



AUSTRALIA

SUBMISSION

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WWF Submission to the draft 2024 AEMO

Integrated System Plan

The World Wide Fund for Nature-Australia (WWF-Australia) welcomes the opportunity to make a submission to the draft Integrated System Plan 2024 developed by the Australian Energy Market Operator (AEMO)¹.

WWF-Australia is part of the WWF International Network, the world's largest independent conservation organisation. WWF's global mission is to 'stop the degradation of the planet's natural environment and to build a future in which humans live in harmony with nature'. WWF-Australia has approximately two million financial and non-financial supporters.

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We would like address two aspects of the draft Plan as they relate to consultation questions 1 and 5.

1. NATURE IMPACTS AND SOCIAL LICENSE

Consultation question: Do you have advice about how social licence can be further considered in the ISP, or advice on how to quantify the potential impact of social licence through social licence sensitivity analysis?

The speed and scale necessary to become a renewable energy fuelled export economy will place pressure on ecosystems, and the location and connectivity of clean energy infrastructure must be beneficial to communities. The clean energy revolution needs to be fast, best, and just if we are to rapidly reduce the effects of a changing climate. Undertaking a 'just transition' of systemic change at scale "depends on environmental and social policies being mutually reinforcing, not contradictory"².

WWF-Australia's Renewables Nation program has delivered significant impact since 2019 and, following the election of the new Federal government, the momentum on climate ambition has shifted. For Australia to realise its renewable energy superpower potential, it will need to ensure that the intersection between the speed and scale of the rollout, and its impact on nature and local communities and particularly for First Nations communities, is managed effectively. These issues are not unique to Australia. Internationally, WWF has been working with major renewables developers and other conservation and Indigenous organisations to bring these issues to attention and seek urgent resolution.

Over the past two years there has been a significant increase in environmental concerns being the basis for community opposition to clean energy infrastructure. As a large national conservation organisation, we have also witnessed a significant increase in tensions between nature conservation and the energy transition amongst our own supporters. From our own analysis, this has been predominantly focussed on wind projects, both on and offshore, but generally spread across the country and across most clean energy infrastructure projects. Renewable energy development opponents from across the political spectrum have amplified these concerns and used disinformation to slow and delay the transition. On the other hand,

¹ <https://aemo.com.au/en/energy-systems/major-publications/integrated-system-plan-isp/2024-integrated-system-plan-isp>

² The Transition Away from Oil & Gas: A WWF Network Policy Position, May 2021
https://wwfint.awsassets.panda.org/downloads/wwf_policy_position_the_transition_away_from_oil_gas.pdf (Page 10)

renewable energy projects can and do negatively impact nature, so separating fact from fiction in the transition is critical.

To date, social license has largely been focussed on ensuring that utility scale projects benefit local communities in economic and social ways (eg. local jobs, payments to landholders, utilising local supply chains etc.). As the ISP points out, gaining social license is faced with two different audiences/challenges; i) local communities directly impacted by new infrastructure and ii) the broader community support for the energy transition. Nature impacts of clean energy infrastructure affects both aspects of social license. Locally, projects that can avoid and minimise impacts and even improve environmental outcomes are likely to face much less opposition. Similarly, these projects will not feed into the broader narrative of conflict and misinformation that is being used to confuse the broader public on the environmental benefits of the energy transition.

An energy transformation that is well-planned and executed can holistically address both climate and nature risks and produce nature-positive outcomes. The recent WWF 'Building a Nature Positive Energy Transformation' report demonstrates how energy systems powered by renewables will be far better across a range of metrics (2-16 times better) for nature and people than a business-as-usual, fossil fuel-dominated energy system, although the transformation will place some demands on natural resources and local communities.³ The extent to which the energy transformation is better, and can produce nature-positive outcomes, depends on how well we implement it. Policymakers, decision-makers, and other stakeholders can avoid or minimize unwanted impacts on some nature and people by deploying laws, incentives, and environmental planning tools and effectively engaging with affected communities.

The final ISP should explicitly recognise and address how the perceived tensions between renewable energy development and biodiversity protection can uniquely erode social license. This is critical to realising both the Step Change and Green Exports Scenario. Explicit reference to this challenge will help to focus government and industry efforts to work towards a nature positive energy transition.

Recommendation: The final ISP should acknowledge the real and perceived tensions between nature and renewable energy development, and recognise that this forms an increasingly important aspect of social license;

Recommendation: The final ISP should emphasise the need for governments to prioritise strategic planning in Renewable Energy Zones to understand and avoid areas of biodiversity sensitivity and environmental impacts in early stages of development;

Recommendation: The final ISP should identify the need to incentivise renewable energy developers to pursue nature positive outcomes⁴.

2. GREEN EXPORTS AND MODELLING SCENARIOS

Consultation question: Do you agree that the proposed optimal development path for transmission, generation and storage will support a reliable, secure and affordable NEM? If yes, what gives you that confidence? If not, what should be considered further, and why?

WWF has long been a champion of a Green Exports scenario, where Australia develops its capacities to become a global renewable energy superpower. We are pleased to see the 2022 Slow Change scenario no longer included in modelling given it does not align with broader climate change commitments. We would like to emphasise that the scenario modelling weighting approach has more often than not grossly underestimated the pace of change. This can be seen across the ISPs over time as the speed and scale of the energy transition gathers pace.

We are concerned that the Optimised Development Pathway identified in the ISP ignores the broader economic, social and environmental benefits of the Green Exports Scenario. One of the challenges facing AEMO in the analysis of scenarios is the boundaries of the cost-benefit analyses, i.e. what is included and excluded. The Green Exports Scenario offers benefits that go beyond the energy system and energy bills that need to be adequately considered in the ISP. The Step Change scenario does enable the broader Australian economy to decarbonise by accommodating increased electrification in other sectors such as transport. However, it does not position Australia to support other countries through our exports to

³ [wff-bcg-building-a-nature-positive-energy-transformation.pdf \(panda.org\)](#)

⁴ [A Playbook for Nature-Positive Infrastructure Development: showcasing solutions | Sustainable Legacies | AECOM](#)

decarbonise quicker and get to net zero globally by 2050. In our view the Step Change scenario does not reflect the current Federal Governments stated ambition to become a green exports superpower⁵.

In 2021, the Sunshot Alliance, a network of Australian business, workers', and environment organisations, including WWF, released the report, 'Sunshot: Australia's Opportunity to Create 395,000 Clean Export Jobs'. The report demonstrated how Australia could create 395,000 new jobs and generate \$89 billion in new trade by 2040 through investment in clean energy exports. The latest report in 2023 identified that the rapid growth in the energy transition and demand for clean energy materials has increased the potential for these exports. In just two years, the opportunity for clean energy exports in prioritised industries has increased from \$124b to \$314b p.a. by 2040⁶.

We also note that the ISP states that the ODP "aims to deliver reliable and affordable power to meet NEM needs for at least 20 years, fulfil the NEM's security and reliability requirements, meet government policy settings and manage risk through a complex transformation". Recent decisions to reform the National Electricity Objective (NEO) to include an emissions reduction objective should have an obvious impact on the scenarios considered in this ISP¹. The Optimal Development Pathway appears focussed on reliability and affordability rather than achieving a fast transition to a zero-emissions energy system, and its contribution to Australia's broader goals of emissions reductions.

Although AEMO has stated that all scenarios are based on net zero by 2050, greater consideration should be given to Australia's role in leading global efforts to achieve net zero, and also 2030 targets. This needs to also consider the role Australia can play in replacing fossil fuel exports with renewable exports, not just reducing our own domestic emissions.

Recommendation: That risks to underestimating the pace of change towards a Green Exports Scenario are recognised in section 8.1

Recommendation: That future scenario modelling captures the broader benefits of the Green Exports Scenario to Australia's economy and efforts to support global decarbonization

Thank you for the opportunity make a comment on the draft ISP. The ISP is an important process and WWF acknowledges the significant effort and consultative process undertaken to develop these plans.

⁵ [Australia Targets Hydrogen Exports to EU as Part of Green Push - Bloomberg](#)

⁶ https://assets.nationbuilder.com/auscon/pages/21744/attachments/original/1678743723/Sunshot_2023_-_Final_Report.pdf



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