

ACBF Response to Productivity Commission Review Consultation Questions

6/06/2025

Pillar 5 Investing in cheaper, cleaner energy and the net zero transformation

Section 2. Reduce the cost of meeting carbon targets

Enduring, broad-based market mechanisms are the best way for governments to reduce carbon emissions and governments have made progress on adjusting policy settings towards this goal.

But more work is needed to make emissions-reduction signals across sectors and jurisdictions more efficient and consistent to support better investment decisions. Some policies to reduce emissions also have a higher cost for governments per tonne of carbon avoided compared to other approaches.

1. What could be done to improve the cost-effectiveness and alignment of policies to reduce emissions across the industrial, electricity and transport sectors?

In your response, please:

outline your views on near-term priorities with supporting evidence

provide examples of different emissions-reduction signals working together to reduce emissions or where misaligned signals produce adverse outcomes.

ACBF Response – Question 1

Efficient emissions reduction requires mechanisms that a) reduce the economy-wide costs of abatement and b) effectively reduce emissions.

The reformed Safeguards Mechanism and its integration with the Australian Carbon Credit Unit (ACCU) scheme provide the most advanced domestic deployment of carbon pricing mechanisms. Ensuring Australia learns from the initial operation of the Safeguards scheme is critical to future deployment of the expanded carbon trading, pricing, and land sector carbon removals that are needed to achieve net zero. Specifically, it is important that lessons are drawn to distinguish between legitimately ‘cost effective’ operation of emissions reduction schemes, and a perverse ‘least cost’ approach that results in delayed or ineffective emissions reduction.

Carbon pricing mechanisms serve to capture environmental externalities, provide relatively more efficient abatement pathways, and to price pollution to the point where it changes behaviour (such as investing in new technology or processes to avoid emissions). The Safeguards Mechanism intends to serve these objectives.

While it is early in the implementation of the baseline-and-credit Safeguards Mechanism, there are signs that abatement integrity concerns in the supply of offset credits (both ACCUs and Safeguard Mechanism Credits) mean the scheme's intent in capturing, trading and abating pollution is being challenged. An abundance of low cost, low integrity credits (that is, credits where there is evidence that credited projects do not represent real, additional and permanent abatement) artificially reduces the cost of abatement, as these credit types do not reliably reduce emissions and therefore do not accurately price emissions reduction (for example, see Macintosh, M (2025) *As Australia's carbon offset industry grapples with integrity concerns, how can companies genuinely tackle climate change?*, the Conversation, 27/05/2025).

This carbon market dominance by 'least cost' abatement options disincentivises polluter action to address the direct, point source emissions reductions that occur higher up the marginal abatement cost curve and that are ultimately required to move closer to net zero.

Low cost, low integrity credits also disincentivise the required orders-of-magnitude increase in supply of high integrity carbon removal projects that are essential to abate economy-wide 'residual' emissions. As the Climate Change Authority's (CCA) *Sector Pathways Review* makes clear, the land sector will need to be removing around 120 Mt of CO₂-e from the atmosphere in Australia by 2050 to meet net zero.

According to CCA modelling, most of this removal is expected to be sourced from biodiverse and carbon plantings (forest planting and restoration), covering between 2.6 and 5.9 million hectares. This is a massive undertaking with long lead times, land and capacity constraints, and social licence and primary production issues to be managed. Environmental plantings projects currently provide less than 1% of Australia's ACCUs.

An artificially low carbon price, caused by markets being dominated by low integrity credits, as well as market share of ACCUs being dominated by those 'least cost' credits, means that scaling up production of high quality but more capital intensive biodiverse environmental plantings projects is being significantly delayed. This market distortion essentially 'kicks the can down the road' and delays the massive expansion required in incentivising biodiverse plantings to remove carbon from the atmosphere. There are also early reports of some investors shying away from carbon project investments due to concerns over low integrity carbon projects in the Australian market, reducing access to capital for much needed abatement projects.

Any delays to rapid scaling up of biodiverse environmental planting projects creates clear risks of missing near term 2030 and 2035 targets, and net zero by 2050, as well as risking social

licence backlash from uncoordinated, rushed, and environmentally perverse landscape change (for example, a situation where rapid policy maker realisation of the need for carbon removals in the early 2030s occurs in the absence of a mature, large scale environmental plantings industry, and results in rapid and uncoordinated monocultural tree planting expansion akin to the Manage Investment Scheme forestry plantation scheme in the 2000s).

The pricing of carbon in a government-established market is inevitably subject to competing stakeholder and political economy concerns, whether it be maintaining business acceptance that the cadence and scale of cost increases can be sustainably absorbed in the course of their operations, or ensuring that the pace and credibility of emissions reductions are sufficient to meet the expectations of the community. To a considerable extent this balancing act is implied or explicit in the design of the Safeguards, for example in relation to prescribed annual reductions and the existence of a cost containment cap.

However, we strongly suggest that upcoming climate policy development and reform opportunities, include 2026 Safeguards review, 2035 target setting, and establishment of sectoral plans explicitly address issues related to distortionary price effects of low integrity, ‘lowest cost abatement’, including disincentivising direct emissions reduction and land sector sequestration projects. We also suggest these processes evaluate the initial operation of the Safeguards Mechanism in terms of the implications for expanded carbon pricing and land sector removal mechanisms to meet net zero by 2050.

More work is needed to make emissions-reduction signals across sectors and jurisdictions more efficient and consistent. Incomplete application of an emissions-reduction signal to a sector would mean that the parts that are covered may bear higher costs than they otherwise would, distorting investment decisions. The objective of filling any gaps would not necessarily be to achieve a higher level of emissions reduction, but to achieve a given level at lower overall cost.

2. Are there gaps in the emissions-reduction policies in the industrial, electricity and transport sectors which should be addressed?

In your response, please:

outline your views on near-term priorities with supporting evidence.

provide examples of adverse outcomes because of policy gaps or reasons why filling these gaps could create adverse outcomes.

ACBF Response – Question 2

Notwithstanding the highly significant improvements to Australia's climate policy architecture since 2022 and the credible reductions pathway mapped to 2030, Australia's most recent emissions reduction accounts show emissions have been static for the past 5 years. This suggests that the 'low hanging fruit' of cost effective energy and land sector emissions reductions have been picked off, to some extent. At the same time, the Climate Change Authority projects Australia will need to remove 133 Mt of CO₂-e from the atmosphere in 2050, mostly from tree plantings, along with major direct emissions reduction across transport, mining, industrial emissions, agriculture and the built environment.

Current policy including renewable energy expansion, the Safeguards Mechanism, ACCU scheme, and vehicle efficiency standards provide a pathway to 2030 targets, noting some uncertainty. This requires an additional 16% reduction on 2005 levels over the next five years.

However, achieving 2035 targets of between 65% and 75% reduction by 2035, as proposed by the CCA, will require an accelerated 22% to 32% reduction over the five years from 2030 to 2035. This will need to occur in an environment where relatively easier and lower cost abatement options will already have been depleted, methods to remove residual emissions

from the atmosphere will need to be ramped up, and plausible pathways to net zero by 2050 will need to be laid out.

Given these challenges, and the long lead times in developing, establishing business and community support, and implementing expanded or new emissions reduction policy, developing post 2030 emissions reduction mechanisms to match the 2035 target is an urgent priority.

While we note the excellent analysis of the CCA on *Sector Pathways* and the stated intent of the Australian Government to develop sector plans, achieving 2035 and 2050 targets will require additional price and trading mechanisms, including those that incentivise the massive expansion of forest restoration required to address residual emissions. While technology improvements, voluntary action, public decarbonisation investments, and the persistence of renewable energy and transport schemes will make essential contributions, the scale of the tasks means an ‘all hands on deck’ policy approach is required.

To that end, we believe the following should be developed and evaluated as potential approaches to meet 2035 and 2050 targets, including through the adoption of 2035 targets, the submission of National Determined Contributions, and the development of Sectoral Plans:

(1) Near and long term ‘removals targets’ as proposed by the Climate Change Authority in the 2024 Issues paper: Targets, Pathways and Progress, including specific ‘land sector removals’ targets. Achieving emissions targets requires addressing *economy-wide* residual emissions. While current mechanisms for removing emissions from the atmosphere are tied to entity-specific emissions liabilities covered under existing schemes (such as Safeguards facilities purchasing some types of land sector ACCUs, like environmental plantings projects) or are ancillary benefits of other land sector activities recorded in national greenhouse accounts (such as forest regrowth or historic landclearing regulation), no mechanisms exist for addressing residual emissions from uncovered and harder to abate industrial, transport or electricity (gas generation) sources, highly diffuse societal sources (such as individual households or landholders), or for increasing landscape sequestration beyond background levels.

While no specific mechanism appears to have been proposed in the CCA’s *Pathways Review*, establishing land sector removal targets and delivering these through new incentives and/or compliance drivers will be necessary to deliver the more than 100 Mt of CO₂-e reductions required annually beyond 2050 from land sector removals. Plausible mechanisms include a

continued and expanded Safeguards Mechanism post 2030, prioritising high integrity land sector removal methods as the key development priority for the ACCU scheme, and stimulating removals through large scale competitive government procurement of land sector removal abatement.

(2) Continuation and Expansion of the Safeguards Mechanism. Preparation for the 2026 Safeguards Mechanism review should include modelling of multiple options for the post 2030 continuation of the scheme, including extensions to 2035 and 2050; and expansion of the scheme to capture additional facilities, for example at 50,000 and 25,000 t of CO₂-e per annum thresholds. This should be undertaken by the Climate Change Authority and include public feedback.

(3) ‘Nature Positive ACCUs’ reforms to redirect and expand the ACCUs scheme to prioritise high integrity carbon projects that remove carbon through biodiverse environmental plantings. The ACCU scheme provides a world leading foundation for expanded land sector sequestration to remove emissions from the atmosphere. However, the scheme is currently dominated by lower quality project types, with some supply of higher integrity ‘avoided emissions’ projects and a much smaller supply of high quality carbon removals (sequestration) projects (environmental plantings).

Delivering the massive expansion of biodiverse environmental plantings required to meet Australia’s emissions targets – in the order of 2.6 to 6 million hectares by 2050, or up to 3 times the size of Australia’s existing plantation forestry estate – will require a rapid and fundamental re-orientation of the ACCU scheme.

There are a range of potential approaches that could contribute to this re-orientation, including regulatory review and reform to ensure all carbon projects use high integrity methods, targeted government procurement, innovation in reducing plantings project establishment capital costs, landholder uptake programs, and removal or increasing of cost containment caps as ACCU prices rise to ensure capital-intensive environmental plantings projects are commercially viable.

More fundamentally, an approach that applies a royalty to ACCU projects that *do not* meet particular criteria, such as delivering biodiversity and carbon removal gains, and directs royalty funds to ACCU projects that do, offers a mechanism to prioritise land sector removals. Such an approach would also deliver existing national environmental restoration targets in the absence of other funding sources, and direct carbon projects to landscapes in a coordinated way that

delivers agricultural productivity benefits and best manages the social licence concerns that will be an inevitable outcome of landscape change.

Given the strong platform of the ACCU's scheme, and the current lack of a mechanism to deliver the large scale land sector removals required to meet Australia's targets, we strongly encourage the Productivity Commission to consider how best the ACCU scheme could be leveraged for this purpose, including through encouraging the Australian Government and Climate Change Authority to assess options through the development of 2035 targets, sectoral pathways, and ongoing ACCU scheme reform.

(4) Reform the regulation and certification of voluntary carbon markets in Australia.

Voluntary purchases of carbon credits are an important mechanism for some businesses to meet their business and strategic objectives. However, integrity concerns over very cheap international credits of dubious integrity, and lower integrity domestically produced carbon credits being used in voluntary carbon schemes, continue to cause concerns for Australian businesses who have been exposed to these credits. For example, a significant number of companies have recently exited the Australian Government run – Climate Active program over these concerns.

The increasing concerns over exposure to greenwashing claims, and integrity concerns in some voluntary carbon credit programs, have created risk of broader rejection of offsetting mechanisms by Australian businesses. A loss of confidence in offsetting due to specific voluntary scheme problems would represent market failure and drive up the cost of abatement by removing carbon crediting as an abatement option.

A logical response to this risk is to drive community confidence in voluntary actions by leveraging the market infrastructure and confidence that the ACCU market has built.

Notwithstanding the need to address method-specific integrity concerns in the ACCU market, we would encourage mechanisms that incentivise voluntary buyers to utilise ACCUs, rather than alternative voluntary schemes, including through the reform of Climate Active scheme.

The experience of cheap, internationally sourced carbon credits undermining confidence in voluntary carbon markets also provides a salutary lesson for any future proposals to allow the use of imported credits in Australian carbon compliance markets or to contribute to emissions reduction more broadly. The primary effect of including internationally sourced credits has been to undermine confidence in carbon trading mechanisms in Australia, and we note the risks of

international credits given the importance of robust carbon trading to underpin achievement of net zero.

Section 3. Speed up approvals for new energy infrastructure

Large energy infrastructure projects must comply with important environmental standards, cultural heritage laws, and other planning requirements. But slow, complex and overlapping approvals processes can cause significant and costly delay. The claim is often made that the approvals process takes too long, but what does the evidence show? We welcome data and illustrative case studies about the extent of the problem and which parts of the process are problematic.

4. Are planning and approvals processes for large energy infrastructure taking too long? If so, what causes the most delay?

ACBF Response – Question 4

Planning and approvals processes vary in pace depending on the jurisdiction. There is proponent reported evidence that some approvals processes – particularly the federal *Environmental Protection and Biodiversity Conservation Act* – are a primary cause of investment risk for clean energy projects. Improvements in the pace and efficiency of federal environmental approvals are required.

It should be noted, however, that this is not an issue unique to clean energy infrastructure. Reformed approvals processes are required and would benefit other key sectors of the economy, including housing construction and mining, as well as ensuring desperately needed environmental conservation and restoration outcomes. Increasing the pace of renewable energy development to meet emissions targets is a national priority and should motivate the reform of federal environmental laws, but the reforms that would improve the situation for renewable proponents are the same as for other key sectors.

Formal reviews, such as the 2020 Samuel EPBC Review and the 2023 Vogel Review in Western Australia, as well as consistent proponent feedback, report that slow approvals are caused by the following factors:

1) A lack of clear environmental standards, priorities and performance measures. As the Samuel Review starkly identified, Australia's national environmental legislation does not set basic standards and performance benchmarks for what effective environmental protection looks like.

This means proponents enter approval processes with no clear direction on the performance bar they need to meet. This creates uncertainties and time delays for proponents who must wait for departmental determinations on what environmental outcomes are required to be met for a particular project or regional context, with regulators hampered by a lack of clear benchmarks in setting assessment requirements.

This lack of standards – an unthinkable failure in other comparable sectors, for example regarding construction or health and safety standards – also results in risk aversion and delays in assessment processes and approval decisions from regulators, including due to legal challenge concerns.

The inability for the Commonwealth, in particular, to establish clear benchmarks for environmental protections has also made it functionally impossible to evaluate and accredit state based assessment and approvals regimes as being equivalent to federal legislative requirements. While this approach has notionally been applied to specific sectors, for example the ‘accreditation’ of regional forest agreement logging regimes, in practice this has relied on removing any requirement for native forest logging to legally meet federal standards, with predictable consequences in the rapid decline of federally listed species known to be impacted by logging operations.

This history of accreditation failure means that a drastically revised approach is required to provide confidence to states and territories, proponents, and stakeholders that there are clear pathways for state approvals processes to achieve equivalent environmental benchmarks as that required under federal law. The foundational building block of any accreditation of state approvals regimes – and the efficiency benefits this could generate for project approvals - must be clear national environment standards, as envisaged by the Samuel Review.

Finally, as well as a set of potential productivity benefits to establishing national environmental standards, a lack of clear conservation benchmarks results in an uncoordinated set of approval conditions, biodiversity offsetting requirements, and strategic conservation prioritisation that results in ‘death by a thousand cuts’ impacts on regional, state and national biodiversity and landscapes. This was highlighted in the Samuel Review’s damning critique that Australia’s federal environmental legislation is not protecting the environment.

Ultimately, protecting the environment is a public good sought by the Australian people. Failures of government policy to deploy the most efficient regulatory and market tools to deliver those sought environment goals – such as meeting Global Biodiversity Framework commitments to

protect and restore ecosystems and protect threatened species – constitute an ongoing source of additional cost and policy failure at federal level. While beyond the scope of this particular review and pillar, we would encourage the Productivity Commission to undertake a full investigation into the full set of regulatory, public investment and market mechanisms that could be deployed by the Australian Government to efficiently meet legislative and international agreement outcomes for environmental conservation and restoration.

2) Inconsistent and unclear approvals process. This includes inconsistent approval conditioning and environmental protection requirements, shifting information and data requirements, and a lack of prescribed procedures and timelines. To greater or lesser extents these issues are identified across jurisdictions but have been identified as a critical problem in the application of the federal EPBC Act, both through direct proponent feedback and formal reviews, including the Samuel Review.

3) Adequate Data. The complexity of environmental data collection, and the scientific uncertainty of the status and trajectories of specific environmental matters make setting protect benchmarks and assessing the risks and impacts of specific projects more challenging than comparable public policy issues, for example setting health and safety standards. For example, there are over 2000 federally listed threatened species, with populations that occur in different parts of the country and are impacted by complex threats that are particular to each species.

Notwithstanding these challenges, however, it has been long been recognised that there is a lack of systematic, fit for purpose, openly accessible environmental data for assessment and approvals and conservation planning purposes, particularly at Commonwealth level.

Remedying this can provide authorities with sufficient confidence to set clear performance standards for the environmental bar proponents need to meet in a particular region or location, significantly reducing the need for expensive, slow, and repeated data collection requests of proponents.

While the nature of environmental data means that desktop and national or regional scale data will in many cases still need to be complemented with site specific studies, an improved federal data collection capacity, including leveraging new spatial technologies, can massively reduce the time and costs of project specific information gathering and reducing risk aversion in approvals and conditioning that is a major source of regulatory delay.

4) Resourcing and expertise deficits, poor systems and processes, and risk aversion in regulatory agencies. Industry feedback consistently highlights specific challenges in engaging with regulatory departments and agencies that aggregate to create major delays and increase assessment costs. This includes inconsistent and constantly shifting assessment processes, a lack of prescribed timelines or commitment to meet deadlines, a lack of expertise including misunderstanding of conflicting regulatory requirements and on ground industry conditions, a revolving door and lack of seniority of staff, inconsistent proponent engagement and a lack of case management, and risk aversion in making decisions which results in continual ‘can kicking’ requests for additional information.

The root cause of this failure of regulatory efficiency is a government failure to prioritise environmental assessments and approvals as a core economic and productivity function of government, particularly at federal level. As leading renewables developers have pointed out, approvals uncertainty and delay are a critical impediment to project development, with delays leading to loss of investment, reduced cash flow, lower production and increased costs. However, approvals have been commonly siloed as an environmental issue, rather than a key potential source of unrealised economic reform potential.

Historically, this has meant that government approaches to assessment and approvals regulation have swung between risk averse regimes that add layers of inefficient and environmentally ineffective process requirements over time, and light regulation and agency de-funding that invariably results in poor environmental outcomes, legal risks, and social licence backlash that undermines industry legitimacy.

A revised approach is required that aligns consistent regulatory process, clear environmental benchmarks, adequate data, and prioritisation of regulatory resourcing and processes that treats environmental assessment and approvals as a core economic lever, whilst more efficiently and effectively delivering the environmental outcomes sought by Australian society.

Many reforms have been proposed in the past to expedite planning and approvals. We are interested in identifying concrete, tangible reforms that will make the most difference.

5. How can planning and approvals processes be sped up without unduly compromising regulatory standards?

In your response, you might want to: provide supporting evidence, talk about examples from other countries.

ACBF Response – Question 5

Addressing slow and ineffective environmental approvals, specifically at federal level, can be delivered through the following reforms

1) Establishing clear and practically applicable *national environmental standards*.

Establishing clear benchmark for protecting the environment is critical to system reform. These national environmental standards provide the basis for proponents to have a clear understanding of the environmental outcomes they need to deliver, for regulators to set consistent requirements, and states and territories to have their approvals systems accredited as meeting national requirements.

National environmental standards on specific aspects - including protection of matters of national environmental significance, offsetting rules, and regional conservation planning - will speed up approval processes, supporting streamlined processes and a 'quick yes' for complying developments. Importantly, these standards also provide the basis for a 'quick no', reducing opportunity costs for proponents in pursuing developments that will not meet environmental standards, allowing capital resources to be allocated to more productive uses, and ensuring agency resources are not tied up assessing applications that are not approvable.

Effective national environmental standards are also the key requirement for accrediting states and territories to provide 'single desk' assessment processes. Demonstrating that state assessment processes can deliver environmental outcomes that meet federal legal requirements depend on clear, measurable and practical benchmarks. The productivity outcome of state accreditation is significant in reducing concurrent and overlapping assessments for project approvals.

2) Ensuring assessment, approvals and compliance processes following standardised and consistent processes, governed by an independent, professional and well-resourced national regulator.

Process inconsistency is a primary source of project risk. Industry concerns on unclear and changing processes, undefined and moving timeframes, repetition of information requests, idiosyncratic approval conditions, poor case management and a lack of departmental resourcing and expertise are widespread across the clean energy sector and other major users of the EPBC Act, including the mining and property sectors.

We strongly recommended two specific reforms are undertaken to address this consistency.

Firstly, an independent and well-resourced national regulator – a national Environment Protection Authority – with a dual mandate of delivering environmental protection and efficient assessment and approvals processes, is established as a matter of urgency. Durable, independent, expert EPAs have provided the foundations of effective state approvals schemes, and the failure to establish an independent Commonwealth regulator has resulted in a lack of transparency and consistency in approvals processes, a lack of transparency and accountability in why and how assessment and approvals decisions are made, and demonstrable failures by the Commonwealth to protect the environment over the last 25 years.

In addition to clear mandates and statutory independence, establishing an independent regulator presents a clear opportunity to establish an agency with accountability to the Australian Parliament and relevant Ministers, a culture in service of environmental outcomes and economic efficiency, and targeted resourcing and delivery focused on delivering those outcomes.

Secondly, approvals processes should be ‘scaffolded’ off of national environmental standards. Standards would set principle-level and practical benchmarks which are then codified in a set of guidelines and practices that are embedded in the everyday delivery and practice of assessment and approvals processes by a national EPA. The opportunity to reform both legislation and implementation means the collection of inconsistent instruments, documents, and processes that have accumulated over the 25 years of the process heavy EPBC can be replaced and modernised to meet the needs of key sectors and the environment, in circumstances of accelerating economic transitions and an undeniable crisis in the protection and restoration of the nation’s unique biodiversity.

3) Establish Environment Information Australia to provide critical data to speed up environmental approvals and prioritise conservation outcomes.

The lack of publicly available, consistent environmental data that is linked to national environmental priorities and approvals benchmarks has been a long standing constraint on efficient approvals processes. This results in resource and time intensive data collection by proponents, repeated information requests, and difficulties in making assessment decisions due to data deficiencies.

Australia invests heavily in agencies such as Geoscience Australia to facilitate economic activity, in that case the exploration and development of minerals, but then fails to invest similarly in the core environmental data collection that would then facilitate efficient environmental approvals. Given the alarming ongoing environmental declines and data-deficiency-induced guesswork in the pace of those declines highlighted in every state of the environment report, there is also a long standing public good case for investing in environmental data to understand the actual state of Australia's environment.

Legislative reforms propose the establishment of a national data collection agency, Environment Information Australia, to provide data that can directly facilitate faster and more environmentally effective assessment and approvals, and provide data that can prioritise conservation and restoration interventions, giving clear direction to project proponents on actions they can undertake to more readily meet approval conditions, such as regional restoration or species protection actions.

We strongly support this proposal, and encourage the EIA model to incorporate essential design features such as prioritising data collection in regions with higher development and environmental pressure (such as renewable energy zones), ensuring full data transparency and access for proponents and stakeholders, having sufficient resourcing and technical capacity to adopt and utilise emerging technology, developing a case management and service culture, building strong relationships with state government agencies, and having powers to compel proponents and other data holders to provide data that can be used to the benefit of approvals efficiency and environmental outcomes.

Given the urgency of the net-zero transition, some countries have introduced legislative processes and administrative features to specifically streamline approvals of clean energy, treating them differently to other types of infrastructure projects.

6. Should clean energy projects be treated differently to other projects for the purpose of environmental and other approvals? If so, how?

ACBF Response – Question 6

There is no clear case for renewable energy projects to be provided special carve outs or dispensation in respect of environmental approvals. Previous attempts to provide ‘special’ approaches to key industries have universally led to both poor economic outcomes and loss of social license to the relevant industry (i.e. forestry, aquaculture) However, legislative reforms of federal environmental law that facilitate regional and sector specific approvals requirements and streamlined pathways, allied with reformed institution and processes for assessment and approvals, specifically through a professional, independent regulator in the form of a national EPA, offer clear benefits that should be applied to the renewable energy sector as a priority, as well as being available to other key sectors.

While we note some interest in considering the positive environmental effects of renewable energy projects through approvals processes, and encourage efforts to explore practical ways this could be done, based on the suggestions we are aware of, it appears current proposals are either impractical or involve substantial social licence risk:

1) While climate change is a clear and present threat to many species and ecosystems that are listed as matters of national environmental significance (MNES), any contribution that an individual clean energy project may make to the recovery of a species through a reduction in carbon emissions is effectively impossible to quantify and attribute.

For example, a wind farm may impact a particular bird species through direct impacts such as breeding habitat clearance or turbine strikes. Conversely, while global temperature increases may threaten the viability of that species, calculating the beneficial effect of an individual windfarm on reducing temperature increases and consequently improving the species’ prospects would involve virtually impossible calculations against emissions counterfactuals,

effects of project carbon emissions displacement on global temperature, and attribution that global temperature change on the ecology and persistence of that species.

While there have been some proposals to recognise climate considerations in renewable energy projects, to date these proposals appear to lack a clear mechanism that would enable the genuine and equivalent contribution to protection of listed species and ecosystems to be quantified.

2) Past experience of carve outs for specific sectors that recognise notional environmental benefits or sector specific circumstances have been a noted environmental, social licence and economic failure. For example, the Regional Forest Agreement regime that established an effective exemption from national environmental approvals law has overseen a precipitous collapse in populations of endangered species known to be impacted by logging, such as Swift Parrots, Greater Gliders, and Koalas, concurrent to a precipitous collapse in industry social licence, production volume, and value.

Considering these drawbacks to a sector specific carve out, it would be more logical for a streamlined approval, regional conservation planning, and offsets regime to be established that provides pathways for renewable energy developers to have more efficient and effective options to meet environmental approval conditions and environmental social licence concerns.

Specific actions highlighted by the sector include:

a) having a defined but flexible set of conservation, restoration, land management and offset activities identified for a specific region and/or project type from the outset of an environmental assessment so proponents know the 'bar they have to meet'.

b) regional conservation planning that identifies environmental priorities in a specific region where there may be multiple projects from the same sector. This would, for example, identify conservation and restoration priorities that could address project and cumulative impacts, and provide up front requirements for proponents (as well as governments and other interests) to invest in activities such as protected area establishment, connectivity corridor restoration or invasive species management.

c) a standardised set of guidelines, data requirements, and timeframes for renewable energy project types that remove the inconsistency and shifting timeframes that provide a key source of cost and investment risk.

d) industry-specific case management and expertise in regulatory staff, including located in states or regions where regulatory staff can develop familiarity with on ground conditions and operating environments.