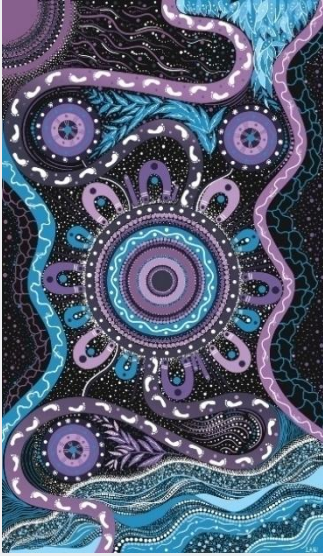


Appendix 8. Social licence

June 2026

Appendix to the 2026 Integrated
System Plan for the National
Electricity Market





We acknowledge the Traditional Custodians of the land, seas and waters across Australia. We honour the wisdom of Aboriginal and Torres Strait Islander Elders past and present and embrace future generations.

We acknowledge that, wherever we work, we do so on Aboriginal and Torres Strait Islander lands. We pay respect to the world's oldest continuing culture and First Nations peoples' deep and continuing connection to Country; and hope that our work can benefit both people and Country.

'Journey of unity: AEMO's Reconciliation Path' by Lani Balzan

AEMO is proud to have launched its Innovate [Reconciliation Action Plan](#) in June 2026. 'Journey of unity: AEMO's Reconciliation Path' was created by Wiradjuri artist Lani Balzan to visually narrate our ongoing journey towards reconciliation – a collaborative endeavour that honours First Nations cultures, fosters mutual understanding, and paves the way for a brighter, more inclusive future.

Important notice

Purpose

This is Appendix 8 to the 2026 *Integrated System Plan (ISP)* which is available at <https://aemo.com.au/energy-systems/major-publications/integrated-system-plan-isp>. AEMO publishes the 2026 ISP pursuant to its functions under section 49(2) of the National Electricity Law (which defines AEMO's functions as National Transmission Planner) and its supporting functions under the National Electricity Rules. This publication is generally based on information available to AEMO as at 20 April 2026 unless otherwise indicated.

Disclaimer

AEMO has made reasonable efforts to ensure the quality of the information in this publication but cannot guarantee that information, forecasts and assumptions are accurate, complete or appropriate for your circumstances.

Modelling work performed as part of preparing this publication inherently requires assumptions about future behaviours and market interactions, which may result in forecasts that deviate from future conditions. There will usually be differences between estimated and actual results, because events and circumstances frequently do not occur as expected, and those differences may be material.

This publication does not include all of the information that an investor, participant or potential participant in the National Electricity Market might require, and does not amount to a recommendation of any investment. Anyone proposing to use the information in this publication (which includes information and forecasts from third parties) should independently verify its accuracy, completeness and suitability for purpose, and obtain independent and specific advice from appropriate experts.

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Version control

Version	Release date	Changes
1	25/06/2026	First release

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Executive summary

AEMO's *Integrated System Plan (ISP)* is a roadmap for the National Electricity Market's (NEM's) transition, and outlines an 'optimal development path' (ODP) for generation, storage and network investments to meet both consumer needs and government policies, at least cost, to 2050. The 2026 ISP reaffirms that renewable energy, connected by transmission and distribution, firmed with storage and backed up by gas, presents the least-cost way to supply secure and reliable electricity to consumers through to 2050, as coal plants retire and while meeting government policies.

Building social licence is crucial to the success of this transition. It underpins the development of new infrastructure, the coordination of consumer energy resources (CER), and broader public support for the transition. It involves the ability of project developers, planners, governments, organisations and other involved groups to individually and collectively build and maintain trust and social acceptance with the people most affected by the impacts, opportunities and challenges it brings. Social licence is difficult to measure; it can be shaped by people's core values, views and experiences; it can shift and evolve over time in response to events, and is unique within and across different groups of people and communities. Community acceptance towards the energy transition can be varied and complex.

At the same time, consumers, both households and businesses, are participating in the energy transition through increasing their own investments in rooftop solar, batteries, electric vehicles (EVs) and energy efficiency. The energy industry, including market bodies, governments, investors and organisations, will need to consider how to facilitate, incentivise, and enable consumer participation, agency and investment in the energy transition, while ensuring energy equity and managing competing demands and risks.

As a strategic planning document, the ISP considers social licence matters at a high level rather than a project-specific level. The responsibility to engage with local communities sits with relevant jurisdictional planning bodies and project developers. AEMO is acutely aware of how the ISP can influence the ability of these planning bodies and developers to build and maintain social licence, particularly when the modelled benefits of projects well advanced in development change, and the potential impacts of ODP decisions on communities. For example, several previously actionable projects in the 2024 ISP have been recategorised, including three which have changed from being 'actionable' in 2024 to 'future projects' in the 2026 ISP¹. If social licence for these projects is lost as a result, this could critically impact credibility if and when these projects are needed in future.

AEMO acknowledges that social licence and consumer agency is an area of continued learning and development for the organisation. AEMO is actively working with key stakeholders (including the ISP Consumer Panel and the Consumer and Community Reference Group, consumer and community groups, and jurisdictions) to improve its understanding of the social, cultural, economic and other impacts, opportunities and challenges that the energy transition affords for local and national communities.

As part of the two-year development process for the 2026 ISP, AEMO has sought to deepen its social licence considerations where possible from 2024. This appendix outlines how:

- **Social licence is considered at a high level in the 2026 ISP.** AEMO's role is to plan the future of the energy system across the NEM, which spans Australia's eastern and south-eastern coasts and comprises five interconnected states:

¹ QNI Connect and the Northern Transmission Project (previously known as the Mid-North South Australia REZ project) are now identified as future projects in the 2026 ISP. The Waddamana to Palmerston transfer capability upgrade has been rescoped as the Second Tasmania REZ Expansion, and will also be considered as an option for the actionable Tasmania REZ Expansion project.

Queensland, New South Wales (including the Australian Capital Territory), South Australia, Victoria, and Tasmania. AEMO's consideration of social licence is at a high level and also focused on utility-scale infrastructure (see Section A8.1.1 on Guiding Principles). AEMO has applied social licence considerations, stakeholder feedback, and community sentiment insights into its considerations on scenarios, early network options planning, updating of the Transmission Cost Database, demand-side modelling and the location and use limits of renewable energy zones (REZs). It has also applied social licence considerations in seeking ongoing analysis and stakeholder engagement to build a high degree of confidence around results before determining whether a project optimises benefits for consumers, or not.

- **Social licence is critical for new energy infrastructure development.** The energy transition requires significant new infrastructure if secure and reliable electricity is to be delivered to consumers at least cost while meeting government policies. AEMO recognises this essential infrastructure can have real and lasting impacts on landowners, communities, and the environment. Organisations seeking to build and maintain social licence should prioritise trust and genuine listening to communities, and deliver overall, enduring positive impact in their community benefit schemes.
- **Social licence is also critical for the adoption and especially the coordination of consumer energy resources (CER).** Consumer agency and participation are essential to the energy transition. Households and businesses are participating in the energy transition through increasing investments in rooftop solar, batteries, EVs and energy efficiency. AEMO also recognises that access to, and the benefits of, CER are not evenly distributed across all Australians; for example, renters, apartment dwellers, embedded networks and lower income households are among groups that are unable to access the full benefits at present. Governments, industry, market bodies like AEMO, and consumer advocates must continue to actively work to ensure benefits can be shared equitably, while also creating an enabling environment to support CER growth through upgrading networks, progressing market reforms, and supporting consumer-led initiatives such as community energy projects.

In the 2024 ISP, AEMO included a social licence sensitivity analysis to model the potential impacts of low social licence on transmission project delays, transmission project costs, and REZ generation costs. There were some overlaps and similarities with the 2026 ISP *Constrained Delivery* sensitivity which considered the impact on consumer benefits if generation, storage and transmission projects were unable to be delivered at the pace required. Given that the 2026 ISP now incorporates broader consideration of social licence factors and the *Constrained Delivery* sensitivity has been included for 2026, AEMO has not repeated the 'social licence' sensitivity analysis in the 2026 ISP.

Key changes from the Draft 2026 ISP²

- Stakeholder feedback, received during public consultation on the Draft 2026 ISP, has been incorporated; for example, new Section A8.3: CER adoption and coordination, and consumer participation, is now added as a third aspect of social licence considered in this appendix.
- Further details on how AEMO has deepened its consideration of social licence, particularly through land use analysis at the early options planning stage, are in **Table 1**.

² AEMO has published all inputs and assumptions in the 2026 ISP Inputs and Assumptions Workbook, including a change log of changes.



AEMO's ISP Information Toolkit

AEMO published an information toolkit in June 2025 that aims to build understanding of the ISP and highlight opportunities for engagement. This toolkit is on AEMO's website at <https://www.aemo.com.au/-/media/files/major-publications/isp/2025/isp-toolkit.pdf>.



A8.1 Social licence overview

Introduction

Social licence is the ongoing trust, acceptance, and support that communities and consumers give to organisations, projects, or changes that affect them. In the energy transition, it means ensuring that those most impacted by new transmission lines, REZs, or changes in how energy is used are heard, respected, and able to share in the benefits of these changes.

AEMO acknowledges that the energy transition is only made possible by the combined and concerted efforts of people and communities. Social licence is not a box to be ticked; it is built through genuine engagement, transparency, and a willingness to adapt.

In the 2026 ISP, AEMO has considered three aspects of social licence:

- social acceptance for the broader energy transition,
- local community acceptance of new energy infrastructure development, and
- consumer adoption of rooftop solar systems, batteries and EVs, together with social acceptance of the ability for CER to be coordinated or ‘orchestrated’.

Definition of ‘community sentiment’

‘Community sentiment’ is referenced in the Energy and Climate Ministerial Council’s (ECMC)’s ISP Review recommendations in relation to social licence in energy planning. Appreciating that community sentiment can be varied and change over time, and include both positive and negative attitudes, AEMO has defined ‘community sentiment’ to be the level of community acceptance or positivity towards the energy transition or energy infrastructure.

AEMO continues to work with key stakeholders to improve its understanding of the social, cultural, economic and other impacts, opportunities and challenges that the energy transition affords for local, regional and national communities.

How social licence is considered in the 2026 ISP

AEMO’s role is to manage the day-to-day operation of Australia’s energy systems and markets, as well as to plan the future of the NEM at a national level. While AEMO does not build or own energy assets, it works with governments, industry, consumer and community representatives, academics, and many other groups to ensure that social licence considerations are reflected in its modelling and advice. The ISP focuses on broad planning considerations; its incorporation of social licence matters is necessarily at a high level. Much of the responsibility to understand and engage with local communities sits with relevant jurisdictional planning bodies and project developers.

While some aspects of social licence have directly informed the development of the 2026 ISP, other aspects which are harder to quantify or integrate into modelling and analysis are noted in this appendix to indicate work underway across the industry. **Table 1** below shows specific examples of how AEMO has applied social licence considerations, stakeholder feedback, and community sentiment insights from joint planning sessions with jurisdictional bodies and network businesses in the 2026 ISP.

Table 1 Social licence considerations

Consideration	Application in the 2026 ISP
<p>Early network options planning</p> <ul style="list-style-type: none"> • Estimation of conceptual easement lengths that avoid the most complex land areas, using publicly available data. • Selection of transmission augmentation options through collaboration and joint planning with transmission network service providers (TNSPs), jurisdictional bodies and other stakeholders. 	<ul style="list-style-type: none"> • AEMO has engaged with environmental and governance experts, planning officials, network project developers, and members of its ISP Consumer Panel and Consumer and Community Reference Group on its approach to incorporating social licence in its planning. AEMO, TNSPs and jurisdictional bodies held a series of workshops between November 2024 and February 2025 to discuss how to further incorporate social licence into the transmission options prepared for the ISP. The workshops provided an avenue to discuss existing network designs, new generation areas, and economic and technical requirements. They also explored how community sentiment is currently and could be further considered in conceptual project options. • Joint planning advice can impact on project scope, cost, build times, and feasibility. As part of preparing transmission augmentation options for the ISP, AEMO considered advice on projects that can make use of existing easements, uprating of existing transmission elements, and existing network capacity that may be freed up as existing generation exits the market. AEMO also acknowledges the need for community engagement as part of any development, and a time allowance has been included for this in the assumed 'lead time' for a transmission augmentation. • AEMO engaged consultancy firm Jacobs to refresh its land use data inputs from 2019, as well as to introduce additional localised and available social, environmental, First Nations and agricultural considerations where possible. The land use criteria scores were also reviewed, with more data points to show more complexity in mapping (see 2025 <i>Electricity Network Options Report</i>^A, p55). • Further analysis of land use criteria was undertaken to provide greater differentiation, distinguish agricultural land types that are less compatible with hosting transmission, expand the geotechnical considerations for transmission infrastructure, and implement a new approach for identifying residential areas. Scoring criteria were applied to land parcels with a resolution of at least 547 x 631 metres, based on individual criterion for environmental, cultural heritage, land use and approvals, geotechnical, community, climate and other factors, to obtain overall 'complexity' scores. • AEMO then used this complexity data to develop desktop estimates of easement lengths for conceptual transmission options, and applied those updated lengths to prepare cost estimates. AEMO started with a direct straight-line route between two substations described in the scope of a transmission option, and subsequently re-routed the path of each transmission option to connect the substations to avoid highly sensitive areas, such as national parks and environmentally sensitive areas, using the land use complexity data results. The 'least complex path' between the two substations to connect the transmission line was chosen, and the total path length was used to estimate the easement length, resulting in more granular and detailed possible project routes and options. However, this was not a proxy for social licence or sentiment for localised projects. All datasets were published alongside the 2025 <i>Electricity Network Options Report</i>^A. • AEMO recognises that increases in costs for electricity transmission network development can impact bills for electricity consumers. The Transmission Cost Database was updated^B this year to reflect cost increases due to supply chain pressures, market competition, project complexity, additional contracting costs, scope revision as more detailed assessments are completed, land price, and to factor in more time for community engagement and feedback. • Additional costs have been included in network options to represent the potential need to change proposed transmission line routes to avoid traversing unsuitable landscapes or particularly complex areas (such as national parks, agricultural and culturally significant land), signalling potential realignment of transmission lines to less complex areas. For example, analysis and advice from joint planning sessions informed some options for the Queensland – New South Wales Interconnector (QNI) Upgrade. • Due to the need to avoid particularly complex areas, some early option transmission routes were lengthened by up to 20% from their straight-line estimate. These routes remain early options based on desktop analysis, and require validation by jurisdictional planners and TNSPs based on on-the-ground community engagement, as well as other regulatory and planning tests and permissions. Where possible, the early electricity network options, with greater granularity on potential route, costs, and project times, were incorporated into the modelling of the ODP.

Consideration	Application in the 2026 ISP
	<ul style="list-style-type: none"> AEMO also recognises the important role that distribution network service providers (DNSPs) play in the transition, and in building and maintaining social licence, including through hosting and facilitating the benefits of consumer energy resources. Deeper consideration of the role and investment needed in distribution networks is outlined in the 2025 <i>Electricity Network Options Report</i> and Appendix A9 <i>Demand Side Factors Statement</i>.
<p>REZs – identification and location</p> <ul style="list-style-type: none"> Selection of locations for potential REZs through consultation. Consideration of input and feedback from external stakeholders (for example, from governments, jurisdictional planners, and from targeted engagement and the public consultation process). 	<ul style="list-style-type: none"> Through the identification of candidate REZs, AEMO considers both the boundaries and development limits to reduce community impact, and has overlaid the candidate REZs over geographical information on Aboriginal and Torres Strait Islander title to provide additional information to TNSPs and governments about Indigenous land interests and enable early engagement. The selection of candidate REZs and their indicative location and boundaries are consulted on through each <i>Inputs, Assumptions and Scenarios Report</i> (IASR) and ISP cycle. Upon advice given to AEMO in joint planning sessions, AEMO has reconsidered the potential size and locations of candidate and hypothetical REZ options such as a new REZ (South Cobar) in New South Wales, and Extension of Mid-North and Northern South Australia, to be located further out from complex land use areas, as noted as part of the Release Areas defined by the South Australian Government.
<p>REZs – resource limits and land use limits</p> <ul style="list-style-type: none"> Use of land use limits and resource limits in modelling. 	<ul style="list-style-type: none"> REZ resource limits are set out in the ISP to estimate resources available for renewable energy developments. This availability is determined by existing land use (for example, agriculture) and environmental and cultural considerations (such as national parks), as well as the quality of wind or solar irradiance, and typical land use requirements for renewable energy generation. AEMO adjusts REZ resource limits when the boundary of a REZ changes or when credible evidence becomes available. AEMO also sets a land use limit for each REZ for the amount of land that could be assumed to be used for renewable energy within a REZ. Data on land use and resource limits on REZs is continually updated and fed back to AEMO by project planners and jurisdictional bodies throughout the planning cycle. AEMO updated its data on New South Wales REZs (New England and Central-West Orana) following community consultation by EnergyCo, split up the Darling Downs REZ into three different potential locations in Queensland, and considered changes to REZs in Victoria, New South Wales and Tasmania following consultation by the Federal Government, and other REZ and transmission line route options following public consultation by jurisdictions and project proponents.

A. The 2025 *Electricity Network Options Report* was published in May 2025, with a revised version published in August 2025. See <https://www.aemo.com.au/consultations/current-and-closed-consultations/2025-electricity-network-options-report-consultation>.

B. AEMO engaged consultancy firm GHD to update the Transmission Cost Database which is used by AEMO to prepare cost estimates for conceptual future ISP projects. Further information is available in the GHD report published alongside the 2025 *Electricity Network Options Report*.

Further information can be found in this 2026 ISP:

- Appendix A1. Stakeholder Engagement – on how stakeholders were consulted throughout the two-year ISP cycle and how social licence feedback was addressed,
- Appendix A3. Renewable Energy Zones – on REZs identification, location, and limits,
- Appendix A6. Cost Benefit Analysis – on costs and benefits of network options and
- Appendix A9: Demand-side Factors Statement – on the impact of CER and distribution network development opportunities on the efficient development of the power system.



A8.1.1 Social licence and the energy transition

Guiding principles for AEMO's consideration of social licence in the ISP

In developing the ISP, AEMO has outlined some high-level guiding principles for its consideration of social licence:

- **Utility-scale infrastructure focus** – while the 2026 ISP has broadened its consideration of distribution-connected resources and explored the impact of demand-side factors, it continues to find that utility-scale generation, storage and network investments and CER will be needed to replace coal and meet both consumer and government policy needs.
- **A generalised focus** – given the ISP focuses on broad planning considerations, AEMO can only consider social licence at a high level across the NEM and is limited to the early stages of the planning cycle. Much of the responsibility to understand and engage with local communities sits with relevant jurisdictional planning bodies and project developers.
- **Increasing understanding of impact** – AEMO acknowledges that social licence is still an area of learning and development for the organisation, and recognises the opportunity to further consider some of the key challenges, opportunities and benefits the energy transition presents in its work. AEMO is working with stakeholders (including its ISP Consumer Panel and the Consumer and Community Reference Group, consumer and community groups, and agencies) to better understand both the impacts and benefits of new energy infrastructure, and to broaden its understanding of social licence matters.

As a complex and largely qualitative matter, there are many drivers of social licence that are difficult to account for in the ISP. Social licence is closely linked to varying community priorities, values, and experiences and is underpinned by transparent, meaningful community engagement. The table below outlines some social licence considerations (non-exhaustive) that can influence social licence, but are not accounted for by AEMO in the ISP.

Table 2 Examples of drivers that can influence social licence but have not been directly considered in the ISP

Driver type	Examples
Environmental values	<ul style="list-style-type: none"> • People’s perceptions of potential impacts of new energy infrastructure to local biodiversity, biosecurity, Indigenous heritage, sites of local and community significance, and the visual landscape. • People’s perceptions of potential developmental impacts on their sense of place and community, wellbeing, culture, ways of living, and connection to Country. • Differing perceptions on the scale of policy ambition and timeline to achieve net zero. • Consumer agency to adopt CER for climate mitigation.
Economic values	<ul style="list-style-type: none"> • People’s perceptions of the potential impacts (positive or negative) to their households, livelihoods and ability to carry out business, local economies, and the equitable distribution of associated benefits within and across communities. • Rising costs of living and energy hardship impacting on energy affordability. • People’s adoption of CER as an investment in their own definition of energy security.
Social and cultural values	<ul style="list-style-type: none"> • People’s understanding and acceptance of the need, costs and impact of new infrastructure development, their roles within this, and feeling that their voices, preferences and concerns are being considered and acted on. • Differing experiences and definitions of energy reliability, especially network disruptions in some areas of Australia. • Recognition of Aboriginal and Torres Strait Islander sites of cultural importance (see Section A8.2). • Meaningful partnerships with Aboriginal and Torres Strait Islander peoples that support an equitable and inclusive energy transition that creates lasting benefits, including First Nations economic empowerment, increased energy access, and self-determination. • Community expectations and experiences of transparency, communication, and quality of engagement by governments, jurisdictional bodies, planners and project developers. • Perspectives that regional Australia are bearing the impacts of new infrastructure but with disproportionately lower benefits compared to metropolitan regions. • Access to CER may be limited for some households and renters.

Community sentiment towards the energy transition

AEMO recognises the diverse range of views and experiences of households, businesses and communities across Australia in the energy transition. Stakeholders have reflected to AEMO the need to consider community sentiment across metropolitan, peri-urban, regional and rural areas, and to listen to the perspectives of communities hosting infrastructure.

In addition to stakeholder insights, AEMO considered a range of publicly available literature on community sentiment and attitudes towards the energy transition in the Draft 2026 ISP, and updated this for the final 2026 ISP. A non-exhaustive list of these reports, summarised in **Table 3** below, shows that community sentiment towards the energy transition is varied and complex. While the datasets were ultimately unable to be applied to AEMO's modelling, these insights are a useful barometer for AEMO, jurisdictional planning bodies, and project developers to bear in mind when engaging with community and stakeholders.

Insights show that support for the energy transition is generally strong (between 47% and 66% across various reports; see rows 1, 6 and 7 in **Table 3**), particularly when the benefits are clearly communicated. However, there is often limited understanding of the scale and nature of large infrastructure projects, and the energy transition in general. This suggests the need for early and genuine engagement by project developers with impacted communities to build trust and address concerns, as well as broader education by various parties (such as governments) around the importance of the energy transition.

Affordability concerns may also impact social support of the energy transition. Many consumers are concerned about rising energy costs, with KPMG reporting in March 2025 that 51% of Australians are struggling to pay their energy bills (see **Table 3**), and Energy Consumers Australia reporting in June 2025 that one in five households are vulnerable to or experiencing energy hardship³. Cost-of-living pressures consistently rank at or near the top of national priorities in SEC Newgate's quarterly 'Mood of the Nation' reports (see **Table 3**), while other energy related issues – such as acting decisively on climate change and transitioning to renewables – remain much lower.

AEMO understands that many factors influence the final energy bills (including electricity, gas, and liquid fuels) that consumers receive. In the context of the ISP, which typically affects mainly electricity bills, AEMO considers affordability by applying a high-level cost-benefit analysis as outlined in the *ISP Methodology*⁴, promoting efficient investment and operation. This approach aims to ensure the ODP delivers a least-cost pathway for the energy transition in the long-term interests of the consumers. The lower the total cost of investment required for the energy transition, relative to other pathways, the lower energy prices will be over time, all else being equal in an efficient market. Achieving this outcome requires continued coordinated action from governments, industry and market bodies to help keep costs manageable for consumers in the short and medium term, while also managing system costs responsibly in the longer term.

³ From ECA's Consumer Energy Report Card: Understanding and measuring energy hardship in Australia, at <https://energyconsumersaustralia.com.au/our-work/surveys/consumer-energy-report-card-understanding-measuring-energy-hardship-australia>.

⁴ The methodology for the 2026 ISP, which was published in June 2025, is at <https://www.aemo.com.au/energy-systems/major-publications/integrated-system-plan-isp/2026-integrated-system-plan-isp/isp-methodology>.

Table 3 Summary of key findings from publicly available research on community sentiment towards the energy transition

Report	Key findings relating to sentiment on energy or energy infrastructure
<p>SEC Newgate, Mood of the Nation Report</p> <ul style="list-style-type: none"> Released quarterly, most recent update in May 2026 Tracking of 36 national priorities At least 1,000 participants per survey <p>https://secnewgate.com.au/sec-newgate-mood-of-the-nation-may-2026-summary/</p>	<ul style="list-style-type: none"> Between June 2023 and May 2026, acting decisively on climate change and transitioning to renewables generally remained between priorities #21 to #29 out of 36. In May 2026, this stood at #29. Between June 2022 to May 2026, positivity towards the renewable transition ranged between a peak of 70% (in August 2022) and a low of 47% (in September 2024). In May 2026, this stood at 52%.
<p>Australian Energy Infrastructure Commission (AEIC) Annual Report</p> <ul style="list-style-type: none"> Released annually, most recent report March 2026 <p>https://www.aeic.gov.au/publications/2025-annual-report</p>	<ul style="list-style-type: none"> In 2025, the AEIC Office logged 205 new cases – its second-busiest year on record behind 2021 – with case numbers continuing to increase since 2015. About 50% of complaints related to wind farms. 2025 also saw an increase in the number of complaints about solar farms, with multiple complaints about a small number of specific projects. The caseload peak of 2021 coincided with the addition of transmission projects to the AEIC’s scope. The five most common community concerns raised were community engagement, planning processes, amenity, natural environment, and economic loss. While the proportion of complaints about transmission decreased in 2025, the AEIC is aware of increasing cases with state-based energy and water ombudsmen.
<p>AEIC, Community Engagement Review</p> <ul style="list-style-type: none"> Released February 2024 Status update in AEIC’s 2025 Annual Report, released March 2026 <p>https://www.aeic.gov.au/news-media/news/community-engagement-review-report</p>	<ul style="list-style-type: none"> Main recommendations included the need to improve the quality of community engagement and ensure it is meaningful, reducing unnecessary engagement through better site selection, assessment and planning processes, selecting only reputable developers and motivating them to achieve best practice, and the need to improve community understanding and acceptance of the transition through clear information, appropriate governance, and sustainable benefit sharing. The AEIC has been active in shaping the development of the Developer Rating Scheme (see Table 5, row 1), which is a key recommendation of its review. It continues to work with jurisdictions and the ECOMC in implementing its recommendations. The AEIC further notes that while some improvements have been seen across industry, including in developer conduct, project and site selection, regional and system planning, and community benefits, increasing levels of activity in regions, the number of projects seeking approval, and rising disinformation continue to require coordinated efforts between industry and government.
<p>Energy Consumers Australia, Consumer Energy Report Card: Household Research Report</p> <ul style="list-style-type: none"> Published December 2025 Survey of over 4,500 people <p>https://energyconsumersaustralia.com.au/our-work/surveys/consumer-energy-report-card-data</p>	<ul style="list-style-type: none"> This research, which had many findings in relation to energy efficiency and CER, found that while 78% of owner-occupier homes have insulation, only 36% of rental properties have insulation. Additionally, only 11% have rooftop solar compared with nearly half of homes owned outright. On energy literacy, only 29% definitely know how their electricity bill is calculated. On relationships, 58% want a basic relationship with the energy system (good price, reliability, service) versus 42% wanting an active relationship (tariff choice, real-time monitoring, CER/distributed energy resources (DER) optimisation).
<p>Energy Consumers Australia, Consumer Energy Report Card: Understanding and measuring energy hardship in Australia</p> <ul style="list-style-type: none"> Published June 2025 Survey of over 4,100 people <p>https://energyconsumersaustralia.com.au/our-work/surveys/consumer-energy-report-card-understanding-measuring-energy-hardship-australia</p>	<ul style="list-style-type: none"> This research found that nearly one in five Australian households (19%) are vulnerable to, or experiencing, energy hardship. The survey asks participants to indicate whether they spend more than 6% of income on energy bills (11%), whether they find it difficult to pay energy bills (8%), and other indicators such as financial stress and turning off heating and cooling to save money (7%).

Report	Key findings relating to sentiment on energy or energy infrastructure
<p>KPMG, The Human Side of the Energy Transition</p> <ul style="list-style-type: none"> Released in 2024 and 2025, with datasets collected in 2022, 2023, and 2025 The 2025 study had 1,012 participants, with an additional 303 surveyed who live in areas of energy infrastructure <p>https://assets.kpmg.com/content/dam/kpmg/au/pdf/2025/human-side-of-energy-transition-2025.pdf</p>	<ul style="list-style-type: none"> Between November 2022 and January 2025, 63-66% of Australians supported the concept of the energy transition once informed. However, public understanding of the energy transition remained low. Between November 2022 and January 2025, only 17-27% of people reported at least some understanding. 51% of Australians are struggling to pay their energy bills.
<p>RE-Alliance and Essential Media, Talking renewables to the regions</p> <ul style="list-style-type: none"> Released July 2024 2,000 regional respondents in New South Wales, Victoria and Queensland Stakeholder interviews and online focus groups <p>https://essentialmedia.com.au/wp-content/uploads/2024/07/Talking-Renewables-to-the-Regions_170724.pdf</p>	<ul style="list-style-type: none"> While a clear majority (56%) supported the general idea of a transition to renewable energy, none among those surveyed felt well-informed about what the plan at either a regional or national level was. The unifying theme was that the developments were being done to communities not with them. Respondents said there was a lack of agency and buy-in to the transition, and consultation was transactional and bureaucratic. There was deep distrust of energy companies and the government.
<p>CSIRO, Australian attitudes to the energy transition research</p> <ul style="list-style-type: none"> Released April 2024 Over 6,700 participants <p>https://www.csiro.au/en/research/environmental-impacts/decarbonisation/energy-transition</p>	<ul style="list-style-type: none"> More than 80% of Australians would tolerate living within 10 kilometres of solar or wind farms. However, this fell to 77% for transmission lines, with the main concerns being reduced visual attractiveness of local landscapes and devalued property.
<p>CSIRO's Exploring community acceptance of rural wind farms in Australia: A snapshot. Hall, N., Ashworth, P., & Shaw, H.</p> <ul style="list-style-type: none"> Released 2012 The research employed a range of methods, including a literature and information review, a media analysis of newspaper articles, case studies, and semi-structured qualitative interviews with a range of stakeholders associated with wind farms <p>https://publications.csiro.au/publications/publication/PIcsi:EP117743</p>	<ul style="list-style-type: none"> This research provides a snapshot of community acceptance levels regarding Australian wind farms from a variety of stakeholder perspectives. The most cited reasons for rejecting wind farms were landscape change and visual amenity impacts, noise impacts, and poor consultation. The most cited reasons for supporting rural wind farms were to take action against human-induced climate change, reduce greenhouse gas emissions and support job creation.

A8.2 Social licence for new energy infrastructure development

The energy transition requires significant new infrastructure to deliver reliable and secure electricity for all Australians at the least cost while meeting government policies. With electricity consumption forecast to nearly double by 2050 under the *Step Change* scenario, the NEM is projected to need approximately 120 gigawatts (GW) of utility-scale wind and solar, almost 50 GW of grid-scale storage and hydro, 17 GW of flexible gas-powered generation, and an additional 6,000 km of transmission by 2050. Consumers are projected to have invested in an estimated 87 GW of rooftop and small-scale solar capacity and 35 GW of household and commercial batteries over that period. To bridge forecast shortfalls in gas supply adequacy, new gas infrastructure (such as new gas supply, storage and/or pipelines) will be needed to support gas consumers, including gas-powered generators that will continue to play a key role in supporting the reliability and security of the NEM.

Understanding the impacts and opportunities

AEMO acknowledges that hosting new energy infrastructure can affect local people's livelihoods, heritage, nature, and community life. Building and sustaining social licence for infrastructure development requires organisations to engage genuinely with local communities, foster long-term trust-based relationships, understand and respect local concerns and intrinsic commitments, and deliver enduring benefits that extend beyond formal community benefit schemes. While there are often positive impacts, new infrastructure development can also present challenges. For some, new infrastructure brings disruption and uncertainty, as well as offering local economic benefits, community payments, diversification, and new jobs.

The ISP's purpose is to establish a whole of system plan for the efficient development of the power system that achieves power system needs for a planning horizon of at least 20 years, to contribute to achieving the national electricity objective (NEO). The NEO refers to the long-term interests of consumers of electricity with respect to 'price, quality, safety, reliability and security' of supply, a reliable and secure electricity system and the achievement of emissions reduction targets⁵. The *ISP Methodology*⁶ sets out the cost benefit analysis and modelling methodology to estimate 'net market benefits', or the total direct benefits to electricity consumers compared to project costs. By and large, these benefits in the ISP take the form of cost savings associated with the building of transmission to avoid more expensive investment in other infrastructure assets.

For the 2026 ISP, these weighted net market benefits for the ODP's transmission are estimated at \$28 billion. The ISP's analysis does not quantify broader impacts outside of those to the electricity market – for example, additional jobs creation, economic development, public infrastructure upgrades, community benefits, social wellbeing, or changes to farming, land use and value, housing, biodiversity, and disruption from construction works. AEMO is on a learning journey to better understand both positive and negative social impacts, recognising that even the prospect of hosting infrastructure can create tensions within communities, and that genuine and transparent engagement is needed to build trust and acceptance.

Incorporating social licence into planning

In response to the ECOMC's 2024 ISP Review, AEMO has sought to deepen its considerations of social licence in early options network planning and development of the ODP. **Table 1** (in the Overview Section A8.1) lists how AEMO has considered social licence in the 2026 ISP, including for transmission and REZ planning.

⁵ National Electricity Objective, National Electricity Law (NEL) section 7.

⁶ The methodology for the 2026 ISP, which was published in June 2025, is at <https://www.aemo.com.au/energy-systems/major-publications/integrated-system-plan-isp/2026-integrated-system-plan-isp/isp-methodology>.

The actions listed in **Table 1** demonstrate how social licence considerations are visible and influential in AEMO's planning, even though many direct engagement activities are led by project developers, governments, and NSPs.

Aboriginal and Torres Strait Islander considerations

AEMO acknowledges the deep and ongoing connection of Aboriginal and Torres Strait Islander peoples to Country, and is making steps in its own reconciliation journey through its Reconciliation Action Plan⁷.

It is vital that First Nations communities are consulted early, regularly and meaningfully, play a central role in energy infrastructure development decisions, and can also harness and benefit from the transition directly. Feedback from some First Nations stakeholders, including AEMO's Consumer and Community Reference Group, highlights that many groups and people are facing engagement fatigue from multiple consultations. While AEMO does not lead on-the-ground engagement with First Nations communities, it encourages project developers to identify the local Traditional Owners, prioritise respectful and sustained relationships, and recognise the unique rights and interests of First Nations people and Traditional Owners.

As part of ISP development, AEMO overlays a map of candidate REZs over available information from the National Native Title Tribunal Indigenous Estates (see Appendix A3 for details). For the 2025 *Electricity Network Options Report*, AEMO also updated its land use inputs to incorporate First Nations considerations wherever available. These datasets are published on AEMO's website to support governments, councils, and rule-makers in developing social licence frameworks⁸.

AEMO also recognises and supports the Federal Government's First Nations Clean Energy Strategy 2024-2030⁹, which aims to close the gap in energy equity, education, employment, investment, and other opportunities. In addition, the Federal Government Capacity Investment Scheme's First Nations Social Licence Merit Criteria aims to support First Nations economic empowerment and self-determination by setting aside part of its capacity target¹⁰ for projects that show strong equity or revenue sharing agreements with First Nations communities. By making Indigenous land interests visible, AEMO seeks to support a transition that is inclusive, respectful, and empowers First Nations peoples to pursue self-determination, and shape energy outcomes, in the energy transition.

A8.2.1 Roles and responsibilities for social licence in transmission planning

As national transmission planner, AEMO engages with stakeholders, environmental and governance experts, planning officials, networks and project developers to gather insights that help embed social licence considerations in early options planning. Community engagement is undertaken by organisations other than AEMO. Some organisations are also implementing strategies and programs to develop strong relationships that are place-based and ongoing (that is, not just for projects), to listen to communities and their specific requirements or concerns. As such, the ISP's consideration of social licence is necessarily high-level and concentrated in the early stages of the planning lifecycle. Ultimately, AEMO also undertakes and publishes relevant work to be useful to industry, governments and consumers and communities.

Figure 1 below shows how social licence is considered through the various stages of transmission development. These broadly align with the stages in the Federal Government's Guidelines for Community Engagement and Benefits for Electricity Transmission Projects. For simplicity, the project stages are shown in a linear fashion, but it should be noted that activities

⁷ At <https://www.aemo.com.au/about/reconciliation-action-plan>.

⁸ At <https://www.aemo.com.au/consultations/current-and-closed-consultations/2025-electricity-network-options-report-consultation>.

⁹ At <https://www.energy.gov.au/sites/default/files/2024-12/First%20Nations%20Clean%20Energy%20Strategy.pdf>.

¹⁰ At <https://www.dcceew.gov.au/energy/renewable/capacity-investment-scheme/first-nations-equity-revenue-sharing-set-aside>.

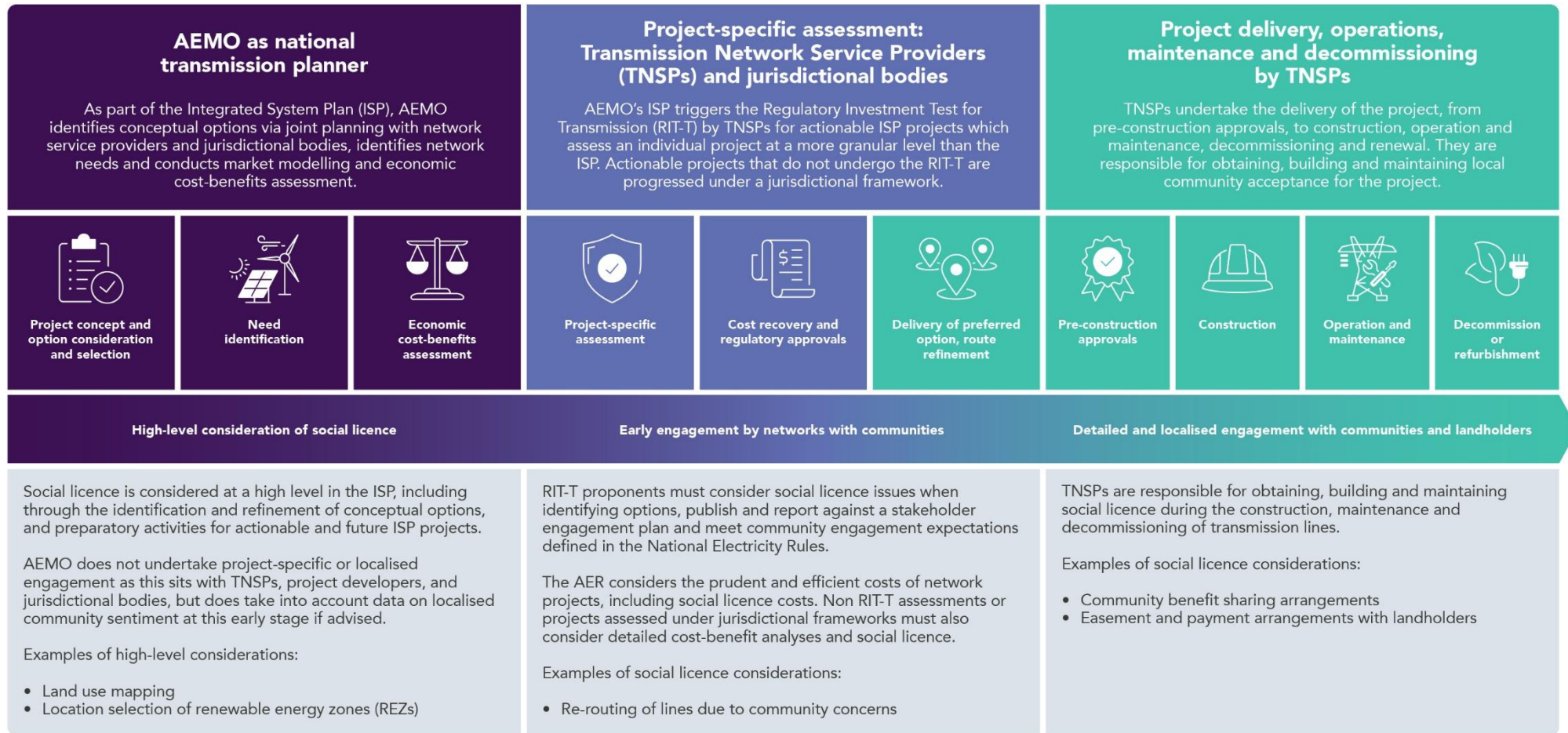
may not actually occur in this sequence. For example, route refinement may occur alongside project specific assessment, and with ongoing community engagement.

A level of reassessment in the early stages of planning is appropriate as the power system is evolving rapidly and decisions to invest in assets that consumers ultimately pay for need to be regularly checked to ensure they remain prudent, but becomes increasingly disruptive to both communities and consumers as project development progresses.

It is also worthwhile noting that several actionable projects identified in the ODP for the 2024 ISP have been recategorised, including three which have changed from being 'actionable' in 2024 to 'future projects' in the 2026 ISP (refer to the main report and Footnote 1 of this appendix).

One example is the Northern Transmission Project (previously known as the Mid-North South Australia REZ project). Given the project remains on the ODP and there is an active regulatory investment test for transmission (RIT-T) underway, AEMO considers ElectraNet should conclude the RIT-T. This will allow further assessment of local factors, system resilience, option value, future load development, and additional credible options. Continuing community engagement may also help to narrow the corridor and reduce uncertainty for affected communities, while ensuring community considerations are reflected in future planning and decision-making. Stopping and restarting engagement can be disruptive, may erode trust, and could make it more difficult to build and maintain social licence for the project over time.

Figure 1 AEMO's role in social licence for transmission planning



Relevant reforms, reviews and reports

AEMO actively participates in the extensive work being led by various jurisdictions, market bodies, industry members and advocates, which inform its approach and reflect broader efforts to address social licence challenges across the energy transition. **Table 4** below outlines some recent key reports and initiatives, although is not intended to be an exhaustive list.

Table 4 Relevant reforms, reviews and reports

Initiative	Details
<p>Australian Energy Market Commission (AEMC) Review of the ISP and other rule changes associated with the ISP https://www.aemc.gov.au/market-reviews-advice/review-integrated-system-plan</p>	<ul style="list-style-type: none"> As required by the National Electricity Rules (NER) 11.126.10, the AEMC is conducting a review of the ISP framework in the NER by 1 July 2027, to ensure it continues to best support Australia’s energy transition. This follows the ECMC ISP Review concluded in 2024. The AEMC released a consultation paper in December 2025. Several submissions to the AEMC, including from the ISP Consumer Panel, highlighted the importance of social licence and consumer and community engagement in the development cycle of the ISP. AEMO will consider any relevant recommendations and findings from the AEMC’s review for the next ISP. The AEMC has also released in April 2026 a draft determination on a rule change proposal for clarifying the treatment of jurisdictional policies and system costs in the ISP^A.
<p>Climate Change Authority (CCA) Annual Progress Report 2025 https://www.climatechangeauthority.gov.au/2025-annual-progress-report</p>	<ul style="list-style-type: none"> The CCA said that Australia needs to drastically increase its current rate of emissions reductions to achieve its 2030 and 2035 emissions targets, to nearly double the rate of -11 million tonnes of carbon dioxide equivalent (Mt CO₂-e) per year. Maintaining momentum in the deployment of renewables and storage is crucial for Australia to reach its targets. However, community acceptance of renewable infrastructure is slowing down the deployment of infrastructure required. Benefit-sharing practices and policies differ across jurisdictions and tiers of government, creating complexity for project developers and inequity for communities. The CCA recommended that the Federal Government develop a national mechanism for community engagement and benefit-sharing that clarifies expectations for communities and project developers and ensures that impacted regions receive fair and lasting benefits from the energy transition.
<p>Australian Energy Regulator (AER) Social Licence for Electricity Transmission Directions Paper and updated Guidelines</p> <p>Directions Paper https://www.aer.gov.au/industry/registers/resources/reviews/social-licence-electricity-transmission-projects/initiation</p> <p>2024 Review https://www.aer.gov.au/industry/registers/resources/reviews/2024-review-cost-benefit-analysis-and-regulatory-investment-test-guidelines</p>	<ul style="list-style-type: none"> The AER released its Social Licence for Electricity Transmission Directions Paper for consultation in October 2023. This formed the basis of the AER’s 2024 review of the cost benefit analysis and regulatory investment test guidelines, published in November 2024. In its guidelines, the AER defines social licence as linked to general awareness and acceptance of a project within a community and is directly linked to a project’s credibility. Successful project proponents and developers have clear strategies and programs to form good relationships and acknowledge these are built over time. The guideline amendments include a number of new obligations on RIT-T proponents, including requirements to consider social licence issues in the identification of credible options, reasonable endeavours to meet community engagement expectations, engagement with stakeholders affected by the project’s development, and publication of a stakeholder engagement plan.

A. At <https://www.aemc.gov.au/rule-changes/clarifying-treatment-jurisdictional-policies-and-system-costs-isp>.

Good practice engagement frameworks

AEMO encourages project developers to continue to engage communities early and meaningfully, understand local impacts and concerns, and support them to make informed decisions. **Table 5** lists guidelines, advice and recommendations.

Table 5 Overview of good practice engagement frameworks

Entity / Report title	Overview
<p>The Department of Climate Change, Energy, the Environment and Water (DCCEEW)'s Developer Rating Scheme Updated May 2026 https://www.dcceew.gov.au/energy/renewable/developer-rating-scheme</p>	<ul style="list-style-type: none"> As a key recommendation from the AEIC's Community Engagement Review^A, DCCEEW established the Developer Rating Scheme as a pilot in August 2025 to provide transparent, periodic, data-driven assessments of renewable energy and transmission businesses to measure their performance, track record and capability, including their community engagement capability. The Scheme opened to the wider industry on 6 March 2026, enabling businesses to commence the assessment process via the independent scheme operator. The Scheme is voluntary, with businesses responsible for assessment fees.
<p>Net Zero Economy Agency (NZE) – Statutory review of the Energy Industry Jobs Plan 2025 Led by Emeritus Prof Roy Green AM, published December 2025, tabled in Parliament March 2026 https://www.netzero.gov.au/sites/default/files/documents/2026-03/EIJP%20Review%20-%20Report.pdf</p>	<ul style="list-style-type: none"> The Energy Industry Jobs Plan (EIJP) supports workers and communities affected by power station closures (for example, Torrens Island B, Eraring). It establishes a legislative framework that ensures workers and businesses can access transition support for their next move. The Review contains 12 recommendations and four additional actions to enhance the EIJP's effectiveness. These include facilitating better employee understanding of the EIJP, adjustments to information flows on planned closure dates, coverage of dependent employers, small business and decommissioning workers, mental health support, and a monitoring and evaluation framework. The Review also highlights best practices from other countries (like the European Union) in their approach to regional economic transitions.
<p>The First Nations Clean Energy Network's Capacity building toolkit Published August 2025 https://proponents-toolkit.firstnationscleanenergy.org.au/</p>	<ul style="list-style-type: none"> For project developers and proponents to learn how to engage with First Nations communities, from understanding First Nations rights, to negotiating access to sea and country, to safeguarding cultural heritage.
<p>New South Wales Department of Climate Change, Energy, the Environment and Water's Strategic Benefit Payment Scheme Guidelines Published June 2025 https://www.energyco.nsw.gov.au/sites/default/files/2025-06/strategic-benefit-payment-scheme-guidelines-june-2025_3.pdf</p>	<ul style="list-style-type: none"> Comprehensive guidelines for host landholder payments for major infrastructure projects.
<p>The Department of Climate Change, Energy, the Environment and Water (DCCEEW)'s National Guidelines for Community Engagement and Benefits for Electricity Transmission Projects Published July 2024 https://www.energy.gov.au/sites/default/files/2024-07/national-guidelines-community-engagement-benefits-electricity-transmission-projects.pdf</p>	<ul style="list-style-type: none"> Provides expectations for effective and responsive community engagement by transmission developers when undertaking new transmission projects. The guidelines provide additional guidance on how communities should be engaged and involved in transmission projects through the lifecycle of planning, construction, operating and decommissioning or replacement.
<p>Tasmanian Government's Guideline for Community Engagement, Benefit Sharing and Local Procurement Published May 2024 https://www.recfit.tas.gov.au/_data/assets/pdf_file/0010/399205/Guideline_for_Community_Engagement,_Benefit_Sharing_and_Local_Procurement.pdf</p>	<ul style="list-style-type: none"> This guideline has been developed to set a clear standard for best practice community engagement, benefit sharing and local procurement for renewable energy development in Tasmania.

Entity / Report title	Overview
<p>Victorian Transmission Investment Framework, Draft REZ Community Benefits Plan Published May 2024, final expected in 2026 https://engage.vic.gov.au/vtif-rez-community-benefits</p>	<ul style="list-style-type: none"> The draft REZ Community Benefits Plan proposes the creation of new benefits for landholders, regional communities, Traditional Owners, and significantly impacted neighbours.
<p>The Clean Energy Council's First Nations Engagement Guide Published February 2024 https://cleanenergycouncil.org.au/news-resources/first-nations-engagement-guide-for-renewables-industry</p>	<ul style="list-style-type: none"> Developed in partnership with the First Nations Clean Energy Network and KPMG, this guide sets out expectations for industry and details key considerations for First Nations engagement at each stage of a project's lifecycle.
<p>Energy Consumers Australia's Enabling energy justice through place-based approaches to expanding transmission infrastructure Published October 2023 https://energyconsumersaustralia.com.au/our-work/research/enabling-energy-justice-through-place-based-approaches-to-expanding-transmission-infrastructure</p>	<ul style="list-style-type: none"> Recommends that project developers and proponents consider place-based approaches that prioritise genuine listening to community concerns, and that 'procedural fairness' plays as significant a role as the fair distribution of benefits. This means that the engagement process itself must include equal opportunity for diverse voices to be heard.
<p>The Energy Charter's Social Licence Better Practice Guideline Published May 2023 https://theenergycharter.com.au/collaboration/bettertogether-initiatives/better-practice-social-licence-guideline-review/</p>	<ul style="list-style-type: none"> Co-developed by landholder and community representatives and a group of electricity transmission businesses to build a shared understanding of the impacts and potential benefits associated with hosting energy transmission infrastructure and to provide practical social licence guidance to mitigate negative impacts and prioritise shared value.
<p>Powerlink, Landholder Payment Framework First published May 2023 www.powerlink.com.au/brochures/payment-framework</p>	<ul style="list-style-type: none"> Powerlink revised its landholder payment framework in May 2023 with insights and input from diverse stakeholder groups that aims to provide more clarity and flexibility for landholders. It also offers a payment to landholders with properties adjacent to new transmission easements.
<p>Victorian Department of Environment, Land, Water and Planning, Community Engagement and Benefit Sharing in Renewable Energy Development in Victoria Published July 2021 https://www.energy.vic.gov.au/_data/assets/pdf_file/0026/580625/community-engagement-and-benefit-sharing-guide.pdf</p>	<ul style="list-style-type: none"> A guide for renewable energy developers for effective community engagement and notes options for sharing benefits of the energy transition with the community.

A. At <https://www.aeic.gov.au/news-media/news/community-engagement-review-report>.

A8.3 Consumer energy resources: adoption and coordination

Households and businesses are increasingly investing in CER and other investments to improve their energy efficiency, and to reduce costs and emissions. Renewables met around 45% of all demand for electricity in the NEM in the 2026 financial year, over 50% in the December quarter of 2025, and reached close to 80% for a half-hour on 11 October 2025. Many households are moving towards electricity and away from gas for heating and cooking, installing rooftop solar, batteries, adopting EVs and participating in virtual power plants (VPPs) to share stored energy, and investing in energy efficient appliances and buildings. Communities are also working together to establish locally led and owned energy projects, such as community solar and wind farms, while businesses are making sizeable investments to reduce energy use and to switch to renewables.

Recognising that consumer agency, adoption of CER and participation are essential to and contribute to social acceptance of the energy transition, the 2026 ISP includes in Appendix A9 an analysis of demand-side factors, particularly energy efficiency and, CER and its coordination¹¹, and their impact on the efficient development of the power system.

The last decade has seen significant effort to support the transition to greater amounts of utility-scale renewables, including improved performance standards and new operational approaches to maintain system security and reliability. A similar concerted effort is required to ensure CER are effectively leveraged in a way that supports the secure and reliable delivery of electricity to all consumers now and into the future. Reforms under the National CER Roadmap¹² are important and progressing, including those that support visibility, predictability, standards, and participation in an increasingly two-sided system.

AEMO recognises that access to CER can present equity challenges across Australia, particularly for groups such as renters, apartment dwellers, those in embedded networks and lower-income households currently unable to access the full benefits. Governments, industry, market bodies like AEMO, and consumer advocates, must continue to actively work to ensure benefits are shared equitably, while creating an enabling environment to support CER growth. This includes through upgrading networks, progressing market reforms, reforming tariffs (such as the Solar Sharer Offer¹³), developing product offerings to increase CER coordination, and supporting consumer-led initiatives such as community energy projects.

8.3.1 Impact of CER coordination

In the 2026 ISP, 'CER coordination' refers to the participation of consumer-, community- and business-owned batteries that can be aggregated, managed and operated, through demand management arrangements, VPPs, vehicle-to-grid (V2G) services and other arrangements. In its role as system planner, AEMO models the impact of increasing coordination of these resources on system outcomes.

Compared to the 2023 *Step Change* scenario, the 2025 *Inputs, Assumptions and Scenarios Report* (IASR) projects that consumers are generally more hesitant to share control of their CER with VPPs. However, moderate long-term growth in coordinating these resources is still projected, and aggregators of consumer resources are assumed to make a growing contribution to the transition over time. This suggests there could be room for more attractive product offerings, more awareness, and engagements by the energy industry to build trust and support consumers' understanding of options

¹¹ CER coordination refers to the participation of consumer-, community- and business-owned batteries that can be operated as VPPs.

¹² At <https://www.energy.gov.au/energy-and-climate-change-ministerial-council/working-groups/electricity-working-group/consumer-energy-resources-sub-working-group/national-cer-roadmap>.

¹³ At <https://www.energy.gov.au/news/solar-sharer-offer-cut-electricity-bills>.

available and value proposition for them to increase participation in VPPs, including taking part via community energy projects as well as individually.

The introduction of the Cheaper Home Batteries Program (CHBP) in July 2025 drove an uptick in battery adoption for residential or small commercial systems, in addition to an increase in battery sizes installed¹⁴. AEMO's *Step Change* scenario, released as part of the IASR in July 2025, was updated in December 2025 to account for recent installations. Further sensitivities were provided to explore the potential that the recent rate of consumer adoption is sustained. AEMO continues to assume that by 2050 in the *Step Change* scenario, home batteries will be installed in around 65% of dwellings with solar, with small-scale batteries forecast to provide 35 GW/78 gigawatt hours (GWh) of storage capacity, and 53% of those batteries coordinated as part of a VPP in that scenario.

What is a virtual power plant (VPP)?

Households and businesses that choose to take part in VPPs allow their devices to be aggregated into larger systems for coordinated imports and exports of energy between them and the grid. Participants usually enter into agreements that allow their batteries to be charged and discharged at times when the power system requires that flexibility, which in turn helps with supporting reliability, moderating prices in peak periods, reducing need for power system investment, and managing power system risks, thereby benefitting all consumers. In return, participants in VPPs may receive financial incentives or other rewards, and the benefit of knowing they are helping to support energy reliability.

VPPs are how consumers might choose to participate today; there may be other ways in the future to coordinate CER. Moreover, consumers should be rewarded for their flexibility in allowing their batteries to be coordinated in VPPs, and to have the opportunity to take part in price-responsive markets. To that end, AEMO is participating in relevant market reforms and national roadmaps to create an enabling environment for the adoption of CER, and for CER owners to realise the value of their investments for all consumers. Section A8.3.3 below details some of AEMO's efforts in that space.

Appendix A9 Demand Side Factors Statement further examines the impact on energy supply where consumer adoption of CER varies from forecasts. The analysis highlights that consumer agency and adoption of CER are essential to the transition and can materially impact the development of the shared power system, including generation, storage, transmission and distribution.

The interconnection between CER adoption, coordination, energy equity, and social acceptance of the energy transition is complex. Consumers invest in CER for a range of reasons, and decisions to participate in coordination arrangements vary across households and businesses, and may include factors such as differences in consumers' appetites, risk preferences and willingness to invest now to avoid more costs later. The interplay between these trends as the energy transition unfolds remain an important area of future study.

8.3.2 CER coordination and maintaining power system security

AEMO, network service providers (NSPs) and market participants all have a role to play in addressing both the challenges and opportunities presented by CER in a renewables-ready power system at the world-leading rate experienced in Australia.

¹⁴ See AEMO's draft 2026 *Forecasting Assumptions Update* (p18), at https://www.aemo.com.au/-/media/files/stakeholder_consultation/consultations/nem-consultations/2025/draft-2026-fau/draft-2026-forecasting-assumptions-update.pdf.

As system operator, AEMO is responsible for ensuring the security and reliability of the power system while working within policy settings and the National Electricity Law and Rules. As renewable and inverter-based generation (from CER) increases, and as demand and market participation evolves, the challenge is ensuring new investments and system security solutions come online in time as coal units progressively go offline. If system security gaps are not met through planning and market operation, and if investments do not come online in time, the market interventions available to AEMO are limited and can result in significant costs and risks of major interruptions to power supply¹⁵. Concerted effort is required on a number of fronts to mitigate risks of investments not coming online in time, and to ensure CER are effectively leveraged in a way that supports the secure and reliable delivery of electricity to all consumers now and into the future.

Stakeholder feedback highlights the importance of AEMO remaining mindful of the perspective of households and businesses that have invested in CER as part of the energy transition. Consumers understandably want to maximise value of their investments and some system security measures – such as enacting minimum system load (MSL) management during periods of oversupply – may be perceived as limiting that value.

While AEMO does not directly coordinate CER, it recognises the importance of ongoing engagement between industry participants and current and prospective CER owners. Clear communication can help consumers better understand their rights and the steps available to maximise value of their investments and to be rewarded for their flexibility at times if there is an oversupply of electricity on the power system. Recognising consumer contributions and supporting informed participation are important to maintaining trust and confidence as CER continues to play an increasingly significant role in the power system.

8.3.3 National Roadmap for unlocking the benefits of CER

With the right policy, market and system settings and management plan for system security risks, the growth and adoption of CER can continue to serve consumer energy needs. All parties in the energy industry need to play their part:

- networks need to develop and enact safe operational standards,
- business-to-business (B2B) platforms and protocols need to be built that share information across devices safely,
- market reforms and platforms need to be established that allow consumers to take part in and benefit from a price-responsive market,
- consumers need to be supported to help address barriers to entry and realise their investments in the energy transition, and
- consumer agency must be maintained over how and when their devices are used and coordinated.

Above all, governments, consumers and industry will need new approaches to work collaboratively to realise the full benefits of CER with transparency over data privacy, rewards for participation, and confidence in the market settings.

The National CER Roadmap¹⁶ was published in July 2024. It sets out an overarching vision and plan to unlock CER at scale by establishing the required mechanisms, tools and systems. AEMO will continue working with governments, market bodies, industry and consumers to implement the Roadmap's four workstreams, which are urgently required to realise the benefits of CER, build transparency and protections for consumers, and to advance the energy transition. This includes:

¹⁵ AEMO's *Transition Plan for System Security* provides detailed information on system security needs over the next decade to support this transition. At <https://www.aemo.com.au/energy-systems/major-publications/transition-plan-for-system-security-tpss>.

¹⁶ At <https://www.energy.gov.au/sites/default/files/2024-07/national-consumer-energy-resources-roadmap.pdf>.

- reforms to increase the market participation of CER, allowing customers to respond to market-based incentives to help meet the challenges of low demand,
- the development of a consumer protections and communication strategy to increase consumer trust and ensure CER benefits are understood by all consumers, and
- measures to support ongoing power system security, particularly the requirement for emergency backstop mechanisms in NEM jurisdictions, to ensure the operational security of the power system when required. Effective integration of CER will require the intersection of power system engineering, technological innovation, consumer choice and experience, and government policy and regulation.

CER investments by households and businesses – enabled by distribution networks, and the right policy, market and system settings – can reduce the scale of needed grid-scale investment. When it does, CER lower the ultimate cost of electricity for all consumers, including delivering benefits to consumers who do not own rooftop solar, such as renters and apartment residents.

Glossary

This glossary has been prepared as a quick guide to help readers understand some of the terms used in the ISP. Words and phrases defined in the National Electricity Rules (NER) have the meaning given to them in the NER. This glossary is not a substitute for consulting the NER, the AER's Cost Benefit Analysis Guidelines, or AEMO's ISP Methodology.

Term	Acronym	Definition
Actionable ISP project	-	Actionable ISP projects optimise benefits for consumers if progressed before the next ISP. A transmission project (or non-network option) identified as part of the ODP and having a delivery date within an actionable window. For newly actionable ISP projects, the actionable window is two years, meaning it is within the window if the project is needed within two years of its earliest in-service date. The window is longer for projects that have previously been actionable. Project proponents are required to begin newly actionable ISP projects with the release of a final ISP, including commencing a RIT-T.
Actionable project progressing under a jurisdictional framework	-	A transmission project (or non-network option), other than an actionable ISP project, which optimises benefits for consumers if progressed before the next ISP, is identified as part of the ODP, and which will progress under a jurisdictional policy that AEMO considers under NER 5.22.3 (b) and includes in the ISP.
Anticipated project	-	A generation, storage or transmission project that is in the process of meeting at least three of the five commitment criteria (planning, construction, land, contracts, finance), in accordance with the AER's Cost Benefit Analysis Guidelines. Anticipated projects are included in all ISP scenarios.
Candidate development path	CDP	A collection of development paths which share a set of potential actionable projects. Within the collection, potential future ISP projects are allowed to vary across scenarios between the development paths. Candidate development paths have been shortlisted for selection as the ODP and are evaluated in detail to determine the ODP, in accordance with the ISP Methodology.
Capacity	-	The maximum rating of a generating or storage unit (or set of generating units), or transmission line, typically expressed in megawatts (MW). For example, a solar farm may have a nominal capacity of 400 MW.
Committed project	-	A generation, storage or transmission project that has fully met all five commitment criteria (planning, construction, land, contracts, finance), in accordance with the AER's Cost Benefit Analysis Guidelines. Committed projects are included in all ISP scenarios.
Consumer energy resources	CER	Generation or storage assets owned by consumers and installed behind-the-meter. These can include rooftop solar, batteries and electric vehicles (EVs). CER may include demand flexibility.
Consumption	-	The electrical energy used over a period of time (for example a day or year). This quantity is typically expressed in megawatt hours (MWh) or its multiples. Various definitions for consumption apply, depending on where it is measured. For example, underlying consumption means consumption being supplied by both CER and the electricity grid.
Cost-benefit analysis	CBA	A comparison of the quantified costs and benefits of a particular project (or suite of projects) in monetary terms. For the ISP, a cost-benefit analysis is conducted in accordance with the AER's Cost Benefit Analysis Guidelines.
Counterfactual development path	-	The counterfactual development path represents a future without major transmission augmentation. AEMO compares candidate development paths against the counterfactual to calculate the economic benefits of transmission.
Demand	-	The amount of electrical power consumed at a point in time. This quantity is typically expressed in megawatts (MW) or its multiples. Various definitions for demand, depending on where it is measured. For example, underlying demand means demand supplied by both CER and the electricity grid.
Demand-side participation	-	The capability of consumers to reduce their demand during periods of high wholesale electricity prices or when reliability issues emerge. This can occur through voluntarily reducing demand, or generating electricity, and is a form of 'demand flexibility'.
Development path	DP	A set of projects (actionable projects, future projects and ISP development opportunities) in an ISP that together address power system needs.
Dispatchable capacity	-	The total amount of generation that can be turned on or off, without being dependent on the weather. Dispatchable capacity is required to provide firming during periods of low variable renewable energy output in the NEM.

Term	Acronym	Definition
Distribution network service provider (DNSP)	DNSP	A business which owns, controls or operates a distribution system (including a distribution network).
Distribution project	-	A distribution project that is part of the ODP and forecast to be needed in the future. The project is an ISP development opportunity and does not address an identified need specified in the ISP. The ISP cannot make a distribution project 'actionable' or require commencement of the Regulatory Investment Test for Distribution (RIT-D).
Economic offloading	-	Refers to a VRE generator being dispatched below its maximum availability as its output is offered at a higher price, typically during periods of negative prices due to an oversupply of generation. This may also be referred to as economic 'spill' or 'spilled energy'.
Firming	-	Grid-connected assets that can provide dispatchable capacity when variable renewable energy generation is limited by weather, for example storage (pumped-hydro and batteries) and gas-powered generation.
Future ISP project	-	A transmission project (or non-network option) that addresses an identified need in the ISP, that is part of the ODP, and is forecast to be actionable in the future.
Identified need	-	The objective a TNSP seeks to achieve by investing in the network in accordance with the NER or an ISP. In the context of the ISP, the identified need is the reason an investment in the network is required, and may be met by either a network or a non-network option.
ISP development opportunity	-	A development identified in the ISP that does not relate to a transmission project (or non-network option) and may include generation, storage, demand-side participation, or other developments such as distribution network projects.
Mid-scale	-	Generation and storage typically connected to the distribution network rather than to either the transmission network or behind the meter at a business or residence. For the 2026 ISP, these resources are assumed to have a generation or charge/discharge capacity of between 5 MW and 30 MW. For ease of reporting in this document, mid-scale generation and storage are sometimes included within the totals for utility-scale generation and storage. In other AEMO documents, such as the <i>Demand Side Factors Information Guidelines</i> and the <i>ISP Methodology</i> , these resources are sometimes referred to as 'other distributed resources'.
National Electricity Rules	NER	The Rules are legally binding rules made under the National Electricity Law, which govern the operation of the National Electricity Market and the ways in which AEMO manages power system security. The Rules also provide the regulatory framework for network connections and access, national transmission planning and pricing for network services. The Rules are mainly made by the AEMC having regard to the National Electricity Objective.
Net market benefits	-	The present value of total market benefits associated with a project (or a group of projects), less its total cost, calculated in accordance with the AER's Cost Benefit Analysis Guidelines. The net market benefits of the ODP through to 2050 is the difference between the cost of the ODP and the cost of a 'counterfactual' development path which has no new transmission build.
Non-network option	-	A means by which an identified need can be fully or partly addressed, that is not a network option. A network option means a solution such as transmission lines or substations which are undertaken by a Network Service Provider using regulated expenditure.
Optimal development path (ODP)	-	The development path identified in the ISP as optimal and robust to future states of the world. The ODP contains actionable projects, future ISP projects and ISP development opportunities, and optimises costs and benefits of various options across a range of future ISP scenarios.
Regulatory Investment Test for Transmission (RIT-T)	RIT-T	The RIT-T is a cost benefit analysis test that TNSPs must apply to prescribed regulated investments in their network. The purpose of the RIT-T is to identify the credible network or non-network options to address the identified network need that maximise net market benefits to the NEM. RIT-Ts are required for some but not all transmission investments.
Reliable (power system)	-	The ability of the power system to supply adequate energy to satisfy consumer demand, allowing for credible generation and transmission network contingencies.
Renewable energy	-	For the purposes of the ISP, the following technologies are referred to under the grouping of renewable energy: "solar, wind, biomass, hydro, and hydrogen turbines". Variable renewable energy is a subset of this group, explained below.
Renewable energy zone	REZ	An area identified in the ISP as a high-quality resource area where a cluster of large renewable energy projects can be developed using economies of scale.
Renewable lull	-	A prolonged period of very low levels of variable renewable output, typically associated with dark and still conditions that limit production from both solar and wind generators.

Term	Acronym	Definition
Rooftop solar and other small-scale solar	-	Solar photovoltaic (PV) generation assets that are not centrally controlled by AEMO dispatch. Examples include residential and business rooftop PV as well as larger commercial or industrial “non-scheduled” PV systems.
Scenario	-	A possible future of how the NEM may develop to meet a set of conditions that influence consumer demand, economic activity, decarbonisation, and other parameters. For this ISP, AEMO has considered three scenarios: <i>Slower Growth</i> , <i>Step Change</i> and <i>Accelerated Transition</i> .
Secure (power system)	-	The system is secure if it is operating within defined technical limits and is able to be returned to within those limits after a major power system element is disconnected (such as a generator or a major transmission network element).
Sensitivity analysis	-	Analysis undertaken to determine how sensitive modelling outcomes are to a change in input or assumption (or a collection of related inputs and assumptions).
Spill	-	Refers to a VRE generator being dispatched below its maximum availability as its output is offered at a higher price, typically during periods of negative prices due to an oversupply of generation. Also referred to as ‘economic offloading’ or ‘spilled energy’.
Transmission network service provider	TNSP	A business that owns, controls or operates a transmission network.
Utility-scale or utility	-	For the purposes of the ISP, ‘utility-scale’ and ‘utility’ refers to technologies connected to the high-voltage power system rather than behind the meter at a business or residence.
Value of greenhouse gas emissions reduction	VER	The VER estimates the value (dollar per tonne) of avoided greenhouse gas emissions. The VER is calculated consistent with the method agreed to by Australia’s Energy Ministers in February 2024.
Variable renewable energy	VRE	Renewable resources whose generation output can vary greatly in short time periods due to changing weather conditions, such as solar and wind.
Virtual power plant	VPP	An aggregation of resources coordinated to deliver services for power system operations and electricity markets. For the ISP, VPPs enable coordinated control of consumer-scale batteries.