



5 Milner Street,
Hindmarsh SA 5000

Phone: (08) 7127 4630

Fax: (08) 82319773

Website:

www.ncssa.asn.au

Hydrogen and Renewable Energy Act Engagement
Department for Energy and Mining
GPO Box 320, Adelaide SA 5001
Submitted via email to: DEM.Legislation@sa.gov.au

Thursday 16 February 2023

Re: Submission to Hydrogen and Renewable Energy Act Engagement

To whom it may concern,

The Nature Conservation Society of South Australia (NCSSA) appreciates the opportunity to provide this submission to consultation on the development of a Hydrogen and Renewable Energy Act (the Act) and the extension in time to do so. Since 1962, the NCSSA has been a strong advocate for the protection of native vegetation and biodiversity in South Australia with particular attention being paid to nationally and state listed threatened plants, animals and ecological communities and the management of protected areas.

The NCSSA supports a rapid transition to renewable energy to address the climate crisis and, in principle, supports a 'one window to government' licencing and regulatory system for the lifecycle of large-scale hydrogen and renewable energy projects in South Australia.

As part of this transition, however, the **nature crisis** must also be recognised and actively planned for. Australian nature is in a state of accelerating decline; in the last five years alone, the number of listed threatened species has risen by 8% and threatened ecological communities by 20%.¹ The most recent South Australian State of the Environment Report highlights that the decline of native species is accelerating at an alarming rate.² Nature is inextricably linked to climate stability, as well as the natural resources on which we depend for our food, livelihoods and wellbeing.

Renewable energy projects (and associated infrastructure) can have serious adverse impacts on nature. Examples of this, particularly from South Australia, are described in **Attachment A**.

Given the fragmented and vulnerable state of South Australia's remaining plants and wildlife, it is critical that **future renewable energy developments prioritise nature protection**, and that this new Act enshrines the best tools to do so. Whilst the reassurance in the Issues Paper that 'the proposed Act will not introduce a regulatory regime providing for access to parks and reserves'³ is welcomed, the Act must go far beyond such basic exclusions and use all tools at our disposal to protect nature.

¹ [Biodiversity | Australia state of the environment 2021 \(dcceew.gov.au\)](https://www.dcceew.gov.au/biodiversity/australia-state-of-the-environment-2021)

² [State of the Environment SA 2018 \(epa.sa.gov.au\)](https://www.epa.sa.gov.au/state-of-the-environment-sa-2018)

³ [Hydrogen and Renewable Energy Act — Open for consultation \(amazonaws.com\)](https://www.amazonaws.com/hydrogen-and-renewable-energy-act)

Deferring to existing environmental legislation is inadequate.

Through deferring environmental assessment responsibility to other pieces of legislation, as is proposed by the Issues Paper, the proposed Act will fail to achieve adequate protection of nature.

Our existing framework of environmental legislation is entirely inadequate and unfit for purpose at both the state and Federal level. This is evidenced by the recently announced plan to overhaul Federal environmental laws⁴ in response to the independent Samuels Review's findings that the laws were 'not fit to address current or future environmental challenges.'⁵ The Albanese Government has further acknowledged the nature crisis by pledging to protect 30% of land and 30% of seas by 2030,⁶ and committing to reaching 'zero extinctions'⁷ of our threatened species. Further, it has committed to establishing a national voluntary "nature repair market" in an attempt to meet the urgent need for biodiversity restoration.⁸

On a state level, the 2017 South Australian Parliamentary Inquiry into Biodiversity concluded that environmental legislation in South Australia '... lacks cohesion and consistency, particularly regarding enforcement and compliance provisions.'⁹ The ineptness of South Australian laws is apparent in the ongoing degradation of our natural environment, as documented in the most recent South Australian State of the Environment Report.¹⁰ In response, the Malinauskas Government has committed to developing a new Biodiversity Act in 2023 with a focus on putting 'the protection of biodiversity for the long-term at the centre of these laws.'¹¹

Therefore, by deferring to the existing legislative framework for biodiversity protection as part of this Act, the State Government would be committing to further environmental decline. The proposed objectives of 'facilitat[ing] a net environmental benefit,' and 'restor[ing] biodiversity'¹² would not be met. Ultimately, given the critical role biodiversity plays in our state's food and water systems on which we depend, such a failure to protect biodiversity would also render the State Government unable to meet the proposed objective of 'protect[ing] the public from risks inherent to regulated activities in the act.'

Hence, this new Act **must explicitly and adequately address biodiversity** as a primary consideration in its own planning and approval processes. If the aim is truly to 'raise the bar' on our approach to renewable energy, the Act needs to go beyond 'minimising the impacts on the state's natural resources,' as stated in the Issues Paper, and actively seek the best outcomes for nature.¹³

⁴ [Landmark Federal environmental overhaul: Independent National Environmental Protection Authority and sweeping reforms - Clayton Utz](#)

⁵ [Executive summary | Independent review of the EPBC Act \(environment.gov.au\)](#)

⁶ [Tanya Plibersek pledges new environment laws to end years of 'wilful neglect' by Coalition | Australian politics | The Guardian](#)

⁷ [Minister launches Threatened Species Action Plan: Toward Zero Extinctions | Ministers \(dcceew.gov.au\)](#)

⁸ [Nature Repair Market - DCCEEW](#)

⁹ Environment RaDC (2017) Biodiversity. *Seventy-eighth Report Environment, Resources and Development Committee*. Report Tabled in the House of Assembly in the Second Session, Fifty-third Parliament (Parliament of South Australia, Adelaide, South Australia)

¹⁰ [State of the Environment SA 2018 \(epa.sa.gov.au\)](#)

¹¹ [Plan for Biodiversity Protection - South Australian Labor](#)

¹² [Hydrogen and Renewable Energy Act — Open for consultation \(amazonaws.com\)](#)

¹³ [Hydrogen and Renewable Energy Act — Open for consultation \(amazonaws.com\)](#)

The following sections ‘Key Recommendations’ and ‘Comments on the Hydrogen and Renewable Energy Act Issues Paper’ offers suggestions and solutions as to how this Act could achieve appropriate levels of protection for biodiversity whilst guiding the roll out of large-scale renewable projects in South Australia.

Key Recommendations: Principles which the NCSSA advises should guide the development of the Act.

1. Site selection criteria should prioritise biodiversity

Avoidance of biodiversity destruction wherever possible should be a key priority guiding the development process. Hence, considerations of biodiversity should be embedded in site selection criteria so that areas critical for conservation and restoration can be excluded from development. This is detailed further in Issue 3, including examples of approaches from the United States and the European Union.

2. Environmental impact assessment processes should be built into the Act

The deference to environmental assessment processes in other Acts will not be sufficient to adequately meet objectives of net environmental benefit. The *Planning, Development and Infrastructure (PDI) Act* lacks reference to many key ecological features in its zones and overlays and therefore does not provide adequate guidance regarding the appropriate location(s) for renewable energy infrastructure. To date, this has led to the approval of projects that have resulted in biodiversity loss (see **Attachment A** for examples). This new Act should therefore develop its own environmental impact assessment process, as detailed further under Issue 12.

Specifically, the Act should set its own high standards for ‘nature risk mitigation’, and should facilitate the growing desire of companies to report against nature impact (for example through nature-related financial disclosures¹⁴) and have regard to the rapidly evolving policy area of voluntary nature investment, e.g. the Nature Repair Market.¹⁵

3. Offsets should be a last resort

Whilst ‘offsets’ are common practise under current environmental law, there is a lack of demonstrable evidence that they can effectively facilitate a genuine net environmental benefit.¹⁶ The NCSSA recommends that offsets are restricted to use only as an absolute last resort mechanism for damage mitigation, when damage cannot otherwise be avoided and all other options have genuinely been exhausted. Such policy has been enacted in the EU in response to the recognition of the urgent need to halt biodiversity loss.¹⁷

4. The Act should apply to infrastructure associated with hydrogen and renewable energy developments

Infrastructure associated with renewable energy, such as new transmission lines, also can also have serious adverse impacts on nature (see **Attachment A** for examples). The NCSSA acknowledges that one consideration for establishing ‘priority areas’ for new renewable energy projects will be existing infrastructure, however, the Act should have greater regard for how all new infrastructure that will be required to make new renewable energy projects feasible will be shaped, particularly with respect to impact on nature.

¹⁴ [Developing and delivering a risk management and disclosure framework for organisations to report and act on evolving nature-related risks - Taskforce on Nature Related Financial Disclosures](#)

¹⁵ [Nature Repair Market - DCCEEW](#)

¹⁶ [8.1 - Environmental offsets do not offset impacts of developments | Independent review of the EPBC Act](#)

¹⁷ [EU biodiversity strategy for 2030 - Publications Office of the EU \(europa.eu\)](#)

5. *First Nations groups should be continuously supported*

Noting that development will largely take place on land under Native Title, the NCSSA supports the informed, early, ongoing and meaningful participation of First Nations people. Further, it endorses the principle of active adaptive management in supporting First Nations groups to cooperatively manage Country and highlights the role of Indigenous wisdom in developing nature positive solutions.

Further, more detailed comments, are in the following pages. If you would like to clarify or discuss this submission please contact Julia Peacock, Nature Advocate, on 0400 277 423 or via email at julia.peacock@ncssa.asn.au.

In terms of the further development of this proposed Act, the NCSSA would be willing to be involved in specific consultation and/or to offer its expertise in nature conservation to ensure that this perspective is adequately reflected in the resulting proposed legislation. The NCSSA therefore looks forward to hearing from you with respect to what further specific consultation or engagement opportunities the Department for Energy and Mining is planning in the development of this Act.

Yours sincerely,



Kirsty Bevan
CEO

NCSSA comments on the Hydrogen and Renewable Energy Act Issues Paper

Issue 1: Objects of the Act

It is encouraging to see that the Objects of the new Act are intended to include the ‘facilita[tion] of a net environmental benefit from activities licenced under the Act, including promoting, as appropriate, practices to eliminate waste and restore biodiversity.’

However, whilst the Issues Paper recommends an Object: ‘to facilitate a net environmental benefit from activities licenced under the Act, including promoting, as appropriate, practices to eliminate waste and restore biodiversity’, the NCSSA would like to see this strengthened as follows (insertions in **bold**):

‘to facilitate **an ongoing** net environmental benefit from activities licenced under the Act, including **protecting existing biodiversity as well as** ~~promoting, as appropriate,~~ practices to eliminate waste and restore biodiversity’.

Such wording clarifies that environmental benefits must be permanent and recognises that protecting existing biodiversity is paramount whilst eliminating waste and restoring biodiversity should also be actively and explicitly embedded in practise.

Issue 2: Renewable energy

Whilst the NCSSA appreciates that the proposed definition of renewable energy as ‘*energy derived from a source that is not depleted when used*’ is accurate, it is possible the definition could be interpreted so as to include experimental or developing technology which may not be genuinely sustainable.

In order to convey, with clarity, a definition which is to be interpreted for its intended use of generating environmentally sustainable energy, the NCSSA suggest the Department for Energy and Mining consider a definition that constrains the Act to a stricter interpretation of renewables. Examples to consider are:

- New Zealand’s National Policy Statement for Renewable Electricity Generation 2011, in which renewable electricity generation is defined as: ‘generation of electricity from solar, wind, hydro, electricity, geothermal, biomass, tidal, wave, or ocean current energy sources.’¹⁸, and
- in the Directive 2003/54/EC of the European Parliament and the Council of 26 June 2003 concerning common rules for the internal market in electricity, the definition of renewable energy is: ‘renewable non-fossil energy sources (wind, solar, geothermal, wave, tidal, hydropower, biomass, landfill gas, sewage treatment plant gas and biogases).’¹⁹

Issue 3: Renewable energy priority areas (REPA)

Broadly, the NCSSA supports the establishment of Renewable Energy Priority Areas (REPAs) but holds concerns regarding their development and application.

Multi-criteria analysis

Firstly, it is critical that the multi-criteria analysis for REPA identification involve a comprehensive selection of layers which **prioritise nature conservation**.

¹⁸ [National Policy Statement for Renewable Electricity Generation - New Zealand Government](#)

¹⁹ [Directive 2009/28/EC of the European Parliament and of the Council of 23 April 2009 - EU Parliament](#)

Such layers could be developed with methods similar to those used in the Nature Conservancy's 'Siting Renewables Right' project in the United States, which compiles data about the environment such as biodiversity, critical habitat, threatened species and climate resilience to identify which areas should be avoided for different types of development.²⁰

Similar mapping frameworks used by the European Union have underpinned the development of a Wildlife Sensitivity Mapping Manual which compiles distributional datasets on sensitive species and habitat to inform site selection.²¹

Similarly, in Wales, national planning policy identifies areas suitable for various types of renewable energy development based on landscape characterisation.²² Characterisation is provided by a national dataset called LANDMAP which takes into account the landscape's geological, ecological, visual, historic and cultural features.²³

In terms of areas to avoid for development, merely excluding parks and reserves recognised under the *National Parks and Wildlife Act 1972* is insufficient. As a minimum starting point, the entire Protected Area estate that includes a range of tenure types²⁴ should be excluded, including areas on pastoral leases protected for conservation.

Further, the State Government has committed to undertaking a 'wilderness assessment' to identify remaining areas of high conservation value in South Australia not yet protected, and this should be reviewed and those areas identified for protection avoided in establishing REPAs. And finally, areas that have high restoration potential, including woodlands and wetlands that have been extensively cleared in South Australia, should also be avoided.

Using these examples and suggestions as a basis, the NCSSA strongly advises that the Department for Energy and Mining draw upon South Australia's existing rich databases which detail the ecological quality of our landscapes to help inform the multi-criteria analysis. Such analysis should then be used to **exclude REPAs in areas important conservation value or areas of restoration potential**.

The NCSSA notes that this work would need to be undertaken in consultation with the Department for Environment and Water, and that **specific resourcing** would need to be made available to convert available datasets into formats useful for this analysis.

Further, the NCSSA notes that whilst some of the State's biological data sets require updating and calls for **further investment** into the collection and management of information relating to South Australia's natural assets. However, the information currently held provides a strong starting point.

Conversely, analysis can also be used to identify areas of low-ecological-risk which may be suitable for REPA siting. This is done in EU's Wildlife Sensitivity Mapping, which does more than identify areas broadly appropriate for development, but further, identifies the specific type of renewable energy most suitable for development in the area.

It will therefore be critical to overlay mapping like that presented in the Issues Paper of potential renewable energy resources²⁵ with the ecological landscape.

²⁰ [Site Renewables Right | The Nature Conservancy](#)

²¹ [The wildlife sensitivity mapping manual - Publications Office of the EU \(europa.eu\)](#)

²² [Planning policy Wales | GOV.WALES, Future Wales: the national plan 2040 - GOV.WALES](#)

²³ [Natural Resources Wales: LANDMAP - the Welsh landscape baseline: GOV.WALES](#)

²⁴ [National Reserve System - DCCEEW](#)

²⁵ [Hydrogen and Renewable Energy Act — Open for consultation \(amazonaws.com\)](#)

Such planning principles enable the meaningful achievement of the Federal Government's objectives of protecting 30% of land and 30% of seas by 2030²⁶, as well as the Act's proposed objectives.

The Department for Energy and Mining should also review the European Union's efforts to assist project developers, transmission system operators and authorities responsible for energy projects to navigate both the rapid development of renewables and the protection of nature through their integrated Habitat and Energy Directives.²⁷

Environment Minister as co-decision maker

It is critical that the identification of REPAs occurs jointly with the **Minister for the Environment**. In the past, the administration of the Pastoral Act has been transferred to the Minister of Agriculture. Whilst it may be appropriate for the Pastoral Minister to be involved in the decision-making process, it is NCSSA's view that the Minister for Environment, whose responsibility is to protect the natural environment, must be a key co-decision maker in the establishment of REPAs.

Consultation

Regarding consultation, the NCSSA supports the idea of consultation with key stakeholders but suggests this point could be strengthened with detail. It may be necessary to legislate that prior to the final determination, consultation should extend to those with adequate competency and authority to advise on the natural environment. This should include the Commonwealth Department of Climate Change, Energy, the Environment and Water, and the relevant Federal Minister, as well as ecologists, conservation groups, Landscape Boards and local landowners such as pastoralists. Consultation with a broad range of stakeholders is important to ensuring the potential implications of development are understood.

As mentioned in its covering letter, the NCSSA supports the central, critical role of First Nations people, and particularly Native Title holders, throughout the entire process of project development and establishment, including at the stage of REPA identification. The NCSSA notes that engagement with First Nations groups, including Native Title holders, will be critical to ensure **cultural sensitivity** in the REPA identification process, noting that further comments with respect to Native Title holder engagement are provided under Issue 16.

Issue 5: What is not covered

Whilst the NCSSA appreciates the complexity of creating new legislation which operates within an existing framework, it holds concerns about the narrowness of the proposed application of the Act.

Transmission infrastructure

The NCSSA believes that the Act should have greater regard for transmission lines, given the large scale of such infrastructure likely to be required for the expected developments associated with the Act, and the potential for significant implications on nature. To date, reliance on existing regulation for the assessment of such infrastructure has led to serious consequences for nature or has led to the need to re-prosecute the basic case for wildlife habitat protection within the conservation estate.

For example, the original route for the South Australia to New South Wales electricity interconnector would have resulted in habitat fragmentation and loss to the endangered Black-eared Miner.²⁸ This

²⁶ [Tanya Plibersek pledges new environment laws to end years of 'wilful neglect' by Coalition | Australian politics | The Guardian](#)

²⁷ [Energy transmission infrastructure and EU nature legislation - Publications Office of the EU \(europa.eu\)](#)

²⁸ [SA-NSW Interconnector — a 'new super highway between two states' — promises to open up export markets - ABC News](#)

could have been avoided had the development been guided by an Act which prioritised avoiding high-value-biodiversity and species preservation. Similarly, the upgraded transmission line on Eyre Peninsula²⁹ required the approval of nearly 200ha of native vegetation for clearance, including within conservation areas, as the ‘best route’ was deemed to be adjacent to the existing route for the entire length of the line.

Ministerial exemptions

The Minister’s power to exempt regulation of renewable energy projects on a case-by-case basis seems broad and arbitrary. There is no clear definition of what is meant by ‘*smaller scale and localised renewable energy projects.*’ Such non-specificity could lead to exploitation in terms of projects approved, resulting in negative consequences for biodiversity. These outcomes have been seen under the Development Act 1993, under which the determination of ‘major project’ is somewhat arbitrary but leads to the bypassing of restrictions imposed by the *Native Vegetation Act 1991*, leading to nature destruction.³⁰ In light of this, the NCSSA seeks to emphasize the importance of regulation for nature protection, even for projects of a small scale. Hence, the NCSSA advises that amendments are made to include criteria which create a high bar for exemption.

Issue 8: Renewable energy feasibility license (REFL)

The NCSSA strongly asserts that the **Minister for the Environment** should have a key decision-making role in the provision of Renewable Energy Feasibility Licenses, as well as in REPAs and in the provision of licenses themselves. Whilst this would differ from the process for mining on multiple-use regional reserves under the *National Parks and Wildlife Act 1972*,³¹ the renewable energy market is rapidly evolving and the granting of a feasibility license will inevitably raise expectations that a subsequent development application will be approved. The Minister for the Environment should therefore be a co-decision maker at all stages of the process.

Issue 9: Renewable infrastructure license

License terms should not be subject to automatic renewals or extensions. The renewable energy market is rapidly changing, and simultaneously, our natural environment is expected to undergo substantial changes with the intensification of climate change.³² The NCSSA endorses the principle of adaptive management, which has been affirmed in leading planning policies globally.³³ In light of this, the NCSSA recommends that it is most responsible to assess each license application according to its merits at the time of its application and in the context of its environment.

Issue 11: Associated activity and research and demonstration licenses

The NCSSA supports the requirement of these licenses and emphasizes the need to regulate associated activities, research and demonstrations. There is the potential that such associated activities will expand in scale in the future, and it is hence important that they are regulated so as to be socially and environmentally responsible. As such, the NCSSA asserts that the Act should prescribe regulations around the size of these developments and embed responsible environmental assessment processes throughout.

²⁹ [Eyre Peninsula Link – ElectraNet](#)

³⁰ [SOER 2018 - Better Prospects for the Future of South Australia’s Biodiversity \(epa.sa.gov.au\)](#)

³¹ [National Parks and Wildlife Act 1972 \(legislation.sa.gov.au\)](#)

³² [Climate trends and projections for South Australia - PIRSA](#)

³³ [Agile and adaptive governance in crisis response: Lessons from the COVID-19 pandemic - ScienceDirect](#)

Issue 12: Environmental impact assessment process

The NCSSA advises that substantial alterations be made to the process of environmental impact assessment (EIA) as proposed by the Issues Paper.

EIA should be undertaken early

Critically, it is problematic that the EIA occurs in the second stage of the licensing and approval process, **after** the area release and grant of tenure has already occurred. By this stage, expectations have built up for developers and stakeholders, and it is often too late to make major changes to the project based on the outcome of the EIA. If nature is to be genuinely protected, EIA must take place in the earliest possible stage, prior to licensing approval.

The NCSSA recommends that the Department for Energy and Mining review the development approval process in the EU. The first stage of any development involves screening to ascertain whether the project is concerned with a high-value biodiversity site. The second stage is concerned with undergoing an assessment of the implications of the site on conservation objectives. Following the assessment, consent will only be granted having ascertained the development will not adversely affect the integrity of surrounding high-value biodiversity sites.³⁴

Because the planning process builds in the environmental assessment process early, it is easier to ensure that environmental damage is **avoided**. Adopting a similar process would increase the likelihood of South Australia meeting the proposed objective of this new Act of net environmental benefit.

EIA should be embedded in the Act

Deferring to other Acts for environmental assessment processes will be insufficient to meet the objective of net environmental benefit. The argument that the Planning, Development and Infrastructure Act 'has successfully assessed previous renewable energy project applications and therefore it is not considered necessary to establish a separate standalone process,'³⁵ ignores the inadequacies of the current planning process for nature protection. The PDI Act's central framework, the Planning and Design Code, does not include key information about nature such as a 'Critical Habitat,' and 'Climate' layers and is hence unsuitable to guide responsible impact assessment.³⁶

In developing this new Act, the Department of Energy and Mining has an opportunity to lead in environmental policy by embedding a strong, new environmental assessment process. For example, in line with recommendations made in the Samuels Review,³⁷ the Act could embed an environmental assessment process which is consistent with emerging National Environmental Standards³⁸ and with the requirements of recovery plans for threatened biodiversity.³⁹

³⁴ [Guidance document on wind energy developments and EU nature legislation - Publications Office of the EU \(europa.eu\)](#)

³⁵ Department for Energy and Mining 2022. *Hydrogen and Renewable Energy Act- Issues paper*, pg 25.

³⁶ [Planning and Design Code - Plan SA](#)

³⁷ [8.2 - Better planning is required to protect and restore the environment | Independent review of the EPBC Act](#)

³⁸ [EPBC Act reform - DCCEEW](#)

³⁹ [Regional recovery plan for threatened species and ecological communities of Adelaide and the Mount Lofty Ranges, South Australia - 2009–2014 - DCCEEW](#)

Definition of environment

The NCSSA strongly suggests the definition of ‘environment’ be strengthened and endorses the Australian Land Conservation Alliance’s suggestion to amend it, as follows:

*‘[T]he definition of environment will include the natural **biodiversity**, economic, social, cultural and visual amenities and values of an area or region.’*

This definition ensures that ecology is adequately acknowledged.

Issue 14: Land in a REPA

Non-interference with conservation

The NCSSA reiterates that the Act should explicitly state that activities in REPAs will not impact on land used for conservation purposes, which is established under various arrangements including Heritage Agreements as well as other tenure types recognised as being in the protected area estate.⁴⁰

Nature positive licensing

Further, to attain a net environmental benefit, the NCSSA advises that the Act create licensing arrangements which facilitate nature positive activities. For example, to keep up with the rapidly developing policy landscape which will include a Nature Repair market, licensing agreements should be designed so as to promote nature positive activities such as restoration. This is again in line with recommendations from the Samuels Review which suggest that further mechanisms are needed to support private investment in nature restoration.⁴¹

Issue 16: Native title

The NCSSA strongly supports the acknowledgement and respect of the rights of native title holders and recognises the integral role in which Indigenous knowledge of Country plays in nature conservation and restoration.

The NCSSA suggests that the Department review the interim guidelines regarding Indigenous engagement, ‘Engage Early’,⁴² developed to support engagement with First Nations groups when dealing with matters regulated under national environmental law. These standards are designed to ensure Indigenous Australians with traditional knowledge of Country are empowered to meaningfully participate in decision making.

Further, the NCSSA suggests that the Act’s wording be strengthened to specifically enshrine the principle of free, prior and informed consent regarding Indigenous participation in decision making. This principle is protected by international human rights standards and is important in ensuring that Indigenous peoples are substantially involved in decisions that affect their land.⁴³

Issue 17: Data reporting

The NCSSA supports regular and thorough data monitoring and reporting as critical in supporting responsible development. It is advisable that technical reports provided to government cover not just data about electricity generation, but also about the ecological character of the site. This is an important component of informing adaptive management when necessary and enables an

⁴⁰ <https://www.environment.sa.gov.au/topics/park-management>

⁴¹ [Chapter 8 - Planning and restoration | Independent review of the EPBC Act \(environment.gov.au\)](#)

⁴² [Engage Early—Guidance for proponents on best practice Indigenous engagement for environmental assessments under the EPBC Act \(agriculture.gov.au\)](#)

⁴³ [Free Prior and Informed Consent – An Indigenous Peoples’ right and a good practice for local communities – FAO | United Nations For Indigenous Peoples](#)

understanding about the environmental impact of development, so that the state may best inform operations.

By exercising ecological monitoring and adaptive management, developers will be better equipped to mitigate their impact on biodiversity. The Candeeiros Santarem Wind Farm in Portugal exemplified such practises. After regular wildlife monitoring at the site over three years, the wind farm found that the development had had a significant effect on the local kestrel population. In response, they developed a site-specific mitigation programme, which involved habitat restoration, and were able to help mitigate their impacts.⁴⁴

Issue 18: Fees, charges and benefit sharing

The NCSSA supports the principle of equitable benefit sharing for goals which help to achieve the Act's objectives. Particularly, the NCSSA advises that there should be a focus on benefit sharing which supports environmental restoration as part of the pursuit of the objective of net environmental benefit, and the notion of benefit sharing with Indigenous peoples in efforts to pursue the objective of delivering net benefits to Aboriginal communities.⁴⁵

⁴⁴[Assessing Environmental Effects: Adaptive Management - Bureau of Ocean Energy Management](#)

⁴⁵[Hydrogen and Renewable Energy Act — Open for consultation \(amazonaws.com\)](#)

Attachment A – Examples of the negative impact of renewable energy and associated infrastructure on nature, as per the South Australian Nature Alliance (SANA) submission (of which the NCSSA is a member)

Negative impacts of renewable energy

SANA provides the following examples of the actual or potential negative impact of renewable energy on nature.

Solar energy

The establishment of solar farms was the leading cause of approved native vegetation clearance in South Australia between 2016-2018, meaning precious habitat for wildlife was being lost to panels and associated infrastructure, including:

- 68 hectares for the Monash Solar Farm,
- Approximately 1,100 hectares for the Cultana Solar Farm and
- Over 1,600 hectares for the Solar River Farm and associated transmission line.

Criteria such as proximity to existing electricity infrastructure and solar radiation index were the determining factors for locating these farms, with impact on nature not considered until after the preferred location was determined. These projects are small compared with the scale of projects outlined in the consultation for this legislation.⁴⁶

Wind farms

Offshore windfarms can also impact nature in a range of ways, including risk of collisions with birds, changes to sea floor and open water habitats, and pollution from increased vessel traffic or release of contaminants from seabed sediments.

In South Australia, the Kingston Offshore Windfarm⁴⁷ will involve constructing 75 wind turbines, impacting an offshore area of over 47,000 hectares. The project has been referred under the national *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) for a range of likely and possible impacts, including on the migratory shorebirds and critically endangered giant kelp marine forests.

On land, the clearance for tracks and pads required for windfarms causes disturbance to natural areas akin to the impacts of mining exploration and/or fracking. The impact on nature of these projects, particularly when sited in or near sensitive areas and when their number and scale are growing, is deeply concerning.⁴⁸

Whilst the clearance of the area is not entire as in the case of solar farms, creating tracks which fragment natural areas provides vectors for weeds, feral animals and diseases, as well as damage to soil through compaction. This clearance can cause serious, irreversible damage to the natural environment.

⁴⁶ [Hydrogen and Renewable Energy Act — Open for consultation \(amazonaws.com\)](#)

⁴⁷ [Home - Kingston Offshore Windfarm](#)

⁴⁸ [Queensland's Kaban Green Power Hub now online, but proximity to rainforest sparks concern - ABC News](#)



Figure 1: Mount Emerald Wind Farm, Qld, showing the clearance required for pads and tracks.

Ensuring future solar and windfarm developments are sited in appropriate areas that do not negatively impact our remaining nature or our potential to restore/recover nature is critical to ensuring both the climate and nature crises are addressed simultaneously.

Critical minerals for renewable energy

In transitioning to renewable energy, consideration also needs to be given to the mining of critical minerals, such as copper, which will be required. The impacts of mining are not just the areas directly affected but also all other infrastructure required to support it.

An example of this is the South Australian Labor Government's commitment to developing a hydrogen hub at Port Bonython in the Upper Spencer Gulf, positioned to become South Australia's first large-scale export terminal for green and blue hydrogen.⁴⁹

SANA understands that a component of this development will be a desalination plant to provide water to support the mining of critical minerals. In locating this desalination plant, impacts on the giant cuttlefish (*Sepia apama*) that congregate to breed in the Upper Spencer Gulf must be considered, particularly given the limited ocean flushing in this region.⁵⁰ SANA understands that two of the three potential sites, which are either at or near Point Lowly, have the potential to negatively impact this species through the release of hypersaline brine.

This is just one example of what is a much more widespread issue associated with mining and its required supporting infrastructure, as the demand for minerals to transition to renewable energy increases.

Electricity interconnector

The original, preferred route for the construction of an interconnector between South Australia and New South Wales to export excess renewable energy⁵¹ included going through critical habitat for the EPBC listed Endangered black-eared miner (*Manorina melanotis*). As documented by BirdLife Australia (below), this 'constraint' was not identified as being of the highest priority for avoidance:

'Calperum Station's listing as Critical Habitat for Black-eared Miner did not deter an electricity transmission specialist from proposing that Project Energy Connect (EPBC

⁴⁹ [Port Bonython export hub | Energy & Mining \(energymining.sa.gov.au\)](https://www.energymining.sa.gov.au)

⁵⁰ [Where to swim with giant cuttlefish in South Australia \(environment.sa.gov.au\)](https://www.environment.sa.gov.au)

⁵¹ [SA-NSW Interconnector — a 'new super highway between two states' — promises to open up export markets - ABC News](https://www.abc.net.au/news/2022-05-11/sa-nsw-interconnector-a-new-super-highway-between-two-states-promises-to-open-up-export-markets)

2019/8468) – a proposal for a major above ground transmission line – should follow a 13.8 km east-west route directly through Critical Habitat on Calperum Station. The Proponent’s original referral documents indicated that the Critical Habitat listing, and the presence of MNES52, was only considered a ‘Tier 2’ constraint; that ‘the interconnector route must try to avoid where possible’. Critical Habitat was not given the same consideration as a ‘Tier 1’ constraints (e.g. Ramsar wetlands); areas that the proponent determined the interconnector route ‘could not pass through’.

Our analysis indicated that the Proposal was likely to have a significant impact on Black-eared Miner through clearing, fragmentation and degradation of habitat. Close examination of the referral documents, and consultation with the Proponent by BirdLife Australia revealed that avoiding the Critical Habitat had not been given serious consideration; it was clear that the mitigation hierarchy of ‘avoid, minimize and offset’ had not been applied. Our submission to the referral process noted that there were multiple alternative routes for the transmission line on developed land that did not impose a large burden of added distance and would avoid impacts on Black-eared Miner habitat.’

BirdLife Australia’s Submission to the Independent Review of the EPBC Act, April 2020

It is critical that a simple mindset of “the shortest distance between two points is a straight line” is not applied to the construction of the multitude of transmission lines that will be required to transport diffuse renewable energy to where it can be used or stored.

Protected areas (e.g., Calperum Station which is included in the National Reserve System), habitat for threatened species, wilderness areas, and other areas of high conservation value that are not yet adequately represented in our conservation estate, should all represent ‘no go zones’ to prevent clearance and further degradation of nature.

⁵² MNES – Matters of National Environmental Significance, protected under the EPBC Act