

Renewable Energy Transition Update

November 2024





Acknowledgement of Country

The NSW Government acknowledges that it stands on Aboriginal land. We acknowledge the Traditional Custodians of the land, and we show our respect for Elders past, present and emerging through thoughtful and collaborative approaches to our work, seeking to demonstrate our ongoing commitment to providing places in which Aboriginal people are included socially, culturally and economically.

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Ministers' Foreword

NSW is leading a once-in-a-generation upgrade of the electricity network, building the infrastructure we need to keep the lights on.

Our coal-fired power stations, which have been a reliable source of power for many generations, are ageing and scheduled to close.

As we move away from coal-fired power, a mix of renewable technologies will power our state, and help NSW meet its target of net zero by 2050. New transmission lines will deliver the power where it's needed.

The Government has been progressing activities in response to the NSW Electricity Supply and Reliability Check Up (the Check Up). As of September 2024, 17 of the 52 recommendations have been completed, and activities to address an additional 33 are in progress.

We now have enough renewable energy projects signed up to get us almost halfway to our legislated 2030 renewable energy generation target, and almost a quarter of the way towards our long duration storage target.

The NSW planning system will play an important part in the transition to renewable energy, and it's vital that it adapts and evolves so that we can deliver the energy generation and transmission infrastructure our state needs. That is why we have released the <u>Renewable Energy Planning Framework</u>. It will support faster and more consistent decision-making and provide greater certainty for the energy industry.

Our regional communities experience the most pressure and change from the transition and the framework will make sure there is more transparency and clarity about where and how development occurs.

This Renewable Energy Transition Update provides information on how the transition to a clean, affordable and reliable energy system is progressing and how we are improving our state planning processes.

This Update also highlights the range of actions the NSW Government is taking to manage the impacts of the transition and support host communities, whilst enabling and incentivising development.

Many of these actions have been developed in response to feedback on the draft Renewable Energy Planning Framework and other engagements conducted throughout the year.

Together we're building an energy system to be proud of, that will keep the lights on and put downward pressure on energy bills for decades to come.

The Hon. Penny Sharpe MLC

Minister for Climate Change and Energy

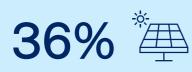
The Hon. Paul Scully MP

Minister for Planning and Public Spaces

Progress Update

Overview

The State's energy transition is well underway. We are working to accelerate investment in renewable energy by implementing the NSW Electricity Infrastructure Roadmap (the Roadmap).



NSW's electricity generation from renewable sources (2023)

The Roadmap is our path to powering our state with affordable, clean and reliable energy for everyone. It will also help us meet our newly legislated emissions reduction targets under the *Climate Change (Net Zero Future) Act 2023.* We now have enough projects signed up to get us almost halfway to our 2030 renewable energy generation target.

In May 2023, we commissioned the NSW Electricity Supply and Reliability Check Up (the Check Up) to identify actions to improve delivery of the Roadmap. The NSW Government accepted 44 of the 54 Check Up recommendations, noted 3 were complete or underway and accepted 3 in part. 17 of the recommendations are now complete (as of September 2024), and another 33 are in progress.

In the last 12 months we have:

- established a whole-of-government Steering Committee and implementation plan to coordinate actions across government agencies
- strengthened the Energy Corporation of NSW's (EnergyCo's) regional presence
- provided additional funding to support the assessment of REZ projects
- designed and launched the \$128 million <u>Community and Employment Benefit</u> <u>Program</u> in the CWO REZ so that benefits are delivered earlier in regional communities hosting new energy transmission and generation projects
- established Australia's first REZ Access
 Scheme to enable generation capacity to connect to the CWO REZ network
 infrastructure
- established an Access Scheme for the South West REZ
- established a partnership between NSW Farmers and EnergyCo, to improve outcomes in the CWO REZ
- progressed construction of the Waratah Super Battery, which is on schedule to be completed by August 2025
- launched the <u>Consumer Energy</u> <u>Strategy: Powering our People and</u> <u>Communities</u>, which aims to take pressure off large-scale generation and transmission infrastructure by making it easier for households and businesses to access energy-saving technologies
- established the Energy Security Corporation under legislation to invest \$1 billion in energy storage and other critical projects

Planning system and approvals

Since September 2023, we have granted planning approval to 24 renewable energy projects. These will deliver 5.2 GW of new energy generation and 5.6 GW (or 13.7 GWh) of storage (as of October 2024). We've also granted planning approval for the CWO REZ transmission project which will connect large-scale solar, wind and energy storage projects to the electricity grid. The project will deliver at least 4.5 GW of transmitted electricity, which is equivalent to powering 1.8 million homes.

Alongside these approvals, there is a substantial pipeline of new renewable energy generation projects in the planning system. As of October 2024, there are 24 under assessment, totalling around 15 GW of generation (equivalent of powering around 6.8 million homes annually) and worth about \$32.4 billion.

We're committed to assessing these applications quickly, and we've reduced our average assessment timeframes for renewable energy projects by 60%. This was from an average of 170 days, between 2016 and 2021, to 71 days between July 2021 and October 2024.

While it is important that the planning system supports the transition and the timely approval of development applications, it needs to do this whilst maintaining robust protections for the environment and NSW communities.



Large-scale renewable energy projects approved since September 2023

5.2 GW

Amount of energy generation approved since September 2023

13.7 GWh

Amount of energy storage approved since September 2023

71 days



The average assessment timeframe for renewable energy projects



The total amount of large-scale renewable energy generation approved through the NSW planning system We have published the Renewable Energy Planning Framework which will help achieve these objectives. This is explained in further detail throughout this document.

It is critical that we continue to work collaboratively with communities and industry to minimise impacts, enhance benefits, develop effective solutions where there are challenges, and provide support where it's needed.

Engagement

We've heard from impacted communities and industry on the need to improve the way we navigate the transition. Including through public consultation on the draft Energy Policy Framework (now renamed the Renewable Energy Planning Framework).

The NSW Government is also working closely with Commonwealth, State and Territory governments through the Energy and Climate Change Ministerial Council's National Energy Transformation Partnership to progress actions in response to recommendations from the Australian Energy Infrastructure Commissioner.

This Update provides an overview of the key themes from these engagements and what we're doing to address feedback from communities and industry. While we have made significant advancements, it is clear we have more to do to make our move to renewable energy happen.



Actions at a Glance

Goals	What we're doing
Engage and support communities	 Implementing the CWO REZ Community and Employment Benefit Program and Strategic Benefit Payment Scheme Expanding the functions of the Energy and Water Ombudsman of NSW to provide independent ombudsman services for those impacted by renewable energy infrastructure projects Supporting the adoption of the <u>National Guidelines for Community Engagement and Benefits for Electricity Transmission Projects</u> Developing <u>region-specific First Nations Guidelines</u> for each REZ.
Streamline planning approvals and incentivise development	 Implementing the Renewable Energy Planning Framework Committing to assess projects within 100 days of receiving an environmental impact statement (not including time taken for the applicant to respond to requests for information) Committing to reduce requests for information and enhance interagency cooperation to help accelerate approvals Developing policy to assist decision-makers in balancing the broader strategic need for renewable energy projects with potential amenity impacts to individual landholders Investigating further opportunities to fast-track assessments, including evaluating impacts and issues at a strategic level
Manage impacts and enhance strategic planning	 Upgrading road intersections and pinch-points along the State road network to enable the transportation of large renewable energy equipment from our ports to REZs Undertaking strategic work to address cumulative impacts within REZs including pressures on housing and accommodation, traffic and transport, water supply, and waste management Undertaking work to identify areas of high scenic value in the REZs, and investigating ways to manage cumulative visual impacts Investigating how we can coordinate biodiversity offsets to enhance conservation outcomes in REZs

Renewable Energy Planning Framework

We have released the Renewable Energy Planning Framework, which improves the planning system by clearly communicating application requirements and expectations, providing more certainty to applicants, reducing assessment timeframes, and enhancing benefits for host communities.

The Framework includes several guidelines and tools. These are summarised in Figure 1 below and explained in more detail on our website.

The Framework addresses some recommendations from the Check Up, including the need to establish guidelines for wind, utility solar, benefit sharing, landholder agreements, and declaring renewable energy projects as Critical State Significant Infrastructure.

The release of the Framework follows a comprehensive consultation process that

included working groups with industry bodies, meetings with local government, town hall-style community meetings in REZs, and the exhibition of a draft Framework and guidelines.

Around 400 submissions were received during the formal exhibition period which ran from 14 November 2023 to 29 January 2024. We heard from a wide range of stakeholders, including:

- individual community members
- community groups including Voice for Walcha, Burrendong SOS, Oberon Against Wind Towers, CWO REZist and HumeLink Alliance
- peak industry bodies including the Clean Energy Council, Clean Energy Investor Group and the Smart Energy Council
- individual developers, and
- local government.

All the submissions can be viewed on the NSW Planning Portal.

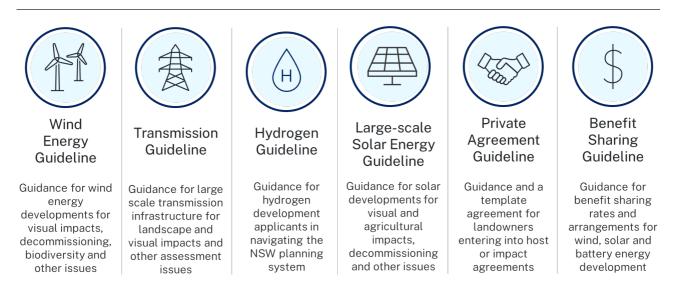


Figure 1: Elements of the Renewable Energy Planning Framework

Many submissions provided feedback on topics and issues outside the scope of the Framework but related to broad matters around the NSW energy transition, offshore wind, nuclear energy, climate change, net zero policies and implementation of the Roadmap.

Other submissions commented on the NSW planning system and called for more streamlined assessment processes to

reduce assessment timeframes and delays. The overwhelming majority of public submissions raised concerns about environmental and social impacts, particularly the cumulative effects of the transition.

Key themes heard during submissions are outlined below and shown in Figure 2.

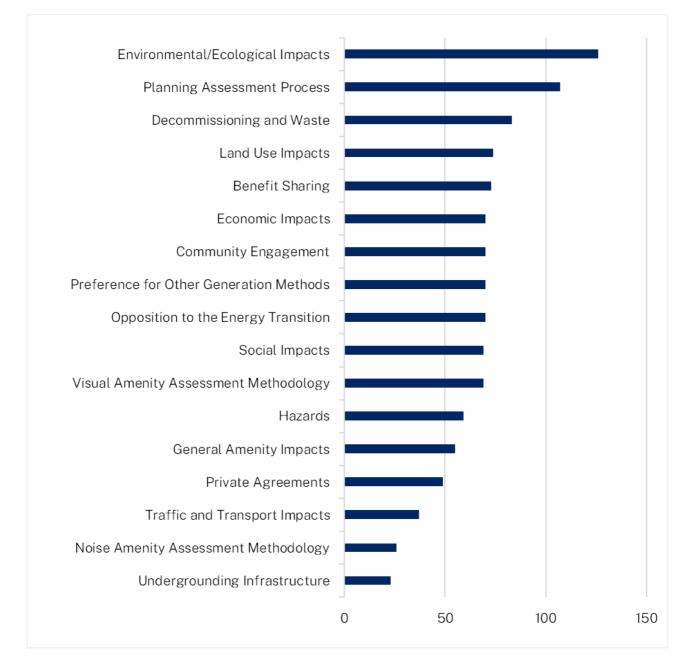


Figure 2: Key issues raised in submissions

Key Emerging Themes

Many of the issues raised in consultation on the Framework have also been raised in other forums and inquiries. This feedback relates to several key themes about renewable energy development and transmission infrastructure, including concerns around:

- environmental and social impacts, particularly in relation to cumulative impacts in REZs (for example, traffic and transport and construction workforce demands)
- decommissioning of energy infrastructure, including solar panels and wind turbines
- amenity impacts from wind energy development (noise and visual)
- community engagement and complaints handling
- economic impacts and the need for local communities and regions to benefit from the transition
- impacts from transmission infrastructure and project undergrounding.

Feedback from industry also called for further strategic planning in the REZs to help streamline assessment processes and expedite the required delivery of infrastructure. Below is a summary of the key feedback areas and how the NSW Government is working to address these issues.

Cumulative Impacts and Strategic Planning

What we've heard

Communities and councils in REZs are concerned about the potential cumulative impacts of proposed renewable energy development, as the number and size of projects likely to be under construction around the same time may place additional pressure on local and regional infrastructure and services.

Specific concerns have been raised in relation to construction-related impacts such as potential increased pressures on local housing markets (due to the need for temporary workforce accommodation), road network impacts, water supply and waste management. Regional-scale cumulative biodiversity impacts from development has also been raised as a concern.

Community groups have requested more strategic spatial land-use planning to support the transition, including strategic planning to mitigate cumulative traffic and transport impacts.

The industry has also requested more strategic assessment to streamline the assessment and upgrade of shared road networks that will be used to transport infrastructure from the Port of Newcastle to the REZs.

What we're doing

Cumulative impact studies

We've committed to undertaking cumulative impact studies for the Central-West Orana, New England and South West REZs.

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These studies will identify ways for the Government to support host communities by identifying specific actions and plans that can be implemented to alleviate the potential pressures of cumulative impacts on local and regional infrastructure and services.

This will address issues like traffic and transport, housing and workforce accommodation, social infrastructure and services, water security and waste management.

For the CWO REZ, these studies will build off the work EnergyCo started in its *Central-West Orana Research Summary* (November 2022), and subsequent report, <u>Central-West Orana Renewable Energy Zone</u> <u>– Coordinating community impacts and</u> <u>benefits in the REZ</u> (March 2023).

Road upgrades

We're working to upgrade road intersections and pinch-points along the State road network to enable the transportation of large renewable energy equipment from our ports to REZs.

The Port to REZ road upgrades will:

• enable delivery of large components essential to construct and operate

major critical REZ transmission and generation projects

- minimise disruption and improve safety for other road users during the movement of oversize and/or overmass (OSOM) loads
- include improvements to intersections and pinch-points and new passing bays
- be designed to enable safe passage of OSOM components and reduce impact on road users.

Coordinate biodiversity offsets



Following the planning assessment, which evaluates the efforts to avoid and minimise impacts to biodiversity, residual impacts are required to be offset.

We're investigating how we can take a coordinated approach to leverage REZ projects to deliver better conservation outcomes.



Visual Amenity

What we've heard

Visual amenity is a critical issue for landowners and communities near proposed projects or in areas expected to be subject to future renewable energy development.

We've introduced an innovative visual impact assessment methodology as part of our new planning framework. This will set clearer expectations and provide more certainty to the industry and communities.

We received a broad range of feedback on this methodology. Some stakeholders requested setbacks from wind turbines to be reduced, while others requested them to be increased.

The Australian Institute of Landscape Architects provided feedback that:

- the visual impact assessment process placed too much emphasis on private views rather than the broader landscape character
- viewpoint sensitivity levels and magnitude thresholds should be aligned across all development types (solar, wind and transmission).

In response to this feedback, we have slightly reduced visual setbacks (e.g. 2.2 km to 1.7 km for a 270 m turbine). These are now more consistent with other states and jurisdictions.



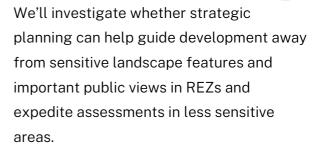
We've also revised magnitude thresholds and viewpoint sensitivity levels so that they are consistent across types of development and added an additional scenic quality class to provide greater flexibility for visual assessment experts to determine the scenic quality and sensitivity of a view.

Additionally, the framework can now be used to assess the cumulative visual impact of multiple projects.

We believe these changes strike an appropriate balance between the need to protect visual amenity and the need to build renewable energy infrastructure.

What we're doing

Strategic planning



Decommissioning

What we've heard

There are calls from community members and some councils for renewable energy developers to pay a bond or bank guarantee to cover the cost of decommissioning and rehabilitation (similar to bonds for mining projects). This could be called upon by Government if a developer does not fulfil its obligations.

In developing the new renewable energy planning framework, we've carefully considered whether decommissioning bonds should be required.

Ultimately, the cost and responsibility of decommissioning are matters for the developer and the landowner in their commercial negotiations. The cost of decommissioning is heavily dependent on what the host landowner is willing to accept at the completion of the project. For example, if the landowner is willing to retain access roads and underground cabling, the cost of decommissioning a single turbine could be as little as \$3000 (after materials are recycled and resold).

It is appropriate for the landowner to consider these costs when they enter into lease agreements and negotiate renumeration from the project.

We've introduced a Private Agreement Guideline and decommissioning calculators to inform landowners of matters they should consider as part of this process, and to enable them to estimate likely costs. If Government were to require a bond, it would come at a significant cost. Bonds incur interest overtime, and this would increase costs for the industry and energy consumers.

To maintain bonds for the renewable energy projects that come online from now until 2030 would cost up to \$1.36 billion (in present value terms over 25 years).

This cost is not proportionate to the risk. Unlike mining projects, almost all investment in renewable energy happens upfront. Coupled with relatively small decommissioning costs, this means the ongoing risks are extremely low and the cost of decommissioning can be recuperated in as little as 2 years of operation.

What we're doing

Enforcement



We'll continue to set conditions on all large-scale wind and solar approvals to ensure they are decommissioned and rehabilitated.

Continual improvement

We'll monitor the effectiveness of our new guidance and update our decommissioning calculators over time to reflect changing market costs and advancements in technology.

Consultation and Complaints Handling

What we've heard

There are calls from community members for earlier and better engagement by the renewable energy and transmission infrastructure industry, more transparency from developers about projects and better complaints handling procedures.

In its <u>Community Engagement Review</u>, the AEIC made recommendations that developers reduce unnecessary and duplicative community engagement by selecting the best project sites, and engage the community more meaningfully to identify opportunities to enable sustainable benefit-sharing.

In response to this feedback, further guidance about community engagement, impact mitigation, good site selection and benefit-sharing expectations for renewable energy and transmission infrastructure projects have been incorporated into the wind, transmission and benefit-sharing guidelines in the Renewable Energy Planning Framework.

For example, we have amended the *Benefit Sharing Guideline* to provide more guidance about its expectations for community engagement during the development and implementation of benefit-sharing arrangements.

Our guidelines continue to require early, genuine and ongoing community engagement as part of the State environmental approvals process for major renewable energy projects. This must happen in a way that allows community members to identify potential opportunities and constraints associated with proposed development. The applicant should identify the elements of the project and the environmental assessment that can be influenced or shaped by the community.

What we're doing

Improving complaints handling

We're expanding the functions of the Energy and Water Ombudsman NSW to provide independent complaint handling services to community members impacted by transmission and renewable energy infrastructure projects (from December 2024).

The Energy and Water Ombudsman NSW will also engage with impacted communities to identify systemic issues, and work with transmission and renewable energy member entities to help improve their internal complaint handling processes and practices.

National guidelines



We're supporting the adoption of the <u>National Guidelines for Community</u> <u>Engagement and Benefits for Electricity</u> <u>Transmission Projects</u> which will help improve community engagement and benefit sharing for new transmission projects. The guidelines will also make sure that local benefit sharing mechanisms align with community priorities and expectations.

Education

We'll work to improve awareness of our planning guidelines and the development assessment process through engagements with industry, local government and communities.

Benefit Sharing

What we've heard

Some communities are concerned that they will host renewable energy infrastructure and the impacts of the transition without experiencing any tangible benefits.

We're committed to ensuring regional and First Nations communities benefit from the transition.

The REZ Community and Employment Benefit Programs will invest hundreds of millions of dollars to share the benefits of the renewable energy transition and support the long-term prosperity of regional communities. Stage 1 of the Program is underway in the CWO REZ and will be rolled out state-wide as more REZs head towards delivery. This funding is raised by access scheme fees levied on developers connecting to new transmission infrastructure.

We've also released the *Benefit Sharing Guideline* as part of our new Renewable Energy Planning Framework. The guideline encourages developers to share benefits through the planning process and provides guidance on an appropriate rate. This will ensure communities benefit from every new energy generation projects, whether in a REZ or not.

We received a range of feedback on the draft *Benefit Sharing Guideline*. While the submissions indicated general support, stakeholders had mixed views about the proposed benefit-sharing rates. They also expressed some reservations about the proposed payment structure, including the timing of payments and who should be responsible for managing shared benefits.

Further guidance was sought on what shared benefits may be used for and how they should be apportioned between different groups of beneficiaries, administrators (such as the developer and the council), and geographical areas (particularly where a development would extend beyond one local government area).

There were also calls for the guidance to apply to stand-alone battery energy storage systems.

In response to stakeholder feedback, the Benefit Sharing Guideline now provides additional guidance about:

- what should and should not be included in benefit sharing arrangements
- the apportionment of benefits to local affected communities and the broader local government area
- the management of different types of benefit sharing arrangements
- expectations for governance and reporting

The guideline includes an additional rate for battery energy storage systems as well

as guidance on how benefit sharing rates should be applied to hybrid developments. Importantly, the guideline sets out a range of principles to ensure that benefit sharing is transparent, focussed on communities (not just individual landholder payments) and delivers positive, tangible and longterm social and economic benefits.

What we're doing

Benefit programs



EnergyCo is continuing to work closely with key stakeholders, industry and community representatives (including First Nations representatives) to identify and define local community priorities for long-term legacy programs in the region to inform the development of program documents.

The <u>Community and Employment Benefit</u> <u>Programs</u> for the REZs will invest hundreds of millions of dollars to share the benefits of the transition and ensure the long-term prosperity of regional communities. EnergyCo has worked closely with communities on the design of this program. In a REZ with a declared access scheme, the program will operate and deliver benefits for many years after the REZs are delivered, ensuring impacted communities are left better off than they were before.

Strategic benefit payments

We've established a <u>Strategic Benefit</u> <u>Payments Scheme</u> to provide payments to private landowners who host certain new major high-voltage transmission projects that are critical to the energy transition. Under this scheme, landowners will receive annual payments for a period of 20 years. These payments are separate, and in addition to, the requirement to pay compensation to host landowners for transmission easements on their land in accordance with the Land Acquisition (Just Terms Compensation) Act 1991.

First Nations Guidelines

In August 2022, the NSW Government published its First Nations Guidelines for the Roadmap. The Guidelines set out the expectations for increasing employment and income opportunities for Aboriginal peoples and communities in the construction and operation of new electricity infrastructure projects.

To support these Guidelines, we're working on region-specific plans for each of the five REZs. These will outline the local Aboriginal communities' goals and aspirations for income and employment opportunities, as well as their preferred method of engagement with Roadmap project proponents and Government.



Streamlining assessment processes and facilitating development

What we've heard

While we're confident the new Renewable Energy Planning Framework will help accelerate decision-making, we've heard that more needs to be done to streamline planning processes and to help us meet our 2030 targets.

Industry bodies have called for:

- broader use of Critical State
 Significant Infrastructure provisions for renewable energy developments
- better inter-agency collaboration to reduce delays associated with referrals
- fewer requests for information in the assessment process
- guidance that strikes a balance between managing the impacts of the renewable energy industry with the urgent need to connect more renewable energy to the grid.

Industry bodies have also told us the planning system needs to do a better job of balancing the need for large and strategically important renewable energy projects and future development potential for rural dwellings and other uses.

In response to this feedback, we amended parts of the Renewable Energy Planning Framework so that impacts on dwellings only need to be considered if they are built or under construction at the time the industry commences the planning process (i.e. at the time the Secretary's Environmental Assessment Requirements are issued).

What we're doing

Expediting assessments

It is vital that the planning system operates efficiently, and we're committed to:

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- assessing projects within 100 government days of receiving an Environmental Impact Statement
- using our best endeavours to limit any major requests for information (to which the time taken to respond does not count in this timeframe) to one per stage of the assessment process
- enhancing inter-agency cooperation to help accelerate approvals, including by improving the quality of agency advice
- developing indicative Environmental Assessment Requirements for wind energy projects, which, coupled with the new framework, will allow the industry to pre-empt requirements for their Environmental Impact Statement.
- using the <u>Independent Expert Advisory</u> <u>Panel for Energy Transition</u> to mediate disputes and minimise delays in the assessment process.

We'll also investigate other opportunities to fast-track assessments, including evaluating impacts and issues at a strategic level so that they do need to be interrogated on a project-by-project basis.

Voluntary acquisition policy

We'll develop policy to assist decisionmakers in balancing the broader strategic need for renewable energy projects with potential amenity impacts to individual landholders.

Like the Government's policy for mining, this would provide landowners with an option to have their land acquired if they would experience significant amenity impacts that cannot be avoided or mitigated and the project is of sufficient importance to the State that it should proceed.

Landholder Agreements

What we've heard

The NSW Government developed a *Private Agreement Guideline*. This provides guidance for landholders who are considering whether to enter into agreements to host or accept the impacts of renewable energy infrastructure.

During consultation on the draft planning framework, we received feedback from industry expressing concerns about the potential legal implications of the draft agreement template and the lack of flexibility to account for project-specific negotiations.

We also heard from stakeholders that the draft guideline was lengthy, overly legal in nature, and as result, difficult to understand. In response to this feedback, we simplified the guidance to be easier to understand and to focus on key issues landowners should consider including confidentiality, biosecurity, compensation and decommissioning. The revised guidance contains general clauses which applicants and landholders can consider and include in their agreements.

We've also clarified that copies of private agreements do not need to be provided to the NSW Government. Instead, applicants must maintain an agreement register and provide a copy of this register when lodging an environmental impact statement. The register will allow us to understand which impacts are covered by the agreement and which impacts do not need to be assessed in a development application.

What we're doing

Collaborating with NSW Farmers



We are working with NSW Farmers to develop codes of conduct around accessing property that will host infrastructure.

This will lay the groundwork for better engagement with farmers and communities in all five REZs and across NSW.

Continual improvement

We'll evaluate the effectiveness of our new guidance over time. We'll continue to work with key stakeholders to ensure landowners have access to resources that help them understand the implications of hosting renewable energy infrastructure.