

Australian Sustainable Finance Taxonomy

Version 1 – 2025

Acknowledgement of Country and Thanks

The Australian Sustainable Finance Institute acknowledges the Traditional Custodians of Country throughout Australia and recognises their continuing connection to land, waters, species and culture. We acknowledge their ongoing status as the First Peoples of Australia and pay our respects to their Ancestors and Elders past and present.

ASFI values the perspectives, knowledge and experience provided by First Nations Peoples to the development of the Australian sustainable finance taxonomy and thanks those who contributed to this work.

About the Australian Sustainable Finance Institute

The Australian Sustainable Finance Institute's (ASFI) mission is to align the Australian financial system with a sustainable, resilient and inclusive Australia. ASFI's establishment followed an unprecedented collaborative effort by 140 representatives from across the Australian finance sector, civil society, academia, financial regulators and government to create the Australian Sustainable Finance Roadmap.

Released in November 2020, the Roadmap sets out 37 recommendations to realign the Australian financial system by 2030 to support a more resilient, sustainable and prosperous future for all Australians.

ASFI was established in July 2021 to coordinate and drive Roadmap implementation, working collaboratively across the financial sector, government, regulators, civil society and academia. Our members are Australian banks, asset owners, asset managers, insurers and financial services companies who are committed to ASFI's vision and willing to contribute to sustainable and impactful solutions.

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Australian Energy Council	Financial Services Council	Property Council of Australia
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1. Background and Purpose

About the Australian Sustainable Finance Taxonomy

The Australian Taxonomy Project commenced in July 2023. It is a joint industry-government initiative, led by the Australian Sustainable Finance Institute (ASFI) in partnership with the Australian Commonwealth Department of the Treasury, to develop an Australian sustainable finance taxonomy.

Funding and partnership from the Australian Government reflects shared appetite across government, finance, and industry for new frameworks to support sustainable finance markets in Australia, and the taxonomy is identified as one of ten priority areas in the Government's Australian Sustainable Finance Roadmap.

The taxonomy's initial development phase covers:

- the development of climate change mitigation criteria for six priority sectors; and
- the development of a Do No Significant Harm (DNSH) framework and Minimum Social Safeguards (MSS).

The first version of the Australian sustainable finance taxonomy has undergone two periods of public consultation. Submissions and related documents can be found [here](#).

Taxonomy Project Governance

The Australian Council of Financial Regulators' Climate Working Group (CWG), comprising representatives from Treasury, the Reserve Bank of Australia, the Australian Prudential Regulation Authority, and the Australian Securities and Investments Commission, has provided governance oversight for the taxonomy's initial development.

The Taxonomy Technical Expert Group (TTEG), whose membership was endorsed by the CWG, has provided strategic direction over, input into, and endorsement of all Australian taxonomy products prior to public consultation and publication.

Sector- and subject-specific Taxonomy Advisory Groups have provided technical input and feedback on draft taxonomy outputs, including activity selection; the application of the transition methodology to activities; and the criteria prior to endorsement by the TTEG. More information on the Australian Taxonomy Project's governance arrangements can be found [here](#).

Purpose of an Australian Taxonomy

A sustainable finance taxonomy is a framework to classify economic activities—generally constituted as assets, projects, facilities or measures—that positively contribute to key environmental sustainability objectives.

The Australian taxonomy will provide a common standard for green and transition finance in Australia, helping to accelerate the allocation of capital towards activities that enable Australia's net zero ambitions.

The taxonomy will:

- make it easier for financial institutions to identify investment and lending opportunities;
- provide financial and non-financial corporate entities with greater confidence in and assurance over sustainability claims;
- support the provision of consistent and comparable information to users;
- enhance comparability between investment products and portfolios; and
- reduce transaction costs associated with due diligence by providing market clarity on whether a transaction is contributing to Australia's climate change mitigation goals, thereby increasing the attractiveness of transactions for sustainable activities.

TABLE 1
Elements in scope – phase 1 of taxonomy development

Description	Sector scope
Technical screening criteria for climate change mitigation	Agriculture and Land >>>
Technical screening criteria (TSC) are applied to each activity covered in the taxonomy and refer to the requirements that must be met for an activity to be assessed as making a substantial contribution to climate change mitigation.	Minerals, Mining and Metals >>>
The Australian taxonomy includes green and transition classifications – the methodology to determine classification is detailed in Section 2 .	Manufacturing and Industry >>>
	Electricity Generation and Supply >>>
	Construction and Buildings >>>
	Transport >>>
Do No Significant Harm (DNSH)	
The DNSH criteria aim to ensure activities that meet the performance thresholds set out in the TSC for climate change mitigation do not cause significant harm to the taxonomy's other environmental objectives.	>>>
Minimum Social Safeguards (MSS)	
The MSS criteria aim to ensure that an entity engaging in taxonomy-aligned activities adheres to key social protections and standards.	>>>

Environmental Objectives

The Australian sustainable finance taxonomy covers the six environmental objectives listed in Table 2. They have been selected and defined based on Australia's environmental priorities and commitments and alignment with other taxonomies.

Prioritising the climate change mitigation objective

The Australian taxonomy has prioritised the development of performance criteria for climate change mitigation in its initial development phase. This reflects the urgent market need for credible and usable guidance to identify activities that are aligned with or make a substantial contribution towards achieving the Paris Agreement temperature goals. It also supports interoperability with international taxonomies and consistency with sustainability-related disclosure frameworks, which have similarly prioritised climate change mitigation (and, in some cases, climate change adaptation) to date.

The taxonomy's other environmental objectives inform the scope of the Do No Significant Harm criteria, which are included to ensure that each economic activity covered in the taxonomy does not significantly harm the other environmental objectives throughout its life cycle.

Recognising the importance of broader environmental objectives to Australia's long-term sustainability, the Australian taxonomy has been designed to ensure that coverage can be expanded in the future to include performance criteria for economic activities that make a substantial contribution to, or are aligned with, the other environmental objectives.

TABLE 2
Australian sustainable finance taxonomy – environmental objectives

Climate change mitigation	Sustainable use and protection of water resources
Achieve net zero greenhouse gas emissions (GHG) in Australia by no later than 2050 to contribute to the Paris Agreement goal of keeping global temperature increases well below 2°C and seeking to limit temperature increases to 1.5°C based on credible, science-aligned scenarios.	Aquatic ecosystems are conserved and restored at a catchment level by 2050 in Australia in line with the goals and targets of the Kunming-Montreal Global Biodiversity Framework to enhance their ecological integrity and connectivity, genetic diversity and enable a continued flow of ecosystem services within the limits of planetary boundaries and based on the principle of equitable outcomes for diverse societal needs.
To support the achievement of this ambition, rapid and sustained GHG emissions reductions consistent with Paris-aligned, quantitative interim targets informed by the best available science and based on Australia's remaining carbon budget are required to avoid further accumulation of greenhouse gases in the atmosphere and reduce adverse climate impacts. This includes the ongoing transformation of the energy sector to net zero emissions sources.	Elevating and integrating First Nations-led traditional practices is critical to the achievement of this ambition. Freshwater withdrawals from surface water bodies and groundwater are effectively managed so that deterioration in water quality and the biodiversity of aquatic ecosystems is halted. By 2030, at least 30 per cent of areas of degraded inland water, marine and coastal ecosystems are restored; and at least 30 per cent of inland, marine and coastal areas are effectively conserved and managed.
Climate change adaptation and resilience	Pollution prevention and control
Businesses, civil society, communities, landscapes and ecosystems in Australia have the capacity to resist, absorb, adapt to, and transform and recover from the current and projected impacts of climate change, both direct and indirect, in a timely and effective manner by 2050.	Pollution risks and the adverse impacts of pollution from all sources are eliminated where possible or reduced to levels that are not harmful to people, biodiversity or ecosystem functions and services in Australia by 2030.
To support the achievement of this ambition, immediate actions and investments are required that anticipate, prepare for, and respond to climate-related risks to reduce the costs and impacts associated with response and recovery.	To support the achievement of this ambition, pollution sources, sinks and pathways are identified and risk-based measures are applied to avoid, reduce and safely remediate pollution from identified contamination sources, including air toxins, international convention chemicals such as Persistent Organic Pollutants, and other chemicals and minerals of concern. The risks associated with hazardous waste are effectively managed and circular economy-aligned approaches are identified and implemented to prevent, minimise, recycle and eliminate other categories of waste.
Biodiversity and ecosystem protection	Transition to a circular economy
Australia's biodiversity loss is halted and reversed and all ecosystems are conserved, restored and sustainably used by 2050 in line with the goals and targets of the Kunming-Montreal Global Biodiversity Framework. The impacts of climate change, invasive species and human pressures are minimised to enable a continued flow of ecosystem services within the limits of planetary boundaries and based on the principle of equitable outcomes for diverse societal needs.	Achieve sustainable design, production and consumption in Australia by transitioning from the current linear "take-make-waste" economic system to a more circular economy by 2030 that supports resource use within planetary boundaries.
Elevating and integrating First Nations-led traditional practices is critical to the achievement of this ambition. Adverse environmental impacts are avoided or minimised while efforts to protect, conserve and restore the environment are scaled up. By 2030, at least 30 per cent of Australia's areas of degraded terrestrial, inland water, and marine and coastal areas are under effective restoration; and at least 30 per cent of terrestrial and inland water, marine and coastal areas, especially areas of particular importance for biodiversity and its ecosystem functions and services, are effectively conserved and managed. Human-induced extinction is halted and extinction risk is minimised to maintain and restore genetic diversity within and between species; and agriculture, aquaculture, fisheries and forestry are managed sustainably.	To support the achievement of this ambition, increase Australia's circularity rate by focusing on designing out waste and pollution; shift to renewable and long-lived materials; implement more materials-efficient production processes and circular business models; circulate materials and products as long as possible (at their highest value); and regenerate nature.

HOW WILL THE AUSTRALIAN SUSTAINABLE FINANCE TAXONOMY BE 1.5°C-ALIGNED?

Aligning a taxonomy with a credible 1.5°C pathway that is recognised by global capital markets is important to provide clarity about activities that verifiably contribute to emissions reductions, which can support investors in shifting asset allocations toward transition-related opportunities over time.

Internationally recognised and credible 1.5°C-aligned scenarios are used to inform (a) the selection of activities prioritised in the taxonomy; and (b) the technical screening criteria for those activities, including emissions intensity thresholds and other performance requirements attached to green and transition classifications.

The core international reference scenario for the taxonomy's development is the International Energy Agency's (IEA, 2023) Net Zero Emissions scenario (NZE2050). While other credible 1.5°C scenarios have been developed, including by the Intergovernmental Panel on Climate Change and the Network for Greening the Financial System, the IEA's NZE2050 model is commonly used as a reference in global capital markets. Aligning with it strengthens the taxonomy's interoperability.

Key Australian reference scenarios include:

- Climateworks Centre's (2023) Australian 1.5°C scenario developed in partnership with CSIRO;
- CSIRO's (2023) 1.5°C Rapid Decarbonisation (CRD) scenario;
- CSIRO's (2024) scenarios for the Climate Change Authority's 2024 Sector Pathways Review, including:
 - A40/G1.5 – assumptions reflect greater global ambition and more rapid emissions reductions. Under that more ambitious global context, the scenario has Australia achieving net-zero in 2040.
 - A50/G2 – assumptions reflect a world tracking to a global warming outcome of less than 2°C. Within that context, the scenario sees Australia achieving net-zero by 2050.

These models all employ the AusTIMES modelling methodology, which downscales the IEA's TIMES model to the Australian context. [Appendix 1](#) provides a detailed overview of the modelling methodologies used in each.

Sectors and activities have been prioritised based on their current emissions shares, their role in facilitating Australia's transition to net zero, and/or their anticipated demand in an Australian net zero economy.

These filters help ensure that the Australian taxonomy will:

- identify key decarbonisation opportunities in high-emitting sectors in Australia that have not been comprehensively covered in other taxonomies, such as mining and agriculture;
- tailor activities and criteria to incorporate Australian practices, standards and disclosure frameworks; and
- support the implementation of priorities articulated through the Australian Government's climate, energy, and industrial policies.

Figure 1 summarises the objectives and principles guiding the taxonomy as set out in a [Terms of Reference](#) between CWG and ASFI, along with the outcomes sought through fulfilment of the taxonomy's core principles.

FIGURE 1

The Australian taxonomy's objectives, principles and practices

Objectives		
	Drive capital into activities that will decarbonise the economy at the speed and scale required to reach our climate commitments under the Paris Agreement.	
	Improve the quality of information available to the market to ensure sustainability definitions are credible, comparable and usable to promote transparency and trust and reduce greenwashing.	
Principles		In Practice
Credibility	The taxonomy should be science- and evidence-based, and informed by up-to-date information and best practice.	Recognised by global capital markets as a credible reference for transition investments.
Usability	The taxonomy should be designed in a manner that is clear, efficient, and understandable by the taxonomy users, including financial and non-financial corporate entities, and government entities.	Easy to use and apply for domestic entities, utilising existing reporting and proxies.
Interoperability	The taxonomy should be broadly compatible with international standards and taxonomies, while still tailored to the Australian context in which it will operate.	Accessible and applicable for international entities investing in Australia's transition.
Prioritisation for Impact	The taxonomy should be tailored to Australian priorities, including supporting the transition to net zero emissions, and aligning with climate policy objectives.	Provides a foundation to guide investment in Australia's low-carbon economy.

Taxonomy in the Policy Context

Accelerating the deployment of public and private investment toward net zero-aligned activities is essential for Australia's economy to transition in line with the Government's commitments under the Paris Agreement. It is also key to realising a range of domestic policy objectives while positioning Australia as a leading exporter in sectors critical to the global transition.

The Government's Sustainable Finance Roadmap, released in June 2024, sets out a number of policy and regulatory reform priorities that support these aims – see Figure 2. These focus on strengthening market transparency in relation to climate risk and opportunity, improving financial market regulation, and catalysing growth in sustainable finance markets.

Implementation of several elements of the Government's Roadmap is in train. Australia's inaugural sovereign green bond – worth A\$7bn – was issued by the Australian Office of Financial Management (AOFM) in June 2024, while Australia's mandatory disclosure regime came into effect on 1 January 2025.

The taxonomy is an important component of the Government's Roadmap. It will enable market participants to understand how certain economic activities and investments align with, or contribute to, climate and sustainability outcomes, thereby providing a robust basis to inform capital allocation decisions.

FIGURE 2
Reform timeline – Australian Government Sustainable Finance Roadmap

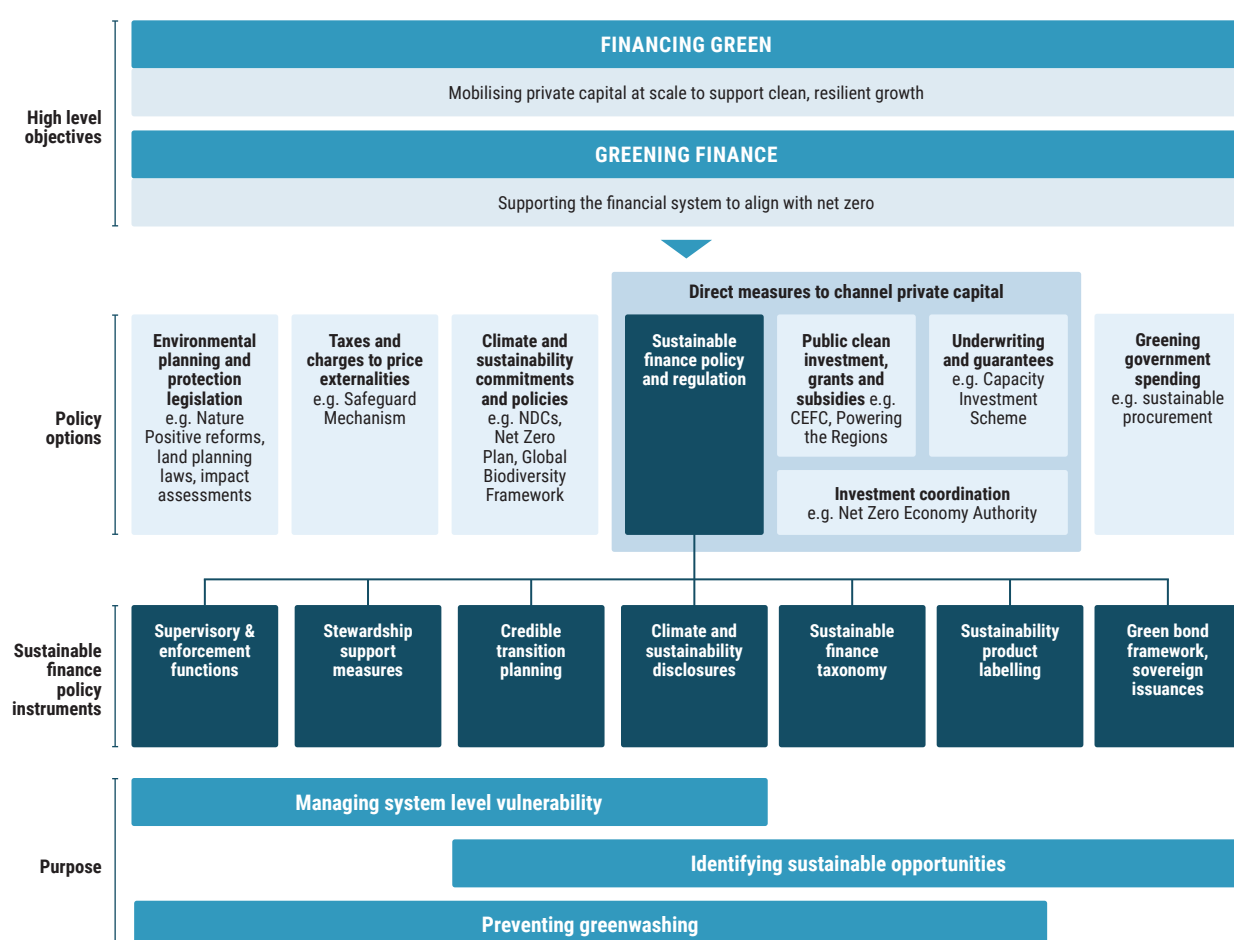
Priority	2024	2025	2026	Ongoing and future	
Implementing climate-related financial disclosure requirements	27 March 2024: Legislation introduced to Parliament.	1 January 2025: Climate disclosure obligations commence for Group 1 entities.	1 July 2026: Obligations commence for Group 2 entities.	1 July 2027: Obligations commence for Group 3 entities.	
	ASIC to issue guidance to support compliance with climate disclosure requirements.			From 2028: Treasury will conduct a review of climate disclosure requirements in 2028-29 and continue to monitor development of international sustainability-related financial disclosure frameworks.	
Developing the Australian Sustainable Finance Taxonomy	May 2024: ASFI commences public consultation on technical screening criteria for initial three sectors.	Late 2024: ASFI to deliver technical screening criteria for six priority sectors, against climate mitigation objective.	Mid 2025: ASFI to make initial taxonomy available for use by firms, investors and regulators on a voluntary basis. Mid 2025: Government to review voluntary taxonomy developed by ASFI and explore initial use cases for sustainable finance taxonomies in the financial and regulatory architecture. Government to consider relevant governance arrangements for the taxonomy.	Ongoing review and maintenance of the taxonomy to ensure it remains credible and useful. Government to consider incorporating additional sustainability objectives, such as nature or adaptation objectives.	
Supporting credible net zero transition planning	Late 2024-early 2025: Treasury consultation on supporting best practice transition plan disclosures.		By end 2025: Treasury will publish best practice guidance on transition plan disclosures.	Treasury will continue to work with regulators and industry to enhance corporate transition planning.	
Developing sustainable investment product labels	Mid 2025: Treasury consultation on developing sustainable investment product labels.		Legislation to be introduced in 2026.	Legislative framework and policy regime to commence in 2027.	
Issuing Australian sovereign Green Bonds	4 June 2024: AOFM issues first Treasury Green Bond.	By end 2025: The Government will publish first annual allocation and impact reporting.		Treasury will continue to support the implementation of the Australian Government Green Bond Framework including to ensure that Australia's green bond program continues to align with international best practice.	
Addressing data and analytical challenges	Early 2025: CFR to provide advice to Government on options to address sustainability data gaps and challenges.			Ongoing work will continue across Government and the CFR to monitor the availability and quality of sustainability related data.	
Identifying and responding to systemic financial risks	Late 2024: APRA will engage with stakeholders to review Prudential Practice Guide CPG 229 Climate Change Financial Risks.	Mid 2025: APRA to publish findings of its Insurance Climate Vulnerability Assessment.		The CFR will continue to expand its work on climate and sustainability-related financial risks, deepening risk management capabilities and practices across financial regulators and market participants.	
			Government	Financial regulators and standards setters	Industry

As per the Roadmap, the initial taxonomy will be available for use on a voluntary basis by both the private and public sectors, with the Government to explore options for long-term governance arrangements and potential regulatory use cases in consultation with key stakeholders. Reflecting strong interest expressed in the public consultation feedback on its Sustainable Finance Strategy, the Government has also stated that it will consider potential expansion priorities such as adaptation (Commonwealth Treasury, 2024).

A credible, interoperable and useable taxonomy is important to help ensure Australia retains access to cost competitive capital required for the transition. It is not, however, the only piece of the puzzle. As set out in Figure 3, sustainable finance policy and regulation is one of several levers for delivering on Australia's net zero objectives.

Other relevant measures include Australia's 2035 Nationally Determined Contribution (NDC), due in 2025, together with sector decarbonisation plans currently under development, which the sectoral scope of the taxonomy aligns with. Public finance, in particular through specialist investment vehicles, combined with policy and regulatory action in other areas, including implementation of the National Energy Performance Strategy, and the Nature Positive Plan, also have important roles to play.

FIGURE 3
Role of sustainable finance policy and regulation in Australia's transition



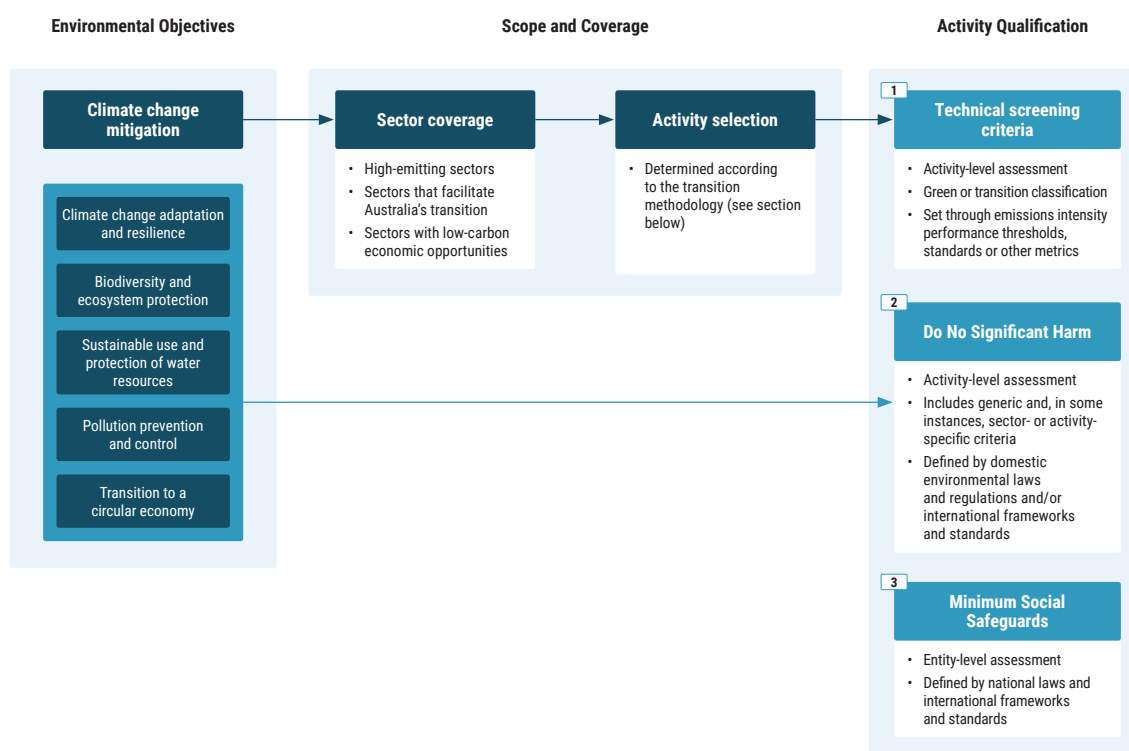
2. Taxonomy Methodology

Taxonomy Development Framework

The broad approach to developing a taxonomy framework, illustrated in Figure 4, is as follows:

1. The overarching environmental and social objectives are identified and described (see Table 1 above);
2. The taxonomy's scope and coverage, including sectors and activities, is determined;
3. Climate change mitigation technical screening criteria (performance criteria) for those sectors and activities is developed; and
4. Further qualifying criteria is developed to ensure activities that support climate change mitigation meet minimum social safeguards and do no significant harm to the taxonomy's other environmental objectives.

FIGURE 4
Australian taxonomy development framework



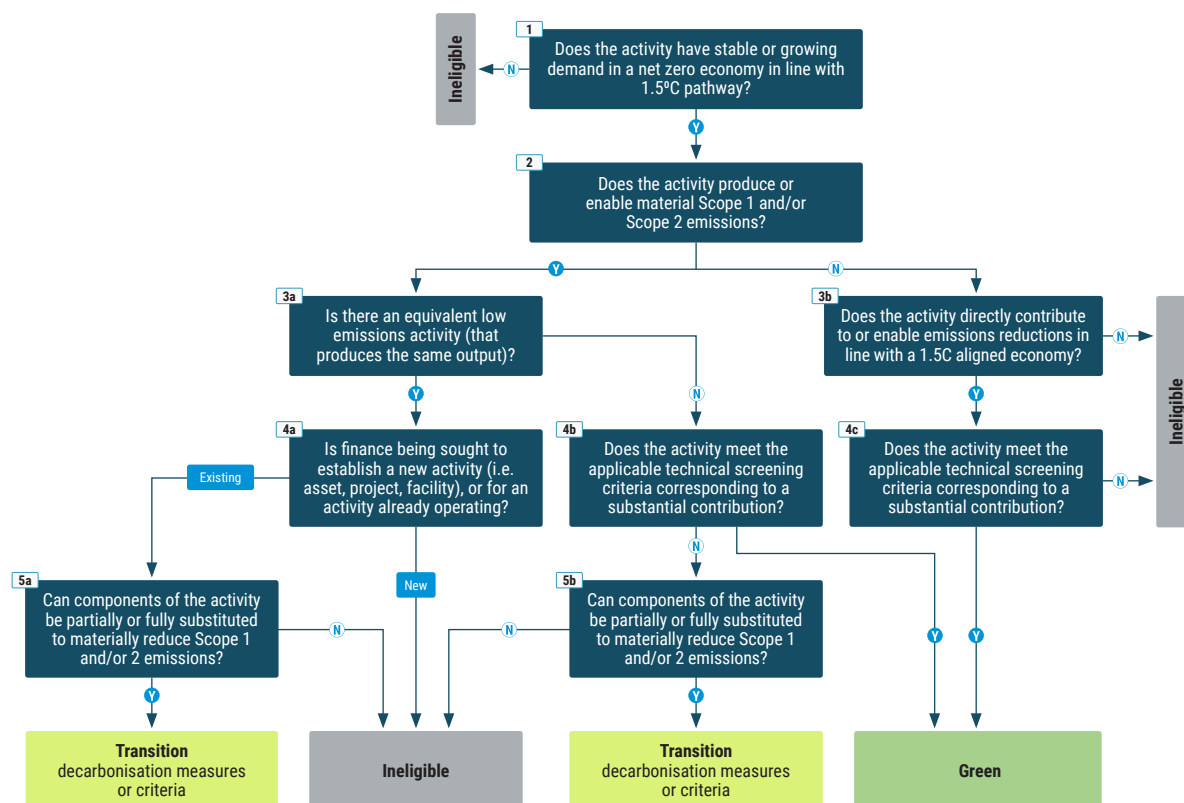
Green and Transition Methodology

The inclusion and classification of an activity in the taxonomy is determined by:

1. whether it has a stable or growing role in a post-net zero economy;
2. the availability of low and zero-emissions alternatives that produce the same output;
3. whether the activity's Scope 1, 2 and 3 emissions can be materially reduced, even if it is only economically feasible in the medium to long term; and
4. its contribution to directly reducing emissions or enabling the growth of zero-emissions technologies.

Figure 5 outlines the transition methodology used to determine activity eligibility and the application of green and transition classifications. Details on the broad approach to developing the taxonomy framework can be found in the [first public consultation paper](#) (pp. 16-19).

FIGURE 5
Transition methodology – classification of activities



Green classification

The three qualifying paths by which an activity can be classified as green under the Australian taxonomy are summarised in Table 3. Green criteria apply to whole activities, meaning assets, projects or facilities corresponding to an activity descriptor. Wherever possible, activity descriptors are consistent with Australian and New Zealand Standard Industrial Classification (ANZSIC).

TABLE 3
Types of green classifications – climate change mitigation

Low or zero emissions activities / substitutes	- Low or zero-emissions activities that directly reduce emissions through their substitution for emissions-intensive alternatives can be classified as green. - To obtain green classification, the activity must meet the corresponding performance requirements set out in the technical screening criteria. - If the activity does not meet the criteria, it is not eligible under the taxonomy. This is to ensure that new low-emissions activities include the best performing technologies. - Performance requirements set through technical screening criteria are generally based on emissions intensity thresholds aligned with a 1.5°C pathway. - An example is renewable electricity generation activities, which provide significant emissions reductions relative to fossil-based equivalents. To be considered green, these activities must meet an emissions intensity threshold of 100gCO₂e/kWh before 2030, after which the thresholds decline.
High performing activities with no low-emissions alternative	- Activities that do not have a readily deployable low or zero-emissions alternative that produces the same output may be eligible to be classified as green in the taxonomy. - However, the activity must have a stable or growing demand in a post-net zero economy and meet performance requirements specified in the technical screening criteria to be classified as green. - An example of this type of activity is the manufacture of cement. - Performance requirements are generally set through emissions intensity thresholds consistent with a 1.5°C pathway, and may include additional requirements to mitigate risks of carbon lock-in. - If the activity does not meet the green criteria, decarbonisation measures will be available in instances where components of the activity can be partially or fully substituted to materially reduce Scope 1 and/or 2 emissions.
Enabling activities	- Where an activity directly enables the decarbonisation of another activity, it may be eligible as green under the taxonomy. - Consistent with the International Capital Market Association's (2024) guidance on green enabling projects, green enabling activities should not lead to locking-in high GHG emitting activities relative to other technologically feasible and/or commercially viable solutions. - Examples include the manufacture of zero-emissions technologies (e.g. electrolyzers, solar panels), and infrastructure that supports the growth of zero and low-carbon transport (e.g. electric vehicle charging infrastructure) or encourages mode shifting (e.g. bike paths).

Transition classification

By definition, transition refers to movement from one state or condition to another. As this version of the taxonomy is focused on climate change mitigation, transition signifies the decarbonisation of emissions-intensive activities toward a point where their performance is more closely aligned with a 1.5°C pathway.

For this reason, transition criteria generally apply to entities seeking finance to decarbonise components of their economic activities (i.e. assets, projects, facilities) where the activity produces an output with a stable or growing demand profile in a post-net zero economy, and has material Scope 1 and 2 emissions.

Where an activity has a low-emissions alternative, measures are not available for a new activity, as there is an expectation that the whole activity should meet green criteria. For new whole activities without a low or zero-emissions alternative, such as mining, measures can be accessed.

There are two types of transition criteria, summarised in Table 4.

TABLE 4
Types of transition classifications – climate change mitigation

Decarbonisation measures	- Decarbonisation measures include eligible technologies, processes, practices, materials and/or services that improve the emissions performance of an activity, bringing it into closer alignment with green performance thresholds. These measures are included where components of the activity can be partially or fully substituted to materially reduce Scope 1 and/or 2 emissions. They do not make the whole activity green. - The purpose of decarbonisation measures is to ensure there are opportunities for entities to access finance to decarbonise existing long-life activities (i.e. assets and facilities) and move toward 1.5°C aligned performance. - Where whole existing activities do not meet the green criteria, the entity will be eligible to access decarbonisation measures to reduce the emissions associated with the activity. - Decarbonisation measures can be reported as taxonomy-aligned capital expenditures (CapEx) or operational expenditures (OpEx), but not as revenue. - Additionally, certain measures include a materiality threshold, which stipulates the scale at which a measure must be applied to be considered taxonomy-aligned.
Transition criteria (whole activity)	- In limited cases, transition criteria are included for a whole existing activity where an assessment is made that it can feasibly reach alignment with the green criteria in the short to medium term. - In these instances, a sunset date on the transition criteria is generally applied, after which the activity must meet the green criteria to remain taxonomy-aligned. - Transition criteria for whole activities include emissions performance and/or materiality requirements. - Transition criteria for whole activities are only currently included in the Construction and Buildings sector.

3. Using the Taxonomy



“Once finalised, the initial taxonomy will be available for use on a voluntary basis by both the private and public sectors. The taxonomy will provide an important source of guidance and consistency for firms, investors, and regulators, improving transparency and supporting the development of credible sustainable finance products. The Government will explore options for governance arrangements and potential regulatory use cases in consultation with key stakeholders”
— Commonwealth Treasury (2024).

Taxonomies are commonly used to identify eligible economic activities for green-labelled debt. However, they are increasingly being used by financial and non-financial corporate entities and governments to guide investment and strategic asset allocation, demonstrate the alignment of business activities with transition-related opportunities, and facilitate the flow of standardised information.

Taxonomies are not designed to be used in isolation. They can be used as an input for multiple purposes, including sustainable financial instruments and products, investment and incentives, disclosures, and transition planning. The taxonomy can be applied as a tool for activity-level allocation decisions, or as a reference to assess and/or demonstrate the aggregate alignment of business activities and investments with transition-related opportunities at the entity-level. Each will be addressed in turn.

Activity-level Uses

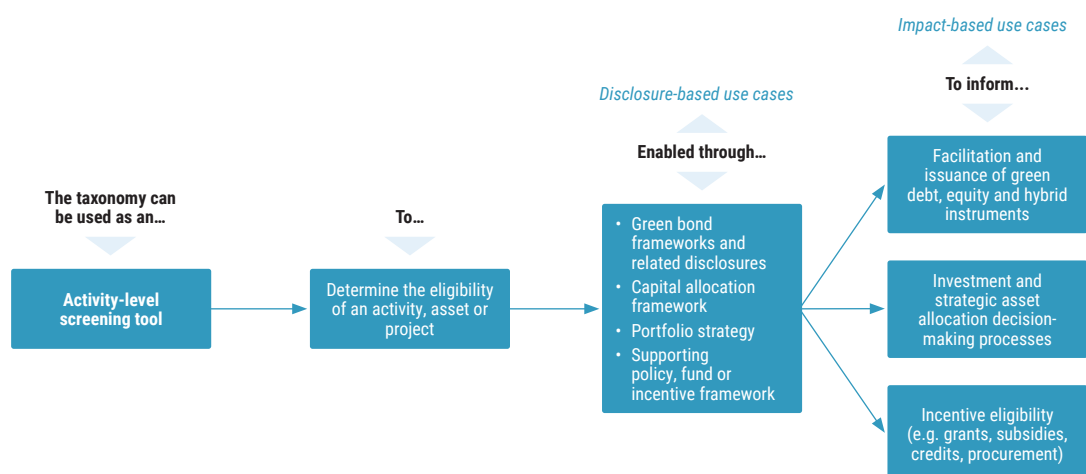
The most common use of a taxonomy is to screen for eligible green investments and expenditures to facilitate the issuance of sovereign, sub-sovereign and corporate green-labelled debt by both the public and private sector.

A credible taxonomy provides a useful framework to screen for eligible assets, set eligibility criteria, guide the project evaluation and selection process, and frame post-issuance impact reporting. The Australian Green Bond Framework states that opportunities to align elements of the Framework with the Australian taxonomy's screening criteria will be considered as the taxonomy develops (Australian Office of Financial Management, 2023).

A taxonomy's value as an activity-level tool extends to other uses, including as an input to inform an entity's investment decisions, as a tool to assess the emissions performance of an existing asset, as a basis for strategic asset allocation decisions, and as an eligibility indicator for the deployment of public finance for climate initiatives.

These uses are enabled through the taxonomy's adoption in frameworks and strategies that set the parameters for capital allocation decisions.

FIGURE 6
Illustrative examples of activity-level taxonomy use cases



Entity-level Uses

Taxonomies are increasingly recognised as a tool, among others, that can be used by entities to demonstrate the alignment of their business activities and investment with key environmental objectives (e.g. climate change mitigation) in a credible way that is useful to capital markets. This, in turn, can be used to demonstrate how an entity, portfolio or financial institution is transitioning over time towards taxonomy-aligned investments and revenues.

The key metrics used by entities to demonstrate alignment include:

- **Percentage of taxonomy-aligned revenues** – the percentage of an entity's total net revenue derived from products or services that are taxonomy-aligned.
- **Percentage of taxonomy-aligned capital expenditures (CapEx)** – the percentage of an entity's total CapEx (tangible and intangible assets) allocated toward taxonomy-aligned activities. In the EU, for example, this includes expenditures that are (1) directed to assets and processes associated with taxonomy-aligned activities, (2) part of an investment plan to expand taxonomy-aligned activities or to enable activities to become taxonomy-aligned, and (3) related to the purchase of output from taxonomy-aligned activities.
- **Percentage of taxonomy-aligned operational expenditures (OpEx)** – the percentage of an entity's total OpEx allocated toward taxonomy-aligned activities, generally referring to non-capitalised expenditures in taxonomy-aligned outputs (e.g. low-carbon liquid fuels), maintenance and servicing, and research and development.

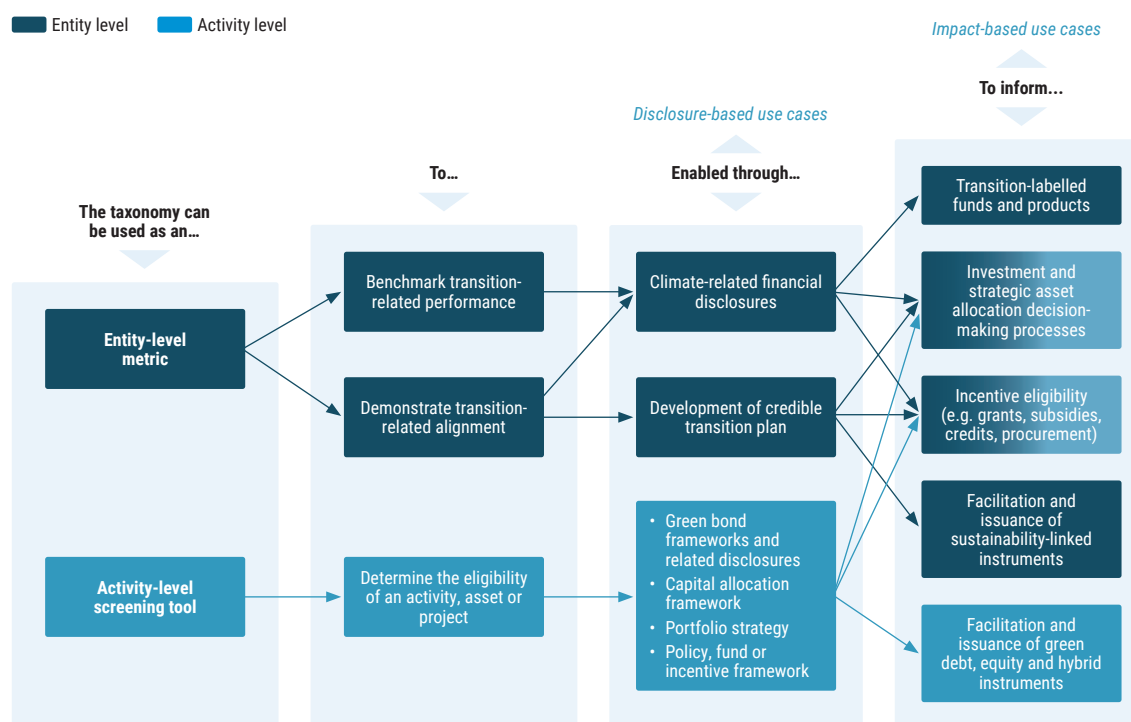
As Figure 7 illustrates, taxonomy-aligned metrics at the entity level could primarily be used in two types of disclosures:

1. Climate-related financial disclosures:

The Metrics and Targets section of the ISSB S2 standard, which has been adopted in paragraphs 29D and 29E of the Australian Sustainability Reporting Standard 2 (AASB S2), includes a requirement for reporting entities to disclose (a) the amount and percentage of assets or business activities aligned with climate-related opportunities; and (b) the amount of capital expenditure, financing or investment deployed towards climate-related risks and opportunities.

The use of the taxonomy to inform disclosures against these requirements is voluntary and not mandated under AASB S2. However, taxonomy-alignment can be a valuable way for entities to demonstrate how their business activities and investments are moving toward alignment with climate-related opportunities year-on-year.

FIGURE 7
Illustrative taxonomy use cases – activity and entity-level



2. Transition plans:

A transition plan provides the strategy and plan for how a company will achieve its objectives relative to a low-carbon transition. Central to this are short, medium and long-term emissions reduction targets that reference science-based scenarios.

While not mandated in Australia, the disclosure of forward-looking taxonomy-aligned targets, particularly related to CapEx, can be valuable in supporting an entity to communicate credibility, intent and ambition to global investors regarding its plans to capitalise on climate-related opportunities. The use of credible taxonomies to inform investment targets is recognised in several best-practice guidance materials, including by the Glasgow Financial Alliance for Net Zero, Science-based Targets Initiative, and the Transition Plan Taskforce.

The application of taxonomy-aligned metrics in these ways can contribute to the flow of more consistent and comparable information in sustainable finance markets, providing two key benefits for investors:

- **Visibility of an entity's alignment with transition-related opportunities over time:** among other purposes, transition plans and climate-related financial disclosures are valuable mediums for an entity to inform investors and shareholders about its response to climate-related risks and opportunities, and its performance against these objectives over time (Network for Greening the Financial System, 2023). The adoption of taxonomy-aligned metrics enables a consistent reference for investors to be able to assess an entity's plan to align investment and/or business activities with transition-related opportunities, and its year-on-year performance towards that alignment. Furthermore, as recognised by the International Capital Markets Association, forward-looking taxonomy-aligned metrics derived from a credible taxonomy can be used as a sustainability performance target to underpin sustainability-linked debt instruments.
- **A point of comparability to benchmark entities' transition-related alignment:** improvements in the flow of standardised information in sustainable finance markets can enable institutional investors and banks to better compare the performance or exposure of entities relative to transition-related opportunities. This can be valuable to (a) inform decision-making processes related to the allocation of capital, including direct and portfolio investment selection for funds and products, and (b) support institutional investors to disclose information about the transition-related weighting of assets, funds or products. It is anticipated that the use of taxonomy-aligned metrics for this purpose is a longer-term objective as it depends on the broad adoption of such disclosures by entities.

OPERATIONALISING THE TAXONOMY

The Australian Government, with advice from Treasury and the Council of Financial Regulators, will determine the long-term institutional arrangements of the Australian sustainable finance taxonomy.

The Sustainable Finance Roadmap confirms that the Government will explore options for governance arrangements and potential regulatory use cases in 2025 in consultation with key stakeholders.

The Government will also consider next steps for the taxonomy's development, including potential opportunities to expand coverage.

TABLE 5

Illustrative use cases of the taxonomy

Potential user	Potential use case	Examples (non-exhaustive)
Corporate entity	Corporate reporting	X% revenue is derived from the generation of electricity via solar photovoltaic power.
Corporate entity	Transition planning and target setting	Transition planning and targets – e.g. to increase taxonomy-aligned CapEx to decarbonise mine site operations.
Financial institution	Debt instruments	Green loans to a company to build or acquire a solar farm.
Government	Expenditures	Taxonomy as a benchmark in subsidy program for low-carbon metals.
Service provider	Labelled green product	Provision of a data product of entities (equities) or bonds assessed as green.

4. Demonstrating Taxonomy Alignment

How to Demonstrate Alignment with the Taxonomy

The first version of the Australian sustainable finance taxonomy has been developed for voluntary use by a range of users, including non-financial corporate entities, lenders, issuers, investors, asset owners and managers, and public entities. This section provides limited guidance to support the initial use of the taxonomy based on the principles of transparency and disclosure.

The first version of the Australian taxonomy can be utilised in any of the following three ways:

- Demonstrating alignment with the TSC for climate change mitigation plus all applicable DNSH and MSS criteria.
- Demonstrating alignment with the TSC for climate change mitigation plus partial alignment with the applicable DNSH and/or MSS criteria.
- Demonstrating alignment with the TSC for climate change mitigation only.

Should users seek to make claims of alignment (or similar – as appropriate) with the Australian taxonomy, users are responsible for disclosing the parts of the taxonomy to which they are aligning (and those to which they are not) and ensuring that the impression conveyed by those claims is not misleading or deceptive.

Without limiting this obligation:

- Where the activity(ies) are assessed as meeting the Technical Screening Criteria for climate change mitigation and all applicable Do No Significant Harm and Minimum Social Safeguards Criteria, alignment representation can refer to the Australian taxonomy for climate change mitigation.
- Where the activity(ies) are assessed as meeting the Technical Screening Criteria for climate change mitigation and only *some* of the applicable Do No Significant Harm and/or Minimum Social Safeguards Criteria, the alignment representation should refer to the Australian taxonomy's Technical Screening Criteria for climate change mitigation and must specify those parts of the applicable Do No Significant Harm and/or Minimum Social Safeguards Criteria with which alignment is, and is not, claimed.
- Where the activity(ies) are assessed as meeting the Technical Screening Criteria for climate change mitigation only, the alignment representation should refer to the Australian taxonomy's Technical Screening Criteria for climate change mitigation, and clearly specify that there is no alignment with the Do No Significant Harm or Minimum Social Safeguards Criteria.

APPLYING THE TAXONOMY TO RETAIL LENDING AND INSURANCE

Where a product issuer is seeking to issue a retail lending or insurance product in alignment with the Australian taxonomy for climate change mitigation (i.e. TSC for climate change mitigation plus

all applicable DNSH and MSS), alignment with the applicable DNSH and MSS criteria may be considered at a product level rather than at an individual transaction level.

How to Apply Green and Transition Classifications

Activity level

Green and transition classifications differentiate activities that are aligned with a 1.5°C pathway, and activities and measures that can facilitate movement toward alignment, respectively.

Accordingly, for the purpose of labelling debt, expenditures, investments and loans directed toward green activities and transition activities or decarbonisation measures can be labelled as aligning with the TSC.

However, there are some distinctions in the requirements attached to the issuance of transition-classified debt, including:

1. Where transition activities or decarbonisation measures include a sunset date, use-of-proceeds debt is only eligible until that date.
2. Use-of-proceeds debt aligned with transition criteria or measures that has a tenor beyond the sunset date must disburse all funds before the sunset date or fall out of compliance.

APPLYING EMISSIONS INTENSITY THRESHOLDS TO GREEN DEBT ISSUANCES

Where data are available and applicable to the activity, the Australian taxonomy defines performance level requirements for green activities through emissions intensity thresholds aligned with 1.5°C-aligned pathways. These thresholds generally decline over five or ten-year increments.

For use-of-proceeds debt issuances that align eligibility with emissions intensity thresholds applied in the green criteria, it is recommended that the emissions intensity value corresponding to the midpoint of the tenor of the debt is used to determine eligibility.

Use-of-proceeds debt with a tenor of ten years or less will be grandfathered so that even if thresholds are revised in a future iteration of the taxonomy, the debt can still be deemed as green-labelled.

Entity level

If entities use taxonomy-aligned metrics to demonstrate transition-related performance or targets (i.e. through percentage taxonomy-aligned CapEx, OpEx and/or revenue) green and transition classifications apply differently in two instances:

- Decarbonisation measures cannot be classified as taxonomy-aligned revenue.
- For transition activities and measures, taxonomy aligned CapEx, OpEx and revenue can not be claimed after the sunset date (see Table 6).

TABLE 6
Taxonomy-alignment at the entity level – green and transition criteria

	Percentage taxonomy-aligned		
	CapEx	OpEx	Revenue
Green	✓	✓	✓
	Revenue derived from existing business activities that meet the green criteria can be classified as aligned with the taxonomy's TSC. This is a year-on-year assessment, and activities must continue to meet declining thresholds over time to retain alignment. CapEx and OpEx toward activities that meet green performance criteria can be classified as aligned with the taxonomy's TSC.		
Decarbonisation measures	✓	✓	✗
	Investments and expenditures in decarbonisation measures can be claimed as taxonomy-aligned CapEx or OpEx. As measures do not cover a whole business activity, taxonomy-aligned revenue cannot be claimed.		
Transition criteria	✓	✓	✓
	Revenue derived from existing business activities that meet the transition criteria can be classified as aligned with the taxonomy's TSC. This is a year-on-year assessment, and activities must continue to meet declining thresholds over time to retain alignment. Entities cannot claim taxonomy-aligned CapEx, OpEx and/or revenue after the sunset date for transition criteria, and must meet green criteria to retain alignment.		

Framework for assessing proxies in the Australian taxonomy

The framework for assessing proxy methods (see Table 7) establishes the attributes of an independent standard, code, rating, or labelling scheme that are suitable for confirming whether an activity meets the technical screening criteria.

TABLE 7
Principles to assess the suitability of proxies

Credibility	Assessment methods should demonstrate a good correlation to the underlying requirements of the relevant screening criteria. Where the screening criteria requirements are binary, the assessment method needs to provide full alignment. Where the screening criteria are numeric, the assessment method should demonstrate consistent and good correlation when applied to the activity.
Usability	Usability considers the rate of current usage of the method or the ease and cost efficiency of adoption at a broader scale. The consideration of usability extends to efficiencies achieved by consistency with other climate-related reporting and investment frameworks and the ease of access to records when financing. The primary aim is to reduce implementation friction, avoid proprietary or bespoke processes, and avoid reliance on any single method.
Balance	The assessment of methods should also consider the inherent nature of the activity. For example in the buildings sector, investment-grade assets are able to accurately capture and report relevant data, whereas residential financing presents many challenges for reliable data collection.



5. Agriculture and Land



A. Sector Context

Globally, the agriculture and land sector, often referred to as the Agriculture, Forestry, and Other Land Use (AFOLU) sector, significantly contributes to greenhouse gas (GHG) emissions, but also offers considerable opportunities for carbon sequestration. The agriculture and land sector, on average, accounted for 13-21 percent of total anthropogenic emissions worldwide in the period 2010–2019 (Intergovernmental Panel on Climate Change, 2022).

By 2050, food production is predicted to need to increase by 49 percent from 2013 production volumes to meet the demands of a growing global population (FAO, 2018). Achieving food security requires addressing systemic issues within our food systems, such as minimising food loss and waste, while simultaneously reducing their impact on climate and nature. The sector's complexity, shaped by its interaction with natural environments, diverse management practices, and significant regional variations, adds to the difficulty of implementing consistent and effective mitigation strategies.

Similarly, the outlook for a primary processed wood products consumption of 3.1 billion m³ roundwood equivalents (RWE) in 2050 reflects an increase of 37 percent compared to 2020 (FAO, 2022).

Science-based climate projections consistent with limiting global warming to 1.5°C by 2050 consider a halting of land conversion of high-carbon ecosystems for agricultural production and a significant increase in restoration of degraded land, reforestation and carbon sequestration in land.

Australia

Australian agriculture contributes significantly to both domestic food production and global exports and accounts for 55 percent of Australian land use (426 million hectares, excluding timber production, as of December 2023 (ABARES, 2024)). Agriculture in Australia is predominantly managed on large parcels of land that have long management cycles and often coexist with native ecosystems.

In 2021–2022, the agriculture and land sector emissions accounted for 17.9 percent of the country's net national emissions, 14.9 percent when excluding Land Use, Land-Use Change, and Forestry (LULUCF) (DCCEEW, 2022). As the electricity generation sector rapidly decarbonises along with other sectors, agriculture's share of Australia's national emissions is expected to rise.

Agricultural emissions, excluding LULUCF, predominantly consist of methane (CH₄) and nitrous oxide (N₂O), as seen in Figure 8, whereas emissions from Forestry and Other Land Use (FOLU) are primarily carbon dioxide (CO₂).

The largest sources of emissions in agriculture are associated with livestock production, particularly from enteric fermentation, land conversion, and manure management (Meyer et al., 2019), with fertiliser use being the next significant contributor.

Agricultural emissions, excluding LULUCF, have remained stable over time, while emissions from LULUCF have declined due to changes in vegetation management, as seen in Figure 9. Land use changes related to pasture and crop expansion are reported under LULUCF in Australia.

FIGURE 8

Share of Australian agricultural emissions (excluding LULUCF) by gas 2021–22 (DCCEEW, 2022)

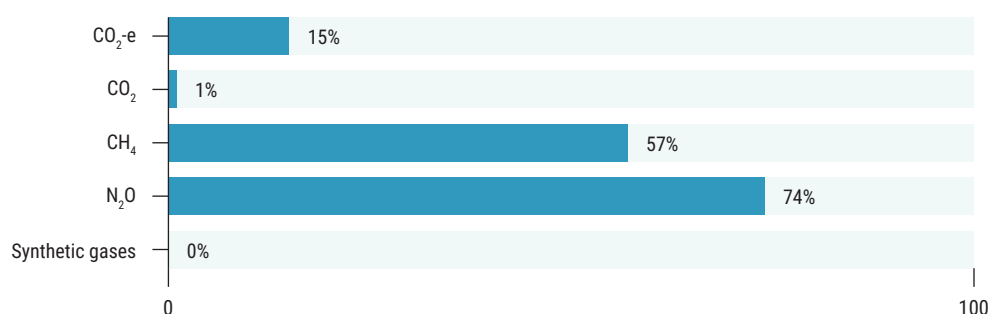
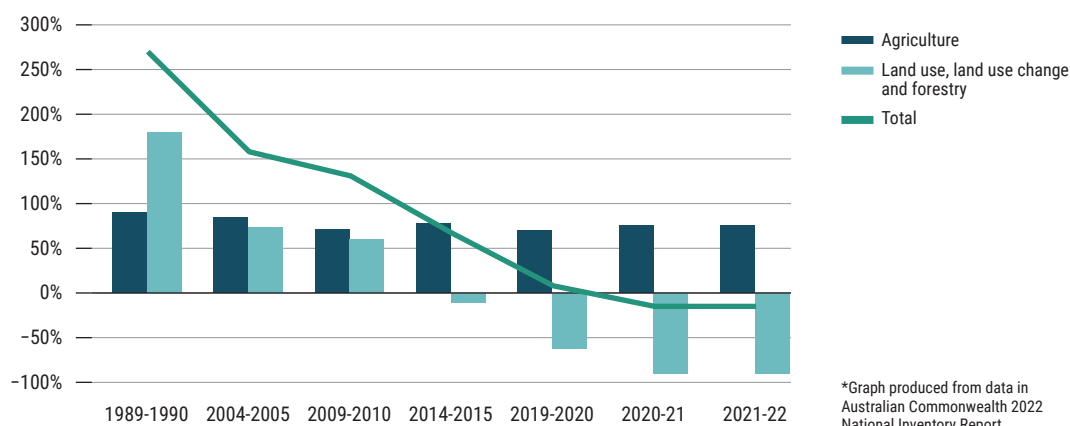


FIGURE 9
Net greenhouse gas emissions from Agriculture and LULUCF (DCCEEW, 2022)



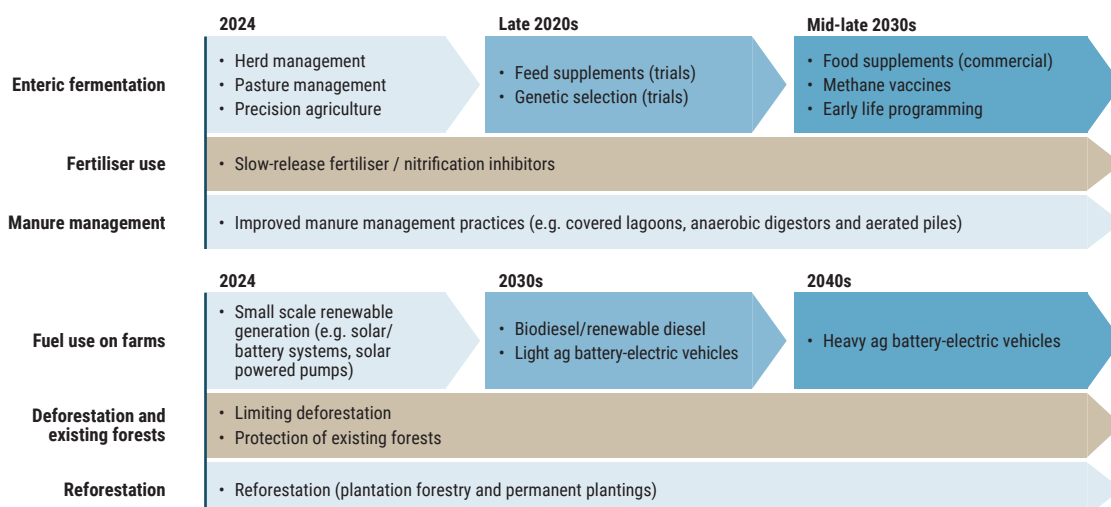
Australia's agricultural and land sector is already feeling the impacts of climate change, including more frequent extreme weather events and shifting seasonal patterns, which threaten productivity, performance, and landscape health.

Managed and natural ecosystems are also significantly affected by climate change, exacerbating existing environmental pressures and threatening ecosystem health.

The Australian Climate Change Authority's Sector Pathways Review highlighted agriculture is well placed to contribute to carbon removals and identified prospective decarbonisation pathways for key activities (Climate Change Authority, 2024). Figure 10 represents the identified priority decarbonisation pathways for the agriculture and land sector based on key technologies and land management practices identified, which align with the taxonomy's sector criteria.

The Australian Government is also developing a sectoral emissions reduction plan for the agriculture and land sector to support the Australian Government's Net Zero Plan (also in development). The sectoral plan will explore ways the sector can contribute to economy-wide goals to reduce emissions.

FIGURE 10
Pathways for decarbonisation for Australian agriculture (Climate Change Authority, 2024)



Overview

The agriculture and land sector presents significant challenges when compared to other sectors, including:

- Complexity of emissions sources: the sector encompasses a wide range of emission sources and sinks, including agriculture, forestry, and land use changes.
- Lack of climate scenarios: compared to other sectors, climate scenarios are limited and the underlying assumptions for scenarios are evolving.
- Natural and anthropogenic processes: sector emissions result from both natural and human-induced processes that occur simultaneously and are difficult to disentangle.
- Inclusion of sinks: it is the only major sector that currently provides established anthropogenic sinks (carbon sequestration in land and biomass).
- Methodological differences: Various approaches and data sources are used to estimate agriculture and land sector emissions with limited agreed approaches.
- Limited data: Limited agreement on data, especially when considering the mitigation of practices at a local level. In addition, there is limited baseline data available at the farm level.
- Monitoring and verification challenges: Monitoring and verifying emissions at the farm level poses significant challenges, including limited national systems and a need to balance efforts with additional cost/time for landholders.
- Limited technological solutions: Within existing production systems, there are limited existing technology solutions to reduce agricultural emissions in large volumes. The land component of the sector is currently a net sink with significant potential for additional land-based carbon removal.

Accordingly, the following approach has been taken to identify and assess specific activities and measures that contribute to climate change mitigation and are deemed appropriate for inclusion in the taxonomy:

1. Initial review and identification of activities, practices and measures that support climate change mitigation (through emissions reduction and carbon sequestration) across relevant global and Australian frameworks and sources¹. This review compiled an initial list of activities, practices and measures that yield the greatest outcomes, present low risk and are consistently referenced across various sources.
2. The listed activities, practices and measures were evaluated for their suitability in the Australian context and adjusted as necessary to improve relevance.
3. The list was then prioritised and refined using the Intergovernmental Panel on Climate Change's (IPCC) Uncertainty Guidance to assess each measure by:
 - The level of confidence in findings by evaluating the evidence base (limited, medium or robust) and agreement or consensus within the scientific community (low, medium or high)
 - The degree of likelihood of climate change mitigation outcomes based on existing metrics and/or expert views (high or very likely, medium or likely, low or unlikely)

¹ Including, but not limited to: EU draft taxonomy for agriculture and EU taxonomy for forestry (EU Technical Expert Group on Sustainable Finance. Taxonomy Report); Clean Energy Finance Corporation's Measuring What Matters Report; New Zealand's Sustainable Agricultural Finance Initiative (SAFI); Climate Bonds Initiative Agriculture Production Criteria; Climateworks Centre's Land Use Trade-offs model; and Australian banks' relevant green finance products.

C. Activity Boundary

The boundary of eligible activities for the agriculture and land sector is primarily, “up to the gate”. It includes everything that happens on a farm or land asset, such as planting, harvesting, and managing resources, including vegetation, as well as energy use and transport used on the farm or land asset. This approach also considers the upstream value chain, including the sourcing of inputs and the impacts of land-use changes. More specifically, activity boundaries within each sub-sector are:

Agriculture

All practices involved in agricultural production that occur “up to the farm gate”, including inputs, processes and outputs (Figure 11). This also covers emissions associated with land-use change, energy use and transport within the farm and upstream practices such as land-use change and feed and chemicals (like fertilisers and pesticides) procurement.

All practices beyond the farmgate are excluded, with the exception of practices that support climate change mitigation efforts of the activity, including specialised infrastructure and equipment and enabling activities (e.g. Research and Development (R&D), the acquisition of Monitoring and Evaluation (M&E) technologies, training and capacity building and prevention of post-harvest and post-production waste). These supporting practices are grouped as a separate activity.

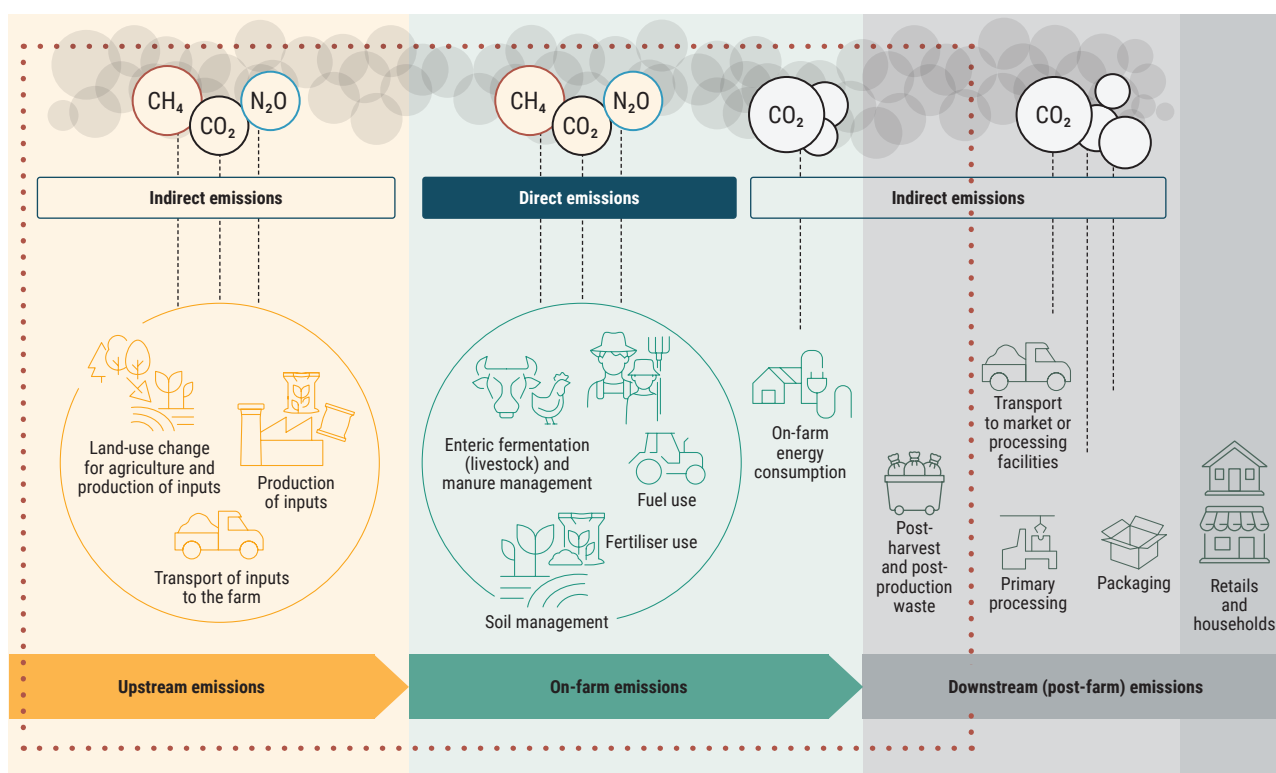
Forest and (other) Natural Ecosystems (LULUCF)

All practices up to the boundary of the forest or natural ecosystem that support carbon sequestration, including:

- Practices related to carbon sinks and sources resulting from changes to land use and vegetation cover, such as land conversion and forest management of both native or plantation forests on public and private land.
- Restoration and conservation activities and practices, including reforestation, afforestation and ecosystem conservation or restoration.
- All practices beyond the boundary of the forest or natural ecosystem are excluded, except when they clearly enable climate change mitigation within the sub-sector (e.g. infrastructure, R&D, training and capacity building).

All criteria for this phase of work are focused on contributing to climate change mitigation, which covers reducing emissions (in agriculture) and/or sequestering carbon (in lands dedicated to agriculture, forestry or natural ecosystems).

FIGURE 11
Boundary (red line) of activities in scope for agriculture production



Activity selection

The scope of activities in the agriculture and land sector have been grouped due to their intrinsic characteristics in three main sub-sectors:

- Agriculture,
- Forestry, and
- (other) Natural Ecosystems Management.

Each includes relevant high-level direct and supporting activities.

Direct activities include sub-categories, such as cropping, animal production, forest and savannah management, among others.

Supporting activities are those that take place outside the boundary of the activity but support its decarbonisation efforts and innovation, such as R&D and the acquisition of M&E technologies.

Table 8 summarises the sub-sectors and scope of agriculture, forestry, and (other) natural ecosystems management activities covered by the initial development phase of the taxonomy.

TABLE 8
Agriculture and land sector green activities and decarbonisation measures (transition criteria)

		Classification	
		Green	Decarbonisation measures
Agriculture	Perennial and Non-perennial Crops (incl. Horticulture and Rice Production)	✓	✓
	Animal Production (incl. Grazing)	✓	✓
	Support Services for Agriculture and Post-harvest		✓
Forestry	Afforestation, Restoration and Rehabilitation	✓	✓
	Existing Forest Management	✓	✓
	Conservation Forestry	✓	✓
	Support Services for Forestry		✓
Other Land Management (Natural Ecosystems)	Restoration and Rehabilitation of Ecosystems	✓	✓
	Savannah Management Using Indigenous Cultural Practices		✓
	Conservation of Natural Ecosystems	✓	✓
	Support Services for Natural Ecosystems		✓

D. Technical Screening Criteria

GO TO
SPECIFIC DNSH



Agriculture

The decarbonisation measures listed below are inconsistent with the taxonomy if the underlying activities result in the conversion of natural forests and/or the draining of wetlands (see [Appendix 2](#) for definitions).

A1. Perennial and Non-perennial Crops (incl. Horticulture and Rice Production)

Sector	Agriculture and Land
Activity	A1. Perennial and Non-perennial Crops (incl. Horticulture and Rice Production)
Associated ANZSIC codes	0111-12, 0114-15, 0121-23, 0131-37, 0139, 0145-46, 0149, 0151-52, 0159, 0193, 0521, 0529, 8922 Other ANZSIC codes may be considered when the activity is conducted alongside animal production, forestry, or other land management activities.
Objective	Climate change mitigation

Technical screening criteria

Green	A1.1 Green perennial and non-perennial cropping Cropping activities that represent significant climate change mitigation potential across the entire activity, to drive both emissions abatement and increase and/or maintain carbon stocks. Process and requirements For a cropping activity to be classified as green, it must meet all of the following requirements: - The activity will be inconsistent with the taxonomy if the underlying activities result in the conversion of natural forests and/or the draining of wetlands. - Have a clearly defined baseline for activity-level emissions and carbon sinks, or, if unavailable, a detailed plan for baseline establishment. The baseline must identify key emissions sources and sinks across the entire activity, following an assessment based on either the GHG Protocol or widely accepted methods in Australia that align with Australian Carbon Credit Units (ACCUs) and/or the National Greenhouse Gas Inventory, and using reputable tools (such as Australian industry-recommended calculators, specialised software and spreadsheets) to calculate their value. - Develop, implement and maintain a comprehensive farm management plan tailored to the needs of the cropping activity and considers relevant local risks, metrics and projected timelines. At a minimum, the plan must outline and document the following management measures: <table border="1"> <thead> <tr> <th>Objective</th><th>Taxonomy-aligned decarbonisation measure</th></tr> </thead> <tbody> <tr> <td>Nutrient management optimisation</td><td>A1.2 Crop nutrient management</td></tr> <tr> <td>Sustainable soil management</td><td>A1.3 Increase soil organic carbon</td></tr> <tr> <td>Integration and management of carbon stock in vegetation (agroforestry), where feasible</td><td>A1.6 Agroforestry</td></tr> </tbody> </table> - Quantitatively demonstrate a reduction in emissions, either in absolute terms (i.e. kgCO₂e) or intensity (i.e. kgCO₂e/kg of product) while maintaining and/or increasing carbon stocks across the entire activity over a period of 1 to 5 years, depending on the management measure, compared to the established baseline. - Demonstrate credible compliance with requirements A to D. Proponents can demonstrate compliance by: - Obtaining third-party assurance or verification opinion of compliance with the requirements; and/or - Setting targets through the Science Based Targets Initiative's Forest, Land and Agriculture (SBTi FLAG) guidance and tool, or other equivalent credible target setting methodology (targets must be verified and cover emissions aligned with the taxonomy's sector boundary); and/or - Providing documentary evidence that substantiates compliance with requirements A to D. This activity can be combined with A2.1 in cases of mixed farming operations. Eligible practices Eligible practices for classifying a cropping activity as green can include both existing and new practices on the farm. In addition to the mandatory requirements, proponents may incorporate any other taxonomy-aligned decarbonisation measures or other enabling activities into the farm management plan* to further support emissions abatement and maintain and/or increase carbon stocks. *Any relevant process requirements outlined in the decarbonisation measures (e.g. management plans, baselining, and monitoring requirements, etc.) can be incorporated into the farm management plan to streamline overall management. Monitoring - Ongoing measurement and reporting of abatement and carbon stocks over a period of 1 to 5 years, depending on the management measure, aligned with the metric(s) specified in the farm management plan, and compared to the established baseline. - Maintain ongoing monitoring of the decarbonisation measures outlined in the farm management plan.	Objective	Taxonomy-aligned decarbonisation measure	Nutrient management optimisation	A1.2 Crop nutrient management	Sustainable soil management	A1.3 Increase soil organic carbon	Integration and management of carbon stock in vegetation (agroforestry), where feasible	A1.6 Agroforestry
Objective	Taxonomy-aligned decarbonisation measure								
Nutrient management optimisation	A1.2 Crop nutrient management								
Sustainable soil management	A1.3 Increase soil organic carbon								
Integration and management of carbon stock in vegetation (agroforestry), where feasible	A1.6 Agroforestry								

Notes	Definitions for land conversion criteria are set out in Appendix 2. Quantitative thresholds for emissions reduction and carbon sequestration will be reviewed and incorporated into future iterations of the taxonomy as sector-specific information, methodologies, and technologies become available.
Decarbonisation measures	A1.2 Crop nutrient management Efficient nitrogen use in cropping systems to minimise nitrous oxide emissions, achieved through the application of Enhanced Efficiency Fertilisers (EEFs) and/or by optimising fertilisation techniques. Process and requirements The measure must comprise all the following: - Develop, implement and maintain a nutrient management plan tailored to the needs of the cropping activity. The plan must include soil type and its needs, crop requirements, historical fertiliser applications and rotations, seasonal conditions and forecasts, and incorporate one or more of the eligible practices listed below. - Demonstrate that the measure has been implemented in accordance with the nutrient management plan, with verification by a qualified expert (e.g. agronomist, agricultural consultant, etc.) being a recommended approach. - Fertiliser application must comply with the following: - When EEFs are used, they must either be approved under the Australian Pesticides and Veterinary Medicines Authority (APVMA) Agvet Code, if applicable, or be exempt and compliant with the relevant APVMA standards and/or state/territory fertiliser regulations. - When EEFs that have a limited shelf life are used, they must have been treated in Australia with the relevant inhibitor and not imported as a treated product. - Use must comply with Fertilizer Australia's codes of practice, including attention to crop and livestock withholding periods. Eligible practices Eligible practices that support sustainable nutrient management, which may include both existing and new practices on farm, along with their associated costs, include: - Engaging and/or conducting agronomic services and soil testing to determine the appropriate application of fertilisers based on soil and crop needs. - Purchasing EEFs that meet the specified criteria mentioned above. Common types of EEFs include nitrification inhibitors, urease inhibitors, polymer-coated fertilisers, sulphur-coated fertilisers, slow-release fertilisers, and controlled-release fertilisers. - Implementing Variable Rate Technology (VRT) and techniques, for fertilisation, irrigation, and other relevant applications, enabling precise application of inputs to different areas of the field based on their specific needs. This includes costs related to purchasing, installing, upgrading, or maintaining relevant equipment and infrastructure, as well as acquiring data solutions. - Installing or optimising irrigation systems and micro-sprinklers to improve controlled fertiliser application and prevent waterlogging. Proponents can enhance this measure by integrating additional taxonomy-aligned decarbonisation measures* and/or agriculture support measures (outlined in section A3. <i>Support Activities for Agriculture and Post-harvest</i>). *Any relevant process requirements outlined in the decarbonisation measures (e.g. management plans) can be incorporated into a single farm management plan.

Decarbonisation measures	A1.3 Increase soil organic carbon Undertaking land management practices in cropping systems that increase soil carbon, enhance soil health, and increase farm productivity. Process and requirements The measure must comprise all the following: - Develop, implement, and maintain a soil management plan tailored to the needs of the cropping activity. The plan must include soil type and its needs, crop/pasture requirements, and incorporate one or more of the eligible practices listed below. - Demonstrate that the measure has been implemented in accordance with the soil management plan, with verification by a qualified expert (e.g. agronomist, agricultural consultant, etc.) being a recommended approach. - The measure must comply with the following: - The project area where the measure is applied must have a minimum soil depth of 30 cm. - The land on which the activity is applied must not be a natural forest or contain organosols (peat soils). Eligible practices Eligible practices aimed at increasing soil carbon and supporting the measure, which may include both existing and new practices on farm, along with their associated costs, include: • Applying variable rate lime to remediate acid soils, including the costs for purchasing lime and other remediating inputs. • Applying gypsum to remediate sodic or magnesian soils. • Re-establishing or rejuvenating pastures through seeding, establishment, or pasture cropping. • Retaining stubble after crop harvest to improve soil quality. • Transitioning from intensive tillage to reduced or no-till practices to promote soil health. • Modifying landscape or landform features to restore or remediate land. • Using mechanical methods to add or redistribute soil for improved soil structure. • Integrating legume species into cropping systems to improve soil nitrogen content and overall soil health. • Utilising cover crops, intermediate crops, or break crops to enhance soil vegetation cover, boost soil fertility, and improve overall soil health. • Establishing and permanently maintaining thriving pastures in areas previously devoid of or with limited pasture. • Implementing new irrigation practices to optimise soil management by improving water use efficiency, considering sustainable water extraction. This includes costs for purchasing, installing, upgrading, or maintaining equipment and infrastructure like irrigation systems and micro sprinklers. • Implementing Variable Rate (Application) Technology (VRT) to optimise soil management by improving fertiliser application, irrigation, seeding, crop rotation and crop cover management, and other relevant applications. This includes costs for purchasing, installing, upgrading, or maintaining equipment and infrastructure, as well as acquiring relevant data solutions. • Implementing the use of Artificial intelligence (AI) technology to optimise soil management and irrigation by providing real-time data on soil moisture, crop needs, and environmental conditions. • Engaging and/or conducting agronomic services and soil testing to establish baseline conditions, perform ongoing monitoring, and determine soil needs. • Purchasing, installing, upgrading, or maintaining sensors to enhance soil management, including optimising irrigation through real-time data on soil moisture, crop needs, and changing environmental conditions. Proponents can enhance this measure by integrating additional taxonomy-aligned decarbonisation measures* and/or agriculture support measures (outlined in section A3. <i>Support Activities for Agriculture and Post-harvest</i>). *Any relevant process requirements outlined in the decarbonisation measures (e.g. management plans) can be incorporated into a single farm management plan.
Notes	Aligned with ACCU method: Estimating soil organic carbon sequestration using measurement and models method.

Decarbonisation measures	A1.4 Improved rice management Lower the emissions intensity of rice production through effective water management and residue straw management by implementing practices aimed at reducing days of flooding by at least 10 percent. Process and requirements The measure must comprise all the following: - Develop, implement, and maintain a rice production management plan tailored to the needs of the rice production activity. The plan must aim to reduce days of flooding by at least 10 percent annually by incorporating one or more of the eligible practices listed below. - Demonstrate that the measure has been implemented in accordance with the rice production management plan, with verification by a qualified expert (e.g. agronomist, agricultural consultant, etc.) being a recommended approach. Eligible practices Eligible practices that support the measure, which may include both existing and new practices on farm, along with their associated costs, include: • Shallow flooding: Utilising shallow water levels to optimise growth. • Direct-seeded rice: Planting rice directly in the field for improved establishment. • Short-duration, high-yielding varieties: Selecting rice varieties that mature quickly while maximising yield. • Midseason drying events: Allowing the field to dry midway through the growing season to enhance soil health and reduce water use. • Alternate wet and dry techniques: Alternating between wet and dry conditions to conserve water and improve rice quality. • Off-season straw management: Properly managing straw during the off-season to benefit soil health. • Engaging and/or conducting agronomic services and soil testing to establish baseline conditions, perform ongoing monitoring, determine soil and crop needs, and develop a rice production management plan. • Installing irrigation and drainage systems, including associated earthworks and pipe installation. • Incorporating precision agriculture technology, such as soil moisture sensors, weather stations and data analysis systems to improve crop management and resource efficiency. Proponents can enhance this measure by integrating additional taxonomy-aligned decarbonisation measures* and/or agriculture support measures (outlined in section A3. <i>Support Activities for Agriculture and Post-harvest</i>). *Any relevant process requirements outlined in the decarbonisation measures (e.g. management plans) can be incorporated into a single farm management plan.
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Decarbonisation measures

A1.5 Biochar application to agricultural lands

Application of biochar to agricultural soils to sequester carbon to increase soil carbon, enhance soil health, and increase farm productivity.

Process and requirements

The measure must comprise all the following:

- A. Develop, implement, and maintain a soil management plan tailored to the needs of the cropping activity. The plan must include soil type and its needs, crop requirements, biochar suitability and application rate, and incorporate one or more of the eligible practices listed below.
- B. Demonstrate that the measure has been implemented in accordance with the soil management plan, with verification by a qualified expert (e.g. agronomist, agricultural consultant, etc.) being a recommended approach.
- C. To meet the requirements of this measure, the applied biochar must comply with one of the following eligibility criteria:
 - a. The biochar must only be produced using agricultural and/or forestry residues and waste as feedstock, such as leftover plant materials, animal manure, biosolids (that meet relevant state/territory and federal requirements), fallen wood, branches, bark, sawdust, and similar organic materials; or
 - b. For biochar derived from dedicated crops and purpose-grown biomass feedstocks, the purchased biochar and/or its feedstocks are certified by a relevant third-party certification body*.

*Relevant certifications include:

- World Biochar Certificate (WBC),
- International Sustainability & Carbon Certification (ISCC) system,
- Roundtable on Sustainable Biomaterials (RSB),
- Forest Stewardship Council (FSC),
- Programme for the Endorsement of Forest Certification (PEFC).

Exclusions and restrictions

The biochar must not be generated from sewage sludge, industrial waste, or landfill waste.

Eligible practices

Eligible practices that support biochar application, which may include both existing and new practices on farm, along with their associated costs, include:

- Engaging and/or conducting agronomic services and soil testing to determine the appropriate biochar type, application rate, and estimate the potential increase in soil carbon following application.
- Purchasing biochar that meets the specified eligibility criteria outlined above.
- Incorporating the use of Natural Resource Management (NRM) and/or agronomic services for planning, baselining assessments, and ongoing monitoring.
- Utilising equipment to support biochar application, such as spreaders, composters, mixers, sprayers, biochar applicators, storage, and irrigation equipment.
- Acquiring equipment for on-farm biochar production, such as a pyrolysis unit, including the costs of purchasing, installing, upgrading, or maintaining relevant equipment and infrastructure.

Proponents can enhance this measure by integrating additional taxonomy-aligned decarbonisation measures** and/or agriculture support measures (outlined in section A3. *Support Activities for Agriculture and Post-harvest*).

**Any relevant process requirements outlined in the decarbonisation measures (e.g. management plans) can be incorporated into a single farm management plan.

Decarbonisation measures	A1.6 Agroforestry Implement or maintain agroforestry by incorporating woody perennials, such as trees, shrubs or other vegetation, into crop production systems. Process and requirements The measure must comprise all the following: - Develop, implement, and maintain a farm management plan tailored to the needs of the cropping activity. The plan must consider the interactions between the cropping activity, woody perennials, and the broader landscape, including factors such as soil condition, climate, and water availability. It must also incorporate one or more of the eligible practices listed below. - Demonstrate that the measure has been implemented in accordance with the farm management plan, with verification by a qualified expert (e.g. agronomist, agricultural consultant, etc.) being a recommended approach. - The measure must comply with the following criteria: - Intentional integration of woody perennials alongside crop production to deliver both economic and ecological benefits, including carbon sequestration. - Utilise the same land for various agricultural purposes. - Planted trees for this measure must have the potential to grow to a minimum height of 2 metres and achieve a canopy cover of at least 20 percent* of the planted area. *Tree height and canopy cover thresholds align with the definition of “forest” adopted by the taxonomy, which uses the Accountability Framework initiative’s (AFI) definition of “forest” with the Australian quantitative forest thresholds used in Australia’s National Greenhouse Gas Inventory (see Appendix 2 for more information). Eligible practices Eligible agroforestry practices that support the measure, which may include both existing and new practices on farm, along with their associated costs, include: - Integrating, maintaining, restoring, and/or expanding woody perennials within agricultural landscapes. These planted areas can take various forms, such as windbreaks, riparian buffers, block or strip plantings for shelterbelts, among others. - Selecting and planting appropriate seedling stock of woody perennial species. - Incorporating the use of Natural Resource Management (NRM) and/or agronomic services for planning, baselining and monitoring. - Installing establishment infrastructure to set up and support the successful establishment of agroforestry practices during the early stages of development, including protection and irrigation systems for the planted area. - Installing other types of infrastructure to protect and enhance established planted areas, such as fencing materials. - Procuring ground-work services or equipment hire for site preparation or fencing installation. - Engaging or conducting labour services for planting, maintenance, and ongoing protection of agroforestry practices. - Implementing and engaging auditing and certification services, such as the Forest Stewardship Council (FSC) or the Program for the Endorsement of Forest Certification (PEFC), for a Sustainable Forest Management System (SFMS). Proponents can enhance this measure by integrating additional taxonomy-aligned decarbonisation measures** and/or agriculture support measures (outlined in section A3. <i>Support Activities for Agriculture and Post-harvest</i>). **Any relevant process requirements outlined in the decarbonisation measures (e.g. management plans) can be incorporated into a single farm management plan.
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Decarbonisation measures	A1.7 Renewable energy Renewable energy use, production, and storage solutions for on-site applications. Process and requirements The measure must comprise the following, as applicable: A. Solar and wind energy-related infrastructure must comply with relevant Australian Standards and/or are purchased from a Clean Energy Council New Energy Tech Approved Seller under the New Energy Tech Consumer Code (NETCC) program (formerly the Approved Solar Retailer program). B. Rechargeable storage systems must be compatible with renewable energy sources and approved under the Clean Energy Council's Battery Assurance Program. C. Renewable energy generation systems, such as solar, wind, bioenergy and geothermal power generation systems, must meet the relevant criteria outlined in the Electricity Generation and Supply sector criteria. D. Any low-carbon liquid fuels (LCLFs) involved in the measure, whether through purchase, manufacturing, or use, must meet the relevant criteria specified in the Manufacturing and Industry sector criteria. E. Quality assurance and compliance with safety standards and regulations at time of commission. Eligible practices Eligible practices that support the integration of renewable energy for on-site applications, which may include both existing and new practices on the farm/asset, along with their associated costs, include: • Installing renewable energy generation systems, including solar PV technologies (ground-mounted or rooftop) and wind energy technologies. This includes the costs of purchasing, installing, upgrading, or maintaining relevant equipment and infrastructure. • Installing rechargeable storage batteries compatible with renewable sources, installed behind the meter. • Purchasing, manufacturing, and/or using LCLFs to power on-farm machinery and vehicles. Proponents can enhance this measure by integrating additional taxonomy-aligned decarbonisation measures* and/or support measures (outlined in sections A3. <i>Support Activities for Agriculture and Post-harvest</i>, A7. <i>Support Services for Forestry</i> and A11. <i>Support Services for Natural Ecosystems</i>). *Any relevant process requirements outlined in the decarbonisation measures (e.g. management plans) can be incorporated into a single management plan.
Decarbonisation measures	A1.8 Electric, energy-efficient, and renewable energy-compatible vehicles and equipment for on-site use Purchase of electric, energy-efficient, and renewable energy-compatible vehicles and equipment for on-site use. Eligible practices Eligible practices, which may include both existing and new practices on the farm/asset, along with their associated costs, include: • Replacing existing diesel fleet and/or equipment with one or more of the following: — Eligible** energy efficient tractors, headers and harvesters. — Heavy and light vehicles and aerial transport that comply with the Taxonomy Transport criteria (I1, I3, I4, I5, I6). Hiring and/or contracting the use of the above fleet and/or equipment for on-site use is eligible. • Modifying or retrofitting existing equipment and vehicles for LCLF use. • Installing eligible*** systems to equip farm fleet for: — GPS Auto-Steer and/or controlled traffic. — Precision or Variable Rate technologies. Proponents can enhance this measure by integrating additional taxonomy-aligned decarbonisation measures* and/or support measures (outlined in sections A3. <i>Support Activities for Agriculture and Post-harvest</i>, A7. <i>Support Services for Forestry</i> and A11. <i>Support Services for Natural Ecosystems</i>). *Any relevant process requirements outlined in the decarbonisation measures (e.g. management plans) can be incorporated into a single management plan.

Notes	**Eligible energy efficient tractors, headers and harvesters are: Purchase of new tractors, headers and other self-propelled machinery, which may include reconfiguration of existing equipment, that meets one of the following: a) at least 20% less energy consumed per unit of output compared to the current vehicle or equipment on the farm; or b) an overall energy saving of at least 20% compared to the current vehicle or equipment on the farm; or c) publicly available information confirming its class leading energy efficiency characteristics. Purchase of new hydrogen fuel cell tractors, headers and other self-propelled machinery, which may include reconfiguration of existing equipment. Purchase of new fully autonomous tractors, headers and other self-propelled machinery, which may include reconfiguration of existing equipment. Purchase of a new agricultural trailed vehicle, that meets one of the following: d) at least 10% less energy consumed per unit of area (i.e. L/ha); or e) is designed for no or zero-tillage planting and seeding. ***Eligible systems to equip farm fleet include: • GPS precision guidance and auto-steer technology, which is fitted to new and existing on farm machinery. • Yield monitors and other sensors which provide real-time information and feedback to growers.
Decarbonisation measures	A1.9 Low emissions cold storage The purchase and installation of cold storage equipment that meets the energy efficiency standards and Global Warming Potential (GWP) limits set out in the Taxonomy Construction and Buildings Criteria (E1). Proponents can enhance this measure by integrating additional taxonomy-aligned decarbonisation measures* and/or agriculture support measures (outlined in section A3. <i>Support Activities for Agriculture and Post-harvest</i>). *Any relevant process requirements outlined in the decarbonisation measures (e.g. management plans) can be incorporated into a single farm management plan.
Decarbonisation measures	A1.10 Management practices for generation of carbon credits (ACCUs) Implementation of management practices and establishment expenditures required to participate in the Australian Government's Australian Carbon Credit Unit (ACCU) scheme for carbon credit generation (ACCUs) under existing ACCU Methods. Exclusions and restrictions Methods must not be expired at time of financing commencement. Eligible practices Eligible practices that support the measure, which may include both existing and new practices on the farm/asset, along with their associated costs, include: • Site development: Expenses associated with preparing the site for the undertaking carbon farming project within the ACCU scheme. • Initial investment: Upfront financial commitments required for the successful establishment and implementation of the project. • Planning and assessment: Costs related to project planning, environmental assessments and feasibility studies. • Application and registration: Fees for applying to and registering in the ACCU scheme. • Audit, certification and reporting: Expenses incurred for compliance audits, ongoing certification, and meeting reporting requirements.

A2. Animal Production (incl. Grazing)

Sector	Agriculture and Land
Activity	A2. Animal Production (incl. Grazing)
Associated ANZSIC codes	0141-45, 0160, 0171-72, 0180, 0191-93, 0199, 0529, 7713, 8922 Other ANZSIC codes may be considered when the activity is conducted alongside cropping, forestry, or other land management activities.
Objective	Climate change mitigation

Technical screening criteria

Green	A2.1 Green animal production Animal production activities that represent significant climate change mitigation potential across the entire activity, to drive both emissions abatement and maintain and/or increase carbon stocks. Process and requirements For an animal production activity to be classified as green, it must meet all of the following requirements: - The activity will be inconsistent with the taxonomy if the underlying activities result in the conversion of natural forests and/or the draining of wetlands. - Have a clearly defined baseline for activity-level emissions and carbon sinks, or, if unavailable, a detailed plan for baseline establishment. The baseline must identify key emissions sources and sinks across the entire activity, following an assessment based on either the GHG Protocol or widely accepted methods in Australia that align with Australian Carbon Credit Units (ACCUs) and/or the National Greenhouse Gas Inventory, and using reputable tools (such as Australian industry-recommended calculators, specialised software and spreadsheets) to calculate their value. - Develop, implement and maintain a comprehensive farm management plan tailored to the needs of the animal production activity and considers relevant local risks, metrics and projected timelines. At a minimum, the plan must outline and document the following management measures: <table border="1"> <thead> <tr> <th>Objective</th><th>Taxonomy-aligned decarbonisation measure</th></tr> </thead> <tbody> <tr> <td>Nutrient management optimisation</td><td>A2.2 Nutrient management</td></tr> <tr> <td>Sustainable soil management</td><td>A2.3 Increase soil organic carbon</td></tr> <tr> <td>Integration and management of carbon stock in vegetation (agroforestry), where feasible</td><td>A2.6 Agroforestry</td></tr> <tr> <td>Sustainable manure management, where applicable</td><td>A2.8 Manure management</td></tr> </tbody> </table> - Quantitatively demonstrate a reduction in emissions, either in absolute terms (i.e. kgCO₂e) or intensity (i.e. kgCO₂e/kg of product) while maintaining or increasing carbon stocks across the entire activity over a period of 1 to 5 years, depending on the management measure, compared to the established baseline. - Demonstrate credible compliance with requirements A to D. Proponents can demonstrate compliance by: - Obtaining third-party assurance or verification of compliance with the requirements; and/or - Setting targets through the Science Based Targets Initiative's Forest, Land and Agriculture (SBTi FLAG) guidance and tool, or other equivalent credible target setting methodology (targets must be verified and cover emissions aligned with the taxonomy's sector boundary); and/or - Providing documentary evidence that substantiates compliance with requirements A to D. This activity can be combined with A1.1 in cases of mixed farming operations. Eligible practices Eligible practices for classifying an animal production activity as green can include both existing and new practices on the farm. In addition to the mandatory requirements, proponents may incorporate any other taxonomy-aligned decarbonisation measures or other enabling activities into the farm management plan* to further support emissions abatement and maintain and/or increase carbon stocks. *Any relevant process requirements outlined in the decarbonisation measures (e.g. management plans, baselining, and monitoring requirements, etc.) can be incorporated into the farm management plan to streamline overall management. Monitoring - Ongoing measurement and reporting of abatement and carbon stocks over a period of 1 to 5 years, depending on the management measure, aligned with the metric(s) specified in the farm management plan, and compared to the established baseline. - Maintain ongoing monitoring of the decarbonisation measures outlined in the farm management plan.	Objective	Taxonomy-aligned decarbonisation measure	Nutrient management optimisation	A2.2 Nutrient management	Sustainable soil management	A2.3 Increase soil organic carbon	Integration and management of carbon stock in vegetation (agroforestry), where feasible	A2.6 Agroforestry	Sustainable manure management, where applicable	A2.8 Manure management
Objective	Taxonomy-aligned decarbonisation measure										
Nutrient management optimisation	A2.2 Nutrient management										
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Sustainable manure management, where applicable	A2.8 Manure management										

Notes	Definitions for land conversion criteria are set out in Appendix 2. Quantitative thresholds for emissions reduction and carbon sequestration will be reviewed and incorporated into future iterations of the taxonomy as sector-specific information, methodologies, and technologies become available.
Decarbonisation measures	A2.2 Nutrient management Efficient nitrogen use in livestock systems to minimise nitrous oxide emissions, achieved through the application of Enhanced Efficiency Fertilisers (EEFs) and/or by optimising fertilisation techniques. Process and requirements The measure must comprise all the following: - Develop, implement and maintain a nutrient management plan tailored to the needs of the livestock activity. The plan must include soil type and its needs, pasture requirements, historical fertiliser applications and rotations, seasonal conditions and forecasts, and incorporate one or more of the eligible practices listed below. - Demonstrate that the measure has been implemented in accordance with the nutrient management plan, with verification by a qualified expert (e.g. agronomist, agricultural consultant, etc.) being a recommended approach. - Fertiliser application must comply with the following: - When EEFs are used, they must either be approved under the Australian Pesticides and Veterinary Medicines Authority (APVMA) Agvet Code, if applicable, or be exempt and compliant with the relevant APVMA standards and/or state/territory fertiliser regulations. - When EEFs that have a limited shelf life are used, they must have been treated in Australia with the relevant inhibitor and not imported as a treated product. - Use must comply with Fertilizer Australia's codes of practice, including attention to crop and livestock withholding periods. Eligible practices Eligible practices that support sustainable nutrient management, which may include both existing and new practices on farm, along with their associated costs, include: - Engaging and/or conducting agronomic services and soil testing to determine the appropriate application of fertilisers based on soil and pasture/livestock needs. - Purchasing EEFs that meet the specified criteria mentioned above. Common types of EEFs include nitrification inhibitors, urease inhibitors, polymer-coated fertilisers, sulphur-coated fertilisers, slow-release fertilisers, and controlled-release fertilisers. - Implementing Variable Rate Technology (VRT) and techniques, for fertilisation, irrigation, and other relevant applications, enabling precise application of inputs to different areas of the field based on their specific needs. This includes costs related to purchasing, installing, upgrading, or maintaining relevant equipment and infrastructure, as well as acquiring data solutions. - Installing or optimising irrigation systems and micro-sprinklers to improve controlled fertiliser application and prevent waterlogging. Proponents can enhance this measure by integrating additional taxonomy-aligned decarbonisation measures* and/or agriculture support measures (outlined in section A3. <i>Support Activities for Agriculture and Post-harvest</i>). *Any relevant process requirements outlined in the decarbonisation measures (e.g. management plans) can be incorporated into a single farm management plan.

Decarbonisation measures	A2.3 Increase soil organic carbon Undertaking land management practices in animal production systems that increase soil carbon, enhance soil health, and increase farm productivity. Process and requirements The measure must comprise all the following: - Develop, implement, and maintain a soil management plan tailored to the needs of the livestock activity. The plan must include soil type and its needs, crop/pasture requirements, and incorporate one or more of the eligible practices listed below. - Demonstrate that the measure has been implemented in accordance with the soil management plan, with verification by a qualified expert (e.g. agronomist, agricultural consultant, etc.) being a recommended approach. - The measure must comply with the following: - The project area where the measure is applied must have a minimum soil depth of 30 cm. - The land on which the activity is applied must not be a natural forest or contain organosols (peat soils). Eligible practices Eligible practices aimed at increasing soil carbon and supporting the measure, which may include both existing and new practices on farm, along with their associated costs, include: - Applying variable rate lime to remediate acid soils, including the costs for purchasing lime and other remediating inputs. - Applying gypsum to remediate sodic or magnesic soils. - Re-establishing or rejuvenating pastures through seeding, establishment, or pasture cropping. - Retaining stubble after crop harvest to improve soil quality. - Transitioning from intensive tillage to reduced or no-till practices to promote soil health. - Modifying landscape or landform features to restore or remediate land. - Using mechanical methods to add or redistribute soil for improved soil structure. - Integrating legume species into cropping systems to improve soil nitrogen content and overall soil health. - Utilising cover crops, intermediate crops, or break crops to enhance soil vegetation cover, boost soil fertility, and improve overall soil health. - Establishing and permanently maintaining thriving pastures in areas previously devoid of or with limited pasture. - Implementing new irrigation practices to optimise soil management by improving water use efficiency, considering sustainable water extraction. This includes costs for purchasing, installing, upgrading, or maintaining equipment and infrastructure like irrigation systems and micro sprinklers. - Implementing Variable Rate (Application) Technology (VRT) to optimise soil management by improving fertiliser application, irrigation, seeding, crop rotation and crop cover management, and other relevant applications. This includes costs for purchasing, installing, upgrading, or maintaining equipment and infrastructure, as well as acquiring relevant data solutions. - Implementing the use of Artificial intelligence (AI) technology to optimise soil management and irrigation by providing real-time data on soil moisture, crop needs, and environmental conditions. - Engaging and/or conducting agronomic services and soil testing to establish baseline conditions, perform ongoing monitoring, and determine soil needs. - Purchasing, installing, upgrading, or maintaining sensors to enhance soil management, including optimising irrigation through real-time data on soil moisture, crop needs, and changing environmental conditions. Proponents can enhance this measure by integrating additional taxonomy-aligned decarbonisation measures* and/or agriculture support measures (outlined in section A3. <i>Support Activities for Agriculture and Post-harvest</i>). *Any relevant process requirements outlined in the decarbonisation measures (e.g. management plans) can be incorporated into a single farm management plan.
Notes	Aligned with ACCU method: Estimating soil organic carbon sequestration using measurement and models method.

Decarbonisation measures	A2.4 Herd management Implement or maintain sustainable herd management practices aimed at enhancing environmental sustainability, health and productivity of livestock production systems. Process and requirements The measure must comprise all the following: - Develop, implement, and maintain a herd management plan tailored to the needs of the livestock activity. The plan must include livestock and pasture requirements, as relevant, and incorporate one or more of the eligible practices listed below. - Demonstrate that the measure has been implemented in accordance with the herd management plan, with verification by a qualified expert (e.g. livestock consultant, livestock nutritionist, agronomist, etc.) being a recommended approach. - Livestock operations must meet feed predominantly through grazing or forage. Eligible practices Eligible practices aligned with sustainable herd management, which may include both existing and new practices on farm, along with their associated costs, include: - Implementing sustainable pasture management and rejuvenation practices, including planting improved pasture species and incorporating legumes and herb species that reduce livestock methane emissions while enhancing forage quality and yield, feed efficiency, soil health and fertility, and livestock reproductive rates. - Adopting sustainable reproductive management practices, such as synchronised breeding or improving herd genetics by selecting animals suited to the local environment, are disease-resistant and are capable of thriving on available pasture and forage, thereby reducing environmental stressors. - Increasing the density of water points to encourage even distribution of grazing pressure, helping to prevent overgrazing while improving livestock health and productivity. This includes the costs of purchasing, installing, upgrading, or maintaining relevant equipment and infrastructure. - Installing equipment and infrastructure, such as fences, to manage livestock movement and promote better land use through optimised grazing patterns. This includes the costs of purchasing, installing, upgrading, or maintaining relevant equipment and infrastructure. - Implementing data monitoring and record-keeping systems to track and analyse performance metrics such as liveweight gain, calving rates, and weaning rates, with the aim of ultimately reducing emissions per unit of livestock production and supporting climate change mitigation efforts. - Engaging professional services and procuring treatments that are non-harmful and endorsed by a livestock health specialist to enhance herd health management and contribute to climate change mitigation efforts. - Engaging consulting and advisory services to improve herd management practices that support emissions reduction. - Incorporating agroforestry practices within the livestock production system (refer to taxonomy-aligned decarbonisation measure A2.6 <i>Agroforestry</i>* for criteria). - Using feed supplements or additives that reduce methane emissions (refer to taxonomy-aligned decarbonisation measure A2.7 <i>Methane inhibitors – feed supplements and additives</i>* for criteria). - Proper management of manure and other waste products (refer to taxonomy-aligned decarbonisation measure A2.8 <i>Manure management</i>* for criteria). Proponents can enhance this measure by integrating additional taxonomy-aligned decarbonisation measures* and/or agriculture support measures (outlined in section A3. <i>Support Activities for Agriculture and Post-harvest</i>). *Any relevant process requirements outlined in the decarbonisation measures (e.g. management plans) can be incorporated into a single farm management plan to streamline overall management.
Notes	Legumes and herb species that help reduce livestock methane emissions contain plant secondary compounds like tannins, saponins, and other polyphenolic compounds that suppress enteric methane production. This is a growing area of research, and the list of methane-suppressing species is continually expanding as they are tested across different Australian agro-ecological regions. Suitable temperate region species include Biserrula, Plantain, Chicory, Lucerne, Sulla, Sainfoin, and Lotus; while subtropical species include Desmanthus and Leucaena.

Decarbonisation measures

A2.5 Biochar application to agricultural lands

Application of biochar to agricultural soils to sequester carbon to increase soil carbon, enhance soil health, and increase farm productivity.

Process and requirements

The measure must comprise all the following:

- A. Develop, implement, and maintain a soil management plan tailored to the needs of the livestock activity. The plan must include soil type and its needs, pasture requirements, biochar suitability and application rate, and incorporate one or more of the eligible practices listed below.
- B. Demonstrate that the measure has been implemented in accordance with the soil management plan, with verification by a qualified expert (e.g. agronomist, agricultural consultant, etc.) being a recommended approach.
- C. To meet the requirements of this measure, the applied biochar must comply with one of the following eligibility criteria:
 - a. The biochar must only be produced using agricultural and/or forestry residues and waste as feedstock, such as leftover plant materials, animal manure, biosolids (that meet relevant state/territory and federal requirements), fallen wood, branches, bark, sawdust, and similar organic materials; or
 - b. For biochar derived from dedicated crops and purpose-grown biomass feedstocks, the purchased biochar and/or its feedstocks are certified by a relevant third-party certification body*.

*Relevant certifications include:

- World Biochar Certificate (WBC),
- International Sustainability & Carbon Certification (ISCC) system,
- Roundtable on Sustainable Biomaterials (RSB),
- Forest Stewardship Council (FSC),
- Programme for the Endorsement of Forest Certification (PEFC).

Exclusions and restrictions

The biochar must not be generated from sewerage sludge, industrial waste, or landfill waste.

Eligible practices

Eligible practices that support biochar application, which may include both existing and new practices on farm, along with their associated costs, include:

- Engaging and/or conducting agronomic services and soil testing determine the appropriate biochar type, application rate, and estimate the potential increase in soil carbon following application.
- Purchasing biochar that meets the specified eligibility criteria outlined above.
- Incorporating the use of Natural Resource Management (NRM) and/or agronomic services for planning, baselining assessments, and ongoing monitoring.
- Utilising equipment to support biochar application, such as spreaders, composters, mixers, sprayers, biochar applicators, storage, and irrigation equipment.
- Acquiring equipment for on-farm biochar production, such as a pyrolysis unit, including the costs of purchasing, installing, upgrading, or maintaining relevant equipment and infrastructure.

Proponents can enhance this measure by integrating additional taxonomy-aligned decarbonisation measures** and/or agriculture support measures (outlined in section A3. *Support Activities for Agriculture and Post-harvest*).

**Any relevant process requirements outlined in the decarbonisation measures (e.g. management plans) can be incorporated into a single farm management plan.

Decarbonisation measures	A2.6 Agroforestry Establishment or maintenance of silvopastoral systems that promote the intentional integration of woody perennials with animal production. Process and requirements The measure must comprise all the following: - Develop, implement, and maintain a farm management plan tailored to the needs of the livestock activity. The plan must consider the interactions between the livestock activity, woody perennials, and the broader landscape, including factors such as soil condition, climate, and water availability. It must also incorporate one or more of the eligible practices listed below. - Demonstrate that the measure has been implemented in accordance with the farm management plan, with verification by a qualified expert (e.g. agronomist, agricultural consultant, etc.) being a recommended approach. - The measure must comply with the following criteria: - Intentional integration of woody perennials alongside animal production to deliver both economic and ecological benefits, including carbon sequestration. - Utilise the same land for various agricultural purposes. - Planted trees for this measure must have the potential to grow to a minimum height of 2 metres and achieve a canopy cover of at least 20 percent* of the planted area. *Tree height and canopy cover thresholds align with the definition of “forest” adopted by the taxonomy, which uses the Accountability Framework initiative’s (AFI) definition of “forest” with the Australian quantitative forest thresholds used in Australia’s National Greenhouse Gas Inventory (see Appendix 2 for more information). Eligible practices Eligible agroforestry practices that support the measure, which may include both existing and new practices on farm, along with their associated costs, include: - Integrating, maintaining, restoring, and/or expanding woody perennials within agricultural landscapes. These planted areas can take various forms, such as windbreaks, riparian buffers, block or strip plantings for shelterbelts, among others. - Selecting and planting appropriate seedling stock of woody perennial species. - Incorporating the use of Natural Resource Management (NRM) and/or agronomic services for planning, baselining and monitoring. - Installing establishment infrastructure to set up and support the successful establishment of agroforestry practices during the early stages of development, including protection and irrigation systems for the planted area. - Installing other types of infrastructure to protect and enhance established planted areas, such as fencing materials. - Procuring ground-work services or equipment hire for site preparation or fencing installation. - Engaging or conducting labour services for planting, maintenance, and ongoing protection of agroforestry practices. - Implementing and engaging auditing and certification services, such as the Forest Stewardship Council (FSC) or the Program for the Endorsement of Forest Certification (PEFC), for a Sustainable Forest Management System (SFMS). Proponents can enhance this measure by integrating additional taxonomy-aligned decarbonisation measures** and/or agriculture support measures (outlined in section A3. <i>Support Activities for Agriculture and Post-harvest</i>). **Any relevant process requirements outlined in the decarbonisation measures (e.g. management plans) can be incorporated into a single farm management plan.
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Decarbonisation measures

A2.7 Methane inhibitors - feed supplements and additives

Ruminant animals are fed or administered methane inhibitors to directly reduce methane production.

Process and requirements

The measure must comprise all the following:

- A. Develop, implement, and maintain a feed management plan tailored to the needs of the livestock activity. The plan must outline the feed supplements or additives technologies to be utilised, including their dosage, compatibility with nutritional balance, mixing and rationing methods, along with one or more of the eligible practices listed below.
- B. Demonstrate that the measure has been implemented in accordance with the feed management plan, with verification by a qualified expert (e.g. livestock nutritionist, etc.) being a recommended approach.
- C. Feed supplements and additives must meet one of the following eligibility criteria:
 - a. Feed supplements and additives that are not excluded by the Australian Pesticides and Veterinary Medicines Authority (APVMA) and meet applicable requirements, hold a valid registration, and deliver a methane reduction efficacy of at least 10%.
 - b. Feed supplements and additives that are exempt from requiring approval and registration with the APVMA and have a documented minimum effective inclusion level (MEIL). Including:
 - Feed material already recognised in Australia as not requiring AMPVA approval and documented as capable of achieving MEIL at low doses (e.g. <0.5% daily diet), such as Asparagopsis in dried forms and formulations, 3-NOP as Bovaer, and Agolin.
 - Other MEIL documented supplements and additives in any embodiment that their application is documented as non-harmful to animals and humans in peer-reviewed publications, have been endorsed by a livestock nutritionist, and have the capacity to deliver a methane reduction efficacy of at least 10% when delivered with production of evidence.

Eligible practices

Eligible practices that support the use of feed supplements and additives to reduce methane emissions, which may include both existing and new practices on farm, along with their associated costs, include:

- Purchasing feed supplements or additives that meet the specified eligibility criteria outlined above.
- Utilising advisory services for the selection, dosing, mixing, rationing, and compliance aspects of the use of methane inhibitors, including consulting with a livestock nutritionist when necessary.
- Acquiring equipment for the storage, mixing, and rationing of feed supplements and additives.
- Conducting monitoring and evaluation activities related to the use of feed supplements and additives, including assessments of emissions reduction, herd health, weight gain, and overall productivity.

Proponents can enhance this measure by integrating additional taxonomy-aligned decarbonisation measures* and/or agriculture support measures (outlined in section A3. *Support Activities for Agriculture and Post-harvest*).

*Any relevant process requirements outlined in the decarbonisation measures (e.g. management plans) can be incorporated into a single farm management plan to streamline overall management.

Decarbonisation measures**A2.8 Manure management**

Minimise methane emissions by implementing or maintaining sustainable manure management practices in livestock operations.

Process and requirements

The measure must comprise all the following:

- A. Develop, implement, and maintain a farm management plan tailored to the needs of the livestock activity. The plan must incorporate one or more of the eligible practices listed below.
- B. Demonstrate that the measure has been implemented in accordance with the farm management plan, with verification by a qualified expert (e.g. livestock consultant, agricultural consultant, etc.) being a recommended approach.

Eligible practices

Eligible practices that support sustainable manure management, which may include both existing and new practices on farm, along with their associated costs*, include:

- Emissions destruction
 - Biogas production: produce biogas from organic effluent using anaerobic digestion in either a covered pond or anaerobic digester tank.
 - Methane capture: capture and destroy the methane component of biogas from the organic effluent through flaring or generating electricity.

Emissions destruction practices listed above must comply with the *Taxonomy Electricity Generation and Supply criteria for the generation of bioenergy* and the *Taxonomy Manufacturing and Industry criteria for the generation of biogas*.
- Emissions avoidance
 - Volatile solids removal: remove material containing volatile solids to reduce methane emissions (diversion of the material).
 - Aerobic treatment: treat the diverted material aerobically, resulting in significantly lower total methane and nitrous oxide emissions compared to anaerobic pond treatment (a post diversion treatment).
- Biogas production for biomethane
 - Biogas production: produce biogas from organic effluent using anaerobic digestion in either a covered pond or anaerobic digester tank.
 - Biogas upgrading: send the produced biogas to a biogas upgrading system to produce biomethane.

Biogas production practices listed above must comply with the *Taxonomy Manufacturing and Industry criteria for the generation of biogas*.
- Biomethane production
 - Biogas reception: receive biogas for processing.
 - Biogas upgrading system: utilise a biogas upgrading system to produce biomethane.

Biomethane production practices listed above must comply with the *Taxonomy Manufacturing and Industry criteria for the generation of biogas*.
- Biochar production
 - Pyrolysis: producing on-farm biochar via pyrolysis.

Biochar production practice listed above must comply with criteria outlined in *A2.5 Biochar application to agricultural lands*.

*Associated costs include expenses for purchasing, installing, upgrading, or maintaining relevant equipment and infrastructure, including capital expenditures (CapEx), removal, treatment and other operational costs.

Proponents can enhance this measure by integrating additional taxonomy-aligned decarbonisation measures** and/or agriculture support measures (outlined in section A3. *Support Activities for Agriculture and Post-harvest*).

**Any relevant process requirements outlined in the decarbonisation measures (e.g. management plans) can be incorporated into a single farm management plan.

Decarbonisation measures	A2.9 Savannah fire management using Indigenous cultural burning and fire management practices Reintroducing controlled burning through Indigenous cultural burning (also known as cool burning) and fire management practices during the early dry season to mitigate the frequency and severity of fires in the late dry season. Process and requirements The measure must comprise all the following: - Develop, implement, and maintain an agreed-upon fire management plan that outlines annual planned burns, tailored to the local landscape and prevailing weather conditions. The plan must include the eligible practice listed below and be regularly updated to accurately reflect conditions at the time of the planned controlled burning. - Demonstrate that the measure has been implemented in accordance with the fire management plan and is conducted in a respectful and culturally sensitive manner, with participation or verification by a qualified expert (e.g. Indigenous fire practitioners and rangers, Traditional Owners, etc.) being a recommended approach. - To meet the requirements of this measure, the land where the controlled burning will take place must comply with the following eligibility criteria: - Land must be within the high or low rainfall zones of northern Australia that support savannah vegetation types. Where appropriate, early dry season fire management may be complemented by late dry season fire management activities, such as constructing fire breaks. Eligible practice Eligible practice, which may include both existing and new practices on the farm/asset, along with its associated costs*: - Igniting strategic and planned fires: - From aircrafts. - From vehicles. - By walking across the land with handheld drip torches. *Associated costs include operational expenses such as aerial ignition hire, necessary gear and equipment, ranger wages, monitoring and evaluation, and consultant services. Proponents can enhance this measure by integrating additional taxonomy-aligned decarbonisation measures** and/or support measures (outlined in sections A3. <i>Support Activities for Agriculture and Post-harvest</i> and A11. <i>Support Services for Natural Ecosystems</i>). **Any relevant process requirements outlined in the decarbonisation measures (e.g. management plans) can be incorporated into a single management plan.
Decarbonisation measures	A2.10 Renewable energy Eligible practices under A1.7.
Decarbonisation measures	A2.11 Electric, energy-efficient, and renewable energy-compatible vehicles and equipment for on-site use Eligible practices under A1.8.
Decarbonisation measures	A2.12 Management practices for generation of carbon credits (ACCUs) Eligible practices under A1.10.

A3. Support Services for Agriculture and Post-harvest

Support measures	A3.1 Agriculture support measures Eligible practices Eligible practices, which may include both existing and new practices on farm, along with their associated costs, include: • Research and Development (R&D) of mitigation options: Conducting research and development of mitigation strategies and practices that align with activities and measures outlined in the Taxonomy, including the development of alternative methane inhibitors and lower-carbon protein sources. • Training and capacity building: Engaging training and capacity-building services to support the adoption and implementation of emissions mitigation practices and the increase and/or maintenance of carbon stocks. • Measurement and monitoring technologies: Implementing technologies to measure and monitor mitigation initiatives and objectives, including GHG emissions, spatial positioning and guidance systems, harvest or yield monitors, and data connectivity solutions. • Mitigation of emissions through the prevention of post-harvest and post-production waste: Implementing technologies and practices designed to prevent, minimise, and reduce losses after harvest and production, including improved sorting, handling, storage and packaging to prevent damage, spoilage, or contamination of crop and livestock products.
Support measures	A3.2 Precision agriculture support measures The use of advanced technologies and data to optimise the management of agricultural activities, with the primary focus on reducing emissions while improving resource utilisation, enhancing efficiency, and promoting sustainability. Eligible practices Eligible precision agriculture practices that support sustainable land management practices, which may include both existing and new practices on farm, along with their associated costs, include: • Implementing data collection technologies to gather real-time data such as soil conditions, weather, crop health, and livestock performance. • Implementing Variable Rate (Application) Technology (VRT) to adjust the application of inputs like water, fertilisers, and pesticides, based on insights gathered from data analysis. This includes systems for precision irrigation, seeding, fertiliser and pesticide application, and harvesting. • Integrating automated systems to enhance precision and efficiency, such as automated monitoring and data analytics systems, mapping technologies, VRT, drones, tractors, and other farm machinery. • Implementing varied precision agriculture techniques, including weed and disease detection, targeted herbicide and pesticide application systems, drone-based monitoring, AI-driven technologies, controlled traffic farming, and precision biological pest control. • Purchasing, installing, upgrading, or maintaining relevant equipment, such as sensors, remote sensing devices, yield monitors, controllers, consoles, drones, unmanned aerial vehicles (UAV), meteorological forecasting, and more. • Setting up networking and connectivity services to support data transmission and integration. • Utilising data analysis and decision support systems to guide informed farm management decisions. • Using specialised tools, including GIS and GPS-based software for precision farming applications. • Covering ongoing costs, including software subscriptions and updates. • Providing staff training to ensure the effective use of precision technologies.

Forestry

A4. Afforestation, Restoration and Rehabilitation

Sector	Agriculture and Land
Activity	A4. Afforestation, Restoration and Rehabilitation
Associated ANZSIC codes	0301 Forestry 0302 Logging 0510 Forestry Support Services 6240 Financial Asset Investing 6419 Other Auxiliary Finance and Investment Services Other ANZSIC codes may be considered when the activity is conducted alongside primary production or other land management activities.
Objective	Climate change mitigation
Technical screening criteria	
Green	A4.1 Establishment of a permanent forest Establish a permanent forest, either natural or plantation, on land that was either previously forested or has been grazed, cropped, or fallow for the past 5 years, ensuring the site can support new forest growth for at least 25 years. Process and requirements For the activity to be classified as green, it must meet all of the following requirements: - The activity will be inconsistent with the taxonomy if the underlying activities result in the conversion of natural forests and/or the draining of wetlands. - Have a clearly defined baseline for carbon sinks, or, if unavailable, a detailed plan for baseline establishment. The baseline must identify key carbon sinks across the entire activity, following an assessment based on either the GHG Protocol or widely accepted methods in Australia that align with Australian Carbon Credit Units (ACCU) and/or the National Greenhouse Gas Inventory, and using reputable tools (such as FullCAM, LOOC-C or a similar tool) to estimate their value. - Develop, implement and maintain a comprehensive forest management plan tailored to the needs of the activity, taking into account relevant local risks, metrics, projected timelines, and the interactions between the planned forest and the broader landscape, including factors such as soil condition, biodiversity, climate, and water availability. The plan must outline and document the number of trees to be planted per hectare to achieve the desired forest cover and include one or more of the eligible practices listed below. - Quantitatively demonstrate an increase in carbon stocks (estimated) across the entire activity compared to the established baseline of at least 0.20 t C per hectare per year, until reaching an estimated saturation point (i.e. the point at which the established forest can no longer absorb additional carbon at a meaningful rate). The comparison should be made using a 5-year rolling average. Where the financing period is shorter than 5 years and historical data is not available, carbon estimations can be used. Where historical data exists and/or where the financing period is longer than 5 years, actual data should be used. Note: The activity will remain eligible if carbon stocks are temporarily reduced due to unforeseeable and unavoidable catastrophes, for example, drought, wildfires or other natural disasters. - Demonstrate credible compliance with requirements A to D. Proponents can demonstrate compliance by: - Providing evidence that the permanent forest and/or all forest products harvested from the activity are certified under the Forest Stewardship Council (FSC) or the Program for the Endorsement of Forest Certification (PEFC); and/or - Obtaining third-party assurance or verification opinion of compliance with the requirements; and/or - Providing documentary evidence that substantiates compliance with requirements A to D. Eligible practices Eligible establishment and management practices that support classifying the activity as green, which may include both existing and new practices on the asset, along with their associated costs, include: - Securing and acquiring land for the establishment of the permanent forest. - Procuring the necessary equipment and resources for the ongoing maintenance and management of the forest. - Implementing and conducting forestry establishment, planting, and managing activities to create the permanent forest, including sowing seed and exclusion of stock. - Installing, upgrading, and maintaining warning systems or satellite monitoring for fire, illegal incursions, epidemics, invasive species, floods, and drought conditions. - Setting up and maintaining protection measures, including employing rangers, installing monitoring equipment, and conducting GIS analysis, satellite data collection, and data analysis. - Implementing and engaging auditing and certification services, such as FSC and PEFC, for a Sustainable Forest Management System (SFMS).

A4.1 continued	In addition to the mandatory requirements, proponents may incorporate any other taxonomy-aligned decarbonisation measures or other enabling activities into the forest management plan* to further support emissions abatement and the increase and/or maintenance of carbon stocks. *Any relevant process requirements outlined in the decarbonisation measures (e.g. management plans, baselining, and monitoring requirements, etc.) can be incorporated into the forest management plan. Monitoring The calculation of changes in carbon stocks within the project area should consider: • Tree growth. • Natural decay. • Disturbance events, including changes due to drought, wildfires or other natural disasters. • Changes due to harvest. Ongoing carbon stocks increase potential can be measured and reported using FullCAM, LOOC-C or a similar tool. Infield measurements via one or more of the following: • Field inventory: measuring sufficient plots within each strata. • Permanent sample plot assessment: establishing permanently marked plots with fixed locations. • Independent verification, such as obtaining third-party certifications or assurance/verification opinions. CO₂e net abatement must be calculated by subtracting activity emissions from activity removals, as outlined in the Carbon Farming Initiative—Reforestation and Afforestation 2.0 - Methodology Determination 2015. Maintain ongoing monitoring of the decarbonisation measures outlined in the forest management plan.
Notes	Aligned to ACCU method: Carbon Credits (Carbon Farming Initiative—Reforestation and Afforestation 2.0) Methodology Determination 2015. Definitions for land conversion criteria are set out in Appendix 2.
Green	A4.2 Restoration and rehabilitation of natural forests Restoration and rehabilitation of degraded natural forests, whether through natural or human-induced processes, with restoration aiming to return ecosystems to their original state, and rehabilitation focused on improving the ecosystem's health and functions. Commercial harvesting is not permitted. However, conservation, and ecosystem management activities such as thinning, removing invasive species, and activities for habitat restoration (including the sale of any byproducts from these activities) is permitted. Process and requirements For the activity to be classified as green, it must meet all of the following requirements: - The activity will be inconsistent with the taxonomy if the underlying activities result in the conversion of natural forests and/or the draining of wetlands. - Have a clearly defined baseline for carbon sinks, or, if unavailable, a detailed plan for baseline establishment. The baseline must identify key carbon sinks across the entire activity, following an assessment based on either the GHG Protocol or widely accepted methods in Australia that align with Australian Carbon Credit Units (ACCU) and/or the National Greenhouse Gas Inventory, and using reputable tools (such as FullCAM, LOOC-C or a similar tool) to estimate their value. - Develop, implement and maintain a comprehensive forest management plan tailored to the needs of the activity and considers relevant local risks, metrics and projected timelines. The plan must include one or more of the eligible practices listed below. - Quantitatively demonstrate an increase in carbon stocks (estimated) across the entire activity compared to the established baseline. The comparison should be made using a 5-year rolling average. Where the financing period is shorter than 5 years and historical data is not available, carbon estimations can be used. Where historical data exists and/or where the financing period is longer than 5 years, actual data should be used. Note: The activity will remain eligible if carbon stocks are temporarily reduced due to unforeseeable and unavoidable catastrophes, for example, drought, wildfires or other natural disasters. - Demonstrate credible compliance with requirements A to D. Proponents can demonstrate compliance by: - Providing evidence that the forest is certified under the Forest Stewardship Council (FSC) or the Program for the Endorsement of Forest Certification (PEFC); and/or - Obtaining third-party assurance or verification opinion of compliance with the requirements; and/or - Providing documentary evidence that substantiates compliance with requirements A to D.

<i>A4.2 continued</i>	Eligible practices Eligible management practices that support classifying the activity as green, which may include both existing and new practices on the asset, along with their associated costs, include: • Securing and acquiring land to protect, restore, and rehabilitate natural forests that provide a range of ecosystem services. • Securing and acquiring land to expand, restore, and rehabilitate existing areas and/or establish new habitats for diverse ecosystem services. • Procuring the necessary equipment and resources for the on-going maintenance and management of restoration and rehabilitation projects. • Implementing and conducting restoration and rehabilitation management activities, including those focused on restoring and rehabilitating habitats and species, improving biological connectivity, and eliminating pests and diseases. • Installing, upgrading, and maintaining warning systems or satellite monitoring for fire, illegal incursions, epidemics, invasive species, floods, and drought conditions. • Setting up and maintaining protection measures, including employing rangers, installing monitoring equipment, and conducting GIS analysis, satellite data collection, and data analysis. In addition to the mandatory requirements, proponents may incorporate any other taxonomy-aligned decarbonisation measures or other enabling activities into the forest management plan* to further support emissions abatement and the increase and/or maintenance of carbon stocks. *Any relevant process requirements outlined in the decarbonisation measures (e.g. management plans, baselining, and monitoring requirements, etc.) can be incorporated into the forest management plan. Monitoring The calculation of changes in carbon stocks within the project area should consider: • Tree growth. • Natural decay. • Disturbance events, including changes due to drought, wildfires or other natural disasters. • Changes due to conservation and ecosystem management activities. Ongoing carbon stocks increase potential can be measured and reported using FullCAM, LOOC-C or a similar tool. Maintain ongoing monitoring of the decarbonisation measures outlined in the management plan.
Notes	Definitions for land conversion criteria are set out in Appendix 2.
Decarbonisation measures	A4.3 Renewable energy Eligible practices under A1.7.
Decarbonisation measures	A4.4 Electric, energy-efficient, and renewable energy-compatible vehicles and equipment for on-site use Eligible practices under A1.8.
Decarbonisation measures	A4.5 Management practices for generation of carbon credits (ACCUs) Eligible practices under A1.10.

A5. Existing Forest Management

Sector	Agriculture and Land
Activity	A5. Existing Forest Management
Associated ANZSIC codes	0301 Forestry 0302 Logging 0510 Forestry Support Services 6240 Financial Asset Investing 6419 Other Auxiliary Finance and Investment Services Other ANZSIC codes may be considered when the activity is conducted alongside primary production or other land management activities.
Objective	Climate change mitigation
Technical screening criteria	
Green	A5.1 Existing forest management Existing forests, either natural or plantation, are managed to maintain or increase above ground carbon stocks. Process and requirements For the activity to be classified as green, it must meet all of the following requirements: - The land on which the activity is being applied must not have been subject to the conversion of natural nor to the draining of wetlands, since 31 December 2020. - Have a clearly defined baseline for carbon sinks, or, if unavailable, a detailed plan for baseline establishment. The baseline must identify key carbon sinks across the entire activity, following an assessment based on either the GHG Protocol or widely accepted methods in Australia that align with Australian Carbon Credit Units (ACCUs) and/or the National Greenhouse Gas Inventory, and using reputable tools (such as FullCAM, LOOC-C or a similar tool) to estimate their value. - Develop, implement and maintain a comprehensive forest management plan tailored to the needs of the activity and considers relevant local risks, metrics and projected timelines. The plan must include one or more of the eligible practices listed below. - Quantitatively demonstrate an increase in or maintenance of carbon stocks (estimated) across the entire activity compared to the established baseline. The comparison should be made using a 5-year rolling average. Where the financing period is shorter than 5 years and historical data is not available, carbon estimations can be used. Where historical data exists and/or where the financing period is longer than 5 years, actual data should be used. Note: The activity will remain eligible if carbon stocks are temporarily reduced due to unforeseeable and unavoidable catastrophes, for example, drought, wildfires or other natural disasters. - Demonstrate credible compliance with requirements A to D. Proponents can demonstrate compliance by: - Providing evidence that the forest and/or all forest products harvested from the activity are certified under the Forest Stewardship Council (FSC) or the Program for the Endorsement of Forest Certification (PEFC); and/or - Obtaining third-party assurance or verification opinion of compliance with the requirements; and/or - Providing documentary evidence that substantiates compliance with requirements A to D. Eligible practices Eligible management practices that support classifying the activity as green, which may include both existing and new practices on the asset, along with their associated costs, include: - Securing and acquiring land for forest management purposes. - Procuring the necessary equipment and resources for the ongoing maintenance and management of the forest. - Implementing and conducting forestry planting, harvesting, and management activities. - Installing, upgrading, and maintaining warning systems or satellite monitoring for fire, illegal incursions, epidemics, invasive species, floods, and drought conditions. - Setting up and maintaining protection measures, including employing rangers, installing monitoring equipment, and conducting GIS analysis, satellite data collection, and data analysis. - Implementing and engaging auditing and certification services, such as FSC and PEFC, for a Sustainable Forest Management System (SFMS). In addition to the mandatory requirements, proponents may incorporate any other taxonomy-aligned decarbonisation measures or other enabling activities into the forest management plan* to further support emissions abatement and the increase and/or maintenance of carbon stocks. *Any relevant process requirements outlined in the decarbonisation measures (e.g. management plans, baselining, and monitoring requirements, etc.) can be incorporated into the forest management plan.

A5.1.continued	Monitoring The calculation of changes in carbon stocks within the project area should consider: • Tree growth. • Natural decay. • Disturbance events, including changes due to drought, wildfires or other natural disasters. • Changes due to harvest. Ongoing carbon stocks increase potential can be measured and reported using FullCAM, LOOC-C or a similar tool. Infield measurements via one or more of the following: • Field inventory: measuring sufficient plots within each strata. • Permanent sample plot assessment: establishing permanently marked plots with fixed locations. • Independent verification, such as obtaining third-party certifications or assurance /verification opinions. Carbon dioxide equivalent net abatement must be calculated by subtracting activity emissions from activity removals, as outlined in the Carbon Farming Initiative—Reforestation and Afforestation 2.0 - Methodology Determination 2015. Maintain ongoing monitoring of the decarbonisation measures outlined in the forest management plan.
Notes	Definitions for land conversion criteria are set out in Appendix 2 .
Decarbonisation measures	A5.2 Renewable energy Eligible practices under A1.7.
Decarbonisation measures	A5.3 Electric, energy-efficient, and renewable energy-compatible vehicles and equipment for on-site use Eligible practices under A1.8.
Decarbonisation measures	A5.4 Management practices for generation of carbon credits (ACCUs) Eligible practices under A1.10.

A6. Conservation Forestry

Sector	Agriculture and Land
Activity	A6. Conservation Forestry
Associated ANZSIC codes	0301 Forestry 0510 Forestry Support Services 6240 Financial Asset Investing 6419 Other Auxiliary Finance and Investment Services Other ANZSIC codes may be considered when the activity is conducted alongside primary production or other land management activities.
Objective	Climate change mitigation

Technical screening criteria

Green	A6.1 Conservation forestry Activities in non-commercial forests aimed at preserving one or more habitats or species. Conservation forestry assumes no change in existing land classification and takes place on land that meets the definition of Natural Forest. Commercial harvesting is not permitted. However, conservation, and ecosystem management activities such as thinning, removing invasive species, and activities for habitat restoration (including the sale of any byproducts from these activities) is permitted. Process and requirements For the activity to be classified as green, it must meet all of the following requirements: - The land on which the activity is being applied must not have been subject to the conversion of natural forests nor to the draining of wetlands, since 31 December 2020. - Have a clearly defined baseline for carbon sinks, or, if unavailable, a detailed plan for baseline establishment. The baseline must identify key carbon sinks across the entire activity, following an assessment based on either the GHG Protocol or widely accepted methods in Australia that align with Australian Carbon Credit Units (ACCUs) and/or the National Greenhouse Gas Inventory, and using reputable tools (such as FullCAM, LOOC-C or a similar tool) to estimate their value. - Develop, implement and maintain a comprehensive forest management plan tailored to the needs of the activity and considers relevant local risks, metrics and projected timelines. The plan must include one or more of the eligible practices listed below. - Quantitatively demonstrate an increase in or maintenance of carbon stocks (estimated) across the entire activity compared to the established baseline. The comparison should be made using a 5-year rolling average. Where the financing period is shorter than 5 years and historical data is not available, carbon estimations can be used. Where historical data exists and/or where the financing period is longer than 5 years, actual data should be used. Note: The activity will remain eligible if carbon stocks are temporarily reduced due to unforeseeable and unavoidable catastrophes, for example, drought, wildfires or other natural disasters. - Demonstrate credible compliance with requirements A to D. Proponents can demonstrate compliance by: - Providing evidence that the forest is certified under the Forest Stewardship Council (FSC) or the Program for the Endorsement of Forest Certification (PEFC); and/or - Obtaining third-party assurance or verification opinion of compliance with the requirements; and/or - Providing documentary evidence that substantiates compliance with requirements A to D. Eligible practices Eligible management practices that support classifying the activity as green, which may include both existing and new practices on the asset, along with their associated costs, include: - Securing and acquiring land for conservation forestry purposes. - Procuring the necessary equipment and resources for the ongoing maintenance and management of the forest. - Implementing and conducting forestry conservation and management activities. - Installing, upgrading, and maintaining warning systems or satellite monitoring for fire, illegal incursions, epidemics, invasive species, floods, and drought conditions. - Setting up and maintaining protection measures, including employing rangers, installing monitoring equipment, and conducting GIS analysis, satellite data collection, and data analysis. - Implementing and engaging auditing and certification services, such as FSC and PEFC, for a Sustainable Forest Management System (SFMS). In addition to the mandatory requirements, proponents may incorporate any other taxonomy-aligned decarbonisation measures or other enabling activities into the forest management plan* to further support emissions abatement and the maintenance and/or increase in carbon stocks. *Any relevant process requirements outlined in the decarbonisation measures (e.g. management plans, baselining, and monitoring requirements, etc.) can be incorporated into the forest management plan.
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A6.1. continued	Monitoring The calculation of changes in carbon stocks within the project area should consider: • Tree growth. • Natural decay. • Disturbance events, including changes due to drought, wildfires or other natural disasters. • Changes due to conservation and ecosystem management activities. Ongoing carbon stocks increase potential can be measured and reported using FullCAM, LOOC-C or a similar tool. Infield measurements via one or more of the following: • Field inventory: measuring sufficient plots within each strata. • Permanent sample plot assessment: establishing permanently marked plots with fixed locations. • Independent verification, such as obtaining third-party certifications or assurance /verification opinions. CO₂e net abatement must be calculated by subtracting activity emissions from activity removals, as outlined in the Carbon Farming Initiative—Reforestation and Afforestation 2.0 - Methodology Determination 2015. Maintain ongoing monitoring of the decarbonisation measures outlined in the forest management plan.
Notes	Definitions for land conversion criteria are set out in Appendix 2 .
Decarbonisation measures	A6.2 Renewable energy Eligible practices under A1.7.
Decarbonisation measures	A6.3 Electric, energy-efficient, and renewable energy-compatible vehicles and equipment for on-site use Eligible practices under A1.8.
Decarbonisation measures	A6.4 Management practices for generation of carbon credits (ACCU) Eligible practices under A1.10.

A7. Support Services for Forestry

Support measures	A7.1 Forestry support measures Eligible practices Eligible practices, which may include both existing and new practices on the asset, along with their associated costs, include: • Research and Development (R&D) of mitigation options: Conducting research and development of mitigation strategies and practices that align with activities and measures outlined in the Taxonomy. • Training and capacity building: Engaging training and capacity-building services to support the adoption and implementation of emissions mitigation practices and the increase and/or maintenance of carbon stocks. • Measurement and monitoring technologies: Implementing technologies to measure and monitor mitigation initiatives and objectives, including GHG emissions, spatial positioning and guidance systems, harvest or yield monitors, and data connectivity solutions.
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Other Land Management (Natural Ecosystems)

A8. Restoration and Rehabilitation of Ecosystems

Sector	Agriculture and Land
Activity	A8. Restoration and Rehabilitation of Ecosystems
Associated ANZSIC codes	0510 Forestry Support Services 8922 Nature Reserves and Conservation Parks Operation Other ANZSIC codes may be considered when the activity is conducted alongside primary production or forestry activities.
Objective	Climate change mitigation

Technical screening criteria

Green	A8.1 Restoration and rehabilitation of ecosystems Restoration and rehabilitation of degraded land, including: • Mangroves and wetlands. • Peatlands. • Overgrazed grasslands with depleted soil organic carbon. With restoration aiming to return ecosystems to their original state, and rehabilitation focused on improving the ecosystem's health and functions. Process and requirements For the activity to be classified as green, it must meet all of the following requirements: - The activity will be inconsistent with the taxonomy if the underlying activities result in the conversion of natural forests and/or the draining of wetlands. - Have a clearly defined baseline for carbon sinks, or, if unavailable, a detailed plan for baseline establishment. The baseline must identify key carbon sinks across the entire activity, following an assessment based on either the GHG Protocol or widely accepted methods in Australia that align with Australian Carbon Credit Units (ACCU) and/or the National Greenhouse Gas Inventory, and using reputable tools (such as FullCAM, LOOC-C or a similar tool) to estimate their value. - Develop, implement and maintain a comprehensive management plan tailored to the needs of the activity and considers relevant local risks, metrics and projected timelines. The plan must include one or more of the eligible practices listed below. - Quantitatively demonstrate an increase in carbon stocks (estimated) across the entire activity compared to the established baseline. The comparison should be made using a 5-year rolling average. Where the financing period is shorter than 5 years and historical data is not available, carbon estimations can be used. Where historical data exists and/or where the financing period is longer than 5 years, actual data should be used. Note: The activity will remain eligible if carbon stocks are temporarily reduced due to unforeseeable and unavoidable catastrophes, for example, drought, wildfires or other natural disasters. - Demonstrate credible compliance with requirements A to D. Proponents can demonstrate compliance by: - Obtaining third-party assurance or verification opinion of compliance with the requirements; and/or - Providing documentary evidence that substantiates compliance with requirements A to D. Eligible practices Eligible management practices that support classifying the activity as green, which may include both existing and new practices on the asset, along with their associated costs, include: • Securing and acquiring land to protect, restore, and rehabilitate ecosystem areas that provide a range of ecosystem services. • Securing and acquiring land to expand, restore, and rehabilitate existing areas and/or establish new habitats for diverse ecosystem services. • Procuring the necessary equipment and resources for the on-going maintenance and management of restoration and rehabilitation projects. • Implementing and conducting restoration and rehabilitation management activities, including those focused on restoring and rehabilitating habitats and species, improving biological connectivity, and eliminating pests and diseases. • Installing, upgrading, and maintaining warning systems or satellite monitoring for fire, illegal incursions, epidemics, invasive species, floods, and drought conditions. • Setting up and maintaining protection measures, including employing rangers, installing monitoring equipment, and conducting GIS analysis, satellite data collection, and data analysis.
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A8.1. continued	In addition to the mandatory requirements, proponents may incorporate any other taxonomy-aligned decarbonisation measures or other enabling activities into the management plan* to further support emissions abatement and the increase and/or maintenance of carbon stocks. *Any relevant process requirements outlined in the decarbonisation measures (e.g. management plans, baselining, and monitoring requirements, etc.) can be incorporated into the management plan. Monitoring Ongoing carbon stocks increase potential can be measured and reported using FullCAM, LOOC-C or a similar tool. Maintain ongoing monitoring of the decarbonisation measures outlined in the management plan.
Notes	Definitions for land conversion criteria are set out in Appendix 2 .
Decarbonisation measures	A8.2 Renewable energy Eligible practices under A1.7.
Decarbonisation measures	A8.3 Electric, energy-efficient, and renewable energy-compatible vehicles and equipment for on-site use Eligible practices under A1.8.
Decarbonisation measures	A8.4 Management practices for generation of carbon credits (ACCUs) Eligible practices under A1.10.

A9. Savannah Management Using Indigenous Cultural Practices

Sector	Agriculture and Land
Activity	A9. Savannah Management Using Indigenous Cultural Practices
Associated ANZSIC codes	0510 Forestry Support Services 8922 Nature Reserves and Conservation Parks Operation 7713 Fire Protection and Other Emergency Services Other ANZSIC codes may be considered when the activity is conducted alongside primary production or forestry activities.
Objective	Climate change mitigation
Technical screening criteria	
Decarbonisation measures	A9.1 Savannah fire management using Indigenous cultural burning and fire management practices Eligible practices under A2.9.
Decarbonisation measures	A9.2 Renewable energy Eligible practices under A1.7.
Decarbonisation measures	A9.3 Electric, energy-efficient, and renewable energy-compatible vehicles and equipment for on-site use Eligible practices under A1.8.
Decarbonisation measures	A9.4 Management practices for generation of carbon credits (ACCUs) Eligible practices under A1.10.

A10. Conservation of Natural Ecosystems

Sector	Agriculture and Land
Activity	A10. Conservation of Natural Ecosystems
Associated ANZSIC codes	0510 Forestry Support Services 8922 Nature Reserves and Conservation Parks Operation Other ANZSIC codes may be considered when the activity is conducted alongside primary production or forestry activities.
Objective	Climate change mitigation

Technical screening criteria

Green	A10.1 Conservation of natural ecosystems Enhance or maintain carbon sinks through the conservation of natural ecosystems, including: • Mangroves and wetlands. • Peatlands. • Coastal wetlands. • Savannahs and grasslands. • Shrublands. Process and requirements For the activity to be classified as green, it must meet all of the following requirements: - The land on which the activity is being applied must not have been subject to the conversion of natural forests nor to the draining of wetlands, since 31 December 2020. - Have a clearly defined baseline for carbon sinks, or, if unavailable, a detailed plan for baseline establishment. The baseline must identify key carbon sinks across the entire activity, following an assessment based on either the GHG Protocol or widely accepted methods in Australia that align with Australian Carbon Credit Units (ACCUs) and/or the National Greenhouse Gas Inventory, and using reputable tools (such as FullCAM, LOOC-C or a similar tool) to estimate their value. - Develop, implement and maintain a comprehensive management plan tailored to the needs of the activity and considers relevant local risks, metrics and projected timelines. The plan must include one or more of the eligible practices listed below. - Quantitatively demonstrate an increase in or maintenance of carbon stocks (estimated) across the entire activity compared to the established baseline. The comparison should be made using a 5-year rolling average. Where the financing period is shorter than 5 years and historical data is not available, carbon estimations can be used. Where historical data exists and/or where the financing period is longer than 5 years, actual data should be used. Note: The activity will remain eligible if carbon stocks are temporarily reduced due to unforeseeable and unavoidable catastrophes, for example, drought, wildfires or other natural disasters. - Demonstrate credible compliance with requirements A to D. Proponents can demonstrate compliance by: - Obtaining third-party assurance or verification opinion of compliance with the requirements; and/or - Providing documentary evidence that substantiates compliance with requirements A to D. Eligible practices Eligible management practices that support classifying the activity as green, which may include both existing and new practices on the asset, along with their associated costs, include: • Securing and acquiring land to protect and conserve ecosystem areas that provide a range of ecosystem services. • Securing and acquiring land to expand and restore existing areas and/or establish new habitats for diverse ecosystem services. • Procuring the necessary equipment and resources for the on-going maintenance and management of conservation projects. • Implementing and conducting conservation management activities, including those focused on preserving habitats and species, improving biological connectivity, and eliminating pests and diseases. • Installing, upgrading, and maintaining warning systems or satellite monitoring for fire, illegal incursions, epidemics, invasive species, floods, and drought conditions. • Setting up and maintaining protection measures, including employing rangers, installing monitoring equipment, and conducting GIS analysis, satellite data collection, and data analysis. In addition to the mandatory requirements, proponents may incorporate any other taxonomy-aligned decarbonisation measures or other enabling activities into the management plan* to further support emissions abatement and the increase and/or maintenance of carbon stocks *Any relevant process requirements outlined in the decarbonisation measures (e.g. management plans, baselining, and monitoring requirements, etc.) can be incorporated into the management plan.
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<i>A10.1. continued</i>	Monitoring Ongoing carbon stocks increase potential can be measured and reported using FullCAM, LOOC-C or a similar tool. Maintain ongoing monitoring of the decarbonisation measures outlined in the management plan.
Notes	Definitions for land conversion criteria are set out in Appendix 2 .
Decarbonisation measures	A10.2 Renewable energy Eligible practices under A1.7.
Decarbonisation measures	A10.3 Electric, energy-efficient, and renewable energy-compatible vehicles and equipment for on-site use Eligible practices under A1.8.
Decarbonisation measures	A10.4 Management practices for generation of carbon credits (ACCUs) Eligible practices under A1.10.

A11. Support Services for Natural Ecosystems

Support measures	A11.1 Other land management (natural ecosystems) support measures Eligible practices Eligible practices, which may include both existing and new practices on the asset, along with their associated costs, include: • Research and Development (R&D) of mitigation options: Conducting research and development of mitigation strategies and practices that align with activities and measures outlined in the Taxonomy. • Training and capacity building: Engaging training and capacity-building services to support the adoption and implementation of emissions mitigation practices and the increase and/or maintenance of carbon stocks. • Measurement and monitoring technologies: Implementing technologies to measure and monitor mitigation initiatives and objectives, including GHG emissions, spatial positioning and guidance systems, relevant management monitors, and data connectivity solutions.
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6. Minerals, Mining and Metals



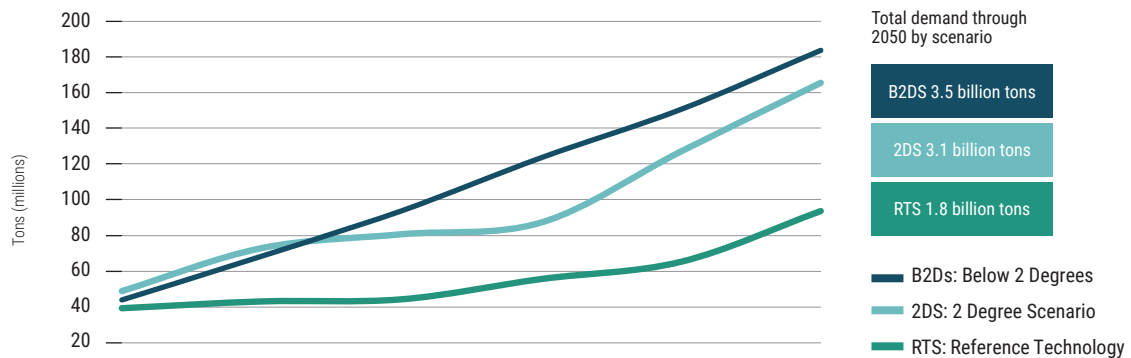
A. Sector Context

The IEA estimates that in a 'below two degrees' (B2DS) scenario, shown in Figure 12, total demand for metals will reach 3.5 billion tons by 2050. Some of the largest demand rises are likely to be driven by metals used in clean energy infrastructure and technologies, including copper, nickel and lithium. As a major minerals producer, Australia is well placed to capitalise on the economic opportunities presented by this demand growth.

Additionally, under Australian 1.5°C scenarios, iron ore production is projected to increase significantly as steel remains a highly important material with a wide array of applications globally, including low-carbon and enabling technologies and infrastructure (Australian Industry Energy Transitions Initiative [ETI], 2023). The production of steel is highly emissions-intensive, with the bulk of total supply chain emissions incurred downstream from the mine site (ETI, 2023; RMI, 2023).

For this reason, it is important that increasing shares of iron ore are directed to low-carbon production processes, as under all 1.5°C scenarios, the production of iron and steel must be decarbonised. The importance of this is reinforced by potential cost implications presented by carbon border adjustment mechanisms. The Australian Government has indicated that the Guarantee of Origin scheme may be expanded to cover green metals, with steel as a priority (Department of Industry, Science and Resources, 2024).

FIGURE 12 Projected annual average demand for minerals up to 2050 – IEA Energy Technology Perspective scenarios



THE MINING SECTOR IN GLOBAL TAXONOMIES: APPROACHES AND CHALLENGES

To date, the inclusion of mining activities has been limited within national and regional taxonomies, particularly when it comes to understanding what 1.5°C alignment looks like for the sector.

The development of taxonomy criteria covering the mining sector is underway in the EU, Brazil and Chile. The Indonesian Taxonomy has broad coverage with

standardised transition criteria of 12.5 per cent emissions reduction against business-as-usual by 2030. There are no green criteria. The proposed mining criteria in the EU, Brazil and Chile adopt an emissions intensity reduction approach, along with downstream requirements for all minerals.

In developing criteria to meet these objectives, the TAG and TTEG have:

- Focused on minerals considered critical, strategic and/or essential to the transition;
- Included downstream emissions requirements in circumstances where downstream emissions are highly material relative to emissions incurred on the mine site. In this iteration, downstream requirements are limited to iron ore, with a sunrise date of 2030.

B. Methodology

Activity selection

In selecting mining activities and minerals to cover in the first phase of the taxonomy's development, the following factors were considered:

- the sector and activity boundaries informed by the classification of activities according to the ANZSIC codes;
- The projected role of minerals in the transition, including their importance for key technologies and infrastructure for the clean energy transition;
- the importance of minerals with projected stable and growing demand to the Australian economy; and
- the Australian Government's policy priorities for minerals and metals with reference to the transition, including the Future Made in Australia agenda and the Critical Minerals Strategy.

Accordingly, Table 9 highlights the minerals in scope in this initial phase of the taxonomy's development, noting that future iterations may aim to cover other minerals as priorities are determined by relevant stakeholders.

Decarbonisation measures that can be used for other mine sites have also been included in recognition that there is a need to provide options to reduce emissions for a variety of other minerals that have a growing demand profile in a 1.5°C aligned pathway. The technical screening criteria outlines further conditions regarding the eligibility of mine sites.

TABLE 9
Activity selection and classification – Minerals, Mining and Metals sector

	Green	Decarbonisation measures
B1. Lithium Ore Mining	✓	✓
B2. Nickel Ore Mining	✓	✓
B3. Copper Ore Mining	✓	✓
B4. Iron Ore Mining	✓	✓
B5. Generic Measures for Mining Operations		✓

Green criteria

The green criteria for the minerals in scope are primarily based on emissions intensity thresholds consistent with a credible pathway to net zero. To account for variances in on-site processing between different mine sites, a range of options covering different emissions boundaries have been included in the green criteria (see the first and second public consultation documents for more detail). These include:

- a. Ore processing boundary** – this option is available for all minerals in scope. The boundary covers Scope 1 emissions and includes all ore preparation processes on-site (i.e. grinding, milling, classification) but not further beneficiation or de-watering processes. Any site boundary that includes those processes may exclude them here for the purposes of calculating emissions.

The emissions intensity starting points for each of lithium, nickel and copper are derived from the top 20th percentile of mine sites globally, based on data provided by Skarn Associates. The rate of decline for emissions intensity thresholds follows the emissions pathway for the Australian mining sector in CSIRO's CRD (2023) scenario. Further detail about how scenarios inform emissions intensity thresholds in the green criteria, and the mining sector methodology, can be found in the first public consultation paper.

In addition to Scope 1 emissions figures as per the boundary above, the criteria include an electricity emissions intensity requirement for lithium, nickel and copper.

For iron ore, the methodology utilised was different given that there are iron ore specific pathways for Australia. The iron ore emissions intensity pathway from CSIRO's (2023) CRD scenario apply to Scope 1 and 2 emissions at the mine (mine-to-gate) – see more below.

- b. Mine-to-gate boundary** – this option is available for all minerals in scope and the methodology for determining the emissions intensity starting point and pathway follows the same process as for the ore processing boundary, but accounts for all Scope 1 and 2 emissions at the mine site. This boundary is less prescriptive and derived from a mix of mine sites, providing an option for sites with broader on-site beneficiation (e.g. leaching, flotation).

c. Percentage-based reduction threshold – this option is available for all minerals in scope. To meet and maintain alignment with this criterion, a mine site must achieve an annual percentage-based improvement in its emissions intensity – 4.2 percent in line with the Science-based Targets Initiative’s absolute contraction approach. This option does not prescribe a boundary and can be applied where the other options are not applicable.

These criteria are specified as applicable only to certain use cases, as summarised in Table 10.

TABLE 10
Application of green mining sector criteria

Criteria type	Taxonomy-aligned use cases
Numerical declining threshold	✓ Issuing use of proceeds debt
	✓ Corporate reporting at the activity or mine site level of aligned revenue, CapEx and OpEx
	✓ Transition planning
	✓ Sustainability-linked debt
Percentage based improvement	✓ Transition planning
	✓ Sustainability-linked debt
	✓ Reporting of CapEx (if CapEx related to % improvement)
	✗ Use of proceeds debt
	✗ Corporate reporting of revenue

Decarbonisation measures

The measures cover significant decarbonisation levers rather than marginal efficiency improvements. They have been gathered from credible sources such as CSIRO, the Climate Change Authority, IEA, Industry ETI and other specialist industry knowledge.

For iron ore, research and development (R&D) has been included as an eligible measure. This is in recognition of the need for R&D to develop green steel production pathways for hematite-goethite iron ore, which comprises the bulk of Australia’s production and is not readily compatible with DRI-EAF, the most advanced green steel technology (CSIRO, 2023; ETI, 2023).

The measures are designed to facilitate green CapEx and are appropriate for the issuance of use-of-proceeds debt. They are not able to be utilised in sustainability-linked debt or entity-level reporting of taxonomy-aligned revenues.

C. Technical Screening Criteria

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B1. Lithium Ore Mining

Sector	Minerals, Mining and Metals
Activity	B1. Lithium Ore Mining
Associated ANZSIC codes	0990 Other Non-Metallic Mineral Mining and Quarrying
Objective	Climate change mitigation

Technical screening criteria

Green	The activity must meet either criteria A, B, or C. A. The mine site meets both of the following: — Scope 1 emissions intensity corresponding to the ore processing at the mine site boundary does not exceed the value below. — The emissions intensity of electricity purchased or produced on the mine site does not exceed 100gCO₂e/kWh. <table> <tr> <th colspan="2">tCO₂e/t LCE</th></tr> <tr> <td>2025</td><td>0.52</td></tr> <tr> <td>2030</td><td>0.23</td></tr> <tr> <td>2035</td><td>0.09</td></tr> <tr> <td>2040</td><td>0.07</td></tr> <tr> <td>2045</td><td>0.04</td></tr> <tr> <td>2050</td><td>0.03</td></tr> </table> B. Mine site (mine to gate) CO₂e emissions intensity (scope 1 + scope 2) does not exceed the value below: <table> <tr> <th colspan="2">tCO₂e/t LCE</th></tr> <tr> <td>2025</td><td>1.091</td></tr> <tr> <td>2030</td><td>0.48</td></tr> <tr> <td>2035</td><td>0.19</td></tr> <tr> <td>2040</td><td>0.14</td></tr> <tr> <td>2045</td><td>0.09</td></tr> <tr> <td>2050</td><td>0.07</td></tr> </table> C. The mine site can demonstrate a percentage reduction in emissions intensity of scope 1 and 2 emissions per tonne of product as follows based on a 2019 baseline (<i>note: this option is not eligible for use-of-proceeds debt</i>): <table> <tr> <td>Annual (any time period <5 years)</td><td>4.2%</td></tr> <tr> <td>2019 - 2030</td><td>56%</td></tr> <tr> <td>2019 - 2035</td><td>83%</td></tr> <tr> <td>2019 - 2040</td><td>87%</td></tr> <tr> <td>2019 - 2050</td><td>94%</td></tr> </table>	tCO ₂ e/t LCE		2025	0.52	2030	0.23	2035	0.09	2040	0.07	2045	0.04	2050	0.03	tCO ₂ e/t LCE		2025	1.091	2030	0.48	2035	0.19	2040	0.14	2045	0.09	2050	0.07	Annual (any time period <5 years)	4.2%	2019 - 2030	56%	2019 - 2035	83%	2019 - 2040	87%	2019 - 2050	94%
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2019 - 2035	83%																																						
2019 - 2040	87%																																						
2019 - 2050	94%																																						
Decarbonisation measures	• Zero tailpipe emissions vehicle fleet. • Energy storage technology including related and required optimisation and use software. • Low carbon fuel technology – e.g. hydrogen or ammonia (as defined in activities C4 and C8 in the Manufacturing and Industry sector). • Trolley assist. • Switching electricity sources (from grid non-renewables and on-site diesel generation to grid and on-site renewables). • Purchase and use of low carbon liquid fuels (as defined in activity C9 in the Manufacturing and Industry sector). • Implementation of technologies and upgrades to enable demand management.																																						
Specific ineligible cases	Sites or facilities with captive coal plants.																																						
Notes	• Emissions intensity trajectory is consistent with the absolute mining sector emissions reduction pathway in CSIRO's (2023) CRD scenario. • Percentage-based reduction based on SBTi Absolute Contraction approach (annual) and CSIRO's (2023) CRD scenario for the mining sector. • Emissions intensity starting points based on 20th percentile highest performing mine sites globally based on data provided by Skarn Associates.																																						

B2. Nickel Ore Mining

Sector	Minerals, Mining and Metals
Activity	B2. Nickel Ore Mining
Associated ANZSIC codes	0806 Nickel Ore Mining
Objective	Climate change mitigation

Technical screening criteria

Green	The activity must meet either criteria A, B, or C. A. GHG intensity meets the following: — Scope 1 emissions intensity corresponding to the ore processing boundary does not exceed the value below. — The emissions intensity of electricity purchased or produced on the mine site does not exceed 100gCO₂e/kWh. <table> <tr> <th colspan="2">tCO₂e/t Ni equivalent</th></tr> <tr> <td>2025</td><td>1.61</td></tr> <tr> <td>2030</td><td>0.70</td></tr> <tr> <td>2035</td><td>0.28</td></tr> <tr> <td>2040</td><td>0.21</td></tr> <tr> <td>2045</td><td>0.13</td></tr> <tr> <td>2050</td><td>0.10</td></tr> </table> B. Mine site (mine to gate) CO₂e emissions intensity (scope 1 + scope 2) does not exceed the value below: <table> <tr> <th colspan="2">tCO₂e/t Ni equivalent</th></tr> <tr> <td>2025</td><td>3.63</td></tr> <tr> <td>2030</td><td>1.58</td></tr> <tr> <td>2035</td><td>0.62</td></tr> <tr> <td>2040</td><td>0.46</td></tr> <tr> <td>2045</td><td>0.30</td></tr> <tr> <td>2050</td><td>0.23</td></tr> </table> C. The mine site can demonstrate a percentage reduction in emissions intensity of scope 1 and 2 emissions per tonne of product as follows based on a 2019 baseline (<i>note: this option is not eligible for use-of-proceeds debt</i>): <table> <tr> <td>Annual (any time period <5 years)</td><td>4.2%</td></tr> <tr> <td>2019 - 2030</td><td>56%</td></tr> <tr> <td>2019 - 2035</td><td>83%</td></tr> <tr> <td>2019 - 2040</td><td>87%</td></tr> <tr> <td>2019 - 2050</td><td>94%</td></tr> </table>	tCO ₂ e/t Ni equivalent		2025	1.61	2030	0.70	2035	0.28	2040	0.21	2045	0.13	2050	0.10	tCO ₂ e/t Ni equivalent		2025	3.63	2030	1.58	2035	0.62	2040	0.46	2045	0.30	2050	0.23	Annual (any time period <5 years)	4.2%	2019 - 2030	56%	2019 - 2035	83%	2019 - 2040	87%	2019 - 2050	94%
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Decarbonisation measures	• Zero tailpipe emissions vehicle fleet. • Energy storage technology including related and required optimisation and use software. • Low carbon fuel technology – e.g. hydrogen or ammonia (as defined in activities C4 and C8 in the Manufacturing and Industry sector). • Trolley assist. • Switching electricity sources (from grid non-renewables and on-site diesel generation to grid and on-site renewables). • Purchase and use of low carbon liquid fuels (as defined in defined in activity C9 in the Manufacturing and Industry sector). • Implementation of technologies and upgrades to enable demand management																																						
Specific ineligible cases	Sites or facilities with captive coal plants.																																						
Notes	• Emissions intensity trajectory is consistent with the absolute mining sector emissions reduction pathway in CSIRO's (2023) CRD scenario. • Percentage-based reduction based on SBTi Absolute Contraction approach (annual) and CSIRO's (2023) CRD scenario for the mining sector. • Emissions intensity starting points based on 20th percentile highest performing mine sites globally based on data provided by Skarn Associates.																																						

B3. Copper Ore Mining

Sector	Minerals, Mining and Metals
Activity	B3. Copper Ore Mining
Associated ANZSIC codes	0803 Copper Ore Mining
Objective	Climate change mitigation

Technical screening criteria

Green	The activity must meet either criteria A, B, or C. A. The mine meets both of the following: — Scope 1 emissions intensity corresponding to the ore processing boundary does not exceed the value below. — The emissions intensity of electricity purchased or produced on the mine site does not exceed 100gCO₂e/kWh. <table> <tr> <th colspan="2">tCO₂e/t Cu equivalent</th></tr> <tr> <td>2025</td><td>0.58</td></tr> <tr> <td>2030</td><td>0.25</td></tr> <tr> <td>2035</td><td>0.1</td></tr> <tr> <td>2040</td><td>0.07</td></tr> <tr> <td>2045</td><td>0.05</td></tr> <tr> <td>2050</td><td>0.04</td></tr> </table> B. Mine site (mine to gate) CO₂e emissions intensity (scope 1 + scope 2) does not exceed the value below: <table> <tr> <th colspan="2">tCO₂e/t Cu equivalent</th></tr> <tr> <td>2025</td><td>0.98</td></tr> <tr> <td>2030</td><td>0.43</td></tr> <tr> <td>2035</td><td>0.17</td></tr> <tr> <td>2040</td><td>0.13</td></tr> <tr> <td>2045</td><td>0.08</td></tr> <tr> <td>2050</td><td>0.06</td></tr> </table> C. The mine site can demonstrate a percentage reduction in emissions intensity of scope 1 and 2 emissions per tonne of product as follows based on a 2019 baseline (<i>note: this option is not eligible for use-of-proceeds debt</i>): <table> <tr> <td>Annual (any time period <5 years)</td><td>4.2%</td></tr> <tr> <td>2019 - 2030</td><td>56%</td></tr> <tr> <td>2019 - 2035</td><td>83%</td></tr> <tr> <td>2019 - 2040</td><td>87%</td></tr> <tr> <td>2019 - 2050</td><td>94%</td></tr> </table>	tCO ₂ e/t Cu equivalent		2025	0.58	2030	0.25	2035	0.1	2040	0.07	2045	0.05	2050	0.04	tCO ₂ e/t Cu equivalent		2025	0.98	2030	0.43	2035	0.17	2040	0.13	2045	0.08	2050	0.06	Annual (any time period <5 years)	4.2%	2019 - 2030	56%	2019 - 2035	83%	2019 - 2040	87%	2019 - 2050	94%
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Decarbonisation measures	• Zero tailpipe emissions vehicle fleet. • Energy storage technology including related and required optimisation and use software. • Low carbon fuel technology – e.g. hydrogen or ammonia (as defined in activities C4 and C8 in the Manufacturing and Industry sector). • Trolley assist. • Switching electricity sources (from grid non-renewables and on-site diesel generation to grid and on-site renewables). • Purchase and use of low carbon liquid fuels (as defined defined in activity C9 in the Manufacturing and Industry sector). • Implementation of technologies and upgrades to enable demand management.																																						
Specific ineligible cases	Sites or facilities with captive coal plants.																																						
Notes	• Emissions intensity trajectory is consistent with the absolute mining sector emissions reduction pathway in CSIRO's (2023) CRD scenario. • Percentage-based reduction based on SBTi Absolute Contraction approach (annual) and CSIRO's (2023) CRD scenario for the mining sector. • Emissions intensity starting points based on 20th percentile highest performing mine sites globally based on data provided by Skarn Associates.																																						

B4. Iron Ore Mining

While it is not designated as a critical mineral, iron ore is vital mineral for the Australian economy and an essential component in modern technologies and infrastructure, including those needed for the clean energy transition, for example, wind turbines and green buildings. It has been included in the taxonomy for these reasons, along with its direct emissions share, and role in high-emissions supply chains. As the Australian Government develops the Guarantee of Origin scheme for green metals, including iron and steel, the impetus to decarbonise iron ore mining will continue to grow.

The major challenge in designing 1.5°C aligned criteria for iron ore is that emissions from mining are relatively minor compared to emissions from iron and steel making. The iron and steel making process accounts for over 90 percent of emissions in the value chain.

For this reason, the TTEG determined that the demonstration of alignment with a 1.5°C trajectory must account for this disproportionate emissions materiality, particularly as the contribution of iron ore supply, in zero-carbon technologies is, on aggregate, less direct relative to the critical minerals covered in this sector.

The criteria defined therefore are designed link to key downstream parts of the value chain where the bulk of emissions are generated. Given the challenges of meeting these criteria in the short term, the downstream requirements are only applicable after 2030.

Sector	Minerals, Mining and Metals
Activity	B4. Iron Ore Mining
Associated ANZSIC codes	0801 Iron Ore Mining
Objective	Climate change mitigation

Technical screening criteria

Green	The activity must comply with either A and B or A and C. All activities must comply with D from 1 January 2030. A. The activity complies with one of the following: — The ore grade is generally and currently compatible with DRI or other low emissions iron/steel, and evidence can be provided to demonstrate this* or; — The ore grade is not generally compatible with DRI or other low emissions iron/steel but the specific site/operation/project is currently compatible with DRI or other low emissions iron/steel and evidence can be provided to demonstrate this*. B. Mine site CO₂e emissions intensity (scope 1 + scope 2) does not exceed the value below: <table> <tr> <th colspan="2">tCO₂e/t iron ore equivalent</th></tr> <tr> <td>2025</td><td>0.013</td></tr> <tr> <td>2030</td><td>0.005</td></tr> <tr> <td>2035</td><td>0.003</td></tr> <tr> <td>2040</td><td>0.002</td></tr> <tr> <td>2050</td><td>0</td></tr> </table> C. The mine site can demonstrate a percentage reduction in emissions intensity of scope 1 and 2 emissions per tonne of product as follows based on a 2019 baseline (<i>note: this option is not eligible for use-of-proceeds debt</i>): <table> <tr> <td>Annual (any time period <5 years)</td><td>4.2%</td></tr> <tr> <td>2019 - 2030</td><td>56%</td></tr> <tr> <td>2019 - 2035</td><td>83%</td></tr> <tr> <td>2019 - 2040</td><td>87%</td></tr> <tr> <td>2019 - 2050</td><td>94%</td></tr> </table> D. From 1 January, 2030: Activities which meet either of the criteria above must also demonstrate (via offtake agreements or other means) that the ore is going to DRI or a more performant process to make low emissions iron and/or steel.	tCO ₂ e/t iron ore equivalent		2025	0.013	2030	0.005	2035	0.003	2040	0.002	2050	0	Annual (any time period <5 years)	4.2%	2019 - 2030	56%	2019 - 2035	83%	2019 - 2040	87%	2019 - 2050	94%
tCO ₂ e/t iron ore equivalent																							
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Decarbonisation measures	• R&D into enabling ores to be compatible with into DRI and other low-carbon steel processes. • Zero tailpipe emissions vehicle fleet. • Energy storage technology including related and required optimisation and use software. • Low carbon fuel technology – e.g. Hydrogen or Ammonia (as defined in activities C4 and C8 in the Manufacturing and Industry sector). • Trolley assist. • Switching electricity sources (from grid non-renewables and on-site diesel generation to grid and on-site renewables). • Purchase and use of low carbon liquid fuels (as defined in activity C9 in the Manufacturing and Industry sector). • Implementation of technologies and upgrades to enable demand management.
Specific ineligible cases	Sites or facilities with captive coal plants
Notes	• Evidence may include the % of Iron Oxide Chemical Quality Limits that meet DR-grade requirements - e.g. <2.5% gangue in the finished iron ore product • Emissions intensity starting point and trajectory based on CSIRO's (2023) CRD iron ore emissions intensity pathway.

B5. Generic Measures for the Mining Sector

The following decarbonisation measures can be applied across any mine site and mineral types other than the exceptions listed below.

The measures are primarily CapEx investments that could be used to issue a labelled bond. They do not, however, allow a whole activity or mine site to be labelled as green or have a green label.

Sector	Minerals, Mining and Metals
Activity	B5. Implementation of Mine Site Decarbonisation Measures
Associated ANZSIC codes	1090 Other Mining Support Services
Objective	Climate change mitigation
Technical screening criteria	
Decarbonisation measures	• Zero tailpipe emissions vehicle fleet. • Energy storage technology including related and required optimisation and use software. • Low carbon fuel technology – e.g. Hydrogen or Ammonia (as defined in activities C4 and C8 in the Manufacturing and Industry sector). • Trolley assist. • Switching electricity sources (from grid non-renewables and on-site diesel generation to grid and on-site renewables). • R&D into other new low carbon technologies and processes not otherwise captured. • Purchase and use of low carbon liquid fuels (as defined in activity C9 in the Manufacturing and Industry sector). • Implementation of technologies and upgrades to enable demand management.
Specific ineligible cases	• Mining of coal. • Extraction of fossil fuels.



7. Manufacturing and Industry



A. Sector Context

Globally, the industry sector account for approximately a quarter of emissions globally, having risen 70 percent since 2000 due to increasing demand for industrial goods. The cement, steel, aluminium and chemicals sectors constitute the major industrial emissions sources, and their demand is expected to continue to rise.

Industrial emissions will need to fall to by approximately 25 percent by 2030 or 3 percent per annum on average according to the IEA's NZE2050 scenario. The highest emitting industrial sectors in Australia are iron and steel, cement, and alumina and aluminium production which account for 50 percent of the sector's emissions (CCA, 2024b). Under CSIRO's CRD scenario, emissions from alumina, aluminium, cement and steel decline by over 85 percent by 2050 on 2020 levels, while demand for these products remains stable and, in the case of cement, grows significantly. This underscores the need to decouple production volume growth from emissions growth.

At the time of writing, the Australian Government is in the final stages of developing an Industry Sector Plan for Australia which will articulate key emissions reduction priorities.

The plan will also articulate associated economic imperatives, in recognition of the growing demand-side opportunities associated with low-carbon industrial sectors. This follows a global reorientation toward low-carbon industrial development driven through the Inflation Reduction Act, and the EU Green Deal Industrial Plan, among other initiatives.

The Future Made in Australia (FMIA) Act constitutes a key pillar of Australia's drive to realise low-carbon competitive advantages relevant to the transition. Priority industries under the FMIA's National Interest Framework include the manufacture of low-carbon hydrogen, low-carbon iron, steel, alumina and aluminium, low-carbon liquid fuels, and clean energy technologies (Parliament of Australia, 2024).

Seizing an increased share of downstream processing and refining capacity for critical minerals has also been identified as a significant economic opportunity for Australia in context of the transition (CSIRO, 2024).

B. Methodology

Activity selection and classification

Activity selection and the development of criteria has drawn from the FMIA priorities, Australia's emissions accounts, and research and pathways developed by CSIRO, Climateworks Centre, the Climate Change Authority and the Industry Energy Transitions Initiative. Where aligned with the core taxonomy principles, industry standards, incentive schemes and regulations have been referenced to ensure local compatibility and usability.

The scope and classification of Manufacturing and Industry sector activities is as follows:

TABLE 11
Activity selection and classification - Manufacturing and Industry sector

	Classification	
	Green	Decarbonisation measures
C1. Refining of Copper, Lithium and Nickel	✓	✓
C2. Alumina Production		✓
C3. Aluminium Smelting		✓
C4. Manufacture of Hydrogen	✓	✓
C5. Manufacture of Cement	✓	✓
C6. Manufacture of Iron and Steel		✓
C7. Manufacture of Nitric Acid	✓	✓
C8. Manufacture of Ammonia	✓	✓
C9. Manufacture of Low-Carbon Liquid Fuels	✓	✓
C10. Manufacture of Biogas	✓	✓
C11. Energy Efficiency for Industrial Facilities		✓
C12. Manufacture of Renewable Energy Technologies	✓	
C13. Manufacture of Equipment for the Production of Hydrogen Through Electrolysis	✓	
C14. Manufacture of Low-Carbon Technologies for Transport	✓	
C15. Manufacture of Energy Efficiency Equipment for Buildings	✓	
C16. Manufacture and Recycling of Batteries	✓	
C17. Manufacture of Plastics in Primary Form Through Recycling	✓	

Types of criteria in the Manufacturing and Industry sector

The manufacturing criteria are divided into three components:

1. Technical thresholds
2. Cross-cutting criteria
3. Decarbonisation measures

Technical thresholds are, where the data is available, determined using credible sector pathways.

Thresholds have been put forward using 5-10 year steps that intersect with the pathway. All thresholds are based on emissions intensity to account for a wide range of different types and sizes of facilities.

The stepped approach was recommended by industry groups and experts to provide stability to the thresholds over a period of time as well as a more realistic reflection of how emissions reductions can be achieved with large investments/upgrades at various points in time rather than incremental steps each year.

In some cases, pathways are available only on an absolute emissions basis. In these cases, data representing best performance in 2025 is used as a starting point and the slope of the absolute emissions reduction curve used to determine future thresholds.

Future thresholds, particularly those beyond 2035, should be seen as indicative in nature. They are put forward here to give users visibility on how the thresholds will ratchet down over time. However, the taxonomy will also be updated over time and these future thresholds may be adjusted to account for changes in technology, pathways and underlying science.

Cross-cutting criteria refer to requirements concerning the sustainability of feedstocks, fuels or other inputs that are linked to criteria in other parts of the taxonomy. In these cases, the relevant taxonomy reference is inserted.

Decarbonisation measures cover directly eligible CapEx investments that will support the decarbonisation of the activity. These measures are broadly in line with the key decarbonisation levers identified by the Climate Change Authority (2024b), which include electrification, fuel substitution, recycling, energy efficiency, and utilisation of waste as feedstocks in the production of gaseous and low-carbon liquid fuels.

C. Technical Screening Criteria

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C1. Refining of Copper, Lithium and Nickel

This class also includes by-production of sulphuric acid in conjunction with the smelting of these metals.

Sector	Manufacturing and Industry																				
Activity	C1. Refining of Copper, Lithium and Nickel																				
Associated ANZSIC codes	2133 Copper, Silver, Lead and Zinc Smelting and Refining 2139 Other Basic Non-Ferrous Metal Manufacturing																				
Objective	Climate change mitigation																				
Technical screening criteria																					
Green	The activity must comply with one of the following:																				
	A. The activity demonstrates a percentage reduction in emissions intensity as follows based on a 2019 baseline:																				
	<table><tr><td></td><td>Copper</td><td>Lithium</td><td>Nickel</td></tr><tr><td>Annual</td><td>4.2%</td><td>4.2%</td><td>4.2%</td></tr><tr><td>2019 - 2030</td><td>30%</td><td>30%</td><td>30%</td></tr><tr><td>2019 - 2040</td><td>70%</td><td>70%</td><td>70%</td></tr><tr><td>2019 - 2050</td><td>90%</td><td>90%</td><td>90%</td></tr></table>		Copper	Lithium	Nickel	Annual	4.2%	4.2%	4.2%	2019 - 2030	30%	30%	30%	2019 - 2040	70%	70%	70%	2019 - 2050	90%	90%	90%
		Copper	Lithium	Nickel																	
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2019 - 2050	90%	90%	90%																		
B. The emissions intensity of refining and smelting does not exceed the value below:																					
<table><tr><td></td><td>Copper (tCO₂e/t Cu)</td><td>Lithium (t CO₂e/t LCE)</td><td>Nickel Sulphide (CO₂e/t Ni equivalent)</td></tr><tr><td>2025</td><td>1.64</td><td>10.7</td><td>3.97</td></tr><tr><td>2030</td><td>1.15</td><td>7.5</td><td>2.78</td></tr><tr><td>2040</td><td>0.5</td><td>3.22</td><td>1.19</td></tr><tr><td>2050</td><td>0.16</td><td>1.07</td><td>0.16</td></tr></table>		Copper (tCO ₂ e/t Cu)	Lithium (t CO ₂ e/t LCE)	Nickel Sulphide (CO ₂ e/t Ni equivalent)	2025	1.64	10.7	3.97	2030	1.15	7.5	2.78	2040	0.5	3.22	1.19	2050	0.16	1.07	0.16	
	Copper (tCO ₂ e/t Cu)	Lithium (t CO ₂ e/t LCE)	Nickel Sulphide (CO ₂ e/t Ni equivalent)																		
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2030	1.15	7.5	2.78																		
2040	0.5	3.22	1.19																		
2050	0.16	1.07	0.16																		
	C. Production of secondary copper, lithium or nickel from scrap, dross, ashes or other waste materials.																				
Decarbonisation measures	- Fuel switching from fossil to non-fossil alternatives. - Process upgrades that reduce emissions by >15%. - Replacement of carbothermal reduction processes with alternatives (e.g. hydrogen and electrolytic reduction). - R&D into low carbon processes. - Sourcing/purchasing of renewable energy (e.g. via PPA). - Switching electricity sources from non-renewables to grid or on-site renewables. - Energy recovery systems. - Replacement of conventional carbon-based anodes with novel anodes or from renewable sources of carbon. - Switching to non-fossil feedstocks.																				
Specific ineligible cases	Refining of laterite ores to produce Nickel Pig Iron.																				
Notes	- Emissions intensity figures sourced from Skarn Associates. - Percentage-based reductions based on SBTi's Absolute contraction approach. - Additional inputs informed by the International Copper Association (2023) Global Decarbonisation Scenario, and the World Bank (2023) Net Zero Roadmap for Copper & Nickel Value Chains.																				

C2. Alumina Production

Refining of bauxite to form alumina (aluminium oxide).

Sector	Manufacturing and Industry
Activity	C2. Alumina Production
Associated ANZSIC codes	2131 Alumina Production
Objective	Climate change mitigation
Technical screening criteria	
Decarbonisation measures	• Fuel switching from fossil to non-fossil alternatives. • R&D dedicated to the substantial reduction, avoidance or removal of GHG emissions from alumina production. • R&D into capturing carbon from alumina refining steam generation or calcination processes. • Electric digestion for alumina refining (e.g. electric boilers or mechanical vapour recompression). • Electric or hydrogen calcination. • Boiler conversion for biomass substitution. • Heat recovery systems. • Sourcing/purchasing of renewable energy (e.g. via PPA). • Non-grid connection to renewable energy. • Construction/installation of renewable energy.
Notes	Green criteria for alumina production are intended to be included in future versions of the taxonomy, following the development of emissions boundaries and associated methodologies through the Guarantee of Origin scheme.

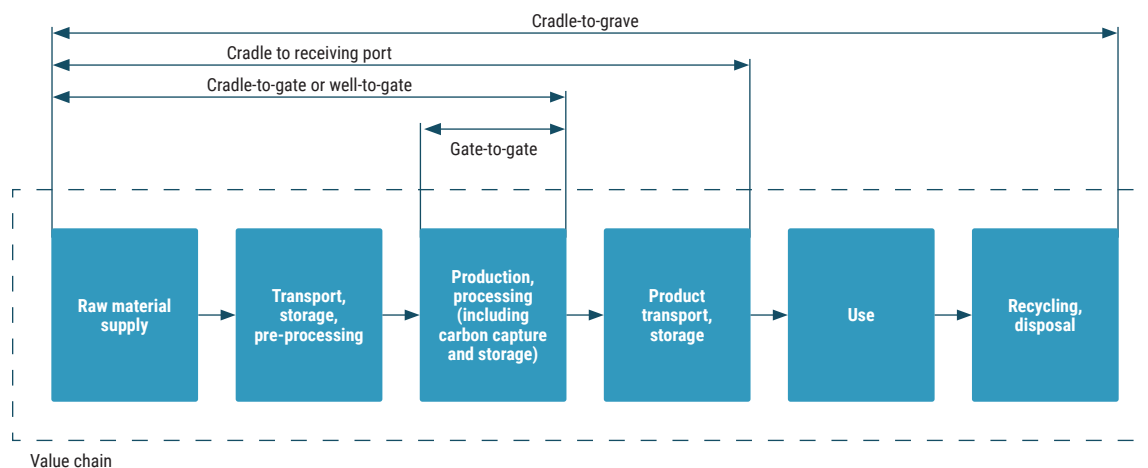
C3. Aluminium Smelting

Smelting of alumina to produce aluminium, or recovering aluminium from scrap.

Sector	Manufacturing and Industry
Activity	C3. Aluminium Smelting
Associated ANZSIC codes	2132 Aluminium Smelting
Objective	Climate change mitigation
Technical screening criteria	
Decarbonisation measures	• Fuel switching from fossil to non-fossil alternatives (eg. low-carbon liquid fuels that meet the criteria in activity C9 of the Australian sustainable finance taxonomy). • Projects to reduce perfluorocarbon (PFC) emissions. • R&D dedicated to the reduction, avoidance or removal of GHG emissions from aluminium production. • R&D into capturing carbon from aluminium smelter flue gas. • Inert anodes for aluminium. • New cell design for aluminium. • Sourcing/purchasing of renewable energy (e.g. via PPA). • Non-grid connection to renewable energy.
Notes	Green criteria for aluminium smelting are intended to be included in future versions of the taxonomy, following the development of emissions boundaries and associated methodologies through the Guarantee of Origin scheme.

C4. Manufacture of Hydrogen

The boundary for Hydrogen criteria follows a cradle-to-gate methodology in line with the Australian Government's forthcoming Hydrogen Guarantee of Origin scheme.



Sector	Manufacturing and Industry
Activity	C4. Manufacture of Hydrogen
Associated ANZSIC codes	1811 Industrial Gas Manufacturing
Objective	Climate change mitigation

Technical screening criteria

Green	The activity must comply with all of the following: A. Emissions intensity: — The activity complies with lifecycle emissions that are equal to or lower than the CO₂e emissions intensity thresholds in the table below. — The lifecycle assessment to demonstrate compliance with the emissions intensity thresholds is based on a well-to-production gate system boundary (i.e. cradle-to-gate). The assessment should be consistent with the Australian government's forthcoming Guarantee of Origin Scheme methodologies, noting the scheme's broader system boundary of well-to-consumption gate. The assessment should otherwise follow ISO/TS 19870:2023 (excluding CapEx emissions) or an equivalent standard consistent with IPHE's Methodology for Determining the Greenhouse Gas Emissions Associated with the Production of Hydrogen. Domestic emissions factors should follow the most recently published version of Australian National Greenhouse Accounts Factors. The applicable measurements and standards should follow NGER requirement(s). B. Feedstock: — The feedstock is not coal, coal derivatives, or biomass other than from waste. C. If the activity utilises Carbon Capture & Storage (CCS) or Carbon Capture and Utilisation (CCU) technology, it must comply with requirements set out in Appendix 3.1. Energy emissions related to CCU/CCS must be included in the GHG accounting. <i>Hydrogen emissions intensity thresholds:</i> <table><tr><th colspan="4">Thresholds (kgCO₂e/kg product)</th></tr><tr><th>2025</th><th>2030</th><th>2040</th><th>2050</th></tr><tr><td>3.0</td><td>1.5</td><td>0.7</td><td>0.0</td></tr></table>	Thresholds (kgCO ₂ e/kg product)				2025	2030	2040	2050	3.0	1.5	0.7	0.0
Thresholds (kgCO ₂ e/kg product)													
2025	2030	2040	2050										
3.0	1.5	0.7	0.0										
Decarbonisation measures	• Purchase/installation of electrolyzers. • Installation/operation of onsite/captive renewable electricity. • Sourcing/purchasing of renewable energy (e.g. via PPA).												
Specific ineligible cases	Production of hydrogen where • The feedstock is coal or coal derivatives. • Facilities with captive coal plants. • Biomass from primary sources and/or wood and other dedicated crops.												
Notes	• Hydrogen emissions intensity thresholds based on those used by the European Commission (2021), Climate Bonds Initiative (2023), and Singapore Taxonomy (2023).												

C5. Manufacture of Cement

Manufacturing of portland, natural and other hydraulic cement from crushed limestone and clay/shale. Also included are units mainly engaged in manufacturing lime and lime products from calcareous materials.

Sector	Manufacturing and Industry										
Activity	C5. Manufacture of Cement										
Associated ANZSIC codes	2031 Cement and Lime Manufacturing										
Objective	Climate change mitigation										
Technical screening criteria											
Green	The activity must comply with all of the following criteria. A. Emissions: The activity must comply with the following emissions intensity thresholds. The system boundaries and GHG accounting methodological notes can be found in Appendix 3.2. <table><tr><td></td><td>2025</td><td>2030</td><td>2040</td><td>2050</td></tr><tr><td>tCO₂/t cement</td><td>0.68</td><td>0.6</td><td>0.2</td><td>0.05</td></tr></table> B. Fuel source: These are applicable only if any of the below are used as fuels: — If Hydrogen: The hydrogen used meets the criteria defined in activity C4 of the Australian sustainable finance taxonomy. — If Biomass: the raw material used is derived from waste from existing supply chains and does not require dedicated production on arable land. Only waste and residues are eligible - this includes the use of mixed non-recyclable construction waste. — Waste-derived fuels, including Municipal Solid Waste must meet both of the following: ○ All waste of recycling potential must be removed prior to burning in line with the waste hierarchy; and ○ Municipal solid waste will not be eligible as a fuel type after 2035. C. If the activity utilises CCS or CCU technology, it must comply with requirements set out in Appendix 3.1. Energy emissions related to CCU/CCS must be included in the GHG accounting.		2025	2030	2040	2050	tCO ₂ /t cement	0.68	0.6	0.2	0.05
	2025	2030	2040	2050							
tCO ₂ /t cement	0.68	0.6	0.2	0.05							
Decarbonisation measures	• Heat recovery systems. • Digitised control equipment or infrastructure (sensors and measurement tools, advanced software, etc). • Replacement of clinker by Supplementary Cementitious Materials (SCM). • R&D into replacement of clinker by geopolymers and clinker free cement. • R&D into differentiated use of concrete types dependent on the application. • R&D into lower clinker cements. • Electrification of heat. • Installation of CCS or CCU that meets requirements set out in Appendix 3.1. • R&D into potential use and/or storage options for captured CO₂. • Purchase and use of alternative fuels and raw materials (AFRs). • Purchase and use of alternative fuels with >40% biogenic content (subject to biomass criteria above). • Testing equipment (automated XRD systems).										
Specific ineligible cases	• Municipal solid waste is not eligible as a fuel source after 2035. • Captive coal plants.										
Notes	• “Cementitious product” means clinker, cement and cement substitutes. The full definition for tCO₂e/t cementitious product aligns with the Cement CO₂ Protocol v3.0 (2011). • Thresholds based on emissions intensity thresholds and guidance by the Mission Possible Partnership (2023) and Safeguard Mechanism. • Biomass requirements based on the Climate Bonds Bioenergy Criteria. Section 3.2.2. Requirement 2: Reducing the risk of indirect land use impact.										

C6. Manufacture of Iron and Steel

Sector	Manufacturing and Industry
Activity	C6. Manufacture of Iron and Steel
Associated ANZSIC codes	2110 Iron Smelting and Steel Manufacturing
Objective	Climate change mitigation
Technical screening criteria	
Decarbonisation measures	- Replacement of blast furnace with DRI or electric arc furnace (EAF) production. - Optimization of EAF, installation and operation of other mitigation measures associated with EAF facilities. - R&D/prototype testing for low carbon steel production processes including but not limited to electric smelting furnaces. - R&D into processes that enable the input of hematite ores into low carbon steel production processes. - Replacement of >50% pulverised coal in the blast furnace with biocarbons, waste or sustainable biomass. To be eligible, biomass must either obtain low ILUC risk certification by the RSB, ISCC or equivalent certification body; or provide evidence and documentation to demonstrate alignment with the low ILUC risk biomass criteria and compliance indicators under the RSB module. Native forest biomass is ineligible. Note: this criterion will be reviewed for applicability following 2030.
Notes	Green criteria are intended to be included in future versions of the taxonomy, following the development of common system boundaries and emissions methodologies for iron and steelmaking underway through international collaboration convened by the World Steel Association.

C7. Manufacture of Nitric Acid

Sector	Manufacturing and Industry												
Activity	C7. Manufacture of Nitric Acid												
Associated ANZSIC codes	1813 Basic Inorganic Chemical Manufacturing												
Objective	Climate change mitigation												
Technical screening criteria													
Green	The activity must comply with all of the following: A. Scope 1 emissions from the production process, including all direct emissions from chemical reactions and fuel combustion on-site, must meet the emissions intensity thresholds defined in the table below. B. If the activity utilises CCS or CCU technology, it must comply with requirements set out in Appendix 3.1. Energy emissions related to CCU/CCS must be included in the GHG accounting. C. Nitric acid is produced from ammonia, as feedstock, that complies with the taxonomy criteria for the manufacture of ammonia. <table><tr><th colspan="4">Thresholds (tCO₂e/t nitric acid)</th></tr><tr><th>2025</th><th>2030</th><th>2040</th><th>2050</th></tr><tr><td>0.038</td><td>0.021</td><td>0.011</td><td>0.007</td></tr></table>	Thresholds (tCO ₂ e/t nitric acid)				2025	2030	2040	2050	0.038	0.021	0.011	0.007
Thresholds (tCO ₂ e/t nitric acid)													
2025	2030	2040	2050										
0.038	0.021	0.011	0.007										
Decarbonisation measures	• Installation and retrofit to include CCS or CCU that meet requirements set out in Appendix 3.1. • Substitution of fossil feedstocks with biogas. • Primary, secondary, and tertiary abatement technologies to reduce N₂O emissions that would otherwise have been vented to the atmosphere. N₂O monitoring systems must be in place.												
Specific ineligible cases	Production of nitric acid where: • The energy source is coal or coal derivatives or dedicated crops, primary organic streams, and wood. • The feedstock is coal or coal derivatives.												
Notes	• Climate Bonds Initiative (2022). • The CCS and CCU requirement are relevant for for integrated plants that produce hydrogen, ammonia, and acid.												

C8. Manufacture of Ammonia

Sector	Manufacturing and Industry
Activity	C8. Manufacture of Ammonia
Associated ANZSIC codes	181 Basic Chemical Manufacturing 1831 Fertiliser Manufacturing 1811 Ammonia Gas Manufacturing
Objective	Climate change mitigation
Technical screening criteria	
Green	The activity must comply with one of the following criteria: A. Ammonia is produced from hydrogen, as feedstock, that complies with the Taxonomy criteria for the manufacture of hydrogen. B. Ammonia is recovered from wastewater.
Decarbonisation measures	• Feedstock substitution using biogas. • Heat source substitution with biogas. • Electric heat generation.
Specific ineligible cases	Production of ammonia where: • The energy source is coal or coal derivatives or dedicated crops, primary organic streams, and wood. • The feedstock is coal or coal derivatives.

C9. Manufacture of Low Carbon Liquid Fuels

Sector	Manufacturing and Industry			
Activity	C9. Manufacture of Low Carbon Liquid Fuels			
Associated ANZSIC codes	1701 Aviation Fuel Manufacturing			
Objective	Climate change mitigation			
Technical screening criteria				
Green	The activity must comply with all of the following criteria.			
	A. The low-carbon liquid fuel (LCLF) is either renewable diesel, sustainable aviation fuel (SAF), or hydrogen-derived fuel.			
	B. The LCLF achieves the following emissions intensity percentage reduction relative to a fossil fuel baseline, calculated on a life cycle basis and including indirect land use change (ILUC) values where biogenic feedstocks are used:			
		Emissions intensity reduction relative to baseline		
		Baseline (gCO ₂ e/MJ)	Until 31 Dec. 2029	2030 onward*
	Renewable diesel	95.1	25%	50%
	SAF	89	25%	50%
	Hydrogen-derived fuel	94	25%	50%
	C. The fuel is produced from any of the following:			
	— Feedstocks included as eligible for CORSIA certification on the most recently published list of raw materials maintained by ICAO or an accredited body. Any additional specifications or limitations applied to a listed raw material as a condition for certification must also be met.			
— CO ₂ captured from industrial processes or the atmosphere.				
— Hydrogen that meets the criteria in Activity C4 of the Australian sustainable finance taxonomy.				
D. Raw material feedstocks are not derived from land with high biodiversity or high carbon stock values, as defined in Principle 1: Protection of Land with High Biodiversity Value or High Carbon Stock of the most recently published version of CORSIA PLUS sustainability requirements.				
E. Life cycle emissions reductions include core LCA and ILUC assessments determined in accordance with the most recently published version of CORSIA's Eligible Fuels Life Cycle Assessment Methodology.				
— Core LCA values can be derived from default or actual values:				
○ Where default LCA values are used, they must align with the most recently published default life cycle emissions values for CORSIA Eligible Fuels.				
○ Where actual LCA values are used, they must be calculated in accordance with the most recently published CORSIA methodology for calculating actual life cycle emissions values and be certified by an accredited body				
— An ILUC assessment can be derived from default ILUC values or low LUC risk certification:				
○ Where default ILUC values are used, they must align with the most recently published default ILUC values for CORSIA Eligible Fuels.				
○ Where low LUC risk certification is used, it must align with the Yield Increase approach or Unused Land approach specified under CORSIA's guidance for low LUC certification, and be certified by an accredited body.				
○ Where the calculation of a direct land use change (DLUC) value is required under the CORSIA methodology, and the DLUC value is higher than the ILUC value, the ILUC value is replaced by the DLUC value in the LCA calculation.				
Decarbonisation measures	• Investment in the supply of eligible feedstocks, including intermediate products eligible under CORSIA's Eligible Fuels, for the purpose of manufacturing LCLFs covered in the Australian sustainable finance taxonomy. • Sourcing/purchasing of renewable energy.			
Specific ineligible cases	Manufacture of co-processed fuels.			
Notes	*Integration of the forthcoming Guarantee of Origin Schemes for Hydrogen and Low-carbon Liquid Fuels in the taxonomy will be considered when the Schemes are operational, including incorporation of Australia-specific default ILUC values once approved by CORSIA.			

C10. Manufacture of Biogas

Manufacture of biogas including upgrading to biomethane

Sector	Manufacturing and Industry
Activity	C10. Manufacture of Biogas Including Upgrading to Biomethane
Associated ANZSIC codes	1811 Industrial Gas Manufacturing
Objective	Climate change mitigation
Technical screening criteria	
Green	The activity must comply with all of the following criteria. A. Biogas is produced from any of the following feedstocks: — Food waste and food processing waste. — Manure. — Agricultural waste including organic effluent and waste streams from industrial processing of agricultural products. — Sewage gas and biomass-based components of sewage. — Biomass-based components of municipal solid waste. B. Demonstrated monitoring, reporting and verification mechanisms, and mitigation measures for methane leakages. C. The producer must demonstrate that the project produces a renewable gas that has a lower emissions than the equivalent emissions of fossil methane gas. D. After 2030: Uses only electricity produced from renewable sources: by implementing one of the following alternatives: — Renewable-based captive power generation. — Renewable-based power purchase agreement. E. Where energy crops are eligible (i.e. not excluded under specific ineligible cases), they do not comprise more than 10% of the total feedstock energy content.
Decarbonisation measures	• Investment in supply of eligible feedstock. • Leak detection systems. • Installation/operation of onsite/captive renewable electricity.
Specific ineligible cases	The following feedstocks are excluded: • Native forest biomass • Any materials, including primary or secondary wastes, sourced from a forest that is not a sustainably harvested plantation forest. • Any materials, including primary or secondary wastes, sourced from a sustainably harvested plantation forest that is located on land from which old growth forest or native forest was cleared after 1 January 1990. • Energy crops grown on land from which old growth forest or native forest was cleared after 1 January 1990. • Food and feed crops. • Fossil-derived fuels.
Notes	Based on requirements set out in the GreenPower Renewable Gas Certification Pilot.

C11. Energy Efficiency for Industrial Facilities

Cross cutting measures are intended for use by any industry sector (not only those listed in this taxonomy) unless specifically excluded. The measures are usable for tagging of CapEx and OpEx, or issuing green bonds, but do not allow the whole activity to be labelled as green.

Sector	Manufacturing and Industry
Activity	C11. Installation and Operation of Energy Efficiency Measures for Industrial Facilities
Associated ANZSIC codes	N/A
Objective	Climate change mitigation
Technical screening criteria	
Decarbonisation measures	The following measures are eligible: • Implementation of a recognised energy management system. • Installation of efficient electric technologies for steam, hot water and process heating, including heat pumps and electro-boilers. • Implementation of advanced data collection and analytics, including the installation of metering and monitoring systems and installation of smart controls. • Installation of electric motors - motor efficiency must meet European standards (as updated). • Installation of smart electronic actuators. • Implementation of variable speed drives to improve energy efficiency of pumps, fans, conveyor and compressor systems. • Installation of industrial thermal battery systems such as water-based thermal batteries. • Waste heat recovery and use technologies and upgrades. • Upgrade or redesign of compressed air systems to convert pneumatic actuators to smart electric actuators, and the replacement of compressed air vacuum with electric vacuum pumps. • Electrification of conveyors.
Specific ineligible cases	These measures are not eligible for fossil fuel extraction or processing facilities.

Enabling Activities

The following activities are classified as enabling activities within the manufacturing sectors due to their role in enabling the decarbonisation of other activities.

Some activities have been designated as directly eligible in the short term or have minimal criteria. This means that their enabling role is sufficient to demonstrate a substantial enabling contribution to climate change mitigation.

In the medium to long term, all manufacturing activities will need to be decarbonised. Therefore these are only directly eligible until 2030 after which additional requirements and conditions may be added.

C12. Manufacture of Renewable Energy Technologies

Sector	Manufacturing and Industry
Activity	C12. Manufacture of Renewable Energy Technologies
Associated ANZSIC codes	2439 Other Electrical Equipment Manufacturing 2499 Other Machinery and Equipment Manufacturing
Objective	Climate change mitigation
Technical screening criteria	
Green	The economic activity manufactures renewable energy technologies that are aligned with the renewable energy generation activities defined in the D1, D2, D3, D4 and D5 of the Australian sustainable finance taxonomy.

C13. Manufacture of Equipment for the Production of Hydrogen Through Electrolysis

Sector	Manufacturing and Industry
Activity	C13. Manufacture of Equipment for the Production of Hydrogen Through Electrolysis
Associated ANZSIC codes	2499 Other Machinery and Equipment Manufacturing
Objective	Climate change mitigation
Technical screening criteria	
Green	The economic activity manufactures equipment for the production of hydrogen via electrolysis.

C14. Manufacture of Low-carbon Technologies for Transport

Sector	Manufacturing and Industry
Activity	C14. Manufacture of Low-carbon Technologies for Transport
Associated ANZSIC codes	2311 Motor Vehicle Manufacturing 2392 Railway Rolling Stock Manufacturing and Repair Services
Objective	Climate change mitigation
Technical screening criteria	
Green	The economic activity manufactures, repairs, maintains, retrofits, repurposes or upgrades any one of the following: A. Trains, passenger coaches and wagons that have zero direct (tailpipe) CO₂ emissions. B. Trains, passenger coaches and wagons that have zero direct (tailpipe) CO₂ emissions when operated on a track with necessary infrastructure, and use a conventional engine where such infrastructure is not available. C. Road passenger transport vehicles that align with the criteria defined in the Transport sector of the Australian sustainable finance taxonomy. D. personal mobility devices that align with the criteria defined in the Transport sector of the Australian sustainable finance taxonomy.

C15. Manufacture of Energy Efficiency Equipment for Buildings

Sector	Manufacturing and Industry
Activity	C15. Manufacture of Energy Efficiency Equipment for Buildings
Associated ANZSIC codes	2499 Other Machinery and Equipment Manufacturing 2439 Other Electrical Equipment Manufacturing
Objective	Climate change mitigation
Technical screening criteria	
Green	The economic activity manufactures, repairs, maintains, imports or distributes the following: • Heat pumps and compressors and air conditioning systems not using HFC refrigerants or blends. • Electric vehicle charging equipment. • Induction cooktops. • Rooftop solar and batteries. • Appliances with the top 15% of the best energy label index under the GEMS Act at the time of manufacture that do not contain refrigerants with a GWP greater than the published threshold (i.e. in Table 14 of this document).
Notes	The requirement for limiting refrigerant GWP is applied without a sunrise provision, as manufacturers, importers and distributors are unimpeded by current market limitations. Eligible GEMS energy label indexes can be found in Appendix 5.

C16. Manufacture and Recycling of Batteries

Manufacture of rechargeable batteries, battery packs and accumulators for transport, stationary and off-grid energy storage and other industrial applications. Manufacture of respective components (battery active materials, battery cells, casings and electronic components). This includes recycling of end-of-life batteries.

Sector	Manufacturing and Industry
Activity	C16. Manufacture and Recycling of Batteries
Associated ANZSIC codes	2439 Other Electrical Equipment Manufacturing
Objective	Climate change mitigation
Technical screening criteria	
Green	Until 2030, the activity complies with one of the following criteria: - The activity manufactures rechargeable batteries, battery packs and accumulators (and respective components), including from secondary raw materials, that result in substantial GHG emissions reductions in transport, stationary and off-grid energy storage and other industrial applications. - The economic activity recycles end-of-life batteries including Lithium ion batteries.

C17. Manufacture of Plastics in Primary Form Through Recycling

Sector	Manufacturing and Industry
Activity	C17. Manufacture of Plastics in Primary Form Through Recycling
Associated ANZSIC codes	
Objective	Climate change mitigation
Technical screening criteria	
Green	The activity complies with one of the following criteria: - The plastic in primary form is fully manufactured by mechanical recycling of plastic waste. - Where mechanical recycling is not technically feasible or economically viable, the plastic in primary form is fully manufactured by chemical recycling of plastic waste and the lifecycle GHG emissions of the manufactured plastic, excluding any calculated credits from the production of fuels, are lower than the lifecycle GHG emissions of the equivalent plastic in primary form manufactured from fossil fuel feedstock. - Biological recycling. - R&D into new recycling processes such as enzymatic recycling.

8. Electricity Generation and Supply



A. Sector Context

Globally, decarbonisation of electricity generation is critical to meet the Paris Agreement and to enable the decarbonisation of other sectors. Furthermore, the production of renewable electricity is both economically and technologically viable in most jurisdictions, including Australia.

The International Energy Agency's 2023 NZE2050 scenario shows that the global power sector will need to be largely decarbonised by 2040 to enable the net zero transition (IEA 2023a). CSIRO's (2023) CRD scenario and Climateworks Centre's 1.5°C and well-below 2C scenarios assume electricity emissions fall close to zero before 2040. CSIRO's (2024) G1.5/A40 scenario assumes electricity sector emissions fall 96.6 percent by 2040 and 98.1 percent by 2050 from 2025 levels. These figures are 82.2 percent and 97.5 percent in the G2/A50 scenario.

Decarbonising Australia's electricity system requires significant reductions in average emissions intensity to accommodate rising electricity demand growth. Under the range of scenarios, emissions intensity declines rapidly between now and 2040, which also reflects the maturity of low and zero-emissions technologies in the power sector (see Figure 17 below).

To decarbonise electricity generation the Australian Government has announced a national target of 82 percent of renewable electricity generation by 2030. At COP28, the Australian government also joined the Global Pledge, which aims to triple the installed capacity of renewable energy and double the rate of energy efficiency improvements. A sustained uptake of renewables is also assumed in core reference scenarios, as well as others, as highlighted in Table 12.

TABLE 12
Projected share of renewable electricity generation, 2035 and 2050 – key scenarios (CSIRO 2023, CCA 2024c)

Scenario	Scenario description	2035	2050
		Renewable generation	Renewable generation
AEMO	Green Energy Exports	99.3%	99.8%
Climateworks Centre	1.5C aligned	98.2%	99.8%
CSIRO	CSIRO Rapid Decarbonisation	98.1%	99.8%
CSIRO for CCA	A40/G1.5 – AusTIMES	93.2%	99.3%
AEMO	Step Change	95.6%	98.6%
Climateworks Centre	Well below 2C aligned	93.3%	99.7%
CSIRO for CCA	A50/G2 – AusTIMES	89.5%	98.8%

B. Methodology

The scope of economic activities selected in this sector has been guided by the taxonomy's core principles of credibility, usability, interoperability and prioritisation for impact. Credibility in this context is defined through consistency with the key global and Australian reference scenarios identified in Section 1, and with the taxonomy's transition methodology.

Activities have been selected based on their substantial contribution to the climate change mitigation objective. Zero and low-emissions technologies included as green activities in the electricity sector are readily deployable and identified in all scenarios as the key decarbonisation levers to prioritise for impact.

Table 13 provides an overview of activity selection and classification in the taxonomy. Each activity is coded 'D' to align with the ANZSIC classification for the electricity sector. Further analysis on the consideration of flexible gas-powered generation is provided in [Appendix 4.1](#). In addition to criteria for eligible activities, the taxonomy offers a voluntary framework to define how back-up flexible gas firming capacity may be recognised and assessed within a credibly transitioning portfolio of generation and storage assets (see [Appendix 4.2](#)).

TABLE 13
Activity selection and classification – Electricity sector

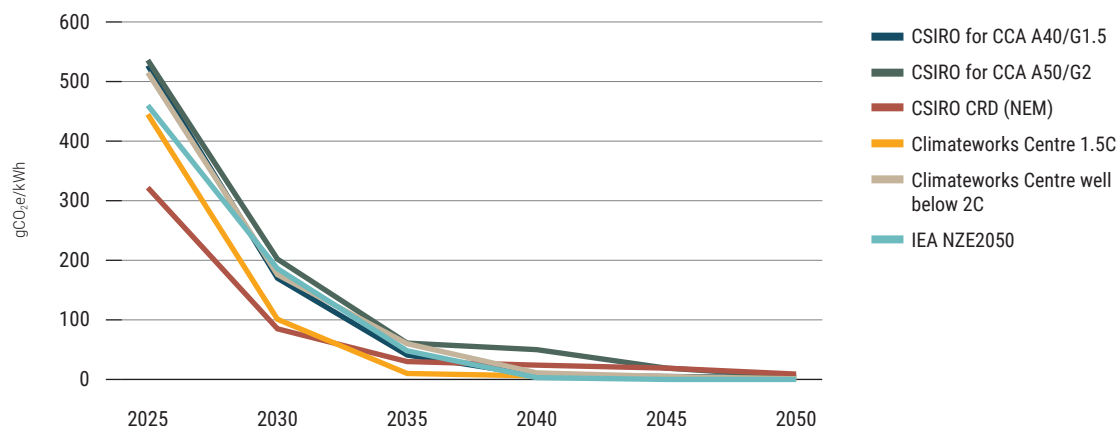
	Classification	
	Green	Transition
D1. Energy Generation from Solar PV and CSP	✓	
D2. Energy Generation from Onshore and Offshore Wind	✓	
D3. Energy Generation from Ocean Energy	✓	
D4. Energy Generation from Hydropower	✓	
D5. Geothermal Energy Generation	✓	
D6. Energy Generation from Bioenergy	✓	
D7. Storage of Electricity	✓	
D8. District Heating and Cooling Systems	✓	
D9. Production of Heating or Cooling from Waste Heat	✓	
D10. Transmission and Distribution of Electricity	✓	
D11. Transmission and Distribution of Renewable and Low-carbon Gases	✓	
D12. Remote and Micro-Grid Systems	✓	

Emissions intensity thresholds

To be consistent with other taxonomies and approaches in other sectors, emissions intensity thresholds aligned with credible global and domestic scenarios are used to determine green criteria. The primary metric for measuring emissions intensity for electricity generation is gCO₂e/kWh.

As Figure 13 demonstrates, on a Scope 1 basis, emissions intensity in Australia is assumed to decline rapidly across a range of scenarios. In 2035, the average emissions intensity assumed across the scenarios is 11.6gCO₂e/kWh, before falling to an average of 8.7 and 2.6 gCO₂e/kWh in 2045 and 2050 respectively.

FIGURE 13 Average Scope 1 emissions intensity of the electricity sector – global and Australian scenarios



Emissions intensity is calculated on a life cycle basis (LCA), which is consistent with other credible taxonomies globally. This includes Scope 1 emissions intensity and, importantly for the electricity sector, upstream emissions intensity values related to production considerations. LCA measurement follows ISO 14067:2018 and ISO 14064-1:2018 standards.

Until 2030, the green threshold for new activities is set at 100gCO₂e/kWh to bring the average emissions intensity of the grid down at the pace required by the reference pathways. After 2030 this threshold will decline, and the next version of the taxonomy will define the post-2030 life cycle emissions intensity thresholds based on analysis of credible pathways. Projects that reach a final investment decision before 2030 will remain eligible, and the updated thresholds will apply to projects that reach final investment decision after 2030.

To aid usability and in line with the approach taken in other jurisdictions, certain types of electricity generation have been deemed directly eligible until 2030. For these types of generation, the evidence shows that in almost all cases, the life cycle emissions intensity is below the 100gCO₂e/kWh threshold. This means that for these activities it is not necessary to measure LCA for each investment to demonstrate alignment with the criteria.

C. Technical Screening Criteria

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D1. Energy Generation from Solar Photovoltaic (PV) and Concentrated Solar Power (CSP)

Sector	Electricity Generation and Supply
Activity	D1. Energy Generation from Solar PV and CSP (including electricity, heating, cooling)
Associated ANZSIC codes	2619 Other Electricity Generation 3109 Other Heavy and Civil Engineering Construction 3231 Plumbing Services 3232 Electrical Services 3233 Air Conditioning and Heating Services
Objective	Climate change mitigation
Technical screening criteria	
Green	Until 2030 all energy generation activities from solar PV and solar CSP are directly eligible.
Specific ineligible cases	Power plants dedicated to support fossil fuel infrastructure (e.g., operations of fossil fuel activities).
Notes	Projects that reach final investment decision before 2030 will remain eligible after 2030. Updated LCA emissions intensity thresholds provided in the next version of the Australian sustainable finance taxonomy will apply only to projects that commence after 2030.

D2. Energy Generation from Onshore and Offshore Wind

Sector	Electricity Generation and Supply
Activity	D2. Energy Generation from Onshore and Offshore Wind
Associated ANZSIC codes	2619 Other Electricity Generation 3109 Other Heavy and Civil Engineering Construction
Objective	Climate change mitigation
Technical screening criteria	
Green	Until 2030 all electricity generation activities from onshore and offshore wind power plants are directly eligible.
Specific ineligible cases	Power plants dedicated to support fossil fuel infrastructure (e.g., operations of fossil fuel activities).
Notes	Projects that reach final investment decision before 2030 will remain eligible after 2030. Updated LCA emissions intensity thresholds provided in the next version of the Australian sustainable finance taxonomy will apply only to projects that commence after 2030.

D3. Energy Generation from Ocean Energy

Sector	Electricity Generation and Supply
Activity	D3. Energy Generation from Ocean Energy
Associated ANZSIC codes	2619 Other Electricity Generation 3109 Other Heavy and Civil Engineering Construct
Objective	Climate change mitigation
Technical screening criteria	
Green	Until 2030 all electricity generation activities from ocean energy are directly eligible.
Specific ineligible cases	Power plants dedicated to support fossil fuel infrastructure (e.g., operations of fossil fuel activities).
Notes	Projects that reach final investment decision before 2030 will remain eligible after 2030. Updated LCA emissions intensity thresholds provided in the next version of the Australian sustainable finance taxonomy will apply only to projects that commence after 2030.

D4. Energy Generation from Hydropower

Sector	Electricity Generation and Supply
Activity	D4. Energy Generation from Hydropower
Associated ANZSIC codes	2612 Hydro-Electricity Generation 3109 Other Heavy and Civil Engineering Construction
Objective	Climate change mitigation
Technical screening criteria	
Green	The activity complies with one of the following criteria: A. the electricity generation facility is a run-of-river plant and does not have an artificial reservoir; B. the power density of the electricity generation facility is above 5 W/m ² ; C. the lifecycle CO ₂ e emissions intensity of the generation of electricity from hydropower is lower than 100gCO ₂ e/kWh.
Specific ineligible cases	Power plants dedicated to support fossil fuel infrastructure (e.g., operations of fossil fuel activities).

D5. Geothermal Energy Generation

Includes electricity, heating, and cooling.

Sector	Electricity Generation and Supply
Activity	D5. Geothermal Energy Generation (including electricity, heating, cooling)
Associated ANZSIC codes	2619 Other Electricity Generation 3109 Other Heavy and Civil Engineering Construction 3233 Air Conditioning and Heating Services
Objective	Climate change mitigation
Technical screening criteria	
Green	The lifecycle emission intensity of the power plant is less than 100gCO ₂ e/kWh.
Specific ineligible cases	Power plants dedicated to support fossil fuel infrastructure (e.g., operations of fossil fuel activities). The use of hydraulic fracturing to create Enhanced Geothermal Systems.

D6. Energy Generation from Bioenergy

Sector	Electricity Generation and Supply
Activity	D6. Energy Generation from Bioenergy (including electricity, heating, cooling)
Associated ANZSIC codes	2619 Other Electricity Generation 3109 Other Heavy and Civil Engineering Construction 3233 Air Conditioning and Heating Services
Objective	Climate change mitigation
Technical screening criteria	
Green	Bioenergy power generation must comply with A, and either B or C. A. Until 2030 the lifecycle emissions intensity of the power plant is less than 100gCO₂e/kWh. B. Bioenergy produced from waste and residues (e.g., agriculture, municipal sources). C. Feedstock used for the generation of bioenergy should comply with one of the following standards: — Forest Stewardship Council (FSC) — Biomass Biofuels voluntary scheme (2BSvs) — Bonsucro (Better Sugarcane Initiative) — Roundtable of Sustainable Biomaterials (RSB) — Round Table on Responsible Soy (RTRS) — International Sustainability and Carbon Certification (ISCC and/or ISCC plus) — Agricultural biomass used in the activity complies with the criteria in Article 29, paragraphs 2 to 5, of Directive (EU) 2018/2001 (the so called RED II Directive) — Forest biomass used in the activity complies with the criteria in Article 29, paragraphs 6 and 7, of Directive (EU) 2018/2001 (the so called RED II Directive)
Specific ineligible cases	• Plants dedicated to supporting fossil fuel infrastructure (e.g., operations of fossil fuel activities). • Plants using native forest biomass as a feedstock.
Notes	Biomass used as a feedstock to produce bioenergy can be generated from a range of waste streams. Examples include: • byproducts or waste from agricultural crops and residues (e.g. maize, wheat, straw, animal manure), forestry (e.g. logs, stumps, leaves and branches); • wood-processing industries (bark, off-cuts, wood chips, sawdust); • organic waste (e.g. municipal solid waste and sewage sludge). This activity covers biogenic waste. Note the activity "Waste to Energy" related to treatment and disposal of non-hazardous waste is not in scope of this taxonomy as it is classified within the waste sector.

D7. Storage of Electricity

Sector	Electricity Generation and Supply
Activity	D7. Storage of Electricity
Associated ANZSIC codes	2640 On Selling Electricity and Electricity Market Operation 3109 Other Heavy and Civil Engineering Construction 3232 Electrical Services
Objective	Climate change mitigation
Technical screening criteria	
Green	The activity is the construction and operation of electricity storage including: • mechanical energy storage systems. • thermal energy storage systems. • pumped hydropower storage. • electrochemical storage systems. Where the activity includes chemical energy storage, the medium of storage complies with the criteria for manufacturing of the corresponding product specified in the Manufacturing and Industry sector of the taxonomy (e.g. storage of hydrogen).

D8. District Heating and Cooling Systems

Sector	Electricity Generation and Supply
Activity	D8. District Heating and Cooling Systems
Associated ANZSIC codes	3233 Air Conditioning and Heating Services 3109 Other Heavy and Civil Engineering Construction 3231 Plumbing Services 3232 Electrical Services 5021 Pipeline Transport
Objective	Climate change mitigation
Technical screening criteria	
Green	All activities related to renewables-based district heating and cooling are eligible.
Specific ineligible cases	The following are ineligible: - Activities with GWP₁₀₀ >10 refrigerants. - Activities that introduce or extend the life of existing hydrofluorocarbons (HFC) refrigerants or blends or hydrochlorofluorocarbons (HCFC)-charged equipment.

D9. Production of Heating or Cooling from Waste Heat

Sector	Electricity Generation and Supply
Activity	D9. Production of Heating or Cooling from Waste Heat
Associated ANZSIC codes	3109 Other Heavy and Civil Engineering Construction 3233 Air Conditioning and Heating Services
Objective	Climate change mitigation
Technical screening criteria	
Green	All activities related to the production of heating or cooling from waste heat are eligible.

D10. Transmission and Distribution of Electricity

Sector	Electricity Generation and Supply
Activity	D10. Transmission and Distribution of Electricity
Associated ANZSIC codes	2620 Electricity Transmission 2630 Electricity Distribution
Objective	Climate change mitigation
Technical screening criteria	
Green	The activity must comply with <u>one</u> of the following criteria: - Transmission and distribution infrastructure dedicated to a direct connection or an expansion of connection between power plants that meet the electricity generation criteria defined in the Australian sustainable finance taxonomy. - Transmission and distribution infrastructure dedicated to a inter-country/region direct or grid connection to access existing or new power plants that meet the criteria for electricity generation defined in the Australian sustainable finance taxonomy. - New or upgrades to existing infrastructure that enable the increased integration of renewable electricity into the system. - All enabling ICT systems and smart management systems and those required for procurement of electricity that meet the green thresholds are eligible.
Specific ineligible cases	Transmission and distribution infrastructure dedicated to connecting fossil fuel plants to the grid.

D11. Transmission and Distribution of Renewable and Low-carbon Gases

Sector	Electricity Generation and Supply
Activity	D11. Transmission and Distribution of Renewable and Low-carbon Gases
Associated ANZSIC codes	2700 Gas Supply 3109 Other Heavy and Civil Engineering Construction 5021 Pipeline Transport
Objective	Climate change mitigation
Technical screening criteria	
Green	The activity must comply with all of the following: A. The activity consists of one of the following: — Construction or operation of new transmission and distribution networks dedicated to hydrogen and/or other low-carbon gases; — Conversion/repurposing of existing networks to 100% hydrogen; — Retrofit of gas transmission and distribution networks to enable the integration of eligible low-carbon gases which cannot technologically be injected into existing pipelines. B. The low-carbon gas is biomethane, low-carbon hydrogen and/or ammonia, and meet/s the criteria defined in activities C4, C8 and C10 of the Australian sustainable finance taxonomy. C. Leak detection and repair mechanisms and a plan to avoid and minimise gas leakages must be presented.
Specific ineligible cases	Pipelines directly connecting fossil methane gas extraction or processing facilities.

D12. Remote and Micro-grid Systems

Sector	Electricity Generation and Supply
Activity	D12. Remote and Micro-grid Systems
Associated ANZSIC codes	2619 Other Electricity Generation
Objective	Climate change mitigation
Technical screening criteria	
Green	The activity must comply with all of the following: A. Meet all of the following qualifying criteria: — The system has no permanent connection to the grid or the connection is intermittent. — The system is less than 10MW in size. — The system can be permanently or temporarily operated when it is not physically connected to the grid. B. The system is designed to run on 90% or more renewable energy, comprising any/all of the following: solar PV, solar CSP, wind energy, utility-scale and/or distributed battery storage. C. Evidence that fossil fuel back up is designed only to be used for: — Back up purposes - i.e. operate only when renewable electricity resources are unavailable. — Restart purposes. D. From 1 January 2030, evidence must be provided to demonstrate the planned and/or actual replacement of fossil fuels with low carbon fuels in back-up generators, and/or deployment of battery storage.
Notes	Definitions for remote and micro-grid systems consistent with ARENA (2024).



9. Construction and Buildings



A. Sector Context

Decarbonising the building sector can contribute significantly to meeting the goals of the Paris Agreement. Emissions sources include direct emissions from using gas (for water heating, space heating, and cooking) and indirect emissions from using non-renewable electricity (for cooling, ventilation, lighting, and equipment). Transitioning to low-emission or net zero-emission buildings is essential for meeting decarbonisation objectives.

According to the IEA (2022), building operations account for approximately 26 percent of global energy-related CO₂ emissions. This figure excludes embodied emissions from construction process. The World Green Building Council estimates building construction contributes another 11 percent to global greenhouse gas emissions. These emissions arise during the procurement, manufacturing, transport, and installation of building materials.

According to the CSIRO (2023), building operations were responsible for approximately 20 percent of Australia's total emissions in 2020. Electricity comprised 58 percent of energy consumption in 2020, with gas accounting for most of the remaining energy use.

The building sector's potential to contribute to decarbonisation has been recognised in Australia for many years with energy efficiency embedded in the National Construction Code; widely used voluntary energy and green building rating tools; and requirements for mandatory disclosure of energy ratings for commercial offices at the point of sale or lease.

Despite these efforts, challenges remain in achieving deep decarbonisation in the Australian buildings sector. These include addressing the significant stock of existing buildings, encouraging the adoption of energy efficiency and electrification across all building use types, and overcoming financial barriers to implementing energy-efficient and low-emissions solutions.

The main decarbonisation levers for the building sector are:

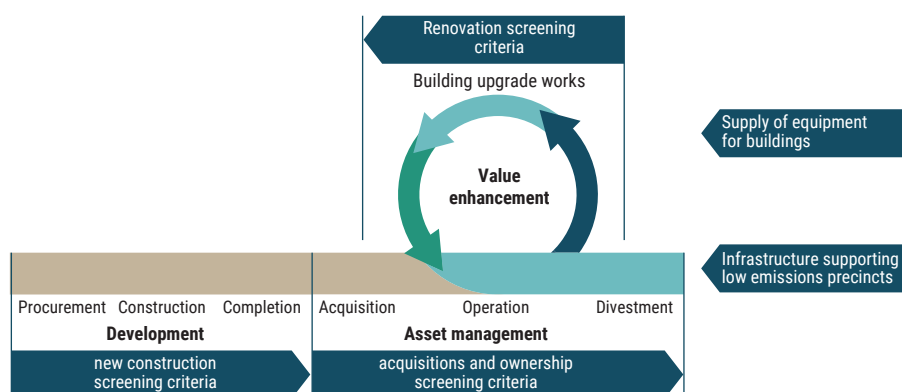
- Removing dependency on the use of fossil fuels as an energy source.
- Reducing emissions and improving energy efficiency in the operation of existing buildings through retrofits and renovations.
- Constructing new buildings to reduce construction impacts and maximise the potential for energy-efficient and low-emission operations.
- Onsite renewable energy generation, wherever feasible, to reduce demand and contribute to the decarbonisation of electricity supply.
- Phasing out the use of Synthetic Greenhouse Gases as refrigerants in air conditioning systems and hot water heat pumps.

However, the diversity of assets, owners and operators of buildings requires careful consideration of how measures should be applied to various asset types and investment values.

B. Methodology

Each activity within the building sector is provided with green and/or transition screening criteria. The activities relevant to a building's economic life cycle are shown below.

FIGURE 14
Relationship of buildings screening criteria over the typical life cycle



Criteria across the buildings lifecycle

The criteria provide a necessary benchmark for tracking buildings' contribution to greenhouse gas emissions over their lifecycle.

The new construction criteria specify the design expectations of new buildings to align with the taxonomy's climate change mitigation objective.

The acquisition and ownership criteria provide crucial information to address the performance gap between the design specifications pertaining to the emissions and energy-related performance of a building and its performance in operation. Robust 1.5°C aligned benchmarks to verify operating performance is essential to ensure pathway alignment. Management strongly influences a building's ongoing energy and emissions efficiency. Soft tools, such as environmental management plans, green leases, and active energy monitoring, can significantly contribute to sectoral decarbonisation.

The acquisitions and ownership criteria provide the screening criteria for the annual verification of performance that a building remains climate-aligned, and rewards continued investment into management practices that maintain and improve a building's actual performance against its potential.

Demonstrating climate alignment

The screening criteria for new construction require additional emissions reductions beyond regulation in Australia. This is achieved by broadening the scope of criteria beyond energy efficiency where regulation is driven by Commonwealth and state and territory governments' commitment to the Trajectory for Low Energy Buildings. The additional screening criteria for no fossil fuel use, limits on the GWP of installed refrigerants and limits on embodied greenhouse gas emissions in construction can deliver significant emissions reductions benefits. When combined, the screening criteria are more ambitious than the minimum energy efficiency requirements of the NCC and aligned to the climate alignment principles adopted in the screening criteria of taxonomies in other jurisdictions, such as the EU.

Fossil fuels

Screening criteria that specifies an exclusion for the use of the fossil fuels covers all combustion of fossil fuels for normal on-site operations, including buildings, plant and equipment.

On-site fossil fuel combustion for standby power within a building is permissible. However, standby power generators shall not be used for peak load topping or any purpose other than standby power (and associated testing).

No fossil fuel plant is eligible under the plant and equipment upgrades screening criteria.

Refrigerant Global Warming Potential thresholds

The screening criteria for activities that involve the installation of new plant or equipment establish thresholds for the maximum GWP values for refrigerants, by equipment type and size. The equipment covered includes all stationary plant and equipment such as air conditioning units, chillers and heat pumps and supermarket refrigeration.

Domestic-scale appliances such as fridges and freezers are excluded.

Refrigerant GWP₁₀₀ values used for comparison to the published thresholds are IPCC AR4 (2007) values as published by the Australian government.

GWP thresholds are subject to a **sunrise date of 1 January 2027**, meaning that from this date compliance with the thresholds in Table 14 will be required where specified in the Buildings sector criteria. The GWP thresholds applied to the screening criteria are as follows:

TABLE 14
GWP thresholds - Construction and Buildings screening criteria

Type and capacity/Year	2027	2028	2029	2030	2031	2032	2033	2034	2035+
Small A/C [<10kW]	700	700	700	150	150	150	150	10	10
Medium A/C [<700kW]	700	700	500	500	150	150	150	10	10
Large A/C [≥700kW]	10	10	10	10	10	10	10	10	10
Commercial hot water heat pump	150	150	150	10	10	10	10	10	10
Supermarket refrigeration	10	10	10	10	10	10	10	10	10
Residential hot water Service	10	10	10	10	10	10	10	10	10
Residential A/C	700	700	700	700	700	150	150	10	10

The Medium A/C thresholds can be applied for large A/C [≥700kW] in applications where regulations restrict the use of refrigerants to only those of A1 flammability.

ADDITIONAL CONSIDERATIONS FOR REFRIGERANTS

In developing the criteria for refrigerants, consideration has been given to the potential for creating adverse outcomes by encouraging the use of HFO (hydrofluoroolefin) ultra-low GWP refrigerants that are included in potential EU regulatory restrictions that expand the definition of PFAS (per- and polyfluoroalkyl substances) to include a broader range of chemicals.

The broader definition of PFAS being applied in the EU also includes most HFCs (hydrofluorocarbons) that are already commonly used for air conditioning within buildings in Australia. The only currently used HFC not included in the proposed EU regulatory restriction is R32.

Because PFAS concerns are already inherent in the currently used HFC refrigerants, the technical screening criteria to limit the GWP of refrigerants will not create an adverse outcome.

Importantly, the technical screening criteria to limit the GWP of refrigerants do not require HFOs to comply with any initial or future GWP thresholds. Small and medium A/C units have an initial maximum GWP threshold of 700, which can be met with R32. PFAS will also be managed as part of the Do No Significant Harm framework, aligning to Australian government regulations and restrictions.

C. Technical Screening Criteria

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Table 15 summarises the performance requirements and features of the buildings sector criteria:

TABLE 15
Green and transition criteria features - Construction and Buildings

Activity	Alignment	Emission/energy threshold	No fossil fuel	Synthetic greenhouse gases	Embodied carbon
E1. New Construction	Green	✓	✓	✓	✓
E2. Acquisition and Ownership	Green	✓	✓		
	Transition	✓			
E3. Renovation and Upgrades	Green	✓	✓	✓	
	Transition	✓			
E4. Replacement of Major Plant and Equipment	Green	✓	✓	✓	
	Transition	✓	✓	✓	
E5. Residential and Small Commercial Upgrades	Decarbonisation measures				
E6. Manufacturing and Supply of Goods	Decarbonisation measures				
E7. Supporting Infrastructure	Decarbonisation measures				

✓ Green criteria

✓ Green criteria implemented after sunrise date

✓ Transition criteria only available before sunset date

E1. Construction of New Buildings

The screening criteria for new buildings apply to all building types except for the embodied emissions measure, which is planned to apply only to constructing buildings with a Gross Floor Area greater than 5,000m² that are covered by the new national method of measure being developed by NABERS.

The screening criteria for embodied carbon will leverage the forthcoming NABERS method, and the sunrise date will be deferred if suitable national measurement method targets, reporting requirements, assessment methods and reliable benchmarking data are unavailable.

Refrigerant GWP and embodied emissions thresholds are both sunrise provisions and become effective on 1 January 2027.

References to the National Construction Code (NCC) within the TSC mean the current edition published by the Australian Building Codes Board no earlier than 12 months prior to the date of construction approval. Non-residential buildings must meet the minimum requirements of NCC BCA Volume One Section J (current edition) at the time of construction approval. Class 2 and 4 residential buildings must meet the relevant requirements of NCC BCA Volume One Section J (current edition) at the time of construction approval. Class 1 residential buildings must meet the relevant requirements of NCC BCA Volume Two Section H6 (current edition) at the time of construction approval.

State-based variations to NCC energy efficiency requirements are permitted only where scheduled within the NCC and the underlying NCC energy efficiency standards are maintained or improved. An example of a permitted variation is the NSW variations that facilitate using BASIX. State-based amendments that adopt previous versions of the NCC with lower energy efficiency standards are not permitted.

Sector	Construction and Buildings
Activity	E1. Construction of New Buildings
Associated ANZSIC codes	E301 Residential Building Construction E3020 Non-residential Building Construction E32 Construction Services
Objective	Climate change mitigation
Technical screening criteria	
Green	The construction of new buildings must meet all of the following criteria: A. Constructed to the relevant energy efficiency requirements of the published National Construction Code at time of building approval/construction. B. Constructed to not allow any future emissions from the on-site combustion of fossil fuels. C. From 1 January 2027: global warming potential of the installed refrigerant inventory must be equal to or lower than the GWP thresholds in Table 14. D. From 1 January 2027: constructed to limit the amount of greenhouse gas emissions resulting from the materials used and the process of construction.

NCC compliance

The following methods can demonstrate compliance with the requirements of **NCC 2022 BCA Volume One Section J** for Non-residential buildings:

- J1P1 energy use
- Deemed-to-satisfy provisions
- J1V1 verification method, without accounting for renewable energy generation*
- J1V2 verification method, without accounting for renewable energy generation*
- J1V3 verification method, without accounting for renewable energy generation*

* Renewable energy generation is to be excluded from the verification method on the NCC Section J requirements to ensure that the renewable energy is additional and the amount of renewable energy generated is not used to proportionally reduce the thermal performance of the building envelope or the energy efficiency of the installed plant and equipment.

The following methods can demonstrate compliance with **NCC 2022 BCA Volume Two Section H6** for class 1 residential buildings:

- H6P1 and H6P2
- H6D2 Deemed-to-satisfy Energy Rating provisions (1)(a) + (2)(a)
- H6D2 Deemed-to-satisfy Elemental Provision (1)(b) + (2)(b)
- H6V2 Verification using a reference building and H6D2 (2)(b)

The following methods can demonstrate compliance with **NCC 2022 BCA Volume One Section J** for class 2 and 4 residential buildings:

- J1P2 Thermal performance
- J1P3 Energy usage
- J1V5 Verification using a reference building for a Class 2 sole-occupancy unit
- J3D1 (1) Deemed-to-satisfy provisions

Per the NSW amendment to the NCC, residential dwellings in NSW can confirm the adequacy for Criteria A with a **BASIX certification** after 1 October 2023 as regulated by the NSW State Environment Planning Policy (SEPP) Sustainable Buildings 2022.

Proxies: new construction

Future emissions from the on-site combustion of fossil fuels:

1. Buildings with a 6-star Green Star Buildings rating or 5-star registrations from 2023 onwards will be deemed to satisfy the all-electric requirement.
2. Residential buildings with a NatHERS certificate showing electricity or solar as the only fuel type in the Predicted Whole-of-home annual impact by Appliance section. The certificate must be produced by a NatHERS accredited assessor. If the certificate contains a pool or a spa, separate confirmation of using only electricity or solar energy is also required.
3. Residential buildings in NSW with a BASIX certification showing only electricity or solar thermal to serve all loads and appliances satisfy the requirement.

New Construction:

Green Star:

Buildings certified with 6 star rating under the Green Star Buildings standard. 5 Star rated buildings registered after 2023 will also comply. Compliance with the above is to be confirmed in a commitment to post-construction certification from the Green Building Council of Australia.

Residential buildings certified by the Green Building Council of Australia under the Green Star Homes. Compliance with the above is to be confirmed in a commitment to post-construction certification from the Green Building Council of Australia.

NatHERS Certificate:

Residential buildings with a NatHERS certificate showing electricity or solar as the only fuel type in the Predicted Whole-of-home annual impact by Appliance section. The certificate must be produced by a NatHERS accredited assessor. If the certificate contains a pool or a spa, separate confirmation of using only electricity or solar energy is also required.

BASIX:

Residential buildings in NSW with a BASIX certification showing only electricity or solar thermal to serve all loads and appliances satisfy the requirement.

International:

International new construction activities can use the Climate Bonds Initiative new construction certification criteria to confirm compliance with parts A and B of the TSC, including using Climate Bonds Initiative proxies.

E2. Acquisition and Ownership

The screening criteria for acquisition and ownership establish energy and emission intensity targets for a range of building classes. The emissions boundary and intensity denominator vary for different building types to suit the nature of ownership and control. The information refined to apply the targets to each building type can be found in [Appendix 5](#).

The availability of reliable benchmarking data or access to in-use operational performance data limits the number of building types covered. However, as data availability improves, the breadth of coverage is expected to grow over time.

Energy and emissions targets for all building types currently able to be screened for acquisition and ownership activities are provided in a worksheet downloadable from the ASFI website.

For the operating energy calculations for data centres, 100 per cent renewable energy must be used for the green criteria. Renewable energy can be sourced offsite and evidenced by transfer and surrender of green generation attributes.

Sector	Construction and Buildings
Activity	E2. Acquisition and Ownership
Associated ANZSIC codes	L6712 Non-Residential Property Operators L6711 Residential Property Operators H4400 Accommodation Q8601 Aged Care Residential Services
Objective	Climate change mitigation

Technical screening criteria

Green	The activity must comply with criteria A and B. Data Centres must also comply with C. A. An energy intensity at or below the published target. <i>See the accompanying worksheet - Attachment A: Construction and Buildings - Emissions and Energy Intensity Targets.</i> B. No fossil combustion on site. C. Use 100% renewable energy.
Transition*	The building must be operated with an emissions intensity at or below the published target. <i>See the accompanying worksheet - Attachment A: Construction and Buildings - Emissions and Energy Intensity Targets.</i> * The transition technical screening criteria is subject to a sunset date of 1 July 2031. After this date, the activity must meet the green criteria to remain taxonomy-aligned.

Proxies - Acquisition and Ownership The following tables detail approved proxies to demonstrate eligibility against building sector acquisition and ownership technical screening criteria as of 17 June 2025.

NatHERS is expanding to provide ratings for existing homes and will become operational mid-2025. The scheme's Home Energy Rating Certificate, once available will be assessed as a proxy for the ownership and acquisition category of Residential Buildings in accordance with the proxy framework.

Scheme	Building Use Type	Minimum rating requirement	Eligibility	General Eligibility Requirements
NABERS Energy	Office (Base Buildings)	5.5 star	-	1. Where a building has on-site renewable energy generation, NABERS Energy can only be used as a proxy for eligibility if the renewable energy benefits are retained for the exclusive benefit of the building and its tenants.
	Office (Whole Building)	5.5 star	Only eligible when base building energy is not separately metered.	
	Shopping Centre	5.5 star	-	
	Hotel	5.0 star	Only eligible for hotel quality grades of three stars and above.	If renewable energy certificates are generated on-site, they must be retired to benefit the building and its uses.
	Apartment Buildings	5.0 star	Common areas and services only. NABERS Energy cannot be used as a proxy for eligibility for apartments, units, or dwellings.	
	Public Hospitals	5.5 star	-	Buildings that sell or transfer renewable energy attributes from on-site solar cannot use NABERS Energy as a proxy.
	Residential Aged Care & Retirement living	5.0 star	-	
	Warehouses and Cold Stores	4.9 star	-	2. NABERS proxies can be used to demonstrate alignment with energy and emissions intensity thresholds in the green and transition criteria respectively. The requirement for no fossil fuel combustion on site must also be verified to confirm eligibility under the green criteria.
	Schools	4.0 star	-	

Proxies - Acquisition and Ownership continued

Scheme	Building Use Type	Minimum rating requirement	Eligibility	General Eligibility Requirements
Green Star Performance v2	Office	40 per cent less energy than the baseline using Pathway A: NABERS Energy Rating	-	Green Star Performance v2 can be used to demonstrate compliance with parts A, B and C of the Green screening criteria. To demonstrate compliance with parts B and C of the Green screening criteria, buildings must achieve Exceptional Performance level in Credit 19 Energy Source: 100% of energy comes from renewable sources (fossil fuel free). There are no additional requirements for the Transition criteria.

E3. Renovation and Upgrades

Three activities are covered within renovation and upgrades to suit different scales of intervention and investment, from renovating a building or replacing major plant and equipment to installing domestic scale low-carbon appliances and equipment.

Percentage reductions in energy and emissions hurdles where applied are to be measured before and after the works. To finance the works, the savings required can be demonstrated through calculation and must be included in the works contract and contracted post-works verification requirements.

Renovation activities cover any work within a building that results in repositioning the building's in-use operating performance. The green criteria does not require a pre-works measure of performance. The transition criteria is to be assessed based on the building's operational emission reduction, not the reduction of works components.

Where Heritage or similar impediments compromise the renovation works, this must be demonstrated by the building being listed on a State, Federal or International heritage register and a conservation management plan confirming that the constraints over elements that will need to be renovated to reduce emissions to a level required to align with the green criteria for the acquisition and ownership of buildings. Where heritage or similar impediments allow a percentage reduction in energy of more than 30 percent, the baseline from which to measure the reduction is to be demonstrated from a third-party verified assessment of the building's current annual operational energy use.

Sector	Construction and Buildings
Activity	E3. Renovation and Upgrades
Associated ANZSIC codes	E301 Residential Building Construction E3020 Non-residential Building Construction E32 Construction Services
Objective	Climate change mitigation
Technical screening criteria	
Green	The renovated building must meet all of the following criteria: A. Meet all relevant green screening criteria provided for the Acquisitions and Ownership of existing buildings. B. From 1 January 2027: global warming potential of the installed refrigerant inventory must be equal to or lower than the GWP thresholds in Table 14. C. Where a building is constrained by heritage listing, a 30% reduction in emissions is to be achieved.
Transition*	The renovated building must meet all of the following criteria: A. Reduce the operational emissions of the building by more than 30%. B. Not include fossil fuel combusting equipment, or extend the life of existing fossil fuel combusting equipment. C. From 1 January 2027: not include refrigerants above the published GWP threshold in Table 14 or extend the life of existing HFC or HCFC charged equipment. * The transition technical screening criteria is subject to a sunset date of 1 July 2031. After this date, the activity must meet the green criteria to remain taxonomy-aligned.

E4. Renovation and Upgrades: Replacement of Major Plant and Equipment

The boundary of energy/emissions improvement to be measured is limited to the plant and equipment that is being replaced. The savings required can be demonstrated through calculation and must be included in the works contract and contracted post-works verification requirements.

Sector	Construction and Buildings
Activity	E4. Renovation and Upgrades: Replacement of Major Plant and Equipment
Associated ANZSIC codes	E301 Residential Building Construction E3020 Non-residential Building Construction E32 Construction Services
Objective	Climate change mitigation
Technical screening criteria	
Green	The plant replacement works must meet A, and either criteria B or C. A. Improve the energy efficiency of the replaced services by more than 30 percent. B. From 1 January 2027: replace all fossil fuel combusting plant and equipment with electric alternatives with refrigerants equal to or less than the GWP thresholds in Table 14 at the time of supply. C. Replace all on-site HFC or HCFC equipment with alternatives with $GWP_{100} < 10$ and do not use fossil fuel combustion.
Transition*	The plant replacement works must meet A, and either criteria B or C: A. Improve the energy efficiency of the replaced services by more than 30 percent. B. not include fossil fuel combusting equipment or extend the life of existing fossil fuel combusting equipment. C. From 1 January 2027: Do not include refrigerants above the published GWP threshold in Table 14 or extend the life of existing HFC or HCFC-charged equipment. * The transition technical screening criteria is subject to a sunset date of 1 July 2031. After this date, the activity must meet the green criteria to remain taxonomy-aligned.

E5. Renovation and Upgrades: Residential and Small Commercial Upgrades

The technical screening criteria support the financing of the installation of small-scale equipment, appliances, and upgrades where the climate mitigation benefits do not require verification testing.

Sector	Construction and Buildings
Activity	E5. Renovation and Upgrades: Residential and Small Commercial Upgrades
Associated ANZSIC codes	E301 Residential Building Construction E3020 Non-residential Building Construction E32 Construction Services
Objective	Climate change mitigation
Technical screening criteria	
Decarbonisation measures	The installation of any of the following components: • Heat pumps. From 1 January 2027, the heat pumps must meet the GWP thresholds defined in Table 14 at the time of supply. • Electric vehicle charging equipment. • Induction cooktops. • Installation of rooftop solar and batteries. • Appliances with the top 15% of the best star ratings under the GEMS Act. If containing refrigerants, from 1 January 2027 they must meet the published maximum GWP thresholds defined in Table 14 at time of supply. • Thermal improvements to meet state and national regulations and incentive schemes.
Notes	Eligible GEMS star ratings can be found in Appendix 5 .

E6. Supply of Equipment for Buildings

The technical screening criteria support manufacturing, importation, and wholesaling of equipment activities that support the building sector's climate alignment.

Sector	Construction and Buildings
Activity	E6. Supply of Equipment for Buildings
Associated ANZSIC codes	C24 Machinery and Equipment Manufacturing F349 Other Machinery and Equipment Wholesaling
Objective	Climate change mitigation
Technical screening criteria	
Decarbonisation measures	Any of the following products and their key components are manufactured, imported or distributed: • Heat pumps and compressors and air conditioning systems not using HFCs refrigerants or blends. • Electric vehicle charging equipment. • Induction cooktops. • Rooftop solar and batteries. • Appliances with the top 15 percent of the best energy label index under the GEMS Act. If containing refrigerants, they must meet the published maximum GWP thresholds defined in Table 14 at time of manufacture.
Notes	The requirement for limiting refrigerant GWP is applied without a sunrise provision, as manufacturers, importers and distributors are unimpeded by current market limitations. Eligible GEMS energy label indexes can be found in Appendix 5 .

E7. Infrastructure Supporting Low Emissions Precincts

The technical screening criteria support the delivery and operation of infrastructure at the precinct scale. Precinct infrastructure is usually delivered to support buildings in a defined master plan or development area.

Utility-scale infrastructure delivered and operated independently of a defined masterplan or development activity is to be assessed under the relevant Technical Screening Criteria of the Energy sector.

Sector	Construction and Buildings
Activity	E7. Infrastructure Supporting Low Emissions Precincts
Associated ANZSIC codes	E32 Construction Services E3109 Other Heavy and Civil Engineering Construction E2619 Other Electricity Generation E263 Electricity Distribution
Objective	Climate change mitigation
Technical screening criteria	
Decarbonisation measures	The following infrastructure is installed to provide physical delivery of low emissions and efficient energy sources to buildings within a precinct, community or district: • Embedded electricity networks providing 100 percent renewable energy through on-generation and long term-voluntary retirement of Renewable Energy Certificates and without reliance on electricity retailing contracts with the building owners and occupiers. • Central thermal energy, including hot water and chiller water provisions that do not use fossil fuels or refrigerants with a GWP greater than 10. • Site works associated with the decommissioning of fossil fuel infrastructure in support of precinct electrification.
Notes	The requirement to limit refrigerant GWP is applied without a sunrise provision.



10. Transport



A. Sector Context

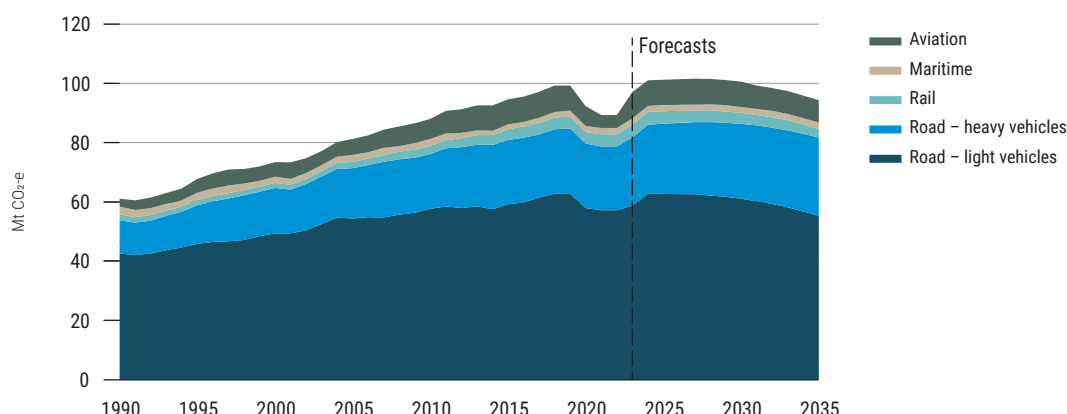
Australia's transport sector is the third largest source of Australia's greenhouse gas emissions, accounting for 22 percent of total emissions (DCCEEW, 2024). Since 2005, transport-related emissions have been among the fastest growing, having increased by 19 percent (DITRDCA, 2024).

Without further action, transport will be the largest source of emissions in Australia by 2030, comprising 26 percent of direct emissions, underscoring the importance of taking immediate action to decarbonise the sector.

The Australian Government is developing a policy platform to drive emissions reductions across transport and infrastructure. The Transport and Infrastructure Net Zero Roadmap and Action Plan, which is undergoing consultation, lays out a comprehensive blueprint to address transport emissions.

The Roadmap consolidates existing and new government initiatives, including the New Vehicles Efficiency Standard and National Electric Vehicle Strategy; funding to scale low-carbon liquid fuel (LCLF) production under the FMIA policy platform for hard-to-abate sectors; and, relatedly, priorities to decarbonise air transport articulated in the Aviation White Paper. The Roadmap also articulates priorities for rail transport decarbonisation, and highlights the important role of mode shifting initiatives in reducing transport sector emissions.

FIGURE 15
Actual and projected transport sector emissions (DITRDCA, 2024)



Road transport constitutes the largest share of transport emissions in Australia, positioning the sub-sector as both a priority and opportunity. While only currently accounting for one percent of Australia's light vehicles, electric vehicles are a commercially mature and readily deployable solution in light and bus road transport (Climate Change Authority, 2024).

Heavy road transport emissions from rigid and articulated vehicles are harder to abate. In the interim, the use of drop-in LCLFs, particularly renewable diesel, can play an important role in reducing emissions. The production of LCLFs is covered in the Manufacturing and Industry sector in the Australian taxonomy, and their use in road, air and rail transport is covered in the Transport sector. Their use in mining operations is covered in the Minerals, Mining and Metals sector.

As the Aviation White Paper notes, sustainable aviation fuel (SAF) is currently the largest lever available to decarbonise air transport, although electric technologies for shorter, regional flights are expected to continue to mature in the medium-term.

Fuel switching to LCLFs is also an important short to medium-term driver of freight rail decarbonisation, another hard-to-abate activity which can contribute to broader emissions reductions in the transport sector by absorbing demand for freight that would otherwise be carried through more emissions-intensive modes. Electrification of freight rail transport is a significant longer-term abatement opportunity (Australian Railway Association, 2024; DITRDCA, 2024).

The use of low-carbon ammonia and methanol are the most feasible means by which to decarbonise shipping in the short-term. There are also substantial abatement opportunities related to port operations, as demonstrated by the Clean Energy Finance Corporation's investment in the electrification of South Australian ports (Clean Energy Finance Corporation, 2024).

The development of enabling low-carbon infrastructure is essential to enable emissions reductions through these modes, and encourage mode shifting.

B. Methodology

Transport sector activities in the Australian taxonomy have been prioritised on the basis of their emissions shares. Green and transition criteria are informed by the key decarbonisation levers articulated above. Table 16 provides an overview of activity selection and classification in the taxonomy.

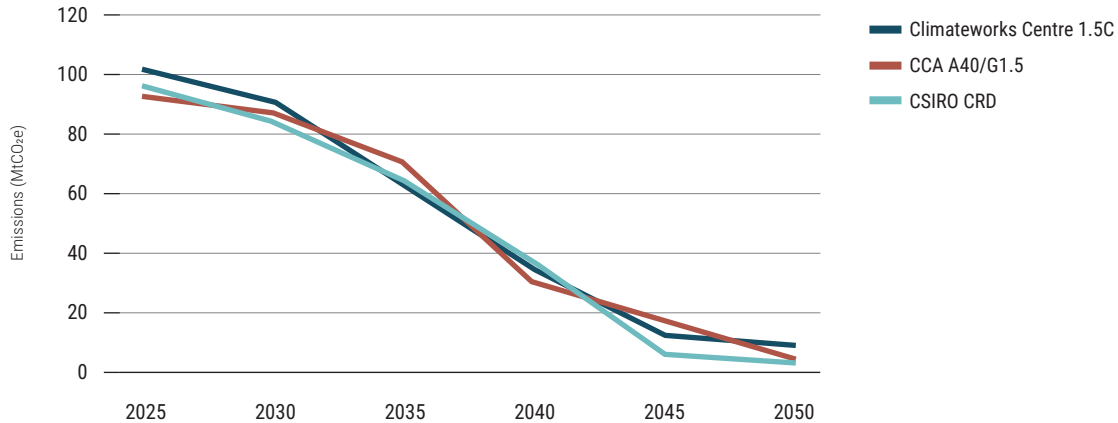
Each activity is coded 'I' to align with the ANZSIC classification for the transport sector.

TABLE 16
Activity selection and classification – Transport sector

	Classification	
	Green	Decarbonisation measures
I1. Road Passenger Transport – Motorbikes, Cars and Light Commercial Vehicles	✓	
I2. Road Passenger Bus Transport	✓	
I3. Micromobility and Active Transport	✓	
I4. Road Freight Transport – Rigid Trucks	✓	✓
I5. Road Freight Transport – Articulated Trucks	✓	✓
I6. Passenger and Freight Air Transport	✓	✓
I7. Air Transport Ground Handling Operations	✓	
I8. Urban and Suburban Passenger Rail Transport	✓	
I9. Interurban Passenger Rail Transport	✓	✓
I10. Freight Rail Transport	✓	✓
I11. Inland Passenger and Freight Water Transport	✓	
I12. Maritime Passenger and Freight Water Transport	✓	✓
I13. Vessels for Port Operations	✓	
I14. Low-Carbon Road Transport Infrastructure	✓	
I15. Micromobility and Active Transport Infrastructure	✓	
I16. Low-Carbon Public Transport Infrastructure	✓	
I17. Low-Carbon Air Transport Infrastructure	✓	
I18. Low-Carbon Rail Transport Infrastructure	✓	
I19. Low-Carbon Water Transport Infrastructure	✓	

The emissions trajectories for the transport sector are broadly consistent across Australian scenarios, including Climateworks Centre's (2023) 1.5°C scenario, CSIRO (2023) CRD scenario, and CSIRO's (2024) A40/G1.5 scenario. Under the scenarios, emissions reduce from 90-100 MtCO₂e in 2025 to 30-40 MtCO₂e in 2040, before declining rapidly in the 2040s to 4-10 MtCO₂e in 2050. Climateworks Centre's transport sector scenarios, which include emissions intensity pathways across road and rail transport modes, have been used to inform green criteria.

FIGURE 16
Australian scenarios for the transport sector



C. Technical Screening Criteria

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Road Transport

I1. Road Passenger Transport – Motorbikes, Cars and Light Commercial Vehicles

Includes purchase, financing, renting, leasing and operation of vehicles designated as category C1.1, C1.2, C1.3 and V1.1 under the scope of Austroads report AP-R264-05.

Sector	Transport
Activity	I1. Road Passenger Transport
Associated ANZSIC codes	4621 Interurban and Rural Bus Transport 4623 Taxi and other Road Transport 5102 Courier Pick-up and Delivery Services 6611 Passenger Car Rental and Hiring 6619 Other Motor Vehicle and Transport Equipment Rental and Hiring
Objective	Climate Change Mitigation
Technical screening criteria	
Green	Purchase, financing, renting, leasing and operation of electric vehicles.

I2. Road Passenger Bus Transport

Purchase, financing, leasing, rental and operation of urban and suburban transport vehicles for passengers and road passenger transport. For motor vehicles, operation of vehicles designated as category Bu1, Bu2 and Bu3 under the scope of Austroads report AP-R264-05. This includes urban and interurban transportation.

Sector	Transport
Activity	I2. Road Passenger Bus Transport
Associated ANZSIC codes	4621 Interurban and Rural Bus Transport 4622 Urban Bus Transport 6611 Passenger Car Rental and Hiring 6619 Other Motor Vehicle and Transport Equipment Rental and Hiring
Objective	Climate Change Mitigation
Technical screening criteria	
Green	Purchase, financing, renting, leasing and operation of zero tailpipe emissions vehicles.

13. Micromobility and Active Transport

Includes the selling, purchasing, financing, leasing, renting and operation of personal mobility or transport devices where the propulsion comes from the physical activity of the user, from a zero-emissions motor, or a mix of zero-emissions motor and physical activity. This includes the provision of freight transport services by (cargo) bicycles.

Sector	Transport
Activity	I3. Micromobility
Associated ANZSIC codes	4623 Taxi and other Road Transport 5102 Courier Pick-up and Delivery Services 6639 Other Goods and Equipment Rental and Hiring
Objective	Climate Change Mitigation
Technical screening criteria	
Green	Purchase, financing, renting, leasing and operation of personal mobility devices where the propulsion comes from the physical activity of the user, from a zero-emissions motor, or a mix of zero-emissions motor and physical activity.

14. Road Freight Transport – Rigid Vehicles

Purchase, financing, leasing, rental and operation of vehicles designated as category 11, and 12 under the scope of Austroads report AP-R264-05.

Sector	Transport														
Activity	I4. Road Freight Transport – Rigid Vehicles														
Associated ANZSIC codes	4610 Road Freight Transport 6619 Other Motor Vehicle and Transport Equipment Rental and Hiring														
Objective	Climate Change Mitigation														
Technical screening criteria															
Green	The activity must comply with one of the criteria A or B, and criteria C and D. A. Zero tailpipe emissions vehicles B. Vehicles meet the following emissions intensity trajectory: <table><tr><th>Year</th><th>2025</th><th>2030</th><th>2035</th><th>2040</th><th>2045</th><th>2050</th></tr><tr><td>gCO₂e/t-km</td><td>243</td><td>207</td><td>135</td><td>60</td><td>6</td><td>0</td></tr></table> C. Where used to meet emissions intensity thresholds, LCLF must meet the green criteria for the manufacture of low-carbon liquid fuels in the Manufacturing and Industry sector of the Australian sustainable finance taxonomy. D. Vehicles are not dedicated to fossil fuel transport	Year	2025	2030	2035	2040	2045	2050	gCO ₂ e/t-km	243	207	135	60	6	0
Year	2025	2030	2035	2040	2045	2050									
gCO ₂ e/t-km	243	207	135	60	6	0									
Decarbonisation measures	Purchase/use of LCLF, and/or measures that facilitate the supply and availability of LCLF.														
Notes	Emissions intensity figures and trajectory based on Climateworks Centre’s (2024) 1.5°C scenario for rigid vehicles.														

15. Road Freight Transport – Articulated Vehicles

Purchase, financing, renting, leasing and operation of vehicles designated as category 11S1, 11S2, 12S1, 12S2, 12S3 under under the scope of Austroads report AP-R264-05.

Sector	Transport														
Activity	I5. Road Freight Transport – Articulated Vehicles														
Associated ANZSIC codes	4610 Road Freight Transport 6619 Other Motor Vehicle and Transport Equipment Rental and Hiring														
Objective	Climate Change Mitigation														
Technical screening criteria															
Green	The activity must comply with one of the criteria A or B, and criteria C and D. A. Zero tailpipe emissions vehicles. B. Vehicles meet the following emission intensity trajectory: <table><tr><th>Year</th><th>2025</th><th>2030</th><th>2035</th><th>2040</th><th>2045</th><th>2050</th></tr><tr><td>gCO₂e/t-km</td><td>50</td><td>47</td><td>28</td><td>12</td><td>1</td><td>0</td></tr></table> C. Where used to meet emissions intensity thresholds, LCLF must meet the green criteria for the manufacture of low-carbon liquid fuels in the Manufacturing and Industry sector of the Australian sustainable finance taxonomy. D. Vehicles are not dedicated to fossil fuel transport.	Year	2025	2030	2035	2040	2045	2050	gCO ₂ e/t-km	50	47	28	12	1	0
Year	2025	2030	2035	2040	2045	2050									
gCO ₂ e/t-km	50	47	28	12	1	0									
Decarbonisation measures	Purchase/use of LCLF, and/or measures that facilitate the supply and availability of LCLF.														
Notes	Emissions intensity figures and trajectory based on Climateworks Centre's (2024) 1.5°C scenario for articulated vehicles.														

Air Transport

16. Passenger and Freight Air Transport

Sector	Transport
Activity	16. Passenger and Freight Air Transport
Associated ANZSIC codes	4900 Air and Space Transport 6119 Other Motor Vehicle and Transport Equipment Rental and Hiring
Objective	Climate Change Mitigation
Technical screening criteria	
Green	The activity must comply with criteria A and B. A. Zero direct (tailpipe) emissions aircrafts. B. Aircrafts are not dedicated to fossil fuel transport.
Decarbonisation measures	Purchase/use of SAF, and/or measures that facilitate the availability and supply of SAF.
Notes	This version of the taxonomy has not included a SAF blend rate as an option to meet the green criteria due to limited analysis addressing a blend rate commensurate with a recognised 1.5C-aligned pathway for aviation. Future versions of the taxonomy will look to include this option following the publication of SAF blend rates that correspond to credible international and/or Australian pathways for the aviation sector.

17. Air Transport Ground Handling Operations

This activity includes the manufacture, repair, maintenance, overhaul, retrofitting, design, repurposing and upgrade, purchase, financing, renting, leasing and operation of equipment and service activities covering zero emissions ground handling operations, including ground services activities at airports, and cargo handling, including loading and unloading of goods from aircraft.

Sector	Transport
Activity	17. Air Transport Ground Handling Operations
Associated ANZSIC codes	5220 Airport Operations and Other Air Transport Support Services 5291 Customs Agency Services 5299 Other Transport Support Services
Objective	Climate Change Mitigation
Technical screening criteria	
Green	• Purchase, leasing and/or operation of zero tailpipe emissions vehicles. • Operation, construction and maintenance of infrastructure dedicated to the provision of SAF.

Rail Transport

18. Urban and Suburban Passenger Rail Transport

Purchase, financing, rental, leasing and operation of urban and suburban passenger transport using railway rolling stock on metropolitan and commuter rail lines.

Sector	Transport
Activity	18. Urban and Suburban Passenger Rail Transport
Associated ANZSIC codes	4720 Rail Passenger Transport 4622 Urban Bus Transport (including Tramway) 6619 Other Motor Vehicle and Transport Equipment Rental and Hiring
Objective	Climate Change Mitigation
Technical screening criteria	
Green	The activity must meet criteria A and B. A. Purchase/operation of zero direct (tailpipe) emissions rolling stock. B. Rolling stock are not dedicated to the transport of fossil fuels.

19. Interurban Passenger Rail Transport

Purchase, financing, rental, leasing and operation of passenger transport using railway rolling stock on mainline networks.

Sector	Transport														
Activity	I9. Interurban Passenger Rail Transport														
Associated ANZSIC codes	4720 Rail Passenger Transport 6119 Other Motor Vehicle and Transport Equipment Rental and Hiring														
Objective	Climate Change Mitigation														
Technical screening criteria															
Green	The activity must comply with criteria A <u>or</u> B, and criteria C and D. A. Zero direct (tailpipe) emissions rolling stock. B. Fleet/rolling stock meet the following emissions intensity trajectory; <table><tr><th>Year</th><th>2025</th><th>2030</th><th>2035</th><th>2040</th><th>2045</th><th>2050</th></tr><tr><td>gCO₂e/p-km</td><td>32</td><td>32</td><td>17</td><td>3</td><td>0</td><td>0</td></tr></table> C. Where used to meet emissions intensity thresholds, LCLF must meet the green criteria for the manufacture of low-carbon liquid fuels in the Manufacturing and Industry sector of the Australian sustainable finance taxonomy. D. Rolling stock is not dedicated to fossil fuel transport.	Year	2025	2030	2035	2040	2045	2050	gCO ₂ e/p-km	32	32	17	3	0	0
Year	2025	2030	2035	2040	2045	2050									
gCO ₂ e/p-km	32	32	17	3	0	0									
Decarbonisation measures	- Acquisition or retrofitting of rolling stocks be able to run on LCLF and/or; - Purchase/use of LCLF and/or measures that facilitate the availability and supply of LCLF.														
Notes	Emissions intensity figures and trajectory based on Climateworks Centre's (2024) 1.5°C scenario for passenger rail transport.														

I10. Freight Rail Transport

Purchase, financing, leasing, rental and operation of freight transport on mainline rail networks as well as short line freight railroads.

Sector	Transport														
Activity	I10. Freight Rail Transport														
Associated ANZSIC codes	4710 Rail Freight Transport 6119 Other Motor Vehicle and Transport Equipment Rental and Hiring														
Objective	Climate Change Mitigation														
Technical screening criteria															
Green	The activity must comply with criteria A or B, and criteria C and D. A. Zero direct (tailpipe) emissions rolling stock. B. Fleet/rolling stock meet the following emissions intensity trajectory; <table><tr><th>Year</th><th>2025</th><th>2030</th><th>2035</th><th>2040</th><th>2045</th><th>2050</th></tr><tr><td>gCO₂e/t-km</td><td>5</td><td>5</td><td>3</td><td>0</td><td>0</td><td>0</td></tr></table> C. Where used to meet emissions intensity thresholds, LCLF must meet the green criteria for the manufacture of low-carbon liquid fuels in the Manufacturing and Industry sector of the Australian sustainable finance taxonomy. D. Rolling stock is not dedicated to fossil fuel transport.	Year	2025	2030	2035	2040	2045	2050	gCO ₂ e/t-km	5	5	3	0	0	0
Year	2025	2030	2035	2040	2045	2050									
gCO ₂ e/t-km	5	5	3	0	0	0									
Decarbonisation measures	- Acquisition or retrofitting of rolling stock to be able to run on LCLF and/or; - Purchase/use of LCLF and/or measures that facilitate the availability and supply of LCLF.														
Notes	Emissions intensity figures and trajectory based on Climateworks Centre's (2024) 1.5°C scenario for freight rail transport.														

Water Transport

I11. Inland Passenger and Freight Water Transport

Purchase, financing, leasing, rental and operation of passenger and freight vessels on inland waters, involving vessels that are not suitable for sea transport.

Sector	Transport
Activity	I11. Inland Passenger and Freight Water Transport
Associated ANZSIC codes	4810 Water Freight Transport 4820 Water Passenger Transport 6619 Other Motor Vehicle and Transport Equipment Rental and Hiring
Objective	Climate Change Mitigation
Technical screening criteria	
Green	Purchase, operation and/or leasing of zero direct (tailpipe) emissions vessels. Until 2030: Purchase, operation and/or leasing of hybrid and dual fuel vessels derive at least 50% of their energy from zero direct (tailpipe) CO ₂ emission fuels or plug-in power for their normal operation.

I12. Maritime Passenger and Freight Water Transport

While water transport is the lowest source of emissions in the Australian domestic transport sector, long-range vessels present an opportunity to be decarbonised using LCLF. Decarbonisation measures have been informed by IMO guidelines.

Purchase, financing, chartering (with or without crew) and operation of vessels designed and equipped for transport of freight or for the combined transport of freight and passengers on sea or coastal waters, whether scheduled or not.

Sector	Transport
Activity	I12. Maritime Passenger and Freight Water Transport
Associated ANZSIC codes	4810 Water Freight Transport 4820 Water Passenger Transport 6619 Other Motor Vehicle and Transport Equipment Rental and Hiring
Objective	Climate Change Mitigation
Technical screening criteria	

Green	The activity complies with either criteria A or B, and criteria C and D.				
	A. Vessel has zero direct (tailpipe) emissions; with emphasis on tank-to-wake emissions and taking into account IMO's guidelines on lifecycle analysis of fuels.				
	B. Fleet/vessels meet the following emission intensity thresholds (in gCO ₂ e/t-nm) for different type of vessels in the table below:				
	<i>Emission intensity thresholds for shipping in gCO₂e/t-nm</i>				
	Type	Size	2020 EEOI/AER	2030 EEOI/AER	2040 EEOI/AER
	Bulk carrier	0-9999 DWT	35.1/24.6	23.4/16.4	11.7/8.2
	Bulk carrier	10000-34999 DWT	12.6/6.6	8.1/4.4	4.1/2.2
	Bulk carrier	35000-59999 DWT	9.2/4.6	6.2/3.1	3.1/1.5
	Bulk carrier	60000-99999 DWT	8.4/3.6	5.6/2.4	2.8/1.2
	Bulk carrier	100000 - 199999 DWT	4.6/2.4	3.1/1.6	1.5/0.8
	Bulk carrier	200000 - + DWT	4.1/2.3	2.7/1.5	1.4/0.8
	Chemical tanker	0 - 4999 DWT	40.3/35.4	26.8/23.6	13.4/11.8
	Chemical tanker	5000 - 9999 DWT	26.6/19	17.7/12.7	8.9/6.3
	Chemical tanker	10000 - 19999 DWT	18.7/11.9	12.5/7.9	6.2/4
	Chemical tanker	20000 - + DWT	12.3/6.5	8.2/4.3	4.1/2.2
	Container	0 - 999 TEU	27.3/16.9	18.2/11.3	9.1/5.6
	Container	1000 - 1999 TEU	24.9/14.8	16.6/9.9	8.3/4.9
	Container	2000 - 2999 TEU	19.5/10	13/6.7	6.5/3.3
	Container	3000 -4999 TEU	16.8/8.3	11.2/5.5	5.6/2.8
	Container	5000 - 7999 TEU	16.2/7.8	10.8/5.2	5.4/2.6
	Container	8000 - 11999 TEU	14.1/6.7	9.4/4.5	4.7/2.2
	Container	12000 - 14500 TEU	10.4/4.6	6.9/3.1	3.5/1.5
	Container	14500 - + TEU	10.4/4.6	6.9/3.1	3.5/1.5
	General cargo	0 - 4999 DWT	30.2/24.2	20.1/16.1	10.1/8.1
	General cargo	5000 - 9999 DWT	27.2/16.7	18.2/11.1	9.1/5.6
	General cargo	10000 - + DWT	24.2/13.1	16.2/8.8	8.1/4.4
	Other liquid tanker	0 - + DWT	106.6/97.6	71.1/65.1	35.5/32.5
	Ferry-pax only*	0 - 1999 GT	1272135.8	848090.5	424045.3
	Ferry-pax only*	2000 - + GT	1740606.6	1160404.4	580202.2
	Cruise*	0 - 1999 GT	2044403.4	1362935.6	681467.8
	Cruise*	2000 - 9999 GT	1286641.3	857760.8	428880.4
	Cruise*	10000 - 59999 GT	1495064.7	996709.8	498354.9
	Cruise*	60000 - 99999 GT	1738613.6	1159075.5	579537.9
	Cruise*	100000 - + GT	1337274.9	891516.6	445758.3
	Ferry-RoPax*	0 - 1999 GT	822123.9	548082.6	274041.3
	Ferry-RoPax*	2000 - + GT	1137003.8	758002.5	379001.3
	Refrigerated bulk	0 - 1999 DWT	72.8/48.7	48.5/32.5	24.3/16.2
	Ro-Ro	0 - 4999 GT	258.2/212.4	172.1/141.6	86.1/70.8
	Ro-Ro	0 - 4999 GT	63.9/45.9	42.6/30.6	21.3/15.3
	Vehicle	0 - 3999 Vehicles	124.7/46	83.2/30.7	41.6/15.3
	Vehicle	4000 - + Vehicles	58.1/13.8	38.7/9.2	19.4/4.6
*For Ferry-pax only, Cruise, and Ferry-RoPax, the emissions intensity unit is gCO ₂ e/Gt-nm					
Decarbonisation Measures	C. Where LCLF is used that is covered in the Australian sustainable finance taxonomy its production must meet the green criteria in the Manufacturing and Industry sector of the Australian sustainable finance taxonomy.				
	D. Vessels are not dedicated to fossil fuel transport				
Notes	- Retrofitting measures (fuel shift or improving energy efficiency) attaining at least 20% Energy Efficiency Design Index (EEDI) value equivalent to reducing the EEDI reference line by at least below the EEDI requirements applicable on 1 April 2022. - Green criteria based on analysis developed by Climate Bonds Initiative (2020). - DWT – Dead Weight Tonnes (the weight of the cargo). - TEU – Twenty-foot Equivalent Unit. - GT – Gross Tonnage.				

I13. Vessels for Port Operations

Purchase, financing, renting and operation of vessels required for port operations and auxiliary activities, such as tugboats, mooring vessels, pilot vessels, salvage vessels and ice-breakers.

Sector	Transport
Activity	I13. Vessels for Port Operations
Associated ANZSIC codes	5219 Other Water Transport Support Services 6619 Other Motor Vehicle and Transport Equipment Rental and Hiring
Objective	Climate Change Mitigation
Technical screening criteria	
Green	Purchase, operation and/or leasing of zero tailpipe emissions vessels.

Enabling Infrastructure

The transport modes covered in the criteria will require the support of infrastructure to scale. This includes electric charging infrastructure, green H₂ pipelines and refuelling stations, and LCLF production, distribution and fuelling stations, among other elements. But a credible plan to decarbonise the transport sector should go beyond electric vehicles and zero emissions fuels. This means incorporating a suite of decarbonisation solutions beyond transitioning to electric vehicles, including practices to avoid or reduce the level of transport activity and shift to lower-emissions modes of transport – for example, freight road transport to freight rail, and passenger vehicles to public and active transport.

Enabling infrastructure activities can inform the implementation of such measures.

I14. Low-carbon Road Transport Infrastructure

Construction, modernisation, maintenance and operation of infrastructure to support low carbon road transport.

Sector	Transport
Activity	I14. Low-carbon Road Transport Infrastructure
Associated ANZSIC codes	3101 Road and Bridge Construction 3109 Other Heavy and Civil Engineering Construction 6921 Architectural Services 6922 Surveying and Mapping Services 6923 Engineering Design and Engineering Consulting Services 6924 Other Specialized Design Services 6925 Scientific Testing and Analysis Services
Objective	Climate Change Mitigation
Technical screening criteria	
Green	Eligible infrastructure includes: • Electric Vehicle (EV) charging solutions (e.g. EV charging points, swap stations, cabinets etc.) which could include, but is not limited to: — electricity grid connection upgrades necessary to support the deployment and operation of infrastructure for charging an EV; — all other solutions related to optimising and/or providing the necessary electrical capacity to support the deployment and operation of EV charging solutions. • Hydrogen fuelling stations. • Electric road systems. • Infrastructure and installations that principally facilitate transshipping freight between the modes: terminal infrastructure and superstructures for loading, unloading and transshipment of goods. • Infrastructure, installations, and related facilities that principally facilitate urban and suburban public passenger transport, including associated signaling systems for metro, tram and rail systems. • Infrastructure dedicated to the provision of SAF.

I15. Micromobility and Active Transport Infrastructure

Construction, modernisation, maintenance and operation of infrastructure for personal mobility.

Sector	Transport
Activity	I15. Micromobility Infrastructure
Associated ANZSIC codes	3101 Road and Bridge Construction 3109 Other Heavy and Civil Engineering Construction 6921 Architectural Services 6922 Surveying and Mapping Services 6923 Engineering Design and Engineering Consulting Services 6924 Other Specialized Design Services 6925 Scientific Testing and Analysis Services
Objective	Climate Change Mitigation
Technical screening criteria	
Green	Eligible infrastructure includes: • Pavements, bike lanes and pedestrian zones, parking provisions for active mobility modes, electrical charging and hydrogen refueling installations for personal mobility devices.

I16. Low-carbon Public Transport Infrastructure

Construction, modernisation, operation and maintenance of infrastructure to support and enable low carbon public transport systems.

Sector	Transport
Activity	I16. Low-carbon Public Transport Infrastructure
Associated ANZSIC codes	3101 Road and Bridge Construction 3109 Other Heavy and Civil Engineering Construction 6921 Architectural Services 6922 Surveying and Mapping Services 6923 Engineering Design and Engineering Consulting Services 6924 Other Specialized Design Services 6925 Scientific Testing and Analysis Services
Objective	Climate Change Mitigation
Technical screening criteria	
Green	Eligible infrastructure includes: • Infrastructure related to build and improvement of public transit corridors (metro lines, bus transit corridors). • Infrastructure dedicated to support and enable zero-emission public transport including but not limited to: electric charging points, electricity grid upgrades, hydrogen and other LCLF refueling stations, resource circularity, renewable energy. • Infrastructure and installations dedicated to trans-shipping passenger between the modes: terminal infrastructure and superstructures for loading, unloading and transshipment of passengers. • Infrastructure, installations, and related facilities that principally facilitate urban and suburban public passenger transport, including associated signaling systems for metro, tram and rail systems.

I17. Low-carbon Air Transport Infrastructure

Construction, modernisation, maintenance and operation of infrastructure that is required to support low carbon aviation.

Sector	Transport
Activity	I17. Low-carbon Air Transport Infrastructure
Associated ANZSIC codes	3109 Other Heavy and Civil Engineering Construction
Objective	Climate Change Mitigation
Technical screening criteria	
Green	Eligible infrastructure includes: • Infrastructure dedicated to the provision of fixed electrical ground power and preconditioned air to stationary aircraft, as well as electrical charging and hydrogen refueling for aircraft and ground handling vehicles and equipment at the airport. • Infrastructure dedicated to support and enable zero-emission aviation including but not limited to: electric charging points, electricity grid upgrades, hydrogen refueling stations, resource circularity, renewable energy, optimize energy and systems efficiency to reduce emissions from airport's own operations. • Air traffic management infrastructure/processes/activities dedicated to enable zero-emission aviation.

I18. Low-carbon Rail Transport Infrastructure

Construction, modernisation, operation and maintenance of railways and subways as well as bridges and tunnels, stations, terminals, rail service facilities and other related infrastructure to support low carbon rail transport.

Sector	Transport
Activity	I18. Low-carbon Rail Transport Infrastructure
Associated ANZSIC codes	3101 Road and Bridge Construction 3109 Other Heavy and Civil Engineering Construction 6921 Architectural Services 6922 Surveying and Mapping Services 6923 Engineering Design and Engineering Consulting Services 6924 Other Specialized Design Services 6925 Scientific Testing and Analysis Services
Objective	Climate Change Mitigation
Technical screening criteria	
Green	Eligible infrastructure includes: • For electrified trackside, infrastructure and associated subsystems: infrastructure, installations and related facilities, energy, on-board control-command and signaling, and trackside control-command and signaling subsystems. • Hydrogen fuelling stations. • For new and existing trackside, infrastructure and associated subsystems where there is a plan for electrification as regards line tracks, and, to the extent necessary for electric train operations, as regards sidings, or where the infrastructure will be fit for use by zero tailpipe CO₂ emission trains within 10 years from the beginning of the activity: infrastructure, energy, on-board control-command and signaling, and trackside control-command and signaling subsystems. • Terminal infrastructure and superstructures for loading, unloading and transshipment of goods. Infrastructure that facilitates the transport of fossil fuels is excluded. • Infrastructure, installations and related facilities that principally facilitate the transfer of passengers from rail to rail or from other modes to rail.

I19. Low-carbon Water Transport Infrastructure

Construction, modernisation, operation and maintenance of infrastructure that is required for zero carbon and low carbon shipping.

Sector	Transport
Activity	I19. Low-carbon Water Transport Infrastructure
Associated ANZSIC codes	3109 Other Heavy and Civil Engineering Construction 6921 Architectural Services 6922 Surveying and Mapping Services 6923 Engineering Design and Engineering Consulting Services 6924 Other Specialized Design Services 6925 Scientific Testing and Analysis Services
Objective	Climate Change Mitigation
Technical screening criteria	
Green	Eligible infrastructure includes: • Electricity charging, hydrogen-based refueling. • Infrastructure dedicated to the provision of shore-side electrical power to vessels at berth. • Infrastructure dedicated to the performance of the port's own operations with zero direct tailpipe CO₂ emissions, e.g. from hybrid straddle carriers to electric automated rubber tyre gantry; replacement of ICE vehicles with electric alternatives. • Infrastructure and installations dedicated to transshipping freight between the modes: terminal infrastructure and superstructures for loading, unloading and transshipment of goods. Infrastructure that facilitates the transport of fossil fuels is excluded.



11. Do No Significant Harm

The Australian taxonomy's Do No Significant Harm (DNSH) framework is designed to ensure an economic activity that makes a substantial contribution to climate change mitigation does not cause significant harm to the taxonomy's other environmental objectives:

- A.** Climate change adaptation and resilience.
- B.** Biodiversity and ecosystem protection.
- C.** Sustainable use and protection of water resources.
- D.** Pollution prevention and control.
- E.** Transition to a circular economy.

DNSH criteria apply at an activity level and consider significant impacts (potential and actual) throughout the lifecycle of an asset, activity or project.

The DNSH framework consists of generic and specific criteria. Generic DNSH criteria are principles-based and defined for each environmental objective. Specific DNSH criteria detail particular requirements for different sectors and activities based on the material impacts of the sector and/or activity that are not covered by the generic criteria.

Whether generic and/or specific DNSH criteria apply to an activity depends on the activity in question.

Following the approach recommended by the UK Green Technical Advisory Group (UK GTAG) in its 2023 report on the usability of DNSH criteria in the EU Taxonomy Regulation, the Australian taxonomy's DNSH criteria are informed by the following design considerations:

- broad interoperability with key reference taxonomies, following the 'adopt some and revise some' approach;
- a principles-based approach to generic criteria;
- a quantitative approach to specific DNSH criteria, with clear threshold/process-based criteria that can be objectively measured;
- a consistent style to increase clarity and usability; and
- minimise subjective language and qualitative criteria (UK GTAG, 2023).

More information on the methodology for developing the Australian taxonomy's DNSH criteria can be found in ASFI's methodology report [here](#).

The taxonomy's generic DNSH criteria are set out below. Guidance for applying the generic DNSH criteria is provided in [Appendix 6](#). The specific DNSH criteria for all sectors and activities are provided in [Appendix 7](#). [Appendix 7](#) also outlines whether generic and/or specific DNSH criteria apply to a particular activity.

Generic Do No Significant Harm Criteria

Climate change adaptation and resilience

Annexes to these criteria are found in [Appendix 6](#).

CRITERIA	DESCRIPTION
1. Climate-related physical risks are identified and substantially mitigated	Material climate-related physical risks to the activity, if any, are identified and adaptation solutions are implemented to substantially mitigate the potential impacts of those risks.
1.1.	For new or materially expanded activities, and where the activity may be materially impacted by one or more climate hazards (see Annex I), a physical climate risk assessment (CRA) is conducted. The CRA may have the following characteristics: • be based on robust analysis of available climate data and projections across at least two relevant potential future scenarios, including a scenario that well exceeds 2°C by 2050 above pre-industrial levels (meaning an increase of 2.5°C or higher); and • be consistent with the expected lifetime of the activity as far as practicable.
1.2.	Based on the CRA findings, an adaptation plan has been developed to ensure physical and non-physical adaptation solutions are implemented to substantially mitigate the material risks posed by any climate hazards to the activity. • For existing activities, the implementation of those physical and non-physical adaptation solutions may be phased and executed over a period of up to five years. • For new activities, implementation of those adaptation solutions must be met at the time of design and construction.
2. The activity and adaptation solutions safeguard against maladaptation	The adaptation plan ensures the activity and any adaptation solutions safeguard against maladaptation.
2.1.	The adaptation plan includes an assessment of whether the adaptation solutions: • align with wider climate change mitigation efforts (i.e. will not lead to a substantial increase in greenhouse gas emissions); • are effective in reducing vulnerability and increasing resilience to climate change; and • are equitable, especially to vulnerable groups. Where viable, Blue Green Infrastructure or Nature-based Solutions are implemented over 'grey' measures to support resilience and achieve potential co-benefits (see Annex II).

Biodiversity and ecosystem protection

Annexes to these criteria are found in [Appendix 6](#).

CRITERIA	DESCRIPTION
1. Biodiversity and ecosystem-related risks and impacts are identified, assessed, managed, and monitored	Significant biodiversity and ecosystem-related risks and potential impacts associated with the activity are identified, assessed, managed, and monitored.
1.1.	The activity does not occur in the following areas, unless the activity improves, does not harm, or is otherwise dedicated to the conservation or restoration of these areas: • UNESCO Natural and Mixed World Heritage Areas; • wetlands protected by the Ramsar Convention; and • buffer zones to protect the integrity of these areas where they have been identified in a zoning plan by a relevant government authority.
1.2.	For new or materially expanded activities and where required by applicable laws or relevant international standards (see Annex III), an environmental impact assessment (EIA) is conducted in accordance with those laws or standards (see Annex IV). An EIA includes the following: Environmental Impact Assessment; Environmental and Social Impact Assessment; Environmental, Social and Health Impact Assessment; and equivalent assessments.
1.3.	The EIA identifies any significant biodiversity and ecosystem-related risks and potential impacts posed by the activity, and measures to avoid, mitigate or manage those risks and impacts, including measures that seek to avoid: • significant impacts to critical habitat for threatened species or ecological communities; and • the conversion of natural forests or other pristine natural ecosystems (see Appendix 2).
Notes	‘Significant impact’ refers to an impact that is important, notable, or of consequence, having regard to its context or intensity. Whether or not an action is likely to have a significant impact depends upon the sensitivity, value, and quality of the environment which is impacted, and upon the intensity, duration, magnitude and geographic extent of the impacts (Australian Government Department of the Environment, 2013). ‘Critical habitat’ refers to habitat critical to the survival of a listed threatened species or ecological community.
1.4.	A management or action plan is in place to ensure appropriate mitigation, compensation, monitoring, reporting, and verification measures are implemented. The management or action plan adheres to the mitigation hierarchy and complies with applicable laws or relevant international standards (see Annex V).

Sustainable use and protection of water resources

Annexes to these criteria are found in [Appendix 6](#).

CRITERIA	DESCRIPTION
1. Water-related risks and impacts are identified, assessed, managed, and monitored	Significant risks and potential impacts associated with the activity related to water (including groundwater) consumption and quality are identified, assessed, managed, and monitored.
1.1.	For new or materially expanded activities and where required by applicable laws or relevant international standards (see Annex III), an EIA is conducted in accordance with those laws or standards (see Annex IV). In addition and where required, a water licence, permit, or equivalent water entitlement is issued in accordance with applicable laws.
1.2.	The EIA identifies any significant water-related risks and potential impacts posed by the activity, and measures to avoid, mitigate, or manage those risks and impacts, including measures to: • minimise water stress caused by the activity; and • avoid significant harm to water quality and aquatic ecosystems, including upstream, downstream, at a catchment-level and in riparian zones.
1.3.	A water management plan is in place to ensure appropriate mitigation, compensation, monitoring, reporting, and verification measures are implemented. The management or action plan adheres to the mitigation hierarchy and complies with applicable laws or relevant international standards (see Annex VI).

Pollution prevention and control

Annexes to these criteria are found in [Appendix 6](#).

CRITERIA	DESCRIPTION
1. Relevant laws, regulations and standards relating to pollution are complied with	The activity does not lead to the manufacture, distribution, use, or emission of harmful substances, noise, light, heat, waste, or any other air, water, or soil pollution beyond levels permitted by applicable laws and regulations or outlined in equivalent international standards listed in Annex VII .
1.1.	For new or materially expanded activities and where required by applicable laws or relevant international standards (see Annex III), an EIA is conducted in accordance with those laws or standards (see Annex IV).
1.2.	The EIA identifies any significant pollution-related risks and potential impacts posed by the activity, and measures to avoid, mitigate or manage those risks and impacts.
1.3.	All necessary measures are implemented in compliance with applicable laws and regulations or equivalent international standards as listed in Annex VII to: • avoid, minimise, manage, and monitor pollution-related risks associated with the activity; • ensure the proper treatment and disposal of any hazardous waste from the activity; and • where relevant and practicable, safely remediate or manage any contamination, including legacy contamination, associated with the activity.

Circular economy

Annexes to these criteria are found in [Appendix 6](#).

CRITERIA	DESCRIPTION
1. Resource use and waste are identified, minimised, and managed	Resources used and waste generated through the construction, operation and end-of-life of the activity are identified, minimised, and managed.
1.1.	The activity has a comprehensive waste management plan that aligns with the waste hierarchy. At a minimum, the waste management plan identifies significant actual and potential waste-related impacts associated with the activity and outlines actions, including circularity measures such as the R-Strategies, to support resource efficiency, and prevent and minimise waste.
1.2.	Where available, product stewardship initiatives and extended producer responsibility are utilised.
1.3.	Where required by applicable laws, decommissioning and rehabilitation plans are developed for the activity in compliance with those laws.



12. Minimum Social Safeguards

Overview

The Australian taxonomy's Minimum Social Safeguards (MSS) framework is designed to ensure an entity seeking to demonstrate that its activities are taxonomy-aligned meets minimum corporate governance standards and adheres to a defined set of social norms in relation to human rights (including labour rights) and First Nations peoples.

Compliance with MSS is determined through an assessment of performance criteria against the taxonomy's three social pillars. These social pillars and the core topics underlying them are provided in Table 17. The MSS performance criteria for each of these social pillars are supported by indicators and guidance provided in [Appendix 8](#).

TABLE 17
Australian taxonomy social pillars

Social pillars	Core topics
Corporate governance	Good corporate governance; taxation; anti-corruption and bribery; fair competition; consumer protection; community engagement
Human rights	Employment; labour and working conditions; occupational health and safety; modern slavery; procurement practices; gender equality; non-discrimination and equal opportunity
First Nations people's rights and cultural heritage	First Nations rights; First Nations cultural heritage

MSS criteria are principles-based and, in contrast to the taxonomy's TSC and DNSH criteria, defined at an entity level due to the significant usability challenges associated with activity-level disclosure.

The taxonomy's MSS criteria represent compliance with Australian laws and regulations, with additional requirements where those laws do not reflect international soft law standards and guidance widely accepted by global capital markets. In particular, the MSS draw on the OECD Guidelines for Multinational Enterprises on Responsible Business Conduct (OECD Guidelines) and the United Nations Guiding Principles on Business and Human Rights (UNGPs).

The UNGPs (discussed further below) are the authoritative global standard on preventing and addressing human rights harms by business. The OECD Guidelines provide recommendations on standards for responsible business conduct, which governments – including the Australian Government – have asked multinational enterprises to observe. The OECD Guidelines expressly include the expectations of the UNGPs.

More information on the methodology for identifying the taxonomy's social pillars and developing the taxonomy's MSS criteria can be found in ASFI's methodology report [here](#).

Minimum Social Safeguards Criteria

Corporate governance

Good corporate governance practices foster transparency, accountability and ethical behaviour within an organisation. They provide a framework of rules and practices that guide decision-making processes and ensure stakeholders' interests are considered. Good corporate governance promotes a culture of integrity and compliance, reducing the risk of fraud, mismanagement, contraventions of environmental laws and breaches of human rights.

The taxonomy's corporate governance social safeguards criteria include requirements relating to bribery and corruption, taxation, fair competition and consumer privacy. They reflect Australian laws, regulations and standards, and widely recognised international frameworks and guidance, including the IFC Corporate Governance methodology and the OECD Guidelines.

Criteria	
1	The entity demonstrates a commitment to implementing high quality corporate governance, including for environmental and social matters.
2	The board and/or management is qualified and adequately structured to oversee the entity's strategy, management and performance.
3	The entity's internal controls, systems and training are sufficient to support a culture of acting ethically and in compliance with relevant laws and regulations, including those related to anti-bribery and corruption; fair competition and taxation; and consumer protection.
4	The entity has policies and mechanisms in place to enable effective stakeholder engagement.
Notes	<i>This includes engagement with potentially affected people in relation to potential and actual impacts to human rights/First Nations rights and cultural heritage, as discussed further below.</i>
5	The entity discloses whether the entity, its board or management, including the board or management of any subsidiaries, has been convicted of corruption or bribery, breach of competition law, tax evasion or tax avoidance.

Human rights²

The taxonomy's human rights social safeguards criteria seek to ensure that entities can demonstrate they have the basic governance building blocks in place for effective human rights risk management, consistent with global standards and evolving stakeholder expectations. To this end, the human rights social safeguards draw on two authoritative international standards on responsible business conduct: the UNGPs and the OECD Guidelines.

As noted above, the UNGPs are the authoritative global standard on preventing and addressing human rights harms by business. The UNGPs expect that businesses respect all internationally recognised human rights, regardless of their size, sector, operational context, ownership and structure (UNGP 14). Globally, the UNGPs are being integrated into a wide range of standards, laws and policies, including the EU's recently adopted Corporate Sustainability Due Diligence Directive (CSDDD). Aspects of the UNGPs have also been embedded into *Australia's Modern Slavery Act 2018* (Cth), and there is growing evidence of uptake by business, investors and industry associations (Australian Human Rights Commission and the Australian Human Rights Institute University of New South Wales, 2021; UN Global Compact Network and Pillar Two, 2023).

To ensure their credibility, interoperability and usability, the human rights social safeguards criteria (and their supporting indicators) also seek to align with the EU Taxonomy's Minimum Safeguards, reporting standards such as the Global Reporting Initiative (GRI) and the UN Global Compact's Communication on Progress, and draw on the indicators utilised in the World Benchmarking Alliance's Corporate Human Rights Benchmark.

Consistent with the UNGPs, OECD Guidelines, and the *Modern Slavery Act 2018* (Cth), the human rights criteria take a risk-based approach; enabling entities to focus on preventing, mitigating and addressing areas of most severe risk to people across their operations and supply or value chains. This allows entities to focus their resources and activities. They also encourage disclosure and transparency of actual and potential adverse human rights impacts with a view to continuous improvement.

Criteria	
1	The entity has a public policy commitment in place that outlines the entity's commitment to respect human rights in line with the expectations of the UNGPs.
2	The entity has a human rights due diligence process or processes to identify, prevent, mitigate and account for how they address their actual and potential adverse human rights impacts through their operations and supply or value chains, that is appropriate to the entity's size, circumstances and operating context.
3	The entity has processes in place to enable the remediation of adverse human rights impacts in line with expectations of the UNGPs.

First Nations rights and cultural heritage

The taxonomy's First Nations social safeguards are underpinned by the United Nations Declaration on the Rights of Indigenous Peoples (UNDRIP). UNDRIP provides a universally recognised standard for upholding the rights, dignity, and self-determination of Indigenous peoples. UNDRIP serves as a vital guide to embedding respect for First Nations sovereignty, culture, and knowledge systems into policies, programs, and decision-making processes.

The taxonomy's First Nations criteria seek to establish a baseline level of recognition of First Nations rights and respect for cultural heritage. By providing this foundation, the taxonomy prompts entities to consider their alignment with internationally recognised instruments, and allow for continuous improvement.

² The human rights criteria and indicators apply to First Nations rights and cultural heritage (next section). The First Nations rights and cultural heritage criteria and indicators provide additional, specific expectations but in no way limit the human rights criteria as they apply to First Nations.

First Nations rights

These criteria apply where the entity has a potential or actual impact (or impacts) on First Nations rights or interests.

Criteria	
1	The entity recognises the rights of First Nations in line with the United Nations Declaration on the Rights of Indigenous Peoples (UNDRIP) and implements policies and processes to respect and support those rights.
2	The entity implements processes to assess, record and report on potential and actual impacts on First Nations through its operations.
3	The entity agrees on appropriate First Nations engagement practices in collaboration or co-design with First Nations in line with the UNDRIP principle of Free, Prior and Informed Consent.

First Nations cultural heritage

This criteria applies where the entity has a potential or actual impact (or impacts) on First Nations cultural heritage.

Criteria	
1	The entity implements processes to investigate, record and manage cultural heritage within its operations in collaboration or co-design with First Nations.

Appendices

Appendix 1: Overview of Key Australian Modelling Methodologies

Prepared by Climateworks Centre for the Australian Sustainable Finance Institute, October 2024.

Climateworks Centre's Decarbonisation Scenarios 2023

Modelling methodology

Climateworks decarbonisation scenarios use AusTIMES, a partial equilibrium model, to represent the Australian economy. The objective of this model is to minimise total costs to the economy over the modelling period, whilst ensuring that Australia's energy demands, and emissions targets are met. A detailed description of the decarbonisation scenarios application of the AusTIMES model can be found [here](#).

Carbon budget

In the decarbonisation scenarios a carbon budget is used to constrain Australia's total emissions between 2021 and 2050. These carbon budgets are derived from IPCC global budgets (IPCC, 2023), using a methodology consistent with the Nicholls and Meinshausen approach (Nicholls & Meinshausen, 2022). The aim of applying carbon budgets in this manner is to align the scenarios with limiting global temperature rise to demonstrate the rate of decarbonisation required for Australia to meet its commitments to the Paris Agreement.

Sectoral representation

Supply-side of electricity sector	AusTIMES models all of Australia's major electricity grids. Off-grid modelling is limited to particular zones in Western Australia. Existing generators are modelled including lifetime and retirement plans. Thirty-one technologies are modelled, as well as distributed generation and storage.
End-use sectors	End-use sectors are represented as: agriculture (8 subsectors), mining (11 subsectors), manufacturing (21 subsectors), other industry (5 subsectors), commercial buildings (7 building types), residential buildings (3 building types), road transport (10 vehicle segments) and non-road transport (aviation, rail and shipping).

Deriving emissions intensities

Electricity generation sector	AusTIMES calculates the total amount of electricity generated (TWh) across Australia that is required to meet future modelled demand. The model also calculates total emissions produced from the electricity sector (KtCO ₂ e). Total emissions are divided by electricity generated in each year to provide an estimate of average carbon intensity of electricity generation.
Transport sector	Transport activity projections are based on current activity data from the Bureau of Infrastructure and Transport Research Economics (BITRE) and projections of population and economic growth, see Climateworks Transport decarbonisation scenarios technical report for further detail. Transport activity projections, fleet and vehicle data are provided as input assumptions to the model. AusTIMES calculates the total energy demand and emissions produced by each transport mode type in the sector. To estimate emissions intensity of transport modes, absolute emissions for each mode are divided by activity data provided by BITRE in each year modelled.

Comparison with other decarbonisation pathways

Climateworks decarbonisation scenarios 2023 plot two possible pathways for Australia to achieve net-zero emissions in line with the Paris Agreement. Other pathways to achieving net-zero have been published in recent years. This section briefly compares the Climateworks decarbonisation scenarios with:

- CSIRO [Sector Pathways](#) commissioned by the Climate Change Authority (CCA); and
- CSIRO's [Rapid decarbonisation pathways for Australia](#)

Modelling methodologies

The three emissions studies under consideration all use AusTIMES to represent Australia's energy system. The modelling methodologies used by each are as follows:

Pathway	Energy and emissions modelling	Macroeconomic and trade modelling and assumptions	Land based sequestration	Emissions constraints
Climateworks decarbonisation scenarios 2023	AusTIMES provides least cost energy, emissions and technology pathways	Provided as input assumptions to AusTIMES based on a variety of sources such as The Australian National Outlook 2019, and ABS projections. See AusTIMES Modelling Assumptions and Methodology for further detail	Determined on a least cost basis by AusTIMES. Cost assumptions based on DISR modelling	A carbon budget constraint for Australia was applied to AusTIMES based on the methodology of (Nicholls and Meinshausen 2022)
CSIRO/CCA Sector pathways		Determined using CSIRO's Global Trade and Environment Model (GTEM)	Land use sequestration levels informed by modelling with the Land-use trade offs model (LUTO)	A 2035 emissions reduction target and net-zero target year were set to reflect an array of emissions reduction outcomes relevant for the authority's 2035 Targets Advice. (See figure C.2 of Sector pathways Review)
CSIRO Rapid decarbonisation pathways for Australia		Determined using a combination of CSIRO's Global Trade and Environment Model (GTEM) and KPMG's Energy and Environment Model (KPMG-EE). Macroeconomic assumptions are broadly aligned with IEA economic trajectories.	Determined on a least cost basis by AusTIMES. Cost assumptions based on (CSIRO 2022)	

Scenarios

Each of the studies present two scenarios. Scenario narratives are as follows:

Pathway	Scenario	Narrative
Climateworks decarbonisation scenarios 2023	1.5°C scenario	Aligns with limiting global warming to 1.5°C (67% likelihood)
	Well-below-2C scenario	Aligns with limiting warming to 1.8°C (67% likelihood)
CSIRO/CCA Sector pathways	A40/G1.5	Has global settings where a successful international policy regime means countries take immediate action to limit warming to 1.5°C. Australia overachieves on its 2030 target and reaches net zero in 2040. This scenario applies global energy and emissions targets specified by IEA's 'Net Zero Emissions' scenario.
	A50/G2	Has global settings where a successful international policy regime means countries take immediate action to limit warming to 2°C. Australia overachieves its current 2030 target and reaches net zero in 2050. This scenario applies global energy and emissions targets specified by IEA's 'Announced Pledges Scenario'.
CSIRO Rapid decarbonisation pathways for Australia	CSIRO Rapid Decarbonisation (CRD) scenario	Based on a rapid but plausible decarbonisation pathway to net zero for Australia aligned with the IEA's NZE global 1.5°C carbon budget
	CSIRO Stated Policies (CSP) scenario	Based on stated policies internationally and within Australia, which projects a 2.6°C temperature increase by 2100

Sectoral representation

All three studies use AusTIMES to represent Australia's economy and hence have the same sectoral representation for modelling. Climateworks' decarbonisation scenarios and CSIRO's Rapid decarbonisation pathways present results using this sector breakdown. The sector pathways use a slightly different breakdown of sectors to present the pathways, detailed in [Table B.2 of the Sector Pathways Review Appendices](#).

Appendix 2: Key Definitions - Land Conversion Requirement for the Agriculture and Land Sector

The Australian taxonomy uses the Accountability Framework initiative 'AFi definitions' of "forest", "natural forest" and "agricultural use", with Australian quantitative forest thresholds used in Australia's National Greenhouse Gas Inventory.

The definitions are set out below. If there are updates to the AFi definitions, the updated definitions in the AFi prevail.

Agriculture/Agricultural use

The use of land primarily for any one or more of the following:

1. Cultivation of temporary or annual crops that have a growing cycle of one year or less.
2. Cultivation of permanent or perennial crops that have a growing cycle of more than one year, including tree crops.
3. Cultivation of permanent or temporary meadows or pastures, for example by planting of non-native grasses and/or by agricultural management practices such as irrigation or fertilisation.
4. Raising of livestock on land characterised by severe and sustained degradation.
5. Buildings, animal feeding operations, and other farm infrastructure.
6. Temporarily fallow land.

Forest

Land spanning more than 0.5 hectares with trees higher than 2 meters and a canopy cover of more than 20 percent*, or trees able to reach these thresholds in situ. It does not include land that is predominantly under agricultural or other land use. Forest includes natural forests and tree plantations.

*Tree height and canopy cover quantitative thresholds correspond to those used in Australia's National Greenhouse Gas Inventory. The AFi states that quantitative thresholds (e.g. for tree height or canopy cover) established in legitimate national or sub-national forest definitions may take precedence over the generic thresholds in their definition.

Natural Forest

A forest that is a natural ecosystem.

Natural forests possess many or most of the characteristics of a forest native to the given site, including species composition, structure, and ecological function.

Natural forests include:

- a. Primary forests that have not been subject to major human impacts in recent history.
- b. Regenerated (second-growth) forests that were subject to major impacts in the past (for instance by agriculture, livestock raising, tree plantations, or intensive logging) but where attained much of the species composition, structure, and ecological function of prior or other contemporary natural ecosystems.
- c. Managed natural forests where much of the ecosystem's composition, structure, and ecological function exist in the presence of activities such as:
 - Harvesting of timber or other forest products, including management to promote high-value species.
 - Low intensity, small-scale cultivation within the forest, such as less-intensive forms of swidden agriculture in a forest mosaic.
- d. Forests that have been partially degraded by anthropogenic or natural causes (e.g. harvesting, fire, climate change, invasive species, or others) but where the land has not been converted to another use and where degradation does not result in the sustained reduction of tree cover below the thresholds that define a forest or sustained loss of other main elements of ecosystem composition, structure, and ecological function.

Wetland

As defined by Australia's Carbon Credits (Carbon Farming Initiative) Rule 2025, wetlands are areas of marsh, fen, peatland or water:

- a.** that are either temporary or permanent; and
- b.** which have water that can be static or flowing, fresh, brackish or salty;

and includes areas of marine water the depth of which at low tide is not more than 6 metres.

Tree plantation

A forest predominantly composed of trees established through planting and/or deliberate seeding that lacks key elements of a natural forest native to the area, such as species composition and structural diversity.

- Tree plantations generally have one or a few tree species and tend to include one or more of the following characteristics:
 - 1.** planted on cleared land
 - 2.** harvested regularly
 - 3.** trees are of even ages
 - 4.** products from the plantation are managed and processed for commercial production
- Tree plantations can consist of trees planted for timber, pulp, non-timber forest products (e.g. rubber latex), or ecosystem services (e.g. soil stabilisation). Plantations dominated by agricultural species (e.g. fruits or oil palm) are considered agriculture, not tree plantations.

Appendix 3: Manufacturing and Industry - Supporting Guidance

Appendix 3.1: CCS/CCU cross cutting requirements

Carbon Capture and Storage Requirements

Transportation of captured CO₂

Transport of captured CO₂ via all modes. Construction and operation of CO₂ pipelines and retrofit of gas networks where the main purpose is the integration of captured CO₂.

The activity should meet all of the following:

- The CO₂ transported from the installation where it is captured to the injection point does not lead to CO₂ leakages above 0.5 percent of the mass of CO₂ transported.
- The CO₂ is delivered to a permanent CO₂ storage site; or to other transport modalities, which lead to permanent CO₂ storage site that meet the criteria below.
- Appropriate leak detection systems are applied, and a monitoring plan is in place, with the report verified by an independent third party.
- The activity may include the installation of assets that increase the flexibility and improve the management of an existing network

Criteria for the underground permanent geological storage of CO₂

Permanent storage of captured CO₂ in appropriate underground geological formations.

- A.** Characterisation and assessment of the potential storage complex and surrounding area, or exploration is carried out to establish whether the geological formation is suitable for use as a CO₂ storage site.
- B.** For operation of underground geological CO₂ storage sites, including closure and post-closure obligations:
 - Appropriate leakage detection systems are implemented to prevent release during operation;
 - A monitoring plan of the injection facilities, the storage complex, and, where appropriate, the surrounding environment is in place, with the regular reports checked by the competent national authority.
- C.** For the exploration and operation of storage sites, the activity complies with ISO 27914:2017/225 for geological storage of CO₂.

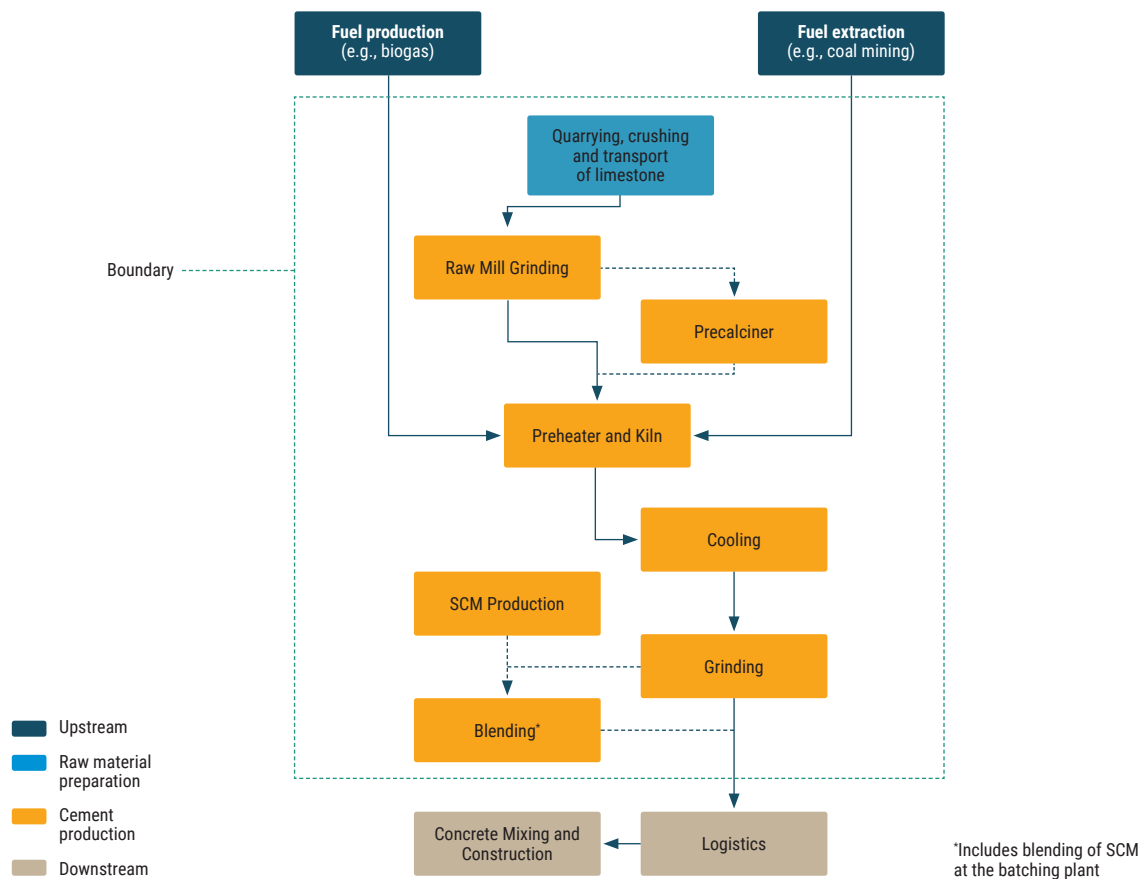
Criteria for the utilisation of CO₂

- CO₂ must be used for the manufacture of durable products – e.g. polymers, construction materials stored in buildings, or recyclable products - and/or chemicals and fuels covered in this version of the Australian sustainable finance taxonomy. If used for chemicals or fuels, the underlying activity must meet the corresponding technical screening criteria (i.e. in applicable activities in the Manufacturing and Industry sector).
- CO₂ is not used for enhanced oil recovery, the production of other forms of fossil fuel-based energy, urea or carbonated beverages.

Appendix 3.2: Manufacture of Cement

Boundary notes and requirements

- Calculation of emissions intensity should include all processes within the boundary define above
- All emissions from fuel burning including waste-derived fuels must be accounted for in the emissions boundary
- Emissions from imported clinker will need to be included as part of the calculation
- Where emissions intensity of imported cement is not available, this cement is not eligible
- SCM within the boundaries only includes only emissions associated with processing of SCM onsite (i.e. scope 1 or emissions of the facility) but does not include upstream emissions.



Appendix 4: Electricity Generation and Supply - Supporting Analysis and Entity-level Firming Advice

4.1 Gas as back-up firming in the taxonomy

The role of gas for electricity generation

The share of gas-powered generation in CSIRO's (2023) CRD scenario, and Climateworks Centres' 1.5°C and well below 2°C scenarios is assumed to continually decline in absolute terms and as a percentage of the total electricity generation mix. Under CSIRO's (2024) A40/G1.5 and A50/G2 scenarios for the Climate Change Authority, which consolidate gas and liquids, gas-powered generation is assumed to peak in 2030 and 2035, respectively, before continually declining to 0.7 percent and 1 percent of the mix in 2050. This is consistent with the IEA's NZE2050 analysis which assumes that "gas-fired generation peaks in the mid-2020s before starting a long-term decline" (IEA 2023a, p.82).

The role of gas to back-up firming renewable electricity generation

The share of gas generation in the mix in AEMO's 2024 Integrated System Plan (ISP) Step Change scenario, which is aligned with ~ 1.8°C 'where relevant' (AEMO, 2024b), is higher than the taxonomy's reference scenarios. A key source of divergence between projected gas-powered generation in AEMO's 2024 ISP Step Change scenario relative to 1.5°C scenarios is the role of 'flexible gas'.

AEMO delineates between more continuous 'mid-merit' gas generation and 'flexible' gas generation. Flexible gas generation in the ISP denotes a back-up role to renewables and firming "to support storages during renewable droughts and cover rare peak demand spikes". AEMO states that this represents "a change in the role of gas-powered generation from more continuous 'mid-merit' gas to a strategic, back-up role".

Under the 2024 ISP's Step Change scenario, the share of mid-merit gas-powered generation is assumed to continue to decline.

It is displaced by flexible gas generation which currently accounts for a marginal share of the mix but is assumed to exceed 1 percent of the mix (ex. storage) in 2036/37, peaking in 2044 before falling to 1.3 percent of the mix in 2050.

According to this shifting role, ISP 2024 assumes that flexible gas-powered generation capacity grows while utilisation decreases. AEMO notes that a typical flexible gas generator may generate just 5 percent of its annual potential. AEMO's Gas Statement of Opportunities (GSOO) 2024 reflects this variability, stating that gas-powered generation in the National Energy Market (NEM) "is forecast to be more weather-dependent and volatile in future years as it will be increasingly influenced by renewable energy availability, depending on the development of electrical alternatives" (AEMO 2024d, p.43).

AEMO's GSOO 2024 further notes that in the longer term, the "degree of investment in renewable electricity generation, transmission developments, storage developments and other alternatives will all influence the overall need for gas to contribute to the firming requirements" in the NEM.

As AEMO's 2024 ISP System Operability Review notes, this shifting role for gas-powered generation means that mid-merit gas-powered capacity, which is primarily provided by combined cycle gas turbines (CCGT), is expected to be replaced by open cycle gas turbines (OCGT) which are better suited to flexible operations (AEMO 2024c). The Review states that OCGTs are a more appropriate replacement technology when operating at lower capacity factors.

Can back-up gas firming be included as an activity in the taxonomy?

On average, OCGTs are more emissions-intensive than CCGTs. Of the existing, committed and anticipated gas-powered generators in the NEM, the average Scope 1 emissions intensity of CCGTs is 455.41gCO₂e/kWh, and the average emissions intensity of OCGTs is higher at 696.7gCO₂e/kWh (AEMO 2024b). A lifecycle emissions assessment increases this figure. The taxonomy follows reference scenarios in setting emissions intensity thresholds in the electricity sector, which fall below 100gCO₂e/kWh after 2030 on a lifecycle basis.

The Australian taxonomy focuses on economic activities that make a substantial contribution to climate change mitigation. As an activity, gas-powered generation has a declining role in line with this objective and has readily deployable alternatives.

The taxonomy utilises scenarios according to the average emissions intensity of the electricity system based on global and Australian scenarios to inform the green criteria. This considers a determination about how the activity performs on average, rather than determinations about how often an individual asset is deployed.

As an activity-level tool, the taxonomy is unable to account for the inherent system-level uncertainties around when and whether the back-up function provided will be required, and generally focuses on avoiding carbon lock-in through the emissions performance of the whole activity, subject to the activity meeting the other methodological filters (see Section 2).

This is consistent with the International Capital Market Association's guidance that green enabling activities should not lead to locking-in high emitting activities relative to other technologically feasible and/or commercially viable solutions (ICMA, 2024).

The assessment of flexible gas-powered generation in the taxonomy does not preclude it as an investible activity in Australia. In recognition of the currently anticipated role of firming articulated in AEMO's 2024 ISP, the taxonomy offers a framework to define how back-up gas firming capacity may be recognised and assessed within a credibly transitioning portfolio of generation and storage assets (see Appendix 4.2).

For activities in other sectors where gas is required to facilitate the transition of certain hard-to-abate industrial sectors, it can be used to meet the taxonomy criteria, particularly for high heat processes while electrification and low-carbon hydrogen technologies continue to mature. (Australian Industry Energy Transitions Initiative 2023; CSIRO 2023; Climate Change Authority 2024).

4.2. Advice for addressing firming and back-up generation activities in a credibly transitioning portfolio

Recognising the currently projected system-level role for flexible gas-powered generation, to respond to variable peak demand needs and provide back-up support as the penetration of renewables in the grid grows, the taxonomy includes a framework to define how such functions, and their overarching activities, can be articulated, recognised and assessed in a credibly transitioning portfolio of assets.

This advice extends beyond the boundaries of the activity-focused Australian taxonomy and provides a framework to evaluate the credibility of portfolios that include activities that provide gas firming activities.

It will aim to cover the following key issues:

- How may utilities and project developers demonstrate to financial institutions their progress toward credibly transitioning their power generation and storage asset mix?
- How can investment in assets that provide back-up support be recognised within a credibly transitioning portfolio of assets?
- What requirements/checks are needed of the system and how can these be applied to an entity?

Transition Plans: A Tool to Assess the Credibility of a Transitioning Portfolio

Taxonomies are classification systems that identify and quantify the contribution of individual economic activities to key sustainability objectives. Accordingly, taxonomies are not equipped to make portfolio or system-level assessments. Transition plans enable assessments of the credibility of transition progress at the portfolio level.

Generic frameworks, guidelines, and sector specific requirements have been developed by a variety of institutions. Each specify detailed expectations regarding the following components of the transition planning process:

- **Targets:** quantitative goals to measure the progress and success of the implementation of an entity's transition plan.
- **Delivery strategy:** how the entity will align business activities and operations with its climate objectives and priorities.
- **Accountability mechanisms:** how the entity is structured to provide oversight, incentivise, and support the implementation of the transition plan.

This guidance focuses solely on identification of key requirements to assess a transition plan of a portfolio that may include firming assets.

Notably, this advice has been developed to support the consideration of firming in transition plans. This has not been explicitly covered in best-practice guidance to date. However, given the importance of firming – including shallow, medium and deep storage, and gas firming as back-up support – to support the decarbonisation of Australia's electricity system, this advice aims to provide an introductory framework.

TABLE

Entity and system-level considerations - transition plans

Linkage between the entity and the system in transition plans

As noted by GFANZ, “the disclosure of transition plans, including the detailed assumptions and data that underpins these, enables the effective engagement and capital allocation across the financial ecosystem”. The disclosure of assumptions that will govern an entities business and financial decisions – i.e the transition plan’s delivery strategy – over the time horizon of decarbonisation process, will enable financial institutions to better understand factors on which the success of the transition plan will ultimately depend.

These factors are predominantly external to the company and their disclosure allows entities to demonstrate how they expect the system in which they operate to change, and their operations to evolve in line with this. From the perspective of evaluating the credibility of portfolios which include fossil fuel-based firming, assumptions regarding aspects such as: technological developments (e.g. non fossil fuel-based firming); security of supply, demand projections, and cost competitiveness are, among others, especially important.

Out of the frameworks recommending disclosure of assumptions, GFANZ and TPT require the greatest level of granularity, with best practice being sensitivity analysis. TPT recommends that “an entity should assess the sensitivity of its plan to changes in key assumptions and external factors on which it depends, and should seek to mitigate delivery risks where possible”. The sensitivity analysis enables better assessment of how resilient the plan is to changes in the external factors and provides evidence that the entity has thought through the consequences of instances in which the selected assumptions fail to materialise in reality.

GFANZ	Transition Plan Taskforce
Describe the key assumptions underlying the company's transition-related business, financial, and operational plans, such as - activities or technologies that the company is not currently performing at scale (e.g., CCS and DAC); - actions of the company's supply chain; - development and implementation of policies and regulations; - significant shifts in demand for products or services; and - other external actions (e.g., level of grid decarbonization, action/subsidies for governments).	Disclose the nature of the key assumptions that it uses and external factors on which it depends, and their implications for the achievement of the Strategic Ambition of its transition plan, these may relate to matters such as: - policy and regulatory change; - the decarbonisation trajectory of the global economy, relevant geographies, and/or sectors; - macroeconomic trends (e.g. labour availability, cost of borrowing etc.); - microeconomic and financial factors (e.g. availability of finance, relative prices); - technological developments; - access to counterparty data and reliability of data; - shifts in client and consumer demand; - the levels of warming over the short-, medium-, and long-term; - the physical impacts of the changing climate, and the regional and spatial implications of these; - the effectiveness of adaptation efforts and possible limits to adaptation, and the regional and spatial implications of these.
Disclose how these assumptions are reflected in the company's financial statements and audit reports.	Disclose the timeframes over which any key assumptions and external factors are expected to occur.
Articulate the impact on the transition plan if certain assumptions prove incorrect.	Disclose whether and how the key assumptions are reflected in the entity's financial statements.

Key Considerations for Gas Firming in Transition Plans

Targets

Cover the whole entity, consider the full range of levers that the entity has available, and cover short, medium and long-term emissions.

	Key Considerations	Purpose
For the transition plan	- Emissions targets cover the short-, medium- and long-term. - Emissions targets do not exclude substantial portions of emissions. - Emissions targets are benchmarked against scientific sectoral pathways/benchmarks.	To verify if the entity's transition: - is aligned with science-based benchmarks, rather than subjectively designed pathways. - comprehensively evaluates the climate impact of all of its actions, rather than its selected areas of economic activity. - takes into account all material direct and indirect emissions.
For firming	- Does the entity's long-term emissions goals align with the goals of the Paris Agreement with an aim to limiting warming to 1.5°C? - How aligned is the average CO₂ intensity with the decarbonisation pathway set by targets? - Does the entity's goal include upstream Scope 3 emissions?	

Delivery Strategy

Connected to the entity's business and operations planning and financial accounts, and underpinned by assumptions and an analysis of dependencies and uncertainties.

Key Considerations				Purpose
For the transition plan			- Action plans are comprehensive and consistent with the emissions targets. - Key assumptions and external factors on which the transition plan depends are identified.	The purpose of these requirements is to assess the connection between the targets and entity's ability to achieve them. Without an assessment of the overarching plans, targets may sit in isolation and not be achieved.
For firming	Existing capacity	Renewables	What is the current share of renewable generation? Is this growing?	The purpose of this consideration is to place the firming capacity in context – i.e. if fossil-based capacity is increasing but the share of renewables remains static or declining, this can signal that the portfolio is not transitioning according to a credible pathway.
		Firming	- Is there a plan to decarbonise firming capacity? - Does the company distinguish between fossil and non-fossil firming? - How is firming capacity enabling the increase of renewables penetration and how is this demonstrated? - What are key system level assumptions validating maintenance of transitional capacity – firming power plants? - Is the evidence base underpinning assumptions credible? - How is the entity considering the use of other non-fossil firming technologies?	The purpose of this consideration is to understand the extent to which the entity is using firming capacity to enable further renewable energy penetration. There should also be evidence to support this claim provided. It is also to assess how reliant on fossil-based firming capacity the entity is for the foreseeable future. The majority of firming will need to be decarbonised under 1.5°C pathways, and the ISP's optimal development path. An aligned portfolio should be assessing and testing alternatives and their viability. Entities that do not distinguish between fossil and non-fossil firming capacity in their targets impede the ability for lenders and investors to understand how the entity is also investing in non-fossil capacity as required by 1.5°C scenarios.
		Transition away	Does the transition plan address decarbonisation/transition away from fossil fuels/phase out as a decarbonisation lever?	A credible transition will be underpinned by the scaling of renewable capacity and the phase down of fossil-based capacity. Transition plans should address both of these levers.
	New capacity	Renewables	Is the percentage of renewable capacity as a proportion of portfolio increasing?	To follow the decarbonisation pathway and thus to bring down emissions of the entity, new investments should focus on scaling up zero-emission technologies to replace assets that are being phased-out.
		Firming	- Is new firming capacity enabling a further increase in renewable energy penetration? To what extent is additional firming capacity required for this? - What are key system level assumptions validating development of new firming capacity? - Is the evidence base underpinning assumptions credible? - How is the entity considering the development of other non-fossil firming technologies?	System level assumptions are important for validating the fit of the firming capacity within a credible system. If the system-level assumptions are not in line with 1.5°C then the firming capacity assumptions would also not be aligned.

Accountability Mechanisms

Key Considerations			Purpose
For the transition plan	- Sufficient disclosure around the transition plan, and specifically all emissions and non-emissions targets. - Independent evaluation of the transition plan.		The credibility of transition, and associated assumptions, have to be underpinned by objective, independent, science based sources. These need to be disclosed to ensure transparency.
For firming	- Has the entity disclosed and is using credible data/scenarios to assess above? - Is there third-party verification to assess credibility of scenarios and assumptions?		Third party verification helps to bring legitimacy of the choices made to select sources and methodologies for assessment.

Appendix 5: Construction and Buildings - Supporting Guidance

This section describes additional supporting guidance for the application of the screening criteria.

Future emissions from the onsite combustion of fossil fuels

All-electric servicing can be demonstrated by the compliance certification of the design and inclusion of requirements in construction contracts.

Buildings with a 6-star **Green Star Buildings rating** or 5-star registrations from 2023 onwards will be deemed to satisfy the all-electric requirement.

Residential buildings with a **NatHERS Whole-of-home certificate** showing electricity or solar as the only fuel type in the Predicted Whole-of-home annual impact by Appliance section. The certificate must be produced by a NatHERS accredited assessor. If the certificate contains a pool or a spa, separate confirmation of using only electricity or solar energy is also required.

Residential buildings in NSW with a **BASIX certification** showing only electricity or solar thermal to serve all loads and appliances satisfy the requirement.

Acquisition and Ownership

Operating emissions and energy intensity

A building's annual operating emissions or energy must be less than the emissions intensity target relevant to the building use type.

Emissions intensity must be used for transition screening criteria

Energy intensity must be used for the green screening criteria.

Emissions or energy intensity must be measured consistently with the boundaries established for the relevant building target. The basis of measurement for each building type is described below.

Emission factors for the building's energy use are to be taken from the relevant location-based emissions factors published in the government's National Greenhouse Accounts Factors and applied to all energy consumed within the defined boundary.

Emissions factors derived from power purchase agreements, green power purchases and the like are not to be used.

Where any building use type represents less than 90 percent of the building's floor area, the building must be assessed as mixed-use. Mixed-use buildings can demonstrate qualification by comparing the total emissions or energy intensity to a target for all building uses derived by area-weighting the targets for each component of building use.

The emissions or energy intensity to be compared to the required target can be calculated from annual energy use and the floor area. The scope of energy uses and area measurement should be consistent with those described for the required targets for each building use type.

The following methods are also able to confirm emissions intensity for qualification against criteria A:

Where office uses comprise more than 90 percent of the building's uses, a **Building Energy Efficiency Certificate** issued under the Building Energy Efficiency Disclosure Act 2010 can be used. The value for 'Annual Emission Intensity' on page 2 of the certificate or the column titled 'CRT_Nabers_AnnualEmissionsIntensity' in the downloadable dataset must be used to compare to the required target for full fuel cycle emissions. The downloadable dataset can be accessed here: <https://www.cbd.gov.au/about-cbd-program/performance-program/download-cbd-program-data> **NABERS Energy rating certificates** issued by the NABERS administrator can be used for to confirm emissions intensity for most non-residential building types:

For Offices, the value for 'Greenhouse gas emissions without Renewable Electricity per m²' found in the NABERS web portal (<https://www.nabers.gov.au/ratings/find-a-current-rating>) is to be compared to the required target for full fuel cycle emissions.

For Hotels, the value for 'Greenhouse gas emissions without Renewable Electricity per room' found in the NABERS web portal (<https://www.nabers.gov.au/ratings/find-a-current-rating>) is to be compared to the required target for full fuel cycle emissions.

For Shopping Centres, the value for 'Greenhouse gas emissions without Renewable Electricity per m², found in the NABERS web portal (<https://www.nabers.gov.au/ratings/find-a-current-rating>) is to be compared to the required target for full fuel cycle emissions.

For Data Centres, the value for 'PUE' found in the NABERS web portal (<https://www.nabers.gov.au/ratings/find-a-current-rating>) is to be compared to the required energy intensity.

Residential buildings constructed in accordance with **NCC 2022 BCA Volume Two Section H6**, or a **BASIX certification** after 1 October 2023 as regulated by the NSW State Environment Planning Policy (SEPP) Sustainable Buildings 2022 are deemed to comply with Criteria A.

Basis of Measurement for Acquisition and Ownership criteria

Basis of Measurement

When screening acquisition and ownership criteria, the basis for measure and emissions boundaries are varied to suit each building type. The following table summarises the activities and building use types with acquisition and ownership screening criteria and the boundary and basis of measurement for each.

TABLE

Basis of measurement for buildings

Building Use Type	Boundary	Basis of measurement	Notes
Office	Landlord Scope 1+2 emissions	/m2 of Net Lettable Area/ annum	Where landlord Scope 1+2 emission are not separately metered, a whole building target, that includes the scope 1 + 2 emissions of the building tenants can be used.
Co-located Data Centre	PUE/Operator Scope 1+2 emissions	The sum is this: $PUE = \frac{\text{TotalFacilityEnergy}}{\text{ITEquipmentEnergy}}$	The basis of measurement used is consistent with the ISO/IEC 30134-2-2016 PUE measure. The PUE is adjusted based on the provisioned IT capacity of the data centre.
Shopping Centre	Landlord Scope 1+2 emissions	/m2 of Gross Lettable Area Retail/annum	Where the landlords provides HVAC services to the retail tenants the target is adjusted to in proportion to the percentage of lettable area served.
Hotel	Operator Scope 1+2 emissions	/guest room/annum	Seperate targets are provided for each hotel service grade star rating. Operator Scope 1+2 emissions includes the energy consumed within the guest rooms,
Serviced apartment	Operator Scope 1+2 emissions	/apartment/annum	Operator Scope 1+2 emissions includes the energy consumed with the apartments.
Built to rent	Operator Scope 1+2 emissions	/apartment/annum	Operator Scope 1+2 emissions includes the energy consumed with the apartments.
Residential dwelling	Occupier Scope 1+2 emissions	/dwelling/annum	Seperate targets are provided for single dwelling, terrace and apartment topologies, and the number of bedrooms in each.
Supermarket	Operator scope 1+2 emissions	/m2 of retail floor area/ annum	The retail floor area is the trading area of the supermarket

Methodology for Energy and Emissions target worksheet

Emissions targets are determined from the 15th percentile of the best operation emissions intensity performance in the market in the baseline year and then reduced annually on a linear trajectory towards net zero emissions in 2040.

The choice of the 15th percentile to determine the baseline is consistent with the EU and other taxonomies approach to their building sector criteria.

The 15th percentile is applied only when determining the baseline, and it is not intended that a building always has to be in the best 15th percentile to satisfy transition or green screening criteria. The energy and emissions reductions required for the sector to align to a 1.5°C future can only be achieved by moving average and poor performers to the level achieved by the current best performance, and the pool of best performers must grow over time.

Energy intensity targets are used where the screening criteria require no on-site fossil fuel combustion. The energy target is fixed at the energy needed for an all-electric building to achieve the 15th percentile of best operations emission intensity in 2024. The energy target is not reduced over the term as the energy and emissions-saving dividends in the sector require the rest of the market to shift toward the standard set by the best performance in the market. Requiring future year-on-year improvements for the buildings that already perform at best in the market could risk over-investment in energy efficiency and establishing a future hurdle rate that disincentivises existing buildings' renovation for limited climate mitigation benefits.

Emission targets are applied to the transition criteria. This allows buildings that use gas to achieve very low emissions to be eligible until the sunset date.

The green screening criteria apply emission or energy intensity targets before the sunset date and only energy intensity targets after. The emissions and energy targets are for each urban centre in Australia. Climate zones cover regional locations. The targets are provided in a publicly available worksheet.

Data sources used to calibrate the 15th percentile include the CBD Downloadable Data Set, Department of Climate Change, Energy, the Environment and Water, NABERS certified rating data, supplied by the NSW Office of Climate and Energy, and for Supermarkets benchmarking undertaken by the Climate Bonds Initiative. Residential benchmarks are calibrated through the analysis of ABS and AER data.

Aggregation for portfolio and entity reporting

When reporting portfolio or aggregated performance, the TSC should be applied without variation. For example, location based accounting of scope 2 emissions is required to be applied regardless of whether an entity purchases green power.

When reporting overall performance of a portfolio, emissions and/or energy intensity targets and performance metrics should be weighted by the measure denominator. For example, overall performance of a portfolio of buildings with emissions targets given as kgCO₂/m² should area weighted when calculating the average.

Additional information on GWP refrigerant limits for appliances

The requirement to limit the maximum GWP of refrigerants is a sunrise provision.

The 15th percentile of an appliance's GEMS rating is to be based on a statistical test of the full GEMS equipment database for the relevant product type no more than 18 months before the activity.

The GEMS star rating and, where relevant, the refrigerant type may be demonstrated from the manufacturer's published data or the relevant record in the GEMS database.

The following refrigerant types are used in air conditioning units found in the GEMS database in September 2024 and below the initial GWP100 threshold of 700: M50, M60, R290, and R32.

TABLE
Minimum star ratings for residential and small commercial upgrade activities (March 2024)

Product type	Minimum GEMS star rating
Clothes Dryer	9
Clothes washer	4.5
Dishwasher	4
Air conditioning (Hot climate)	4.0 cooling & 2.5 heating
Air conditioning (Mixed climate)	3.5 cooling & 3.0 heating
Air conditioning (Cold climate)	4.0 cooling & 3.5 heating

TABLE
Minimum GEMS energy label indexes for supply of equipment activities (March 2024)

Product type	Metric	Minimum GEMS star rating
Clothes Dryer	New SRI	9.03
Clothes washer	New SRI	5.73
Dishwasher	New SRI	4.12
Air conditioner	ACOP, and AEER	4.1286, and 3.8121
Chiller	Decl. COP	6.27

Appendix 6: Generic Do No Significant Harm Guidance

Annex I: Climate-related physical risks

The list of climate-related hazards in this table is non-exhaustive and constitutes only an indicative list of the most globally widespread hazards that, where material to the activity, should be taken into account at a minimum in a physical climate risk assessment.

Hazards of particular relevance to Australia include drought, bushfire, cyclones, storm, hail, flood, coastal erosion, and sea level rise.

	TEMPERATURE-RELATED	WIND-RELATED	WATER-RELATED	SOLID MASS-RELATED
Chronic	Changes in temperature (air, freshwater, marine water) including extremes	Changing wind patterns	Changing precipitation patterns and types (rain, hail, snow/ice)	Coastal erosion, inundation and recession
	Heat stress		Precipitation or hydrological variability	Soil degradation
	Temperature variability		Ocean acidification	Soil erosion
	Permafrost thawing		Saline intrusion	Solifluction
			Sea level rise	
			Water stress	
Acute	Heatwave	Cyclone, hurricane, typhoon	Drought and changes in aridity	
	Cold wave/frost		Heavy precipitation (storm, rain, hail, snow/ice)	
		Storm (including extratropical, convective, blizzards, dust and sandstorms)	Storm surges (due to cyclones and non-cyclone East Coast lows)	
	Bushfire, grassfire, wildfire	Tornado	Flood (coastal, estuarine, fluvial, pluvial, ground water)	
			Glacial lake outburst	

Annex II: Definitions of key terms in climate change adaptation and resilience criteria

TERM	DEFINITION
Blue Green Infrastructure	Refers to a strategically planned network of natural and semi-natural areas with other environmental features designed and managed to deliver a wide range of ecosystem services such as water purification, air quality, space for recreation, and climate mitigation and adaptation (European Commission).
Nature-based Solutions	Refers to solutions that leverage nature and the power of healthy ecosystems to protect people, optimise infrastructure, and safeguard a stable and biodiverse future (International Union for Conservation of Nature).

Annex III: Screening for environmental impact assessments

The following should be used to screen whether an environmental impact assessment (EIA) is required for a particular activity in Australia or another jurisdiction.

JURISDICTION	APPROACH	SCREENING REQUIREMENTS
Australia (or OECD country)	Under Australian federal, state and territory legislation, an EIA is required where an activity is likely to significantly affect the environment. EIA requirements in Australia vary depending on the jurisdiction (federal, state, and territory) and type of activity. For all activities located in Australia and other OECD countries, whether an EIA is required should be determined in accordance with the applicable laws of the relevant jurisdiction(s) in force at the time the activity is undertaken.	<u><i>Environmental Protection and Biodiversity Conservation Act 1999 (Cth) (EPBC Act)</i></u> An EIA is required if a project is likely to have a significant impact on matters of national environmental significance. In Australia, these matters include: • World Heritage properties. • National Heritage places. • Wetlands of international importance. • Threatened species and ecological communities. • Migratory species. • Commonwealth marine areas. In addition, each state and territory has environmental planning and assessment laws that require EIAs (or Environmental Impact Statements) for all activities that are likely to have a significant impact on the environment.
International	If the activity is not located in Australia or another OECD country, an EIA must be conducted if that activity would require an EIA in Australia. The EIA can be conducted in line with the international standards set out in Annex IV.	Refer to screening requirements above. The activity should be screened according to the EPBC Act and the environmental planning and assessment laws of the state of New South Wales.

Annex IV: Environmental impact assessments - international standards and guidelines

The below table provides a list of internationally recognised standards and guidelines that could be used to conduct environmental impact assessments for activities located outside of Australia and other OECD countries.

GUIDANCE ON CONDUCTING ENVIRONMENTAL IMPACT ASSESSMENTS OUTSIDE AUSTRALIA AND OTHER OECD COUNTRIES			
Organisation	Name	Description	Link
The Equator Principles (EP) Association	Equator Principles EP4 July 2020	• Set of principles detailing requirements that apply for managing environmental and social risks in projects within scope of the Equator Principles.	<u>The Equator Principles - Equator Principles</u>
United Nations Environment Programme (UNEP)	Guidelines for conducting integrated environmental assessments	• Provide guidance for a wide range of different types of Integrated Environmental Assessments.	<u>UNEP Guidelines for Conducting EIA</u>
International Financial Corporation (IFC)	Performance Standard 1: Assessment and Management of Environmental and Social Risks and Impacts	• Applies to business activities with environmental and/or social risks and/or impacts. • Key objectives are to identify and evaluate environmental and social risks and impacts of the project and to adopt a mitigation hierarchy to anticipate and avoid, or where avoidance is not possible, minimise, and, where residual impacts remain, compensate/offset for risks and impacts to workers, affected communities, and the environment.	<u>Performance Standards on Environmental and Social Sustainability, IFC</u>
IFC	Environmental, Health and Safety Guidelines (EHS)	• Set of recommendations designed to help businesses and projects manage environmental and health risks effectively. • Include strategies for reducing pollution, conserving resources, and minimising environmental impact; recommendations for specific industries; and performance indicators.	<u>IFC EHShttps://www.iso.org/standard/60857.html</u>

Annex V: Biodiversity and ecosystem management planning - international standards and guidelines

The below table provides a list of internationally recognised standards that could be used in biodiversity and ecosystem management for activities located outside of Australia and other OECD countries.

INTERNATIONAL GUIDELINES AND STANDARDS FOR BEMP/BMP			
Organisation	Name	Description	Link
IFC	Performance Standard 6: Biodiversity Conservation and Sustainable Management of Living Natural Resources	The requirements set out in this Performance Standard have been guided by the Convention on Biological Diversity, and its applicability is established during the environmental and social risks and impacts identification process.	Performance Standards on Environmental and Social Sustainability, IFC
GRI	GRI 304: Biodiversity	Provides specific indicators for reporting on biodiversity impacts and management.	GRI Topic Standard for Biodiversity

Annex VI: Water management planning - international standards and guidelines

The below table provides a list of internationally recognised standards that could be used in water management planning for activities located outside of Australia and other OECD countries.

INTERNATIONAL GUIDELINES AND STANDARDS FOR WQMPs			
Organisation	Name	Description	Link
IFC	Performance Standard 3 (Resource Efficiency and Pollution Prevention)	Addresses water resource management, including requirements for minimising water use and managing wastewater to protect water quality.	IFC Performance Standard 3
UNEP	Water Quality Monitoring and Assessment of Groundwater - Technical Guidance Document	Describes key features of groundwater that govern its quantity, availability, and chemical quality.	Water Quality Monitoring and Assessment of Groundwater - Technical Guidance Document (unep.org)
	Quality Assurance for Freshwater Quality Monitoring - Technical Guidance Document	Provides an introduction to the key concepts and approaches that can be used in Quality Assurance and Quality Control.	Quality Assurance for Freshwater Quality Monitoring - Technical Guidance Document (unep.org)
	Introduction to Freshwater Quality Monitoring and Assessment - Technical Guidance Document	Explains the hydrological and ecological functioning of water bodies when planning a sampling and analysis programme.	Introduction to Freshwater Quality Monitoring and Assessment - Technical Guidance Document (unep.org)
International Organization for Standardization (ISO)	ISO 14046:2014 (Water Footprint)	Offers guidelines for assessing and reporting the water footprint of products, processes, and organisations, including impacts on water quality.	ISO 14046:2014 – Environmental management – Water footprint
	ISO 5667 Series (Water Quality – Sampling)	Provides guidelines for the sampling of water to ensure accurate and reliable water quality data.	ISO 5667 – 1:2023 – Water quality - Sampling
GRI	GRI 303: Water and Effluents	Includes indicators and reporting requirements related to water use, wastewater, and effluents, relevant for entities to disclose their water management practices.	GRI Topic Standard for Water and Effluents

Annex VII: Pollution prevention and control - national and international standards and guidelines

POLLUTION TYPE	INTERNATIONAL CONVENTIONS, STANDARDS AND GUIDANCE	ALIGNMENT WITH AUSTRALIAN LAWS AND REGULATIONS AND GUIDANCE
Various	IFC EHS Guidelines Final - General EHS Guidelines_APRIL 29.doc (ifc.org)	State-based EPAs.
Various	International Convention for the Prevention of Pollution from Ships (MARPOL)	Protection of the Sea (Prevention of Pollution from Ships) Act 1983 (Cth) State and territory legislation.
Air	WHO Air Quality Guidelines World Health Organization (WHO) air quality guidelines (AQGs) and estimated reference levels (RLs) – European Environment Agency (europa.eu) GRI standards on emissions (GRI 305 – includes air pollutants like nitrogen oxides, sulphur oxides and particulate matter) and effluents and waste (GRI 306)	National Environment Protection Measure (NEPM) for Ambient Air Quality State and territory legislation and regulations. National Greenhouse and Energy Reporting Act 2007 (Cth) Environmental Protection and Biodiversity Conservation Act 1999 (Cth) State and territory legislation and regulations.
Water	ISO Water Quality Standards ISO - Water quality WHO's Water Quality: guidelines, standards and health 924154533X.pdf (who.int)	National Water Quality Management Strategy (NWQMS) State and territory legislation and regulations.
Soil	ISO Soil Quality Standards ISO/TC 190 - Soil quality	State and territory soil quality, contamination, and management legislation and standards.
Noise	WHO Guidance on environmental noise Guidance on environmental noise (who.int)	Australian Standard AS 1055 State-based EPAs.
Chemicals/waste	Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal Basel Convention on the Control of Transboundary Movements of Hazardous Wastes UNEP - UN Environment Programme Stockholm Convention on Persistent Organic Pollutants Microsoft Word - Convention_text_E.doc (pops.int) Minamata Convention on Mercury The Minamata Convention on Mercury UNEP - UN Environment Programme The Montreal Protocol on Substances that Deplete the Ozone Layer (including the Kigali amendments) MP-consolidated-English-2019.pdf (unep.org) Rotterdam Convention on the Prior Informed Consent (PIC) Procedure for Certain Hazardous Chemicals and Pesticides in International Trade. Rotterdam Convention Text (pic.int) Global Framework on Chemicals (previously known as Strategic Approach to International Chemicals Management (SAICM)) New SAICM Text with ICCM resolutions_E.pdf ISO 11014:2009(en) Safety data sheet for chemical products ISO 11014:2009 - Safety data sheet for chemical products – Content and order of sections	Hazardous Waste (Regulation) Act 1989 (Cth) National Environment Protection (Movement of Controlled Waste between States and Territories) Measure 1998 (Cth) Industrial Chemicals Act 2019 (Cth) National Environment Protection Measure (NEPM) for Ambient Air Quality IChEMS (Schedules 5; 6 and 7)

Appendix 7: Specific Do No Significant Harm Criteria

A. Agriculture and Land



A1. Perennial and Non-perennial Crops (incl. Horticulture and Rice Production)

OBJECTIVE	CRITERIA
Climate change adaptation and resilience	Apply generic criteria.
Biodiversity and ecosystem protection	• Apply generic criteria. • An EIA should identify measures to avoid, mitigate or manage risks and impacts to soil health. • Where applicable, the cultivation of novel non-native or potentially invasive species must undergo a risk assessment before the commencement of a new activity which includes processes to monitor and manage potential negative impacts to biodiversity and ecosystems, in accordance with applicable laws or relevant international standards.
Sustainable use and protection of water resources	• Apply generic criteria. • Where applicable, a process is in place to avoid, mitigate and manage material risks and potential impacts associated with the activity that may lead to negative impacts to sensitive waterways, such as the Great Barrier Reef, to eliminate or mitigate land-based run-off, such as effluent, soil, nutrient, and chemical run-off.
Pollution prevention and control	Apply generic criteria.
Notes	International standards for generic pollution prevention and control criteria: IFC EHS Guidelines: Air emissions and ambient air quality; ISO 4001:2015; Strategic Approach to International Chemicals Management (SAICM); ISO 11014:2009(en) Safety data sheet for chemical products; ISO/TC 134, Fertilisers and soil conditioners; ISO 27065, Protective clothing – Performance requirements for protective clothing worn by operators applying liquid pesticides; FAO's International Code of Conduct on Pesticide Management; the Rotterdam Convention on the prior informed consent procedure for certain hazardous chemicals and pesticides in international trade; the Minamata Convention on Mercury; the Montreal Protocol on Substances that Deplete the Ozone Layer; and of active ingredients.
Transition to a circular economy	Apply generic criteria.
Notes	DNSH criteria do not apply to the following decarbonisation measures: • A1.7 Renewable energy • A1.8 Electric, energy-efficient, and renewable energy-compatible vehicles and equipment for on-site use • A1.9 Low emissions cold storage

A2. Animal Production (incl. Grazing)

OBJECTIVE	CRITERIA
Climate change adaptation and resilience	Apply generic criteria.
Biodiversity and ecosystem protection	• Apply generic criteria. • An EIA should identify measures to avoid, mitigate or manage risks and impacts to soil health. • Where applicable, the cultivation of novel non-native or potentially invasive species must undergo a risk assessment before the commencement of a new activity which includes processes to monitor and manage potential negative impacts to biodiversity and ecosystems, in accordance with applicable laws or relevant international standards.
Sustainable use and protection of water resources	• Apply generic criteria. • Where applicable, a process is in place to avoid, mitigate or manage material risks and potential impacts associated with the activity that may lead to negative impacts to sensitive waterways, such as the Great Barrier Reef, to eliminate or mitigate land-based run-off, such as animal waste, effluent, soil, nutrient, and chemical run-off.
Pollution prevention and control	• Apply generic criteria. • Where applicable, the activity has processes in place for the collection, storage, and treatment of animal waste and other effluent to prevent contamination of surrounding environments. • The activity has processes in place for the responsible storage, handling and disposal of antibiotics and other veterinary pharmaceuticals.
Notes	International standards for generic pollution prevention and control criteria: IFC EHS Guidelines: Air emissions and ambient air quality; ISO 4001:2015; Strategic Approach to International Chemicals Management (SAICM); ISO 11014:2009(en) Safety data sheet for chemical products; ISO/TC 134, Fertilisers and soil conditioners; ISO 27065, Protective clothing – Performance requirements for protective clothing worn by operators applying liquid pesticides; FAO's International Code of Conduct on Pesticide Management; the Rotterdam Convention on the prior informed consent procedure for certain hazardous chemicals and pesticides in international trade; the Minamata Convention on Mercury; the Montreal Protocol on Substances that Deplete the Ozone Layer; and of active ingredients.
Transition to a circular economy	Apply generic criteria.
Animal welfare	• Animal welfare is managed in accordance with applicable laws or relevant national or international standards, guidelines, and codes of practice, including developing and maintaining (as applicable) an Animal Welfare Plan, necessary documentation of animal care practices (such as the Livestock Production Assurance National Vendor Declaration (LPA NDV)), and/or the acquisition of relevant voluntary third-party certifications. • Activities related to animal husbandry practices are conducted in accordance with applicable laws or relevant national or international standards, guidelines, and codes of practice, including developing and maintaining (as applicable) an Animal Welfare Plan, necessary documentation of animal care practices (such as the LPA NDV), and/or the acquisition of relevant voluntary third-party certifications. • The activity follows responsible use of antibiotics in animal rearing, adhering to applicable laws, relevant national or international standards, guidelines, and codes of practice to prevent overuse and misuse. This includes a process for implementing protocols for antibiotic administration and the monitoring of antimicrobial resistance, such as utilising alternatives to antibiotics when appropriate. • Activities that involve animal rearing and handling are conducted in accordance with applicable laws or relevant national or international standards, guidelines, and codes of practice; including, as applicable, adherence to available guidelines for the transportation of livestock and conducting necessary assessments of the fitness to travel of animals (i.e. Fit to Load).
Notes	DNSH criteria do not apply to the following decarbonisation measures: • A2.10 Renewable energy • A2.11 Electric, energy-efficient, and renewable energy-compatible vehicles and equipment for on-site use

A3. Support Services for Agriculture and Post-harvest

OBJECTIVE	CRITERIA
Climate change adaptation and resilience	N/A
Biodiversity and ecosystem protection	N/A
Sustainable use and protection of water resources	N/A
Pollution prevention and control	N/A
Transition to a circular economy	N/A

A4. Afforestation, Restoration and Rehabilitation

OBJECTIVE	CRITERIA
Climate change adaptation and resilience	Apply generic criteria.
Biodiversity and ecosystem protection	• Apply generic criteria. • An EIA should identify measures to avoid, mitigate or manage risks and impacts to soil health. • Where applicable, the cultivation of novel non-native or potentially invasive species must undergo a risk assessment before the commencement of a new activity which includes processes to monitor and manage potential negative impacts to biodiversity and ecosystems, in accordance with applicable laws or relevant international standards.
Sustainable use and protection of water resources	• Apply generic criteria. • Where applicable, a process is in place to avoid, mitigate and manage material risks and potential impacts associated with the activity that may lead to negative impacts to sensitive waterways, such as the Great Barrier Reef, to eliminate or mitigate land-based run-off, such as animal waste, effluent, soil, nutrient, and chemical run-off.
Pollution prevention and control	Apply generic criteria.
Notes	International standards for generic pollution prevention and control criteria: IFC EHS Guidelines: Air emissions and ambient air quality; ISO 4001:2015; Strategic Approach to International Chemicals Management (SAICM); ISO 11014:2009(en) Safety data sheet for chemical products; ISO/TC 134, Fertilisers and soil conditioners; ISO 27065, Protective clothing – Performance requirements for protective clothing worn by operators applying liquid pesticides; FAO's International Code of Conduct on Pesticide Management; the Rotterdam Convention on the prior informed consent procedure for certain hazardous chemicals and pesticides in international trade; the Minamata Convention on Mercury; the Montreal Protocol on Substances that Deplete the Ozone Layer; and of active ingredients.
Transition to a circular economy	Apply generic criteria.
Notes	DNSH criteria do not apply to the following decarbonisation measures: • A4.3 Renewable energy • A4.4 Electric, energy-efficient, and renewable energy-compatible vehicles and equipment for on-site use

A5. Existing Forest Management

OBJECTIVE	CRITERIA
Climate change adaptation and resilience	Apply generic criteria.
Biodiversity and ecosystem protection	• Apply generic criteria. • An EIA should identify measures to avoid, mitigate or manage risks and impacts to soil health. • Where applicable, the cultivation of novel non-native or potentially invasive species must undergo a risk assessment before the commencement of a new activity which includes processes to monitor and manage potential negative impacts to biodiversity and ecosystems, in accordance with applicable laws or relevant international standards.
Sustainable use and protection of water resources	• Apply generic criteria. • Where applicable, a process is in place to avoid, mitigate and manage material risks and potential impacts associated with the activity that may lead to negative impacts to sensitive waterways, such as the Great Barrier Reef, to eliminate or mitigate land-based run-off, such as animal waste, effluent, soil, nutrient, and chemical run-off.
Pollution prevention and control	Apply generic criteria.
Notes	International standards for generic pollution prevention and control criteria: IFC EHS Guidelines: Air emissions and ambient air quality; ISO 4001:2015; Strategic Approach to International Chemicals Management (SAICM); ISO 11014:2009(en) Safety data sheet for chemical products; ISO/TC 134, Fertilisers and soil conditioners; ISO 27065, Protective clothing – Performance requirements for protective clothing worn by operators applying liquid pesticides; FAO's International Code of Conduct on Pesticide Management; the Rotterdam Convention on the prior informed consent procedure for certain hazardous chemicals and pesticides in international trade; the Minamata Convention on Mercury; the Montreal Protocol on Substances that Deplete the Ozone Layer; and of active ingredients.
Transition to a circular economy	Apply generic criteria.
Notes	DNSH criteria do not apply to the following decarbonisation measures: • A5.2 Renewable energy • A5.3 Electric, energy-efficient, and renewable energy-compatible vehicles and equipment for on-site use

A6. Conservation Forestry

OBJECTIVE	CRITERIA
Climate change adaptation and resilience	Apply generic criteria.
Biodiversity and ecosystem protection	• Apply generic criteria. • An EIA should identify measures to avoid, mitigate or manage risks and impacts to soil health. • Where applicable, the cultivation of novel non-native or potentially invasive species must undergo a risk assessment before the commencement of a new activity which includes processes to monitor and manage potential negative impacts to biodiversity and ecosystems, in accordance with applicable laws or relevant international standards.
Sustainable use and protection of water resources	• Apply generic criteria. • Where applicable, a process is in place to avoid, mitigate and manage material risks and potential impacts associated with the activity that may lead to negative impacts to sensitive waterways, such as the Great Barrier Reef, to eliminate or mitigate land-based run-off, such as animal waste, effluent, soil, nutrient, and chemical run-off.
Pollution prevention and control	Apply generic criteria.
Notes	International standards for generic pollution prevention and control criteria: IFC EHS Guidelines: Air emissions and ambient air quality; ISO 4001:2015; Strategic Approach to International Chemicals Management (SAICM); ISO 11014:2009(en) Safety data sheet for chemical products; ISO/TC 134, Fertilisers and soil conditioners; ISO 27065, Protective clothing – Performance requirements for protective clothing worn by operators applying liquid pesticides; FAO's International Code of Conduct on Pesticide Management; the Rotterdam Convention on the prior informed consent procedure for certain hazardous chemicals and pesticides in international trade; the Minamata Convention on Mercury; the Montreal Protocol on Substances that Deplete the Ozone Layer; and of active ingredients.
Transition to a circular economy	Apply generic criteria.
Notes	DNSH criteria do not apply to the following decarbonisation measures: • A6.2 Renewable energy • A6.3 Electric, energy-efficient, and renewable energy-compatible vehicles and equipment for on-site use

A7. Support Services for Forestry

OBJECTIVE	CRITERIA
Climate change adaptation and resilience	N/A
Biodiversity and ecosystem protection	N/A
Sustainable use and protection of water resources	N/A
Pollution prevention and control	N/A
Transition to a circular economy	N/A

A8. Restoration and Rehabilitation of Ecosystems

OBJECTIVE	CRITERIA
Climate change adaptation and resilience	Apply generic criteria.
Biodiversity and ecosystem protection	• Apply generic criteria. • An EIA should identify measures to avoid, mitigate or manage risks and impacts to soil health. • Where applicable, the cultivation of novel non-native or potentially invasive species must undergo a risk assessment before the commencement of a new activity which includes processes to monitor and manage potential negative impacts to biodiversity and ecosystems, in accordance with applicable laws or relevant international standards.
Sustainable use and protection of water resources	• Apply generic criteria. • Where applicable, a process is in place to avoid, mitigate and manage material risks and potential impacts associated with the activity that may lead to negative impacts to sensitive waterways, such as the Great Barrier Reef, to eliminate or mitigate land-based run-off, such as animal waste, effluent, soil, nutrient, and chemical run-off.
Pollution prevention and control	Apply generic criteria.
Notes	International standards for generic pollution prevention and control criteria: IFC EHS Guidelines: Air emissions and ambient air quality; ISO 4001:2015; Strategic Approach to International Chemicals Management (SAICM); ISO 11014:2009(en) Safety data sheet for chemical products; ISO/TC 134, Fertilisers and soil conditioners; ISO 27065, Protective clothing – Performance requirements for protective clothing worn by operators applying liquid pesticides; FAO's International Code of Conduct on Pesticide Management; the Rotterdam Convention on the prior informed consent procedure for certain hazardous chemicals and pesticides in international trade; the Minamata Convention on Mercury; the Montreal Protocol on Substances that Deplete the Ozone Layer; and of active ingredients.
Transition to a circular economy	N/A
Notes	DNSH criteria do not apply to the following decarbonisation measures: • A8.2 Renewable energy • A8.3 Electric, energy-efficient, and renewable energy-compatible vehicles and equipment for on-site use

A9. Savannah Management Using Indigenous Cultural Practices

OBJECTIVE	CRITERIA
Climate change adaptation and resilience	Apply generic criteria.
Biodiversity and ecosystem protection	Apply generic criteria.
Sustainable use and protection of water resources	N/A
Pollution prevention and control	N/A
Transition to a circular economy	N/A
Notes	DNSH criteria do not apply to the following decarbonisation measures: • A9.2 Renewable energy • A9.3 Electric, energy-efficient, and renewable energy-compatible vehicles and equipment for on-site use

A10. Conservation of Natural Ecosystems

OBJECTIVE	CRITERIA
Climate change adaptation and resilience	Apply generic criteria.
Biodiversity and ecosystem protection	• Apply generic criteria. • An EIA should identify measures to avoid, mitigate or manage risks and impacts to soil health. • Where applicable, the cultivation of novel non-native or potentially invasive species must undergo a risk assessment before the commencement of a new activity which includes processes to monitor and manage potential negative impacts to biodiversity and ecosystems, in accordance with applicable laws or relevant international standards.
Sustainable use and protection of water resources	• Apply generic criteria. • Where applicable, a process is in place to avoid, mitigate and manage material risks and potential impacts associated with the activity that may lead to negative impacts to sensitive waterways, such as the Great Barrier Reef, to eliminate or mitigate land-based run-off, such as animal waste, effluent, soil, nutrient, and chemical run-off.
Pollution prevention and control	Apply generic criteria.
Notes	International standards for generic pollution prevention and control criteria: IFC EHS Guidelines: Air emissions and ambient air quality; ISO 4001:2015; Strategic Approach to International Chemicals Management (SAICM); ISO 11014:2009(en) Safety data sheet for chemical products; ISO/TC 134, Fertilisers and soil conditioners; ISO 27065, Protective clothing – Performance requirements for protective clothing worn by operators applying liquid pesticides; FAO's International Code of Conduct on Pesticide Management; the Rotterdam Convention on the prior informed consent procedure for certain hazardous chemicals and pesticides in international trade; the Minamata Convention on Mercury; the Montreal Protocol on Substances that Deplete the Ozone Layer; and of active ingredients.
Transition to a circular economy	N/A
Notes	DNSH criteria do not apply to the following decarbonisation measures: • A10.2 Renewable energy • A10.3 Electric, energy-efficient, and renewable energy-compatible vehicles and equipment for on-site use

A11. Support Services for Natural Ecosystems

OBJECTIVE	CRITERIA
Climate change adaptation and resilience	N/A
Biodiversity and ecosystem protection	N/A
Sustainable use and protection of water resources	N/A
Pollution prevention and control	N/A
Transition to a circular economy	N/A

B. Minerals, Mining and Metals



B1. Lithium Ore Mining

OBJECTIVE	CRITERIA
Climate change adaptation and resilience	Apply generic criteria.
Biodiversity and ecosystem protection	Apply generic criteria.
Notes	International proxies for biodiversity and ecosystem protection criteria: IRMA, Copper Mark, RMI.
Sustainable use and protection of water resources	Apply generic criteria. In addition: Brine-based lithium entities have a management system and stewardship approach for water resources in line with global good practice frameworks such as Integrated Water Resource Management (IWRM).
Notes	International proxies for sustainable use and protection of water resources criteria: IRMA, Copper Mark, RMI.
Pollution prevention and control	Apply generic criteria. In addition: - A risk assessment has been undertaken to identify chemical and physical risks associated with existing mine waste (including brine). - Systems or processes are in place to regularly evaluate the performance of mine waste facilities to assess the effectiveness of risk management measures, including critical controls for high consequence facilities. This is to avoid, minimise, rectify, and compensate for adverse impacts from mine waste through the implementation of a system to manage waste in line with internationally recognised frameworks and good practice. - The mine does not use riverine, submarine, or lake disposal for mine wastes.
Notes	International proxies for generic pollution prevention and control criteria: RMI. International proxies for tailings: IRMA, Copper Mark.
Transition to a circular economy	Apply generic criteria.
Notes	International proxies for circular economy criteria: IRMA, Copper Mark, RMI.

B2. Nickel Ore Mining

OBJECTIVE	CRITERIA
Climate change adaptation and resilience	Apply generic criteria.
Biodiversity and ecosystem protection	Apply generic criteria.
Notes	International proxies for biodiversity and ecosystem protection criteria: IRMA, Copper Mark, RMI.
Sustainable use and protection of water resources	Apply generic criteria.
Notes	International proxies for sustainable use and protection of water resources criteria: IRMA, Copper Mark, RMI.
Pollution prevention and control	Apply generic criteria. In addition: - A risk assessment has been undertaken to identify chemical and physical risks associated with existing mine waste (including tailings) facilities. - Environmental management systems are in place, in particular for waste and emissions treatment, to ensure that harmful pollutants are not released into the environment. - Systems or processes are in place to evaluate the performance of mine waste facilities to assess the effectiveness of risk management measures, including critical controls for high consequence facilities. This is to avoid, mitigate, rectify, and compensate for adverse impacts from tailings through the implementation of a system to manage on-land tailings in line with internationally recognised frameworks. - The mine does not use riverine, submarine, or lake disposal for mine wastes. - Mining product hazards are assessed according to UN Globally Harmonised System of Hazard Classification and Labelling, or equivalent, and communicated through safety data sheets and labelling as appropriate.
Notes	International proxies for generic pollution prevention and control criteria: RMI. International proxies for tailings: IRMA, Copper Mark.
Transition to a circular economy	Apply generic criteria.
Notes	International proxies for circular economy criteria: IRMA, Copper Mark, RMI.

B3. Copper Ore Mining

OBJECTIVE	CRITERIA
Climate change adaptation and resilience	Apply generic criteria.
Biodiversity and ecosystem protection	Apply generic criteria.
Notes	International proxies for biodiversity and ecosystem protection criteria: IRMA, Copper Mark, RMI.
Sustainable use and protection of water resources	Apply generic criteria.
Notes	International proxies for sustainable use and protection of water resources criteria: IRMA, Copper Mark, RMI.
Pollution prevention and control	Apply generic criteria. In addition: • A risk assessment has been undertaken to identify chemical and physical risks associated with existing mine waste (including tailings) facilities. • Environmental management systems are in place, both for contemporaneous impacts and to mitigate potential acid mine drainage after closure. • Systems or processes are in place to evaluate the performance of mine waste facilities to assess the effectiveness of risk management measures, including critical controls for high consequence facilities. This is to avoid, mitigate, rectify, and compensate for adverse impacts from tailings through the implementation of a system to manage on-land tailings in line with internationally recognised frameworks. • The mine does not use riverine, submarine, or lake disposal for mine wastes, including acid drainage and chemical spills. • Mining product hazards are assessed according to UN Globally Harmonised System of Hazard Classification and Labelling, or equivalent, and communicated through safety data sheets and labelling as appropriate.
Notes	International proxies for generic pollution prevention and control criteria: RMI. International proxies for tailings: IRMA, Copper Mark.
Transition to a circular economy	Apply generic criteria.
Notes	International proxies for circular economy criteria: IRMA, Copper Mark, RMI.

B4. Iron Ore Mining

OBJECTIVE	CRITERIA
Climate change adaptation and resilience	Apply generic criteria.
Biodiversity and ecosystem protection	Apply generic criteria.
Notes	International proxies for biodiversity and ecosystem protection criteria: IRMA, Copper Mark, RMI.
Sustainable use and protection of water resources	Apply generic criteria.
Notes	International proxies for sustainable use and protection of water resources criteria: IRMA, Copper Mark, RMI.
Pollution prevention and control	Apply generic criteria. In addition: • A risk assessment has been undertaken to identify chemical and physical risks associated with existing mine waste (including tailings). • Systems or processes are in place to evaluate the performance of mine waste facilities to assess the effectiveness of risk management measures, including critical controls for high consequence facilities. This is to avoid, mitigate, rectify, and compensate for adverse impacts from tailings through the implementation of a system to manage on-land tailings in line with internationally recognised frameworks and good practice. • The mine does not use riverine, submarine, or lake disposal for mine wastes.
Notes	International proxies for generic pollution prevention and control criteria: RMI. International proxies for tailings: IRMA, Copper Mark.
Transition to a circular economy	Apply generic criteria. In addition: • The viability of reclamation and recycling projects where they use iron ore tailings as a source of metallic iron has been assessed. E.g. recycling iron from iron ore tailings through magnetising roasting and direct reduction.
Notes	International proxies for circular economy criteria: IRMA, Copper Mark, RMI.

B5. Generic Measures for the Mining Sector

OBJECTIVE	CRITERIA
Climate change adaptation and resilience	N/A
Biodiversity and ecosystem protection	N/A
Sustainable use and protection of water resources	N/A
Pollution prevention and control	N/A
Transition to a circular economy	N/A

C. Manufacturing and Industry



C1. Refining of Copper, Lithium and Nickel

OBJECTIVE	CRITERIA
Climate change adaptation and resilience	Apply generic criteria.
Biodiversity and ecosystem protection	Apply generic criteria.
Sustainable use and protection of water resources	Apply generic criteria.
Pollution prevention and control	Apply generic criteria. In addition: - Emissions to air (e.g. sulphur dioxide - SO₂, nitrogen oxide - NO_x, particulate matter, Total Organic Carbon (TOC), dioxins, mercury (Hg), hydrogen chloride (HCL), hydrogen fluoride (HF), Total Fluoride, and (PFCs) polyfluorinated hydrocarbons (PFCs)) are prevented/minimised as per national laws and regulations or international standards and guidelines (e.g. IFC EHS Guidelines: Air emissions and ambient air quality; ISO 14001:2015 Environmental management systems – Requirements with guidance for use; Strategic Approach to International Chemicals Management (SAICM); ISO 11014:2009(en) Safety data sheet for chemical products). - Contaminants, including toxins from heavy metals, are contained using best available technologies to prevent leaching into the environment. - Measures are in place to ensure no significant cross-media effects occur.
Transition to a circular economy	Apply generic criteria.

C2. Alumina Production

OBJECTIVE	CRITERIA
Climate change adaptation and resilience	N/A
Biodiversity and ecosystem protection	N/A
Sustainable use and protection of water resources	N/A
Pollution prevention and control	N/A
Transition to a circular economy	N/A

C3. Aluminium Smelting

OBJECTIVE	CRITERIA
Climate change adaptation and resilience	N/A
Biodiversity and ecosystem protection	N/A
Sustainable use and protection of water resources	N/A
Pollution prevention and control	N/A
Transition to a circular economy	N/A

C4. Manufacture of Hydrogen

OBJECTIVE	CRITERIA
Climate change adaptation and resilience	Apply generic criteria.
Biodiversity and ecosystem protection	Apply generic criteria.
Sustainable use and protection of water resources	Apply generic criteria. In addition: Desalinated water used in the production of hydrogen is sourced from plants powered by renewable energy and meets national energy efficiency and water quality standards. Further, wastewater discharge methods, including brine management, utilise best available technologies to eliminate or minimise negative ecological impacts on marine life.
Pollution prevention and control	Apply generic criteria. In addition: Measures are in place to ensure no significant cross-media effects occur.
Transition to a circular economy	Apply generic criteria.

C5. Manufacture of Cement

OBJECTIVE	CRITERIA
Climate change adaptation and resilience	Apply generic criteria.
Biodiversity and ecosystem protection	Apply generic criteria.
Sustainable use and protection of water resources	Apply generic criteria.
Pollution prevention and control	Apply generic criteria. In addition: - Emissions to air, water, and soil are prevented/minimised as per national laws and regulation and international standards and guidelines for the Production of Cement, Lime and Magnesium Oxide. (E.g.: IFC EHS Guidelines: Air emissions and ambient air quality; ISO 14001:2015 Environmental management systems – Requirements with guidance for use; Strategic Approach to International Chemicals Management (SAICM); ISO 11014:2009(en) Safety data sheet for chemical products). - If refuse derived fuel (RDF) is used in the production of cement, the RDF is a suitable specification that is beneficial, fit for purpose, and will not cause harm as per national and international guidelines. The following wastes must not be used and need to be managed and treated or disposed of at suitably authorised facilities: - Asbestos. - CCA treated timber. - Hazardous wastes. - Wastes with high mineral content, e.g. soils containing polycyclic aromatic hydrocarbons. - Medical waste. - Radioactive wastes. - Quarantine waste and waste of biosecurity concern. - Scheduled wastes. - Wastes that have an available and practical high-order recovery or reuse or recycling option according to the waste hierarchy. - Waste treated by immobilisation or containerisation. The combustion of the RDF must be subject to risk assessment—addressing the potential for harm to human health and the environment, and modelling and monitoring—undertaken to determine the resulting emissions to atmosphere of gas and particulates. The risk assessment should include volatile and non volatile metals, considering and detailing both the odour and design ground level concentrations, stack emission limits, and the requisite pollution control equipment. Pollution control equipment includes cooling temperature of exhaust gases and controls for polychlorinated dioxins and furans. - Measures are in place to ensure no significant cross-media effects occur.
Transition to a circular economy	Apply generic criteria. In addition: Cement manufacturing plants accept alternative fuels such as Solid Recovered Fuel (SRF) originating from waste, as well as secondary raw materials such as recycled concrete aggregates (RCA).

C6. Manufacture of Iron and Steel

OBJECTIVE	CRITERIA
Climate change adaptation and resilience	N/A
Biodiversity and ecosystem protection	N/A
Sustainable use and protection of water resources	N/A
Pollution prevention and control	N/A
Transition to a circular economy	N/A

C7. Manufacture of Nitric Acid

OBJECTIVE	CRITERIA
Climate change adaptation and resilience	Apply generic criteria.
Biodiversity and ecosystem protection	Apply generic criteria.
Sustainable use and protection of water resources	Apply generic criteria.
Pollution prevention and control	Apply generic criteria. In addition: - Emissions to air, water, and soil, including NO_x and VOCs, are prevented/minimised as per international and national standards and guidelines (e.g. IFC EHS Guidelines: Air emissions and ambient air quality; ISO 14001:2015 Environmental management systems – Requirements with guidance for use). - Wastewater effluents with high concentrations of residual nitric acid or other contaminants are managed or contained using best available technologies. - Measures are in place to ensure no significant cross-media effects occur.
Transition to a circular economy	Apply generic criteria.

C8. Manufacture of Ammonia

OBJECTIVE	CRITERIA
Climate change adaptation and resilience	Apply generic criteria.
Biodiversity and ecosystem protection	Apply generic criteria.
Sustainable use and protection of water resources	Apply generic criteria. In addition: - Water efficiency measures such as water recycling and closed-loop water systems are utilised to minimise water consumption and enhance efficiency. - Wastewater effluents with high concentrations of ammonia or other contaminants are managed or contained using best available technologies.
Pollution prevention and control	Apply generic criteria. In addition: - Ensure emissions to air, water, and soil, including NO_x and VOCs, are prevented/minimised as per international and national standards and guidelines (e.g. IFC EHS Guidelines: Air emissions and ambient air quality; ISO 14001:2015 Environmental management systems – Requirements with guidance for use). - Measures are in place to ensure no significant cross-media effects occur.
Transition to a circular economy	Apply generic criteria.

C9. Manufacture of Low Carbon Liquid Fuels

OBJECTIVE	CRITERIA
Climate change adaptation and resilience	Apply generic criteria.
Biodiversity and ecosystem protection	Apply generic criteria. In addition: Raw material feedstocks are not derived from land with high biodiversity or high carbon stock values, as defined in Principle 1: Protection of Land with High Biodiversity Value or High Carbon Stock of the most recently published version of CORSIA PLUS sustainability requirements.
Notes	International proxy for biodiversity and ecosystem protection criteria: ISCC CORSIA PLUS Principle 1: Protection of Land with High Biodiversity Value or High Carbon Stock, and Principle 2: Environmentally Responsible Production to Protect Soil, Water and Air.
Sustainable use and protection of water resources	Apply generic criteria.
Notes	International proxy for sustainable use and protection of water resources: ISCC CORSIA PLUS Principle 1: Protection of Land with High Biodiversity Value or High Carbon Stock, and Principle 2: Environmentally Responsible Production to Protect Soil, Water and Air.
Pollution prevention and control	Apply generic criteria. In addition: Ensure emissions to air, water, and soil are prevented or minimised as per international standards and guidelines (e.g. IFC EHS Guidelines: Air emissions and ambient air quality; ISO 13065:2015: Sustainability Criteria for Bioenergy).
Notes	International proxy for pollution prevention and control: ISCC CORSIA PLUS Principle 2: Environmentally Responsible Production to Protect Soil, Water and Air.
Transition to a circular economy	Apply generic criteria.
Notes	International proxy for transition to a circular economy: ISCC CORSIA PLUS Principle 2: Environmentally Responsible Production to Protect Soil, Water and Air.

C10. Manufacture of Biogas

OBJECTIVE	CRITERIA
Climate change adaptation and resilience	Apply generic criteria.
Biodiversity and ecosystem protection	Apply generic criteria. In addition: - Biogas is produced from any of the following feedstocks: - commercial and municipal food waste; - manure; - agricultural waste, including organic effluent; or - sewage sludge.
Sustainable use and protection of water resources	Apply generic criteria.
Pollution prevention and control	Apply generic criteria. In addition: - Plant emissions to air and water are within national and international guidelines (e.g. IFC EHS Guidelines: Air emissions and ambient air quality; ISO 14001:2015 Environmental management systems – Requirements with guidance for use; Strategic Approach to International Chemicals Management (SAICM); ISO 11014:2009(en) Safety data sheet for chemical products). - Emissions to air (e.g. SO_x, NO_x) after combustion of biogas are controlled, abated (when needed), and within the limits set by national legislation. - For biogas production, a gas-tight cover on the digestate storage is applied. In the case of anaerobic digestion of organic material, where the produced digestate is used as fertiliser or soil improver, either directly or after composting or any other treatment, it meets the requirements for fertilising materials set out in national rules on fertilisers or soil improvers for agricultural use. - Measures are in place to ensure no significant cross-media effects occur.
Transition to a circular economy	N/A

C11. Energy Efficiency for Industrial Facilities

OBJECTIVE	CRITERIA
Climate change adaptation and resilience	N/A
Biodiversity and ecosystem protection	N/A
Sustainable use and protection of water resources	N/A
Pollution prevention and control	N/A
Transition to a circular economy	N/A

C12. Manufacture of Renewable Energy Technologies

OBJECTIVE	CRITERIA
Climate change adaptation and resilience	Apply generic criteria.
Biodiversity and ecosystem protection	Apply generic criteria.
Sustainable use and protection of water resources	Apply generic criteria.
Pollution prevention and control	Apply generic criteria. In addition: Where applicable, vehicles do not contain lead, mercury, hexavalent chromium, or cadmium.
Transition to a circular economy	Apply generic criteria.

C13. Manufacture of Equipment for the Production of Hydrogen Through Electrolysis

OBJECTIVE	CRITERIA
Climate change adaptation and resilience	Apply generic criteria.
Biodiversity and ecosystem protection	Apply generic criteria.
Sustainable use and protection of water resources	Apply generic criteria. In addition: Emissions to air, water, and soil are prevented/minimised as per international and national standards (e.g. IFC EHS Guidelines: Air emissions and ambient air quality; ISO 14001:2015 Environmental management systems – Requirements with guidance for use; Strategic Approach to International Chemicals Management (SAICM); ISO 11014:2009(en) Safety data sheet for chemical products; ISO 19884; IEC 63341 2 ; ISO 16111).
Pollution prevention and control	Apply generic criteria.
Transition to a circular economy	Apply generic criteria.

C14. Manufacture of Low-carbon Technologies for Transport

OBJECTIVE	CRITERIA
Climate change adaptation and resilience	Apply generic criteria.
Biodiversity and ecosystem protection	Apply generic criteria.
Sustainable use and protection of water resources	Apply generic criteria.
Pollution prevention and control	Apply generic criteria. In addition: Emissions to air, water, and soil are prevented/minimised as per international standards and guidelines and in compliance with restricted chemicals and hazardous substances regulations (e.g. IFC EHS Guidelines: Air emissions and ambient air quality; ISO 14001:2015 Environmental management systems – Requirements with guidance for use; Strategic Approach to International Chemicals Management (SAICM); ISO 11014:2009(en) Safety data sheet for chemical products).
Transition to a circular economy	Apply generic criteria.

C15. Manufacture of Energy Efficiency Equipment for Buildings

OBJECTIVE	CRITERIA
Climate change adaptation and resilience	Apply generic criteria.
Biodiversity and ecosystem protection	Apply generic criteria.
Sustainable use and protection of water resources	Apply generic criteria.
Pollution prevention and control	Apply generic criteria. In addition: Emissions to air, water, and soil are prevented/minimised as per international and national standards (e.g. IFC EHS Guidelines: Air emissions and ambient air quality; ISO 14001:2015 Environmental management systems – Requirements with guidance for use; Strategic Approach to International Chemicals Management (SAICM); ISO 11014:2009(en) Safety data sheet for chemical products).
Transition to a circular economy	Apply generic criteria.

C16. Manufacture and Recycling of Batteries

OBJECTIVE	CRITERIA
Climate change adaptation and resilience	Apply generic criteria.
Biodiversity and ecosystem protection	Apply generic criteria.
Sustainable use and protection of water resources	Apply generic criteria.
Pollution prevention and control	Apply generic criteria. In addition: Ensure emissions to air, water, and soil are prevented/minimised as per international and national standards (e.g. IFC EHS Guidelines: Air emissions and ambient air quality; ISO 14001:2015 Environmental management systems – Requirements with guidance for use; Strategic Approach to International Chemicals Management (SAICM); ISO 11014:2009(en) Safety data sheet for chemical products).
Transition to a circular economy	Apply generic criteria.

C17. Manufacture of Plastics in Primary Form Through Recycling

OBJECTIVE	CRITERIA
Climate change adaptation and resilience	Apply generic criteria.
Biodiversity and ecosystem protection	Apply generic criteria.
Sustainable use and protection of water resources	Apply generic criteria.
Pollution prevention and control	Apply generic criteria. In addition: Ensure emissions to air, water, and soil are prevented/minimised as per international and national standards (e.g. IFC EHS Guidelines: Air emissions and ambient air quality; ISO 14001:2015 Environmental management systems – Requirements with guidance for use; Strategic Approach to International Chemicals Management (SAICM); ISO 11014:2009(en) Safety data sheet for chemical products).
Transition to a circular economy	Apply generic criteria.

D. Electricity Generation and Supply



D1. Energy Generation from Solar PV and CSP

OBJECTIVE	CRITERIA
Climate change adaptation and resilience	Apply generic criteria.
Biodiversity and ecosystem protection	Apply generic criteria.
Sustainable use and protection of water resources	Apply generic criteria.
Pollution prevention and control	Apply generic criteria. In addition: Potential negative impacts of the cooling system on water resources are avoided.
Transition to a circular economy	Apply generic criteria.

D2. Energy Generation from Onshore and Offshore Wind

OBJECTIVE	CRITERIA
Climate change adaptation and resilience	Apply generic criteria.
Biodiversity and ecosystem protection	Apply generic criteria.
Sustainable use and protection of water resources	Apply generic criteria.
Pollution prevention and control	Apply generic criteria. In addition, for offshore wind: - Any required mitigation measures are in place to avoid or reduce underwater noise generated by the installation of offshore wind turbines. - Measures are in place to minimise the toxicity of anti-fouling paint and biocides as per international standards and guidelines (e.g. International Convention on the Control of Harmful Anti-fouling Systems on Ships; ISO 13073).
Transition to a circular economy	Apply generic criteria.

D3. Energy Generation from Ocean Energy

OBJECTIVE	CRITERIA
Climate change adaptation and resilience	Apply generic criteria.
Biodiversity and ecosystem protection	Apply generic criteria.
Sustainable use and protection of water resources	Apply generic criteria.
Pollution prevention and control	Apply generic criteria. In addition: - Any required mitigation measures are in place to avoid or reduce underwater noise created by the generation of electricity. - Measures are in place to minimise the toxicity of anti-fouling paint and biocides as per international standards and guidelines (e.g. International Convention on the Control of Harmful Anti-fouling Systems on Ships; ISO 13073).
Transition to a circular economy	Apply generic criteria.

D4. Energy Generation from Hydropower

OBJECTIVE	CRITERIA
Climate change adaptation and resilience	Apply generic criteria.
Biodiversity and ecosystem protection	Apply generic criteria.
Sustainable use and protection of water resources	Apply generic criteria. In addition: - Construction of new hydropower should not increase river fragmentation. Consequently, refurbishment of existing hydropower plants and rehabilitation of existing barriers should be prioritised. - All necessary mitigation measures should be implemented to reach good ecological status or potential, in particular regarding ecological continuity and ecological flow. Priority should be given to Nature-based Solutions.
Pollution prevention and control	Apply generic criteria. In addition: - Discharges to water bodies during hydropower construction are avoided. - Plant is maintained for high reliability to reduce potential loss of containment and minimise pollution.
Transition to a circular economy	Apply generic criteria.

D5. Geothermal Energy Generation

OBJECTIVE	CRITERIA
Climate change adaptation and resilience	Apply generic criteria.
Biodiversity and ecosystem protection	Apply generic criteria.
Sustainable use and protection of water resources	Apply generic criteria.
Pollution prevention and control	Apply generic criteria. In addition: - Discharges to water bodies should comply with individual license conditions for specific operations, where applicable, and/or national threshold values in line with the international standards and guidelines. - The operations of high-enthalpy geothermal energy systems ensures that adequate abatement systems are in place to comply with international standards and guidelines (e.g. IFC's Environmental, Health, and Safety Guidelines for Geothermal Power Generation; ISO 14001:2015 Environmental management systems – Requirements with guidance for use). - Thermal anomalies associated with the discharge of waste heat should not exceed 3°K for groundwater environments or 1.5°K for surface water environments, respectively.
Transition to a circular economy	Apply generic criteria.

D6. Energy Generation from Bioenergy

OBJECTIVE	CRITERIA
Climate change adaptation and resilience	Apply generic criteria.
Biodiversity and ecosystem protection	Apply generic criteria. In addition: • Feedstocks used to produce modern bioenergy comply with one of the following standards: — Forest Stewardship Council (FSC). — Biomass Biofuels voluntary scheme (2BSvs). — Bonsucro (Better Sugarcane Initiative). — Roundtable of Sustainable Biomaterials (RSB). — Round Table on Responsible Soy (RTRS). — International Sustainability and Carbon Certification (ISCC and/or ISCC PLUS).
Sustainable use and protection of water resources	Apply generic criteria.
Pollution prevention and control	Apply generic criteria. In addition: • Plant emissions to air and water are within national and international guidelines (e.g. IFC EHS Guidelines: Air emissions and ambient air quality; ISO 14001:2015 Environmental management systems – Requirements with guidance for use; Strategic Approach to International Chemicals Management (SAICM); ISO 11014:2009(en) Safety data sheet for chemical products). • For anaerobic digestion of organic material, where the produced digestate is used as fertiliser or soil improver, either directly or after composting or any other treatment, it meets the requirements for fertilising materials set out in national standards on fertilisers or soil improvers for agricultural use. • Measures are in place to ensure no significant cross-media effects occur.
Transition to a circular economy	Apply generic criteria.

D7. Storage of Electricity

OBJECTIVE	CRITERIA
Climate change adaptation and resilience	Apply generic criteria.
Biodiversity and ecosystem protection	Apply generic criteria.
Sustainable use and protection of water resources	Apply generic criteria. In addition, for pumped hydropower storage connected to a river body: • The activity also complies with the specific DNSH criteria for energy generation from hydropower.
Pollution prevention and control	Apply generic criteria. In addition: • The activity complies with international standards, particularly if the storage is above five tonnes (e.g. ISO 19884 Gaseous Hydrogen – Cylinders and tubes for stationary storage; IEC 63341-2 Railway applications – Rolling stock – Fuel cell systems for propulsion - Part 2: Hydrogen storage system; ISO 16111 Transportable Gas Storage Devices - Hydrogen Absorbed in Reversible Metal Hydrides).
Transition to a circular economy	Apply generic criteria.

D8. District Heating and Cooling Systems

OBJECTIVE	CRITERIA
Climate change adaptation and resilience	Apply generic criteria.
Biodiversity and ecosystem protection	Apply generic criteria.
Sustainable use and protection of water resources	Apply generic criteria.
Pollution prevention and control	Apply generic criteria.
Transition to a circular economy	Apply generic criteria.

D9. Production of Heating or Cooling from Waste Heat

OBJECTIVE	CRITERIA
Climate change adaptation and resilience	Apply generic criteria.
Biodiversity and ecosystem protection	Apply generic criteria.
Sustainable use and protection of water resources	Apply generic criteria.
Pollution prevention and control	Apply generic criteria.
Transition to a circular economy	Apply generic criteria.

D10. Transmission and Distribution of Electricity

OBJECTIVE	CRITERIA
Climate change adaptation and resilience	Apply generic criteria.
Biodiversity and ecosystem protection	Apply generic criteria. In addition, for underline powerlines: Avoid routings that would have a significant impact on marine and terrestrial ecosystems.
Sustainable use and protection of water resources	N/A
Pollution prevention and control	Apply generic criteria. In addition, for overhead high-voltage lines: - Respect applicable norms and regulations to limit impact of electromagnetic radiation on human health (e.g. 1998 ICNIRP (International Commission on Non-Ionizing Radiation Protection)). - Do not use PCBs Polychlorinated Biphenyls.
Transition to a circular economy	Apply generic criteria.

D11. Transmission and Distribution of Renewable and Low-carbon Gases

OBJECTIVE	CRITERIA
Climate change adaptation and resilience	Apply generic criteria.
Biodiversity and ecosystem protection	Apply generic criteria.
Sustainable use and protection of water resources	Apply generic criteria.
Pollution prevention and control	Apply generic criteria.
Transition to a circular economy	Apply generic criteria.

D12. Remote and Micro-grid Systems

OBJECTIVE	CRITERIA
Climate change adaptation and resilience	Apply generic criteria.
Biodiversity and ecosystem protection	Apply generic criteria.
Sustainable use and protection of water resources	Apply generic criteria.
Pollution prevention and control	Apply generic criteria. In addition: Potential negative impacts of the cooling system on water resources are avoided.
Transition to a circular economy	Apply generic criteria.

E. Construction and Buildings



E1. Construction of New Buildings

The following DNSH criteria apply to all new construction activities involving buildings with a GFA > 5,000m².

OBJECTIVE	CRITERIA
Climate change adaptation and resilience	Apply generic criteria.
Notes	The pre-screen checklist from Green Star Buildings is an acceptable proxy for applying the generic DNSH criteria for climate adaptation and resilience.
Biodiversity and ecosystem protection	Apply generic criteria. In addition: • The activity must not be constructed on Prime Agricultural Land unless the activity is dedicated to the surrounding agricultural enterprise. • All timber must be sustainably sourced or reused.
Notes	International proxies for the requirement that all timber be sustainably sourced and reused: FSC and PEFC.
Sustainable use and protection of water resources	Apply generic criteria. In addition: • Systems are in place to measure and monitor water use. • Where applicable, water consumption is optimised through the use of water-efficient cooling systems (e.g. air side economisers; liquid cooling systems; or closed loop cooling systems). • Rainwater harvesting and recycling systems are utilised and potable water use is reduced where appropriate to the site.
Pollution prevention and control	Apply generic criteria.
Transition to a circular economy	Apply generic criteria. In addition: • At least 80 percent of construction waste by weight is to be diverted from landfill through reuse, recycling, or recovery processes.

E2. Acquisition and Ownership

OBJECTIVE	CRITERIA
Climate change adaptation and resilience	N/A
Biodiversity and ecosystem protection	N/A
Sustainable use and protection of water resources	N/A, unless the acquisition and ownership relates to a data centre. For data centres: • Systems are in place to measure and monitor water use. • Water consumption is optimised through the use of water-efficient cooling systems (e.g. air side economisers; liquid cooling systems; or closed loop cooling systems). • Rainwater harvesting and recycling systems are utilised and potable water use is reduced where appropriate to the site.
Pollution prevention and control	N/A
Transition to a circular economy	N/A

E3. Renovation and Upgrades

The following DNSH criteria apply to all renovation and upgrade activities involving works with a capital investment value of > \$5,000,000 (AUD).

OBJECTIVE	CRITERIA
Climate change adaptation and resilience	Apply generic criteria.
Notes	The pre-screen checklist from Green Star Buildings is an acceptable proxy for applying the generic DNSH criteria for climate adaptation and resilience.
Biodiversity and ecosystem protection	N/A
Sustainable use and protection of water resources	Apply generic criteria. In addition: • Systems are in place to measure and monitor water use. • Where applicable, water consumption is optimised through the use of water-efficient cooling systems (e.g. air side economisers; liquid cooling systems; or closed loop cooling systems). • Rainwater harvesting and recycling systems are utilised and potable water use is reduced where appropriate to the site.
Pollution prevention and control	Apply generic criteria.
Transition to a circular economy	Apply generic criteria. In addition: • At least 80 percent of construction waste by weight is to be diverted from landfill through reuse, recycling, or recovery processes.

E4. Replacement of Major Plant and Equipment

OBJECTIVE	CRITERIA
Climate change adaptation and resilience	N/A
Biodiversity and ecosystem protection	N/A
Sustainable use and protection of water resources	N/A
Pollution prevention and control	N/A
Transition to a circular economy	N/A

E5. Residential and Small Commercial Upgrades

The following DNSH criteria apply to all renovation and upgrade activities involving works with a capital investment value of > \$5,000,000 (AUD).

OBJECTIVE	CRITERIA
Climate change adaptation and resilience	N/A
Biodiversity and ecosystem protection	N/A
Sustainable use and protection of water resources	Apply generic criteria. In addition: • Systems are in place to measure and monitor water use. • Where applicable, water consumption is optimised through the use of water-efficient cooling systems (e.g. air side economisers; liquid cooling systems; or closed loop cooling systems). • Rainwater harvesting and recycling systems are utilised and potable water use is reduced where appropriate to the site.
Pollution prevention and control	Apply generic criteria.
Transition to a circular economy	Apply generic criteria. In addition: • At least 80 percent of construction waste by weight is to be diverted from landfill through reuse, recycling, or recovery processes.

E6. Supply of Equipment for Buildings

OBJECTIVE	CRITERIA
Climate change adaptation and resilience	N/A
Biodiversity and ecosystem protection	N/A
Sustainable use and protection of water resources	N/A
Pollution prevention and control	N/A
Transition to a circular economy	N/A

E7. Infrastructure Supporting Low Emissions Precincts

OBJECTIVE	CRITERIA
Climate change adaptation and resilience	N/A
Biodiversity and ecosystem protection	N/A
Sustainable use and protection of water resources	N/A
Pollution prevention and control	N/A
Transition to a circular economy	N/A

F. Transport



I1. Road Passenger Transport – Motorbikes, Cars and Light Commercial Vehicles

OBJECTIVE	CRITERIA
Climate change adaptation and resilience	N/A
Biodiversity and ecosystem protection	N/A
Sustainable use and protection of water resources	N/A
Pollution prevention and control	Apply generic criteria.
Transition to a circular economy	Apply generic criteria. In particular: - Measures are in place to manage waste during the use phase (maintenance) and the end-of-life of the fleet. This includes through the reuse and recycling of batteries and electronics (in particular critical raw materials therein), in accordance with the waste hierarchy. - Available tyre product stewardship schemes are utilised.

I2. Road Passenger Bus Transport

OBJECTIVE	CRITERIA
Climate change adaptation and resilience	N/A
Biodiversity and ecosystem protection	N/A
Sustainable use and protection of water resources	N/A
Pollution prevention and control	Apply generic criteria.
Transition to a circular economy	Apply generic criteria. In particular: - Measures are in place to manage waste during the use phase (maintenance) and the end-of-life of the fleet. This includes through the reuse and recycling of batteries and electronics (in particular critical raw materials therein), in accordance with the waste hierarchy. - Available tyre product stewardship schemes are utilised.

I3. Micromobility

OBJECTIVE	CRITERIA
Climate change adaptation and resilience	N/A
Biodiversity and ecosystem protection	N/A
Sustainable use and protection of water resources	N/A
Pollution prevention and control	Apply generic criteria.
Transition to a circular economy	Apply generic criteria. In particular: Measures are in place to manage waste during the use phase (maintenance) and the end-of-life of the fleet. This includes through the reuse and recycling of batteries and electronics (in particular critical raw materials therein), in accordance with the waste hierarchy.

14. Road Freight Transport – Rigid Vehicles

OBJECTIVE	CRITERIA
Climate change adaptation and resilience	N/A
Biodiversity and ecosystem protection	N/A
Sustainable use and protection of water resources	N/A
Pollution prevention and control	Apply generic criteria.
Transition to a circular economy	Apply generic criteria. In particular: - Measures are in place to manage waste during the use phase (maintenance) and the end-of-life of the fleet. This includes through the reuse and recycling of batteries and electronics (in particular critical raw materials therein), in accordance with the waste hierarchy. - Available tyre product stewardship schemes are utilised.

15. Road Freight Transport – Articulated Vehicles

OBJECTIVE	CRITERIA
Climate change adaptation and resilience	N/A
Biodiversity and ecosystem protection	N/A
Sustainable use and protection of water resources	N/A
Pollution prevention and control	Apply generic criteria.
Transition to a circular economy	Apply generic criteria. In particular: - Measures are in place to manage waste during the use phase (maintenance) and the end-of-life of the fleet. This includes through the reuse and recycling of batteries and electronics (in particular critical raw materials therein), in accordance with the waste hierarchy. - Available tyre product stewardship schemes are utilised.

16. Passenger and Freight Air Transport

OBJECTIVE	CRITERIA
Climate change adaptation and resilience	N/A
Biodiversity and ecosystem protection	N/A
Sustainable use and protection of water resources	N/A
Pollution prevention and control	Apply generic criteria. In addition: - The aircraft complies with the following amendments to the Chicago Convention on Civil Aviation: - Amendment 13 of Volume I (noise), Chapter 14, Annex 16; and - Amendment 10 of Volume II (engine emissions), Chapters 2 and 4 of Annex 16.
Transition to a circular economy	Apply generic criteria. In particular: Measures are in place to prevent the generation of waste in the use phase (maintenance, operation of air transport services with regards to catering waste) and manage any remaining waste in accordance with the waste hierarchy. This includes through the reuse and recycling of batteries and electronics (in particular critical raw minerals therein).

17. Air Transport Ground Handling Operations

OBJECTIVE	CRITERIA
Climate change adaptation and resilience	Apply generic criteria.
Biodiversity and ecosystem protection	N/A
Sustainable use and protection of water resources	Apply generic criteria. In addition: De-icing measures and discharge controls are in place at an airport level to reduce the environmental impact of de-icing agents and runoff or waste from de-icing activities on watercourses. For example, the use of more environmentally sustainable chemicals, glycol recovery, and surface water treatment.
Pollution prevention and control	Apply generic criteria. In addition: - The aircraft complies with the following amendments to the Chicago Convention on Civil Aviation: - Amendment 13 of Volume I (noise), Chapter 14, Annex 16; and - Amendment 10 of Volume II (engine emissions), Chapters 2 and 4 of Annex 16.
Transition to a circular economy	Apply generic criteria. In particular: Measures are in place to prevent the generation of waste in the use phase (maintenance, operation of air transport services with regards to catering waste) and manage any remaining waste in accordance with the waste hierarchy. This includes through the reuse and recycling of batteries and electronics (in particular critical raw minerals therein).

18. Urban and Suburban Passenger Rail Transport

OBJECTIVE	CRITERIA
Climate change adaptation and resilience	N/A
Biodiversity and ecosystem protection	Apply generic criteria.
Sustainable use and protection of water resources	Apply generic criteria.
Pollution prevention and control	Apply generic criteria. In addition: Noise and vibrations of rolling stock are minimised in line with noise regulations.
Transition to a circular economy	Apply generic criteria. In particular: Measures are in place to manage waste during the use phase (maintenance) and the end-of-life of the fleet. This includes through the reuse and recycling of batteries and electronics (in particular critical raw materials therein), in accordance with the waste hierarchy.

19. Interurban Passenger Rail Transport

OBJECTIVE	CRITERIA
Climate change adaptation and resilience	N/A
Biodiversity and ecosystem protection	Apply generic criteria.
Sustainable use and protection of water resources	Apply generic criteria.
Pollution prevention and control	Apply generic criteria. In addition: Noise and vibrations of rolling stock are minimised in line with noise regulations.
Transition to a circular economy	Apply generic criteria. In particular: Measures are in place to manage waste during the use phase (maintenance) and the end-of-life of the fleet. This includes through the reuse and recycling of batteries and electronics (in particular critical raw materials therein), in accordance with the waste hierarchy.

110. Freight Rail Transport

OBJECTIVE	CRITERIA
Climate change adaptation and resilience	N/A
Biodiversity and ecosystem protection	Apply generic criteria.
Sustainable use and protection of water resources	Apply generic criteria.
Pollution prevention and control	Apply generic criteria. In addition: Noise and vibrations of rolling stock are minimised in line with noise regulations.
Transition to a circular economy	Apply generic criteria. In particular: Measures are in place to manage waste during the use phase (maintenance) and the end-of-life of the fleet. This includes through the reuse and recycling of batteries and electronics (in particular critical raw materials therein), in accordance with the waste hierarchy.

111. Inland Passenger and Freight Water Transport

OBJECTIVE	CRITERIA
Climate change adaptation and resilience	N/A
Biodiversity and ecosystem protection	Apply generic criteria.
Sustainable use and protection of water resources	Apply generic criteria. In addition: Measures are in place to ensure the activity does not lead to releases of ballast water containing aquatic invasive species.
Pollution prevention and control	Apply generic criteria.
Transition to a circular economy	Apply generic criteria. In particular: Measures are in place to manage waste during the use phase (maintenance) and the end-of-life of the fleet. This includes through the reuse and recycling of batteries and electronics (in particular critical raw materials therein), in accordance with the waste hierarchy.

112. Maritime Passenger and Freight Water Transport

OBJECTIVE	CRITERIA
Climate change adaptation and resilience	N/A
Biodiversity and ecosystem protection	Apply generic criteria. In addition: Underwater noise pollution is mitigated, consistent with the International Maritime Organization's (IMO) Guidelines for the Reduction of Underwater Noise.
Sustainable use and protection of water resources	Apply generic criteria. In addition: - Measures are in place to ensure the activity does not lead to releases of ballast water containing non indigenous species (consistent with the International Convention for the Control and Management of Ships' Ballast Water and Sediments (BWM)). - Measures are in place to prevent the introduction of non-indigenous species through biofouling of hull and niche areas of ships (consistent with best practices identified in the IMO's Biofouling Guidelines).
Pollution prevention and control	Apply generic criteria. In addition: - With respect to managing waste and reducing legal discharges, the ship is operated in accordance with Annex V the International Convention for the Prevention of Pollution from Ships (the IMO MARPOL Convention). - With respect to the reduction of sulphur oxides emissions and particulate matters, vessels comply with Regulation 14 of Annex VI the IMO MARPOL Convention. - With respect to nitrogen oxides (NOx) emissions, vessels comply with Regulation 13 of Annex VI of the IMO MARPOL Convention. Tier II NOx requirement applies to ships constructed after 2011. Only while operating in NOx emission control areas established under IMO rules, ships constructed after 1 January 2016 comply with stricter engine requirements (Tier III) reducing NOx emissions. - Discharges of black and grey water comply with Annex IV of the IMO MARPOL Convention. - Measures are in place to minimise the toxicity of anti-fouling paint and biocides as per international standards and guidelines (e.g. International Convention on the Control of Harmful Anti-fouling Systems on Ships; ISO 13073).
Transition to a circular economy	Apply generic criteria. In particular: Measures are in place to manage waste during the use phase (maintenance) and the end-of-life of the fleet. This includes through the reuse and recycling of batteries and electronics (in particular critical raw materials therein), in accordance with the waste hierarchy.

113. Vessels for Port Operations

OBJECTIVE	CRITERIA
Climate change adaptation and resilience	Apply generic criteria.
Biodiversity and ecosystem protection	Apply generic criteria. In addition: Measures are in place to minimise underwater noise pollution, consistent with the IMO Guidelines for the Reduction of Underwater Noise.
Sustainable use and protection of water resources	Apply generic criteria. In addition: - Measures are in place to ensure the activity does not lead to releases of ballast water containing non indigenous species (consistent with the International Convention for the Control and Management of Ships' Ballast Water and Sediments (BWM)). - Measures are in place to prevent the introduction of non-indigenous species through biofouling of hull and niche areas of ships (consistent with best practices identified in the International Maritime Organization's (IMO) Biofouling Guidelines).
Pollution prevention and control	Apply generic criteria. In addition: - With respect to managing waste and reducing legal discharges, the ship is operated in accordance with Annex V of the International Convention for the Prevention of Pollution from Ships (the IMO MARPOL Convention). - With respect to the reduction of sulphur oxides emissions and particulate matters, vessels comply with Regulation 14 of Annex VI of the IMO MARPOL Convention. - With respect to nitrogen oxides (NOx) emissions, vessels comply with Regulation 13 of Annex VI of the IMO MARPOL Convention. Tier II NOx requirement applies to ships constructed after 2011. Only while operating in NOx emission control areas established under IMO rules, ships constructed after 1 January 2016 comply with stricter engine requirements (Tier III) reducing NOx emissions. - Discharges of black and grey water comply with Annex IV of the IMO MARPOL Convention. - Measures are in place to minimise the toxicity of anti-fouling paint and biocides as per international standards and guidelines (e.g. International Convention on the Control of Harmful Anti-fouling Systems on Ships; ISO 13073).
Transition to a circular economy	Apply generic criteria. In particular: Measures are in place to manage waste during the use phase (maintenance) and the end-of-life of the fleet. This includes through the reuse and recycling of batteries and electronics (in particular critical raw materials therein), in accordance with the waste hierarchy.

I14. Low-carbon Road Transport Infrastructure

OBJECTIVE	CRITERIA
Climate change adaptation and resilience	Apply generic criteria.
Biodiversity and ecosystem protection	Apply generic criteria. In addition: Wildlife hazard management procedures are in place to minimise wildlife strikes. For example, fences along areas with high strike risk; and viaducts, tunnels, overpasses and bridges in high strike risk areas.
Sustainable use and protection of water resources	Apply generic criteria.
Pollution prevention and control	Apply generic criteria. In addition: Measures are in place to minimise noise and vibrations, dust and other pollutants during the construction, renewal, and upgrade of infrastructure, consistent with applicable laws and relevant international standards (e.g. ISO 2887:2020; ISO ISO/TS 21928-2:2023, Sustainability in buildings and civil engineering works – Sustainability indicators).
Transition to a circular economy	Apply generic criteria. In addition: - Re-used parts and recycled materials are used during the renewal, upgrade, and construction of infrastructure. - At least 80 percent (by weight) of non-hazardous construction and demolition waste (excluding naturally occurring material) generated on the construction site must be prepared for re-use, recycling, and other material recovery, including backfilling operations using waste to substitute other materials.

I15. Micromobility Infrastructure

OBJECTIVE	CRITERIA
Climate change adaptation and resilience	Apply generic criteria.
Biodiversity and ecosystem protection	Apply generic criteria. In addition: Wildlife hazard management procedures are in place to minimise wildlife strikes. For example, fences along areas with high strike risk; and viaducts, tunnels, overpasses and bridges in high strike risk areas.
Sustainable use and protection of water resources	Apply generic criteria.
Pollution prevention and control	Apply generic criteria. In addition: Measures are in place to minimise noise and vibrations, dust and other pollutants during the construction, renewal, and upgrade of infrastructure, consistent with applicable laws and relevant international standards (e.g. ISO 2887:2020; ISO ISO/TS 21928-2:2023, Sustainability in buildings and civil engineering works – Sustainability indicators).
Transition to a circular economy	Apply generic criteria. In addition: - Re-used parts and recycled materials are used during the renewal, upgrade, and construction of infrastructure. - At least 80 percent (by weight) of non-hazardous construction and demolition waste (excluding naturally occurring material) generated on the construction site must be prepared for re-use, recycling, and other material recovery, including backfilling operations using waste to substitute other materials.

116. Low-carbon Public Transport Infrastructure

OBJECTIVE	CRITERIA
Climate change adaptation and resilience	Apply generic criteria.
Biodiversity and ecosystem protection	Apply generic criteria. In addition: Wildlife hazard management procedures are in place to minimise wildlife strikes. For example, fences along areas with high strike risk; and viaducts, tunnels, overpasses and bridges in high strike risk areas.
Sustainable use and protection of water resources	Apply generic criteria.
Pollution prevention and control	Apply generic criteria. In addition: Measures are in place to minimise noise and vibrations, dust and other pollutants during the construction, renewal, and upgrade of infrastructure, consistent with applicable laws and relevant international standards (e.g. ISO 2887:2020; ISO ISO/TS 21928-2:2023, Sustainability in buildings and civil engineering works – Sustainability indicators).
Transition to a circular economy	Apply generic criteria. In addition: - Re-used parts and recycled materials are used during the renewal, upgrade, and construction of infrastructure. - At least 80 percent (by weight) of non-hazardous construction and demolition waste (excluding naturally occurring material) generated on the construction site must be prepared for re-use, recycling, and other material recovery, including backfilling operations using waste to substitute other materials.

117. Low-carbon Air Transport Infrastructure

OBJECTIVE	CRITERIA
Climate change adaptation and resilience	Apply generic criteria.
Biodiversity and ecosystem protection	Apply generic criteria. In addition: - Measures are in place to prevent the spread of invasive plants through proper maintenance. - Wildlife hazard management and monitoring procedures are in place, consistent with applicable laws and International Civil Aviation Organisation Doc 9137.
Sustainable use and protection of water resources	Apply generic criteria.
Pollution prevention and control	Apply generic criteria. In addition: Measures are in place to minimise noise and vibrations, dust and other pollutants during the construction, renewal, and upgrade of infrastructure, consistent with applicable laws and relevant international standards (e.g. ISO 2887:2020; ISO ISO/TS 21928-2:2023, Sustainability in buildings and civil engineering works – Sustainability indicators).
Transition to a circular economy	Apply generic criteria. In addition: - Re-used parts and recycled materials are used during the renewal, upgrade, and construction of infrastructure. - At least 80 percent (by weight) of non-hazardous construction and demolition waste (excluding naturally occurring material) generated on the construction site must be prepared for re-use, recycling, and other material recovery, including backfilling operations using waste to substitute other materials.

118. Low-carbon Rail Transport Infrastructure

OBJECTIVE	CRITERIA
Climate change adaptation and resilience	Apply generic criteria.
Biodiversity and ecosystem protection	Apply generic criteria. In addition: Wildlife hazard management procedures are in place to minimise wildlife strikes. For example, fences along areas with high strike risk; and viaducts, tunnels, overpasses and bridges in high strike risk areas.
Sustainable use and protection of water resources	Apply generic criteria.
Pollution prevention and control	Apply generic criteria. In addition: Measures are in place to minimise noise and vibrations, dust and other pollutants during the construction, renewal, and upgrade of infrastructure, consistent with applicable laws and relevant international standards (e.g. ISO 2887:2020; ISO ISO/TS 21928-2:2023, Sustainability in buildings and civil engineering works – Sustainability indicators).
Transition to a circular economy	Apply generic criteria. In addition: - Re-used parts and recycled materials are used during the renewal, upgrade, and construction of infrastructure. - At least 80 percent (by weight) of non-hazardous construction and demolition waste (excluding naturally occurring material) generated on the construction site must be prepared for re-use, recycling, and other material recovery, including backfilling operations using waste to substitute other materials.

119. Low-carbon Water Transport Infrastructure

OBJECTIVE	CRITERIA
Climate change adaptation and resilience	Apply generic criteria.
Biodiversity and ecosystem protection	Apply generic criteria. In addition: Measures are in place to prevent the spread of invasive plants through proper maintenance.
Sustainable use and protection of water resources	Apply generic criteria.
Pollution prevention and control	Apply generic criteria. In addition: Measures are in place to minimise noise and vibrations, dust and other pollutants during the construction, renewal, and upgrade of infrastructure, consistent with applicable laws and relevant international standards (e.g. ISO 2887:2020; ISO ISO/TS 21928-2:2023, Sustainability in buildings and civil engineering works – Sustainability indicators).
Transition to a circular economy	Apply generic criteria. In addition: - Re-used parts and recycled materials are used during the renewal, upgrade, and construction of infrastructure. - At least 80 percent (by weight) of non-hazardous construction and demolition waste (excluding naturally occurring material) generated on the construction site must be prepared for re-use, recycling, and other material recovery, including backfilling operations using waste to substitute other materials.

Appendix 8: Minimum Social Safeguards Guidance

Corporate governance

1. The entity demonstrates a commitment to implementing high quality corporate governance, including for environmental and social matters.

Indicators	Guidance	Alignment with existing standards and frameworks
1.1 The entity develops and applies good corporate governance principles and effective self-regulatory practices and management systems that foster a relationship of confidence and mutual trust between the entity and the societies in which it operates.	The entity publicly commits to respecting the OECD Guidelines and/or UNGPs.	OECD Guidelines, Chapter 2, General Policies 6 and 7 UNGP 11 and 12 UNGPRF A1 GRI 103-2

2. The entity's board and/or management is qualified and adequately structured to oversee the entity's strategy, management and performance.

Indicators	Guidance	Alignment with existing standards and frameworks
2.1 The entity has a board and/or management of effective composition and size with clearly delineated roles and responsibilities to adequately implement its corporate governance policies.	The entity has one or more documents setting out: a) the roles and responsibilities of its board and/or management, including in relation to the oversight of climate, environmental, and/or social issues that materially affect the entity; b) those matters expressly reserved to the board and those delegated to management; and c) its process for periodically evaluating the performance of its board and/or management. For listed entities, this document is a board charter or similar.	IFC Corporate Governance Methodology UNGP 19 UNGPRF A2 and A2.1 GRI 102-19 and 102-20 ASX Corporate Governance Principles

3. The entity's internal controls, systems and training are sufficient to ensure compliance with relevant laws and regulations, including those related to anti-bribery and corruption; fair competition and taxation; and consumer protection.

Indicators	Guidance	Alignment with existing standards and frameworks
3.1 The entity has developed and adopted adequate policies and procedures for preventing, detecting and addressing bribery and other forms of corruption.	The entity has an anti-bribery and corruption policy and procedures in place that are tailored and proportionate to the entity's size, operations and risk exposure and overseen by the entity's directors and/or management. The entity's anti-bribery and corruption policy can be a stand-alone policy or form part of its code of conduct. The policy acknowledges the serious criminal and civil penalties that may be incurred and the reputational damage that may be done if the entity is involved in bribery or corruption, and prohibits conduct that could amount to bribery or corruption. It also outlines appropriate controls around political donations and/or offering or accepting gifts; and requires breaches of the policy to be reported to the appropriate person or body within the entity. The entity's anti-bribery and corruption procedures enable it to prevent, track, investigate and respond to allegations or incidents relating to bribery and corruption and may include risk assessment and due-diligence processes, whistleblowing mechanisms and investigative procedures, as well as regular communication and training. The entity's anti-bribery and corruption policy and procedures are periodically reviewed for effectiveness.	SASB Topic: Business Ethics & Transparency (Mining Industry) EM-MM-510a.1. (Description of the management system for prevention of corruption and bribery throughout the value chain.) ESRS G2 28,30 ASX Corporate Governance Principles <i>Criminal Code Act 1995</i> (Cth) Attorney-General's Department; Guidance on Adequate procedures to prevent the commission of foreign bribery.
3.2 The entity has robust systems in place to ensure compliance with the letter and spirit of the tax law and regulations of the countries in which it operates.	The entity treats tax governance and tax compliance as important elements of its oversight and broader risk management systems. In particular, the board or senior management has tax risk management strategies and/or systems in place - including assurance processes where applicable - to ensure that the financial, regulatory and reputational risks associated with taxation are fully identified and evaluated.	OECD Guidelines, Chapter XI.1, XI.2. GRI 207-2 ESRS 2 31 (a)
3.3 The entity incorporates sustainability considerations into its guidelines/criteria for sourcing goods and services, to account for significant risks associated with environmental and social externalities created by suppliers through their operational activities.	The entity has a process for screening, selecting, monitoring, and engaging with suppliers on their environmental and social impacts that is proportionate to the entity's size, operations and risk exposure.	GRI 414 SASB: Labour Conditions in the Supply Chain; Raw Materials Sourcing
3.4 The entity regularly implements communication and training programs to raise awareness of, and support compliance with, anti-bribery, corruption and fair competition laws and policies among employees and persons or entities linked by a business relationship.	The entity delivers communication and training on anti-corruption, bribery and fair competition to its management and employees in a form and frequency that the entity deems necessary to build capacity. Training promotes employee awareness of the importance of compliance with all applicable laws and regulations and covers the entity's commitments and expectations for employees and other business relationships.	ASX Corporate Governance Principles. OECD Guidelines, X.4. GRI 205, ESRS G3 40,42 SASB Topic: Business Ethics & Transparency (Mining Industry) Crimes Legislation Amendment (Combating Foreign Bribery) Act 2024 (Cth)

Indicators	Guidance	Alignment with existing standards and frameworks
3.5 The entity protects consumer privacy by ensuring it collects and uses consumer data in a lawful manner and takes all reasonable measures to safeguard the personal data it collects, stores, processes and disseminates.	Where an entity collects or uses consumer data, the entity has a system for identifying and addressing data security risks, including regular risk assessments of its data security systems, and takes necessary actions to mitigate any identified risks. The entity also discloses any incidents of violation of customer protections that have been reported or confirmed, including the remedial action(s) taken.	OECD Guidelines VIII.6 SASB topic: Data Security GRI 418 <i>Privacy Act 1988</i> (Cth)

4. The entity has policies and mechanisms in place to enable effective stakeholder engagement.

Indicators	Guidance	Alignment with existing standards and frameworks
4.1 The entity's board and/or management recognises that the entity is dependent on its social licence to operate and therefore relies on a range of stakeholders (including communities, consumers, suppliers, employees, governments, investors, regulators and suppliers) to operate and succeed.	The entity has clearly identified its key stakeholders and has a strategy or processes in place to engage with them and report material issues to the board and/or management.	ACSI Governance Guidelines ASX Corporate Governance Principles
4.2 The entity's board or management ensures the entity provides stakeholders with access to an operational grievance mechanism(s) or mechanisms that allows them to raise and seek resolution or remedy for grievances that may occur in relation to the entity's operations or actions.	The entity has an operational grievance mechanism(s) in place for stakeholders to address complaints and provide appropriate resolutions. The grievance mechanism(s) is legitimate, accessible, predictable, equitable, transparent, rights-compatible and a source of continuous learning in line with the UNGPs. The mechanism addresses a range of grievances, including human rights issues and whistleblowing, while ensuring access to other judicial or non-judicial mechanisms is not impeded. Refer to the Human Rights and First Nations criteria and indicators for further guidance on grievance mechanisms concerning human rights issues and First Nations.	UNGP Guiding Principle 31 OECD Guidelines, Chapter VIII. OECD/LEGAL/-356

5. The entity discloses whether the entity, its board or management, including the board or management of any subsidiaries, has been convicted of corruption or bribery, breach of competition law, tax evasion or tax avoidance.

Indicators	Guidance	Alignment with existing standards and frameworks
5.1 The entity discloses, without prejudice to national laws and requirements, any misconduct related to bribery and other forms of corruption, and measures adopted to address cases of suspected bribery and other forms of corruption.	The entity discloses any confirmed incidents of bribery or corruption during the relevant reporting period, including sanctions or legal cases brought against the entity, its directors or employees and the remedial steps taken by the entity including any disciplinary action taken against offending directors or employees. Where the entity operates in any of the 20 lowest countries on Transparency International's most recently published Corruption Perception Index, the entity has a process or processes in place to assess and manage corruption risk within its operations and supply or value chains in these countries. This could include due diligence requirements, internal audits and monitoring, and a whistleblower mechanism.	OECD Guidelines GRI 205 ESRS G2 41, 43
5.2 The entity discloses any instances in which it has been found guilty of tax evasion or tax avoidance through aggressive tax planning.	The entity discloses any instances where the entity, its directors or management are convicted of violating the tax laws of the countries in which they operate, and the remedial actions taken, including any disciplinary action taken against offending directors or employees in the last five years. The entity provides a description of the mechanisms it has in place to raise concerns about the entity's business conduct and integrity in relation to taxation.	OECD Guidelines GRI 207-2 ESRS 2 7
5.3 The entity discloses, without prejudice to national laws and requirements, any misconduct related to anti-trust and fair competition, as well as the measures adopted to address such cases.	The entity discloses any confirmed violations of competition laws where the entity or its subsidiaries were named as a participant by a legal authority during the relevant reporting period. The disclosure includes information on legal proceedings and remedial actions implemented to prevent future breaches of anti-trust and fair competition laws and policies including any disciplinary action taken against offending directors or employees.	OECD Guidelines GRI 206 SASB topic: Pricing Integrity & Transparency ESRS G2 45, G3 47

Human rights³

1. The entity has a public policy commitment that outlines the entity's commitment to respect human rights in line with the expectations in the UN Guiding Principles on Business and Human Rights (UNGPs).

Indicators	Guidance	Alignment with existing standards and frameworks
1.1 The entity publicly commits to respect all internationally recognised human rights, in line with the expectations outlined in the UNGPs.	The entity publicly commits to respecting all internationally recognised human rights as outlined by the UN Declaration on Human Rights, the International Covenant on Civil and Political Rights, the International Covenant on Economic, Social and Cultural Rights and the ILO Declaration on Fundamental Principles and Rights at Work. The entity also commits to aligning with the UNGPs. This commitment can be made in a standalone Human Rights Policy or integrated into other policy documents.	UNGP 11, 12 and 16 OECD Guidelines, Chapter IV, Commentary para 49 GRI 2 2021, Disclosure 2-23 UNGC CoP G2 CHRB A1.1
1.2 The policy commitment is signed off at the most senior level of the entity.	The entity's highest governance body (e.g. Board) or most senior executive (i.e. the CEO) signs off on the policy commitment.	UNGP 16 OECD Guidelines, Chapter IV, Commentary para 49 GRI 2 2021, Disclosure 2-23 UNGC CoP G2 CHRB A.2.1
1.3 The policy commitment sets out expectations for workers, officers and directors and its business relationships.	The policy commitment clearly outlines expectations for workers, officers and directors and its business relationships (e.g. suppliers, joint venture partners, franchisees, customers) to respect human rights.	UNGP 16 OECD Guidelines, Chapter IV, Commentary para 49 GRI 2 2021, Disclosure 2-23 UNGC CoP HR2.1

³ The human rights criteria and indicators apply to First Nations rights and cultural heritage (next section). However, the First Nations rights and cultural heritage criteria and indicators provide additional, specific expectations.

2. The entity has a human rights due diligence process or processes to identify, prevent, mitigate and account for how they address their actual and potential adverse human rights impacts through their operations and supply or value chains, that is appropriate to the entity's size, circumstances and operating context.

Indicators	Guidance	Alignment with existing standards and frameworks
2.1 The entity identifies and assesses its actual and potential adverse human rights impacts across its operations and supply or value chain.	The entity proactively identifies and assesses its actual and potential (i.e. risks to human rights) adverse human rights impacts across its operations and supply or value chain on an on-going basis. When identifying and assessing its actual and potential adverse human rights impacts, entities should consider all internationally recognised human rights. However, the Australian sustainable finance taxonomy has identified core social pillars which are particularly relevant to the Australian context. While not ignoring other human rights issues, entities should consider actual and potential adverse human rights impacts related to employment, labour and working conditions, occupational health and safety, modern slavery, gender equality, non-discrimination, diversity and equal opportunity, and the rights of First Nations Peoples when conducting human rights due diligence. Having identified the actual and potential adverse human rights impacts including considering any actual and potential adverse human rights impacts related to the core social pillars above, the entity prioritises the most salient human rights issues for action. That is, the human rights at risk of the most severe negative impact through the entity's operations and supply or value chain. Saliency is determined by considering the severity – encompassing the concepts of scale, scope and irremediability - and likelihood of an adverse human rights impact. The process to identify and assess actual and potential adverse human rights impacts should take into consideration factors such as sectoral risks, geographical risks, risks related to at risk, marginalised or vulnerable populations and the entity's business model. It should also be informed by a range of sources including internal and external expertise and meaningful consultation with potentially affected stakeholders (see indicator on stakeholder engagement for further guidance). This process considers both risk of harm to people and risks to the business, though they will often overlap. However, saliency assessments should only be based on risk to people.	UNGP 17, 18 and 24 OECD Guidelines, Chapter IV, Commentary para 50 GRI 3 2021, Disclosure 3-3 UNGC CoP G6 and G7 CHRB B.2.1 and B.2.2
2.2 The entity integrates the findings of its assessments of its actual and potential adverse human rights impacts into relevant internal functions and processes, and takes appropriate action.	The entity integrates the findings of its assessments of its actual and potential adverse human rights impacts into relevant internal functions and processes, to ensure appropriate measures are taken to prevent, mitigate and remediate adverse human rights impacts, starting with the most salient risks and impacts. Such measures could include integrating human rights expectations into contract clauses, building workers' and suppliers' capacity on human rights, developing action plans and key performance indicators, allocating senior leadership and other responsibility for human rights risk management, establishing an internal mechanism (e.g. a cross-functions working group) to coordinate and drive action across the entity and engaging in sector based collaborations to address key risks.	UNGP 17, 19 and 24 OECD Guidelines, Chapter IV, Commentary para 50 GRI 3 2021, Disclosure 3-3 UNGC CoP G7 CHRB B.2.3
2.3 The entity regularly conducts internal capacity building on human rights	The entity builds the capacity of its workers, senior executives and directors by delivering human rights training in a form and frequency that the entity deems necessary to build capacity. The training is tailored to address the potential and actual adverse human rights impacts that are specific to the entity. The training also includes the entity's commitments, expectations for workers, suppliers and other business relationships in line with the expectations of the UNGPs. Good practice includes disclosing the content of the training at a high level, who received the training, the form (e.g., in-person, online) and frequency of the training and tracking the outcomes and the effectiveness of the training.	UNGP 16 OECD Guidelines, Chapter IV, Commentary para 49 GRI 2 2021, Disclosure 2-24 UNGC CoP HR5 CHRB B.1.5.
2.4 The entity tracks the effectiveness of the steps it has taken in response to its actual and potential adverse human rights impacts.	The entity tracks, evaluates and discloses the effectiveness of actions taken in response to its actual and potential adverse human rights impacts. This could include the development of human rights-related key performance indicators. The entity draws on feedback from both internal and external stakeholders; uses appropriate qualitative and quantitative indicators including with a focus on outcome (i.e. the results the entity hopes to achieve) not just output based indicators (i.e. processes and actions that contribute to outcomes); and uses this information to improve its processes and systems on an on-going basis.	UNGP 17 and 20 OECD Guidelines, Chapter IV, Commentary para 50 GRI 3 2021, Disclosure 3-3 UNGC CoP G7, G9 and HR6 CHRB B.2.4

2.5 The entity communicates externally how it addresses its actual and potential adverse human impacts.	The entity's communications are in a form and frequency that reflect its actual and potential adverse human rights impacts and are accessible to its intended audiences (including affected and potentially affected stakeholders). The information provides sufficient detail to evaluate the adequacy of the entity's response to the entity's actual and potential adverse impacts particularly in relation to its salient human rights issues. Communications should not pose risks to stakeholders, including potentially affected stakeholders, and may take into account legitimate requirements of commercial confidentiality and reflect variations in the entity's size and structure. Communication can take a variety of forms such as in-person and online meetings, consultation with affected stakeholders and formal public reports (e.g. sustainability reports). Annual reporting on human rights due diligence and remediation processes is encouraged.	UNGP 21 OECD Guidelines, Chapter IV, Commentary para 50 GRI 2 2021, Disclosure 2-29 CHRB B.2.5
2.6 The entity engages with stakeholders throughout the human rights due diligence process, including affected and potentially affected stakeholders where appropriate.	Meaningful stakeholder engagement (including with affected and potentially affected stakeholders and human rights defenders) is central to effective human rights due diligence. The entity engages with stakeholders (including affected and potentially stakeholders and including at risk, marginalised or vulnerable stakeholders or their representatives) on an ongoing basis to understand its actual and potential adverse human rights impacts and receive feedback on actions taken. For indicators and guidance specific to engagement with First Nations Peoples, see the First Nations Minimum Social Safeguards.	UNGP 16, 18, 19, 20, 21, 22 and 29 OECD Guidelines, Chapter II, Commentary para 28 GRI 3 2021, Disclosure 3-1 and 3-3 UNGC CoP HR3 CHRB B.1.8, B.2.1, B.2.2 and B.2.5

3. The entity has processes in place to enable the remediation of adverse human rights impacts in line with the expectations of the UNGPs.

Indicators	Guidance	Alignment with existing standards and frameworks
3.1 The entity has a grievance mechanism(s) in place that can receive human rights related complaints and makes efforts to cooperate with other legitimate grievance mechanisms and processes.	The entity has one or more mechanism(s) through which workers, communities, consumers and other stakeholders whose human rights may be adversely impacted by the entity (including by the entities' suppliers or other business partners as appropriate and in line with the UNGPs), can raise complaints or concerns in relation to human rights issues. The mechanism(s) may be managed by the company or by third parties. In order to ensure their effectiveness, the entity's grievance mechanisms should be legitimate, accessible, predictable, equitable, transparent, rights-compatible, a source of continuous learning and based on engagement and dialogue (in line with the UNGPs). This includes establishing safeguards so complaints can be made without fear of retaliation or reprisal (e.g. confidentiality requirements, non-retaliation policy and the option for complaints to be made anonymously). The mechanism also does not prevent access to other judicial or non-judicial mechanisms and makes efforts to cooperate with any such legitimate grievance mechanisms or processes. Good practice also includes encouraging business partners to have their own grievance mechanism(s) in place that can receive human rights-related complaints. The entity discloses on the types of complaints made including complaints that were not processed and why, and the outcomes and follow-up activities for completed cases. This information can be aggregated and anonymised to safeguard complainants. Refer to the Corporate Governance and First Nations indicators and criteria for further guidance on grievance mechanism concerning governance issues and First Nations Peoples.	UNGP 22, 29, 30 and 31 OECD Guidelines Chapter IV, Commentary para 5 GRI 3 2021, Disclosure 3-3 UNGC CoP G8 and HR7 CHRB C.1, C.2 and C.4
3.2 The entity provides for or cooperates in remediation where it has identified it has caused or contributed to the adverse human rights impact.	Where it identifies it has caused or contributed to an adverse impact (in line with the UNGPs), the entity provides for or cooperates in effective remediation through legitimate processes. Remediation can be provided in a variety of forms (e.g. apology, restitution, rehabilitation, financial or non-financial compensation) and should be decided in consultation with affected stakeholders. The entity also takes actions to prevent similar adverse human rights impacts in the future. Where adverse human rights impacts have occurred that the entity has not caused or contributed to, but which are directly linked to its operations, products or services by their business relationships (Appendix 8.2), the entity should seek to use its leverage to prevent and mitigate the impacts, and may choose to take a role in providing for or cooperating in remediation.	UNGP 13, 19, 22 and 31 OECD Guidelines Chapter IV, Commentary para 6 GRI 3 2021, Disclosure 3-3 UNGC CoP HR7 CHRB C.7
3.3 The entity has not refused or failed to engage in a National Contact Point (NCP) complaint process or failed to implement recommendations made by an NCP.	The entity has not been the subject of a finding within the previous 12 months by a NCP for Responsible Business Conduct that the entity failed to engage in good faith in an NCP's complaint process or failed to satisfy the NCP that the entity has implemented recommendations previously made by the NCP to improve the entity's observance of the OECD Guidelines.	OECD Guidelines

First Nations rights and cultural heritage

These criteria apply where the entity has a potential or actual impact (or impacts) on First Nations rights or interests.

First Nations rights

1. The entity recognises the rights of First Nations in line with the United Nations Declaration on the Rights of Indigenous Peoples (UNDRIP) and embeds policies and processes to respect and support those rights.

INDICATOR	GUIDANCE	REFERENCES
1.1 The entity makes a public commitment to recognise, respect and support the rights of First Nations.	The entity publicly commits to recognising, respecting and supporting First Nations rights. This commitment can be made through a Reconciliation Action Plan, a First Nations Policy, or incorporated into other policy documents. The commitment is endorsed at the entity's highest governance body (e.g. Board) or most senior executive (i.e. the CEO).	UNGPs 16 IFC Performance Standard 7 IRMA 2.2.1 Reconciliation Action Australia
1.2 The entity regularly conducts internal capacity building on First Nations rights, traditions and protocols.	The entity builds the capacity of its workers, senior executives and directors by delivering training on First Nations rights, traditions and protocols in a form and frequency that the entity deems necessary to build capacity. The training includes the entity's commitments, expectations for workers, suppliers and other business relationships in relation to First Nations. Workers can be provided access to resources, training and/or immersion activities to understand First Nations cultures, traditions, and protocols. Processes are adopted to measure staff access, engagement, completion and frequency of capacity building activities for continuous improvement.	IFC Performance Standard 1.17

2. The entity implements processes to assess, record and report on potential and actual impacts on First Nations through its operations.

INDICATORS	GUIDANCE	REFERENCES
2.1 The entity conducts regular assessments to identify and evaluate potential and actual impacts caused by the entity or its operations on First Nations.	The entity has a process in place to identify and evaluate potential and actual impacts caused by the entity or its operation on First Nations. The process includes a mitigation strategy or guidance to address any negative impacts and incorporates First Nations input and feedback. The entity promptly addresses any identified non-compliance issues.	IFC Performance Standard 7 UNPG 20
2.2 The entity records and reports its impacts on First Nations to relevant authorities and the impacted First Nations at regular intervals.	The entity maintains records of its operations and activities that impact First Nations in line with the guidance provided in Human Rights indicator 2.5. (the entity communicates externally how it addresses its actual and potential adverse human rights impacts). At a minimum, records document the entity's potential and actual impacts on First Nations including through its operations and suppliers. Reports to relevant authorities and impacted First Nations are clear, concise, and accessible to all relevant parties.	IFC Performance Standard 7
2.3 The entity has embedded a culturally safe grievance mechanism.	Refer to the guidance provided in Human Rights indicator 3.1 on implementing an operational grievance mechanism(s) in line with the UNGPs. In addition, the entity respects the customs, traditions, rules and legal systems of First Nations concerned within the grievance mechanism.	UNGP Guiding Principle 31 OECD Guidelines, Chapter VIII. OECD/LEGAL/-356

3. The entity agrees on appropriate First Nations engagement practices in collaboration or co-design with First Nations in line with the UNDRIP principle of Free, Prior and Informed Consent.

INDICATORS	GUIDANCE	REFERENCES
3.1 The entity has a protocol(s) in place to ensure that engagement practices with First Nations are developed in collaboration or co-designed with First Nations. Engagement practices are carried out in line with the UNDRIP principle of Free, Prior and Informed Consent.	Good practice protocols for First Nations engagement practices include guidance on appropriately resourcing knowledge holders and First Nations organisations to enable Free, Prior and Informed Consent. The entity may also explore opportunities for benefit-sharing with First Nations communities where relevant.	IFC Performance Standard 7 Self-determination principle of UNDRIP IRMA 2.2

First Nations cultural heritage

These criteria apply where the entity has a potential or actual impact (or impacts) on First Nations Cultural heritage.

1. The entity implements processes to investigate, record and manage cultural heritage within its operations in collaboration or co-design with First Nations.

INDICATORS	GUIDANCE	REFERENCES
1.1 The entity consults and collaborates with First Nations to identify cultural heritage sites, artifacts and landscapes within its operations and avoids impacts on cultural heritage sites.	The entity conducts thorough surveys to identify cultural heritage sites, artifacts, and landscapes within its operations. Processes are in place to ensure First Nations communities are involved in the identification process to ensure cultural significance is accurately recognised. Traditional knowledge is used to inform the identification of cultural heritage sites. The entity seeks to avoid or minimise impacts on cultural heritage sites.	IFC Performance Standard 1 & 8 IRMA 3.7 Cultural Heritage
1.2 Measures are implemented to preserve cultural heritage sites.	Measures are implemented to preserve and conserve cultural heritage sites. Mitigation measures are monitored and evaluated to ensure their effectiveness. Processes are in place to ensure access to cultural heritage sites is managed to protect their integrity.	IFC Performance Standard 1 & 8 IRMA 3.7 Cultural Heritage
1.3 Through ongoing consultation and collaboration, the entity incorporates traditional knowledge into management plans that protect cultural heritage.	The entity has a process to enable First Nations to be involved in the management of cultural heritage matters of relevance to them; for ongoing consultation with First Nations regarding cultural heritage management; and incorporating traditional knowledge into cultural heritage management plans. The entity maintains records of cultural heritage both tangible and intangible activities. The entity conducts regular monitoring to ensure compliance with cultural heritage management plans. Independent audits are conducted to assess compliance. Any non-compliance issues are addressed promptly.	IRMA 3.7 Cultural Heritage

Appendix 8.2 Minimum Social Safeguards – Key Terms

Aboriginal Cultural Heritage refers to knowledge and lore, practices and people, objectives and places that are valued, culturally meaningful and connected to identity and Country. Aboriginal Cultural Heritage shapes identity and is a lived spirituality fundamental to the wellbeing of communities through connectedness across generations.

Actual or potential adverse human rights impact occurs when an action removes or reduces the ability of an individual to enjoy their human rights.

Affected and potentially affected stakeholders are those people whose human rights may be impacted by business operations, products or services.

Cause, contribute or directly linked to is defined in accordance with the UNGPs, which outline that there are three ways in which an entity can be involved in an adverse human rights impact:

- it may cause the impact through its own activities;
- it may contribute to the impact if its actions or omissions facilitate, enable or incentivise an adverse human rights impact to the extent that the impact would not have occurred without these actions or omissions; and
- it can be directly linked to an adverse impact through the activities of a third party.

How close an entity is to an impact informs what actions they are expected to take. For example, where an entity identifies that it has caused or contributed to an adverse human rights impact, it should provide for or cooperate in remediation. If an entity is directly linked to the impact, then it does not have to remediate the impact itself. It should, however, consider what role it might take in remediation, and use and build the leverage it has with the business partner that caused or contributed to the harm, to encourage remedy.

Country is a term used by First Nations peoples to refer to the lands, waters and skies to which they are connected through ancestral ties and family origins.

First Nations rights are rights that pertain to First Nations under the United Nations Declaration on the Rights of Indigenous Peoples.

Free, Prior and Informed Consent is a process whereby First Nations peoples are consulted on, and freely participate in, decisions that affect them.

Grievance mechanism is a process that allows for all people who could be impacted by an entity's operations and activities to raise grievances concerning adverse human rights impacts and seek remedy.

Human rights due diligence is a way for entities to proactively manage their actual or potential human rights impacts on people. It should include assessing actual and potential adverse human rights, integrating and acting upon the findings, tracking responses, and communicating how impacts are addressed.

Salient human rights issues are the human rights at risk of the most severe negative impact through the entity's activities and business relationships.

Self-determination is concerned with the rights of all peoples - including First Nations peoples - to freely determine their political status and freely pursue their economic, social and cultural development.

Traditional knowledge refers to Indigenous knowledges, sciences and practices.

Workers includes employees, contractors and contingent workers.

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