Implementing Australia's Strategy for Nature 2024-2030

Purpose of this Submission

The Environment Institute of Australia and New Zealand (EIANZ) welcomes the opportunity to contribute to the development of the *Implementation Plan for Australia's Strategy for Nature 2024–2030*. This submission aims to ensure the strategy's implementation moves beyond aspiration to deliver genuine transformation in how Australia protects nature sustainably.

This transformation requires:

- Strong leadership and clear governance
- Rigorous adaptive design with built-in feedback loops
- Transparent accountabilities and performance reporting
- Adequate resourcing across all implementation phases
- Professional delivery involving qualified practitioners.

EIANZ is Australasia's peak body for environmental professionals. Our 4,000 practitioners span diverse technical professions - including scientists, policymakers, engineers, lawyers and economists - working at the forefront of impact assessment, biodiversity, climate change and nature positive outcomes. This submission draws on the expertise of twelve leading practitioners across these disciplines, reflecting EIANZ's commitment to supporting approaches that secure measurable ecological outcomes while demonstrating tangible value to the Australian community.

Structural Alignment Concerns

While this submission addresses the specific questions in the discussion paper, EIANZ notes an important issue: the discussion paper does not consistently reflect the structure or breadth of *Australia's Strategy for Nature 2024–2030*. Discrepancies in emphasis and scope create fragmentation between the Strategy and its proposed implementation plan.

Full structural alignment is essential. Without it, implementation risks becoming disconnected from the Strategy's core goals and targets, undermining the entire framework's effectiveness.

Overarching Observations on the Strategy and Implementation Plan

The Need for Transformational Change

The Strategy correctly identifies the urgency of addressing biodiversity decline and the need for coordinated national action. However, achieving the 2030 and 2050 goals requires fundamental transformation in how Australian society, economy and environment interact. Simply continuing approaches that have failed to halt biodiversity loss will not deliver results.

Leadership must come from the highest levels of government, with oversight embedded within the Department of the Prime Minister and Cabinet to ensure accountability and cross-portfolio commitment.

National Scope and Federal Leadership

EIANZ strongly supports the Strategy's national scope. Biodiversity does not recognise jurisdictional boundaries, and truly national effort is essential, particularly where bioregions cross state or territory borders.

Yet history demonstrates that since Federation, Federal, State and Territory approaches and priorities on environmental protection issues have differed. For this plan to succeed:

- The Commonwealth must lead by example
- A clear federal strategy must sit within the national framework
- Defined accountabilities for delivery are essential
- Transparent performance reporting on these accountabilities is required.

Beyond Numerical Targets: Ecological Outcomes Matter

The Strategy should avoid equating numerical achievement with ecological success. While Australia tracks well towards the 30×30 protection target (already achieved for marine areas and nearly achieved for terrestrial systems), terrestrial gains concentrate in arid zones, leaving many eastern ecosystems under-represented.

Targets are valuable only when well designed and delivering measurable improvement in important biodiversity condition and resilience. They must:

- Adhere to SMART principles (specific, measurable, achievable, relevant, time-bound)
- Link explicitly to priority ecological outcomes rather than broad aspirational statements.

Our submission specifically comments on pragmatic wording regarding the nominated extinction objectives.

Critical Gaps in the Implementation Plan

EIANZ considers all content in the draft Implementation Plan necessary but insufficient to achieve overall nature positive objective. Two broad gaps remain:

1. Whole-of-government mindset shift

There is a need for genuine cultural transformation so that protecting and restoring nature are treated as central to Australia's economic, societal and policy systems, not as peripheral environmental programs. Without this accountability, cultural and structural shift, the Plan will likely fall short of delivering the transformational change envisioned in the Strategy and required to support current and future Australian communities.

2. Absence of technical detail

The plan omits necessary technical detail to confirm it is truly comprehensive and effective. Much of our commentary below addresses this gap, stressing the need for further elaboration on:

- Prioritisation frameworks
- Clear accountabilities
- Measurement methodologies
- Funding commitments
- Coordination mechanisms.

Systemic Barriers and Enablers

Governance and Coordination

Responsibility for nature protection is widely distributed across and within jurisdictions, yet too often fragmented. The Implementation Plan must clarify roles of the Commonwealth, States and Territories, and local governments to avoid gaps, duplication and diffusion of accountability.

A robust coordination role should be led from within the Prime Minister and Cabinet Department. This high-level leadership can be supported technically by Environment Information Australia.

Adequate and Realistic Resourcing

Funding for biodiversity conservation has historically been inadequate, reflected in continuing decline of many ecosystems and species. The Implementation Plan must be fully funded and realistic—there is no room for implied "miracle happens here" assumptions.

Investment should support not only restoration activities but also the ongoing costs of:

- Traditional knowledge and engagement
- Monitoring and compliance systems
- Research programs
- Community engagement initiatives.

The Economic Case for Nature

A strong business case needs public communication to frame nature protection as an economic and national good underpinning productivity, regional livelihoods and national wellbeing.

The Plan must communicate a clear, consistent national narrative: **Protecting nature is central to Australia's economic prosperity and social identity.**

Strengthening Data and Evidence Frameworks

Data and evidence frameworks need to be strengthened. The Strategy relies heavily on progress measures that lack clarity in definition, data source and methodology.

For example, landscape-scale native vegetation corridors (Objective 7E in the broader Strategy framework) are addressed only indirectly within the priority targets on protection, restoration and threatened species recovery. While connectivity is mentioned as important for "well-connected" protected areas and "reconnecting fragmented habitats", the Discussion Paper provides no specific metrics or implementation guidance for measuring corridor extent, quality or effectiveness. Yet corridor delivery will be central to habitat connectivity and species movement under climate stress. Measuring connectivity outcomes requires clarity on:

- Mapping scale and resolution
- Recognition of stewardship lands
- Inclusion of active restoration versus passive recovery

Addressing Taxonomic and Monitoring Deficits

Monitoring and review of many taxonomic groupings remains inadequate. The discussion paper focuses on known species already recognised as threatened, but these represent only part of Australia's biodiversity.

For example, it is estimated that more than 10,000 Australian moth species remain undescribed, and some will likely become extinct simply because we know nothing about their distribution, population size, ecology or threats.

Strengthening taxonomic capacity, baseline data collection and long-term monitoring programs must therefore be integral to the Implementation Plan if "no new extinctions" is to be credible.

Role of Environmental Practitioners and Certification Schemes

Professional Standards Deliver Better Outcomes

Doing the job properly the first time leads to better, faster and cheaper outcomes. Consequently, certified environmental professionals should play a crucial role in translating policy ambition into effective action.

Recognised qualifications such as the Certified Environmental Practitioner (CEnvP) scheme provide assurance of competence and ethical standards. The Plan should explicitly recognise and leverage this professional capacity in:

- Funded programs
- Regulatory processes
- Restoration initiatives

Realistic Expectations for Emerging Policy Tools

It is important to remain realistic about emerging policy levers. For example:

- The proposed Nature Repair Market, while innovative, still lacks demonstrated capacity to deliver all claimed ecological benefits
- Goals such as eradicating invasive species or preventing all future extinctions are commendable but aspirational under current resourcing.

A focus on feasible milestones, supported by sound data and adaptive management, will build credibility and public trust.

Cross-sector Collaboration

Transformative change must engage regional Australia and Indigenous communities early, building shared ownership rather than imposing city-centric solutions.

Conclusion

The successful implementation of Australia's Strategy for Nature 2024-2030 requires more than good intentions. It demands transformational change in governance, genuine whole-of-government commitment, adequate resourcing, and professional delivery grounded in sound science.

As detailed in this submission, critical gaps remain in the Implementation Plan. High-level leadership, clear accountabilities, realistic funding, SMART targets and strengthened data systems are all essential. The technical expertise and professional standards exist within Australia's environmental practitioner community - what is needed now is the political will, institutional reform and sustained investment to deploy that capacity effectively.

Nature protection is not discretionary environmental policy - it is fundamental to Australia's productivity, regional livelihoods and long-term prosperity. The Strategy identifies what needs to be achieved. The Implementation Plan must now specify how it will be achieved, by whom, with what resources, and with what measures of success.

EIANZ stands ready to support implementation that delivers genuine ecological outcomes for current and future generations.

The question is not whether Australia values its unique biodiversity, but *whether we are prepared to transform how we protect it*.

Appendix – Responses to Specific Questions

Appendix Contents

Target 1: Protect and conserve 30% of Australia's landmass and 30% of Australia's marine areas by 2030

Context and Alignment

Achieving the "30 by 30" target represents a critical test of Australia's capacity to deliver ecologically meaningful protection rather than simply expand mapped areas. While the *National Roadmap for Protecting and Conserving 30% of Australia's Land by 2030* and the *National OECM Framework* provide structure, protection remains uneven. Of Australia's 89 terrestrial bioregions, 27 have less than 10% protection, and over 57% of protected areas sit in lower IUCN categories. Without correcting this imbalance, expansion risks favouring arid zones over fertile ecosystems, limiting biodiversity outcomes.

EIANZ Perspective

EIANZ supports the 30×30 target but emphasises ecological representativeness, adaptive governance, and transparent monitoring as the measures of integrity. The *JANIS principles* remain the benchmark for representativeness, ensuring diverse bioregions are equitably protected. Expansion should be accompanied by ecological restoration and connectivity that reflect cultural, ecological, and climate dimensions.

All protected and conserved areas - whether Commonwealth, State, Indigenous Protected Areas (IPAs), or Other Effective Area-based Conservation Measures (OECMs) - should adopt adaptive management plans similar to Queensland's *Values Based Management Framework*.

The Institute advocates for adaptive restoration frameworks incorporating long-term monitoring, feedback loops, and continuous learning. EIANZ supports the use of functional trait diversity metrics to measure restoration success and ecosystem resilience under climate change. A wider toolbox of protective mechanisms - including IPAs, OECMs, and conservation covenants—should be applied where conservation is the primary objective and legal protection is secure and enforceable. Areas managed for other purposes should only count towards the 30×30 target if they deliver enduring, verifiable conservation outcomes.

Priority Actions and Barriers

To deliver 30×30 with integrity and measurable outcomes:

- Apply *JANIS*-style Comprehensive, Adequate and Representative (CAR) principles to ensure representativeness, prioritising under-protected fertile ecosystems and preventing over-reliance on arid or low-value areas.
- Prioritise bioregions and subregions with less than 10% protection and favour land capable of achieving higher IUCN categories (I–IV).
- Identify and remove tenure constraints that inhibit secure protection.
- Require environmental and regional planning processes to demonstrate how they contribute to achieving the target.
- Implement restoration readiness mapping to focus effort on areas with high recovery potential.
- Integrate carbon and biodiversity crediting within a single transparent national register.
- Exclude insecure or multi-use areas from accounting unless legal and management conditions guarantee conservation outcomes.

Barriers include fragmented jurisdictional frameworks, funding uncertainty, inconsistent standards, and lack of a national mechanism to align tenure, planning, and biodiversity outcomes.

Cross-Linkages

The 30×30 target interacts with climate mitigation, carbon markets, and regional land-use planning. Integrating it with environmental impact assessment, offsets, and restoration frameworks will align biodiversity protection with broader policy and market mechanisms. Ensuring consistency with OECM standards and clear accounting rules will prevent distorted reporting and uphold national and international credibility.

EIANZ Position:
EIANZ endorses the 30×30 target as achievable if guided by representativeness, secure tenure, and adaptive governance. Applying *JANIS* principles, excluding insecure designations, and aligning legal, financial, and monitoring frameworks are essential to preserve integrity. The Institute advocates a coordinated, evidence-based national approach linking ecological science, practitioner standards, and policy instruments to deliver enduring biodiversity and climate outcomes.

Outcome 1: Public and private protected and conserved areas are expanded on land

1. Is this a main area where action should be focused and why?

Yes. Achieving the 30×30 target depends on expanding both public and private conservation areas through a balanced mix of IUCN categories. In addition to continued acquisition of National Parks, Reserves, and Habitat Areas (Categories I–IV) guided by Comprehensive, Adequate and Representative (CAR) criteria, Australia must increase Indigenous Protected Areas (IPAs) and establish multi-objective conservation zones (Categories V–VI). Expansion of Other Effective Area-based Conservation Measures (OECMs) on private land is essential, as it represents the only feasible pathway to scale protection across the landscape while integrating ecological, cultural, and community values.

2. Are there barriers to achieving this?

Yes. The primary barrier is inadequate and unsustainable funding for land acquisition, long-term management, and stewardship. Current funding is predominantly short-term and project-based, making it difficult to ensure enduring conservation outcomes.

Governance and recognition challenges also impede progress. These include: tenure complexity; inconsistent recognition of OECMs across jurisdictions; variable monitoring and compliance standards; and the absence of a unified national framework for classifying and managing OECMs, which limits comparability and accountability.

Private landholders often lack both incentives and technical support to secure conservation covenants. IUCN guidance emphasises that privately protected areas require long-term binding instruments to ensure permanence, while financial sustainability through mechanisms

such as endowments or stewardship payments is critical for effective ongoing management. Without addressing both legal permanence and financial sustainability, private land conservation efforts risk failing to deliver the long-term outcomes required for the 30% target.

3. What additional outcomes will support this?

Achieving this outcome requires integrated spatial data on ecological communities, species distribution, and connectivity corridors to prioritise acquisition and management. National mapping of endangered and at-risk habitats will guide investment and ensure CAR representation. Alignment between OECM recognition and carbon or biodiversity crediting frameworks could attract private finance. Strengthened partnerships between governments, Traditional Owners, and conservation NGOs would enhance on-ground delivery and monitoring capacity. Embedding practitioner-led adaptive management and restoration standards will ensure that expansion efforts produce verifiable ecological outcomes.

4. Is EIANZ already contributing to this outcome?

Yes. EIANZ contributes indirectly by promoting professional standards, certification (CEnvP), and practitioner capacity critical to credible conservation management. However, conservation NGOs, National Parks Associations, and members of the Australian Land Conservation Alliance (ALCA) - including Bush Heritage Australia, Australian Wildlife Conservancy, and Greening Australia - are the primary on-ground actors, collectively managing over 71 million hectares (9.3% of Australia). EIANZ could strengthen its role through collaboration and professional development partnerships with these organisations to embed consistent standards and practitioner accreditation across all conservation tenures.

Outcome 2: Protected and conserved areas on land are well connected, ecologically representative and include areas of particular importance for biodiversity

1. Is this a main area where action should be focused and why?

Yes. Achieving well-connected, ecologically representative systems is fundamental to the integrity of the 30×30 target. Expansion alone will not safeguard biodiversity unless areas of high ecological importance are linked through functional corridors. OECMs and conservation agreements are essential for protecting critical habitats, maintaining landscape connectivity, and enabling species and ecosystems to shift under climate change. These areas also provide refuges during extreme events such as fire and cyclones. Incentivising private landholders to establish Nature Refuges and other conserved areas offers the most practical path to achieving connectivity at scale across tenures.

2. Are there barriers to achieving this?

Yes. In several jurisdictions, including Queensland, legislative protection for Nature Refuges and conservation agreements remains inadequate. Unlike national parks, mining projects are allowed to be developed within privately owned nature refuges against the landowner's wishes, undermining their long-term conservation value.

Additional barriers include:

- Inconsistent policy frameworks across jurisdictions
- Limited financial incentives for private landholders
- Insufficient technical and management support for conservation agreement holders
- Lack of nationally consistent standards for OECMs recognition

IUCN's 2020 Guidelines for Conserving Connectivity emphasise that well-connected protected area networks require effective governance, management and legal frameworks to maintain ecological connectivity across landscapes. Without addressing these barriers, private land contributions to the 30% target will remain limited and insecure.

3. What additional outcomes will support this?

Governments should ensure that all States and Territories provide legally perpetual conservation agreements with absolute protection from incompatible uses. A national program of management support - covering invasive species control, fencing, and habitat restoration - would sustain landholder engagement. Strengthening ecological mapping and connectivity modelling will help prioritise corridor design, especially for species most vulnerable to climate-driven range shifts. Integrating biodiversity connectivity into regional planning and infrastructure assessment will further embed nature-positive development principles.

4. Is EIANZ already contributing to this outcome?

Yes. EIANZ contributes through our Australian Network for Ecology and Transport (ANET), which addresses wildlife movement barriers associated with roads and transport infrastructure. EIANZ members and Certified Environmental Practitioners (CEnvPs) also design and implement habitat surveys, ecological assessments, and management plans that enhance connectivity. The Institute supports the development of consistent professional standards to guide practitioners involved in connectivity planning, ensuring that ecological networks are science-based and durable.

Outcome 3: First Nations Peoples are supported to care for Land and Sea Country

1. Is this a main area where action should be focused and why?
Yes. First Nations stewardship is central to 30×30. Native Title covers ~44% of Australia; ~36% is subject to Indigenous Land Use Agreements; ~25% is under Indigenous management, including ~11% as IPAs spanning ~106 million ha of land and ~6 million ha of sea. Expanding Indigenous Ranger Programs and joint-management arrangements will deliver ecological and cultural outcomes, enable climate-adaptive land and sea management, and support employment in regions facing mining decline.

2. Are there barriers to achieving this?
Yes. Funding constraints and short program cycles limit continuity and scale. Governance fragmentation and uneven recognition of cultural authority impede coordinated delivery. Capacity gaps persist in accredited training, monitoring, and long-term stewardship financing.

The Productivity Commission's "Overcoming Indigenous Disadvantage" reports (2014, 2016) have consistently highlighted that short-term funding arrangements undermine the effectiveness of Indigenous ranger programs, despite their demonstrated success in delivering environmental, social and cultural outcomes. Research shows that Indigenous ranger and Protected Area programs deliver substantial returns on investment, with benefits including biodiversity conservation, employment, skills development and community wellbeing.

3. What additional outcomes will support this?

- Multi-year, co-designed funding with on-Country governance.
- Cultural covenants and strengthened joint-management frameworks.
- Vocational pathways and accreditation for Indigenous practitioners, with paid mentoring and cross-cultural knowledge exchange.
- Partnerships that integrate Traditional knowledge and western science in fire, restoration, biosecurity, and monitoring.
- Nature-positive enterprises, including cultural and eco-tourism, to diversify revenue and sustain custodianship.

4. Is EIANZ already contributing to this outcome?
Partially. The Indigenous and First Nations Engagement Working Group (IEWG) advances engagement. Many members and CEnvPs already partner with Traditional Owners on Country-based planning, assessment, and management. EIANZ can scale impact by: co-designing certification modules with Indigenous leaders; recognising Indigenous practitioner credentials within CEnvP; and brokering practitioner networks that embed cultural authority, data governance, and enduring stewardship agreements.

Outcome 4: Protected and conserved areas across land and sea are effectively managed

1. Is this a main area where action should be focused and why?
Yes. Management quality determines biodiversity outcomes. All protected and conserved areas - Commonwealth, State, IPAs and OECMs - should operate under adaptive management plans. Queensland's Values Based Management Framework (VBMF) shows how values, indicators, and monitoring inform decisions. Applying JANIS-style representativeness principles helps ensure effort across ecosystem types, including fertile or modified landscapes. Clear objectives, measurable indicators, and transparent reporting enable adaptive improvement by accredited practitioners.

2. Are there barriers to achieving this?
Yes. Disparate State and Territory frameworks create inconsistent objectives, monitoring, and reporting, which reduces comparability and accountability. Inclusion of areas with insecure tenure or competing land uses weakens integrity and complicates performance tracking. Limited alignment on practitioner standards further fragments delivery.

3. What additional outcomes will support this?

- Harmonised planning standards with transparent, auditable monitoring.
- Visitor education emphasising the primacy of conservation values.
- Open publication of management objectives, indicators, and results.
- Independent auditing of agencies and plan implementation.
- Competency alignment and guidance so accredited practitioners apply adaptive management consistently across jurisdictions.

4. Is EIANZ already contributing to this outcome?
Not substantially. Many park professionals affiliate with Parks & Leisure Australasia (PLA). EIANZ could collaborate with PLA and National Parks Associations to co-author guidance, align competencies, and integrate CEnvP pathways into park management and restoration roles, strengthening plan quality, monitoring, and accountability.

Target 2: Priority degraded areas are under effective restoration by 2030

Context and Alignment
Without defined metrics – such as ecosystem types targeted, hectares restored, or baseline condition thresholds – accountability and evaluation are not possible.

Effective restoration must also operate within the mitigation hierarchy: avoid, minimise, then offset environmental impacts, consistent with principles in the EPBC Act reforms and Nature Positive Plan.

EIANZ Perspective

EIANZ supports the intent to restore priority areas but considers the target insufficiently precise to guide investment or performance tracking. Restoration science shows that full recovery of pre-disturbance diversity and complexity is rarely achieved (Suding 2011, *Annual Review of Ecology, Evolution, and Systematics,* 42:465-487) underscoring the need to prioritise avoidance of new degradation. Restoration efforts should embed adaptive restoration frameworks that integrate long-term monitoring, feedback loops, and ecological learning outcomes.

Regional planning mechanisms proposed under EPBC reform would help identify priority restoration areas based on ecological potential, landscape connectivity, and restoration readiness mapping rather than landholder willingness alone. The Institute emphasises that effective restoration also depends on workforce capability. Australia faces a shortage of skilled practitioners in ecological restoration, land management, and monitoring. Addressing this skills gap requires coordinated training and certification pathways to ensure consistent, professional practice standards.

Priority Actions and Barriers

Key enabling actions include:

- Supporting restoration readiness mapping to identify catchments and land uses with the highest recovery potential.
- Establishing measurable, time-bound restoration targets underpinned by spatial data and transparent reporting.
- Promoting use of functional trait diversity metrics to evaluate ecosystem resilience under climate change (Cadotte et al. 2011, Journal of Applied Ecology, 48:1079–1087*).
- Incentivising landscape-level restoration consortia combining Traditional Owners, local government, and private landholders.
- Integrating carbon and biodiversity crediting under one transparent national register to align ecological and climate objectives.
- Funding applied research to refine and share best-practice methodologies validated through national registers.
- Embedding Indigenous partnership and leadership, ensuring cultural and financial benefits align with self-determination and long-term business development.
- Implementing compliance and auditing mechanisms to verify ecological outcomes.

Barriers include limited financing, fragmented governance, and the tendency for investment to follow landholder willingness rather than ecological priority.

Cross-Linkages
This target interrelates strongly with:

- Invasive species management – restoration success depends on controlling predation and competition pressures.
- Water management – catchment hydrology, water quality, and flow regimes must be addressed in wetland and riparian restoration.
- Corporate nature-related reporting – implementation of Taskforce on Nature-related Financial Disclosures (TNFD) frameworks can drive private investment, potentially mobilising billions in restoration finance.

Summary
EIANZ supports the 2030 restoration goal as a national vision but urges DCCEEW to define measurable outcomes, strengthen capacity and compliance systems, and align public and private investment through credible, science-based mechanisms. Restoration must be adaptive, integrated, and professionally delivered to ensure lasting ecological and social returns.

Outcome 1: Priority degraded areas are identified to guide restoration where it will best support native species and ecosystem recovery

1. Is this a main area where action should be focused and why?

Yes. This has been an issue for at least the last 30 years, yet biodiversity continues to decline. Action must focus on the areas identified in the discussion paper, but bold decisions are needed to direct effort beyond conservation lands to areas not currently protected or managed for biodiversity outcomes. This will be critical particularly for threatened native vegetation communities (such as Ecological Vegetation Classes in Victoria, Regional Ecosystems in Queensland, and equivalent classifications in other jurisdictions) within agricultural and rangeland regions, where most land is privately owned or leasehold, and where current biobanking and carbon banking mechanisms require significant improvement.

Protect, mitigate, then offset. Avoiding damage remains most critical, but in urban and peri-urban areas where land and waterways are degraded by past clearing and weed invasion, ecological restoration represents low-hanging fruit for increasing biodiversity and community engagement. Similarly, water-sensitive urban design (WSUD) in new developments provides opportunities for biodiverse wetland creation.

2. Are there barriers to achieving this?

Yes. Major barriers include low public and private funding, limited landholder willingness, and a shortage of skilled staff. Land ownership, tenure constraints, and existing clearing rights complicate where restoration can occur. Many projects and community groups remain unfunded despite their readiness to act. The absence of a unified framework for prioritisation means resources are not always directed where ecological outcomes would be greatest.

3. What additional outcomes will support this?

Enablers include nature-related financial disclosures by government and business, which would expose poor performers, enhance social licence, and drive investment through consistent, science-backed methodologies. The *Nature Repair Market* could strengthen accountability if disclosure requirements are implemented. Grassroots volunteering also requires stronger government and local council coordination and support. National mapping that identifies restoration needs irrespective of tenure and existing rights would improve transparency and equity in restoration investment.

4. Is EIANZ already contributing to this outcome?

Yes. EIANZ contributes meaningfully through its *Special Interest Sections* and *Communities of Practice* - particularly the *Social and Environmental Assessment (SEA)* and *Offsets* groups - which foster collaboration, knowledge sharing and the application of consistent professional standards in restoration planning and impact mitigation. The Institute's biennial *National Biodiversity Offsets Conference* and annual *Impact Assessment Symposium* further strengthen national practice by connecting practitioners, researchers, and policymakers to advance evidence-based restoration outcomes. EIANZ's role is to elevate professional capability, not to deliver on-ground works, ensuring that restoration is guided by qualified, ethical, and certified practitioners.

Outcome 2: Effective restoration is clearly defined to promote best practice

1. Is this a main area where action should be focused and why?

Yes. Defining "effective restoration" is essential to achieving consistency and accountability across Australia's diverse ecosystems. While most sectors already have best practice guidance—such as for natural channel design, post-mining rehabilitation, coastal dune stabilisation, and woodland restoration—definitions of success vary widely. Clear, nationally agreed standards are needed across all restoration contexts, from urban and agricultural landscapes to mining and industrial sites, to ensure consistent ecological, functional, and social outcomes.

2. Are there barriers to achieving this?

Yes. Barriers arise from the diversity of ecosystems, restoration objectives, and land uses across Australia. A lack of nationally consistent metrics and terminology can lead to fragmented approaches. Legacy issues such as contamination, altered hydrology, and complex land tenure also complicate the development of common standards. However, defining what constitutes “effective restoration” should not be difficult if experts across disciplines—ecology, land management, engineering, and social science—are engaged in a coordinated framework. The real challenge lies in achieving consensus and commitment across jurisdictions, sectors, and stakeholders.

3. What additional outcomes will support this?

Building national consensus on post-disturbance land uses, success criteria, and acceptable environmental risk thresholds will enhance clarity and accountability. Guidance on when modified systems, such as artificial water bodies, can safely interact with natural ecosystems will further support consistency. The Society for Ecological Restoration's International Standards (2019) provide a strong foundation for integrating ecological, cultural, and social dimensions into restoration frameworks across all ecosystem types.

4. Is EIANZ already contributing to this outcome?

Yes. EIANZ’s Certified Environmental Practitioner (CEnvP) Site Contamination Specialist Certification and related Specialist Environmental Advisory Committee (SEAC) have advanced national consistency in assessing and managing degraded sites. Reviving and expanding these professional pathways would help embed best practice across sectors where restoration intersects with contamination, remediation, and ecological recovery. EIANZ is well placed to convene collaboration between industry, academia, and government to establish shared definitions of effective restoration applicable to all Australian ecosystems.

Outcome 3: On-ground restoration is supported

1. Is this a main area where action should be focused and why?

Yes. Delivering effective restoration depends on well-supported on-ground implementation. As highlighted in Outcome 2, guidance and policy must be matched with capacity-building measures that strengthen technical expertise, seed supply, and long-term program delivery. National investment in skilled labour and technology is essential to scale up and sustain restoration efforts across all regions.

2. Are there barriers to achieving this?

Yes. For decades, restoration has been viewed as low-skill work. Government programs such as *Work for the Dole* and *Green Corps* historically relied on low-paid, short-term labour. The industry continues to face high turnover and undervaluing of professional expertise. Reliance

on volunteers through Landcare, private conservation and bush care groups persists, despite restoration being a technical discipline requiring scientific and project management skills. No other industry depends so heavily on unpaid labour for core delivery. Greater focus is needed on training, accreditation, and long-term career pathways to professionalise the workforce. Investment in the seed industry is futile without skilled people to grow, plant, maintain, and monitor outcomes.

3. What additional outcomes will support this?

As above. Investment in workforce development must accompany seed industry and technology growth. Establishing accredited training programs and recognised career structures would transform restoration into a viable, respected profession.

4. Is EIANZ already contributing to this outcome?

Yes. EIANZ contributes through the CEnvP Scheme and professional standards that underpin environmental practice. However, broader collaboration is needed with restoration bodies, universities, and funding agencies to develop shared criteria for success. EIANZ can play an important role in uniting professional, volunteer, and government sectors to lift restoration quality and accountability.

Target 3: Eradicate or control invasive species in priority landscapes and further minimise their introduction by 2030

Context and Alignment

Invasive species are among Australia's leading threats to biodiversity, causing habitat degradation, competition with native species, and ecosystem collapse. The target to eradicate or control invasive species in priority landscapes aligns with the *National Biosecurity Strategy*, the *Threatened Species Action Plan 2022–2032*, and Australia's obligations under the *Convention on Biological Diversity*. The proposed implementation rightly emphasises prevention and preparedness as cost-effective measures. However, to achieve lasting outcomes, these must be supported by rapid detection, coordinated response systems, and integration with land-use and climate change planning.

EIANZ Perspective

EIANZ supports the target but considers the current framework insufficient to address the scale and complexity of invasive species threats. Management remains fragmented across jurisdictions and land tenures, with inconsistent monitoring and data sharing. Effective control requires sustained national coordination, investment in practitioner capability, and incorporation of modern technologies. Environmental practitioners play a critical role in biosecurity surveillance, ecological restoration, and adaptive management. Recognition of

certified professionals and best-practice standards would strengthen implementation and accountability across government and industry.

Priority Actions and Barriers
Key actions to enhance delivery include:

- Establishing a national early warning and rapid response network, coordinated through Environment Information Australia, to unify data and reporting protocols.
- Supporting the use of environmental DNA (eDNA) and AI-assisted detection tools for real-time surveillance, particularly in remote or high-risk regions. Research demonstrates that eDNA monitoring can detect invasive fish and aquatic species at lower densities than traditional surveys (e.g., Jerde et al. 2011, Thomsen & Willerslev 2015).
- Funding landscape biosecurity hubs linking natural resource management groups, Indigenous ranger programs, and local councils to strengthen place-based management capacity.
- Developing predictive modelling to identify areas of highest invasion risk under projected climate change scenarios.
- Embedding mandatory biosecurity risk assessments for major land-use changes to prevent new pathways of introduction.

Barriers include short-term funding cycles, limited cross-sector data integration, and inconsistent enforcement of biosecurity protocols. Sustained national funding and clear governance roles are essential to overcome these limitations.

Cross-Linkages
This target interacts strongly with restoration, threatened species recovery, and land management outcomes. Integrating biosecurity with restoration planning will ensure that gains in habitat rehabilitation are not undermined by reinvasion. Similarly, aligning monitoring frameworks with carbon and biodiversity markets will enable co-benefits and efficient resource allocation.

Summary Position
EIANZ supports a coordinated, prevention-focused approach to invasive species management, underpinned by early detection, practitioner capability, and long-term investment. Achieving this target will require national leadership, technological innovation, and consistent application of professional standards across jurisdictions.

Outcome 1: Stronger collaboration and alignment across governments and sectors improves invasive species management

1. Is this a main area where action should be focused and why?
Yes. Effective invasive species management depends on collaboration across jurisdictions and sectors. However, policy must differentiate between types of invasive species – those with economic impacts in agriculture, those that displace threatened ecological communities, and those so entrenched that eradication is unrealistic. National strategies should prioritise species and sites where control is feasible and outcomes are measurable, aligning resources to conservation significance rather than visual amenity or short-term economic concerns. This approach enables practitioners to apply science-based standards for ecological restoration and adaptive management.

2. Are there barriers to achieving this?
Yes. Major barriers include underfunding and uneven resource allocation. For example, Queensland's entire National Parks pest management budget is reportedly smaller than that of Brisbane City Council despite vastly greater land under management.

Policies are also sometimes inconsistent with science – such as NSW's promotion of recreational pest shooting programs in National Parks, although these programs have been shown to have limited efficacy in population control.

Continued introduction of potential pests and misdirected local control efforts, such as repetitive weed removal downstream of untreated infestations, further undermine outcomes.

3. What additional outcomes will support this?
Additional outcomes should include sustained funding and institutional support for applied ecological science and professional practice. Strategic prioritisation based on achievable outcomes and ecological impact would maximise return on investment. Establishing a transparent, nationally coordinated prioritisation framework would ensure that limited resources target species and regions where intervention is ecologically justified. Integrating environmental practitioner standards into program design would strengthen quality assurance and accountability across all levels of management.

4. Is EIANZ already contributing to this outcome?
Yes. EIANZ's certified environmental practitioners contribute to pest and biosecurity management through assessment, monitoring, and ecological restoration. However, the Institute could expand collaboration with biosecurity agencies, research institutions, and relevant NGOs to strengthen professional alignment and policy influence. Exploring partnerships – such as engagement with the Invasive Species Council and regional biosecurity alliances – would enhance EIANZ's contribution to best practice standards, knowledge exchange, and professional recognition in invasive species management.

Outcome 2: On-ground action controls and, where feasible, eradicates established invasive species in priority landscapes and places

1. Is this a main area where action should be focused and why?
Yes. As noted under Outcome 1, this remains a primary area for action because effective invasive species control depends on targeting species and landscapes where eradication or long-term suppression is feasible. Prioritising achievable outcomes ensures resources are directed to areas of high conservation value and measurable biodiversity recovery.

2. Are there barriers to achieving this?
Yes. As outlined under Outcome 1, major barriers include inadequate and uneven funding across jurisdictions, policy decisions not grounded in science, and uncoordinated control efforts such as repeated downstream weed removal without upstream treatment. These structural inefficiencies reduce program effectiveness.

3. What additional outcomes will support us to achieve this target or enabler of change?
As discussed under Outcome 1, success depends on secure long-term funding, stronger integration of scientific evidence into policy, and better targeting of priorities to ensure achievable and durable outcomes.

4. Is EIANZ already contributing to this outcome?
Yes. EIANZ's direct contribution to on-ground invasive species control is limited. However, its certified practitioners routinely engage in ecological assessment, restoration, and environmental management activities that support related objectives. The Institute's standards and certification framework could be leveraged to strengthen practitioner capability, promote consistent best practice, and enhance collaboration with biosecurity and land management agencies in future programs.

Outcome 3: Environmental biosecurity minimises the introduction and establishment of new invasive species

1. Is this a main area where action should be focused and why?
Yes. For example, the introduction of Myrtle Rust and Fire Ants has caused major ecological and financial damage. Maintaining a strong national focus on prevention is essential to avoid future incursions and the immense cost of post-establishment control.

2. Are there barriers to achieving this?
Yes. Complacency remains a key barrier. Australia must continue to apply strict controls and enforcement against industries and individuals that facilitate or downplay biosecurity risks. Sustained vigilance is essential, especially at our borders, and all sectors (including the nursery, landscape, seed supply and plant breeding industries) must collaborate.

3. What additional outcomes will support us to achieve this target or enabler of change?
Ongoing prevention, strong compliance, and cross-sector vigilance will continue to be the most effective outcomes in limiting new introductions.

4. Is EIANZ already contributing to this outcome?
Partially. EIANZ's direct involvement in preventing new invasive species introductions is limited. Nonetheless, its members contribute indirectly through environmental risk assessment, import approvals, and ecological monitoring roles that support biosecurity objectives

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Outcome 4: Research and development improve tools and technologies for managing invasive species

1. Is this a main area where action should be focused and why?
Yes. Traditional control methods have not succeeded for all invasive threats. Innovation is needed to manage persistent species and to meet emerging risks driven by global trade and climate change.

2. Are there barriers to achieving this?
Yes. Australia has significant expertise developing new control tools, but sustained funding is needed to bring innovations into widespread use. Public misunderstanding also limits support – for example, opposition to Fire Ant and feral horse management, or the deliberate release of feral pigs for hunting, show the need for improved community education and acceptance of evidence-based solutions.

3. What additional outcomes will support us to achieve this target or enabler of change?
As with earlier outcomes, continued investment in innovation, research, and education will strengthen capability and community support for new technologies.

4. Is EIANZ already contributing to this outcome?
EIANZ's direct involvement in innovation and technology for invasive species management is currently limited. However, the Institute can play a stronger role by promoting practitioner-led innovation, supporting knowledge exchange between researchers and field professionals, and embedding emerging technologies within professional standards and certification frameworks.

Target 4 - No New Extinctions

Context and Alignment

The target of *no new extinctions* represents a clear moral and ecological commitment that resonates with the public and provides an accessible accountability benchmark for governments. Although effective as a communication and accountability tool, it remains

scientifically and technically challenging. A practical interpretation of this goal is required that prevents extinctions caused or accelerated by human activity. The Threatened Species Action Plan 2022–2032 provides a useful framework for achieving this, but its success depends on turning intent into measurable, prioritised actions that recognise ecological limits and triage realities. *According to the IUCN Red List, Australia accounts for about 10% of recorded global species extinctions since European settlement (IUCN, 2024)* – highlighting the need for stronger accountability and systemic reform, not just aspirational goals.

EIANZ Perspective

EIANZ supports the clarity and accountability of the *no new extinctions* commitment while emphasising that it must be grounded in ecological and practical realism. The focus should be on preventing extinctions driven by human activity and maintaining viable populations of native species in functioning ecosystems. To achieve this, EIANZ recommends reframing the target around persistence and recovery potential, ensuring actions are prioritised according to scientific feasibility and long-term resilience. EIANZ suggests redefining Outcome 1 as: *"Species at imminent risk of extinction are identified and supported if they have the potential to persist in their natural habitat after identified threatening processes have been addressed."*

Priority Actions and Barriers

- Shift from reactive to preventative management by identifying species and ecosystems at high risk of collapse before thresholds are crossed.
- Apply triage-based prioritisation that weighs ecological roles, recovery potential, and co-benefits for ecosystem function.
- Embed climate vulnerability assessments into recovery planning to ensure resilience under future conditions.
- Employ ex-situ conservation strategically where it supports the maintenance of genetic diversity and contributes demonstrably to viable, self-sustaining in-situ populations
- Require independent, periodic review of recovery progress to ensure accountability. Barriers include fragmented governance, insufficient baseline data, and underfunded monitoring frameworks. *Recent audits indicate that fewer than half of listed species have adequately implemented recovery plans (Auditor-General of Australia, 2023)*.

Cross-Linkages

Delivering this target requires alignment with restoration, invasive species control, and climate adaptation efforts. Effective implementation depends on coordinated national investment and consistent professional standards, ensuring that species survival is supported by broader ecosystem integrity and landscape connectivity.

Summary Position

EIANZ supports the *no new extinctions* target as a clear and publicly resonant commitment that strengthens accountability. However, achieving it requires reframing towards feasible, evidence-based outcomes focused on maintaining viable species populations in functional ecosystems, guided by accredited practitioners and consistent national governance.

Outcome 1: Species at imminent risk of extinction are identified and supported to persist

1. Is this a main area where action should be focused and why?
Yes. Preventing imminent extinctions is essential but must be grounded in ecological feasibility. Actions should focus on species with a realistic chance of persisting in their natural habitats once major threats are addressed. This ensures limited resources are directed toward achievable, lasting outcomes that reinforce ecosystem function and align with sound conservation triage.

2. Are there barriers to achieving this?
Yes. Key barriers include fragmented governance across jurisdictions, insufficient data, and inadequate monitoring frameworks. The lack of consistent national recovery standards hinders effective prioritisation and cross-border coordination. Limited investment in early-warning systems also delays timely intervention for species on the brink.

3. What additional outcomes will support this?
Embedding climate vulnerability and population trend assessments in monitoring programs will improve the ability to detect and prevent collapse. Periodic, independent reviews of recovery progress and integration with landscape-scale restoration programs will enhance accountability and ecological viability.

4. Is EIANZ already contributing to this outcome?
Yes. Through its Certified Environmental Practitioner (CEnvP) Scheme and professional standards, EIANZ promotes high competence in threatened species assessment, impact mitigation, and ecological monitoring. Members contribute directly to recovery plans and adaptive management programs that support the persistence of high-risk species.

Outcome 2: Actions are underway to recover priority threatened species and ensure healthy ecosystems

1. Is this a main area where action should be focused and why?
Yes. Recovery of priority species complements preventative measures by strengthening overall ecosystem resilience. Targeted investment maximises resource efficiency and focuses on

specific outcomes. Improving habitat condition remains one of the most effective and cost-efficient ways to secure species survival.

2. Are there barriers to achieving this?
Yes. Barriers include inconsistent prioritisation frameworks, limited collaboration between sectors, and insufficient long-term funding. Recovery planning often lacks integration of climate adaptation, cumulative impact assessment, and ecological connectivity. These systemic issues are reflected in implementation outcomes: the 2021–22 Auditor-General's report found that just 2% of recovery plans had been completed within statutory timeframes since 2013, with an average of 2,355 days (over six years) to establish a species recovery plan.

3. What additional outcomes will support this?
Developing national standards for recovery effectiveness, aligning carbon and biodiversity crediting mechanisms, and incentivising multi-stakeholder restoration consortia would improve scalability. Integrating restoration readiness mapping would direct investment toward high-return areas with strong recovery potential.

4. Is EIANZ already contributing to this outcome?
Yes. EIANZ members lead projects in habitat restoration, environmental impact assessment, and ecological monitoring guided by certified professional standards. The Institute fosters collaboration between practitioners, government, and academia to advance science-based restoration and long-term recovery outcomes.

Target 5 - Minimise the impact of climate change on biodiversity

Context and Alignment
Climate change is becoming a systemic driver of biodiversity loss in Australia, compounding threats from habitat fragmentation, invasive species, and altered fire and hydrological regimes. The Plan's target correctly emphasises embedding climate adaptation in all decision-making and aligning mitigation, adaptation, and disaster risk reduction. However, it must move beyond listing broad commitments aligned with the *Paris Agreement* and the *Net Zero 2050 Plan* and describe how these frameworks directly protect ecosystems and species. Effective alignment requires integrating biodiversity outcomes into climate policy, infrastructure investment, and emissions reduction programs.

EIANZ Perspective
EIANZ identifies climate change as one of the top three threats to biodiversity. The Institute supports explicit inclusion of climate considerations across the Strategy's implementation and calls for actions that directly address climate related ecological thresholds already being crossed. With global temperature increases already well above 1°C and likely to exceed 1.5°C,

biodiversity responses must anticipate changes in species distributions, ecosystem function, and commensurate needs for landscape connectivity.

The current framing in the plan underrepresents the urgency of adaptation and monitoring needed. EIANZ recommends reversing in the implementation plan the order of proposed outcomes to foreground ecosystem resilience and adaptive management rather than policy description.

Priority Actions and Barriers
Priority actions should:

- Integrate climate and biodiversity policies to ensure mitigation and adaptation deliver measurable co-benefits.
- Embed biodiversity safeguards into renewable energy, energy transmission, and carbon sequestration projects.
- Prioritise *nature-based solutions* such as reforestation, blue carbon, and wetland restoration as low-cost, high-benefit interventions (*IPBES, 2023*).
- Strengthen adaptive management frameworks and fund long-term ecosystem monitoring to detect threshold responses.

Cross-Linkages
This target connects with restoration, invasive species management, and landscape connectivity. Climate adaptation is foundational for achieving no new extinctions and for effective restoration outcomes.

Summary
EIANZ supports the Plan's intent but urges that climate resilience actions be grounded in ecological evidence and professional standards. Achieving this target requires integrating biodiversity into climate policy design.

Outcome 1: Continue Australia's efforts to mitigate climate change and deliver on Australia's net zero by 2050 target

1. Is this a main area where action should be focused and why?
Yes. Emissions mitigation is essential to limit further climate-driven biodiversity loss. Australia's domestic emissions reductions must align with the *Paris Agreement* and be complemented by active participation in global decarbonisation efforts. However, the climate affecting Australian ecosystems will depend largely on global emissions trajectories. Therefore, national efforts should both reduce domestic emissions and strengthen Australia's influence in international policy, trade, and climate diplomacy to accelerate collective action consistent with the 1.5 °C goal.

2. Are there barriers to achieving this?
Yes. Key barriers include the pace at which nationally we can politically and physically broaden, design, approve and implement our mitigation efforts. The other key barrier is the pace of international progress and cooperation on international mitigation effort.

3. What additional outcomes will support this?
Linking emissions mitigation to biodiversity protection through *nature-based solutions* – such as restoration of forests, wetlands, and blue carbon systems – will generate dual climate and ecological benefits (*IPCC, 2022*). Incorporating ecological resilience into the *Net Zero 2050 Plan* and future carbon markets will further strengthen alignment between mitigation and biodiversity outcomes.

4. Is EIANZ already contributing to this outcome?
Yes. EIANZ promotes professional standards and certification (e.g. CEnvP Climate Change and Impact Assessment specialisations) that ensure emissions reduction and biodiversity outcomes are assessed holistically in environmental decision-making. Members apply best practice in emissions assessment, land rehabilitation, and project planning to minimise climate impacts and integrate mitigation with ecological protection. EIANZ also supports practitioner education on carbon accounting and nature-based mitigation approaches consistent with national and international standards.

Outcome 2: Nature is thriving to the greatest extent possible despite climate change

1. Is this a main area where action should be focused and why?
Yes. Building ecological resilience is critical to ensuring Australia's biodiversity can persist under ongoing climate change. Strengthening landscape-scale resilience through habitat protection, restoration, and connectivity directly supports adaptation. Reducing compounding stressors – such as invasive species, pollution, and land-use pressure – will increase ecosystems' capacity to absorb climate shocks.

2. Are there barriers to achieving this?
Yes. Barriers include inconsistent climate risk assessment and reporting across jurisdictions, limited funding for long-term adaptation, and the absence of standardised frameworks for resilience planning. Current adaptation initiatives often remain conceptual, with few operational mechanisms for implementing assisted adaptation or post-disaster ecosystem recovery. Institutional silos between climate, biodiversity, and land management programs also constrain integrated resilience approaches.

3. What additional outcomes will support this?
Requiring all land managers – including public agencies, private owners, and Indigenous landholders – to plan for and disclose biodiversity climate risks, akin to corporate climate

disclosure models (*Australian Treasury, 2024*), would strengthen national resilience. Developing detailed adaptation and recovery plans for ecosystems likely to exceed resilience thresholds (e.g. post-fire landscapes, altered hydrological systems) would ensure preparedness for irreversible change. Cross-sector frameworks linking disaster recovery, adaptation, and biodiversity programs would enable faster, coordinated interventions when resilience limits are reached.

4. Is EIANZ already contributing to this outcome?
Yes. EIANZ members apply adaptive management principles and resilience frameworks across environmental assessment, planning, and restoration projects. Through the Certified Environmental Practitioner (CEnvP) Scheme, the Institute promotes professional standards that integrate climate risk, adaptation, and recovery into environmental management. EIANZ also supports practitioner education and policy dialogue on resilience planning, monitoring, and disclosure to strengthen evidence-based biodiversity adaptation under climate stress.

Outcome 3: Integrated climate and nature policy approaches are reflected across policy and decision making

1. Is this a main area where action should be focused and why?
Yes. Integrating climate and nature policy is essential to deliver durable outcomes for both emissions reduction and biodiversity conservation. Climate change is now a dominant ecological driver, so emissions mitigation, adaptation, and biodiversity objectives must be planned and delivered together. Current program silos risk trade-offs that harm ecosystems during the rapid energy transition. A single, coherent lens across policy, planning, investment, and approvals will reduce duplication, improve accountability, and ensure climate actions produce measurable biodiversity gains while avoiding unintended ecological impacts.

2. Are there barriers to achieving this?
Yes. Barriers include separate governance and funding streams, inconsistent metrics, and fragmented regulatory settings. The energy system transition increases land-use and transmission pressure, and the existing assessment processes create both delays and ecological risks.

3. What additional outcomes will support this?
Set explicit biodiversity performance expectations for renewable energy and ,network developments. Establish joint governance that links climate, biodiversity, disaster risk reduction, and restoration programs, enabling coordinated investment and adaptive management at landscape scales.

4. Is EIANZ already contributing to this outcome?
Yes. EIANZ advances integrated practice through professional standards and the CEnvP Scheme, ensuring climate–biodiversity interactions are addressed in assessments and

approvals. EIANZ continues practitioner education and policy engagement to operationalise integration across planning, approvals, markets, and monitoring.

Target 6: Increase Australia's circularity rate and reduce pollution and its impacts on biodiversity by 2030

Context and Alignment

The target links Australia's biodiversity outcomes with its transition to a circular economy. Current frameworks, including the Circular Economy Policy, National Waste Policy Action Plan and ReMade in Australia certification, provide structure but focus heavily on waste diversion rather than resource regeneration. Integrating the third pillar of circularity – **conserve natural resources and regenerate nature** – would align circular economy objectives with ecological restoration and land use efficiency.

EIANZ Perspective

EIANZ commends the Government for recognising that circularity and biodiversity are interconnected. However, implementation must expand beyond recycling and product stewardship to include regenerative design and ecological limits. Increased circularity, particularly in food systems, can reduce environmental footprints through less on-farm waste and more efficient use of land and water. Circularity targets should be supported by biodiversity accounting tools that quantify environmental impacts across life cycles. The long-term persistence of pollutants, particularly plastics, microplastics, nutrients, and chemicals, continues to erode biodiversity functionality. National coordination to understand and manage these pollutants remains underdeveloped and under-resourced.

Priority Actions and Barriers

- Create a national ecological footprint index linked to product life cycles, quantifying biodiversity impact per production unit.
- Mandate pollutant reduction targets for sectors affecting aquatic ecosystems, particularly agriculture and manufacturing.
- Encourage restorative product and packaging design standards embedding biodiversity and materials recovery criteria.
- Develop national soil regeneration standards as part of circular economy policy.
- Establish biodiversity-related risk disclosure obligations for high-impact industries.

Key barriers include lack of circular economy incentives beyond waste management, and absence of measurable biodiversity performance indicators within circularity frameworks.

Cross-Linkages
Circular economy actions intersect with climate, water, and land-use strategies. Integrating circularity with **Nature Positive**, **National Soils Strategy**, and **Net Zero** agendas can multiply benefits. Policies on sustainable procurement and recycled content traceability should explicitly embed biodiversity criteria.

EIANZ Position
EIANZ supports increasing circularity as a key pathway to reduce biodiversity loss but urges stronger inclusion of resource regeneration, soil health, and pollution control. A national, biodiversity-linked circularity framework will drive more coherent, measurable outcomes for nature.

Outcome 1: Markets are developed to support producers and consumers to shift to a circular economy

1. Is this a main area where action should be focused and why?
Yes. Market development is central to driving low-emissions, resource-efficient systems that align with Australia's climate and biodiversity objectives.

2. Are there barriers to achieving this?
Yes. Current markets undervalue environmental outcomes and fail to account for embedded emissions in goods and services. Domestic market incentives remain fragmented across jurisdictions, and existing mechanisms do not address the full lifecycle impacts of traded products.

3. What additional outcomes will support this?
Outcomes that promote harmonised emissions accounting, transparent supply chains, and integration of biodiversity and carbon performance into trade policy will strengthen circular market design. Expanding government procurement criteria to value circular and low-emission goods will also stimulate demand.

4. Is EIANZ already contributing to this outcome?
Yes. The Institute's professional standards and education programs support credible climate and circular economy practice, including life-cycle assessment and policy design aligned with Paris Agreement objectives.

Outcome 2: Pollution and its impacts on biodiversity are understood, measured and managed at local, state and national levels, with a focus on plastics and harmful pollutants

1. Is this a main area where action should be focused and why?
Yes. Persistent pollutants continue to undermine biodiversity functionality and ecosystem resilience. Strengthening measurement and monitoring frameworks across jurisdictions is essential to identify and manage pollutant impacts. Programs that reduce on-farm food waste can indirectly lessen pollution and land degradation, freeing resources such as water and soil capacity for biodiversity benefits.

2. Are there barriers to achieving this?
Yes. Current commitments lack detail and are likely to be under-resourced for effective implementation. Limited cross-agency coordination and inconsistent pollution monitoring impede a coherent national picture. Many pollution effects on biodiversity, including chemical persistence, remain poorly understood. Data gaps and insufficient practitioner capacity to apply integrated ecological and pollution management frameworks further constrain progress.

3. What additional outcomes will support this?
Building resilience into biodiversity and ecosystems requires reducing pollution alongside other pressures.

4. Is EIANZ already contributing to this outcome?
Yes. EIANZ advances pollution management and resilience planning through its Certified Environmental Practitioner (CEnvP) Scheme and professional standards in environmental risk assessment, monitoring, and restoration. Members contribute to research, policy, and practice addressing pollution impacts across aquatic and terrestrial systems, supporting consistent, science-based management approaches.

Outcome 3: Efforts to clean up contaminated environments are enhanced and implemented at scale

1. Is this a main area where action should be focused and why?
Yes. Contaminated environments present direct risks to biodiversity and ecosystem recovery. Integrating biodiversity strategies within clean-up programs will maximise ecological benefits and resilience. Large-scale clean-ups also provide opportunities to trial technologies that support habitat restoration.

2. Are there barriers to achieving this?
Yes. The proposed commitments lack sufficient detail and are likely to be under-resourced for effective delivery. Governance fragmentation and limited integration between pollution control and biodiversity recovery constrain progress. Updated impact assessment and project

approval frameworks are required to ensure remediation aligns with biodiversity protection goals.

3. What additional outcomes will support this?
Enhanced research and development investment is needed to deploy technologies for contaminated soil, water, and air remediation at ecosystem scale. Clearer cross-jurisdictional standards for environmental clean-up and long-term monitoring will support consistency, accountability, and public trust in outcomes.

4. Is EIANZ already contributing to this outcome?
Yes. EIANZ contributes through certifying practitioners and by guidance in impact assessment, environmental management, and contaminated land remediation. The Institute supports integrated planning approaches that ensure remediation actions are science-based, ethical, and outcome-focused.

Enabler 1: Ensure equitable representation and participation in decisions relating to nature, particularly for First Nations peoples.

Context and Alignment
Equitable participation in environmental decision making is fundamental to achieving nature-positive outcomes. First Nations peoples hold rights and responsibilities over extensive parts of Australia's land and sea country – 44% under Native Title and a further 36% through Indigenous Land Use Agreements. Indigenous land and sea management already contributes to nature conservation and restoration over about 25% of Australia, including 11% within Indigenous Protected Areas. These efforts demonstrate that biodiversity recovery depends on recognising Traditional Knowledge, cultural authority and decision-making rights alongside scientific expertise.

EIANZ Perspective
EIANZ recognises Indigenous peoples as rights-holders, not stakeholders. Their participation and leadership are essential in policy, planning and project assessment processes that affect Country. The Institute supports a co-governance model where Traditional Owners participate directly in setting biodiversity objectives, defining success metrics, and monitoring outcomes.

The principles of equitable participation in environmental decision-making also extend to other under-represented or disempowered groups – youth, people with disability, and gender-diverse stakeholders – whose lived experiences broaden environmental problem-solving.

Priority Actions and Barriers

- Embed biodiversity valuation, accounting frameworks and approaches to management that draw upon multiple sources of evidence, including both Traditional and scientific knowledge systems.
- Require biodiversity impact assessments for all major government and business decisions to ensure cumulative effects are understood and mitigated.
- Encourage private-sector alignment with the *Taskforce on Nature-related Financial Disclosures (TNFD)* to direct capital toward positive biodiversity outcomes.
- Support accredited training for professionals managing biodiversity data and reporting, including pathways for Indigenous rangers and community scientists.

Key barriers include inconsistent recognition of Indigenous decision-making authority and time frames, fragmented funding across jurisdictions, and insufficient data interoperability between Traditional knowledge and scientific monitoring systems (*Commonwealth of Australia, State of the Environment Report 2021*).

Cross-Linkages
Equitable representation intersects with several other enablers and outcomes. It strengthens climate-nature integration, supports adaptive management frameworks, and informs restoration planning that aligns with Indigenous Caring for Country principles. Collaboration between Indigenous organisations, environmental practitioners and industry will also underpin unified accounting of carbon and biodiversity outcomes under the national sustainability reporting architecture.

Summary Position
EIANZ strongly supports embedding Indigenous and community representation within all biodiversity governance and investment processes. Empowering rights-holders through shared authority, capacity building and transparent data systems is essential to credible and lasting nature protection.

Outcome 1: First Nations peoples are supported to preserve and apply Traditional Knowledge, with governance arrangements that enable culturally grounded, self-determined decision-making

1. Is this a main area where action should be focused and why?
Yes. Embedding Traditional Knowledge in biodiversity policy and land management delivers durable conservation outcomes and supports cultural continuity. Strong examples already exist through national park co-management, Indigenous Protected Areas, Bush Heritage Australia and Australian Wildlife Conservancy partnerships, and the growing networks of Indigenous rangers and land and sea management organisations. However, these initiatives

occur mainly away from major population centres. Greater visibility and regular reporting on their success would strengthen community understanding and public support, particularly following the *Voice* referendum outcome.

2. Are there barriers to achieving this?
Yes. Transformational change requires social cohesion and trust. Where First Nations rights, interests, culture and values are likely to be affected, Indigenous communities must be included in shaping governance approaches to ensure legitimacy. On Indigenous Protected Areas and on other Aboriginal land, and in places with cultural heritage significance, genuine partnership is essential.

3. What additional outcomes will support this?

Legislation protecting Indigenous Cultural and Intellectual Property (ICIP) should underpin equitable knowledge transfer and ensure appropriate recognition and remuneration. Implementing *Professor Graeme Samuel's recommendation* for a National Environmental Standard on Aboriginal and Torres Strait Islander engagement would provide consistency across jurisdictions and embed clear expectations for partnership, co-design and participation. Together these measures would formalise Traditional Knowledge as a valued and safeguarded component of Australia's environmental governance framework.

4. Is EIANZ already contributing to this outcome?
Yes. EIANZ promotes ethical professional standards for practitioners engaging with Traditional Knowledge and Indigenous cultural heritage. Its certification and training programs emphasise respect for Indigenous rights, data sovereignty and community-led consent processes. Through professional guidance and practitioner education, EIANZ contributes to embedding Traditional Knowledge principles within environmental assessment, planning and management practice.

Outcome 2: Decision-making is informed by diverse voices, including youth, people with disabilities and people of all genders

Is this a main area where action should be focused and why?
Yes. Decisions about biodiversity are more legitimate and durable when shaped by diverse perspectives across age, gender, ability, location and background. Encouraging participation and facilitating input from under-represented groups strengthens policy relevance and on-ground uptake. For practitioners, this translates into clearer mandates to design engagement that is representative, and to document how diverse knowledge informs options analysis, risk assessment and monitoring. Standards should require practitioners to evidence inclusive engagement methods and track who was consulted, how feedback shaped decisions, and residual gaps.

Are there barriers to achieving this?
Yes. Barriers include inconsistent opportunities for participation, limited accessibility of engagement processes, and consultation formats that do not accommodate different needs or contexts. Regional and rural communities may perceive city-based decision-making as imposed or disconnected from local realities. Addressing this perception through communication, transparency and shared decision frameworks will be critical to building mutual confidence. Without explicit and shared objectives, diverse voices can be invited but not integrated into final decisions. For practitioners, constraints arise when timelines, resourcing, or templates do not support inclusive design, accessible materials, or feedback loops. Clarity in roles, scope and decision pathways is necessary so contributions from youth, people with disabilities and people of all genders are considered and recorded in decision rationales.

What additional outcomes will support this?
Set explicit participation objectives in programs and regulations, with minimum accessibility requirements and reporting on who participated and how input influenced outcomes. Provide capacity-building for agencies and proponents on inclusive engagement design and evaluation. Embed inclusive practice in procurement and project approval conditions so resourcing reflects expectations. For practitioners, align guidance and competency standards with inclusive engagement planning, accessible information provision, and transparent incorporation of feedback into impact assessment, mitigation design and monitoring frameworks.

Is EIANZ already contributing to this outcome?
Yes. Within the professional community, EIANZ can advance this outcome by codifying inclusive engagement expectations in guidance, training and certification criteria; by promoting event and consultation accessibility; and by sharing practitioner case studies where diverse input improved outcomes. These activities support consistent practice, clearer evidence standards, and better documentation of how engagement with youth, people with disabilities and people of all genders informs environmental decisions.

Enabler 2: Mainstream nature into government and business decision-making, including in financing, policies, regulations and planning processes

Context and Alignment
Integrating nature into all levels of government and business decision-making is essential to halting biodiversity decline and achieving a nature-positive future. Decisions about infrastructure, land use, energy, agriculture, and finance all affect ecosystems directly or

indirectly. Embedding biodiversity and ecosystem considerations into governance, regulation, and investment decisions will align Australia's environmental ambitions with its economic and social goals. *The Taskforce on Nature-related Financial Disclosures (TNFD, 2024)* offers a globally recognised framework for identifying, managing, and disclosing nature-related risks and dependencies. Similarly, the *Nature Repair Market Act 2023* provides a foundation for mobilising private investment in restoration and conservation. Together, these initiatives can shift Australia's economy from treating nature as an externality to recognising it as a fundamental asset underpinning productivity, health, and resilience. To operationalise this shift, the internationally recognised BIOFIN framework can help governments map biodiversity-related expenditure and investment needs, creating the financial transparency required to integrate nature into economic planning.

EIANZ Perspective

EIANZ commends the Australian Government for recognising "mainstreaming" as a fundamental enabler of system-wide change. Reversing nature decline cannot be achieved through targeted interventions alone. It requires that every sector – public, private, and community – integrate ecological considerations into policy and operational decision-making. At the heart of effective mainstreaming are two levers: education and incentivisation.

Current levels of understanding about human impacts on nature and the dependencies of society and the economy on healthy ecosystems are low. This is evident in both policy design, corporate strategy and general community awareness. EIANZ considers that education is therefore an essential precondition for transformational change. Policymakers, business leaders, and practitioners must understand:

- how current systems and activities impact nature;
- how ecological decline undermines economic value, supply chain stability, and community wellbeing; and
- how to identify, avoid, minimise, and offset their organisation's impacts.

A structured national education and awareness program – tailored for varying levels of sophistication – should be developed to reach these audiences. Messaging must be accessible, practical, and linked to economic and community outcomes. The concept of *"nature positive"* should anchor this program, replacing outdated "no net loss" framing that has proved inadequate to stop decline.

Another lever is incentivisation. Two complementary approaches are needed. First, through **compliance and regulation**: embedding biodiversity considerations into planning laws, procurement frameworks, and corporate governance obligations (including directors' duties to consider material nature-related risks). Second, through **market opportunities**: expanding transparent biodiversity credit schemes, green finance instruments, and accreditation systems that recognise verified nature-positive outcomes. EIANZ supports development of consistent

standards that give investors confidence and reward organisations demonstrating ecological integrity.

Priority Actions and Barriers
Priority actions include:

- Embedding nature-related risk assessment and disclosure in public and private sector reporting frameworks, consistent with TNFD principles.
- Establishing mandatory biodiversity and ecosystem accounting within environmental-economic frameworks.
- Developing national guidance and education resources for local governments and businesses on integrating nature into planning and investment decisions.
- Expanding certification, accreditation, and training programs to ensure competent environmental practitioners support implementation.

Without a coordinated national framework and adequate resourcing for professional training, mainstreaming will remain aspirational. BIOFIN's methodology could also assist governments in coordinating public and private finance by linking biodiversity investment targets with national accounting systems and environmental-economic frameworks.

Cross-Linkages
This enabler is interdependent with others across the Plan. It reinforces the enablers on *building capability and capacity* and *mobilising finance for nature*, and directly supports targets on restoration, climate-nature integration, and sustainable land management. BIOFIN complements these linkages by aligning fiscal planning with biodiversity outcomes and strengthening coherence between finance mobilisation, corporate disclosure (TNFD), and practitioner capability development.

Summary Position
EIANZ strongly supports mainstreaming nature into all decision-making processes as a prerequisite for systemic environmental recovery. The Institute recommends prioritising Prime Minister level leadership, education and incentivisation as the primary mechanisms for success, supported by clear standards, consistent regulation, and strong professional practice. Embedding ecological literacy, accountability, and market confidence across Australia's public and private sectors will be central to achieving enduring, nature-positive outcomes.

Outcome 1: Protection and restoration of nature is embedded in the planning, policy and regulatory decisions of government

1. Is this a main area where action should be focused and why?
Yes. Embedding protection and restoration of nature into all levels of government decision-

making is essential to achieving a nature positive outcome. Government decisions on planning, land use, taxation, and infrastructure directly affect biodiversity outcomes. While most jurisdictions have biodiversity legislation, its effectiveness depends on how other laws and policies interact with it. Clear national principles for biodiversity inclusion should be applied as a test across all policy and regulatory decisions.

2. Are there barriers to achieving this?
Yes. Some governments have begun integrating climate considerations into policy and administration, but similar measures for biodiversity are lacking. Existing planning laws often focus on project-level approvals, overlooking cumulative impacts and landscape-scale outcomes. Additionally, there is insufficient training and accreditation for professionals responsible for biodiversity data and reporting, leading to variable quality and reliability. Without coordinated intergovernmental leadership and clearly defined accountability mechanisms, biodiversity protection remains subordinate to economic or political imperatives.

3. What additional outcomes will support this?
Key supporting measures include:

- Establishing a mandatory requirement for biodiversity impact assessments in all major government and business decisions.
- Conducting jurisdictional reviews of environmental and planning laws to align them with nature positive objectives.
- Embedding the *avoid–minimise–mitigate–offset* hierarchy within regional and strategic planning processes to prevent incremental loss of biodiversity.
- Developing national principles to ensure policy incentives – such as taxation measures – support diverse, resilient ecosystems rather than monocultures or perverse outcomes.

4. Is EIANZ already contributing to this outcome?
Yes. EIANZ contributes by promoting professional standards and ethical practice in environmental management, supporting accredited practitioners, and providing guidance on best practice environmental impact assessment. The Institute also provides expert advice and input to governments on reforms aimed at embedding nature in decision-making such as regional planning initiatives. EIANZ stands ready to support government efforts to operationalise a nature positive approach across all levels of policy and administration.

Outcome 2: Businesses embed nature in their decision-making

1. Is this a main area where action should be focused and why?
Yes. Businesses should play a pivotal role in reversing biodiversity decline through their

operations, procurement, and investment decisions. Embedding nature in corporate strategy enables accountability for both direct and supply-chain impacts. While frameworks such as the *Taskforce on Nature-related Financial Disclosures (TNFD)* offer a global model for identifying and managing nature-related risks, adoption across Australian industries remains limited. Government support in this area will accelerate the integration of nature-positive practices into core business governance and decision-making.

2. Are there barriers to achieving this?
Yes. Significant barriers include variable capacity across business sectors, limited access to consistent biodiversity data, and the lack of a regulatory framework mandating nature-related reporting. Agriculture, which occupies more than half of Australia's land mass, exemplifies this challenge. Large corporate enterprises can track and disclose biodiversity performance within supply chains, but many smaller operators lack resources, expertise, and tools to do so. Without accessible guidance, data platforms, and financial incentives, nature-related disclosure will remain confined to large entities.

3. What additional outcomes will support this?
Supporting outcomes should include:

- Government endorsement and phased incorporation of TNFD-aligned disclosure requirements into corporate compliance frameworks.
- Establishment of financial incentives – such as preferential lending rates or investment access – for businesses demonstrating verified biodiversity gains.
- Development of national biodiversity accounting standards and data infrastructure to improve consistency and transparency.
- Capacity-building programs for rural land managers and small-to-medium enterprises to understand, measure, and report on biodiversity.
- Practical support for sustainable land management practices that enhance on-farm biodiversity and promote circular resource use.
- At the state level, BIOFIN could be piloted to benchmark biodiversity investment, identify funding priorities, and design mechanisms to attract private capital into restoration and conservation.

4. Is EIANZ already contributing to this outcome?
Yes. EIANZ actively supports the integration of environmental and biodiversity considerations into business and investment decisions through professional standards, certification, and practitioner education. Its certified practitioners provide technical expertise in biodiversity assessment, data management, and reporting frameworks. EIANZ also engages with government and industry to promote alignment with international standards, including TNFD, and to strengthen professional capability for credible, science-based decision-making.

Outcome 3: People and communities better understand and care for nature and its many values

1. Is this a main area where action should be focused and why?
Yes. Education is the key to helping people and communities understand the importance of biodiversity and their role in protecting it. Education should highlight both personal influence and the responsibilities of government and business, building a shared sense of accountability for environmental outcomes.

2. Are there barriers to achieving this?
Yes. Public understanding of biodiversity remains limited. Environmental education is inconsistent, and access to credible information varies. Without visible leadership from governments and businesses, motivation to act can be weak.

3. What additional outcomes will support this?
A national biodiversity education strategy would integrate learning into schools, universities, workplaces, and communities. Public campaigns promoting the concept of "nature positive" would motivate behavioural change. Community participation opportunities – such as citizen science and local restoration – would strengthen connection and accountability.

4. Is EIANZ already contributing to this outcome?
Yes. EIANZ advances public and professional understanding of environmental management through education, certification, and guidance. Its members work across sectors to interpret environmental information and support evidence-based decisions.

Enabler 3: Ensure environmental data and information are widely accessible and support decision-making

Context and Alignment

Effective biodiversity management depends on a nationally coordinated system for collecting, governing and sharing environmental information. Data must be credible, transparent, and structured within clear governance frameworks to support evidence-based decisions. *Environment Information Australia (EIA)* provides an opportunity to unify disparate data systems, develop national standards and promote interoperability. Consistent governance, funding and accountability mechanisms will ensure data integrity, comparability and usability over time.

EIANZ Perspective

EIANZ recognises high-quality and accessible data as the enabling force behind all other outcomes in the Plan. The Institute supports a whole-of-system approach that integrates data production, curation, access, and application through national standards and interoperability protocols. Data must not only exist but be usable and trusted. Open access, transparency and co-design with practitioners, governments and communities is needed.

Priority Actions and Barriers

Persistent barriers include inconsistent collection methodologies, variable funding for long-term monitoring, and institutional silos that dissuade data sharing. Legacy systems, cultural resistance, and lack of technical capability also constrain progress. EIANZ also highlights the importance of sustained investment in human capability – training practitioners in data management, analysis and ethical use to maintain credibility and comparability.

Cross-Linkages

Accessible, consistent data underpins every target in the Strategy.

EIANZ Position

EIANZ strongly supports prioritising this enabler as a foundational investment. The Institute advocates for consistent national standards, enduring funding, and genuinely open systems that make environmental data trusted, usable and used. Through its Certified Environmental Practitioner (CEnvP) Scheme, technical guidance, and professional development programs, EIANZ is already advancing professional competency, data literacy and integrity.

Outcome 1: High-quality, consistent and fit-for-purpose data and information is produced to support decision-making

1. Is this a main area where action should be focused and why?
Yes. Data integrity is the essential foundation for all other components of the Strategy for Nature. High-quality and consistent data is critical for credibility, public trust, effective environmental management and market integrity. For practitioners, it enables evidence-based assessments and transparent decision-making.

2. Are there barriers to achieving this?
Yes. Significant barriers include inconsistent methodologies across jurisdictions, spatial and temporal gaps in data collection, and chronic underfunding of long-term monitoring programs. Defining “fit for purpose” is also complex, as data suitable for scientific research may not meet the needs of regulators, businesses or local practitioners. These challenges are compounded by fragmented governance and lack of enforceable standards, resulting in duplication, inefficiency and data silos.

3. What additional outcomes will support this?
Achieving this outcome requires mandatory national environmental data standards, clear governance arrangements and enduring investment in monitoring and reporting systems. Collaboration frameworks between governments, research institutions, Traditional Owners and the private sector can ensure co-designed approaches that serve multiple stakeholder needs. Embedding data-sharing protocols and open-access requirements would also improve transparency and enable cross-sector innovation.

3. Is EIANZ already contributing to this outcome?
Yes. EIANZ actively supports this outcome by upholding professional and ethical standards through the Certified Environmental Practitioner (CEnvP) Scheme, fostering data literacy and competency through professional development, and producing technical guidance that promotes methodological consistency.

Outcome 2: Improved and interoperable systems and tools are developed and made accessible to analyse and apply data effectively

1. Is this a main area where action should be focused and why?
Yes. Producing high-quality data alone is insufficient if it remains inaccessible or fragmented across incompatible systems. To convert raw data into actionable insight, there must be interoperable tools and infrastructure that allow integration across jurisdictions and sectors. Effective and user friendly "plumbing" for data movement and analysis is essential to support cumulative impact assessment, adaptive management, and national consistency.

2. Are there barriers to achieving this?
Yes. The barriers are as much institutional and cultural as they are technical. Many agencies and research organisations rely on outdated legacy platforms that cannot share or receive information seamlessly. A persistent "ownership" mindset creates data silos and limits collaboration. While establishing the *Biodiversity Data Repository* is an important step, its value will depend on developing analysis-ready, interoperable datasets that are regularly updated and easy to apply. Sustained public investment, technical leadership, and incentives for researchers and institutions to share and apply data effectively are critical to overcome these systemic limitations.

3. What additional outcomes will support this?
Progress will rely on policy reforms that embed open-access principles and mandate the publication of biophysical data in machine-readable formats by default. Intergovernmental agreements must formalise consistent technical standards, metadata requirements, and use of application programming interfaces (APIs). *Drawing from open government data models (ODC, 2022)*, establishing national interoperability standards will enhance efficiency and enable consistent spatial and temporal analyses.

4. Is EIANZ already contributing to this outcome?
Yes. EIANZ represents a significant cohort of end-users – environmental practitioners – who rely on accessible, high-quality tools for impact assessment, monitoring and reporting. Members are well positioned to provide expert input into the design and testing of these systems. EIANZ can act as a key channel for practitioner engagement, training and dissemination, ensuring data tools are used ethically, consistently and effectively across the profession.

Outcome 3: Indigenous data are governed according to the FAIR and CARE principles and meaningfully inform decision-making

1. Is this a main area where action should be focused and why?
Yes. This outcome is both an ethical imperative and a practical necessity for effective nature conservation in Australia. Genuine partnerships with Traditional Custodians are essential to embed Traditional knowledge, perspectives and rights within decision-making. Applying the FAIR and CARE principles establishes a governance framework that respects Indigenous data sovereignty, ensures equitable participation, and safeguards Indigenous cultural and intellectual property (ICIP).

2. Are there barriers to achieving this?
Yes. Systemic barriers are deep-rooted and structural. Historical misuse and appropriation of Traditional knowledge have created mistrust between communities, researchers and government institutions. Many practitioners and policymakers still lack understanding of the CARE principles and their application in data governance. Resource asymmetry further limits First Nations participation in complex, time-intensive governance processes. In addition, Australian legislation currently provides insufficient recognition or protection of Indigenous Cultural and Intellectual Property (ICIP), leaving gaps in legal frameworks that enable exploitation without consent or benefit-sharing. These obstacles require deliberate, long-term reform to address.

3. What additional outcomes will support this?
Achieving this outcome depends on embedding co-design and co-governance as standard practice from the outset of all data programs. Long-term funding must be directed to First Nations organisations to build capacity and data infrastructure. Heritage and intellectual property laws should be reformed to explicitly recognise Indigenous rights and ensure benefit-sharing from knowledge use. A nationally consistent framework for compliance with the *Nagoya Protocol* would align practice across jurisdictions, strengthen ICIP protections, and provide legal clarity for both custodians and data users. *Examples from Canada and Aotearoa New Zealand show such frameworks can balance sovereignty with collaboration*.

4. Is EIANZ already contributing to this outcome?
Yes. EIANZ's commitment to reconciliation and ethical practice provides a foundation for

supporting this outcome. Through its Indigenous Engagement Working Group (IEWG) the Institute is building awareness and competence among practitioners.

Outcome 4: Research and development improve tools, technologies and understanding for managing drivers of biodiversity decline and assisting recovery

1. Is this a main area where action should be focused and why?
Yes. Innovation is required to keep pace with dynamic and often unpredictable pressures on nature. For practitioners, R&D delivers methods that can be operationalised in assessments, restoration design and adaptive management plans. Prioritising mission-driven research ensures resources target practical problems and produce outputs that translate into field-ready guidance, decision-support, and measurable improvements in biodiversity outcomes.

2. Are there barriers to achieving this?
Yes. A persistent research-implementation gap limits uptake of useful findings. Short funding cycles tied to competitive grants discourage the long, iterative work required for conservation research and technology maturation. Disciplinary silos impede integrated solutions, while translation is often weak, leaving outputs inaccessible to regulators, proponents and consultants. Without stable pathways from discovery to deployment, promising approaches fail to reach practice or remain unevaluated at scale.

3. What additional outcomes will support this?
Bridge the gap with mission-oriented programs that fund end-to-end pipelines from research to tested, standards-ready tools. Invest in knowledge-brokering roles and organisations to convert research into practitioner guidance, templates and training. Formalise co-design with practitioners, Traditional Owners, regulators and industry to ensure relevance and operational feasibility. Create incentives and frameworks for field trials, independent evaluation and publication of methods to speed consensus on best practice. Embed requirements for open methods, metadata and validation protocols so outputs are reproducible and ready for incorporation into professional standards.

4. Is EIANZ already contributing to this outcome?
Yes. EIANZ functions as part of the implementation bridge by: disseminating research through journals, conferences and webinars; identifying priority on-ground challenges that require R&D attention; and fostering an innovation culture that showcases emerging technologies and evidence-based approaches.

Monitoring, evaluation and reporting

Context and Alignment

Monitoring, evaluation and reporting (MER) underpin accountability in implementing both Australia's Strategy for Nature and its obligations under the Global Biodiversity Framework (GBF). The move towards a consistent, standardised approach is a positive step, particularly through alignment with the GBF Monitoring Framework and the State of the Environment reporting. The establishment of Environment Information Australia provides an institutional anchor for this work, but its success depends on comprehensive baseline data, clear metrics, and sustained investment.

EIANZ Perspective

EIANZ supports the Government's commitment to align national MER systems with international frameworks but highlights several weaknesses that could undermine effectiveness. Without a national ecological baseline, Australia cannot credibly measure progress toward halting and reversing biodiversity loss by 2030. Disparate data systems across jurisdictions hinder comparability and transparency. A truly national framework must bring together ecological, environmental-economic, and Traditional knowledge systems, supported by national standards for collection, sharing and use. Resourcing remains a critical constraint.

Priority Actions and Barriers

- **Establish a national baseline** using the most recent comprehensive datasets to create an agreed 2024 reference point for all indicators.
- **Mandate standardised ecological condition metrics** across jurisdictions to improve consistency.
- **Implement open-access data sharing** through a national biodiversity repository, with appropriate protection of Indigenous and private intellectual property.
- **Adopt emerging technologies** such as remote sensing, environmental DNA, and AI-driven monitoring to enhance spatial and temporal coverage.
- **Ensure sustained resourcing** for Environment Information Australia and partner institutions to analyse and report on data.
- **Create an independent ecological audit body** to verify progress toward 2030 and 2050 goals, enhancing public trust and scientific credibility.

Cross-Linkages

Effective MER supports all national nature targets by providing the evidence base for adaptive management and policy refinement. It also connects directly with climate reporting, natural capital accounting, and national environmental standards. Integration with Indigenous data

governance frameworks is essential to ensure ethical, co-designed use of Traditional Ecological Knowledge.

Summary

EIANZ strongly supports Australia's alignment with the GBF Monitoring Framework but emphasises that success depends on robust baseline data, interoperability, Indigenous governance, and long-term investment. A credible national MER system must deliver transparent, consistent, and independently verified evidence to guide decisions and demonstrate real progress toward reversing biodiversity loss.