



RioTinto

Finding better ways

Our approach to nature-based solutions

2025

While prioritising emissions reductions at our operations, we are developing and investing in nature-based solutions that can bring benefits to people, nature and climate.

Our nature-based solutions projects complement the work we're doing to reduce our Scope 1 and 2 emissions. We treat these projects as enablers for activities that support sustainable livelihoods for the communities where we operate, while protecting and restoring nature, and delivering high-quality carbon credits.

We're investing in existing projects and developing new ones in Argentina, Australia, Guinea, Madagascar and South Africa. Our ambition is to work with communities to enable high-integrity nature-based solutions projects across 500,000 hectares of land, globally by the end of 2025.

How we use carbon credits

In alignment with our updated Climate Action Plan, we will limit the use of voluntary and compliance carbon credits towards our 2030 climate target to up to 10% of our 2018 baseline emissions (~3.6 million).

Carbon credits retired as offsets towards our climate targets must pass our due diligence assessment, including meeting our high-integrity criteria.

How we source carbon credits

We're developing and investing in new nature-based solutions projects in the regions where we operate. At the same time, we look for existing high-integrity projects we can support. This combined approach creates opportunities for nature-based solutions to grow in number and scale. We also purchase high-quality carbon credits from the voluntary carbon market.

We work in 3 ways:



Invest in new projects

We work with local partners and communities to develop and implement new nature-based solutions projects that address nature loss, while generating carbon credits and delivering benefits for local communities.



Invest in and scale up existing projects

Through commercial investments with project partners, we provide capital and support the development and scale-up of nature-based solutions projects in our operating regions.



Source high-integrity carbon credits

Through spot carbon credit purchases and long-term offtake agreements from nature-based solutions projects that meet our high-integrity criteria, we aim to source the highest quality credits available in the market.

Sourcing carbon credits to meet our compliance obligations

Australia

In Australia, where we have significant emissions, we are building a portfolio of high-quality Australian Carbon Credit Units (ACCUs) to meet our obligations under the Safeguard Mechanism, while remaining focused on structural abatement to minimise or eliminate emissions at the source.

Our ACCU sourcing strategy currently focuses on three preferred methods, due to their combined potential for carbon sequestration and emissions avoidance, with the wider benefits they can bring for communities and nature repair: savanna fire management, human-induced regeneration, and environmental planting.

We continuously strengthen our due diligence process, to select ACCU projects with strong track records, value-sharing arrangements and future potential.

We seek to:

1. Purchase high-quality credits available in the market through spot transactions to meet our immediate and short-term obligations.
2. Establish long-term partnerships and offtake agreements to secure a supply pipeline, as we expect increased demand for ACCUs. This also allows us to provide more sustainable support for projects, including upfront capital for development. For example, we are working with Indigenous fire management project developers, as these projects can bring multiple benefits in addition to fire management and nature repair, with carbon finance reinvested into the communities to support training, employment and enhanced connection to Country.
3. Invest in project development to reduce our overall reliance on spot transactions, move ACCU costs closer to the cost of development and have greater oversight of the integrity of projects. This includes investing in carbon developers, such as Australian Integrated Carbon (we have a 14.15% interest) and the Silva Carbon Origination Fund, one of the first in Australia to provide investors with access to large-scale, high-quality carbon credits from land reforestation projects integrated with sustainable agriculture.

How we assess Australian Carbon Credit Unit projects

In alignment with our high-integrity criteria and building on the Clean Energy Regulator method requirements, we use a range of geospatial tools and approaches, including satellite imagery analysis and land cover classification. Applied as relevant to each method, these tools and approaches enable us to monitor, verify and quantify vegetation growth, land cover changes, and fire frequency and severity over time. Our site visits and engagement with developers give us additional information to support our assessments and help us make investment decisions.

Human-Induced Regeneration (HIR)

involves changing land management practices to help native forests regrow by reducing livestock grazing, controlling feral animals, and stopping regrowth destruction. Our due diligence for HIR projects includes assessing project design and performance, supported by site visits.

1. Project Design: We visually assess carbon estimation areas (CEAs) to ensure they are well-defined, excluding areas with little forest cover or no forest potential. This helps determine realistic ACCU issuance. We also compare nearby projects and work with developers who can demonstrate impactful project activities like reduced grazing and improved fencing.
2. Project Performance: We assess vegetation growth and land cover composition in CEAs using:
 - Normalised Difference Vegetation Index (NDVI): Evaluates vegetation health and density using near-infrared and red light data, to help establish changes over time whilst controlling for high rainfall years.
 - Land Cover Classification: Identifies forested areas using spectral analysis and validates with high-resolution imagery. Comparing historical and recent data helps estimate changes in forested areas.
3. Ground Truthing: site visits provide insights to validate findings and verify project data.

Environmental Planting (EP)

involves creating new forests by planting native species. We assess land suitability and potential ACCU yield using land cover classification and terrain analysis. During this analysis we also assess scenarios for the integration of other land uses alongside the generation of ACCUs. This can translate into excluding areas of cultural, spiritual or environmental significance, productive agriculture areas, and incorporating future grazing by lowering plant density.

Savanna Fire Management

is a technique used by Indigenous communities to reduce the scale and severity of late-season wildfires, by setting fires in controlled conditions in the early dry season, creating fire breaks and reducing fuel on the ground such as grass, leaves and other organic material. We verify project additionality using fire history data and satellite imagery to assess fire frequency, size, and intensity reductions. This helps demonstrate the project's role in avoiding emissions and increasing carbon sequestration.

More detailed information on our high-integrity criteria and due diligence process, including specific steps we take when assessing Australian Carbon Credit Unit (ACCU) projects, is available at <https://www.riotinto.com/naturesolutions>

Other countries

We operate in many jurisdictions that have implemented carbon pricing regulations that cover our Scope 1 emissions. This includes Australia, Canada, California, the EU and New Zealand where approximately 83% of our scope 1 emissions or 64% of our total emissions are covered by these regulations.

We will update our carbon credit sourcing strategy as compliance regulation and Rio Tinto's abatement trajectory advance.

How we make investment decisions

We believe that both voluntary and compliance carbon markets can enable the urgent investments needed for the protection and restoration of nature, enhanced climate resilience, and more sustainable livelihoods for communities.

We define high-integrity projects as those which foster positive outcomes for people, nature and climate, and take an integrated landscape perspective. Whether we invest in new projects, provide scale-up capital or purchase from the market, we apply our high-integrity criteria, which form the basis of our due diligence process.

Our criteria are based on our own standards as well as international best practice, guidance and principles, as provided by organisations such as:

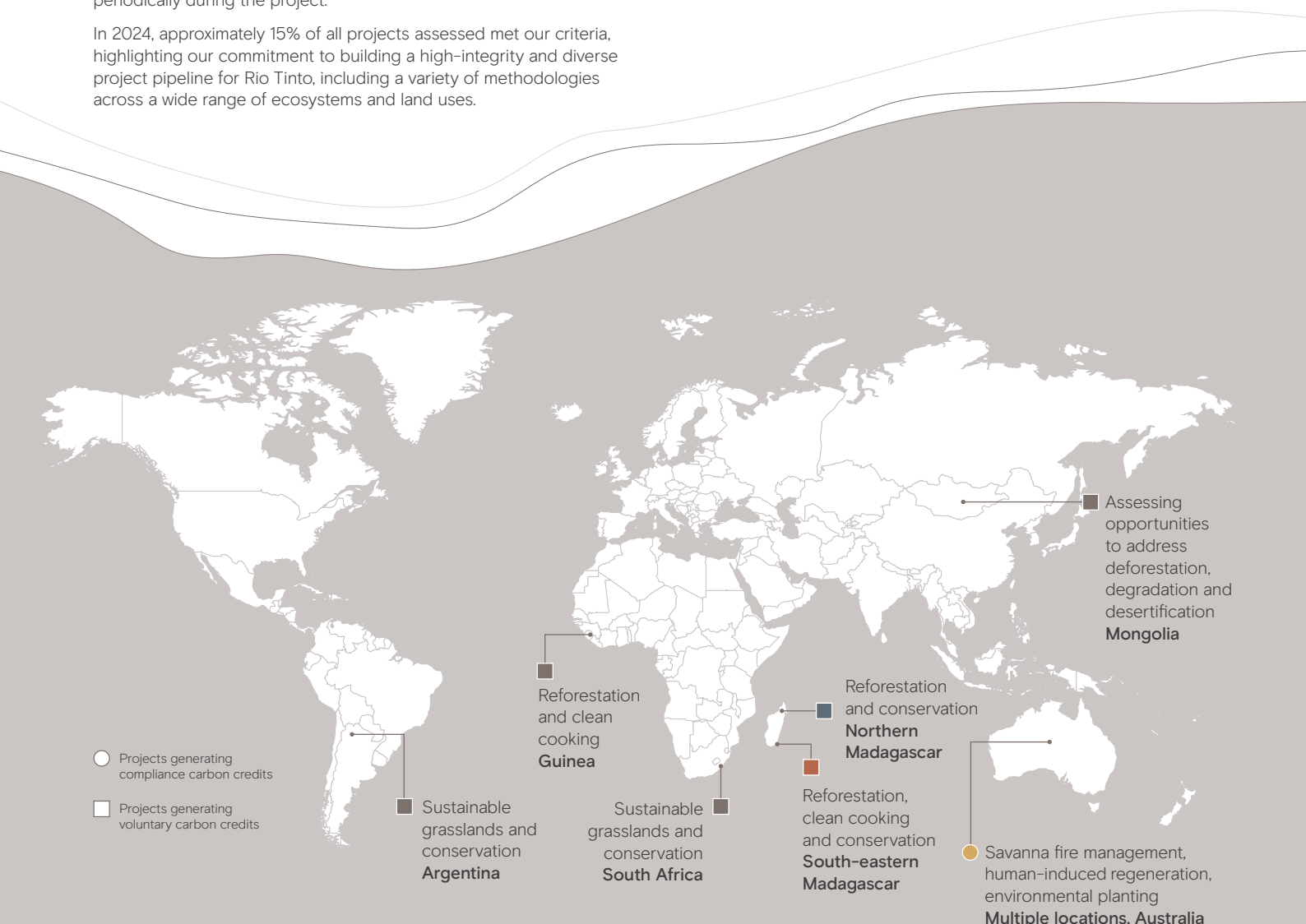
- [International Union for Conservation of Nature Global Standard for Nature-based Solutions](#)
- [United Nations Framework Convention on Climate Change](#)
- [Integrity Council for the Voluntary Carbon Market Core Carbon Principles](#)
- [Voluntary Carbon Markets Integrity Initiative](#)
- [International Organization for Standardization](#)

Our criteria include an assessment of the potential impact of our projects, seeking to ensure that they do not result in negative unintended consequences for people, communities, their heritage or natural ecosystems. The risks and opportunities identified in the assessment must be addressed, managed, tracked and assessed periodically during the project.

In 2024, approximately 15% of all projects assessed met our criteria, highlighting our commitment to building a high-integrity and diverse project pipeline for Rio Tinto, including a variety of methodologies across a wide range of ecosystems and land uses.

Our high-integrity criteria

- 1 Additionality**
The project and its outcomes are made possible by climate finance and would not have happened otherwise.
- 2 Quantification**
The project can generate real carbon reductions, removals, or both, supported by robust accounting practices.
- 3 Permanence**
The project can deliver permanent carbon reductions, removals, or both, and reversal risks are realistic and well-managed.
- 4 Governance, Social & Ecological Safeguards**
The project takes an integrated approach to protecting or restoring nature, or both, while supporting community livelihoods and without impinging on human rights.
- 5 Sustainable Development and Nature Positive Outcomes**
The project supports multi-decade sustainability outcomes and a diverse project pipeline for Rio Tinto.





Tsitongambarika Forest Protection and Restoration Projects, Southeastern Madagascar

The Tsitongambarika Forest is a protected area with a varied and unique wildlife. Also known as TGK, Tsitongambarika is the only remaining forest of its kind in Madagascar, and one of the world's most irreplaceable sites for threatened biodiversity. With an estimated 8,000+ households in the protected forest and the surrounding buffer zone, most of these families rely on TGK for their livelihoods, including food, water, fuelwood, or charcoal and building materials like timber. Despite the difficult terrain in places, the forest is extremely threatened.

In partnership with the Government of Madagascar, BirdLife International, Asity Madagascar and other partners, we are supporting the development of the TGK REDD+ project. Under the United Nations Framework Convention on Climate Change, REDD+ projects are aimed at reducing emissions from deforestation and forest degradation in developing countries. The TGK project relies on a variety of integrated landscape activities such as community-based forest management, reforestation and transitioning to clean cookstoves. These activities provide sources of direct income and address the root causes of forest loss and degradation by helping communities find alternatives to address livelihoods challenges.

Team member at work in Mandromondromotra plant nursery in Forth Dauphin, Madagascar

Makira Natural Park REDD+ Project, Northern Madagascar

In northern Madagascar, Rio Tinto has committed \$16 million to the Makira Natural Park REDD+ Project in northern Madagascar, through a new partnership with the Wildlife Conservation Society (WCS) and Everland. This commitment complements Rio Tinto's investment in nature-based solutions in the south-east of the country.

In 2003, the Madagascar Ministry of Environment and Sustainable Development launched a program, supported by WCS, to create the Makira Forest Protected Area and to finance it in part through carbon markets. After a 12-year development effort, in 2013 the Makira Natural Park REDD+ Project became the first government-owned REDD+ project in Africa to sell carbon credits on the voluntary carbon market, after achieving verification under the Verified Carbon Standard (VCS) and Climate, and Community and Biodiversity (CCB) Standards.

Today, the Makira Natural Park REDD+ Project encompasses 372,000 hectares of dense primary forest. One of the largest remaining rainforests in the country, harboring 17 species of lemur and more than 50% of Madagascar's botanical diversity, Makira is critical to the protection of species found nowhere else in the world. Home to approximately 90,000 people who live in 120 villages in the project area, the project works to build the capacity of communities to practice more sustainable agriculture and avoid deforesting new areas.

Rio Tinto's commitment will allow the project to scale up and improve protected area management, and bring funds that will directly benefit the rural communities living in and around the Park. These funds will allow the project to reassess the deforestation baseline according to the latest Verified Carbon Standard (VCS) and Climate, Community and Biodiversity (CCB) Standards before credit issuance. Funding will also support monitoring and reporting on the



Makira Natural Park, Madagascar.
Image credit: Rijasololo, courtesy of the Wildlife Conservation Society

impact of ongoing interventions to reduce deforestation, protect threatened biodiversity, and bring durable improvements to local communities, including increasing their involvement and agency in forest and wildlife protection activities. Rio Tinto's investment also includes a committed offtake of carbon credits from the project.



● Savanna Fire Management Projects, Northern Territory and Far North Queensland, Australia

In Australia, we are investing in savanna fire management carbon credits from Indigenous-owned projects near our operations. Savanna fire management, a sequestration and emissions avoidance method, is regulated by the Australian Carbon Credit Unit (ACCU) Scheme.

Near our Gove operations in the Northern Territory we are supporting Arnhem Land Fire Abatement, an Aboriginal-created, owned and operated not-for-profit carbon business. Similarly, close to our Weipa operations in Far North Queensland, we are supporting several projects including the Aurukun Savanna Burning project and the Oriners & Sefton Savanna Burning project.

These projects bring multiple benefits in addition to fire management and nature repair, as carbon finance is reinvested into the communities to support training, employment through ranger programs, and enhanced connection to Country.

Rangers at Arnhem Land, Australia.
Image credit: David Hancock

Policy backdrop

While business has a vital role in managing the risks and uncertainties of climate change, governments can support the challenge by providing enabling frameworks, including the policy and regulations, which increase momentum towards shared net zero goals.

At COP29, nearly 10 years after the Paris Agreement was adopted, significant progress was made towards implementation of Article 6, supporting international cooperation and the flow of financing to activities that contribute to climate mitigation. The completion of the Article 6 Rulebook and the establishment of a Supervisory Body to oversee Article 6.4's Paris Agreement Climate Mechanism are expected to accelerate private sector investment in voluntary carbon credit projects – such as nature-based solutions – by providing clearer rules around the accounting, social and environmental safeguards, management, and trading of credits. These developments were met with mixed reactions by climate-focused NGOs and CSOs, but most acknowledged their contribution towards the clarity, consistency and transparency needed to harness the climate mitigation potential of the voluntary carbon market.

Recent developments in climate reporting, such as the new IFRS S2 Climate-related Disclosures standard, are expected to further drive transparency, consistency, and comparability across climate action, performance, governance, risks and opportunities.

Government policies and frameworks are required to support the development of a liquid supply of high integrity carbon credits required to underpin emissions reductions legislation, including Australia's Safeguard Mechanism. These could include working with carbon credit developers and users to develop new high integrity recognised methods of carbon credits at the pace required to meet demand, and that promote positive cultural, social and environmental outcomes as co-benefits. Proponent-led method development under Australia's ACCU Scheme is a promising step, and it's important that sufficient resources are available to enable these new methods to be developed and rolled out at the pace needed. Governments and regulators also have a role to establish information disclosure requirements that enable purchasers and other stakeholders to get reasonable assurance of the credibility of the credits and confidence in their use towards decarbonisation efforts.

There are broader benefits to society and the economies in the development of high integrity regulated carbon credit markets. These could include multiple opportunities for creation of economic value and new partnerships as well as supporting communities and development of industries in regional areas.



