

Reef Credit Guide

v2.0 14 October 2021



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Version Control

Reef Credit Guide

Version 2.0

Last updated 14 October 2021

Version Number	Author	Change	Date	Date Approved
2.0	Review panel	Beta Phase Review	30 August 2021	14 October 2021

Contact

Eco-Markets Australia, as the Reef Credit Secretariat www.eco-markets.org.au

Acknowledgements

The Reef Credit Scheme was conceived in response to the emerging consensus that a market-mechanism to incentivise water quality improvements across catchments of the Great Barrier Reef was urgently needed. In 2017, natural resource management organisations, Terrain NRM and NQ Dry Tropics partnered with GreenCollar, an environmental markets investor, to guide the development of the Reef Credit Scheme and serve as the Interim Steering Committee. Advice and assistance was provided by the environmental markets and standard development consultants, Winrock International, and a number of operating water quality market programs, participants and founders, and standard development organisations were also engaged.

The Queensland Government officially launched the Reef Credit Scheme in October 2017 as part of two reef water quality projects - the Wet Tropics and Burdekin Major Integrated Projects (MIPs) - with the intent to operate in all catchments of the Great Barrier Reef. Members of the Technical Advisory Committee (TAC) have provided feedback and recommendations at all stages of the Reef Credit Standard and methodology development, as well as on the overall design of the Scheme and subsequent revisions. Funding to support the development of the Scheme, Governance and Registry was provided by the partnership between the Australian Government's Reef Trust and the Great Barrier Reef Foundation, and Queensland Government.

The Reef Credit Scheme has not been designed to disrupt agricultural production, but rather to recognise, value and support landowners to innovate and adopt best practice to deliver environmental benefits and positively contribute to water quality in the reef catchment. To ensure the Scheme focuses on delivering the highest standards of environmental and financial integrity, Australia's first independent administrator of environmental markets, Eco-Markets Australia, was established in late 2020. Eco-Markets Australia is governed by a skills-based Board of Directors with day-to-day administration of the Reef Credit Standard delegated to the Secretariat.

This document may be cited as the Reef Credit Standard Version 2.0, 14 October 2021.

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Purpose of the Reef Credit Guide

The Reef Credit Guide establishes the rationale and principles of the Reef Credit Scheme. It describes the overall governance and various elements that operationalize the Scheme.

Versions and Review

This is version 2.0 of the Reef Credit Guide and replaces prior versions. This version applies from 14 October 2021 and is effective immediately, subject to any grace periods contained in the Reef Credit Standard or other requirements documents that allow use of earlier versions.

The Reef Credit Guide and all accompany documents may be updated from time to time by the Secretariat. All material revisions to the Reef Credit Guide or Requirement Documents will be subject to a 30-day public consultation period.

The Secretariat may also issue minor errata corrections or revisions to the Reef Credit Guide or Requirement Documents, which will be published on Eco-Markets Australia's website.

Rationale for the Reef Credit Scheme

The Great Barrier Reef

The Great Barrier Reef is the world's largest coral reef system, covering an area of 344,000 square kilometres, comprising approximately 3000 reefs, 900 islands and extending 2300 km along the Queensland coast of Australia.

The Reef, cared for by Traditional owners for thousands of years, was listed on the World Heritage Register in 1981 on the basis of its Outstanding Universal Value, particularly its "exceptional natural beauty and aesthetic importance", and as an outstanding example "representing significant ongoing ecological and biological processes". The contribution of the Reef to the Queensland and Australian economy is estimated to be close to \$6 billion a year, generating over 69,000 jobs across the tourism, recreation, commercial fishing, scientific research and management industries.

The agricultural land use in the catchments adjacent to the Great Barrier Reef lagoon, employs over 35,000 people and contributes approximately \$3.7 billion annually in gross value of production. (*Great Barrier Reef Water Science Taskforce Report*)

Impact of Catchment Run-off on the Great Barrier Reef

In 2017, the Reef Scientific Consensus Statement reported that key Great Barrier Reef ecosystems continue to be in poor condition. This is largely due to the collective impact of land-based run-off associated with past and ongoing catchment and coastal developments, extreme weather events and climate change impacts such as coral bleaching.

Improving water quality entering the Great Barrier Reef Catchments is one of the most manageable actions to reduce the threats facing the Great Barrier Reef. To address water quality, the Queensland and Federal governments' Reef 2050 Long Term Sustainability Plan and the Reef 2050 Water Quality Improvement Plan (2018) set water quality targets. The targets are to reduce dissolved inorganic nitrogen loads by 60%, fine sediment loads by 25%, particulate nutrients by 20% and reducing pesticide to protect at least 99% of aquatic species at the end of the catchment. The 2017 Reef Scientific Consensus statement recognised that current initiatives cannot meet the water quality targets and that exploration of management alternatives and increased support and resources will be required.

A Market Solution for Protecting the Reef

A key conclusion in the 2016 Queensland Water Quality Science Taskforce report was the need to consider incentives and market mechanisms “to complement and integrate with regulation extension and education”. Such market-based approaches have been shown to work effectively around the world in the provision of environmental services such as the sequestration of carbon, the reduction of sulphur oxides and the creation of water quality credits

The Reef Credit Scheme adopts a similar approach in the Great Barrier Reef catchments, allowing landowners to generate and sell Reef Credits that result from activities that reduce Pollutants. The market for Reef Credits will work alongside existing environmental markets such as those for carbon and biodiversity. Reef Credits may be sold to a range of buyers such as government, corporate, industrial or philanthropic entities.

Benefits of the Reef Credit Scheme

1. Clear and robust rules to ensure water quality improvements credited are real, additional and permanent.
2. Farmers and land managers earn diversified and regular income by participating in the scheme.
3. Research and knowledge linked to on-ground practice through peer reviewed methodologies designed to suit local conditions.
4. Attracts investment from government, corporate and philanthropic sources.
5. Investors buy verified water quality outcomes when they are delivered and audited.
6. A single administrative platform with independent, transparent and accountable governance oversight to achieve water quality improvement.
7. Delivers consistent measurement and monitoring tools to track progress toward water quality targets across the entire Reef.
8. Funds projects designed to suit local conditions, agribusiness requirements and land manager’s plans.
9. Complements other key services such as extension, agribusiness, catchment management and other ecosystem services.

Objectives and Scheme Components

The objectives of the Reef Credit Scheme are to:

1. Improve water quality entering the Great Barrier Reef.
2. Contribute to the delivery of water quality improvement targets set under the Reef 2050 Water Quality Improvement Plan (2018) and any subsequent revisions to the water quality targets.
3. Create a market mechanism to incentivise projects that achieve water quality improvements.

The Reef Credit Scheme aims to provide a practical and credible scheme to credit reductions of Pollutants entering the Great Barrier Reef. The Reef Credit Scheme encompasses all elements to deliver water quality improvements through ecosystem service payments, primarily to farmers and land managers, in the Great Barrier Reef catchments.

Components of the Reef Credit Scheme:	
Reef Credit Guide	Overview of the Reef Credit Scheme.
Reef Credit Standard	Rules and requirements to develop Reef Credit Projects and Methodologies; Validate, register, Monitor, and Verify Projects; and issue, trade and use Reef Credits.
Reef Credit Registry	Ledger that tracks Reef Credit issuance, transactions and ownership.
Reef Credit Methodology	Approved methods to undertake Reef Credit Projects that provide verifiable Pollutant reductions.
Reef Credit Projects	Activities that conform to an approved Reef Credit Methodology and the Reef Credit Standard.
Reef Credit Governance	Independent oversight of the Standard, Registry, Methodologies and Reef Credit Projects.

The Reef Credit Scheme:

1. Creates a fungible Pollutant reduction credit called a Reef Credit;
2. Provides a transparent and secure Registry system that offers protection against Double Counting and provides visibility for the public;
3. Establishes clear rules and procedures to allow development of Pollutant reduction Reef Credit Projects;
4. Provides transparent oversight through the independent Reef Credit governance body to ensure that landholders, participants, investors, community and the market recognise the Reef Credit as being real, additional and permanent;
5. Links research and knowledge with practice through a creditable, transparent and verifiable market mechanism;
6. Provides a testable and practical framework for a water quality market within the Great Barrier Reef; and
7. Provides an economically efficient, verifiable pathway and a scalable mechanism for delivering landscape level change to achieving the Reef 2050 Water Quality Improvement Plan (2018) water quality targets.

Dispute Resolution and Stakeholder Grievances

The Reef Credit Secretariat maintains and publishes a dispute resolution and stakeholder grievance processes to log, review and address disputes and stakeholder grievances in a timely and transparent manner.

The Dispute Resolution Procedures relate to any decisions made by the Secretariate that a stakeholder believes was incorrectly made.

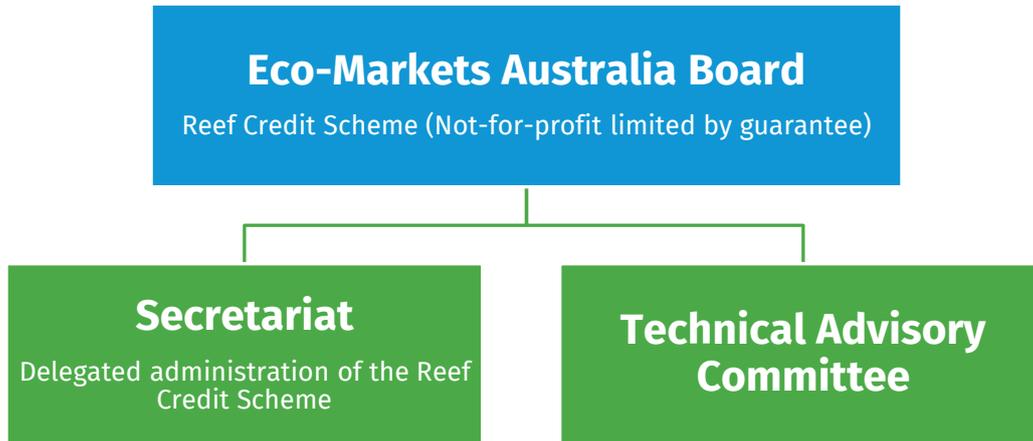
The Stakeholder Grievance Procedures address grievances by stakeholders who are adversely affected by a Reef Credit Project.

All issues or complaints can be lodged via the webpage, www.eco-markets.org.au.

Governance

Governance structure

Eco-Markets Australia, an independent not-for-profit company, established in Queensland under the *Corporations Act 2001* (Cth) as a company limited by guarantee, administers the Reef Credit Scheme. The company is governed by a skills-based Board of Directors, with the day-to-day administration of the Reef Credit Standard delegated to the Reef Credit Secretariat (staff).



Board of Directors

The role of the Board is to provide strategic, risk and compliance, and financial oversight to the Reef Credit Scheme, manage the development and ongoing maintenance of the Reef Credit Standard, and provide supervision of the Reef Credit Secretariat.

Secretariat

The Secretariat, overseen by the Board, administers the Reef Credit Scheme. The Reef Credit Secretariat's role and responsibilities includes:

- Managing or overseeing all Reef Credit Scheme processes and procedures
- Issuing, approving and/or updating all Reef Credit documentation
- Issuing guidance and interpretations related to the Reef Credit Scheme
- Ensuring the integrity of the Reef Credit Scheme
- Making decisions regarding the administration or operation of the Reef Credit Scheme, which may include input from the Technical Advisory Committee and Board.

Technical Advisory Committee

The Technical Advisory Committee (TAC) is composed of specialists that complement the skills of the Board and Reef Credit Secretariat on technical aspects of the Reef Credit Standard and Methodologies. The TAC also provides independent expertise on the methodology approval and modification process, selection of peer reviewers, compliance matters and related issues.

Foundation Members

Foundation Members of Eco-Markets Australia include the four organisations responsible for development of the Reef Credit Scheme:

- Terrain NRM
- NQ Dry Tropics

- GreenCollar
- Queensland Government, represented by the Department of Environment and Science

Scope and Application

Reef Credit Base Unit and Conversion Factors

A Reef Credit represents a quantifiable amount of Pollutant prevented from entering the Great Barrier Reef catchment.

The relative value of Pollutant reduction is set using the reef wide pollution reduction targets described in the Reef 2050 Water Quality Improvement Plan (2018). These values will be periodically amended by the Reef Credit Secretariat to reflect changes to the water quality targets. The calculations used to convert different types of Pollutant reductions into Reef Credits are set out in the Reef Credit Standard Section 2.2 and Schedule 2.

Methodologies

Projects operating under the Reef Credit Scheme must use an approved Reef Credit Methodology to quantify Pollutant reductions. Methodologies may be developed for any practice change or ecosystem repair activities that are able to reduce or remove Pollutants entering the Great Barrier Reef. Reef Credit Methodologies must comply with the Reef Credit Standard requirements for methodology development and approval as set out in the Reef Credit Standard Section 4.

Other Forms of Environmental Credit

The scope of the Reef Credit Scheme does not include greenhouse gas emissions or biodiversity. It is, however, possible to undertake other ecosystem services projects (including carbon, biodiversity and renewable energy projects) over the same area, subject to the requirements set out in the Reef Credit Standard.

Voluntary and Compliance Markets

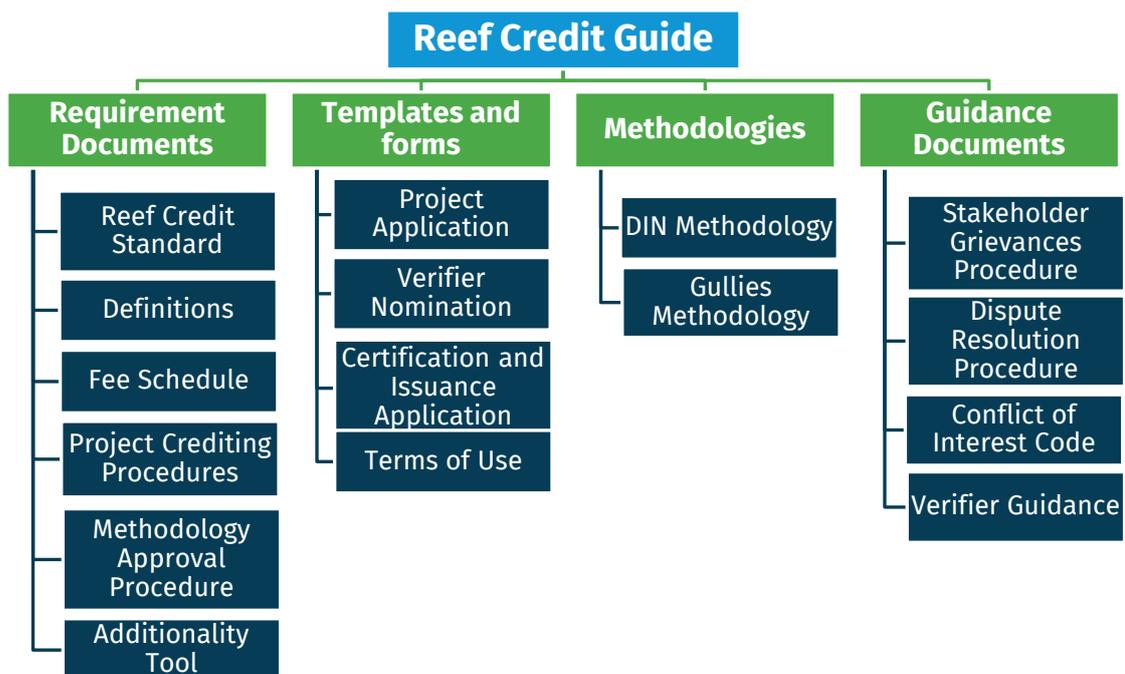
The Reef Credit Scheme can be used to develop, buy, and sell Reef Credits for voluntary purposes and, subject to any specific regulatory requirements, to meet regulatory obligations.

In the voluntary market context, it provides a mechanism to consistently measure benefits generated by land management and conservation actions, providing increased accountability for those who want to invest in water quality improvements. In the regulatory market context, it provides a mechanism for mitigation or trading under regulatory requirements.

Reef Credits have been designed as fungible units across pollutant types and any water quality improvement programs. The mechanism for this is provided in the relative water quality targets in the Reef 2050 Water Quality Improvement Plan (2018) as the basis for both voluntary and regulated markets.

Reef Credit Documentation

The rules and requirements for the Reef Credit Scheme are described in the Reef Credit documentation. Reef Credit Projects and Reef Credit Methodologies need to meet with all applicable rules and requirements described in these documents.



Reef Credit Guide - Reef Credit Guide is the overarching explanatory document that details the rationale for the Reef Credit Scheme, the core principles, the participants, governance of the Scheme, and the framework to generate, register, and issue Reef Credits from a Reef Credit Project.

Requirement Documents - Reef Credit Standard sets out the rules and requirements to develop Reef Credit Projects and Reef Credit Methodologies, the Validation, registration, Monitoring, Verification, crediting, issuance and transaction requirements. The Reef Credit Standard is accompanied by other requirements documents. The Reef Credit Definitions apply to all Reef Credit Documents. The Methodology Approval Procedures describe in detail the procedure to follow when a methodology is submitted for approval under the Reef Credit Standard. The Project Crediting Procedures describe in detail the procedure to follow when a Reef Credit Project is submitted for approval and crediting under the Reef Credit Standard.

Reef Credit Fee Schedule provides fees for submission of Reef Credit Projects, methodologies and issuance, transfer and retirement of Reef Credits.

The Conflict of Interest Code [forthcoming].

Tool for the Demonstration and Assessment of Additionality in Reef Credit Projects.

Templates and Forms - Procedural documents forms and templates referred to in the Reef Credit Scheme Guide and Reef Credit Standard detail the processes, procedures, forms, and a terms of use agreement to give effect to the relevant rules and requirements.

Methodologies - Reef Credit Methodologies provide the specific eligibility requirements and accounting rules for different types of Reef Credit Projects. All Reef Credit projects must use an approved Reef Credit Methodology.

Guidance Documents - Guidance documents provide additional information to stakeholders that participate in the Reef Credit Scheme. Guidance documents do not contain new or additional requirements but provide information on how to interpret or apply the Requirement Documents. A Reef Credit Verification Guidance will be developed, and other guidance documents may be developed as needed.

Reef Credit Registry

The Reef Credit Registry is comprised of a Reef Credit project database and the Registry, to provide Project Proponents with the ability to list and register projects, and issue, transfer and retire Reef Credits. The secure online platform is operated by Eco-Markets Australia and uses unique serial number tracking to ensure transparency, traceability, and integrity for all Reef Credits.

Reef Credit Principles

All Reef Credit Projects must meet the requirements set out in this document and the Reef Credit Standard. Pollutant reductions verified under this Scheme and issued with Reef Credits must meet the following core principles:

Real

All Reef Credits must be the result of registered Reef Credit Projects that yield quantifiable and verifiable Pollutant reductions or removals.

Measurable

All Reef Credits and underlying Pollutant reductions and removals must be quantified using a credible baseline established in Reef Credit Methodologies approved by the Secretariat.

Permanent

Where Reef Credits are generated by Projects that sequester Pollutants in the landscape and therefore carry the risk of Reversal, adequate safeguards must be in place to ensure that, should Reversal occur, a mechanism is in place that guarantees replacement or compensation.

Additional

All Reef Credit generated pollutant reductions and removals must be over and above:

1. a Business as Usual scenario;
2. legal requirements (e.g. regulatory standards threshold for compliance, or activities required by a conservation covenant); and
3. what is already funded to occur (i.e. satisfy the financial additionality test).

Independently audited

Reef Credits must be verified by an independent, accredited Verifier with the necessary expertise.

Unique

Each Reef Credit must be unique and only associated with a single Reef Credit Project.

Transparent

There must be sufficient and adequate public disclosure of information to ensure Reef Credits are trusted by generators, investors, partners, stakeholders, government and the general public.

Conservative

Accurate or conservative assumptions, values, and procedures must be used to ensure Reef Credit Pollutant reductions and removals are not over estimated. This includes a requirement that the Project Proponent assess, account for, and mitigate 'leakage', in accordance with the Standard and relevant approved Methodology.

Leakage is the displacement of activities that harm water quality from within the Project Area to a location outside the Project Area. Leakage occurs if improving water quality within Project Areas has a knock-on effect of reducing water quality elsewhere that affects the Great Barrier Reef.

Leakage may be caused by shifting of the activities of people present in the Project Area. For example, if there is a risk that farming on adjacent land might be intensified to compensate for reduced output in the Project Area. Leakage can also occur due to market effects whereby Pollutant reductions are countered by pollution created by shifts in supply of and demand for the products and services affected by the Project. Leakage does not occur if activities are shifted, or market effects occur outside the Great Barrier Reef catchment area.

Leakage results in a lower provision of water quality improvement services being attributable to the Project. Project Proponents must deduct leakage that reduces the Pollutant reduction and/or removal benefit of a Project in excess of any applicable threshold specified in the Methodology.

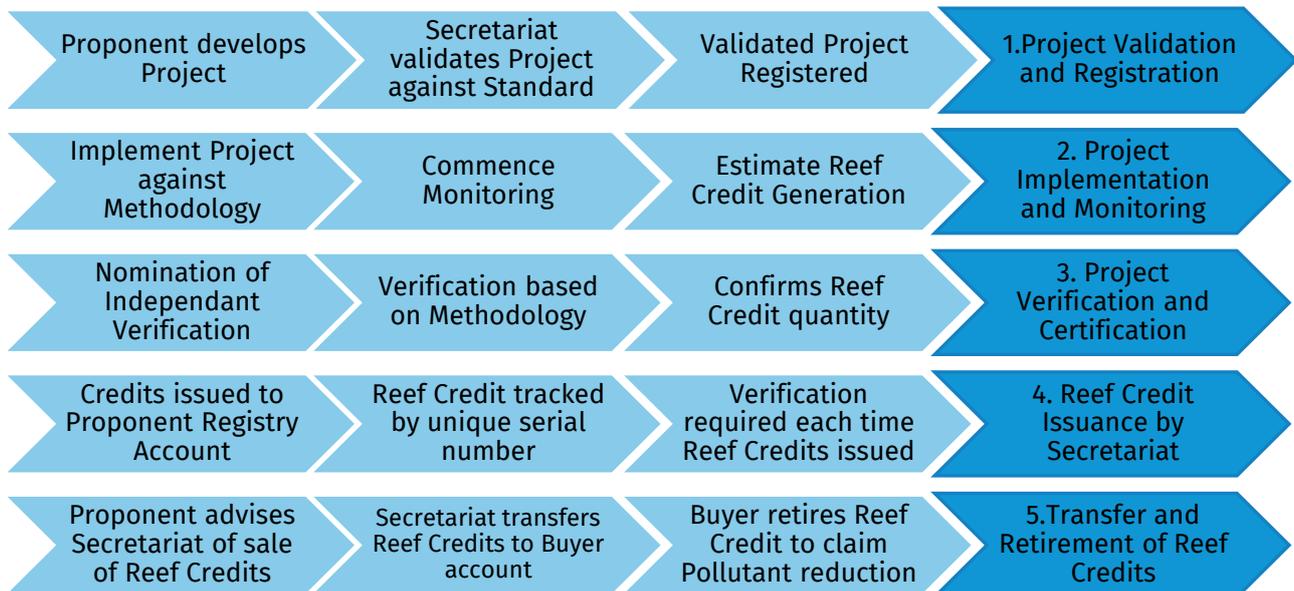
Reef Credit Scheme Participants

Participation in the Reef Credit Scheme is voluntary and based on satisfying the Reef Credit Standard and Methodologies. Participation is open to anyone that can meet these requirements. The various participants in the Reef Credit Scheme are set out in the table below and may be further described in the Definitions.

Participant	Role
Project Proponents	<i>Project Proponents</i> are individuals or entities that create Reef Credits. A Project Proponent might be an individual landowner, land manager, or project developer.
Buyers	<i>Buyers</i> include any public or private entity that chooses or needs to support water quality improvement by purchasing Reef Credits. Buyers may purchase Reef Credits to meet regulatory obligations, subject to any relevant regulatory agency requirements, or as a way to measure progress toward environmental goals.
Verifiers	<i>Verifiers</i> are independent third parties or agencies who confirm that Reef Credits are calculated accurately and maintained to the appropriate standard throughout the life of the Reef Credit Project. Verifiers must be appropriately trained and accredited.
Governance Body and Secretariat	The Reef Credit Scheme is governed by a not-for-profit company limited by guarantee incorporated in Queensland, Australia. The company, Eco-Markets Australia, is governed by a Board of Directors, with the day-to-day administration of the Reef Credit Standard delegated to the Reef Credit Secretariat. The Reef Credit Secretariat manages Reef Credit validation, registration, verification, and Reef Credit issuance processes.

Overview of the Reef Credit Process

The following steps outline the process that a Project Proponent follows to generate, issue, and sell Reef Credits from a Reef Credit Project.



1. Site selection, validation and registration

Once a Project Proponent has identified a site to implement a Reef Credit Project, selected an appropriate Reef Credit Methodology, and is satisfied that they meet all necessary rules and criteria of the Reef Credit Standard, they must apply to register a Project with the Reef Credit Secretariat.

The Reef Credit Secretariat will validate the Project against the Reef Credit Standard and the appropriate Methodology to ensure that the Project Proponent has complied with all relevant rules and criteria. If the Project is compliant the Secretariat will notify the Project Proponent and register the Project on the Registry. If the Project is not compliant the Reef Credit Secretariat will notify the Project Proponent that the Project has failed to meet Validation standards. Project Proponents may revise their Project Application and reapply if they feel they are able to subsequently satisfy meet all necessary rules and criteria of the Reef Credit Standard and Methodology.

2. Reef Project implementation and Reef Credit calculation

To generate Reef Credits Project Proponents must implement the Reef Credit Project activities and Monitor of the Reef Credit Project.

Project Proponents must apply the relevant Reef Credit Methodology to determine monitoring requirements and estimate the number of Reef Credits generated. The estimation of Reef Credits may require making several deductions to the amount of Pollutant reductions generated by a project to take into account uncertainties, potential Leakage and Risk of Reversal as specified in the Reef Credit Methodology.

3. Reef Credit Verification and Certification

To provide assurance that Pollutant reductions are real and correctly estimated, all projects must undergo independent Verification by professional Verifiers approved by the Reef Credit Secretariat.

Verification processes may differ depending on the Methodology. This process confirms Project eligibility, baseline and Project Pollutant reduction calculations, Reef Credit quantity and that the Project was implemented to meet the Reef Credit Standard.

4. Reef Credit Issuance

Once a Reef Credit Project has been verified the Reef Credit Secretariat is able to issue Reef Credits to the Project Proponent.

The Project Proponent must set up a Registry account into which Reef Credits are issued. Upon issuance, Reef Credits become visible to the public and are tracked with a unique serial number.

Project Verification by independent and accredited Verifiers must be undertaken each time Project Proponents seek to have Reef Credits issued.

5. Transfer and Retirement of Reef Credits

Reef Credits can be sold and purchased by transferring the credits between Registry Accounts. This includes sales from Project Proponents and buyers, or between other buyers and sellers that are not implementing Reef Credit Projects.

Registry Account holders can retire Reef Credits for their own benefit, or on behalf of third parties. Retirement amounts to a party claiming the benefits associated with a Reef Credit and results in Reef Credits being moved to a retirement account on the Registry which removes the credit from circulation.

Reef Credits are also subject to 'vintaging'. The Vintage is a term that refers to the year of production of the Reef Credit, which means the date on which the Pollutant reduction or removal was verified. The price of a Reef Credit may vary depending on its Vintage. Reef Credits remain valid for three (3) years from the date of the Verification Report for which the Reef Credit was issued, after which the Reef Credit automatically expires. The purpose of vintaging is to ensure that water quality improvement claims are realised within a timeframe consistent with the Reef Credit Project intention and implementation.

Detailed Definitions and Process

Terms used in this document are defined in the Reef Credit Definitions. Details on accreditation of Verifiers, Methodology Approval, Dispute Resolution, Leakage Assessments, Permanence, Safeguards, Crediting Periods and Credit Retirement are provided in the Reef Credit Standard, Methodology Approval Procedures, and Project Crediting Procedures.

References

Great Barrier Reef Outlook Report (2014), Commonwealth Government 2014.

Great Barrier Reef Scientific Consensus Statement (2017), Queensland Government 2017.

Great Barrier Reef Water Science Taskforce Report (2016), Queensland Government 2016.

Reef 2050 Long-Term Sustainability Plan (2018), Commonwealth of Australia 2018.

Reef 2050 Water Quality Improvement Plan (2017-2022), Commonwealth of Australia 2017.