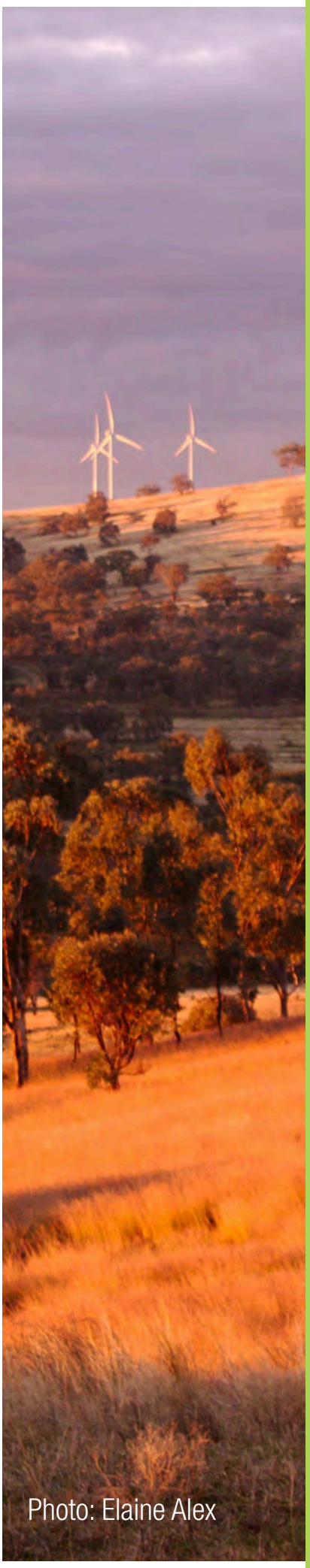

Photo: Elaine Alex

Nature Conservation Council

Nature & Renewables Toolkit

Helping NSW communities achieve a renewables rollout that protects and enhances the local environment

2025

Nature Conservation Council

Nature & Renewables Toolkit

Introduction

Acknowledgement

The Nature Conservation Council NSW acknowledges that we live and work on the land of First Nations people. This land has been cared for since time immemorial by Traditional Owners, whose sovereignty was never ceded. We pay our respects to the Traditional Owners past and present of the many Countries within so-called New South Wales.

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The Nature Conservation Council of NSW (NCC) respects and supports all First Nations people's right to self-determination as outlined by the UN Declaration of the Rights of Indigenous Peoples (UNDRIP), which extends to recognising the many different First Nations within Australia and the Torres Strait Islands. NCC commits to maintain open lines of communication and to build respectful mutual relationships with First Nations people in all the work we do and wherever possible, seek aligned outcomes with and support the goals of First Nations groups.

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Version 1, August 2025

Introduction: Why a Nature & Renewables Toolkit?

NSW's environment and planning laws need to be strengthened to ensure that nature is protected and restored through all development, including the building of renewable energy. As Ken Henry's review of NSW biodiversity laws found, all development must move to a nature positive framework. Nature positive means there has been an improvement in the diversity, abundance, resilience and integrity of ecosystems from an agreed baseline.

The build of renewable energy in NSW is a once in a generation opportunity. It has potential to transform rural and regional communities in NSW through economic and community benefits, the ability to diversify industry and income streams for farmers and landholders, and increase nature restoration and protection opportunities.

To achieve the full benefits of the renewable energy transition, our environment and planning laws need to include mechanisms to uphold the values of protecting and enhancing the environment, First Nations self-determination, and reflect the aspirations of local communities.

The Nature & Renewables Toolkit was developed to help communities in NSW who are grappling with how to achieve a renewables rollout that achieves the above values. It aims to build up the capacity of communities and local environment groups to engage with the planning process for renewable energy developments in their regions in an informed, constructive way. It can be used by local community members or groups who are being impacted by the transition (whether located inside or outside of a Renewable Energy Zone), key stakeholders (such as local councils), and decision makers, to inform policy decisions.

This Toolkit is divided into three parts:

1. Protecting nature in the rollout of renewable energy – outlines what a renewable energy transition that protects and restores nature looks like, how we can achieve this, and actions individuals can take to make it happen.
2. Nature and Renewables FAQs – works through answers to some frequently asked questions regarding the transition to renewables and its impacts.
3. Renewable energy developments and the NSW planning system – outlines how renewable projects move through the NSW planning system, ways community members can participate in the planning process, and tips for reading an environmental impact statement (EIS).

All three parts are important to be considered together.

We hope this Toolkit serves as a useful guide for building grassroots support for a positive renewable energy transition while also providing tips on engaging with the NSW planning system.

For any questions or enquiries on this Toolkit please reach out at ncc@nature.org.au.

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Protecting nature in the rollout of renewable energy

Nature & Renewables Toolkit

Part 1

Acknowledgement

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About this toolkit

The purpose of this toolkit is to demonstrate what a renewable energy transition that protects and restores nature looks like, how we can achieve this, and actions individuals can take to make it happen.

Version 1, August 2025

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Switching to renewables will protect nature through alleviating climate impacts

Climate change poses one of the biggest risks to nature, through impacts including drought, bushfires, storms, ocean acidification, sea level rise and global warming. Many plants and animals cannot adapt to the effects of climate change. NSW has 1018 plant and animal species and ecological communities that are at risk of extinction, with climate change, habitat destruction, and invasive species the key drivers.

The bushfires and floods over the last few years have given us a taste of what is to come if we don't take action to prevent climate change. The Paris Agreement states that to limit global warming to 1.5 degrees and prevent catastrophic climate events and mass extinction, we must reduce emissions by 43% by 2030.

NSW has legislated emissions reduction targets (based on 2005 levels) of a 50% reduction by 2030, 70% by 2035, and 0% (achieving net zero emissions) by 2050. The NSW Net Zero Commission's 2024 annual report outlined how, if things continue as they are, NSW won't meet our emissions reduction targets for 2030 and 2035. Significantly reducing emissions in the energy sector is crucial to achieving net zero by 2050.

NSW's ongoing reliance on coal-fired power means more blackouts and higher energy-prices. We need to build renewable energy in a timely manner to reach our emissions reductions targets, minimise the impacts of climate change on our environment, provide reliable energy for our state, and bring down energy prices to alleviate cost-of-living pressures.

We should strive for a renewable energy system that protects and restores nature

A thriving renewables industry has the potential to enhance biodiversity, ecosystem health and connectivity.

Working collaboratively with ecologists, First Nations groups, landholders, Landcare networks and the environment movement, renewable energy that supports nature to thrive rests on three principles:

1. Correctly siting renewable infrastructure to ensure minimal impacts, such as on already cleared or degraded land.
2. Planning renewable energy projects to include nature restoration.
3. Establishing whole-of-life, closed loop systems for renewable technologies and materials.

These principles recognise that biodiversity loss and climate change mutually reinforce each other, and that neither will be successfully resolved unless both are tackled together.

These principles can act as a guide to achieve best practice. It's important to recognise it might not always be possible for every renewable energy development to fully incorporate all principles.

What does this look like?

Renewable energy developments that protect and restore nature is not a new idea. There has been extensive research on how better biodiversity outcomes can be achieved in the planning, building and running of renewable energy development.

Both in Australia and internationally there are numerous case studies of how positive outcomes for nature can be implemented. We need to ensure that NSW's planning and environment laws ensure the standard is lifted so that all developments, including renewable energy, prioritise the protection and restoration of nature.

Case Studies

SA Water & Seeding Natives revegetation project, involving the planting of almost a tonne of native grass and saltbush seed under thousands of solar panels across the state to secure the return of native scrub vegetation and local jobs.

Ecology team harvesting native seeds for the project
Image source: SA Water/LinkedIn

Image source: IdentiFlight

Cattle Hill wind farm use of Identiflight AI technology as part of their mitigation strategy to protect eagles from turbine blade strike. Since implementing this technology, there have been no impacts involving endangered and protected eagles at the project for over a year, despite eagle activity being higher than ever.

Wellington solar farm, located south east of Dubbo, is an example of agrivoltaics – the co-location of solar farming and agricultural practices on the same piece of land. A study based on the results of the Wellington solar farm, which co-locates solar farming and sheep grazing, found no negative impact on wool production and even an improvement in the quality of wool produced.

Image source: Lightsource bp

Image source: RE-Alliance

Fundamental principles for successful renewable development in Hay LGA, is a document that outlines what the town of Hay, located in the South-West REZ, expect from any renewable energy projects that want to develop in their LGA. The development of these principles demonstrates the power of communities coming together to tell developers what they want to see out of the transition.

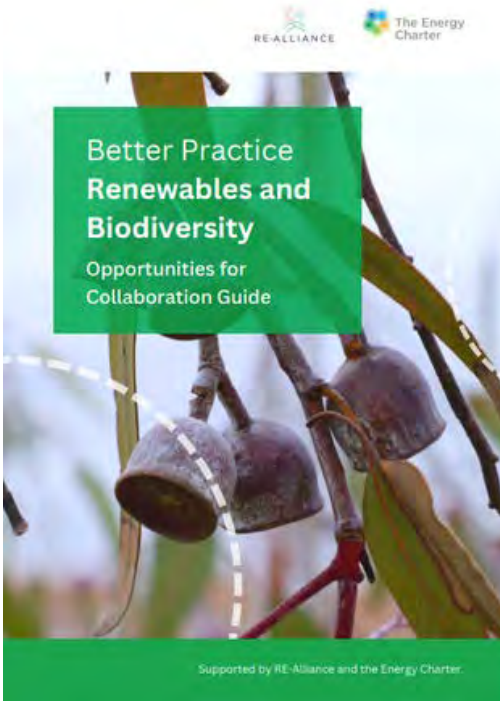
Looking for more case studies?

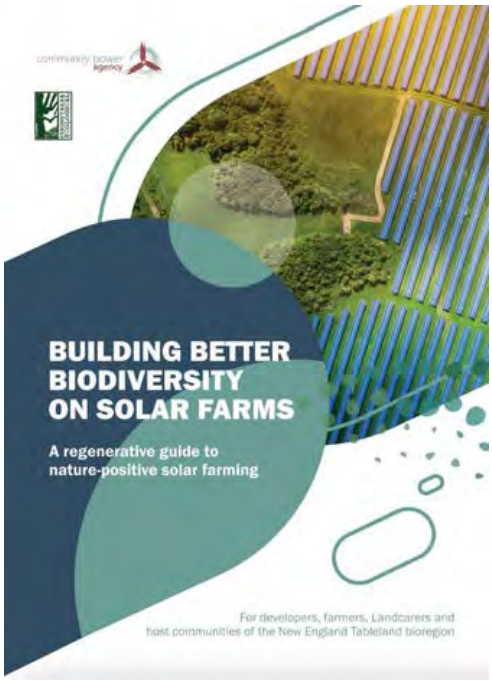
Check out the 'States of transition' report commissioned by state and territory conservation councils, and the 'renewables done right' series by RE-Alliance.

Guides

Better Practice Renewables and Biodiversity: Opportunities for Collaboration Guide – by RE-Alliance and The Energy Charter

This guide offers strategies to integrate better biodiversity outcomes throughout the lifecycle of renewable energy developments. It showcases several environmental interventions at every stage of renewable energy project development, from energy system design to end-of-life. It outlines some of what is possible through case studies and identifies opportunities for cross-sector collaboration.





Building Better Biodiversity on Solar Farms: A regenerative guide to nature-positive solar farming – by Community Power Agency and Stringybark Ecological

This guide demonstrates strategies and practical methods designed to overcome land use conflict through a biodiversity net gain approach to development and land management. It is an approach that aims to leave the natural environment in a measurably better state than it was before it hosted a solar farm.

Blueprint to Repair Australia's Landscapes: National case for a 30-year investment in a healthy, productive & resilient Australia – by Wentworth Group of Concerned Scientists

This report presents a 30-year plan to restore Australia's degraded landscapes, including 24 practical actions to do so. While this research is focused on degraded land across Australia, it serves as a useful guide for developers on how to incorporate practical actions to restore degraded land that may be on the site of a renewable energy project.

Our Renewable Future: a Plan for People and Nature – by WWF-Australia and the Australian Conservation Foundation

This joint report charts a path for renewable energy and nature to work in harmony. It identifies key steps that government, industry and communities can take and shows how an energy transition can be done in a way that not only avoids and minimises nature impacts but improves nature overall.

How do we achieve this?

NCC, working alongside our members and key community stakeholders in the New England and Hunter Renewable Energy Zones, produced a joint statement on strengthening the NSW Renewable Energy Zones. This statement includes key recommendations to the NSW government and to renewable energy developers, drawn from the reflections and learnings that people in regions have of the rollout thus far.

The key changes we want to see implemented are:

Genuine engagement and consultation with First Nations communities must remain a central part of the planning, construction, operations and decommissioning of renewable energy projects

- Ensuring policy mechanisms such as weighted criteria in tender processes for local First Nations business participation, and resourcing First Nations ranger programs.
- The NSW government should continue working with the Federal government and directly with First Nations communities to meaningfully implement an impactful and well-resourced rollout of the First Nations Clean Energy Strategy in NSW.

Identify ecological protection and restoration priorities for each Renewable Energy Zone and require developers to contribute to specific nature positive environmental regional outcomes

- This will ensure that opportunities to protect and restore nature are considered from the beginning of the planning process, rather than waiting until the environmental impact statement stage.
- We want to see regional-scale strategic plans for nature protection and restoration, instead of planning being made on a project-by-project basis.
- Local environment organisations and ecologists should be consulted to help inform these priorities.

Develop regional community benefit plans and strengthen developer consultation with communities

- Regional community benefits plans should prioritise the aspirations of both the local and broader communities in REZs and include benefits such as discounted power for residents and co-ownership of assets like community batteries.
- The NSW Renewable Energy Planning Framework should provide clearer guidance as to what “early and meaningful” community engagement looks like.

Actions you can take to support renewable energy that protects and restores nature

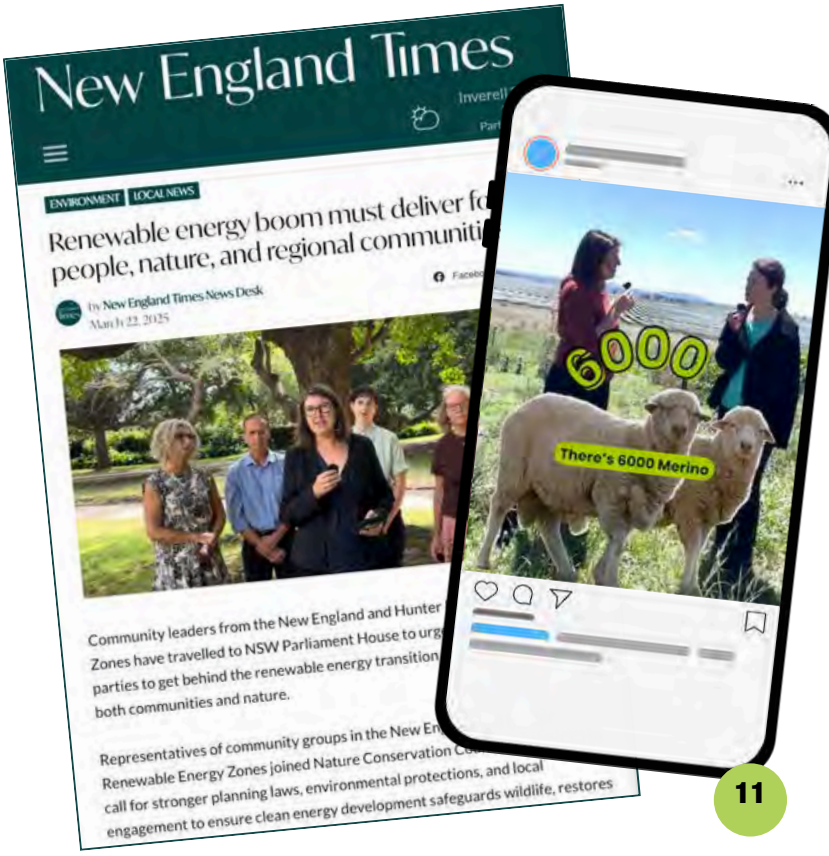
If you want to see a rollout of renewable energy in NSW that protects and restores nature, you can use your voice to advocate to decision makers, developers, and other stakeholders. To achieve the changes we want to see, it's important for community members to make it loud and clear that they want stronger action on strengthening our environment and planning laws to achieve better outcomes for nature and communities.

Meetings with your local council

Local councils are a key stakeholder in the rollout of REZs. Local councils work closely with renewable energy developers on managing the impact of a project on the region. They can often receive 85% of the benefit-sharing funds from developers to fund community projects and services, and if they make an objection to a development in the LGA it will be automatically referred to the Independent Planning Commission. Therefore, it's important that local councils are informed on the outcomes the local community wants from the transition to renewables, especially to protect and restore nature.

Media engagement

Talking to your local media about why you want to see a renewable energy transition that supports nature or showcasing examples of where this has been done right. This can include writing an opinion piece or a letter to the editor. If any media engagement gets published, make sure to share it with your community and/or on social media.



Meetings with your local member for parliament

It's important for your local MP to hear from community members who want a renewable energy transition that protects and restores nature. Even though your local MP may not have direct influence on the parliamentary processes to achieve our asks, MPs that are informed on the issues and what communities want to see can talk to MPs who are decision makers and encourage them to act.

Reach out directly to renewable energy developers in your region

It is the responsibility of renewable energy developers to have a community engagement plan, which includes engaging with key community stakeholders and local groups. However, you can also organise meetings directly developers to build a relationship with them, understand the scope of the project, provide feedback and insights on the local community and region.

Attend community events

EnergyCo, renewable energy developers, and local community groups will often run community events or forums on the rollout of REZs. They might be about a specific renewable energy project, an update from a government department, or about community engagement. Attending these events is not only an important way to stay informed on developments, but to also understand the sentiment of the wider community, giving you an opportunity to express your opinions in a public forum and advocate for better nature outcomes.

Delegation of representatives from the Hunter and New England REZs at NSW Parliament House with NCC

Distributing guides on nature positive renewable energy developments

As mentioned above, there are many existing guides, reports and pieces of research on how renewable energy projects can achieve better outcomes for nature and communities. Sometimes renewable energy developers, key stakeholders or decision makers are supportive in theory of nature positive renewable energy developments but lack technical knowledge on how this can be achieved. Organising meetings to share and talk through the research on how to incorporate nature protection and restoration into renewable energy developments can be an important first step in encouraging developers to adopt such practices.

Running community workshops

To get the attention of decision makers, building momentum within your community is important. Running workshops on nature and renewables to inform your community on the issues and the outcomes we're trying to achieve can be an effective way to build support.

Nature & Renewables Workshops in the Hunter and New England REZs

NCC is keen to support community members in taking action!

If you have further questions, seeking support or guidance, please reach out at ncc@nature.org.au

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Nature and Renewables FAQs

Nature & Renewables Toolkit

Part 2

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About this toolkit

The purpose of this toolkit is to work through answers to some frequently asked questions regarding the transition to renewables and its impacts from a trusted source. Please use it to learn more yourself or share with friends, community members, or decision makers who have asked these questions.

Version 1, August 2025

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Why are we transitioning to renewable energy?

To act swiftly on climate change, it is essential that we significantly reduce our greenhouse gas emissions. New South Wales (NSW) has legislated emissions reduction targets (based on 2005 levels): a 50% reduction by 2030, 70% by 2035, and achieving net zero emissions by 2050. The most impactful way to meet these targets is by transitioning our energy generation away from polluting coal-fired power stations to clean, renewable energy sources. Currently, NSW still depends on four coal-fired power stations, and any extensions to their operational lifespans could jeopardise the state's ability to meet its legally binding emissions reduction commitments. The timely rollout of renewable energy generation, transmission and storage projects is critical to ensure these coal-fired power stations close as soon as possible.

How far along is NSW in the transition to renewable energy?

NSW is already more than halfway to our renewable energy generation capacity (currently at 53%). Under the Electricity Infrastructure Investment Act, NSW has legislated a goal of delivering 12 gigawatts (GW) of renewable energy generation and 2GW of storage by 2030, as well as a non-legislated target of 12GWh of long duration storage by 2034. This transition in NSW will be largely driven through the rollout of Renewable Energy Zones.

What are Renewable Energy Zones (REZs)?

The NSW Government has established five Renewable Energy Zones (REZs) to deliver the large-scale renewable energy generation needed to meet the state's clean energy targets. These REZs function as energy hubs, where renewable energy infrastructure, power generation, and high-voltage transmission lines are co-located to maximise efficiency. The locations for these zones were selected based on several key factors, including strong renewable energy potential – areas with abundant sunlight and/or wind – and proximity to the existing electricity network.

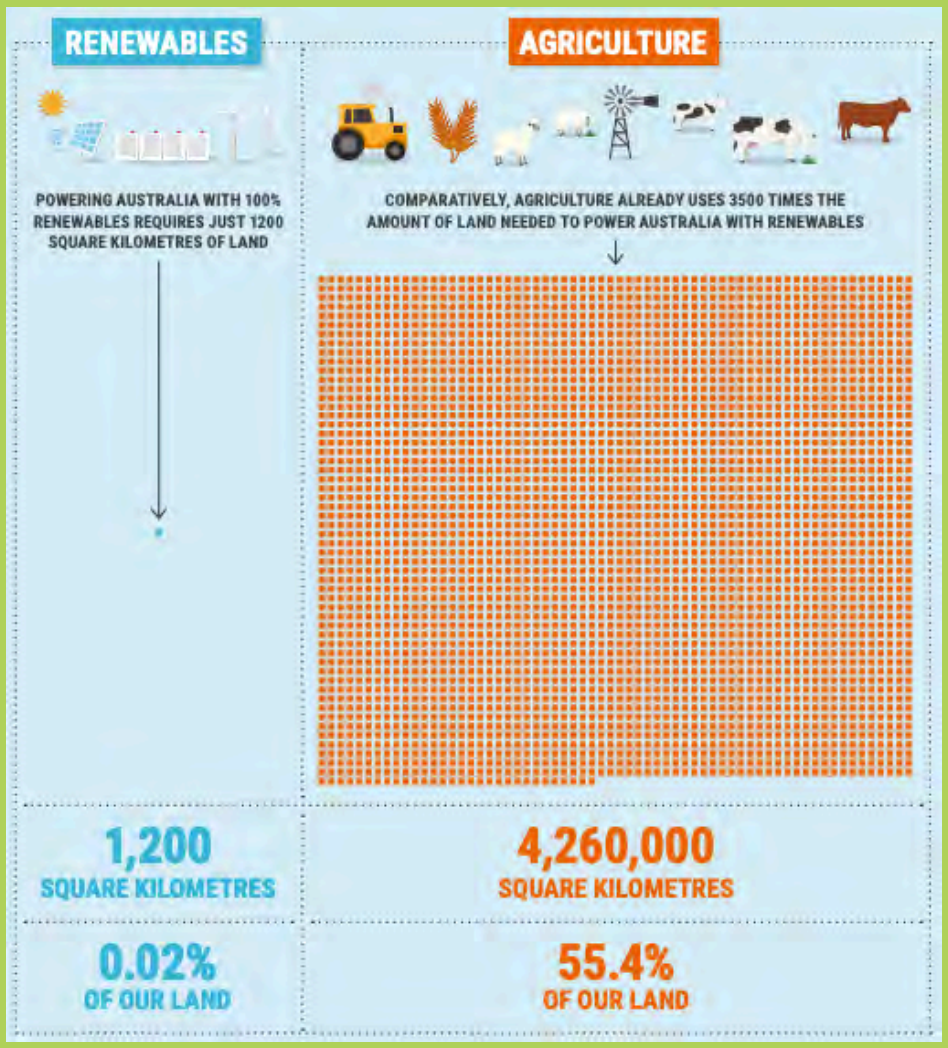
While REZs act as a vehicle to coordinate large amounts of renewable energy in NSW, renewable energy development will continue to be built outside of the REZs to ensure the state has enough energy to meet consumer needs and stick to timelines.

Map of NSW Renewable Energy Zones. Source: EnergyCo

How much land will renewable energy use?

The land required for renewable energy infrastructure in Australia is relatively small, especially when compared to other industries. Research indicates that powering the nation with renewable energy could require up to just 1,200 square kilometres of land, only about 0.02% of Australia's total land area. In contrast, agriculture occupies around 4.2 million square kilometres, or roughly 55% of the country.

Australia has some of the best solar and wind resources in the world, which means we have the capacity to produce some of the cheapest electricity through wind and solar technology. Importantly, renewable energy projects also create opportunities for dual land use. For example, sheep and other livestock can graze beneath solar panels, allowing agricultural activities to continue alongside energy generation. This co-use model enables farmers to diversify their income, build resilience against drought, and strengthen the long-term sustainability of their farms.



Source: Climate Council: Electric Shock! Australia's Light-Bulb Moment

What are the environmental impacts of renewable energy?

Climate change is one of the greatest threats to nature, impacting ecosystems, species, and habitats across the planet. Transitioning to renewable energy allows us to stop our reliance on fossil fuels and mitigate the long-term impacts of climate change. When planned and implemented responsibly, renewable energy developments can play a significant role in protecting nature.

Like all forms of development, renewable energy infrastructure can have some impact on the environment. It's important that we make sure our planning and environment laws are strong to ensure the impact on the environment is minimal, that threatened and endangered species are protected, and developers are actively incorporating additional nature protection and restoration measures into their projects.

Why do we need different types of renewable energy generation and storage?

Having a mix of different types of renewables – rooftop solar, household batteries, large scale solar, wind farms, and large scale storage – is important for energy reliability and maximising energy output. Each type of renewables complements each other to make sure that there is energy available 24/7.

For example, solar panels can't generate electricity at night when the sun isn't shining, and they produce less on cloudy days. Having wind to generate electricity during such conditions and batteries to store excess electricity also ensures energy reliability and security.

Do wind turbines harm birds and bats?

The relationship between wind turbines and bird or bat deaths is complex and often misunderstood. Wind turbines can have a negative impact on birds and bats by increasing the risk of collisions, which can lead to bird and bat deaths. Our environmental and planning laws need be strengthened to ensure that wind turbines are built in the right places and with proper mitigation strategies in place to reduce the risk.

It's also important to consider the broader context:

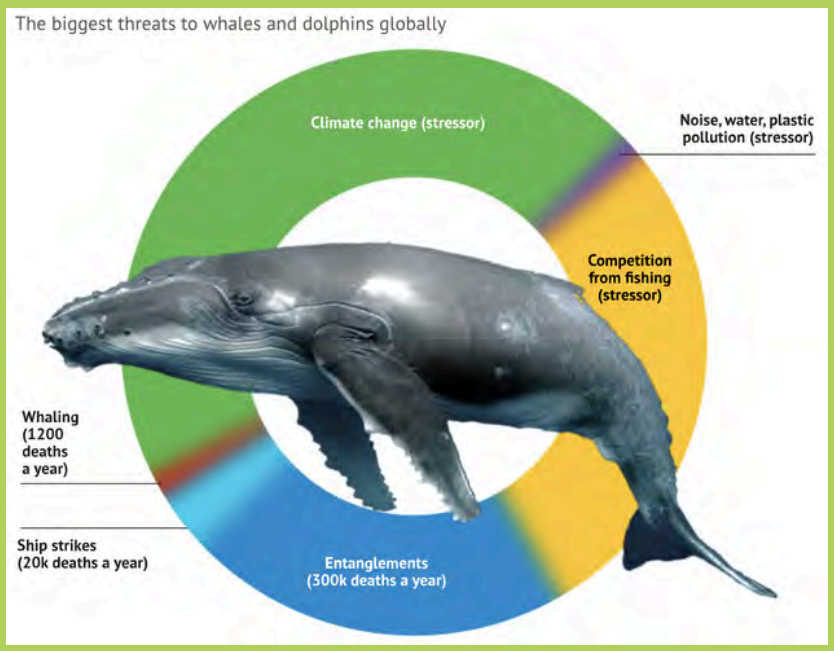
1. Mitigation strategies are working: Smart planning and new technologies can greatly reduce the risks. Strategies that can be used to minimise collisions include incorporating visual or audible signals that deter birds and bats as they're approaching turbines, curtailing (shutting down) turbines when species are detected or during known times of heightened risk, and adjusting the height of turbines. The Cattle Hill Wind Farm in Tasmania, for instance, uses Identiflight AI technology to monitor and protect eagles from turbine collisions. Since this system was installed, there have been no recorded impacts involving endangered eagles, even though eagle activity has increased.
2. Climate change is the bigger threat: The most significant threat to birds, bats, and other wildlife is climate change itself. Rising temperatures, more frequent extreme weather events, and ocean acidification make it harder for many species to survive. Moving to renewable energy helps limit these threats.
3. Turbine collisions represent a small fraction of bird deaths: While wind turbines can cause bird and bat deaths through collisions, these numbers are incredibly small compared to other human-related threats. For example, fossil fuel power generation causes over 700 times more bird deaths, and domestic cats kill more birds in a single year than wind turbines do in a decade.

With the right environmental regulations, we can ensure wind farms are located and managed in ways that minimise their impact on wildlife. It's crucial we continue working to strengthen these regulations to achieve the best outcomes for nature. For more info, see the Australasian Bat Society's policy statement on wind farms.

Do offshore wind farms harm whales?

No, there is no evidence that offshore wind farms harm whales. Offshore wind has been operating for years in regions like the UK, Europe, and the US, and extensive research has found no negative impacts on whales. The major threats to whales include climate change, entanglement in fishing gear, ship strikes, plastic pollution, and whaling. Addressing these issues is critical to protecting whale populations globally.

That said, offshore wind projects can affect some wildlife, particularly seabirds. However, as with onshore wind, these risks can be greatly reduced through careful siting and effective mitigation strategies. Whales and dolphins are not considered at risk from offshore wind turbines.



Source: International Whaling Commission, Friend of the Sea
Graphic: Matt Davidson

Do we need both onshore and offshore wind?

It's important to have a mix of renewable energy generation to ensure energy reliability and security. Winds that blow across the ocean (offshore) are more consistent and stronger than winds that blow on land (onshore). So wind turbines that are built offshore, in the ocean, are able to generate far greater amounts of energy.

However, onshore wind cost less to build and has shorter construction periods. So while offshore wind is more powerful, we still need onshore in the mix to keep prices down and roll out renewables in a timely manner.

Can materials for wind and solar be recycled?

Solar panels typically have a lifespan of 25 to 30 years, while wind farms generally last around 20 to 30 years. As these systems reach the end of their operational life, it's important to ensure their materials are responsibly managed. Fortunately, most components used in solar panels and wind turbines are recyclable. In fact, up to 95% of a solar panel's materials can be recovered and reused, while approximately 85–94% of a wind turbine's mass is also recyclable.

Emerging technologies and innovative recycling solutions are continuing to improve how we recover and reuse materials from renewable energy systems. The NSW Government is supporting this transition to a more circular economy through the NSW Circular Economy Policy Statement, which includes:

- A scoping study for photovoltaic panel and battery system reuse and recycling to assist organisations in the development of end-of-life solar programs
- $10 million through a circular grants program to support collaborative projects that trial better reuse and recycling of solar panels with a circular economy framework
- $13 million to a Circular Innovation Fund to support research into new recycling technologies and material uses, and opportunities to pilot them in government projects.

These efforts are an important step toward reducing waste and making the most of renewable energy materials, but more work is needed to scale up recycling solutions and ensure they're widely accessible and effective.

To learn more about what happens to renewables at the end of their life, you can read this toolkit by RE-Alliance.

Do renewable energy projects pose any health risks?

No. There is no evidence that renewable energy projects – such as wind farms and solar panels – have negative impacts on human health. In fact, by reducing reliance on fossil fuels and mitigating climate change, renewable energy helps improve air quality and public health.

Are solar panels safe?

Yes. Solar panels are safe and pose no risk to human or environmental health. The International Energy Agency has conducted extensive research into the safety of solar panels and found no significant health concerns. The only potential issue identified was the use of very small amounts of lead, about 0.1% of the panel, for soldering. Many manufacturers are now using lead-free alternatives to eliminate this minimal risk.

Is noise from wind turbines harmful to human health?

Extensive studies have shown that wind turbines do not pose a health risk. The Australian Medical Association has found no direct link between wind turbines and adverse health effects. While wind turbines do produce a gentle “whooshing” sound that can be heard at the base of the turbine, it is not loud enough to disrupt normal conversation or daily activities.

Wind farms in Australia are subject to noise regulations and undergo thorough environmental assessments before approval. Once operational, they are regularly monitored to ensure compliance with these standards. Research by the Australian National Health and Medical Research Council has also confirmed that wind turbines do not produce harmful low-frequency noise.

What's the environmental impact of critical minerals needed for building renewable energy technology ?

Critical minerals – such as copper, lithium, nickel and cobalt – are essential to building renewable energy technologies. Like all mining, the mining of critical minerals (also called rare earth minerals) has an impact on the environment. The reality is that without a substantial increase in critical minerals to supply parts to power renewable technologies, we won't be able to decarbonise the energy system to move away from fossil fuels and combat climate change.

Unlike other industries, the minerals used in renewable energy technology can be reused and recycled. For coal, it is mined to be burned once. Renewables, therefore, require substantially less mining overall. An economy based on fossil fuels requires 535 times more mining than a clean energy economy.

This isn't to say that the increased demand for critical minerals isn't without real threats to the natural world. It is critical that we demand stronger environmental regulations to ensure that the mining of critical minerals has a minimal impact on the environment.

Sustainable and ethical sourcing practices, alongside improved recycling and circular economy practices, can significantly reduce the demand for critical minerals while protecting nature and labour rights throughout the supply chain.

For more info, check out:

- NCC: What does an energy transition that restores nature look like?
- NCC: Climate & Energy Campaign
- Climate Council: Electric Shock! Australia's Light-Bulb Moment
- NSW Government Renewable Energy Planning Framework FAQs

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Renewable energy developments and the NSW planning system

Nature & Renewables Toolkit

Part 3

Acknowledgement

The Nature Conservation Council NSW acknowledges that we live and work on the land of First Nations people. This land has been cared for since time immemorial by Traditional Owners, whose sovereignty was never ceded. We pay our respects to the Traditional Owners past and present of the many Countries within so-called New South Wales.

We respect the leadership of Traditional Owners in caring for Country, and support the development of treaties that meaningfully empower them to do so. We acknowledge the dispossession of First Nations People and the harm inflicted on people and Country since colonisation began. We acknowledge that colonisation is an unjust and brutal process that continues to impact First Nations people today. As people living and working on First Nations Country it is incumbent on us to play our part in righting the historical and ongoing wrongs of colonisation. Indeed, our vision of a society in which nature and communities thrive together depends upon it.

The Nature Conservation Council of NSW (NCC) respects and supports all First Nations people's right to self-determination as outlined by the UN Declaration of the Rights of Indigenous Peoples (UNDRIP), which extends to recognising the many different First Nations within Australia and the Torres Strait Islands. NCC commits to maintain open lines of communication and to build respectful mutual relationships with First Nations people in all the work we do and wherever possible, seek aligned outcomes with and support the goals of First Nations groups.

We commit, as an organisation, to empower and work together with First Nations people to protect, conserve and restore the land, waters, air, wildlife, climate and culture of the many First Nations people in NSW.

About this toolkit

The purpose of this toolkit is to help communities understand the way that renewable energy project proposals move through the NSW planning system, help navigate the environmental impacts of renewable energy developments in their region, and direct to further helpful resources that provide more detailed information on this issue.

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About NCC

The Nature Conservation Council of New South Wales (NCC) is the state's peak environment organisation. We represent over 200 environment groups across NSW. Together we are dedicated to protecting and conserving the wildlife, landscapes and natural resources of NSW.

www.nature.org.au

www.youtube.com/user/NatureNSW

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The NSW Planning System

The Environmental Planning and Assessment Act 1979 (NSW) (EP&A Act) sets out the environmental planning and assessment framework for all development in NSW. This framework identifies where renewable energy development may be permitted and the process by which it must be assessed and determined.

Under this Act, there are various categories for the types of development. Renewable energy can be categorised as either State significant development (SSD), State significant infrastructure (SSI) or critical SSI (CSSI). The different categories have different rules in the project assessment process. In NSW, renewable energy developments are generally categorised as SSD.

For SSD applications, the best stage of the planning process to influence is submissions to the EIS (stage 4 below) or if it goes to the IPC, during the submission process there (stage 7 below).

Glossary of acronyms and terms

- Consent authority – The authority responsible for granting or refusing consent for a development application or modification application
- DA – Development application
- DPHI – Department of Planning, Housing and Infrastructure
- EIS – Environmental impact statement: An environmental impact statement prepared by or on behalf of the applicant to accompany a development application. It involves a comprehensive assessment of the environmental, social and economic impacts of a project.
- IPC – Independent Planning Commission
- SEARs – Secretary's Environmental Assessment Regulations: The Planning Secretary's environmental assessment requirements, which set out the matters that must be addressed in an environmental impact statement.
- SSDs – State significant developments: A development declared to have state significance due to its size, economic value or potential impacts

In NSW, the pathway for SSDs is generally as follows:

1. **Developer requests SEARS**

Keep a look out! Request will be uploaded to Major Projects website

2. **Developer prepares Environmental Impact Statement (EIS)**

Have your say! Reach out to the developer to inform the EIS

3. **DPHI reviews development application**

4. **Public exhibition of EIS**

Have your say! Make a submission

5. **Developer responds to submissions**

Keep a look out! Report of responses will be published on Major Projects website

6. **DPHI assesses development application**

Keep a look out! Assessment report will be published on Major Projects website

7. **If required, the project is referred to the Independent Planning Commission (IPC)**

Have your say! Make a submission or participate in a hearing

8. **Determination**

Stages of the planning process

1. Developer requests SEARs

Renewable energy developer prepares and lodges a request to the Department of Planning, Housing and Infrastructure (DPHI) for Secretary's Environmental Assessment Regulations (SEARs). The SEARs are the instructions that the DPHI gives to developers on what they need to include in their Environmental Impact Statement (EIS). SEARs are tailored to each development application (DA). Often the request for SEARs will be uploaded onto the Major Projects Website and called a “scoping report”.

2. Developer prepares Environmental Impact Statement (EIS)

The purpose of the EIS is to assess the economic, environmental and social impacts of the project. An EIS can help the communities, councils, and government agencies make informed submissions on the merits of the project. It’s also guides the consent authority (the organisation that assesses and decides on if a project will be approved) in making their decision.

Preparing an EIS will generally involve:

- Conducting community and stakeholder consultation
- Detailed technical studies to assess any impacts of the development (including biodiversity assessments)
- Refining the design of the project to minimise or avoid any potential impacts

3. DPHI reviews development application

The developer will then do a formal lodgement of the development application (DA), including the EIS. The DPHI reviews the application and may request further information.

4. Public exhibition of EIS

The DPHI will then publish the DA and the EIS on the Major Projects Website and give notice to relevant stakeholders and those who've signed up for alerts (via the major projects website) that these documents are on public exhibition. Public exhibition means that these important documents explaining the development and its impacts are now publicly available for the public to review. The DA and EIS are required to be on exhibition for a minimum of 28 days. It is during this public exhibition period that the public can make submissions on the development. Submissions can be either be in support, objecting or be a comment.

5. Developer responds to submissions

After the exhibition time has ended and submissions are no longer being accepted, the DPHI will publish all submissions made onto the major projects website and request the developer responds. The developer is required to prepare a submissions report that responds to the issues raised in the submissions. During this period the developer may make amendments to the project (and therefore to the DA) to address the issues raised in submissions. This could include the developer undertaking further engagement and assessments to refine the project. The DPHI may also require the developer to provide additional information. Once the developer completes the submission report they submit it back to the DPHI, who then publishes it on the major projects site.

6. DPHI assesses development application

The DPHI will undertake a detailed assessment of the most updated project DA, which may also require the developer providing additional information to address any outstanding issues. Once the assessment has been completed, DPHI will publish a summary of its findings in an "assessment report" on the major project website.

7. If required, the project is referred to the Independent Planning Commission (IPC)

If a project received at least 50 unique objections, the local council has objected, or the developer has made a reportable political donation, then projects will be referred to the Independent Planning Commission (IPC) to decide on whether or not the project will be approved – called a determination. In determining the project, there are several stages including:

- Invitation for written submissions from interested individuals and groups
- Stakeholder consultation
- Site inspections
- Public meetings or hearings

These stages of the IPC process are an opportunity for witnesses, experts and community members to have their say on the benefits, concerns, and/or improvements of a development.

8. Determination

If the project has been referred to the IPC, then it will be up to the IPC to make the determination on the project. If the project hasn't been referred to the IPC, then the Planning Minister (or delegate in DPHI) will determine the outcome of the DA.

Participating in the planning process

As outlined above, there are several stages where the community can participate in the planning process. In their community participation plan, DPHI outlines ways that community members can participate, which we've adapted to focus on NSW renewable energy developments:

Keeping up to date

- Reading mailouts, public notices and advertisements (some of these notifications are required by the EP&A Act and the Environmental Planning and Assessment Regulation 2021 (EP&A Regulation))
- Signing up for digital updates including the Department's and EnergyCo's regular newsletter
- Following the Department, EnergyCo and renewable energy developer's social media channels
- Regularly checking the websites of DPHI, EnergyCo, renewable energy developers, and checking the Major Projects Website for updates on plans and projects. You can sign up for alerts on specific projects on the major projects website. Click here for instructions on how to set up notifications.

NCC staff participating in NSW parliamentary hearing

Attend events, such as

- Lectures and symposia
- Open days
- Mobile engagement at festivals
- Public meetings and hearings
- Walking tours
- Information sessions
- Digital engagement initiatives
- Drop-in session
- Shopfronts near key sites

Provide informal feedback

- Contacting project teams and renewable energy developers directly. Contact details are provided on the relevant project or planning proposal webpage or most developers have a community stakeholder team you can reach out to.
- Completing a survey relating to a plan or project
- Contacting a community consultative committee if there is one
- Contacting the department's compliance team
- Feedback sessions and workshops
- Community reference groups (can be found on the EnergyCo website)
- Online forums
- One-on-one meetings
- Public meetings and hearings

Learn more!

- EDO guide on How to have your say in developments across NSW
- EDO factsheet on writing submissions, letter and petitions
- NSW IPC
- NSW Renewable Energy Framework

Representatives from the New England and Hunter REZs meeting with MP for New England, Mr Brendan Moylan

Provide formal feedback

- Making a submission during the public exhibition of a development (see more information below).
- During a public meeting or public hearing – The consent authority may seek public comments on a development through a public meeting or public hearing. These are a good opportunity to share your thoughts, concerns, and/or support about a potential development in a public forum. Usually, you will need to register to speak at a public meeting or hearing. These public meetings or hearings most often occur when a project has been referred to the IPC (stage 7 above).

Reading an Environmental Impact Statement (EIS)

Understanding the environmental impacts of a renewable energy development

The EIS is the key document to understand the likely environmental impact of a proposed renewable energy development. When participating in the planning process of a development, whether informally such as through meetings or attending events, or formally, such as writing a submission, the EIS will contain the key information to inform your opinion.

Making a written submission on a development is a good way to make a difference. It's important to be clear whether you support or object to the development as well as provide a rationale. Remember that all project developments have nature impacts, and that renewable energy projects are critical to addressing climate change and protecting nature. So, if a project involves habitat clearance, try and understand the rationale and the extent to which the site selection and mitigation actions have minimised these impacts. You can choose to support a development and make suggestions to improve environmental outcomes.

You can choose to oppose a development making it more likely to go to the IPC with a delay to assessment. As outlined above, the time you can make a submission is when the EIS is on public exhibition or if the development is referred to the IPC.

An EIS for a renewable energy development contains a lot of important and detailed information. While this is a good thing, it can mean these documents can be hundreds of pages long and can be difficult for a member of the public to read and understand.

While each EIS will be unique to that specific development and region, we've put together these tips to help community members understand the impacts of a development on the environment.

Positive actions taken by developers

Look for good environmental practices planned by the development. This could include:

- Site has been selected on already degraded or cleared land
- The project will be co-located with other industry, such as sheep grazing or other agricultural practices
- Undertaking flora and fauna surveys across different seasons and at appropriate times of day or night, to ensure all species present on a site are identified
- Measures that reduce harm to wildlife and habitat (mitigation measures)
- Planning to plant native vegetation to restore or enhance habitat
- Planning to create habitat corridors that help species move safely across the landscape, especially as the climate changes
- Contributing funding to research on the local ecology or important species

Read the purpose and justification sections carefully

These parts explain why the project is needed and why it should go ahead in that specific site. It's important to understand the reasoning behind the project to form an opinion or raise concerns.

Access local knowledge to identify any gaps

Community members often know of local threatened species or habitat areas that may not be listed in government databases. If species you know to exist in the project area aren't mentioned in the EIS, it's important to raise this in your submission and directly with the developer.

Check the Social Impact Assessment (SIA)

Social Impact Assessment (SIA) is a process used to identify, predict and evaluate the likely social impacts of a project. The SIA will also propose responses that aim to avoid, mitigate or reduce negative impacts and enhance positive impacts. The SIA is required to be included in the EIS (while also during the scoping stage and post-approval stage) and is an important document to read and consider if potential impacts have been thoroughly assessed. Learn more about SIA here.

Look at the cultural heritage assessment

Check whether the Aboriginal and other cultural heritage values assessed in the EIS involved meaningful and ongoing engagement with Traditional Owners and First Nations communities in the region.

See if the developer has included actions that align with the NSW First Nations Guidelines and respects First Nations community's rights and aspirations.

This could include making sure the developer has:

- Engaged respectfully with local Aboriginal communities from the start, including meeting on Country and following cultural protocols.
- Identified employment and income opportunities for Aboriginal communities, such as jobs, training, and contracts for Aboriginal-owned businesses.
- Proposed benefit-sharing or co-ownership arrangements, ensuring long-term community benefits.
- Included a clear Industry and Aboriginal Participation Plan (IAPP) with measurable commitments and a plan for reporting back to the community.

Check if ecological surveys were done at the right time of year

Conducting ecological surveys at the right time of year is essential, as many species are only active or visible during specific seasons. When surveys are timed correctly, it greatly increases the chances of detecting important species and capturing a more accurate picture of the ecosystem.

Understand how species credits were calculated

All biodiversity offsets and species credits should be calculated using the biodiversity assessment method (BAM).

- Look at how the consultants classified the habitat – does it match your knowledge of the area?
- For more complex assessments, it may help to speak with an independent ecologist or consultant to make sense of it.

Don't forget roads and clearing

Access roads and vegetation clearing for construction can have big environmental impacts. It's worth checking whether the EIS includes these considerations in its assessments.

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