Institute of Public Affairs

8 July 2024

Senate Standing Committees on Environment and Communications
PO Box 6021
Parliament House
Canberra, ACT 2600

Dear Committee Secretary

Nature Positive is an undemocratic and unaccountable policy that will impose immense social and economic costs on Australians

The purpose of this letter is to provide research and analysis conducted by the Institute of Public Affairs (the IPA) to the Senate Standing Committees on Environment and Communications (the Committee) as it conducts its inquiry into the Nature Positive (Environment Information Australia) Bill 2024 [Provisions] and related bills.

The bills seek to establish two new government agencies, Environment Protection Australia (EPA) and Environment Information Australia (EIA), and to transfer a wide range of regulatory decision-making responsibilities in the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) from the federal environment minister to the person appointed to be CEO of EPA.

The Nature Positive Plan exemplifies the detachment of the political class from mainstream Australian society. Despite its potential to impose significant and radical economic harm on the country, the federal government entered into international commitments to implement its goals without public debate, and the Nature Positive Plan was adopted in full in December 2022, only after an election was held.

Subsequently, the Nature Positive Plan has received little scrutiny and there is minimal public understanding over what 'Nature Positive' will mean in practice once it is fully implemented, and who in the community will incur the costs.

The IPA has conducted and collected a significant body of research in relation to the origins of Nature Positive, the potential administrative costs to the taxpayer, and the undemocratic character of the plan. The IPA analysis of the bills finds:

- Nature Positive is undemocratic.
- The Nature Positive Plan is inconsistent with the Samuel Review of the *Environment Protection and Biodiversity Conservation Act 1999*.
- Environment Protection Australia and Environment Information Australia will be unaccountable to parliament, and Environment Protection Australia has the potential to be highly secretive.
- The bills will increase Green Tape, which is currently at a record high.

The Nature Positive Plan was adopted by the federal government without public debate or parliamentary scrutiny

The Nature Positive Plan is the domestic manifestation of the Nature Positive Initiative, an international movement based on agenda-led 'science-based opinion' and promoted by a group of aligned NGOs and foundations. Central to the advancement of the Nature Positive Initiative was the High Ambition Coalition for Nature and People (the HACNP), whose main goal is the adoption of the 30x30 plan—where governments commit to reserving 30 per cent of lands and seas by the year 2030.

Australia joined the HACNP in 2021. However, no agreement made within that body has ever been subject to public debate in Australia nor has any agreement been subject to parliamentary scrutiny. This is because the agreements reached in bodies such as the HACNP do not meet the technical definition of a 'treaty'—despite being an international agreement. These 'soft law' agreements are not subject to the same level of public scrutiny as treaties. However, these soft law instruments are invoked to justify policy developments in the same way as treaties.

The failure to scrutinise soft law instruments is a significant democratic defect that must be addressed. At the very least, soft law international instruments must be subject to the same scrutiny as treaties. Accordingly, Australia's involvement in international agreements arising from the Nature Positive Initiative and the HACNP must be subject to immediate democratic scrutiny and accountability at the point of adoption, not after legislation has already been drafted and introduced into parliament.

The Nature Positive Plan is inconsistent with the recommendations of the Samuel Review

The federal government has claimed that its Nature Positive Plan is based on the recommendations made in the second review into the EPBC Act, carried out by Professor Graeme Samuel AC and presented to the environment minister in October 2020. However, this is not accurate: in several key respects, the Nature Positive Plan repudiates explicit recommendations of the Samuel Review.

For instance, as part of the Nature Positive Plan, the government passed an amendment in December 2023 to introduce a 'water trigger' into the EPBC Act, and has in the bills currently before parliament proposed to establish two new 'independent' agencies. Both are inconsistent with the Samuel Review.

While the Samuel Review did recommend a 'cop on the beat', this was to be an official within the Department of Climate Change, Energy, the Environment and Water (DCCEEW) tasked with ensuring project proponents were meeting their EPBC approval obligations. Not only do the bills establish an environment protection agency separate from the department, they also begin the process of transferring approval powers to the CEO of EPA. The Nature Positive (Environmental Law Amendments and Transitional Provisions) Bill 2024 will enable the minister to delegate referral and approval powers to the CEO of EPA, with the full transfer of this responsibility flagged for the third stage of Nature Positive reforms.[1]

[1] Nature Positive (Environment Law Amendments and Transitional Provisions) Bill 2024 (Cth); DCCEEW, *Consultation for Stage 3 – Nature Positive Law Reform* (April 2024).

EPA and EIA will be unaccountable and have the potential to be highly secretive

The Head of EIA will have the power to unilaterally redefine 'Nature Positive'

Prior to the release of the Nature Positive (Environment Information Australia) Bill 2024 ("EIA bill") there had been no agreed upon definition of what 'Nature Positive' actually is. This is despite the 60-page document released by the DCCEEW, which outlines the government's 'Nature Positive Plan'.

Section 6(1) of the EIA bill states that the definition of Nature Positive is "an improvement in the diversity, abundance, resilience and integrity of ecosystems from a baseline". Section 13(2) clarifies that the Head of EIA 'must determine a baseline for the purposes of subsection 6(1) (definition of *Nature Positive*)'. Section 12 provides that the Head of EIA 'is not subject to the direction' of the Secretary of the DCCEEW nor the relevant minister in performing its functions, including under section 13.

This would in effect mean an unelected public servant has wide discretion to rewrite the definition of 'Nature Positive'—a substantial government policy—without the direction or approval of elected ministers or the parliament.

Regulatory powers will be transferred from elected minister to unelected bureaucrat

A significant part of the government's Nature Positive Plan is to confer powers currently exercised by the Minister of CCEEW to the CEO of EPA.[2] EPA would be a regulatory body with "strong new powers and penalties" and "central to a Nature Positive Australia".[3] The actions taken by the CEO of EPA are not subject to direction from anyone.[4]

Ministers are better positioned than unelected and unaccountable bureaucrats to make informed decisions on environmental policies. This is because the minister must factor in the views and priorities of other ministers in the elected government and, in theory, should be considering the other important elements of regulatory decisions, such as the economic value that could be lost due to approval decisions made or regulatory actions taken.

This is a form of democratic backsliding and means that the relevant environmental law-making process lacks any meaningful public scrutiny or accountability.

The bills contain vague and arbitrary secrecy provisions

Section 23(a) and 23(c) of the bill provide exemptions from a statutory requirement to document actions on a register—and therefore withhold that information from the public—if it endangers public safety, or if the information could "cause damage to the security, defence or international relations of Australia".

The 'endangering public safety' provision is vague and has no set definition within the EPA bill. The more alarming provision however is the exception provided for damage caused to the international relations of Australia.

[2] Nature Positive (Environment Law Amendments and Transitional Provisions) Bill 2024 (Cth).
[3] Nature Positive (Environment Protection Australia) Bill 2024 (Cth) Explanatory Memorandum.
[4] Nature Positive (Environment Protection Australia) Bill 2024 (Cth).

Given EPA will be a regulator of some of the industries responsible for Australia's most significant exports (such as coal and gas), there are many circumstances in which the restriction of those industries could put Australia's international relations at risk.

An example of this was the introduction of the safeguard mechanism, with Japanese trading partners voicing their concern over our ongoing capacity to export gas from the Barossa Gas Project, and even asking if the project could be made exempt.

Regulatory decisions made by the CEO of EPA, not accountable to the relevant minister nor the department, on resource industries which export, will have a significant effect on Australia's international relations and reputation. This subsection within the EPA bill opens the door for secrecy within the public service, and closes the door to public scrutiny and the accountability of a powerful agency.

Environment Protection Australia will be expensive and one of the largest agencies in the country once fully operational

Recent IPA research revealed that regulatory staffing had reached over 100,000 people for the first time in Australia's history, and the largest contributor to that increase was seen in the CCEEW portfolio, where regulatory staff had increased by 76 per cent over the previous two financial years. This will likely increase dramatically once EPA is fully set up and operational.

IPA analysis of the potential and administrative costs of EPA, based on existing publicly available data relating to state environmental protection agencies, finds that in order to carry out the extraordinary array of regulatory functions and decision making in the bills:

- EPA could be the sixth most highly resourced agency in the federal government, at $1.8 billion per year.
- Staff expenses at EPA could reach $694 million per year.
- EPA could employ 4,760 people, which would almost double the number of people already employed in the federal environmental department.

This would-be increase in staffing levels within the CCEEW portfolio is entirely reflective of the increase currently being seen under the federal government.

Australia is already at record high levels of environmental regulation (Green Tape)

Government red tape is at record highs federally and in every state across the country, a significant reason for this is due to the increase in environmental red tape, or 'Green Tape'.

Recent IPA research revealed that the DCCEEW is currently responsible for enforcing 6,803 pages of legislation – which is the highest number on record.

In 2021, the final full year of the previous government, the federal environment department was responsible for enforcing less than 3,000 pages of legislation. Should the three Nature Positive bills, which this inquiry is the subject of, be passed, the number of pages of legislation administered by the DCCEEW will rise to at least 7,004 pages, which is an increase of 142 per cent from 2021 levels.

Public debate surrounding Nature Positive has indicated that the bills may be amended further to include a climate trigger.[5] The inclusion of a climate trigger would impose significant costs on Australian businesses, putting at risk jobs and the economy at large.

Recent economic analysis by the IPA found that introducing a climate trigger would put at risk $227.1 billion of investment in critical nation building resource projects. Western Australia would be the most impacted State/Territory, with $111.7 billion in investment at risk, Queensland and the Northern Territory would be the next most impacted.

	WA	QLD	NT	NSW	SA	VIC	TAS	TOTAL
Killed investment	$59.8bn	$41.9bn	$17.1bn	$11.9bn	$2.5bn	$0.6bn	N/A	$133.8bn
Delayed investment	$38.1bn	$7.3bn	$0.6bn	$1.1bn	$3.9bn	$2.1bn	$0.9bn	$54.0bn
High risk investment	$13.8bn	$17.3bn	$1.2bn	$1.6bn	$2.85bn	$2.5bn	N/A	$39.3bn
Total at risk	$111.7bn	$66.6bn	$18.8bn	$14.6bn	$9.3bn	$5.2bn	$0.9bn	$227.1bn

Note: The sum of the state columns may not equal the total at risk due to rounding.

Enclosed IPA Research

Red Tape Army: 2024-25 Budget Update (July 2024)

The Undemocratic Origins of the Nature Positive Plan (July 2024)

How the Nature Positive Plan Contradicts the Samuel Review of the EPBC Act (July 2024)

What the Federal Government's Proposed Environment Protection Agency Will Cost to Taxpayers (July 2024)

Economic Analysis of the 'Climate Trigger' (July 2024)

Nature Positive Legislation to Put Green Tape Over 7,000 pages (July 2024)

I thank the Committee for the opportunity to provide this submission. Please do not hesitate to contact me at for further consultation or discussion.

Kind regards,

Saxon Davidson
Research Fellow

[5] Senator Larissa Waters, Hansard - Australian Senate (27 June 2024); Monique Ryan MP, Hansard - House of Representatives (3 July 2024),

Institute of Public Affairs

IPA RESEARCH NOTE

JULY 2024

RED TAPE ARMY: 2024-25 BUDGET UPDATE

Lachlan Clark
Research Fellow

Summary of findings

- By the end of the 2025 financial year, the number of red tape enforcers—federal government employees engaged in regulatory roles—will be more than 106,000 people. This is an increase of more than 5,000 people (+5.5%) from the 2024 financial year, and an overall increase of more than 15,000 (+17%) from the 2023 financial year.
- Annual staffing costs to employ red tape enforcers alone will be approximately $14.7 billion by the end of the 2025 financial year. This is an increase of $797 million (+5.7%) from the 2024 financial year.
- The number of red tape enforcers will increase in all government portfolios by an average of 5% between the 2024 and 2025 financial years.
- Staffing numbers at the Climate Change, Energy, Environment and Water portfolio will increase by 14.5%, the highest increase of all federal government portfolios.
- At the end of the 2023 financial year, the Climate Change, Energy, Environment and Water portfolio employed 3,311 regulators. By the end of the 2025 financial year it is forecast to employ 5,820 regulators, an increase of 76% over two financial years.
- Staffing numbers at the Department of Climate Change, Energy, Environment and Water will increase by 17.5%, the highest departmental increase across the federal government.
- By 2025, the average staffing level across the federal government (excluding military and reserves) is forecast to reach 209,150. This means that over half the federal government workforce will be engaged in regulatory activity.

Methodology

This research note updates analysis previously published in February 2024, *Red Tape Army: Headcount and Cost of the Federal Regulatory Workforce* (February Note) using new data published in the 2024-25 Commonwealth budget papers.

The analysis measures the number of staff and the staffing costs of people employed within the federal regulatory bodies and agencies across the 2024 and 2025 financial years.

The methodology in this research note replicates the methodology in the February Note regarding the selection and criteria used to determine whether a government body was a regulatory body.

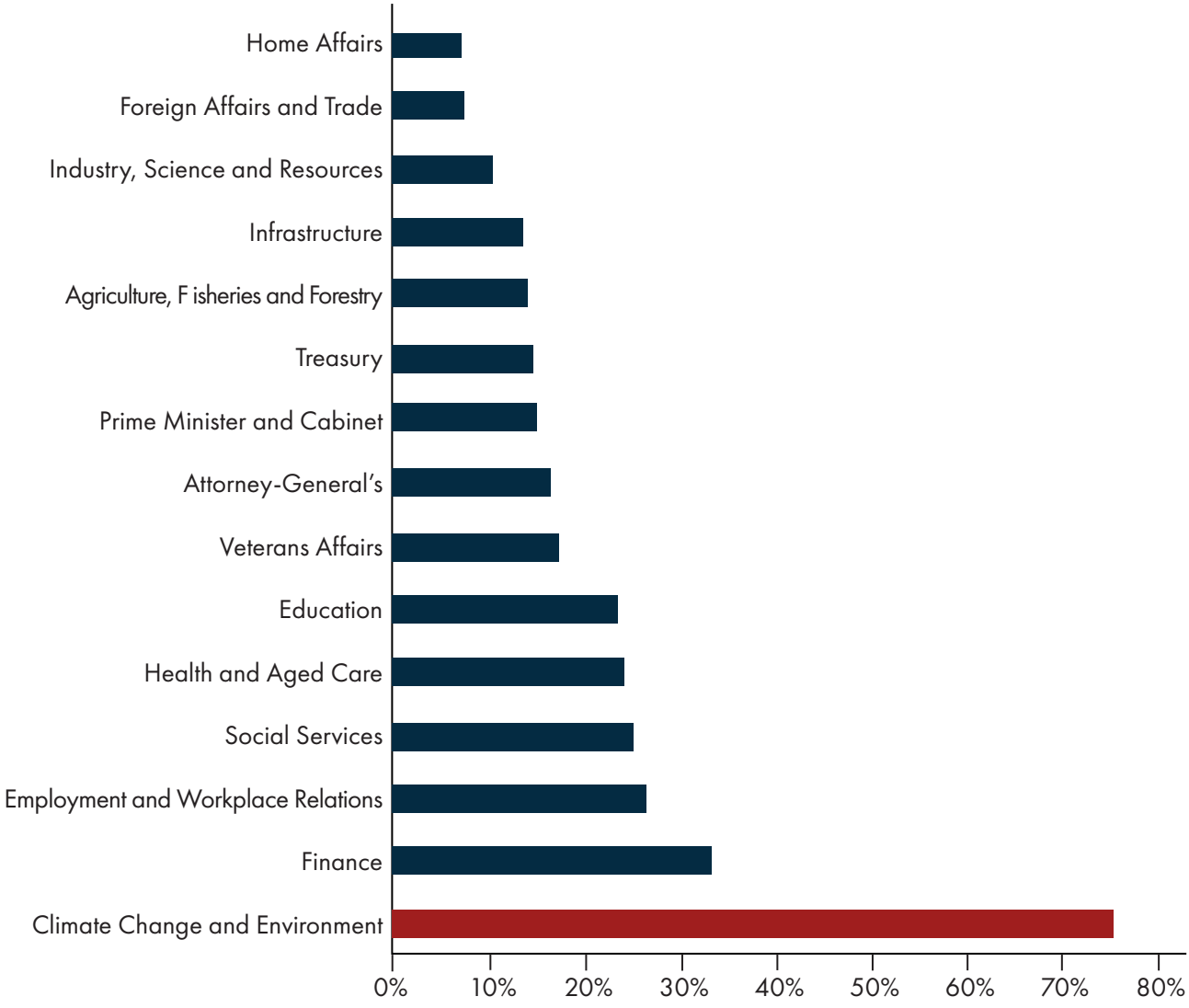
Staffing numbers, or 'average staffing levels', is defined as the average number of employees receiving salary or wages over the financial year, with casual and part-time employees adjusted to a full-time equivalent. This information is derived from the 2024-25 federal budget papers, namely *Budget Paper No. 4*.[1]

1 Average staffing levels for Reserve Bank of Australia and the National Heavy Vehicle Regulator for 2023-24 and 2024-25 has not been made available in the budget papers or portfolio budget papers. This note uses the figures from the 2022-23 annual report of both agencies, which is assumed to be consistent across the following financial years.

Actual staffing costs represents the total cost of employee benefits. This figure typically includes wages and salaries, superannuation costs, leave and other entitlements costs and separation and redundancies costs. This analysis uses information from 2024-25 Portfolio Budget Statements.[2]

Staffing data for the 2024 financial year used in this note varies from the data in the February Note. This variation is due to revisions made to the 2024 financial year data in the 2024-25 federal budget papers.

Growth of regulatory workforce from 2023 to 2025, categorised by government portfolio.



Source: IPA; 2024-25 Commonwealth budget papers

Analysis contained in this note and data for the 2023 financial year in the February Note illustrating the growth of the federal regulatory workforce from July 2022 (the beginning of the 2023 financial year). It reveals that staffing growth of all portfolios from the 2023 financial year to the 2025 financial year will average 21 per cent, but staffing at the Climate Change, Energy, Environment and Water portfolio will be almost four times the national average, at 76 per cent.

2 Actual cost data for the Reserve Bank of Australia and the National Heavy Vehicle Regulator for 2022-23 has not been made available in the budget papers or portfolio budget papers. This note uses the figures from the 2022-23 annual report of both agencies, which is assumed to be consistent across the following financial years.

Appendix: Table of findings

PORTFOLIO	NUMBER OF REGULATORY STAFF			REGULATORY STAFFING COSTS		
	2023-24	2024-25		2023-24	2024-25	
Treasury	**26,793**	**29,110**	**+8.6%**	**$3,799m**	**$4,085m**	**+7.5%**
Australian Taxation Office	19,579	21,350	+9.0%	$2,566m	$2,739m	+6.7%
Australian Securities and Investments Commission	1,709	1,948	+14.0%	$287m	$329m	+14.6%
Department of the Treasury	1,487	1,586	+6.7%	$232m	$256m	+10.3%
Reserve Bank of Australia	1,575	1,575	0.0%	$304m	$304m	0.0%
Australian Competition and Consumer Commission and the Australian Energy Regulator (reported jointly)	1,560	1,719	+10.2%	$234m	$259m	+10.7%
Australian Prudential Regulation Authority	857	893	+4.2%	$172m	$191m	+11.0%
Office of the Australian Accounting Standards Bureau	26	39	+50.0%	$4m	$7m	+75.0%
Home Affairs	**15,017**	**15,175**	**+1.1%**	**$2,025m**	**$2,071m**	**+2.3%**
Department of Home Affairs	15,017	15,175	+1.1%	$2,025m	$2,071m	+2.3%
Health and Aged Care	**8,574**	**9,152**	**+6.7%**	**$1,175m**	**$1,275m**	**+8.5%**
Department of Health and Aged Care	6,127	6,320	+3.1%	$824m	$879m	+6.7%
Aged Care Quality and Safety Commission	1,313	1,590	+21.1%	$188m	$210m	+11.7%
Australian Digital Health Agency	464	561	+20.9%	$66m	$83m	+25.8%
National Health and Medical Research Council	205	205	0.0%	$29m	$31m	+6.9%
Sport Integrity Australia	167	178	+6.6%	$24m	$29m	+20.8%
Australian Radiation Protection and Nuclear Safety Agency	178	178	0.0%	$26m	$26m	0.0%
Food Standards Australia New Zealand	120	120	0.0%	$18m	$17m	-5.6%
Foreign Affairs and Trade	**6,625**	**6,949**	**+4.9%**	**$1,111m**	**$1,160m**	**+4.4%**
Department of Foreign Affairs and Trade	6,625	6,949	+4.9%	$1,111m	$1,160m	+4.4%
Agriculture, Fisheries and Forestry	**6,316**	**6,591**	**+4.4%**	**$713m**	**$779m**	**+9.3%**
Department of Agriculture, Fisheries and Forestry	5,896	6,166	+4.6%	$650m	$714m	+9.8%
Wine Australia	53	53	0.0%	$10m	$9m	-10.0%
Australian Fisheries Management Authority	177	177	0.0%	$25m	$24m	-4.0%
Australian Pesticides and Veterinary Medicines Authority	190	195	+2.6%	$28m	$32m	+14.3%
Employment and Workplace Relations	**6,097**	**6,522**	**+7.0%**	**$752m**	**$807m**	**+7.3%**
Department of Employment and Workplace Relations	3,786	4,163	+10.0%	$437m	$477m	+9.2%
Office of the Fair Work Ombudsman	954	970	+1.7%	$119m	$121m	+1.7%
Comcare	642	646	+0.6%	$88m	$93m	+5.7%
Fair Work Commission	402	417	+3.7%	$65m	$71m	+9.2%
Australian Skills Quality Authority (National Vocational Education and Training Regulator)	212	225	+6.1%	$29m	$31m	+6.9%
Safe Work Australia	101	101	+0.0%	$14m	$14m	0.0%
Industry, Science and Resources	**4,473**	**4,533**	**+1.3%**	**$617m**	**$655m**	**+6.2%**
Department of Industry, Science and Resources	3,199	3,238	+1.2%	$424m	$449m	+5.9%
IP Australia	1,100	1,100	0.0%	$153m	$159m	+3.9%
National Offshore Petroleum Safety and Environmental Management Authority	174	195	+12.1%	$40m	$47m	+17.5%

PORTFOLIO	NUMBER OF REGULATORY STAFF			REGULATORY STAFFING COSTS		
	2023-24	2024-25		2023-24	2024-25	
Climate Change, Energy, the Environment and Water	**5,082**	**5,820**	**+14.5%**	**$647m**	**$747m**	**+15.5%**
Department of Climate Change, Energy, the Environment and Water	4,014	4,716	+17.5%	$496m	$587m	+18.3%
Clean Energy Regulator	388	400	+3.1%	$52m	$54m	+3.8%
Murray-Darling Basin Authority	343	367	+7.0%	$51m	$57m	+11.8%
Great Barrier Reef Marine Park Authority	272	272	0.0%	$37m	$38m	+2.7%
Climate Change Authority	65	65	0.0%	$11m	$11m	0.0%
Infrastructure, Transport, Regional Development, Communications and the Arts	**4,756**	**5,053**	**+6.2%**	**$740m**	**$771m**	**+4.2%**
Department of Infrastructure, Transport, Regional Development, Communications and the Arts	2,043	2,271	+11.2%	$311m	$324m	+4.2%
Civil Aviation Safety Authority	820	832	+1.5%	$143m	$149m	+4.2%
Australian Communications and Media Authority	608	654	+7.6%	$95m	$104m	+9.5%
Australian Maritime Safety Authority	470	481	+2.3%	$83m	$86m	+3.6%
National Heavy Vehicle Regulator	815	815	0.0%	$108m	$108m	0.0%
Social Services	**3,712**	**3,799**	**+2.3%**	**$494m**	**$521m**	**+5.5%**
Department of Social Services	2,894	2,891	-0.1%	$412m	$424m	+2.9%
NDIS Quality and Safeguards Commission	818	908	+11.0%	$82m	$97m	+18.3%
Veterans Affairs	**3,266**	**3,188**	**-2.4%**	**$435m**	**$410m**	**-5.7%**
Department of Veterans' Affairs	3,266	3,188	-2.4%	$435m	$410m	-5.7%
Attorney-General's	**3,060**	**3,072**	**+0.4%**	**$424m**	**$405m**	**-4.5%**
Attorney-General's Department	2,098	1,994	-5.0%	$300m	$271m	-9.7%
Australian Transaction Reports and Analysis Centre	500	616	+23.2%	$70m	$83m	+18.6%
Australian Financial Security Authority	462	462	0.0%	$54m	$51m	-5.6%
Prime Minister and Cabinet	**2,916**	**3,019**	**+3.5%**	**$442m**	**$441m**	**-0.2%**
Department of the Prime Minister and Cabinet	1,265	1,305	+3.2%	$191m	$194m	+1.6%
National Indigenous Australians Agency	1433	1486	+3.7%	$221m	$217m	-1.8%
Torres Strait Regional Authority	159	169	+6.3%	$22m	$22m	0.0%
Workplace Gender Equality Agency	59	59	0.0%	$8m	$8m	0.0%
Finance	**2,170**	**2,237**	**+3.1%**	**$273m**	**$294m**	**+7.7%**
Department of Finance	1,868	1,901	+1.8%	$226m	$243m	+7.5%
Digital Transformation Agency	242	271	+12.0%	$39m	$43m	+10.3%
Independent Parliamentary Expenses Authority	60	65	+8.3%	$8m	$8m	0.0%
Education	**1,687**	**1,836**	**+8.6%**	**$263m**	**$286m**	**+8.7%**
Department of Education	1,472	1,624	+10.3%	$226m	$251m	+11.1%
Tertiary Education Quality and Standards Agency	113	110	-2.7%	$15m	$15m	0.0%
Australian Curriculum, Assessment and Reporting Authority	102	102	0.0%	$22m	$20m	-9.1%
Total	**100,544**	**106,056**	**+5.5%**	**$13,910m**	**$14,707m**	**+5.7%**

Institute of Public Affairs

JULY 2024

THE UNDEMOCRATIC ORIGINS OF THE NATURE POSITIVE PLAN

Aynsley Kellow

Professor Emeritus of Government, University of Tasmania

Foreword by Scott Hargreaves

Executive Director

The Undemocratic Origins of the Nature Positive Plan

Published by IPA.

Printed in Melbourne, Australia, 2024.

www.ipa.org.au

Image Credit: Paul Kagame www.flickr.com/photos/paulkagame/

Foreword

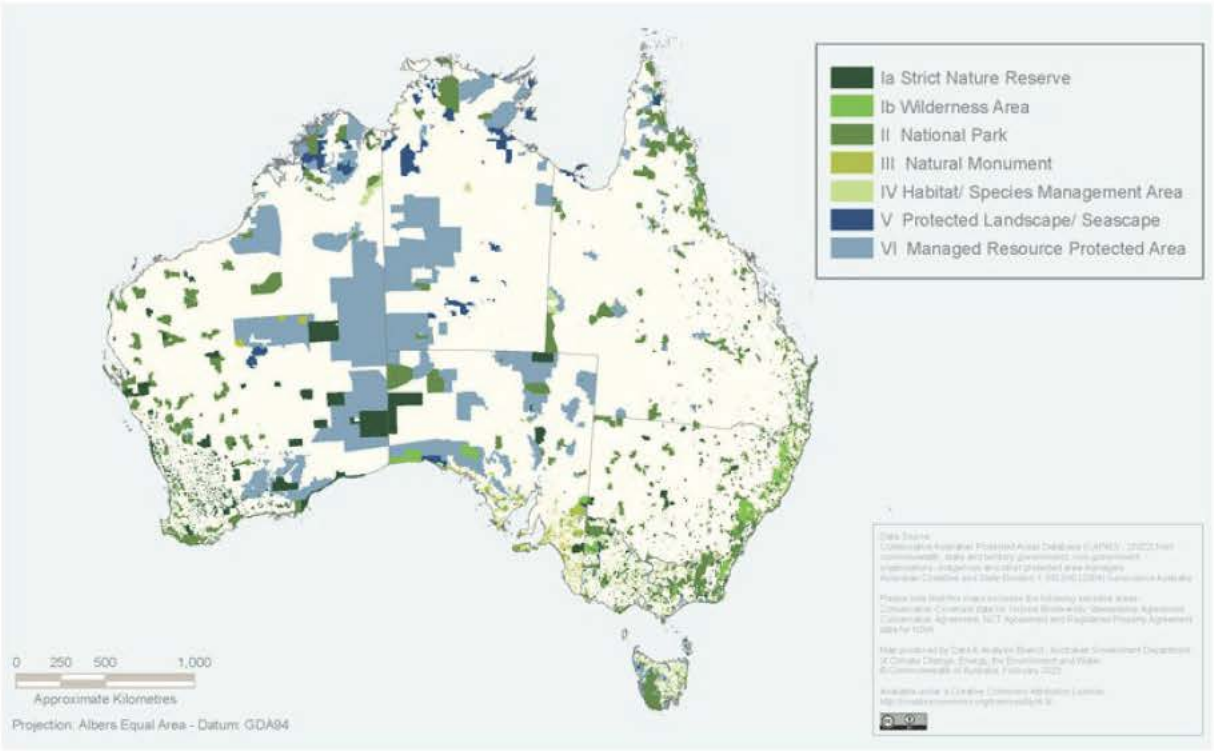
Australia is big, very big. Wringing a living from the varied and sometimes very tough landscapes was the central concern of Aboriginal Australians, and with hard work and ingenuity the European settlers were able to build the modern and prosperous Australia we have now. The primary industries—particularly agriculture and mining—were central to the story, and necessarily entwined with objectives for land management and for the environment.

So how we manage this vast continent of ours is rightly a concern of all Australians. But until early 2024 very few Australians knew anything at all about the federal government's intention to enshrine 'Nature Positive' principles into our domestic legal system.

In March 2024 we learned via the media that incredibly consequential decisions were being made behind closed doors about the federal government's power to make rulings over virtually every form of land use across the country going forward. In official consultations with industry bodies, participants are being provided with mountains of draft documents, but were not allowed to take them away to discuss with their members.

The context for the discussion is that 22 per cent of Australia is already set aside for various kinds of reserves, including national parks, wilderness areas, an so on. This information can be found at the website of the Department of Climate Change, Energy, the Environment and Water. A map of that area appears below as Figure 1 – National Reserve System – IUCN categories.

FIGURE 1: NATIONAL RESERVE SYSTEM (IUCN CATEGORIES)



Source: Department of Climate Change, Energy, the Environment and Water

But very few Australians were aware that the federal environment minister, Tanya Plibersek, announced the federal government has set a target to increase this to 30 per cent.

Pastoralists and graziers across the country are already trapped in a cage of associated environmental regulations. Central Queensland beef producer Adam Coffey is just one of the many farmers who are very very concerned, or should be.

> Why would we be making more national parks when the current parks are massively underfunded and mismanaged?
>
> Imagine the fires if we increased the number of national parks we have. Has anyone calculated the biodiversity loss from the large forest fires in National Parks we've seen in recent years? The huge carbon emissions? Why would anyone think it is a good plan to multiply this environmental catastrophe?[1]

And yet here we are with a commitment to add hundreds of thousands of square kilometres to the Nature Reserve System, without any guidance as to where they will be. Farmers, prospectors, and miners are in the dark, cruelling the entrepreneurial spirit. I operate on the assumption the DCCEEW has a database of proposed additions and perhaps even maps of what Australia would look like under a 30 per cent target, and it should be more transparent. Elected representatives and parliamentary committees should demand these maps be provided before any consideration is given to new legislation.

The 'Nature Positive' laws have been presented by the government as a response to the review of the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) conducted by Graeme Samuel and delivered to the previous government in October 2020. But the phrase 'Nature Positive' appears nowhere in Mr Samuels' final report.

What we have here is 'mission creep': the process by which original objectives of a process alter and expand by stealth and inattention. The original review of the EPBC Act, designed to identify room for improvement and indeed streamline the ridiculously complex, lengthy, and arbitrary project approval process for new investments in Australia, has been hijacked.

Back in 2020 the IPA made a submission to the Samuel inquiry in good faith, as those were the kind of improvements we said Australia needed to maintain our prosperity while meeting reasonable goals for environmental protection. In particular, we highlighted the need to address the massive increase in red tape the expansion of the Commonwealth's power of environmental regulation had created:

> Previous research by the IPA has highlighted the deleterious effect the EPBC Act has on business investment and job creation in Australia. Environmental law has grown 80-fold since the first piece of Commonwealth environmental legislation was enacted in 1971. And the research report *Section 487: How Activists Use Red Tape to Stop Development and Jobs (2020 Update)* estimated that environmental activist groups such as Greenpeace have used a special legal privilege through Section 487 to engage in frivolous and vexatious litigation to put at risk

1 Eric Barker, 'Concerns raised over Plibersek's plan to "lock up" land', *Beef Central* (20 July 2022): https://www.beefcentral.com/news/concerns-raised-over-pliberseks-plan-to-lock-up-land/.

> $65 billion worth of investment in major projects such as dams, public infrastructure, and coal mines. ... there has been a 445 per cent increase in the amount of regulation contained in the EPBC Act and relevant subsidiary legislation since the year 2000 when Act came into effect.[2]

But instead of the promised streamlining, the federal government is adding objectives promoted by green organisations across the world. In the formal announcement of 'Nature Positive', Ms Plibersek, said this:

> The Australian Government has committed to protect 30% of Australia's land and seas by 2030, create a nature repair market, establish an independent Environment Protection Agency (EPA) and work in partnership with First Nations people, including to develop standalone cultural heritage legislation. We are working towards zero new extinctions.[3]

The has two principal concerns with the 'Nature Positive' laws:

1. The arbitrary nature of the goals, and the negative effect on property rights and economic growth they will have; and
2. The lack of governance around the process by which the government has made commitments to international bodies to achieve these goals without the explicit participation of the parliament and/or the broader community.

On the first point, the IPA will continue to monitor and make submsission on the laws as they development, in pursuit of its objective of reducing red tape and of securing the sources of our prospertiyt for future generations.

On the second point, we felt it important to explicate the issues and draw them to the attention of the parliament and the wider community, and so turned to Professor Aynsley Kellow, who is an acknowledged expert on the development of global environmental committees, and the domestic processes by they are (or should be) overseen.

At the very least, the '30x30' commitment inherent in the Nature Positive agreements should be reviewed by the Commonwealth parliament's Joint Standing Committee on Treaties, as a matter of urgency. This would seem to fall within the remit of the Committee which is, inter alia, to:

> Review and report on all treaty actions proposed by the Government before action which binds Australia to the terms of the treaty is taken.[4]

We are very pleased to present Professor Kellow's final report, and look forward to a robust conversation in the community on the federal government's objectives and the process going forward.

Scott Hargreaves
Executive Director

---

2 Cian Hussey, *The Growth and Complexity of Environmental Regulation* (Institute of Public Affairs Research Report, April 2020).

3 Department of Climate Change, Energyt, the Environment and Water, *Nature Positive Plan: Better for the environment, better for business* (December 2022) iii.

4 'Joint Standing Committee on Treaties: Role of the Committee': https://www.aph.gov.au/Parliamentary_Business/Committees/Joint/Treaties/Role_of_the_Committee.

Contents

Executive summary

- In December 2022, the federal government released Nature Positive, which included within the document a commitment to 30x30, a proposal to protect 30 per cent of Australia's land area and 30 per cent of Australia's seas from development by 2030.
- The federal government's Nature Positive plan is the commitment to implement under domestic law an international movement of NGOs and foundations known as the Nature Positive Initiative, as well as the agreements arising out of the High Ambition Coalition for Nature and People (HACNP).
- The international Nature Positive movement is based on agenda-led 'science-based opinion', produced by catastrophist academics such as Paul Ehrlich and Edward O. Wilson who demanded a target of 50 per cent on the basis the world is in the midst of a 'Sixth Mass Extinction Event'.
- In June 2021, the Commonwealth of Australia joined the HACNP, an international group whose main purpose is to champion the 30x30 target.
- Since joining the HACNP, no agreement that has been reached within that body, such as the Kunming-Montreal Global Biodiversity Framework, has been submitted to the Parliamentary Standing Joint Committee on Treaties for scrutiny, meaning Australians have not been given an opportunity to make submissions prior to the government beginning the process of implementing it.
- These agreements and frameworks are not scrutinised because they do not meet the technical definition of a treaty. However, these instruments of 'soft law' are invoked to justify policy developments in the same way as treaties.
- 'Soft law' instruments must be subject to the same scrutiny as treaties. Accordingly, Australia's involvement in international agreements arising from the Nature Positive Initiative and the High Ambitious Coalition for Nature and People must be subject to immediate democratic scrutiny and accountability. The Joint Select Committee on Treaties should be empowered to urgently review Nature Positive-related agreements.

Introduction

The federal government's 'Nature Positive' proposal has had a long gestation in international science and politics, though this is not readily apparent in the document that sets out the proposal.

Nature Positive includes a voluntary commitment to protect and conserve 30 per cent of Australia's land and oceans by 2030. This follows a commitment by many countries to a '30x30' target, a proposal to protect 30 per cent of a country's land area and oceans from development. The Australian commitment to the international community joins the commitment of others, and is based upon a proposal by international conservation groups.

There is little indication in the document proposing it that this arises from any international agreement, and the Joint Standing Committee on Treaties has not considered and reported on such a proposal. Aside from the '30x30' reference, the only indication of its international origins lies in a reference on page 10 (DCCEEW, 2022) to the fact that 'the Prime Minister has endorsed the Leaders' Pledge for Nature, which aims to step up global ambition to tackle the climate crisis, halt biodiversity loss and deliver a nature positive world by 2030.'

In fact, the commitment arises from a series of international 'agreements' that stopped short of being treaties, much as the Paris Agreement on climate change in 2015 stopped short of being a binding treaty—primarily for the reason that the Obama Administration in the United States had no chance of achieving the two-thirds majority required in the Senate for its ratification.

Paris was given effect in the US by means of an Executive Order, which allowed Trump to withdraw the US, and Biden to recommit. The 30x30 commitment leads through the Convention on Biological Diversity (CBD), to which the US has never acceded, and it is hard to escape the conclusion that the global policy process that 30x30 and 'Nature Positive' followed has been deliberately structured to both minimise visibility and accountability and maximise US involvement.

Aaron Wildavsky, in his classic book *The Politics of the Budgetary Process* set out various strategies for actors to get what they want from the process. One of these was essentially the thin edge of the wedge, or what Wildavsky termed 'The Camel's Nose', suggesting that it was indeed difficult for a camel to pass through the eye of a needle, but one's chances of success were enhanced if one did not begin with the blunt end. The process by which we reached the commitment to 'Nature Positive' is very much an international Camel's Nose process.

There are other devices helpful for developing the consensus necessary for international agreement, and whereas unanimity is required—as the US standing outside the CBD shows—there are ways around that inconvenience. They do not all make for accountability and effective global policy. The concept of 'Constructive Ambiguity' (attributed to Henry Kissinger) and the similar 'Veil of Vagueness' (Gibson & Goodin, 1999) assist with maximising the number of parties that can sign on, but ambiguity and imprecision do not make for good policy and often provide too much discretion to implementing agents who are frequently relatively unaccountable.

The result is often resort to vague concepts that have public relations appeal, but can change in meaning over time. An example is the concept of Sustainable Development, which grew out of the notion of sustained yield in German forestry in response to a time of rapid social change, was advanced as a compromise term to accommodate the development aspirations of the Global South and the environmental concerns of the Global North, and more recently has frequently been expressed as simply 'Sustainability', betraying development aspirations. 'Nature Positive' and '30x30' fit this pattern to a tee.

Another necessary component of an effective global environmental policy process is the existence of a consensus among the members of what Peter Haas (1992) called an 'Epistemic Community' over the causes of problems and their solution. The formation of a consensus is a political process, but it can coalesce around compelling theories and evidence over time. Unfortunately, since Haas wrote in 1992 the internet has developed along with cheap reliable air travel and these have allowed communities to form and for them to advance and define problems they consider to be compelling. Anonymous peer review is now more problematic because scientists are less likely to be unknown to others, or separated by geographical isolation. This has resulted in an abundance of 'scientism' in public policy, apparent with environmental issues and other issues such as the response of most governments to Covid-19 that followed catastrophic modelling and ignored human factors.

George William Russell wisely stated, in an aphorism often attributed (wrongly) to Churchill, that 'Experts ought to be on tap and not on top'. Contemporary scientists want to be 'on top'. For example, while the IPCC is required to be 'policy neutral', some of its authors recently proclaimed that *they* should decide climate policy.

The 'Nature Positive' concept can be traced back to the advocacy of Edward O. Wilson (2016) for conserving, not 30 per cent, but fully 50 per cent of the surface of the Earth to halt a claimed crisis in biodiversity loss resulting from a putative 'Sixth Mass Extinction' spasm. Perhaps recognising that 50 per cent was a bit ambitious, Wilson's disciples settled for 30 per cent in a series of papers. Eric Dinerstein, lead author of two of the papers, was quoted as saying 'there's no scientific basis for 30 percent.' While advocating Wilson's half of nature because 30 per cent was not enough, Dinerstein admitted of 30 per cent that 'It's arbitrary' (Jones, 2021).

Nature Positive and 30x30 have been evolved by means of incremental forum shopping based on scientific opinion pieces by activist scientists and NGOs. It represents a continuation of a trend first exemplified by the Paris Agreement in 2015 of progressing global policy by what is known as 'soft law', a core feature of which is diminishing visibility and accountability.

The epistemic basis: Endangered species and island biogeography

While the field of conservation biology is respected by, and helpful to, environmental activists, it is rather contentious. As an area of study, it was founded by Michael Soulé in 1985. Soulé was a graduate student of Paul Ehrlich at Stanford and founded the journal *Conservation Biology* in 1987, and his biography points to the value-laden nature of the field.

Soulé left his post as a professor of biology to join a Zen Buddhism centre in 1978, but then re-entered academia in the mid-1980s to found the new 'discipline' of conservation biology, to which E.O. Wilson, Paul Ehrlich, and catastrophist Jared Diamond were early converts (Jones, 2003). He teamed up with Dave Foreman, the founder of the radical bio-centric group Earth First! (famous for its monkey-wrenching, tree-spiking and radical actions, and featuring a millenarian ideology (Lee, 1997)) to establish the Wildlands Project to link vast areas of North America for ecosystem protection and, particularly, to reintroduce large carnivores which Soulé regarded as 'the governors of ecosystems' and without which ecosystems would collapse (Jones, 2003).

Soulé's commitment to proselytising for the cause rather than the scientific method was exemplified by the following statement from him:

> I once wrote that the facts compute, but they don't convert. I know when I'm giving a lecture and tears come to my eyes it has much greater impact than slide after slide of numbers, or even pretty pictures. An instant of honesty and compassion is much more important than an hour of logical argumentation and the facts (Jones, 2003).

Conservation biology embodies a focus on a supposed harmonious balance in nature that has not been the prevailing view in ecology since c1990, since when change and perturbation have prevailed. We see references to an 'ancient' Great Barrier Reef that has existed for only about 20,000 years, and contrary evidence suggesting that landscapes are less venerable is often just ignored. For example, Wilson in *The Diversity of Life* (1992: 205–6) claimed that tropical rainforests 'have persisted over broad parts of the continents since their origins as stronghold of the flowering plants 150 million years ago.' On the contrary, parts of the Amazonian rainforest appear to be perhaps only 1,000 years old. They appear to have grown over a system of raised fields, irrigation canals, fish weirs, settlement mounds, roads and causeways and other anthropogenic features constructed between about 100 BC and AD 1100. This evidence was first described in the 1960s by geographer William Denevan and studied in detail by archaeologist Clark Erickson from the 1970s onwards (Erickson, 1988). These observations by Erickson were later confirmed by Heckenberger et al (2003).

Rainforests are particularly beloved by activists, with the result that biodiversity in deserts receives scant attention, but while they are accorded considerable veneration, they do not require millennia to evolve. A mature rainforest evolved in a mere 150 years on Green Mountain on the island of Ascension, after the Royal Navy in 1843 deposited some plants as part of a scheme for revitalising what Charles Darwin had described as an island 'entirely destitute of trees' in 1836 (Kellow, 2007: 41-4). Moreover, there is evidence that rainforests—rather than existing in some timeless harmony—actually require some disturbance to retain their productivity (Wardle *et al.*, 2004).

In worse news for Wilson's followers, research has found that the Amazon was extremely low in biodiversity among bacteria, with fewer species present than in deserts because of the higher levels of acidity found in rainforests. Microorganisms are the most diverse and abundant group of organisms on earth, and the prevailing view of biodiversity in the Amazon was based upon species which are less numerous. While rainforests might be more biodiverse in terms of flowering plants, insects, and other more noticeable species, it might be that they are not particularly diverse after all (Fierer and Jackson, 2006).

Underpinning the claims that we are in the midst of the Sixth Mass Extinction and thus providing the rationale for the CBD and 30x30, is Wilson's island biogeography theory with its species-area equation. This was founded in the 1960s by E.O. Wilson, later of socio-biology fame, and R.H. MacArthur (MacArthur and Wilson, 1967), and serves as the basis for most of the claims of widespread species extinction.

Developed from islands but applied to continental landscapes, the species-area rule relates the number of species to be found to the area of the island, so that loss of habitat is equated to extinction of a number of species. On this basis, an extinction rate of 50,000-100,000 per annum is used by Greenpeace and others. As Budiansky notes (1995: 166), Wilson presented widely varying estimates of the rate of species extinction, succumbing more to hyperbole for non-peer reviewed outlets. Together with Paul Ehrlich in *Science* (Ehrlich and Wilson, 1991), it is a 'conservative estimate' of 4,000 species a year; in his 1991 book *The Diversity of Life*, 27,000 species are lost each year (about one every 20 minutes); while in popular outlets like the *New York Times* the number grew to 50,000 or even 100,000 (Budiansky, 1995, p. 166).

The accuracy of the species-area equation has been questioned in relation to islands, where it was developed, but (more importantly) it has been considered inappropriate that this relationship is extrapolated backwards in mainland settings, as Wilson does, to suggest that reducing the area of a forest will produce the same rate of species reduction as does its growth (Heywood and Stuart, 1992). Budiansky quotes conservation biologist Vernon Heywood in an interview explaining why biologists are cautious about expressing sceptical views about Wilson's science publicly, suggesting it is because they do not wish to be seen to be 'rocking the boat'. 'This is the fear it might damage "the cause"' (Budiansky, 1995: 263, n. 15).

The species-area rule has drawn evidence substantial enough to amount to falsification. Budiansky (1995, pp. 167–8) points out that almost 90 per cent of the Atlantic coastal forests in the US have been cleared over the past 500 years, which should predict the loss of half of all species. Instead, not one known species has been declared extinct, and several birds and six butterflies thought 20 years ago to have been extinct have been rediscovered. The extinctions forming the 'Sixth Mass Extinction Event' turn out to be virtual—the result of *modelled* extinctions. Jeff McNeely, chief scientist at the IUCN, acknowledged on the eve of COP 8 of the CBD that only around 1.7 million plant and animal species had been described, and some estimates suggested there might be 100 million species. In terms of actual *documented* extinctions, however, the IUCN estimated there had been only 'more than 800' plant and animal extinctions since 1500 when accurate historical and scientific records began' (Reuters, 2006).

While linking the protection of endangered species to wilderness preservation suits wilderness activists and helps build support for that cause, it sells endangered species conservation short because many endangered species are found in urban areas. For example, by 2018 the National Environmental Science Program in Australia had identified almost 380 nationally-listed threatened species occurring in urban areas across the country (Soanes, 2018).

Sound environmental management is desirable and the conservation of endangered species is a noble goal, but the focus on conserving areas of landscape believing that in so doing we are achieving the latter ignores the need to work on the latter in urban settings as well as wilderness. Daniel Simberloff, Wilson's graduate student who assisted him with the original Florida field research from which island biogeographical theory was developed, has argued exactly that: that the theory has been an unwarranted distraction from the main task of conservation biologists in determining 'what habitats are important and how to maintain them' (Budiansky, 1995, pp. 168–9).

Moreover, environmental management decisions are not as simple as 'preserving nature', because nature changes. A stark example is provided on Cape York Peninsula, where an area of wet sclerophyll forest was being 'invaded' by rainforest (Harrington and Sanderson, 1994). The wet sclerophyll was habitat to several endangered species. What management decision should we take? Rainforest is naturally more biodiverse than wet sclerophyll, but if we care about species extinction, should we not intervene? Should we manage to preserve the wet sclerophyll (an artefact of indigenous fire activity) over the rainforest which has been advantaged by the fire suppression activity of modern society?

Management by slogan—such as 30x30, Nature Positive, Net Zero, et cetera—is problematic. Lord May, an Australian who rose to be president of the Royal Society, made his reputation by proving that maximising biodiversity was no guarantee of ecosystem stability (May, 1973). A management plan for a national park in Germany was once saved from the efforts of environmental activists to write into it a requirement to 'maximize biodiversity' by ecologists in the parks agency realising that the alpine ecosystem had low natural biodiversity (Haber, 1993: 39).

There is quite a history of 'Noble Cause Corruption' (Kellow, 2007) among conservation biologists, who want to preserve landscape and will invoke an endangered species in order to do so. One example I have cited was the planting of fur from the endangered Canadian lynx in Wenatchee and Gifford Pinchot National Forests in the Pacific Northwest in 2002 (Kellow, 2007: 24), an action that was then defended by an editorial in *Nature*, which supported those who had faked the evidence, labelling their critics a 'lynch mob'.

The case of the use of the Spotted Owl in the battle over the forests in the Pacific Northwest of the US provides another example. Alston Chase (1995) has chronicled how a conservation biology paper was manufactured to justify a prohibition on logging because of the endangered owl, but non-activist science later showed that the owl preferred regrowth forest because it provided greater hunting opportunities.

The origins of 30x30 and Nature Positive

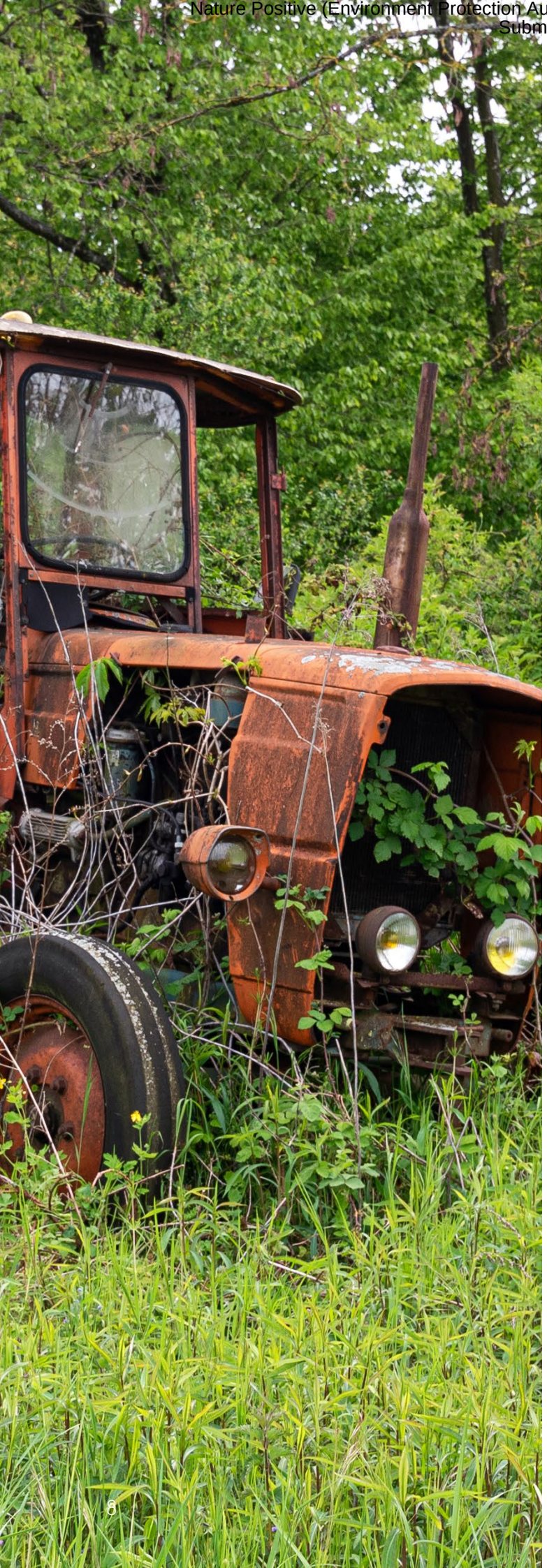
Initially, the goal set at CBD COP 10 in Nagoya, Japan was for a more modest level than 30x30 in the Aichi Biodiversity Targets. Governments pledged then to halve the loss of natural habitats and expand nature reserves to 17 per cent of the world's land and freshwater area and 10 per cent of the oceans by 2020. The UN then in December 2010 declared 2011 to 2020 as the United Nations Decade on Biodiversity, notably preferring the expression 'biological diversity' inherent in the name of the CBD to the expression popularised by Wilson.

The epistemic impetus for the Aichi Targets was provided by two journal articles by a group of environmental scientists arguing for the establishment of and adherence to 'planetary boundaries' to establish what they termed 'a safe operating space for humanity'. Curiously, an abridged version appeared in *Nature* in September 2009 (Rockström et al 2009) with a longer version in *Ecology and Society* in December (Rockström et al 2009a). The idea had been developed at a forum in June 2008 hosted by the *Stockholm Resilience Centre, the Stockholm Environment Institute, and the Tällberg Foundation,* an NGO largely focused on problems related to the growing imbalance between nature and human activity.

Participants in the forum included perennial catastrophist Paul Ehrlich, and journalist Mark Lynas, who was yet to undergo his Damascene conversion and confess that he was wrong in opposing genetically modified agriculture. The authors acknowledged the assistance of Lynas thus: *'Mark Lynas has provided valuable inputs for the advancement of this paper through his initiative to write a book popularizing the science behind our planetary boundaries analysis'* (Rockström et al 2009a: *31-32*).

Lynas has mellowed somewhat, after famously hitting Bjorn Lomborg in the face with a cream pie in an Oxford bookshop as he promoted *The Sceptical Environmentalist* in 2001, and is now much more open to civil conversation over points of difference. Many of the co-authors of this and subsequent articles had also played roles in excoriating Lomborg for citing statistics undermining alarmism over the loss of species and biodiversity.

The involvement of Ehrlich was significant because a network of activist scholars connected to him had conducted an organised assault on Lomborg for the heresy of his book upon its launch. I detailed this campaign in Chapter Four, 'Defending the Litany: the attack on *The Sceptical Environmentalist*', in my book *Science and Public Policy* (Kellow, 2007) and many of those active in that exercise and who appear in the literature justifying action on biodiversity loss had links to environmental advocacy groups. For example, in 2007 Thomas E. Lovejoy, who was chief biodiversity adviser to the president of the World Bank was Director of the World Wildlife Fund (US) from 1973 to 1987.



Wilson had served on the Scientific Advisory Committee of the World Wildlife Fund since 1978, and on its Board of Directors, 1984–94, and Executive Committee, 1987–92. He was also on the Board of Directors, The Nature Conservancy (1993–) and Conservation International (1997–).

The co-authors of both Rockström et al papers included climate scientist James Hansen, who was at the birth of concern over climate change with his stage-managed appearance before a Congressional Committee in 1988, when the date in an El Niño year was selected to be as warm as possible and a staffer opened the windows overnight to overwhelm the air-conditioning system to ensure television showed perspiring *dramatis personae*.

As the Decade on Biodiversity proceeded, Wilson published *Half-Earth: Our Planet's Fight for Survival* (2016), and two more journal articles were produced to provide further impetus. Both were produced under the lead authorship of Eric Dinerstein, from the Washington NGO Resolve. In 2000 Dinerstein had been employed by WWF.

First, Dinerstein et al (2017: 534) claimed that Aichi Target 11 aiming for 17 per cent of the land area to be protected was 'not a science-based level of protection that will achieve representation of all species or ecosystems in protected areas and the conservation of global biodiversity, as are required by the CBD.' This was agenda-led 'science-based opinion'. Dinerstein et al (2017) was a Forum article in *BioScience*, citing an editorial as evidence.

Then in April 2019, Dinerstein led a group of 19 scientists in making the 30x30 proposal the centrepiece of a proposed 'Global Deal for Nature', an idea that was very quickly adopted by Costa Rica and several other nations, which formed a 'Coalition for Nature'. France and the United Kingdom soon joined and collaborated with Costa Rica to establish a High Ambition Coalition for Nature and People, launched at the One Planet Summit in January 2021.

The role of 'forum shopping' in building a global consensus

The One Planet Summits had their origins in 2017 with a desire by Emmanuel Macron, President of the French Republic, António Guterres, United Nations Secretary-General, and Jim Kim, President of the World Bank, to address what they perceived as the lower priority afforded to tackling climate change in international agendas, as a result of certain key governments changing positions.

The first Summit was held in Paris on 12 December 2017, precisely two years after the adoption of the Paris Agreement. It was attended by more than 4,000 participants including a panel of political leaders, private sector executives, international organisations, financial institutions, foundations, and NGOs. The participants committed to take further action, based on 12 'transformative climate commitments'.

The One Planet Summit is rather obscure; a search of *The Australian* newspaper yields no results and it does not even have an entry in Wikipedia, being mentioned only in relation to some of its initiatives, such as the Network for Greening the Financial System which co-ordinates activity by central banks. It is fair to say that it passes well beneath the radar in most political systems.

At the 2021 summit French President Emmanuel Macron announced that the High Ambition Coalition for Nature and People, which was launched in 2019 by Costa Rica, France, and Britain to set a target of protecting at least 30 per cent of the planet by 2030, had now been joined by 50 countries.

The 2021 One Planet Summit effectively fused the biodiversity issue to the climate change issue, with many leaders speaking about integrating the policy responses to biodiversity loss, the climate 'emergency' and the Covid-19 pandemic. The UK and French governments announced that they would earmark 30 per cent of their overseas public climate funding to nature-based solutions, with additional financial commitments from Norway and Germany. It also saw the launch of the 'PREZODE' initiative, intended to help prevent the next pandemic through collaborative research and reducing pressures on biodiversity. (Clearly, the EU rejected the 'lab-leak' theory.)

Coinciding with the 2021 One Planet Summit, another paper was published in January 2021 in the lead-up to the deferred COP 15, which had been scheduled to take place in Kunming, but was deferred because of the pandemic, and so was held in Montreal and at which the Kunming-Montreal Global Biodiversity Framework was adopted. This was non-binding, not that that stopped some from referring to it as an 'Agreement'.

As noted above, Dinerstein et al (2017: 534) claimed that Aichi Target 11 aiming for 17 per cent was 'not a science-based level of protection that will achieve representation of all species or ecosystems in protected areas and the conservation of global biodiversity, as are required by the CBD.' Their authority for this statement was a self-reference to an editorial in *Conservation Biology* by a team led by one of the authors (Noss). They then claimed that a scientific justification for a 50 per cent target was provided by that same editorial and a paper examining a regional conservation plan in South Africa (Pressey et al, 2003), as if that figure should be extended globally when it was specified for a region: 'Recent comprehensive conservation plans have delineated around 50% or more of regions for nature conservation' (Pressey et al, 2003: 122).

A 2021 paper (Bradshaw et al, 2021) went textbook catastrophist, including among its authors both Paul Ehrlich and his wife Anne, as well as sociologist Eileen Crist who appears in much of this literature. Its title was value-laden to say the least: 'Underestimating the Challenges of Avoiding a Ghastly Future'. The list of authors also included William J. Ripple, who had done much to entrench the claim of 'climate crisis' in the academic literature.

Ripple was the lead author of a 'Viewpoint' article in *BioSciences* 2020 that first put the idea of a 'climate emergency' into the scientific literature in what was essentially a petition with more than 11,000 signatures (Ripple et al, 2020) – an idea that was first suggested by the local government in Darebin in Melbourne. He had earlier marked the 25th anniversary of a Union of Concerned Scientists warning with another petition 'article' (again in *BioSciences*) that, *inter alia*, noted that the human population had increased by two billion since then (Ripple et al, 2017). This was agenda-led 'science-based opinion'. Dinerstein et al (2017) was itself a Forum article in *BioScience*, citing an editorial as evidence.

COP 15 was also given a kick along by a United Nations Summit on Biodiversity held virtually on 30 September 2020, at which countries from all regions and the European Union committed to reverse biodiversity loss by 2030 for 'people, prosperity and planet', thus establishing the second part of the catchy 30x30 slogan.

About 30 leaders, government officials and heads of international organisations participated in the One Planet Summit on 11 January 2021, which was being held by videoconference because of the coronavirus pandemic. Top US officials were notably absent (because the Biden presidency had not been inaugurated), as were the leaders of Russia, India, and Brazil. French President Emmanuel Macron announced that the High Ambition Coalition for Nature and People had now been joined by 50 countries.

A substantial role in progressing the agenda was played by Swiss billionaire Hansjörg Wyss, who had spent time in the US as a student and became enamoured of the wilderness he saw in Colorado, which he contrasted favourably with the Swiss Alps, on wilderness rather than scenic grounds. Through the Wyss Foundation he committed $1 billion in 2018 toward initiatives to help a range of stakeholders conserve 30 per cent of the planet in its natural state by 2030. To this end he established the Campaign for Nature, which then worked in conjunction with National Geographic.

Then in September 2021 at a Transformative Action for Nature and People High Level event at the UN General Assembly, nine philanthropic organisations (including the Wyss Foundation, Bezos Earth Fund and Bloomberg Philanthropies) launched the Protecting Our Planet Challenge and pledged $5 billion to protect and conserve 30 per cent of the planet by 2030. The group pointed to a development earlier that month: the International Union for the Conservation of Nature (IUCN) endorsement of the 30×30 goal as part of the post-2020 framework of the United Nations Convention on Biological Diversity.

IMAGE CREDIT: UN BIODIVERSITY | WWW.FLICKR.COM/PHOTOS/150988932@N04/52549245229

There was a strong consensus (and much money) behind 30x30 by the time CBD COP 15 adopted the Kunming-Montreal Global Biodiversity Framework in December, replacing the 17 per cent land and 10 per cent ocean Aichi targets. So 30x30 is the third of 23 global biodiversity targets for 2030 in the Kunming-Montreal Global Biodiversity Framework that was adopted at CBD COP15 in December 2022:

> Ensure and enable that by 2030 at least 30 per cent of terrestrial, inland water, and of coastal and marine areas, especially areas of particular importance for biodiversity and ecosystem functions and services, are effectively conserved and managed through ecologically representative, well-connected and equitably governed systems of protected areas and other effective area-based conservation measures, recognizing indigenous and traditional territories, where applicable, and integrated into wider landscapes, seascapes and the ocean, while ensuring that any sustainable use, where appropriate in such areas, is fully consistent with conservation outcomes, recognizing and respecting the rights of indigenous peoples and local communities, including over their traditional territories.

A year later, on 6 September 2023 the 'Nature Positive' plan was adopted 'to promote the integrity and implementation of the Global Goal for Nature. The Nature Positive Initiative is an eponymous coalition of 27 NGOs, including IUCN, Pew, The Nature Conservancy, World Resources Institute, WWF, and Wyss's Campaign for Nature. Nature Positive defines its goal as a global societal goal to 'Halt and Reverse Nature Loss by 2030 on a 2020 baseline, and achieve full recovery by 2050' (Nature Positive, 2023).

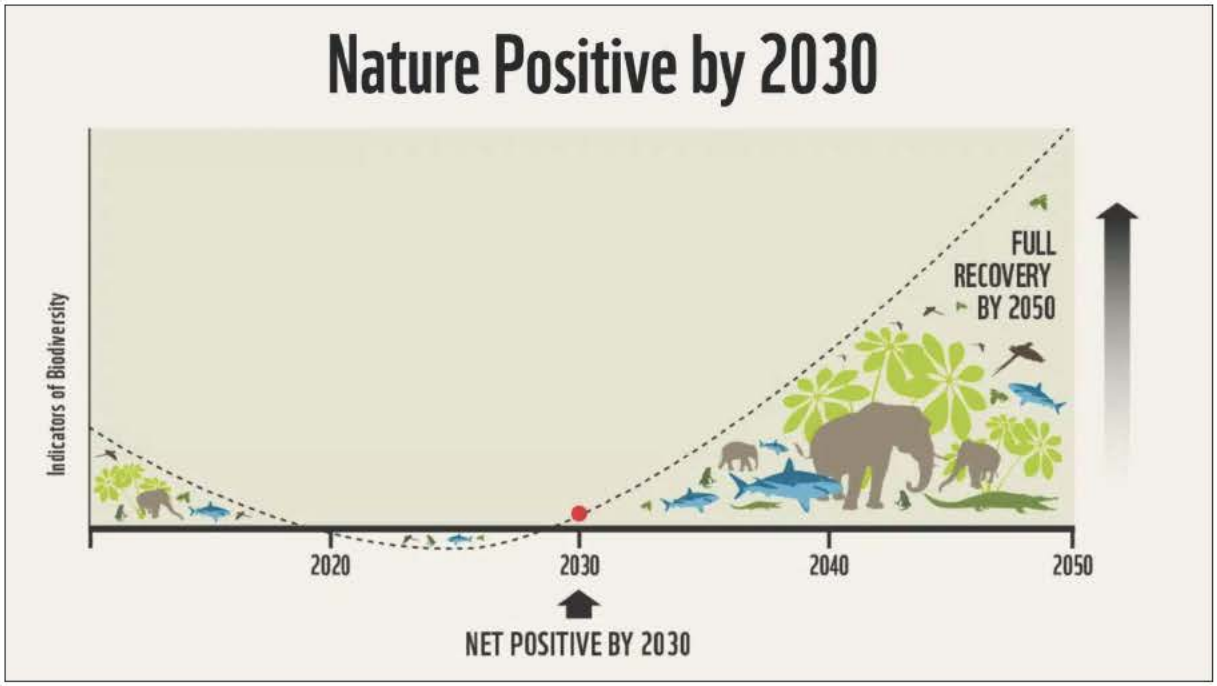
A graph was even produced to illustrate the concept, but this unwittingly revealed the lack of any real base in observational data, just a few stylised megafauna and a smooth curve suggesting that we only went 'nature negative' in 2020. Remarkably, the x-axis had years marked, but there was *no* scale on the y-axis. This was not evidence-based policy, but policy essentially based on 'the vibe' that we recently went nature negative and must return to positivity by 2030. The Great Barrier Reef was (inevitably) harnessed to the cause, despite the fact that its regular bleaching events are inevitably followed by recovery without any apparent evidence of loss of biodiversity. So were the 2019-20 Australian bushfires—in landscape that is not just fire-adapted, but creates the conditions that produce the fire it requires for regeneration.

What is noteworthy about Australia's conduct is that the document setting out its embrace of Nature Positive came in December 2022, almost a year before the Initiative was launched. The only evidence to support it was the most recent State of the Environment Report, authorship of which might as well be attributed to Hanrahan. The Foreword to the Nature Positive report by Environment Minister Tanya Plibersek states (DCCEEW, 2023: iii):

> When we reform our environmental laws, we will take them from being nature negative, where we oversee an overall decline in our environment, to nature positive, where we protect our land and leave it in a better state than we found it.

One wonders how any improvement will be measured, except by a qualitative assessment by the authors of the next State of the Environment Report.

FIGURE 2: GRAPH DEMONSTRATING NATURE POSITIVE



Source: www.naturepositive.org

Nature Positive is therefore a concept pushed by environment NGOs, supported financially by wilderness advocates like Wyss, and reflecting the island biogeographical ideas of E.O. Wilson and the catastrophism of Paul Ehrlich.

The process followed to develop the Framework was a classic example of forum shopping, with a consensus for action building slowly in multiple areas, some created especially, and supported by the coordinated publication of articles that could be claimed to be providing a scientific base—albeit one that was built largely on opinion pieces by activist scientists.

Forum shopping is a strategy for advancing agendas by building minor, seemingly non-threatening agreements in multiple arenas (Kellow, 2012; Murphy, & Kellow, 2013). Previous (minor) decisions are cited as reasons to reach slightly more ambitious ones, and can be reached in arenas with characteristics such as decision rules that are more conducive to agreement. For example, the OECD's 'mutual agreement' rule means that a single negative vote will kill a proposal (though a relatively small, like-minded membership is helpful). Opposition of a party in the Conference of the Parties of a multilateral environmental agreement is not as serious, but too many opponents weakens the measure because, in strict legal terms, parties are not bound by what they do not support. (Recall the US declined to become a party to the CBD.) The UN General Assembly (which resolved to hold a summit on biodiversity) requires a simple majority, if a vote is taken (which was not necessary in that case). And, of course, the Security Council provides a veto to the Permanent Members.

Informal gatherings such as the One Planet Summit that attract little media coverage are less likely to excite opposition, especially back home where business, for example, enjoys greater influence through structural power than it does at the international level (Kellow, 2002), where international organisations must remain indifferent to decisions on the location of investment. This power imbalance often leads to the vertical disintegration of policy (Hanf and Underdal, 1998), after what Putnam (1988) termed the logic of two-level games. Already, the EU has slid back from 30 per cent and adopted a target of 20 per cent as it has struggled to give effect to the Framework (Bomas, 2023; Caolán, 2023).

Forum shopping facilitates international agreement, but it can undermine sovereignty and accountability—as did the Paris Agreement—by subverting the constitutional requirement in the US for a qualified majority vote in the Senate for ratification. Similarly, 'Nature Positive', while not binding, is being progressed by the Albanese government as if it is an international obligation, but it has not been referred to the Joint Standing Committee on Treaties. JSCOT was instituted to ensure international commitments were considered by Parliament, with submissions received from the public. The present government is receiving submissions in a much less transparent process and the role of Parliament is diminished.

The slow, incremental development of the elements of the Nature Positive and 30x30 initiatives took place over a period of about a decade and a half, and a chronology of the main developments shows how momentum was built gradually with agreement obtained on non-threatening elements over time, supported by articles in scientific journals that were largely opinion pieces by conservation biologists—including Paul Ehrlich, E. O. Wilson, and many of their acolytes such as Thomas Lovejoy—many of whom had banded together to attack the apostasy of Bjorn Lomborg who dared to question the results of species-area modelling in his *The Sceptical Environmentalist* (see Kellow, 2007: 31).

Unlike these scientists, Lomborg looked at the best available statistics to conclude that Hanrahan was wrong, and we might not be 'rooned' after all. Pointing out the extinction numbers generated from Wilson's model, and challenging catastrophists to name a single virtual species that had become extinct, led Stuart Pimm, one of the authors driving 30x30, to label Lomborg a 'denier'. The denier label was then expanded to apply particularly to 'climate deniers'. Perhaps appropriately, the activist authors contributing opinion pieces on biodiversity included Ripple who did much to institutionalise a 'climate emergency' (Ripple et al, 2020), despite the most recent IPCC report finding that all but one measure had not emerged from natural variability (Ranasinghe, et al 2021: 1856).

A short chronology shows how a consensus on 30x30 emerged slowly over time, building support in multiple arenas – some created especially for the purpose – with scientists, many employed or associated with NGOs, many supported by Wyss and other 'pass through' foundations, producing scientific opinion pieces that assigned a greater validity to the work of Wilson and Ehrlich than sceptical science suggests is merited. This Wilsonian consensus has been defended by attacks on 'heretics' who dare to question it.

Chronology of the development of Nature Positive

2009 – Tällberg Foundation workshop at Stockholm Resilience Centre leads to publication of Rockström et al 2009 calling for 'planetary boundaries' that define a 'safe operating space for humanity.'

December 2010 – CBD COP 10 at Nagoya sees declaration of United Nations Decade on Biodiversity, the adoption of a Strategic Plan for Biodiversity, 2011-2020 and the Aichi Biodiversity Targets, including a target of 17 per cent of the Earth's land surface protected.

2016 – E. O. Wilson publishes *Half Earth* published with a call for 50 per cent of the area of the Earth to be protected.

2017 – Dinerstein et al (2017) and Ripple at al (2017) published providing additional support in scientific opinion for protection of 30 per cent.

2018 – Philanthropist Hansjörg Wyss puts $1 billion toward initiatives to help a range of stakeholders conserve 30 per cent of the planet in its natural state by 2030.

2019 – Dinerstein et al (2019) published.

September 2019 – Costa Rica and a handful of other countries announce at the UN General Assembly their intention to form a 'coalition for nature'.

October 2019 – Idea behind the High Ambition Coalition for Nature and People officially introduced at UNFCCC PreCOP 25 by ministers from co-chairs Costa Rica and France along with UK, Finland, Gabon, UAE and Grenada.

30 September 2020 – United Nations Summit on Biodiversity held.

January 2021 – Bradshaw et al (2021) published.

11 January 2021 – High Ambition Coalition for Nature and People launched at One Planet Summit, with over 50 members committing to the 30x30 target.

June 2021 – Australia joins High Ambition Coalition for Nature and People.

July 2021 – First draft of Kunming-Montreal Global Biodiversity Framework released – including 30x30.

23 September 2021 – Protecting Our Planet Challenge launched at Transformative Action for Nature and People High Level event at the UN General Assembly.

December 2021 – Costa Rica and France host a 'Pioneers Meeting' in Madrid at UNFCCC COP 25 where countries formally commit to a roadmap and goals from High Ambition Coalition for Nature and People.

September 2022 – First meeting of International Steering Committee of HACNP at UNGA77 in NewYork.

December 2022 – Kunming-Montreal Global Biodiversity Framework adopted at COP15 UNCBD. Australia publishes its report committing to Nature Positive.

6 September 2023 – Nature Positive Initiative launched.

References

Bloomberg Philanthropies. (2021) Private Funders of the New 'Protecting Our Planet Challenge' Announce $5 Billion Commitment to Protect and Conserve 30% of Planet by 2030. Press Release 22 September. https://www.bloomberg.org/press/private-funders-of-the-new-protecting-our-planet-challenge-announce-5-billion-commitment-to-protect-and-conserve-30-of-planet-by-2030/

Bomas, Wiebke (2023) 'EU likely to miss conservation targets – catching up needs more rangers,' *European Ranger Federation.* https://www.europeanrangers.org/eu-likely-to-miss-conservation-targets-catching-up-needs-more-rangers/

Bradshaw, C. J., Ehrlich, P. R., Beattie, A., Ceballos, G., Crist, E., Diamond, J., ... & Blumstein, D. T. (2021). Underestimating the challenges of avoiding a ghastly future. *Frontiers in Conservation Science, 1*, 615419.

Budiansky, Stephen (1995), *Nature's Keepers: The New Science of Nature Management,* New York: Free Press.

Butler, Rhett A. (2020) 'Building the Campaign for Nature: Q&A with Brian O'Donnell.' *Mongabay* https://news.mongabay.com/2021/08/building-the-campaign-for-nature-a-with-brian-odonnell/

Chase, Alston (1995), *In a Dark Wood,* Boston, MA: Houghton Mifflin

Corbet, Sylvie (2021) '50 countries vow to protect 30% of land and sea by 2030. *Washington Times.* 11 January. https://www.washingtontimes.com/news/2021/jan/11/leaders-at-summit-focus-on-better-protecting-biodi/

Department of Climate Change, Energy, the Environment and Water (2022) Nature Positive Plan: better for the environment, better for business, Department of Climate Change, Energy, the Environment and Water, Canberra, December. CC BY 4.0.

DCCEEW 17 January 2023 A New Global Biodiversity Framework: Kunming-Montreal Global Biodiversity Framework https://www.dcceew.gov.au/environment/biodiversity/international/un-convention-biological-diversity/global-biodiversity-framework

Dinerstein, E., Olson, D., Joshi, A., Vynne, C., Burgess, N. D., Wikramanayake, E., ... & Saleem, M. (2017). An ecoregion-based approach to protecting half the terrestrial realm. *BioScience, 67*(6), 534-545.

Dinerstein, E., Powell, G., Olson, D., Wikramanayake, E., Abell, R., Loucks, C., Underwood, E., Allnutt, T., Wttengel, W., Ricketts, T. and Strand, H., 2000. A workbook for conducting biological assessments and developing biodiversity visions for ecoregion-based conservation. *World Wildlife Fund, Washington, DC. http://www. worldwildlife. org/science/pubs2. cfml.*

Dinerstein, E., Vynne, C., Sala, E., Joshi, A. R., Fernando, S., Lovejoy, T. E., ... & Wikramanayake, E. (2019). A global deal for nature: guiding principles, milestones, and targets. *Science advances, 5*(4), eaaw2869.

Erickson, C. (1988), 'An archaeological investigation of raised field agriculture in the Lake Titicaca Basin of Peru', doctoral dissertation, University of Illinois in Urbana.

Fierer, N., & Jackson, R. B. (2006). The diversity and biogeography of soil bacterial communities. *Proceedings of the National Academy of Sciences, 103*(3), 626-631.

Gibson, D., & Goodin, R. (1999). The veil of vagueness: a model of institutional design. In *Organizing Political Institutions: Essays for Johan P Olsen*. Scandinavian University Press.

Haas, P. M. (1992). Introduction: epistemic communities and international policy coordination. *International organization, 46*(1), 1-35.

Haber, Wolfgang (1993), 'Environmental attitudes in Germany: the transfer of scientific information into political action', in R.J. Berry (ed.), *Environmental Dilemmas: Ethics and Decisions*, London: Chapman and Hall.

Hanf, Kenneth and Arild Underdal (1998) 'Domesticating International Commitments: Linking National and International Decision-Making' in Arild Underdal (ed) *The Politics of International Environmental Management,* Dordrecht, Kluwer.

Harrington, G.N. and K.D. Sanderson (1994), 'Recent contraction of wet sclerophyll forest in the wet tropics of Queensland due to invasion by rainforest', *Pacific Conservation Biology,* **1**, 319–27.

Heywood, Vernon H. and S.N. Stuart (1992), 'Species extinctions in tropical forests', in T.C. Whitmore and J.A. Sayer (eds), *Tropical Deforestation and Species Extinction*, London: Chapman & Hall.

Heckenberger, Michael J., Afukaka Kuikuro, Urissapa Tabata Kuikuro, J. Christian Russell, Morgan Schmidt, Carlos Fausto and Bruna Franchetto (2003), 'Amazonia 1492: pristine forest or cultural park-land?', *Science*, 301(5640), 1710.

Jones, Benji (2021) Down to Earth 12 April 2021, https://www.vox.com/22369705/biden-conservation-biodiversity-collapse-30-by-30

Jones, Lisa (2003), '"Facts compute, but they don't convert": biologist Michael Soulé speaks from the heart – interview', *Sierra Magazine*, July-August, www.findarticles.com/p/articles/mi_m1525/iss_4_88/ai_104, accessed 3 March 2006.

Kellow, A. (2002). 'Comparing business and public interest associability at the international level.' *International Political Science Review*, 23(2): 175-186.

Kellow, A. J. (2007). *Science and public policy: the virtuous corruption of virtual environmental science.* Edward Elgar Publishing.

Kellow, A. (2012). Multi-level and multi-arena governance: the limits of integration and the possibilities of forum shopping. *International Environmental Agreements: Politics, Law and Economics, 12*, 327-342.

Magee, Caolin (2023) 'Europe agrees landmark nature and climate deal after tense negotiations.' *CNN.* 12 July. https://edition.cnn.com/2023/07/12/europe/eu-nature-restoration-law-climate-intl/index.html

May, Robert M. (1973), *Stability and Complexity in Model Ecosystems*, Princeton, NJ: Princeton University Press.

Murphy, H., & Kellow, A. (2013). Forum shopping in global governance: understanding states, business and NGOs in multiple arenas. *Global Policy, 4*(2), 139-149.

Nature Positive Initiative (2024) https://www.naturepositive.org

Noss RF, et al. 2012. Bolder thinking for conservation. Conservation Biology 26: 1–4.

One Planet Summit: the building of a multi-stakeholder platform. https://oneplanetsummit.fr/en/one-planet-summit-building-multi-stakeholder-platform-160

Pressey RL, Cowling RM, Rouget M. 2003. Formulating conservation targets for biodiversity pattern and process in the Cape Floristic Region, South Africa. Biological Conservation 112: 99–127.

Putnam, R.D. (1988) 'Diplomacy and domestic politics: the logic of two-level games.' *International organization*, 42(3): 427-460.

Ranasinghe, Roshanka et al (2021) 'Climate Change Information for Regional Impact and for Risk Assessment' in *Climate Change 2021: The Physical Science Basis. Contribution of Working Group I to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change* [Masson-Delmotte, V., P. Zhai, et al. (eds.)]. Cambridge University Press, Cambridge, United Kingdom and New York, NY, USA, pp. 1767–1926.

Reklev, Stian 'Countries set to upgrade High Ambition Coalition to work on GBF implementation.' 20 December 2022. https://carbon-pulse.com/185466/

Reuters (2006), 'How many species inhabit the planet?', 15 March, www.alertnet.org.thenews/newsdesk/L08936794.htm

Ripple, W. J., Wolf, C., Newsome, T. M., Barnard, P., & Moomaw, W. R. (2020). World scientists' warning of a climate emergency. BioScience, 70(1), 8-100. (Viewpoint).

Ripple, W. J., Wolf, C., Newsome, T. M., Galetti, M., Alamgir, M., Crist, E., ... & 15,364 Scientist Signatories from 184 Countries. (2017). World scientists' warning to humanity: a second notice. *BioScience*, *67*(12), 1026-1028.

Rockström, J., Steffen, W., Noone, K., Persson, Å., Chapin, F. S., Lambin, E. F., ... & Foley, J. A. (2009). A safe operating space for humanity. *Nature*, *461*(7263), 472-475.

Rockström, J., Steffen, W., Noone, K., Persson, Å., Chapin III, F. S., Lambin, E., ... & Foley, J. (2009a). Planetary boundaries: exploring the safe operating space for humanity. *Ecology and society*, *14*(2).

Soanes, Kelly (2018) 'The Threatened Species in our Urban Jungle.' *Pursuit*. 11 February 2018. https://pursuit.unimelb.edu.au/articles/the-threatened-species-in-our-urban-jungle.

Soulé, Michael E. (1985), 'What is conservation biology?', BioScience, 35(11), 727–34.

Underdal, Arild (1979), 'Issues determine politics determine policies' *Cooperation and Conflict* 14: 1-9.

Underdal, Arild (1980), *The Politics of International Fisheries Management: The Case of the North-East Atlantic*. New York, NY: Columbia University Press.

Wardle, David A., Lawrence R. Walker and Richard D. Bardgett (2004), 'Ecosystem properties and forest decline in contrasting long-term chronosequences', *Science*, 305, 509–13.

Wilson, E. O. (1992). *The Diversity of Life*. Cambridge, Mass: Harvard University Press.

Wilson, E. O. (2016). *Half-earth: our planet's fight for life*. WW Norton & Company.

About the Institute of Public Affairs

The Institute of Public Affairs is an independent, non-profit public policy think tank, dedicated to preserving and strengthening the foundations of economic and political freedom. Since 1943, the IPA has been at the forefront of the political and policy debate, defining the contemporary political landscape. The IPA is funded by individual memberships, as well as individual and corporate donors.

The IPA supports the free market of ideas, the free flow of capital, a limited and efficient government, evidence-based public policy, the rule of law, and representative democracy. Throughout human history, these ideas have proven themselves to be the most dynamic, liberating and exciting. Our researchers apply these ideas to the public policy questions which matter today.

About the author

Prof. Aynsley Kellow is Professor Emeritius of Government at the University of Tasmania. He represented the Academy of Social Sciences on the Joint Academies Committee on Sustainability, and was an Expert Reviewer for the Intergovernmental Panel on Climate Change. He has published widely on environmental policy and multilateral environmental agreements. He gave an invited address to the 10th Anniversary Symposium of the Joint Standing Committee on Treaties in 2006.

Scott Hargreaves is passionate about Australia and its people, and securing their freedoms and prosperity for the next generation.

He has the honour of leading a team of talented, committed and enthusiastic men and women who conduct and disseminate the IPA's research across Australia, making an impact for the better.

He joined the IPA staff in 2015 having been a member of the IPA for over twenty years prior to that. During that time he gained experience in a range of private and public organisations, including periods inside government, in the corporate world, and running small businesses.

Amongst other responsibilities he is Editor of the IPA Review, Australia's oldest continuously published magazine covering politics and public affairs. As can be seen from his publications he produces evidences and argument for smaller government, individual freedom, and western civilisation, and against the infusion of post-modernism into our education system, climate catastrophism, and government waste.

He has a Bachelor of Arts in Politics and Economics, a Post Graduate Diploma in Public Policy, an MBA from the Melbourne Business School, and a Master of Commercial Law.

Institute of Public Affairs

www.ipa.org.au

Institute of Public Affairs

IPA RESEARCH NOTE

How the Nature Positive Plan contradicts the Samuel Review of the EPBC Act

JULY 2024

Lachlan Clark
Research Fellow

Key findings

The federal government has justified its Nature Positive Plan as a response to the recommendations made in the 2020 review of the Environment Protection and Biodiversity Conservation Act by Graeme Samuel (the Samuel Review). However, in three key respects, the Nature Positive Plan proposes a significant and radical departure from the recommendations made in the Samuel Review:

- Under the Nature Positive Plan, the government is establishing a federal environmental protection agency and to confer on this agency power over approvals, contradicting the recommendation in the Samuel Review to retain approvals power with the minister.
- Under the Nature Positive Plan, the government will set a 30x30 target, whereby 30 per cent of Australia's land and 30 per cent of Australia's seas are conserved, despite the Samuel Review not recommending such targets be established.
- Under the first tranche of the Nature Positive Plan, the government has already expanded the water trigger to include all forms of unconventional gas, despite the Samuel recommending the water trigger should be narrowed so that its scope only applies to cross-border water resources.

Introduction

In October 2019, Professor Graeme Samuel AC was appointed as the independent reviewer for the *Environment Protection and Biodiversity Conservation Act 1999*. The report was tabled in October 2020, and concluded that the EPBC Act is outdated and requires fundamental reform. The report provided 38 recommendations for reform for the government to consider.

In November 2022, the federal government published its formal response to the Samuel Review, called the Nature Positive Plan. The federal environment minister noted in the foreword to the Plan that

> In formally responding to the Professor Samuel's review, we are identifying the priorities that will guide our government's reform agenda…
>
> Professor Samuel produced a comprehensive, thoughtful and practical report, which offers us an opportunity to make the fundamental changes we need to make…
>
> The fundamental problems with the EPBC Act and the basis of the necessary reforms are set out by Professor Samuel AC in the review.[1]

In other words, the federal governments reform agenda set out in the Plan have been justified by the recommendations made in the Samuel Review.

Although the Nature Positive Plan has been developed to implement the recommendations made by the Samuel review, they are not identical, and the differences are not minor. Indeed, in three areas, the distinctions between the Nature Positive Plan and the Samuel Review are fundamental aspects of the environmental regulatory framework. This research note explores three of these key distinctions

The Samuel Review did not recommend the creation of a federal environment protection agency

As part of the Nature Positive Plan, the federal government has committed to establishing a new government agency, separate to the environment department, known as Environment Protection Australia. This agency is intended to be responsible for 'project assessments, decisions and post-approvals' with limited ministerial oversight.

The Samuel Review categorically and specifically rejected calls for a new agency of this kind.

While the Samuel Review did recommend a 'cop on the beat', it recommended that this official would be within the department and be limited to matters relating to ensuring project proponents were meeting their EPBC approval obligations and to restore public trust in Australia's environmental regulatory framework. The Samuel Review stated:

> The Commonwealth Minister must retain responsibility for setting the rules (including making decisions and setting conditions for development approvals), but the regulator should be responsible for enforcing them.
>
> The devolved decision-maker should remain primarily responsible for project-level monitoring, compliance, enforcement and assurance, and transparently report actions taken. The Commonwealth should also retain the ability to intervene in project-level compliance and enforcement, where egregious breaches are not being effectively enforced by the state or territory regulator.[2]

Specifically, the Samuel Review recommended establishing three federal offices within the environment department[3] 'to provide confidence that the EPBC Act is being effectively and efficiently administered, and that it is achieving its objects'[4]:

- Environment Assurance Commissioner – responsible for the audit and audit and oversight of the Act and its operations.
- Office of Compliance and Enforcement – responsible for regulatory surveillance, compliance and enforcement.
- Ecologically Sustainable Development Committee – responsible for monitoring and reporting on environmental performance.

In contrast, the federal government has declared that it will instead be establishing an independent national environmental protection agency.[5]

The proposed EPA will be responsible for undertaking regulatory functions, making decisions on project proposals, setting approval conditions, issuing permits and licences, and reporting on its performance.

Under Samuel's recommendation, because the new bodies would sit within the environment department, they would be directly accountable to the minister. Whereas under the government's proposal, because the environment minister would be unable to direct the EPA in any way (due to its independence), the EPA would be effectively unaccountable to the minister.

The government is proposing that EPA will have decision making responsibility for new projects and developments, and given the EPA will be an independent agency which will not need to be accountable to the minister, this will mean that decisions on projects will be made by unelected and unrepresentative bureaucrats whose only consideration is environmental outcomes.

Under Samuel's model, project approval decisions would by default be made by the minister. As noted in the Samuel Review, it 'is entirely appropriate that elected representatives (and their delegates) make decisions that require competing values to weighed and competing national objectives to be balanced'.[6]

Ministers are better positioned to make an informed decisions on new projects and developments because the minister must factor in the views and priorities of the other ministers in the elected government and therefore in theory should be considering the other important elements of the project or development proposal, such as the benefits the projects would bring to local communities, and the projects overall economic value.

The Samuel Review did not recommend locking up 30 per cent of Australia's land and seas

The Samuel Review did not recommend that the government should establish or commit to an arbitrary target of conserving a specific percentage of Australia's land and seas, such as the 30X30 plan, whereby the government will use regional plans to ensure 30 per cent of Australia's land and 30 per cent of Australia's seas are conserved.

In the Nature Positive Plan the government states that 'regional plans will … help ensure Australia meets its biodiversity outcomes including the 30x30 target.'[7] The 30x30 target is a global conservation initiative that the federal government has committed to, which aims to protect and conserve 30 per cent of our land and 30 per cent of our oceans by 2030.[8]

Implementing these arbitrary conservation targets into regional planning is a radical departure from the recommendations made in the Samuel Review, and is a significant threat to Australia's primary industries such as mining and agriculture, that they rely on the utilisation of the natural environment.

More details on how the government intends to integrate conservation targets into regional planning is required in order to understand what these targets means for the primary industries, but it appears almost certain that restricting the use of large tracts of Australia's land and seas will adversely affect industries that require access and to make use of land and sea.

Given that exports from Australia's primary industries alone account for more than half of the total value of the nation's goods exports, establishing rules which will likely make it harder for these industries to operate and produce is a threat to our future economic development and prosperity.[9]

The Samuel Review did not recommend expanding the 'water trigger'

In December 2023, the government implemented the first tranche of the Nature Positive Plan by amending the EPBC Act to expand the scope of the water trigger to include all forms of unconventional gas, such as shale and tight gas.[10]

This legislative change directly contradicted the recommendation made in the Samuel review to amend the water trigger to narrow its scope to water resources that span over state borders. The Samuel Review noted that the states and territories have a constitutional responsibility for making their water resources:

> The Review considers that it is not the role of the EPBC Act to regulate impacts of development on water users such as towns or agricultural users. This is the responsibility of the States and Territories and they should be clearly accountable for the decisions they make.[11]

In 2013, the EPBC Act was amended to include a water trigger, which required proposed coal seam gas and large coal mining developments likely to significantly impact on a water resource to be assessed and approved by the Commonwealth.

Throughout the last decade, the water trigger has financially hindered large coal and coal seam gas projects. Previous research by the IPA has estimated that the water trigger imposes administrative costs between $54,874 and $99,584 for a single approval, whilst the delay costs can amount to $30 million per month for large projects.[12]

Following the expansion of the water trigger passed in December, environmental groups have criticised the changes as not going far enough, indicating that further reform may follow. When the water trigger is currently applied, the Independent Expert Scientific Committee on Unconventional Gas Development and Large Coal Mining Development is responsible for providing decision makers with information and advice on whether the project will impact water resources. Environmental groups argue that IESC advice should be binding, so that decision makers are forced to comply with the IESC's findings.[13]

End Notes

1. Department of Climate Change, Energy, the Environment and Water, *Nature Positive Plan: Better for the Environment, Better for Business* (December 2022) iii.
2. Graeme Samuel, *Independent Review of the EPBC Act – Interim Report* (Department of Agriculture, Water and the Environment, June 2020) 15.
3. See Graeme Samuel, *Independent Review of the EPBC Act – Final Report* (Department of Agriculture, Water and the Environment, October 2020) 14, 199. ('Samuel Review').
4. Samuel Review, 118.
5. Nature Positive Plan, 28-29.
6. Nature Positive Plan, 89.
7. Nature Positive Plan, 3.
8. See Aynsley Kellow, *The Undemocratic Origins of the Nature Positive Plan* (Institute of Public Affairs Research Report, July 2024).
9. Australian Bureau of Statistics, *International Trade in Goods, April 2024* (Table 31, 6 June 2024).
10. *Nature Repair (Consequential Amendments) Act 2023* (Cth).
11. Samuel Review, 46.
12. Darcy Allen, Daniel Wild and Brett Hogan, *On Regulation, Productivity and Growth: Reforms to Make Australia More Prosperous* (Institute of Public Affairs Research Report, 2016) 48.
13. https://assets.nationbuilder.com/lockthegate/pages/8572/attachments/original/1707199707/Water_Trigger_Report_2024.pdf?1707199707

Institute of Public Affairs

IPA RESEARCH NOTE

What the federal government's proposed environment protection agency will cost to taxpayers

JULY 2024

Saxon Davidson
Research Fellow

Key findings

- The proposed Environment Protection Australia agency would be the sixth most resourced agency in the federal government out of 137, based on 2022-23 financial year data, with estimated revenue from the federal government of $1.8 billion.
- Environment Protection Australia would increase the number of bureaucrats in the Climate Change, Energy, Environment and Water portfolio by more than 80 per cent, to a total of more than 10,000 full time equivalent employees.
    - This would make the environment portfolio the fifth largest federal government portfolio overall in terms of staffing.
- Total staffing expenditure for the proposed Environment Protection Australia would be almost $694 million, more than double the staffing expenditure at the Reserve Bank of Australia.

Analysis

The *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) is the primary piece of federal legislation regulating major projects and developments which have an impact on 'matters of national environmental significance'. Previous research by the Institute of Public Affairs found that that there had been a 445 per cent increase in the volume of regulatory restrictions contained in the EPBC Act and relevant subsidiary legislation between 2000 and 2020.[1] Between 2023 and 2024, the number of regulators enforcing green tape is expected to increase by 51 per cent.[2]

Green tape and environmental regulators are both set to increase under the federal government's proposed reforms of the EPBC Act, known as the 'nature positive plan'.[3] A key change under the Nature Positive Plan is the creation of a new federal government regulatory agency, Environmental Protection Australia (EPA) to, among other things, assume the responsibility approving projects (currently exercised by the minister).

The 2023-24 federal budget committed $121 million over four years for the 'establishment of Environment Protection Australia, which would imply an annual average of 223.6 full time equivalent (FTE) staff based off the average staffing cost of a CCEEW employee in 2023-24. However, a freedom of information request by the IPA found that within the components of the department that have been marked as the 'future EPA' already employ 516.8 FTE people, meaning the number of EPA employees already exceeds the maximum number of staff that could be serviced according to the budget—before EPA has even been legislated and established.

To calculate the potential future administrative costs of EPA, this analysis uses publicly available data of spending and staffing levels of state environment protection agencies. Five of six Australian states already have an equivalent EPA body (Queensland being the exception). To calculate the potential administrative cost of a federal EPA, this note measures and averages the funding and staffing costs of the state EPAs (excluding Western Australia).[4] Those measures are then scaled to the national level to estimate the resourcing requirements of the proposed Environment Protection Australia.

Table 1: *State EPA resourcing in 2022-23*

State	Funding from state government	Total state government budget expenditure	EPA funding as a % of total state budget
New South Wales EPA	$250,476,000	$105,901,000,000	0.24%
EPA Victoria	$196,328,000	$85,952,000,000	0.24%
EPA South Australia	$74,284,000	$25,408,000,000	0.29%
EPA Tasmania	$21,396,000	$8,540,000,000	0.25%
Average			*0.25%*

Source: State EPA annual reports and state government budget papers

On average, government funding of the four state EPA's was 0.25 per cent of state budget outlays in the 2022-23 financial year.

General federal government sector expenditure in 2022-23 was estimated to be just over $637 billion.[5] If the federal EPA were to be of similar relative size as state EPA's—that is, 0.25 per cent of total spending—then the federal EPA would receive nearly $1.8 billion per year. This would make the federal EPA the sixth most resourced agency in the federal government.[6]

Table 2: *Federal government agencies (excluding departments) with revenue above $1 billion in 2022-23*

Federal government agency	Revenue ($bn)
Australian Taxation Office	$18.4bn
Services Australia	$7.8bn
National Indigenous Australians Agency	$3.9bn
National Emergency Management Agency	$1.9bn
Australian Federal Police	$1.8bn
Environment Protection Australia	***$1.8bn***
CSIRO	$1.7bn
Australian Signals Directorate	$1.7bn
National Blood Authority	$1.6bn
Australian Broadcasting Corporation	$1.3bn

Note: National Disability Insurance Agency is excluded as it is only a service facilitator, rather than a service provider. The Australian Office of Financial Management is excluded as its revenue is mainly derived from issuing debt securities on behalf of the Commonwealth.

Source: Federal government budget papers 2023-24

This is a conservative calculation as the scope of the proposed federal EPA would be broader than the state EPA's: the federal EPA is proposed to be responsible for project approvals as post-approval enforcement, while the state EPA's do not have approval powers, with the exception of the Victorian EPA has narrow power to issue development licences in relation to construction projects.

Approximately half of state EPA resourcing is committed to staff expenses. This ranges from 32 per cent in the EPA in South Australia, to 63 per cent in the EPA in Tasmania. On average, the four state EPA's commit 47.4 per cent of total revenue from government to staff expenditure.

***Table 3:** State EPA staffing in 2022-23*

State	EPA staff expenditure 2022-23	Staff expenditure as a % of total funding from government
New South Wales EPA	$116,435,000	46.49%
EPA Victoria	$94,246,000	48.00%
EPA South Australia	$23,571,000	31.73%
EPA Tasmania	$13,561,000	63.38%
Average		***47.40%***

Source: State EPA annual reports and state government budget papers

Assuming the 47.4 per cent state average is a reliable proxy for staffing of the proposed Environment Protection Australia, then it can be assumed that the new agency's staffing expenses will be 47.4 per cent of $1.8 billion, or almost $694 million.

The total staffing spend can be used to estimate the number of persons employed in the proposed Environment Protection Australia. The average cost per full time equivalent employee in the CCEEW portfolio was $145,751 in 2022-23. Dividing the full staffing cost by $145,741 suggests the proposed Environment Protection Australia could have an average staffing level of 4,760.

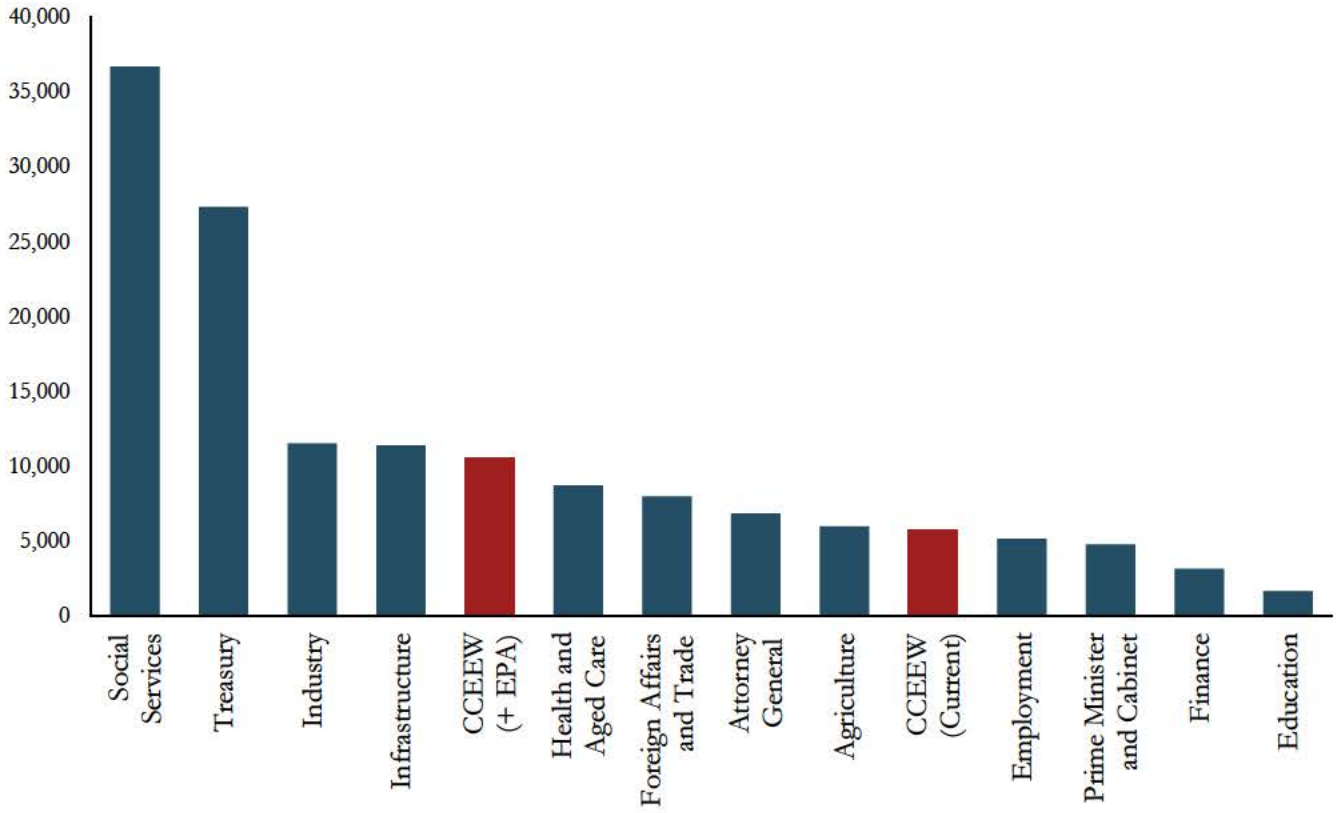
In 2022-23, the CCEEW portfolio had an average staffing level of 5,794, meaning the additional staff from the proposed Environment Protection Australia would increase total CCEEW staffing by 82 per cent to 10,554 full time equivalent employees. This would make the CCEEW the portfolio with the fifth highest number of bureaucrats (after excluding people employed in national security and law enforcement7).

***Table 4:** CCEEW portfolio staffing numbers and costs, 2022-23*

Agency	Staff numbers	Staff costs
DCCEEW (departmental staff)	2,414	$366,535,000
Bureau of Meteorology	1,627	$210,568,000
Director of National Parks	332	$49,593,000
Clean Energy Regulator	337	$45,283,000
Australian Institute of Marine Science	299	$43,924,000
Murray-Darling Basin Authority	267	$41,695,000
Great Barrier Reef Marine Park Authority	255	$28,912,000
Clean Energy Finance Corporation	156	$42,110,000
Sydney Harbour Federation Trust	63	$8,080,000
Climate Change Authority	38	$5,504,000
North Queensland Water Infrastructure Authority	4	$946,000
Australian Renewable Energy Agency	2	$1,333,000
CCEEW Portfolio Total	**5,794**	**$844,483,000**
Environment Protection Australia	*4,760*	*$693,824,000*
CCEEW Portfolio Total PLUS EPA	**10,554**	**$1,538,307,000**

Source: State EPA annual reports and state government budget papers

Chart 1: *Federal government portfolio staff levels, 2022-23*



Note: Excludes people employed in defence and law enforcement roles, such as the Defence Portfolio or the Australian Federal Police. Source: IPA

End Notes

1. Cian Hussey, *The Growth and Complexity of Federal Environmental Regulation* (Institute of Public Affairs, April 2020).
2. Lachlan Clark, *Red Tape Army: Headcount and Cost of the Federal Regulatory Workforce* (Institute of Public Affairs Research Note, February 2024).
3. Department of Climate Change, Energy, the Environment and Water, *Nature Positive Plan: better for the environment, better for business* (December 2022).
4. NSW EPA, *2022-23 Annual Report* (December 2023); EPA Victoria, *2022-23 Annual Report* (January 2024); EPA SA, *2022-23 Annual Report* (September 2023); EPA Tasmania, *2022-23 Annual Report* (October 2023), NSW Government, *2023-24 Half-Yearly Review* (December 2023); Victorian Government, *2023-24 State Budget, Budget Paper No.5* (May 2023); South Australian Government, *Mid-Year Budget Review 2023-24* (December 2023); Tasmanian Government, *2023-24 Budget, Budget Paper No.1* (May 2023); EPA WA is excluded from this analysis due to lack of relevant detail in annual report.
5. Commonwealth of Australia, *Mid-Year Economic and Fiscal Outlook 2023-24* (December 2023).
6. Commonwealth of Australia, *Budget 2023-24, Budget Paper No. 4* (May 2023). The National Disability Insurance Agency and the Australian Office of Financial Management have been excluded because they are not direct service providers: the NDIA is a service facilitator, and the revenue of the AOFM is due to its role in issuing debt securities on behalf of the Commonwealth government.
7. This is consistent with the definition of public servant under the *Public Service Act 1999* (Cth).

Institute of Public Affairs

IPA RESEARCH NOTE

Economic analysis of the 'climate trigger'

JULY 2024

Daniel Wild
Deputy Executive Director

Key findings

- Introducing a 'climate trigger' would potentially prevent $227.1 billion of investment into the Australian economy.
    - A 'climate trigger' refers to a policy mechanism whereby a certain level of annual carbon emissions from a given project would trigger the need for a federal EPBC Act approval.
- $134 billion of investment in future emission intensive projects would be cancelled immediately by the introduction of a climate trigger. A further $54 billion worth of investment could be delayed, and $39 billion would be high risk.
- Western Australia would be the state most affected by a climate trigger, potentially losing $111.7 billion of investment. Western Australia will incur just over 49 percent of the cost of a climate trigger, with Queensland ($66.6 billion) and the Northern Territory ($18.8 billion) also highly impacted.

Analysis

The federal government is reportedly considering adding a 'climate trigger' to the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) as part of its Nature Positive reforms of federal environmental legislation.[1]

A 'climate trigger' refers to a policy mechanism whereby a certain level of annual carbon emissions from a given project would trigger the need for a federal EPBC Act approval.

When he was shadow environment minister in 2005, Anthony Albanese introduced a bill to Parliament to establish a climate trigger in the EPBC Act. Mr Albanese at the time stated that the 'glaring gap in matters of national environmental significance is climate change … It is time to act. It is time for procrastination to end … We need action and one of the actions that we need … is this amendment to the EPBC Act."[2]

Adding a climate trigger to the EPBC Act will duplicate existing federal regulation, add significant costs for businesses and the economy, tie up departmental resources, and could prevent significant investments in major projects in Australia.

The independent review of the EPBC Act conducted by Professor Graeme Samuel AC specifically ruled out a climate trigger, noting that federal legislation to manage carbon emissions already exists and that 'these specific mechanisms, not the EPBC Act, are the appropriate way to place limits on greenhouse gas emissions."[3]

This paper estimates the potential costs of implementing a climate trigger. It takes as a model the current version of the climate trigger put forward in parliament, the Environment Protection and Biodiversity Amendment (Climate Trigger) Bill 2022. The climate trigger proposed in that Bill would require any proposed projects with between 25,000 and 100,000 tonnes of carbon emissions per year to be required to have an EPBC Act assessment and approval. Projects with more than 100,000 tonnes of annual emissions would be banned outright.[4]

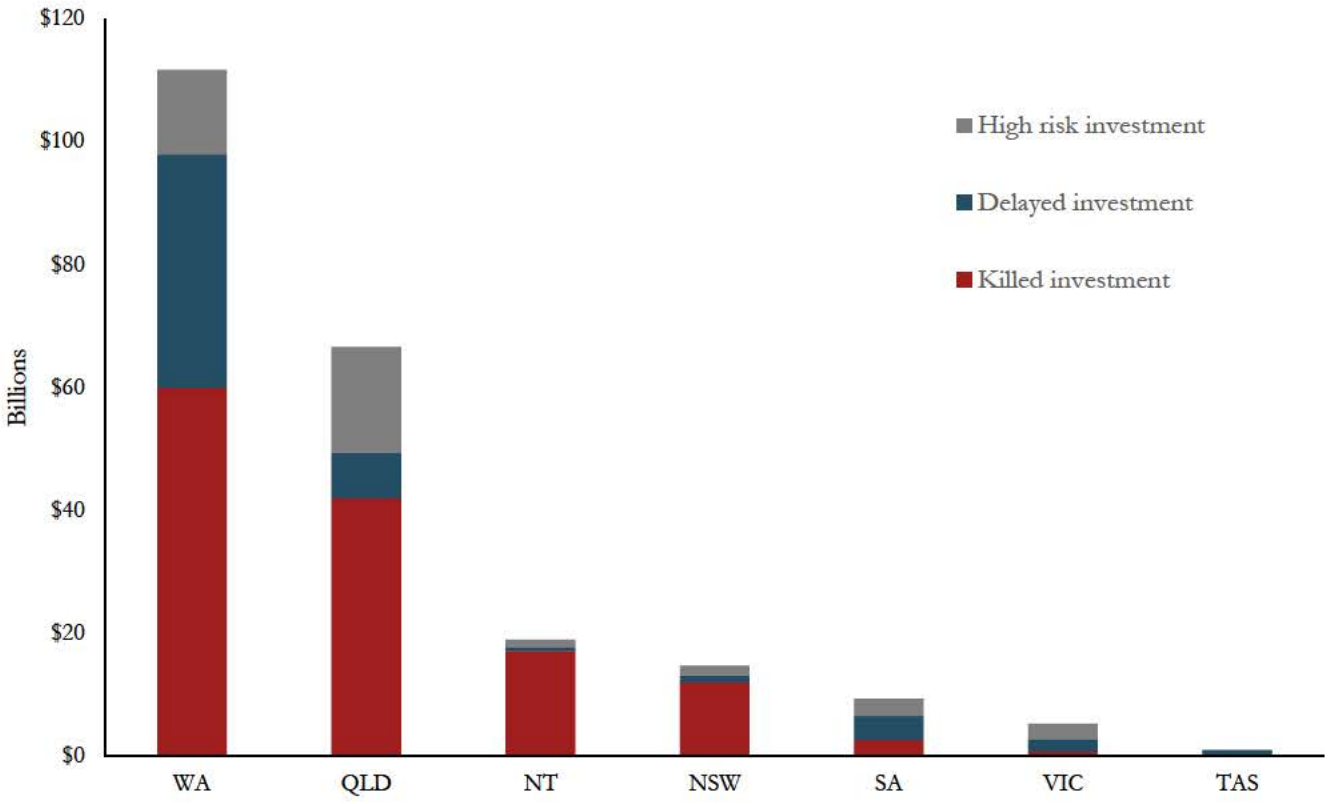
This paper finds that a climate trigger could cost the Australian economy over $227.1 billion in lost investment in major resources projects alone

Impact of a climate trigger on major project investment

The potential impact of a climate trigger on the Australian economy is the risk of losing some $227.1 billion in investment. This is a conservative estimate for reasons explained further in the methodology section.

This estimated impact is based on three categories of risk: killed investment, delayed investment, and high-risk investment. Killed investment refers to projects with estimated annual emissions of 100,000 tonnes of carbon dioxide equivalent emissions (t CO2e) or more, which would be banned under a climate trigger. Delayed investment refers to projects with between 25,000 t CO2e and 100,000 t CO2e which would trigger an EPBC Act assessment, and which may not proceed to development. High risk investment refers to projects for which estimated emissions data is not available, but which are deemed to be high risk because it is a coal, oil or gas project which generally have comparatively high annual emissions profiles.

***Chart 1:** State based cost of climate trigger*



Source: Department of Industry, Science and Resources

Table 1: State based cost of climate trigger

	WA	QLD	NT	NSW	SA	VIC	TAS	TOTAL
Killed investment	$59.84bn	$41.93bn	$17.05bn	$11.90bn	$2.50bn	$0.60bn	NA	$133.83bn
Delayed investment	$38.08bn	$7.31bn	$0.58bn	$1.14bn	$3.91bn	$2.10bn	$0.87bn	$53.99bn
High risk investment	$13.77bn	$17.35bn	$1.20bn	$1.60bn	$2.85bn	$2.50bn	NA	$39.26bn
Total at risk	$111.69bn	$66.58bn	$18.83bn	$14.65bn	$9.26bn	$5.20bn	$0.87bn	$227.08bn

Methodology

This paper is based on data from the Office of Chief Economist's 2023 resources and energy major projects list.[5] This list includes all the major resources and energy projects in Australia which have been publicly announced or are progressing through the different studies and approvals stages. For the purposes of this analysis, any projects listed as 'completed' were excluded. The latest major projects list was published at the end of 2023, and therefore may not contain some projects which were announced after publication.

The investment figures used in this paper are primarily those published in the major projects list as a project cost estimate. For some projects in the list missing this estimate, data has been supplemented using public source information where available. There are a total of eight projects identified as being prohibited by the climate trigger for which no cost estimate was available. There are an additional five projects identified as being at risk of delay from a climate trigger for which no cost estimate was available. A total of twelve projects identified as 'high risk' did not have an available cost estimate. Taken together, these figures make the analysis in this paper relatively conservative.

The estimated emissions for projects have been sourced from public source documents, assisted by modelled estimates of the emissions intensity of mining operations for some projects. Estimated emissions were not available for a large number of projects on the list, either because this data has not yet been estimated or because that information is not yet publicly available. Out of a total of 344 projects across Australia identified in this analysis, emissions estimates were available for only 132 projects. Emissions estimates could not be sourced for 212, or 61.6 per cent, of major resource and energy projects across Australia. This is another factor making this analysis relatively conservative.

Further, this analysis has only looked at major resources and energy projects. There are other projects and developments which would likely be impacted by the introduction of a climate trigger, but are outside the remit of this paper. For example, in Western Australia the Great Northern Highway – Bindoon Bypass project has estimated scope one emissions of 194,603t CO_2e during construction.[6] This is a $275 million project funded by the Western Australian ($55 million) and Federal ($220 million) governments.[7] Major projects such as commercial and residential property development, industrial developments, and public infrastructure will be impacted by the climate trigger. Some simply will not proceed, while many others which would not otherwise be impacted by the currently existing EPBC Act, or whose obligations under that Act would be expanded, would see higher costs and delays due to assessment and approval processes.

Finally, this analysis likely underestimates the costs of a climate trigger as it simply takes a point in time assessment of some of the currently proposed major resources and energy projects and assumes that they have a one-off benefit to the economy through capital investment. It does not account for ongoing sustaining capital costs or later stages of investment built upon an initial project. It also does not assess the foregone

operational expenses once these projects become operational, such as wages and supplier payments made, state royalties and payroll taxes, and federal corporate taxes paid. Nor does it estimate how many future projects will never be proposed because they could not proceed under a climate trigger. Australia has vast mineral deposits which can be developed with the appropriate policy settings. A climate trigger would prevent vast swathes of these from ever being developed.

Data tables

Table 2: Western Australia

Project	Company	Commodity group	Cost estimate (AUD)	Estimated start of commercial operations	Emissions
H2Perth	Woodside	Hydrogen	$1,000m	2029+	8,500,000
Browse to North West Shelf	Woodside/ BP / PetroChina / Japan Australia LNG	Oil & gas	$21,429m	2026+	4,000,000
HyEnergy Project (Phase 1)	Providence Resources Ltd	Hydrogen	$5,000m	2029+	1,800,000
Havieron	Newmont Mining and Greatland Gold	Gold	$529m	2025+	1,536,605
Collie Green Steel Mill	Green Steel WA	Iron Ore	$400m	2025+	562,000
Wingellina	Nico Resources Limited	Nickel, cobalt	$2,390m	2027	500,000
NiWest Nickel-Cobalt Project	Alliance Nickel Limited	Nickel, cobalt	$1,261m	2026+	440,000
Ravensthorpe Gold Project	Medallion Metals	Gold	$163m	2026	296,104
Murchison Technology Metals Project aka Gabanintha Vanadium?)	Technology Metals AU Ltd	Other Commodities	$532m	2025	280,770
Cashmere Downs	Cashmere Iron	Iron Ore	$2,500m	2029+	248,376
Hemi Gold Project	De Grey Mining Limited	Gold	$1,345m	2026	240,734
Thunderbird (Stage 2)	Sheffield Resources/Yansteel	Other Commodities	$258m	2028	239,002
Mulga Rock	Deep Yellow Limited	Uranium	$393m	2028	225,000
Nyidinghu	Fortescue Metals Group	Iron Ore	$3,100m	2029+	220,800
Rhodes Ridge	Rio Tinto/Wright Prospecting	Iron Ore	$510m	2029+	220,800
West Pilbara Iron Ore Project	Aquila, AMCI/POSCO	Iron Ore	$6,800m	2029+	220,800
Yeelirrie	Cameco	Uranium	$650m	2028+	193,530
Ashburton Hub/Onslow Iron Ore Project	Mineral Resources Ltd	Iron Ore	$3,000m	2024	193,200
Balmoral South	Australasian Resources Limited, Mineralogy Pty Ltd	Iron Ore	n/a	2029+	163,095
Western Range	Rio Tinto/Baowu Steel Group	Iron Ore	$2,900m	2025	138,000
Jimblebar beneficiation plant	BHP	Iron Ore	$1,000m	2028+	137,577
Mount Ida	Juno Minerals	Iron Ore	$1,600m	2029+	124,188
Aurukun Bauxite projects	Glencore Bauxite Resources and Mitsubishi	Aluminium, Alumina, Bauxite	$1,280m	2026+	118,722

Project	Company	Commodity group	Cost estimate (AUD)	Estimated start of commercial operations	Emissions
Pilbara Hub (Marillana and Ophthalmia - Initial Development)	Mineral Resources Ltd/Brockman Resources	Iron Ore	$105m	2024+	110,400
Western Ridge	BHP/ITOCHU/Mitsui	Iron Ore	$750m	2026+	110,400
Kintyre	Cameco	Uranium	$600m	2028+	106,700
West Erregulla (Phase 1)	Strike Energy / Hancock Energy / Australian Gas Infrastructure Group	Oil & gas	$347m	2024	105,951
Lockyer Gas Project	Mineral Resources	Oil & gas	$250m	2028	89,455
Murchison Hydrogen Renewables Project	Hydrogen Renewables Australia, Copenhagen Infrastructure Partners	Hydrogen	$10,000m	2029+	86,315
Greenbushes Expansion CGP4	Tianqi Lithium Australia Pty Ltd & IGO Ltd	Lithium	$537m	2027	82,194
Project Haber	Strike Energy	Hydrogen	$3000m	2026	75,000
Browns Range (Stages 2 and 3)	Northern Minerals	Other Commodities	$500m	2026	72,000
Winu	Rio Tinto	Copper	n/a	2025	69,859
South Erregulla	Strike Energy	Oil & gas	$90m	2024	67,040
Weld Range	Sinosteel Mid West	Iron Ore	$4,000m	2029+	66,240
Southdown	Grange Resources/Sojitz/Kobe Steel	Iron Ore	$1,400m	2026+	62,094
Yalgoo (Yogi)	FI JV Ltd	Iron Ore	$1,500m	2025+	62,094
Yilgarn (Koolyanobbing) Magnetite	Mineral Resources Ltd	Iron Ore	$400m	2029+	62,094
Koongie Park	AuKing Mining Limited	Copper	$134m	2025+	60,000
Hardey Project	API/Hancock Prospecting	Iron Ore	$10,300m	2024+	55,200
McPhee Creek	Atlas Iron/Hancock Prospecting	Iron Ore	$605m	2025+	55,200
Sanjiv Ridge (Stage 2)	Atlas Iron/Hancock Prospecting	Iron Ore	n/a	2024+	55,200
Sulphur Springs Copper-Zinc Project	Develop Global Limited	Copper	$296m	2025+	54,600
Mackay Potash Project	Agrimin Ltd	Other Commodities	$622m	2026+	50,712
Australian Vanadium Project	Australian Vanadium Ltd	Other Commodities	$604m	2025	45,000
Ashburton Stage 2 (Bungaroo South and Kumina)	Mineral Resource Limited	Iron Ore	n/a	2025+	44,160
Gudai Darri capacity expansion	Rio Tinto	Iron Ore	$130m	2025	38,640
Caravel (Stage 1)	Caravel Minerals Ltd	Copper	$1,676m	2026	38,152
Lake Giles iron ore project (Moonshine and Ularring)	Macarthur Minerals	Iron Ore	$863m	2024+	37,256
Ridley Magnetite Project	Atlas Iron/Hancock Prospecting	Iron Ore	$400m	2029+	37,256
Lake Wells	Australian Potash	Other Commodities	$292m	2025+	34,108

Project	Company	Commodity group	Cost estimate (AUD)	Estimated start of commercial operations	Emissions
Cadoux Kwinana High Purity Alumina	FYI Resources	Aluminium, Alumina, Bauxite	$284m	2025+	31,608
Bidaminna Mineral Sands Project	Image Resources	Other Commodities	$194m	2026	31,000
Mt Forrest	Mindax/Norton Gold Fields	Iron Ore	n/a	2027+	24,838
Robe Mesa	CZR Resources	Iron Ore	$153m	2024+	19,320
Ashburton (salt)	K+S Group	Other Commodities	$850m	2025+	19,000
Blacksmith Project	Red Hawk Mining	Iron Ore	$150m	2025+	16,560
Yangibana	Hastings Technology Metals Limited	Other Commodities	$470m	2025	12,937
Tubridgi Phase 2	AGI Tubridgdi	Oil & gas	$53m	2023	11,724
Arrowsmith Hydrogen Project Stage 1	Infinite Green Energy	Hydrogen	$300m	2025	7,498
Manna Lithium Project	Global Lithium Resources	Lithium	$435m	2026	729
Eramurra Solar Salt Project	Leichhardt Industrials Pty Ltd	Other Commodities	$280m	2027	
Kumpupintil Lake Potash Project	Reward Minerals Ltd	Other Commodities	$451m	2025+	
Pilbara Hydrogen Hub	Australian Government and Western Australian Government	Infrastructure	n/a	2029+	
Australian Renewable Energy Hub	bp Australia, Intercontinental Energy, Macquarie Capital and Macquarie's Green Investment Group	Hydrogen	$50,000m	2029+	
Lake Hope HPA Project	Impact Minerals and Playa One Pty Ltd	Aluminium, Alumina, Bauxite	$253m	2025+	
Lake Maitland Uranium Project Extension (expansion to Wiluna Uranium)	Toro Energy	Uranium	$270m	2028+	
Austvolt Cathode Precursor Material Manufacturing Plant	Ausvolt	Other Commodities	n/a	2028+	
Barrambie Titanium Project	Neometals	Other Commodities	$215m	2025	
Collie BAM Facility	International Graphite	Other Commodities	$441m	2026+	
Collie net zero magnesium refinery	Magnium Australia	Other Commodities	n/a	2028+	
Cummins Range	RareX Ltd.	Other Commodities	$412m	2025	
Cyclone Zircon Project	Diatreme Resources	Other Commodities	$136m	2028+	
Gabbin Kaolin Project	Suvo Strategic Minerals	Other Commodities	$68m	2026	
Karratha Project	EcoMag Ltd	Other Commodities	n/a	2028+	
Kwinana Integrated Battery Material Facility	IGO Ltd/Wyloo Metals	Other Commodities	$800m	2028+	
Lake Throssell	Trigg Minerals Ltd	Other Commodities	$412m	2028	

Project	Company	Commodity group	Cost estimate (AUD)	Estimated start of commercial operations	Emissions
McIntosh	Hexagon Resources Limited/Green Critical Minerals Pty Ltd	Other Commodities	$148m	2027	
Mt Mulgine	Tungsten Mining	Other Commodities	$669m	2028+	
Munglinup	Mineral Commodities	Other Commodities	$88m	2025	
Oakover Project	Firebird Metals Ltd	Other Commodities	$123m	2025	
Onslow rare earths plant	Hastings Technology Metals Limited	Other Commodities	$478m	2028	
Speewah	Tivan Limited	Other Commodities	$550m	2026	
Springdale Graphite Project	International Graphite	Other Commodities	n/a	2026+	
WA pCAM Hub (refinery)	Pure Battery Technologies	Other Commodities	$460m	2025	
Windimurra	Atlantic Pty Ltd	Other Commodities	$213m	2028+	
Clio-Acme	Chevron	Oil & gas	$6,751m	2027+	
Dorado	Santos / Carnarvon Petroleum	Oil & gas	$2,766m	2028	
Equus	Western Gas	Oil & gas	$2,600m	2027	
Transborders Energy's Generic FLNG Solution	Transborders Energy	Oil & gas	$1,600m	2028+	
Black Swan Restart	Poseidon Nickel Limited	Nickel, cobalt	$50m	2024	
Fisher East	Kedalion Nickel Pty Ltd	Nickel, cobalt	$87m	2025+	
Gonneville Project	Chalice Mining Limited	Nickel, cobalt	$1,600m	2029	
Goongarrie Nickel Cobalt Project	Ardea	Nickel, cobalt	$3,117m	2028	
Mt Thirsty	Greenstone Resources/ Conico Limited	Nickel, cobalt	$371m	2025+	
Kathleen Valley Refinery	Liontown Resources Ltd	Lithium	$725m	2028+	
Pioneer Dome	Essential Metals	Lithium	$293m	2026	
Paroo Station	LeadFX	Lead, Zinc, Silver	$262m	2029	
Sorby Hills	Boab Metals Limited	Lead, Zinc, Silver	$245m	2024	
Balla Balla infrastructure project	BBIG (subsidiary of Todd Corporation)	Infrastructure	$5,600m	2029+	
Karratha Hub	Woodside, BP, Shell, Chevron, MIMI	Infrastructure	n/a	2029+	
Pilbara Hub	Mineral Resources Ltd	Infrastructure	$1,500m	2026+	
Pilbara Solar and Storage Project - Phase 1	Rio Tinto	Infrastructure	$600m	2026	
South West Hub	Government of West Australia, Dept of Mines Ind Reg Safety, Alcoa of Australia, Verve Energy, Griffin Group, Premier Coal, Perdaman Chemicals and Fertilize	Infrastructure		2029+	

Project	Company	Commodity group	Cost estimate (AUD)	Estimated start of commercial operations	Emissions
Stanley Point Berth 3	Mineral Resources Ltd/Hancock Prospecting	Infrastructure	n/a	2026+	
Arrowsmith Hydrogen Project Stage 2	Infinite Green Energy	Hydrogen	n/a	2029+	
Arrowsmith Hydrogen Project Stage 3	Infinite Green Energy	Hydrogen	n/a	2029+	
Arrowsmith Hydrogen Project Stage 4	Infinite Green Energy	Hydrogen	n/a	2029+	
Boolathana Project	Gascoyne Green Energy	Hydrogen	n/a	2029+	
Bristol Springs Solar Hydrogen Project	Frontier Energy Limited	Hydrogen	$242m	2029+	
Collie Battery and Hydrogen Industrial Hub Project	Sunshot Industries	Hydrogen	n/a	2029+	
Early Production System: MEG-HP1	Infinite Green Energy	Hydrogen	$110m	2025	
East Kimberley Clean Hydrogen Project	Aboriginal Clean Energy Partnership (Balanggarra Ventures Limited, MG Corporation, Kimberley Land Council, Pollination)	Hydrogen	$3,000m	2029	
Geraldton Export-Scale Renewables Investment (Demonstrator scale)	bp Australia, GHD Advisory Group Ltd	Hydrogen	n/a	2029+	
Geraldton Export-Scale Renewables Investment (full scale)	bp Australia, GHD Advisory Group Ltd	Hydrogen	n/a	2029+	
H2Kwinana	bp Australia, Macquarie Capital	Hydrogen	$1,376m	2029+	
HyEnergy Project (Remainder)	Providence Resources Ltd	Hydrogen	n/a	2029+	
Joint Feasibility Study for Creation of a Supply Chain of Low Carbon Ammonia in Western Australia	Mitsui E&P Australia Pty Ltd	Hydrogen	n/a	2029+	
Mid West Clean Energy Project	Pilot Energy	Hydrogen	n/a	2027	
Western Green Energy Hub	InterContinental Energy, CWP Global, Mining Green Energy Limited	Hydrogen	$100,000m	2025	
Bardoc Gold Project	Genesis Minerals Limited	Gold	$232m	2025+	
Cardinia Gold Project	Kin Mining	Gold	$77m	2025+	
Kal East Gold Project	Black Cat Syndicate Limited	Gold	$99m	2025+	
Katanning Gold Project	Ausgold Limited	Gold	$297m	2025	
Mt Gibson Gold Project	Capricorn Metals Limited	Gold	$339m	2025	
Nifty	Cyprium	Copper	$149m	2025+	
Whim Creek	Anax Metals	Copper	$71m	2024	

Table 3: Queensland

Project	Company	Commodity group	Cost estimate (AUD)	Estimated start of commercial operations	Emissions
East Olive Downs South Extended/Willunga	Pembroke Resources	Coal	$300m	2029+	1,989,000
Surat Gas Project (Phases 2-5)	Arrow Energy	Oil & gas	$8,000m	2026	1,050,000
Townsville Energy Chemical Hub - Stage 1	Queensland Pacific Metals Pty Ltd	Nickel, cobalt	$2,100m	2025+	1,018,400
Townsville Energy Chemical Hub - Stage 2	Queensland Pacific Metals Pty Ltd	Nickel, cobalt	$1,750m	2028+	1,018,400
Moranbah South	Anglo American and Exxaro Resources Limited	Coal	$2,000m	2029+	1,000,000
Saraji East	BM Alliance	Coal	$2,400m	2026+	810,000
Winchester South	Whitehaven Coal	Coal	$1,000m	2029+	580,000
Springsure Creek	Adamelia Resources	Coal	$1,200m	2029+	426,100
Lake Vermont Meadowbrook Extension	Bowen Basin Coal Pty Ltd / Jellinbah	Coal	$100m	2027+	362,942
Elimatta	New Hope Coal	Coal	n/a	2029+	314,100
Caval Ridge Mine Horse Pit Extension	BHP Mitsubishi Alliance	Coal	$4,000m	2026	271,895
Alpha (mine and rail)	GVK Hancock Coal	Coal	$10,800m	2029+	211,317
Gemini coal mine	Magnetic South	Coal	n/a	2025+	186,857
Wandoan	Glencore	Coal	$7,000m	2029+	182,693
Aurukun Bauxite projects	Glencore Bauxite Resources and Mitsubishi	Aluminium, Alumina, Bauxite	$1,280m	2026+	118,722
Meandu King 2 East Project	Stanwell	Coal	n/a	2024+	97,000
Kevin's Corner	GVK	Coal	$5,200m	2029+	96,824
Abbot point dredging	QLD Government	Infrastructure	$240m	2027	84,464
Port of Townsville Expansion (Stage 3)	Port of Townsville Limited	Infrastructure	$1,287m	2029+	36,285
Wiggins Island Coal Terminal (Stages 2 and 3)	Wiggins Island Coal Export Terminal (WICET)	Infrastructure	$580m	2029+	28,240
Port of Townsville Expansion (Stage 2)	Port of Townsville Limited	Infrastructure	$200m	2026+	23,485
Byerwen Coal project Stage 2	Byerwen Coal	Coal	$646m	2029+	15,054
Mahalo Gas project	Comet Ridge / Santos	Oil & gas	$200m	2025	6,129
Cape Flattery Silica Sands	Metallica Minerals Ltd	Other Commodities	$165m	2027	
H2-Hub Gladstone	The Hydrogen Utility (H2U)	Hydrogen	$4,700m	2025	
Atlas (Stage 3)	Senex Energy	Oil & gas	$1,000m	2025	
Blackwater South	BHP	Coal	n/a	2029+	
Blue Energy Bowen (Moranbah to Rolleston) gas pipeline	Blue Energy	Infrastructure	n/a	2024	
Bowen Gas Project	Arrow Energy	Oil & gas	$500m	2025	

Project	Company	Commodity group	Cost estimate (AUD)	Estimated start of commercial operations	Emissions
Carborough Downs	Fitzroy Australia Resources	Coal	n/a	2025+	
Central Queensland Hydrogen Hub	Stanwell Corporation Limited, Queensland Governemnt	Infrastructure	$138m	2027	
Central Queensland Hydrogen Project	Stanwell Corporation Limited, Iwatani Corporation, Marubeni Corporation, Kansai Electric Power Company, Keppel Infrastructure	Hydrogen	n/a	2027	
Century - Silver King and East Fault Block	New Century	Lead, Zinc, Silver	$78m	2024	
Charters Towers	Citigold Corporation	Gold	$149m	2025+	
Colton	New Colton Coal	Coal	n/a	2029+	
Comet Ridge	Bowen Coking Coal	Coal	$52m	2029+	
Corvus (formerly Teresa)	Corvus Coal Assets (New Emerald Coal)	Coal	n/a	2029+	
Curragh Extension Project	Coronado Global	Coal	$93m	2024	
Dysart East	Bengal Energy	Coal	$200m	2025	
Edify Green Hydrogen Project (full scale)	Edify Energy	Hydrogen	n/a	2029+	
Edify Green Hydrogen Project (stage 1)	Edify Energy	Hydrogen	n/a	2029+	
Emerald Coaches Green Hydrogen Mobility Project	Emeral Coaches	Hydrogen	$100m	2024	
Ernest Henry Mine Extension	Evolution Mining	Copper	$475m	2028	
Eva Copper Project	Harmony Gold Mining Company	Copper	$836m	2025	
Galilee Gas Pipeline	Jemena	Infrastructure	$600m	2024	
Gibson Island Green Ammonia Project	Fortescue Future Industries, Incitec Pivot Ltd	Hydrogen	n/a	2029+	
Glenaras gas project	Galilee Energy	Oil & gas	$1,500m	2025	
Glenaras to Cooladdi pipeline	APA	Infrastructure	n/a	2025	
Glencore Surat Hydrogen Project	Glencore	Hydrogen	n/a	2029+	
Goonyella-Riverside & Broadmeadow Extension (Red Hill) Mine	BMA	Coal	n/a	2029+	
Green Hydrogen Export Project	Origin Energy, Kawasaki Heavy Industries	Hydrogen	n/a	2029+	
Green Methanol Feasibility Study	Cement Australia (a Holcim and Heidelberg Materials joint venture), Mitsubishi Gas Chemical Company	Hydrogen	$150m	2028	
Grosvenor Phase 2	Anglo American	Coal	n/a	2026+	
Han-Ho H2 Hub	Ark Energy Corporation Pty Ltd	Hydrogen	n/a	2029+	
Hay Point Hydrogen Export	Dalrymple Bay Infrastructure Ltd, North Queensland Bulk Ports Corporation,	Hydrogen	n/a	2029+	

Project	Company	Commodity group	Cost estimate (AUD)	Estimated start of commercial operations	Emissions
	Brookfield Group, ITOCHU Corporation				
Karin	Vitrinite Pty Ltd	Coal	n/a	2029+	
Kogan Creek Hydrogen Ready Gas Peaking Power Station	Queensland Government (CS Energy as development lead)	Hydrogen	n/a	2027	
Minyango	Qcoal	Coal	$390m	2029+	
Moorlands	Cuesta Coal Ltd	Coal	$148m	2029+	
Mount Isa North Uranium Project	Paladin Resources	Uranium	n/a	2028+	
New Lenton	Bowen Coking Coal	Coal	n/a	2029+	
Northern Gas Pipeline extension	Jemena	Infrastructure	$5,000m	2025	
Northern Silica Project	Diatreme Resources	Other Commodities	$535m	2026	
Origin and ENEOS	Origin Energy, ENEOS	Hydrogen	n/a	2029+	
Pacific Solar Hydrogen Facility	Austrom Hydrogen Limited	Hydrogen	n/a	2029+	
Richmond-Julia Creek Vanadium Project	Richmond Vanadium Technology Pty Ltd	Other Commodities	$242m	2025	
Rolleston (phase 2)	Glencore, Sumisho, IRCA	Coal	$400m	2026+	
Sconi	Australian Mines Limited	Nickel, cobalt	$1,500m	2028	
South Galilee	Alpha Coal Pty Ltd and AMCI (Alpha) Pty Ltd	Coal	$4,200m	2029+	
Taroborah	Shenhuo Group	Coal	$560m	2029+	
Walford Creek	Aeon Metals	Copper	$996m	2026+	
Wards Well	Stanmore SMC	Coal	$1,500m	2028	
Washpool	Magnetic South	Coal	$358m	2029+	
Watershed Tungsten project	Tungsten Mining	Other Commodities	$172m	2026+	
Westmoreland	Laramide Resources	Uranium	$317m	2028+	

Table 4: Northern Territory

Project	Company	Commodity group	Cost estimate (AUD)	Estimated start of commercial operations	Emissions
Mt Todd	Vista Gold	Gold	$1,338m	2027	434,000
Nolans Project	Arafura Resources	Other Commodities	$1,590m	2025	349,000
Mt Bundy	Primary Gold Pty Ltd (Hanking Australia Investment)	Gold	$412m	2024+	215,000
Mount Peake	Tivan Limited	Other Commodities	$824m	2028+	178,000

Project	Company	Commodity group	Cost estimate (AUD)	Estimated start of commercial operations	Emissions
Ammaroo Phosphate Project	Verdant Minerals Ltd	Other Commodities	$414m	2025+	164,896
Greater Sunrise	Timor GAP / Woodside / Osaka Gas	Oil & gas	$11,800m	2029+	149,748
Chandler Salt Mine	Tellus Holdings	Other Commodities	$676m	2026+	104,310
Jervois	KGL Resources	Copper	$298m	2024	66,139
Rover 1	Castile Resources Limited	Gold	$280m	2025	46,878
Molyhil	Thor Mining/Investigator Resource Ltd	Other Commodities	$252m	2025+	15,080
Winchelsea Island Manganese Mine Project	Winchelsea Mining Pty Ltd	Other Commodities	n/a	2028+	8,485
Amadeus to Moomba Gas Pipeline	Central Petroleum/Australian Gas Infrastructure Group/Macquarie Capital	Infrastructure	$1,200m	2024	
Bayu Undan CCS Project	Santos, SK E&S, INPEX ,Eni, Tokyo Timor Sea Resources	Infrastructure	$2,117m	2026	
Bonnaparte CCS	Inpex, TotalEnergies CCS Australia Pty Ltd, Woodside Energy Ltd	Infrastructure	n/a	2029+	
Charley Creek	Enova Mining Limited	Other Commodities	$156m	2028+	
Darwin Green Liquid Hydrogen Export Project and Hydrogen Hub Development	Lattice Technology (Korea) Co. Ltd	Hydrogen	$1,090m	2029+	
Darwin H2 Hub	Northern Territory Government, Total Eren	Hydrogen	n/a	2029+	
Darwin LFP cathode manufacturing plant	Avenira Ltd	Other Commodities	$527m	2025+	
Desert Bloom Hydrogen (phase 1)	Aqua Aerem	Hydrogen	$700m	2027	
Desert Bloom Hydrogen (phase 2)	Aqua Aerem	Hydrogen	$16,129m	2029+	
Green Springs Project	Climate Impact Capital Limited (CIC)	Hydrogen	$14,928m	2029+	
Hayes Creek	PNX metals	Lead, Zinc, Silver	$58m	2029	
Ichthys expansion (Train 3)	Ichthys LNG	Oil & gas	n/a	2030	
Minhub MSP	MinHub Operations Pty Ltd	Other Commodities	n/a	2026+	
Northern Territory LNG	Tamboran Resources	Oil & gas	n/a	2030	
Reindeer CCS	Santos, SK E&S	Infrastructure	n/a	2029+	
Tiwi H2 (initial phase)	Provaris Energy	Hydrogen	n/a	2025	
Tiwi H2 (remainder)	Provaris Energy	Hydrogen	n/a	2029+	
Winchester Magnesium Project	Korab Resources	Other Commodities	$416m	2028+	

Table 5: New South Wales

Project	Company	Commodity group	Cost estimate (AUD)	Estimated start of commercial operations	Emissions
Narrabri (Stage 3)	Whitehaven Coal	Coal	$420m	2024+	1,360,000
HVO Continuation	Yancoal / Glencore	Coal	$500m	2025+	1,126,923
Narrabri coal seam gas project	Santos	Oil & gas	$3,600m	2025	1,052,000
Chain Valley Extension	Delta Coal	Coal		2024+	792,000
Mt Pleasant Optimisation Project	Mach Energy	Coal	$950m	2026+	452,000
Boggabri Coal Extension	Idemitsu	Coal	$513m	2029+	444,580
Spur Hill	Malabar Coal	Coal	$920m	2029+	431,200
Mt Thorley	Yancoal Australia	Coal		2029+	385,591
Dartbrook	Australian Pacific Coal	Coal	$953m	2025+	369,000
Sunrise Project	Sunrise Energy Metals Limited	Nickel, cobalt	$2,368m	2025+	327,433
Dubbo Project	Australian Strategic Materials Limited	Other Commodities	$1,678m	2027	140,040
Hawsons Iron Project	Hawsons Iron Ltd	Iron Ore		2026+	136,607
Moolarben CHPP upgrade	Yancoal	Coal		2027	110,030
Copi Project	RZ Resources	Other Commodities	$325m	2026	47,300
Port Kembla Hydrogen Hub	BlueScope / Shell / RioTinto / NSW government	Infrastructure	$224m	2029+	44,145
McPhillamys	Regis Resources Ltd	Gold	$215m	2026+	42,500
Angus Place West	Centennial Coal	Coal	$210m	2026+	42,473
Newstan Mine Extension	Banpu	Coal	$170m	2029+	38,397
Bowdens Project	Silver Mines	Lead, Zinc, Silver	$246m	2025	19,300
Nyngan Scandium Project	Scandium International Mining Corp	Other Commodities	$117m	2027	11,767
Hunter Valley Hydrogen Hub	Origin Energy, Orica	Hydrogen	$200m	2026	438
Copper Hill project	Golden Cross Resources	Copper	$131m	2026+	
Good Earth Green Hydrogen and Ammonia Project	Hiringa Energy (Operator), Sundown Pastoral Company	Hydrogen	n/a	2029+	
Hunter Energy Hub	AGL Energy, Fortescue Future Industries, APA Group, INPEX Corporation, Jemena, Osaka Gas Australia	Hydrogen	n/a	2029+	
Illawara Hydrogen Technology Hub	BOC Ltd.	Hydrogen	$55m	2025	
ScaleH2	ATCO Australia Pty Ltd	Hydrogen	n/a	2029+	
Eastern gas pipeline extension	Jemena	Infrastructure	$400m	2023	
Hunter gas pipeline	Santos	Infrastructure	$1,200m	2025	
Broken Hill Cobalt Project	Cobalt Blue Holdings	Nickel, cobalt	$600m	2026	

Project	Company	Commodity group	Cost estimate (AUD)	Estimated start of commercial operations	Emissions
Flemington	Australian Mines Limited	Nickel, cobalt	$74m	2026	
Blue Bush	Tellus Holdings	Other Commodities	$140m	2026+	
Platina Scandium Project (Owendale)	Rio Tinto	Other Commodities	$83m	2028+	
Taronga Tin Project	First Tin	Other Commodities	$114m	2026	

Table 6: South Australia

Project	Company	Commodity group	Cost estimate (AUD)	Estimated start of commercial operations	Emissions
Central Eyre Iron Project	Iron Road Ltd	Iron Ore	$2,500m	2029+	114,460
Hillside	Rex Minerals	Copper	$854m	2025	73,802
Razorback	Magnetite Mines Limited	Iron Ore	$1,900m	2025+	62,094
Magnetite Expansion Project, Middleback Ranges	SIMEC Mining	Iron Ore		2024+	31,047
Siviour Graphite Project (Stage 2)	Renascor	Other Commodities	$550m	2028	25,000
Siviour Battery Anode Material Project	Renascor	Other Commodities	$395m	2026	25,000
Siviour Graphite Project (Stage 1)	Renascor	Other Commodities	$215m	2025	25,000
Cape Hardy Green Hydrogen Hub (phase 1)	Amp Energy, Iron Road Ltd	Hydrogen	$15,000m	2028	
Cape Hardy Green Hydrogen Hub (phase 2)	Amp Energy, Iron Road Ltd	Hydrogen	$15,000m	2029+	
entX and Kimberly-Clark – Millicent Mill Green Hydrogen Project (stage 1)	entX Limited Kimberly-Clark Australia	Hydrogen	n/a	2029	
entX and Kimberly-Clark – Millicent Mill Green Hydrogen Project (stage 2)	entX Limited Kimberly-Clark Australia	Hydrogen	n/a	2026	
Green Cement Decarbonisation Project	Hallett Group, Elecseed, Korea Hydro and Nuclear Power Company	Hydrogen	n/a	2028	
Neoen-ENEOS Export Project	Neoen Australia, ENEOS Corporation	Hydrogen	n/a	2029+	
Port Pirie Green Hydrogen Project (Phase 1)	Trafigura Group Pte. Ltd	Hydrogen	n/a	2027	
Port Pirie Green Hydrogen Project (Remainder)	Trafigura Group Pte. Ltd	Hydrogen	n/a	2029+	
SM1	Vast	Hydrogen	n/a	2026	
East Coast Gas Storage	3dOil	Infrastructure	n/a	2029+	
Myponie Point- Iron Ore export facility	Flinders Ports Pty Ltd/Hawsons Iron Ltd	Infrastructure	n/a	2024+	
Neurizer Urea Project	NeuRizer	Hydrogen	$2,600m	2025	
Leigh Creek coal to gas - project stage 2	NeuRizer	Oil & gas	$2,600m	2026+	

Project	Company	Commodity group	Cost estimate (AUD)	Estimated start of commercial operations	Emissions
Carrapateena Block Cave 1 Expansion	BHP	Copper	$1,250m	2026	
South Australian Government Hydrogen Facility	The Office of Hydrogen Power South Australia	Hydrogen	$593m	2026	
Kalkaroo	Havilah Resources	Copper	$332m	2025+	
Elizabeth Creek (Phase 2)	Coda Minerals	Copper	$320m	2027	
Elizabeth Creek (Phase 1)	Coda Minerals	Copper	$277m	2027	
LNG import terminal - Outer Harbor Project	Venice Energy	Oil & gas	$250m	2026	
Eyre Peninsula Gateway Project – Demonstrator Stage	The Hydrogen Utility (H2U)	Hydrogen	$240m	2026	
Port Bonython Hydrogen Hub	Government of South Australia (Project lead on behalf of itself and project partners)	Infrastructure	$140m	2029+	
Paris Silver Project	Investigator Resources Limited	Lead, Zinc, Silver	$131m	2024	
Koppamurra	Australian Rare Earths Limited	Other Commodities	$108m	2026	
Uley 2	Quantum Graphite Limited	Other Commodities	$80m	2025+	
Maldorky	Havilah Resources	Iron Ore	$70m	2029+	
Mindarie Mineral Sands Project	Murray Zircon	Other Commodities	$70m	2023	
Great White Kaolin Project (Stage 2 & Stage 3)	Andromeda	Other Commodities	$68m	2027	
Bird in Hand (Adelaide Hills) Gold Project	Terramin Australia Limited	Gold	$54m	2024+	

Table 7: Victoria

Project	Company	Commodity group	Cost estimate (AUD)	Estimated start of commercial operations	Emissions
Goschen Project	VHM Ltd	Other Commodities	$600m	2025	200,000
Avonbank Mineral Sands Project	WIM Resource Pty Ltd	Other Commodities	0	2025+	100,000
Fingerboards	Gippsland Critical Minerals	Other Commodities	$200m	2028+	80,148
Wimmera	Iluka Resources	Other Commodities	$775m	2028	50,000
Stockman Project	Aeris Resources	Copper	$202m	2025+	50,000
LNG import terminal - Geelong LNG Regasification Terminal	Viva Energy	Oil & gas	$300m	2024	47,906
Golden Beach Gas project	GB Energy	Oil & gas	$500m	2025	43,567
Western Outer Ring Main	APA	Infrastructure	$122m	2023	40,554

Project	Company	Commodity group	Cost estimate (AUD)	Estimated start of commercial operations	Emissions
Geelong Hydrogen Hub	GeelongPort, CAC-H2	Hydrogen	n/a	2029+	
Portland Renewable Fuels	HAMR Energy	Hydrogen	n/a	2027	
CarbonNet Project	Victorian Government/Australian Government	Infrastructure	n/a	2027	
South East Australian CCS Hub	Exxonmobil	Infrastructure	n/a	2025	
Liquefied Hydrogen Supply Chain Commercial Demonstration Project	Electric Power Development Co. (J-Power), Sumitomo Corporation, Kawasaki Heavy Industries (KHI), Iwatani Corporation	Hydrogen	$2,350m	2029+	
Judith Gas Field Project	Emperor Energy Ltd	Oil & gas	$500m	2027	
Trefoil Project	Beach Energy	Oil & gas	$459m	2025	
Manta Gas Project	Cooper Energy	Oil & gas	$416m	2028	
Kipper	Esso / Woodside / Mitsui	Oil & gas	$400m	2023	
Otway (Phase 3) Development Project	Cooper Energy	Oil & gas	$400m	2024	
Donald Rare Earth and Mineral Sands Project	Astron Limited	Other Commodities	$364m	2025	
LNG import terminal - Port Philip Bay	Vopak	Oil & gas	$250m	2026	
Latrobe magnesium project (Stage 2)	Latrobe Magnesium	Other Commodities	$102m	2025	
Hydrogen Portland Project	Countrywide Renewable Hydrogen Limited, Glenelg Shire Council, Port of Portland	Hydrogen	$85m	2029+	
Melbourne Hydrogen Hub	Countrywide Renewable Hydrogen Limited	Hydrogen	$75m	2029+	
SWP Expansion	APA	Infrastructure	$71m	2023	
Hydrogen Park Murray Valley	Australian Gas Networks (AGN) part of Australian Gas Infrastructure Group (AGIG)	Hydrogen	$64m	2025	
Otway Basin	Beach Energy, Ofer Global Group	Infrastructure	$60m	2029+	
Enterprise Project	Beach Energy	Oil & gas	$51m	2024	

Table 8: Tasmania

Project	Company	Commodity group	Cost estimate (AUD)	Estimated start of commercial operations	Emissions
Savage River Expansion	Grange Resources/Sojitz/Kobe Steel	Iron Ore		2025+	74,513
ABEL Energy Bell Bay Powerfuels Project	ABEL Energy	Hydrogen	$1,200m	2027	
HIF Carbon Neutral eFuels Manufacturing Facility	HIF Global	Hydrogen	$1,000m	2027	

Fortescue Green Hydrogen and Ammonia Plant	Fortescue Metals Group	Hydrogen	$670m	2029+	
Hobart zinc works electrolysis plant	Nyrstar	Lead, Zinc, Silver	$400m	2024	
Mount Lyell	Sibanye Stillwater	Copper	$279m	2025	
Renison Expansion Project (Rentails)	Metals X and Greentech Technology International Limited	Other Commodities	$205m	2028+	
Hellyer Tailings Project	EnviroGold Global Ltd	tasminain	$137m	2024	
Hydrogen Bell Bay	Countrywide Renewable Hydrogen	Hydrogen	$77m	2029+	
Hydrogen Brighton Project	Countrywide Hydrogen Pty Ltd	Hydrogen	$60m	2029+	
Heemskirk	Stellar Resources	Other Commodities	$57m	2026+	
George Town Project (stage 1a)	LINE Hydrogen	Hydrogen	n/a	2024	
George Town Project (stage 1b)	LINE Hydrogen	Hydrogen	n/a	2029+	
H2TAS Project	Woodside Energy Ltd , Marubeni Corporation, IHI Corporation	Hydrogen	n/a	2025+	
Origin Green Hydrogen and ammonia Plant	Origin Energy	Hydrogen	n/a	2029+	
Bell Bay Hub	Tasmanian government	Infrastructure	n/a	2029+	
Tasmania Green Hydrogen Hub	Tasmanian government	Infrastructure	n/a	2029+	
Mt Lindsay	Venture Minerals	Other Commodities	n/a	2026+	
Goschen Project	VHM Ltd	Other Commodities	$600m	2025	200,000
Avonbank Mineral Sands Project	WIM Resource Pty Ltd	Other Commodities	0	2025+	100,000

Source: IPA; Department of Industry, Science and Resources

End Notes

1. Geoff Chambers, 'Anthony Albanese refuses to rule out climate trigger,' *The Australian* (30 May 2024): https://www.theaustralian.com.au/nation/politics/anthony-albanese-refuses-to-rule-out-climate-trigger/news-story/2803bcf3ac9e67b5a58cb534265362a0.

2. Commonwealth, *Parliamentary Debates*, House of Representatives, 5 September 2005, 16-18 (Anthony Albanese).

3. Graeme Samuel, *Independent Review of the EPBC Act – Final Report* (Department of Agriculture, Water and the Environment, Canberra, October 2020) 47.

4. Explanatory Memorandum, Environment Protection and Biodiversity Conservation Amendment (Climate Trigger) Bill 2022 (Cth) 2.

5. Office of the Chief Economist, 'Resources and energy major projects: 2023' (Department of Industry, Science and Resources, 18 December 2023): https://www.industry.gov.au/publications/resources-and-energy-major-projects-2023.

6. Environment Protection Authority (WA), *Great Northern Highway – Bindoon Bypass* (Report 1742, June 2023) 14.

7. Mainroads Western Australia, 'Bindoon Bypass' (Online., 12 June 2024): https://www.mainroads.wa.gov.au/projects-initiatives/all-projects/regional/bindoon-bypass/.

Institute of Public Affairs

IPA RESEARCH NOTE

Nature Positive legislation to put green tape over 7,000 pages

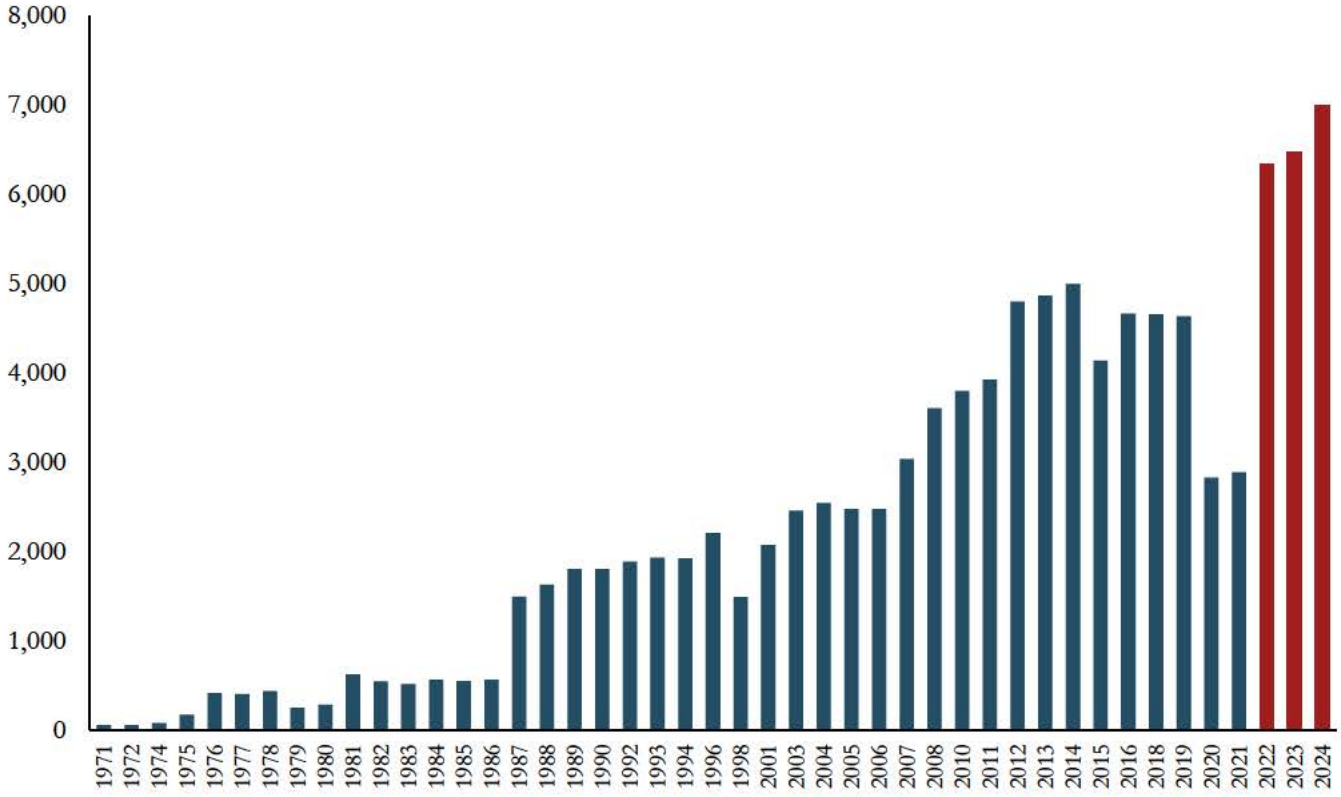
JULY 2024

Lachlan Clark
Research Fellow

Key findings

- In 2021—the final full year of Coalition government—the federal environment department was responsible for enforcing less than 3,000 pages of legislation.
- If the three Nature Positive bills currently before the parliament are passed, the number of pages of legislation enforced by the federal environment department in 2024 will reach at least 7,004 pages, an increase of 142 per cent on 2021 levels.
- As the first federal environment department was responsible for enforcing just 57 pages of legislation in 1971, by 2024 there has been a 122-fold increase in the volume of federal environmental legislation.

Table 1: *Number of pages of legislation administered by the federal environment department*



Source: Institute of Public Affairs; Federal Register of Legislation

- Over the past 12 months, the following act and bills have been responsible for the largest increase, and potential increases, in the number of pages administered by the environment department.
    - *Nature Repair Act 2023* (260 pages. Came into effect December 2023).
    - Nature Positive (Environment Law Amendments and Transitional Provisions) Bill 2024 (124 pages. Currently before parliament).
    - Nature Positive (Environment Protection Australia) Bill 2024 (40 pages. Currently before parliament).

Methodology

This research note updates previous research published by the Institute of Public Affairs in 2019 that measured the growth of federal environmental legislation since 1971.

The analysis uses administrative arrangements orders to determine what is categorised as environmental legislation. Administrative arrangement orders are published by the government to distribute all statutes in force to their responsible departments. The Federal Register of Legislation contains past and present versions of all Commonwealth laws, allowing a historical count of pages of legislation in force over time.

The most recent administrative arrangement order was issued in October 2022. The page number count for 2023 and 2024 uses the stock of legislation listed in the October 2022 order, as well as new legislation that has been introduced and passed, including bills that are currently in parliament, that is listed as being administered by the environment department on the Federal Register of Legislation as of 1 July of each year.

In February 2020, the administration of energy policy was removed from the environment department, while the remainder of the environment department was merged with the agriculture department under the stewardship of separate ministers. Significantly, throughout that period, the agriculture minister was more senior than the environment minister.

Given the departmental arrangements in place between February 2020 and October 2022, this analysis excludes from the page count of environmental legislation any laws that were previously administered by the agriculture department. Including these laws would overstate and misrepresent the amount of environmental laws being administered in that period.

Analysis

The volume of legislation administered by a federal environmental department or minister has never been higher than it is today.

Currently, the number of pages of legislation in force that is administered by the federal environment department is 6,803. In May 2024, the federal environment minister introduced into the House of Representatives three bills as part of the federal government's 'Nature Positive plan':

- The Nature Positive (Environment Information Australia) Bill 2024.
- The Nature Positive (Environment Law Amendments and Transitional Provisions) Bill 2024.
- The Nature Positive (Environment Protection Australia) Bill 2024.

The addition of these bills would increase the number of pages of environmental legislation administered by the Department of Climate Change, Energy, the Environment and Water to 7,004. This represents a 122-fold increase in the amount of environmental legislation since 1971, when the Commonwealth environment department—the Department of Environment, Aborigines and the Arts—administered just 57 pages of federal legislation.

The administrative rearrangements in October 2022 re-established a larger and more prominent environment department, responsible for administering significantly more laws. This is partially due to the transferring of responsibility for existing laws from other ministers to the environment minister. It is also due to the passage of new legislation administered by the environment minister, including the *Climate Change Act 2022* (which in part enshrined in legislation the net zero by 2050 target), the *Safeguard Mechanism (Crediting) Amendment Act 2023* (which expanded the Safeguard Mechanism into a carbon tax-like instrument), and the *Nature Repair Act 2023*.

The volume of environmental legislation will likely grow further. The Nature Positive Plan—the federal government's December 2022 response to the *Independent Review of the EPBC Act*—originally committed to implementing the proposed reforms and creating new national environmental legalisation within the first six months of 2023. Since then, the federal government has instead decided to stagger the proposed reforms into three stages. The first stage—completed in December 2023—established the Nature Repair market and expanded the water trigger. The second stage—currently before the parliament—involves establishing new government agencies, namely Environment Protection Australia (EPA) and Environment Information Australia (EIA), and transfers regulatory powers from the environment minister to the CEO of the EPA. The third stage—which has no set timeline—involves completely overhauling the EPBC Act and implementing the remaining reforms outlined in the Nature Positive Plan.

In November 2022, the Department of Climate Change, Energy, the Environment and Water also published the federal government's response to the Destruction of Juukan Gorge (the Response). In the Response, the federal government endorsed recommendations to increase and expand the regulation of matters relating to Indigenous cultural heritage. One of the recommendations includes giving 'traditional owners' a special right to 'effectively enforce Commonwealth protections through civil action'. This would potentially be analogous to section 487 of the *Environment Protection and Biodiversity Conservation Act 1999* which gives environmental groups a special legal privilege to enforce environmental protections through civil action by challenging ministerial approvals of major projects.

Recommendations for addressing environmental overregulation

At present, overregulation is acting as a roadblock to Australian businesses and individuals and undermines economic productivity and competitiveness. Environmental law, being a significant component of the regulatory framework, is a key contributor to the problem.

At the national level alone, environmental laws have over time become larger in size and more restrictive in practice. For instance, the *Environmental Protection and Biodiversity Conservation Act 1999* (EPBC Act) is the largest piece of federal environmental legislation. The number of regulatory restrictions contained within the EPBC Act and the subsidiary legislation enabled by it, increased by 445 per cent, from 885 restrictions in the year 2000 to 4,820 restrictions in 2019. In addition to this, laws with respect to environmental matters are imposed by both state and federal governments, meaning there is significant regulatory duplication.

Federal environmental laws and regulations have also become weapons wielded by the environmentalist and conservationist movement to disrupt Australian industry and business. For example, section 487 of the EPBC Act has enabled environmental groups to challenge ministerial approvals of major projects. Institute of Public

Affairs research found between 2000 and 2020, legal activism by environmental groups through section 487 had put $65 billion of investment at risk by holding major projects up in court for a cumulative total of 10,100 days.

To address the problem of environmental overregulation, lawmakers should:

Reduce the size and restrictiveness of the EPBC act to pre-2000 levels.

Setting goals to remove excessive green tape should start with reforming national environmental laws, reverting to the more reasonable levels which were managed prior to 2000. To achieve this target, regulatory reduction methods such as the one-in two-out rule, successfully adopted in the United States, that requires policymakers to remove at least two existing regulations for every new rule added. Other reforms to the EPBC Act should include repeal of section 487 or the ban on nuclear power under section 140A.

Devolve environmental regulation to the states.

Responsibility for environmental regulation should be left to the jurisdiction that can manage it most efficiently while imposing minimal costs on business and development. One-size-fits-all centralised regulation is inappropriate, as the federal government is too far removed from the unique environmental circumstances of each state. Parliament should assess and eliminate regulatory duplication by devolving to the states the responsibility for administering environmental laws.

Focus on outcome rather than process.

Environmental regulation should focus on the outcome of regulation, rather than compliance with a process. Under the current regulatory approach, regulators impose unnecessary costs on regulated actors. This causes an inefficient allocation of scarce resources for both regulators and the regulated. Reform should shift regulatory obligations from the pre-operational phase to the operational phase, allowing actors to meet their obligations while they are generating revenue. This makes it easier to meet the costs of these regulations and makes investment more attractive by reducing the opportunity costs of investing and starting a business or project.

End Notes

1. Department of Climate Change, Energy, the Environment and Water, *Nature Positive Plan: better for the environment, better for business* (December 2022) <https://www.dcceew.gov.au/environment/epbc/epbc-act-reform>.
2. Ibid.
3. Department of Climate Change, Energy, the Environment and Water, *Australian Government Response to the Joint Standing Committee on Northern Australia's: A Way Forward and Never Again* (November 2022) <https://www.dcceew.gov.au/sites/default/files/documents/australian-response-to-destruction-of-juukan-gorge.pdf>.
4. Cian Hussey, *The Growth and Complexity of Environmental Regulation* (Institute of Public Affairs Research Report, 2016).
5. Kurt Wallace, *Section 487: How Activists use Red Tape to Stop Development and Jobs (2020 Update)* (Institute of Public Affairs Research Report, March 2020).
6. Cian Hussey and Daniel Wild, *The Trump Administrations' Red Tape Reduction Agenda* (Institute of Public Affairs Research Report, 2019).
7. Darcy Allen and Daniel Wild, *Five Principles of Red Tape Reduction* (Institute of Public Affairs Research Report, 2016).