



Nature
Conservation
Council

Protecting nature in the rollout of renewable energy

Nature & Renewables Toolkit

Part 1



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 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

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.



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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.

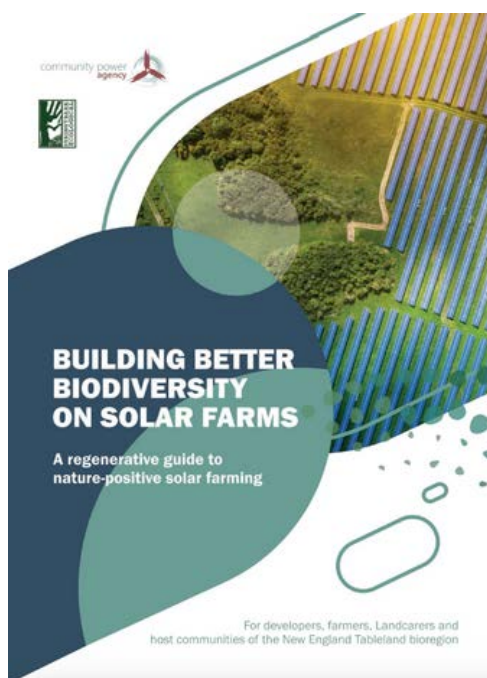
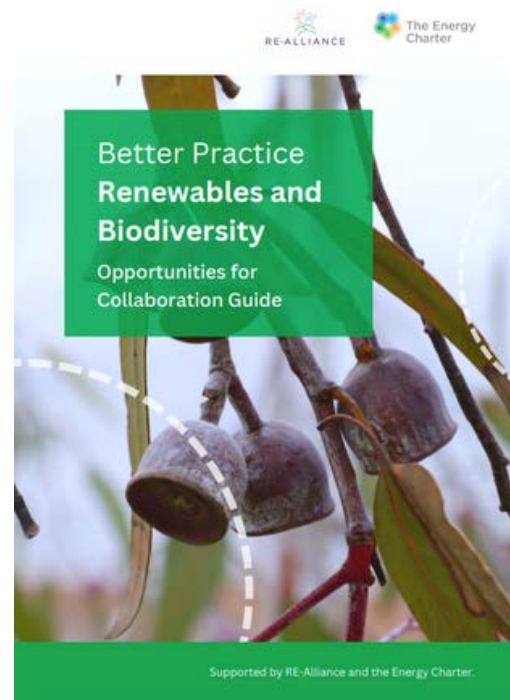
Looking for more case studies?

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

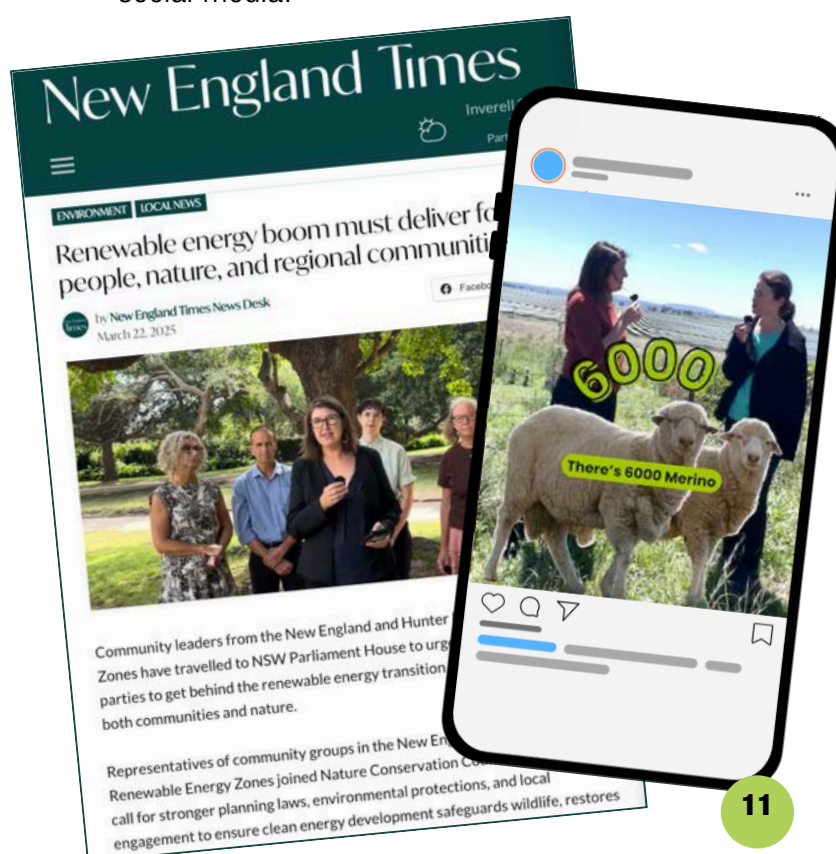
If you want to see a rollout of renewable energy in NSW that protects and restores nature, you can use your voice to advocate to decision makers, developers, and other stakeholders. To achieve the changes we want to see, it's important for community members to make it loud and clear that they want stronger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