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Australian Academy of Science submission on *Environmental Protection Reform Bill 2025 and six related bills*

The Environmental Protection Reform Bill 2025 and six related bills (the Bills) are a critical opportunity to modernise and reform Australia's environmental legislation to restore trust and protect and restore Australia's environment and declining biodiversity.

The Australian Academy of Science (the Academy) emphasises the importance of applying multi-disciplinary science and strengthening environmental standards and governance for improved environmental outcomes and the wellbeing of current and future generations.

The Academy recognises positive elements in the Bill. The Academy welcomes the embedding of the Mitigation Hierarchy into the Bill, and the power for the Minister of Environment to make National Environmental Standards to provide consistent protections across Australia. The concept of 'net gain' is welcome, if properly defined and enforced. The environmental protection statements within the National Environmental Protection Agency Bill 2025 (NEPA) are a welcome part of the framework and up-to-date scientific advice must underpin these statements. Expanding recovery and threat abatement plans to cover parts of a process or species, allows consideration of a wider range of key threatening processes such as greenhouse gas emissions.

Further development and refinement of the Bills is required to ensure its mechanisms are scientifically robust and capable of delivering the environmental improvements it seeks to achieve. This submission focuses on the Environmental Protection Reform Bill 2025 (the Bill), the National Environment Protection Agency Bill 2025 (the NEPA Bill) and the Environment Information Australia Bill 2025 (the EIA Bill).

The Academy recommends the Bills be amended to:

- Establish clear, legislated mechanisms that embed scientific advice into decision making, including in relation to biodiversity offsets.
- Remove damaging exemptions including forestry, cumulative land clearing and continuous use pathways to improve the strength and impact of the Bills, particularly placing conditions on Ministerial discretionary powers.
- Establish independent governance boards for the EPA and EIA and legislate their expert advisory committees with clear functions under each.
- Legislate clear definitions of key terms and tests in the legislation with quantifiable criteria, supported by independent scientific assessment, to reduce interpretive discretion and improve clarity over required outcomes.

[Robust scientific evidence must be embedded in decision-making](#)

Robust scientific evidence helps policy and decision makers understand potential environmental impacts, complex ecosystems and long-term impacts to inform effective environmental management.

To ensure that regulatory actions are based on scientific evidence, the Legislation must clearly define the structures and processes to ensure that quality, independent and transparent scientific advice is embedded into decision-making at all levels.

There is permissive language throughout the Bills regarding environmental assessment at all levels (approval decisions, compliance, enforcement and development of Standards), which states that scientific advice ‘may’ be considered in decision-making but is not a requirement. This weakens the legislation and risks decisions being made without appropriate scientific evidence, leading to inadequate responses to environmental challenges, insufficient environmental safeguards, inconsistent decision-making, uncertainty for business, lack of capacity to address cumulative effects and considerable uncertainty regarding the impact of human activities on the environment.

Robust independent scientific review, utilising scientific advisory bodies such as the Threatened Species Scientific Committee, should be included prior to ministerial determination. Mechanisms for recourse to and inclusion of scientific evidence must be clearly defined in the Bill and embedded formally in the decision-making process, including in the composition of committees to ensure appropriate expertise is represented.

The NEPA and EIA Bills should legislate advisory mechanisms to assist the CEO and Head of EIA in their decision-making. This could include establishing scientific advisory groups with clear, legislated functions. The CEO and Head of EIA should be required to consider the advice and that the advice be made publicly available in accordance with appropriate governance principles. This would ensure transparency and accountability and help restore integrity to the system.

In its previous submission, the Academy highlighted that current environmental data systems do not provide decision-makers with the information they need. The Academy supports the functions of the Head of Environment Information Australia (EIA) to provide high quality information and data to the Minister and the public, to uplift the quality and availability of environmental data.

[Amend the Bill to limit ministerial discretion to uphold the intent of reforms to protect and improve the environment](#)

The Academy is deeply concerned about the broad Ministerial discretionary authority granted in the Bill, which risks short-term goals and political agendas taking priority over scientific advice and transparency in environmental decision-making.

The Bill in its current form heavily relies on the discretion of the Minister, and weak language reduces parts of the legislation to guidance, particularly regarding approvals, net gain determinations and vague ‘national interest’ exemptions. This discretionary power is concerning, particularly for projects of potential high environmental impact such as forestry, fossil fuel developments and offshore petroleum activities.¹

The Bill should limit ministerial discretion in cases where environmental Standards or the net gain test are not met. The ‘national interest’ exemption effectively enables discretionary override of every project, negating the intent of the Bill to safeguard Australia’s environment. Discretion to approve projects where impacts will not align with the required Standards should be limited to explicitly defined, very rare situations of public emergency. Where such an exemption is invoked, the Bill should require public justification and transparency surrounding these decisions.

The independence of both NEPA and the EIA are crucial elements to the reform package. The Academy continues to recommend that these bodies have independent governing boards, to ensure appropriate separations between these entities and the Commonwealth.

Refine and strengthen the Bill to improve environmental protection in a changing world

Exemptions should not contradict legislative intent

The exemptions contained within the Bill weaken its environmental protection objective and should be removed. Exemptions for forestry, cumulative land clearing, continuous use pathways and dilution of the water trigger mechanism contradict the purpose of a strengthened environmental assessment framework with decisions informed by scientific evidence and quality environmental data.

The proposed environmental Standards must be clear, measurable and enforceable to achieve meaningful outcomes. Greater detail in the Standards would provide certainty for all stakeholders to ensure consistent application across jurisdictions and project types. The Academy will contribute to the Department of Climate Change, Energy, the Environment and Water's consultation on the National Environmental Standards separately.

Devolving the water trigger to states and territories without legislated direction to receive advice from scientific committees such as the Independent Expert Scientific Committee (IESC) undermines the intent of the water trigger to protect finite water resources, particularly from fossil fuel and gas projects. This responsibility should remain at the federal level to avoid state and territory-level economic pressures influencing environmental safeguards. economic pressures influencing environmental safeguards.

Climate impacts and continuous use are not adequately covered, which creates a structural gap exposing ecosystems and species to escalating climate driven harm and weakens the overall intent and effectiveness of these reforms. The legislation must apply consistently across all sectors, including offshore fossil fuel activities and the Standards and decision making must be grounded in robust scientific evidence.

The Bill does not adequately account for climate-related harms to nature nor appropriately contain potential Ministerial overreach. Under the proposed arrangements, emissions cannot be considered by the Minister when determining environmental approvals. Excluding climate impacts from environmental decision-making represents a fundamental gap that will continue to expose ecosystems to compounding and unmitigated risk.

Biodiversity offsets should consider real world settings

The compensation and offset principles presented in the Bill should be redeveloped as they are not applicable at scale and present loopholes that expose the environment to potential harm.

The offsets contained within the Bill represent an oversimplification of the complexity and difficulty of restoration issues across Australia. Proponents (including the Restoration Contribution Holder) should need to demonstrate success in achieving competent ecological restoration based on scientifically assessed completion criteria. For example, despite 60 years of operation in Australia's Jarrah Forrest, Alcoa have not 'restored' post mined land to an acceptable level, despite research investment in the past 40 years and spending more than \$40 million.²

The basic principles represented in the Bill to guide the use of offsets are sound but are entirely

undermined by the introduction of a new pathway that avoids the need to comply with them. The Bill allows for the free option for proponents who will significantly impact a Matter of National Environmental Significance (MNES) to acquit their liability to offset this impact by simply paying into a federally operated fund (the 'Restoration Fund'). Failings of this type of offset practice have been repeatedly demonstrated in Australia.³

Major reasons for the failure of such funds include setting fees far too low to cover the real costs of generating gains equivalent to losses, and well-documented limits to the ability of offsets to generate gains for particular matters. The fund will work around this by being able to deliver offsets for matters other than those impacted, if such challenges arise, with few safeguards. This system will entrench ongoing declines for MNES for which restoration or protection is costly or challenging.

Given the challenge of delivering reliable offsets, the legislation needs to provide clarity that offsets are the final step in the mitigation hierarchy, and only applicable under impacts for which there is strong scientific evidence that compensation will be effective. This is a key challenge in the current reform proposal that is necessary to preserve the integrity of matters of environmental significance to avoid a 'pay to destroy' practice.

As recommended in previous submissions by the Academy, the new legislation should ensure any offsets for MNES must be like-for-like.⁴ Where the scientific data are not available to identify 'like-for-like' offsets, such as in some of the remote regions of Australia important for critical minerals, the use of Strategic Regional Environmental and Baseline assessments could be incorporated into the relevant National Environmental Standards without weakening the Environment Protection Reform Bill, as could ways of dealing with residual impacts from small-footprint developments close to major cities.⁵

Clarity for key terms including the net gain test

Environmental decline must not only be avoided but reversed. Presently, the Bill holds a significant absence of clear statutory definitions and definitive criteria of a 'net gain', 'critical habitat', 'water resource', 'national significance' and 'unacceptable impact' and does not consider cumulative impacts.

To avoid misinterpretation and inconsistency, these key terms must be defined in the Bill rather than the Standards, including the criteria under the net gain test. Recognition of the changing environment and mechanisms to immediately cover the rediscovery of a previously thought to be extinct species is needed to allow for adequate policy expansions and shifting conservation priorities.

Determinations on whether a proponent has achieved appropriate mitigation via the Mitigation Hierarchy, and the feasibility of offsets for particular matters, requires scientific committee overview, and transparency and appropriate data Standards. Strengthening the terminology and definitions surrounding these key terms within the legislation would provide accuracy and rigour.

To discuss or clarify any aspect of this submission, please contact Lauren Sullivan, Manager Policy

References

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