

Nature – a foundation of productivity – and the need for reform

Submission to the Economic Reform Roundtable

Summary

- 49% of Australia’s GDP is moderately or heavily reliant upon nature, and natural capital stocks are foundational to Australia’s ongoing level of economic productivity and prosperity.
- However, national discussions about productivity rarely consider the impacts of the accelerating decline of Australia’s nature and stock of natural capital. Historically, Australian governments have failed to systematically forecast the impacts of this decline upon productivity and economic growth.
- Fundamentally, Australia’s decline in natural capital stocks can only be overcome by remedying the underinvestment in nature by business and government.
- The natural capital (‘nature’) investment gap is so great that structural economic reform will also be required to facilitate non-government investment in natural capital; but non-government investment should not be seen a substitute for the necessary and complementary government investment.

Why is nature so important for Australia’s productivity?

Nature is essential economic infrastructure.

Nature provides many quintessential examples of products – predominantly ecological services – that have positive externalities (i.e. public benefits) and are thus undersupplied by the market. Unfortunately, there are also examples where the tragedy of the commons has led to the depletion and destruction of these public benefits due to a lack of effective public regulation and public-led and coordinated investment.

The United Nations System of Environmental Economic Accounting (which “*organises and presents statistics on the environment and its relationship with the economy*”¹) details which sectors’ supply chains are most critically dependent upon nature. They include²:

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| • Cropping | • Solid waste remediation |
| • Grazing | • Water purification services |
| • Forestry | • Water flow regulation services |
| • Wild fisheries | • Coastal protection services |
| • Water supply | • River flood mitigation services |
| • Global climate regulation services (e.g. carbon sequestration) | • Nursery population and habitat services |
| • Local climate regulation services (e.g. urban cooling and agricultural cooling effects) | • Recreation-related services (incl. tourism) |
| • Air filtration | • Pollination services |
| • Soil and sediment retention services | • Visual amenity services |
| | • Education, scientific and research services |
| | • Mental health services ³ |

¹ United Nations; <https://seea.un.org/content/about-seea>

² Largely reproduced from: p154-157 (Annex 6.1), *SEEA – Ecosystem Accounting*, UN, September 2021; https://seea.un.org/sites/seea.un.org/files/documents/EA/seea_ea_white_cover_final.pdf

³ This last item has been well-documented during the COVID-19 pandemic; see: S.M. Labib et. al., *Nature’s contributions in coping with a pandemic in the 21st century: A narrative review of evidence during COVID-19*, *Science of the Total Environment* (Journal), 10 August 2022;

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC8983608/>; University of Western Australia research: J.N. Sneddon et. al, *The impact of the COVID-19 pandemic on environmental values*, May 2022, *Sustainability Science* (Journal); <https://link.springer.com/article/10.1007/s11625-022-01151-w>

Most of these goods and services provided by nature – whether as intermediate inputs or as final products – are either non-substitutable or have no close substitutes. This means that there are many supply chains that would either collapse or at least greatly struggle to adjust if our nature is not stewarded for sustainable use.

Further, “...sectors that have a high or very high direct dependency on nature are responsible for more than three quarters of Australia’s export earnings, with resources currently accounting for 68.7% of Australia’s export share and agricultural exports another 11.3%.”⁴

The scale of the impacts upon productivity without sufficient natural capital to underpin is dramatic. According to the World Economic Forum, approximately half of global GDP is either moderately or heavily reliant upon nature⁵ – using the same methodology, Australia is on par with this global average, with 49% of Australia’s GDP⁶ – over A\$1trillion – being moderately or heavily reliant upon nature.

Australia faces an insurance protection gap for natural disasters, with “catastrophe losses over the decade 2014–2023 at US\$12 billion, or one-third of the estimated US\$37 billion cost of natural catastrophes over that period.”⁷ The role of intact, well-protected and well-managed nature in helping to mitigate a variety of natural disasters has been well-documented⁸.

As the Insurance Council of Australia concludes in their October 2024 report, *Advancing Resilient Nature Positive Insurance in Australia*:

“While the connection may not be immediately obvious, insurance and nature are intertwined on many fronts. Insurers underwrite and invest in industries reliant on natural resources and ecosystem services, and climate change and nature loss are exposing insurers to increased risk... There are connections between insurance and nature everywhere...”

*Insurance companies are directly dependent on nature through their operations, and indirectly through their policyholders’ and investees’ dependencies, which directly affects the risks and returns associated with insurance policies and investment portfolios.”*⁹

Australia’s accelerating natural capital decline

However, nature-based solutions (NbS) to climate-related challenges – including escalating natural disasters – have not yet become a Federal Government priority. Government investment in NbS to-date has been minimal and incidental, with ASIC

⁴ p4, *The nature-based economy: How Australia’s prosperity depends on nature*, Australian Conservation Foundation, September 2022; <https://www.acf.org.au/news/how-australias-prosperity-depends-on-nature>

⁵ *Nature Risk Rising: Why the Crisis Engulfing Nature Matters for Business and the Economy*, World Economic Forum, <https://www.weforum.org/publications/nature-risk-rising-why-the-crisis-engulfing-nature-matters-for-business-and-the-economy/>

⁶ As above n4.

⁷ *Insurance Catastrophe Resilience Report 2023–24*, Insurance Council of Australia, August 2024; https://insurancecouncil.com.au/wp-content/uploads/2024/08/21100_ICA_Catastrophe-Report_Print-2024_Final-spreads.pdf; also: <http://www.swissre.com/risk-knowledge/mitigating-climate-risk/natcat-protection-gap-infographic.html#/country/Australia>

⁸ *Nature-based solutions can help reduce the impact of natural hazards: A global analysis of NBS case studies*, Debele et. al, *Science of The Total Environment*, Volume 902, 2023; <https://doi.org/10.1016/j.scitotenv.2023.165824>; *Good practices for increasing the application of ecosystem-based adaptation and nature-based solutions for disaster risk reduction: Volume II*, 2024/SC/DRR/07, UNESCO; <https://unesdoc.unesco.org/ark:/48223/pf0000391788>

⁹ *Advancing Resilient Nature Positive Insurance in Australia*, Insurance Council of Australia, October 2024; https://insurancecouncil.com.au/wp-content/uploads/2024/10/ICA_Nature-Insurance-Report.pdf

yet to even provide guidance for corporate entities who seek voluntarily make nature-related financial risk disclosures¹⁰.

Indeed, Australia's stock of natural capital only continues to decline. As noted by the Federal Government's own most recent State of the Environment Report (2021):

*“Overall, the state and trend of the environment of Australia are poor and deteriorating as a result of increasing pressures from climate change, habitat loss, invasive species, pollution and resource extraction... Our inability to adequately manage pressures will continue to result in species extinctions and deteriorating ecosystem condition, **which are reducing the environmental capital on which current and future economies depend. Social, environmental and economic impacts are already apparent.**”¹¹*

Nature faces chronic underinvestment from Government – and business – with Australia's Federal environment budget being only 2% larger now than it was 10 years ago, despite 10 years of economic growth that averaged $\approx 2.4\%$ *annually*¹². Using the framework of analysis provided in the Commonwealth's *State of Environment Report* (2021), the estimated Commonwealth expenditure on biodiversity in the 2025 Federal Budget was approximately \$530m – less than 0.1% of the Federal Budget¹³.

Worse still, Federal nature negative Government subsidies – subsidies that actively support activities that significantly harm nature and our natural capital stocks – are estimated at \$26.3 billion¹⁴ – 4% of the Federal Budget – approximately 50 times the Commonwealth's biodiversity (i.e. nature positive) expenditure.

What reforms would help safeguard Australia's nature-based productivity?

The key problem facing productivity derived from nature is the large and growing investment gap in natural capital. Australian governments can address this by:

1. Dramatically increasing direct Government investment in natural capital by redirecting the estimated \$26.3 billion in nature negative Federal Government subsidies into nature positive investments [**budget positive**]
2. Focus, prove up, and invest in Nature-based Solutions (NbS) to help mitigate climate change and build disaster resilience, noting that grey infrastructure depreciates on the balance sheet, whereas green infrastructure appreciates [**budget positive compared to counterfactual**];
3. Direct ASIC to provide guidance on voluntary nature-related disclosures [**budget neutral**];
4. Work towards mandatory nature-related disclosures under s296A of the *Corporations Act 2001* (Cth) [**budget neutral in the short-term, but with opportunities to become budget positive over the medium to long-term**];

¹⁰ Noting there is a now a legislative head of power that can regulate such nature-related disclosures in future; see: s296A, *Corporations Act 2001* (Cth); <https://www.legislation.gov.au/C2004A00818/latest/text/2>

¹¹ Overview – Key findings, *State of the Environment Report 2021*, Government of Australia, 2021; <https://soe.dceew.gov.au/overview/key-findings>

¹² Question on Notice #SQ22-00066, Budget Estimates, 15 November 2022, Environment and Communications Committee, The Senate; <https://www.aph.gov.au/api/gon/downloadestimatesquestions/EstimatesQuestion-Committeeld8-EstimatesRoundId19-Portfoliold46-QuestionNumber155>

¹³ Analysis by the Australian Land Conservation Alliance; see: @10m30s to 16m0s – https://www.youtube.com/watch?v=PtKjH03R7nM&ab_channel=AustralianLandConservationAlliance

¹⁴ 'Nature-negative' – the federal government subsidies harming biodiversity, Biodiversity Council [Paul Elton], October 2024; <https://biodiversitycouncil.org.au/news/nature-negative-the-federal-government-subsidies-harming-biodiversity>

5. Amend the *Carbon Credits (Carbon Farming Initiative) Act 2011* to allow for Commonwealth carbon market procurement to optimise public value (i.e. be able to consider the value of environmental and other co-benefits)¹⁵ **[assuming Government policy objectives can be aligned, budget positive]**;
6. Requiring the mandates of Government investment funds to require a proportion of their investments to be nature positive **[budget neutral]**;
7. Finalise the chronically delayed reform of the *EPBC Act 1999* (Cth), including legislating for a Commonwealth Biodiversity Investment Strategy, and a new National Environmental Standards making power to enable the Minister to make, review and amend National Environmental Standards as disallowable legislative instruments (as per the Senate Committee report into the previous attempt at EPBC Act reform¹⁶) **[budget positive compared to counterfactual]**; and
8. Undertake a review of tax settings and incentives for conservation activities – including environmental restoration as per Recommendation 28(d) of the Samuel Review of the EPBC Act¹⁷ **[the review itself would be largely budget neutral]**.

Businesses can address the investment gap by:

9. Assessing their nature risk exposure and taking action – and making investments – to mitigate those risks;
10. Making voluntary nature-related risk disclosures;
11. Adopting an integrated approach to climate and nature – for example, procuring biodiverse carbon credits when acquitting climate obligations, or otherwise adopting Nature-based Solutions; and

Recognising the key connections between nature and Country, Australian governments and businesses can:

12. Collaborate and partner with the land conservation and Indigenous land management sectors to realise their business' and national ambitions for nature, and management of nature-related risks.

Additional information

ALCA's Policy Lead, Michael Cornish, stands ready to provide further information and assistance.

Email: michael@alca.org.au.

Australian Land Conservation Alliance, July 2025

¹⁵ This aligns with the Key findings under Recommendation 13 of the Independent Review of Australian Carbon Credit Units (Dec 2022), that “*Scheme arrangements should facilitate but not require provision of co-benefits.*”; see: <https://www.dcceew.gov.au/sites/default/files/documents/independent-review-accu-exec-summary.pdf>

¹⁶ Environment and Communications Legislation Committee, *Nature Positive (Environment Protection Australia) Bill 2024 [Provisions] and related bills*, The Senate; [https://parlinfo.aph.gov.au/parlInfo/download/committees/reportsen/RB000445/toc_pdf/NaturePositive\(EnvironmentProtectionAustralia\)Bill2024\[Provisions\]andrelatedbills.pdf](https://parlinfo.aph.gov.au/parlInfo/download/committees/reportsen/RB000445/toc_pdf/NaturePositive(EnvironmentProtectionAustralia)Bill2024[Provisions]andrelatedbills.pdf)

¹⁷ *Independent Review of the EPBC Act – Final Report*, Prof. Graeme Samuel AC, October 2020; <https://www.dcceew.gov.au/sites/default/files/documents/epbc-act-review-final-report-october-2020.pdf>