



This document has been prepared by the Carbon Market Institute in partnership with global law firm Norton Rose Fulbright (Australia).

1. Overview

This explainer provides an overview of the key aspects of Australia's carbon credit scheme, which has been operating since 2011. It details that there are a number of "checks and balances" enshrined within the scheme to ensure that

- environmental integrity is achieved for all carbon credits that are issued under the scheme;
- carbon credits are only issued for abatement that has actually occurred; and
- abatement is not credited twice.

The scheme also incorporates the involvement of independent, third-party auditors who are registered under the *National Greenhouse and Energy Reporting Regulations 2008* to ensure appropriate verification of credit issuance.

At a high level, the scheme includes the following attributes:

- Offsets integrity standards, against which proposed methodologies are assessed;
- Public consultation for proposed methodologies;
- Review of proposed methodologies by an independent body to ensure they comply with the offset integrity standards;
- Periodic review of existing methodologies;
- Requirement for projects to satisfy additionality requirements (the project must be new, not required to be undertaken by law and not funded by other specified government programs);
- Independent verification of abatement achieved from project activities through reasonable assurance audits;
- A test to ensure no double counting of the abatement;
- Permanence requirements for sequestration projects, and mechanisms to address the reversal of sequestration;
- Mechanisms to address fraudulent conduct;

A comparison of Australia's carbon credit scheme with other schemes operating in compliance and voluntary markets demonstrates that the Australian scheme has all the essential integrity attributes considered appropriate for schemes of this nature.



2. Key Points

The Australian carbon market operates through a regulated scheme, established under the Carbon Credits (Carbon Farming Initiative) Act 2011 (CFI Act) and administered by the Clean Energy Regulator (Regulator).

- Under the scheme, one Australian Carbon Credits Unit (ACCU) is issued for each tonne of CO₂-e abatement. The abatement can comprise an emission reduction or an emission removal. Emission removal includes sequestration activities, which involve storing carbon in vegetation or soil.
- The issuance of ACCUs is governed by the CFI Act, the Carbon Credits (Carbon Farming Initiative) Regulations 2011 (CFI Regulations), and the Carbon Credits (Carbon Farming Initiative) Rule 2015 (CFI Rule).
- In order to generate ACCUs, the reduction or removal activity must be undertaken in accordance with a set of rules, known as a “methodology”. The project activity must be registered by the Regulator, which involves an assessment process, including assessment of whether the project activity will comply with the methodology.
- Projects are authorised for a specific period, which normally involves 7 years for an emissions reduction project and 25 years for a sequestration project (such as the human-induced regeneration projects). ACCUs can be issued throughout this period.
- ACCUs are generated following the completion of a report which calculates the amount of abatement that has been achieved by the project activities. These reports are assessed by the Regulator against certain criteria, including that the abatement has been calculated in accordance with the methodology. For vegetation projects, depending on the methodology, the abatement is calculated via either; direct measurement of the vegetation (e.g., avoided deforestation projects), or a scientifically backed abatement modelling tool (e.g. FullCAM).
- For certain sequestration projects, such as those known as human-induced regeneration projects, there are more rigorous criteria that apply in order for the project to receive ACCUs. These criteria are set out within the methodologies and in regulatory guidance documents that sit alongside the methodologies.
- Audits are undertaken by independent, third-party auditors of the reports provided to the Regulator during the project’s life cycle. The Regulator also has the power to commission an audit of a project at any time.
- ACCUs are regulated as financial products under the corporation law, and accordingly, there are licensing requirements for those who deal in ACCUs or provide financial advice about them.



3. Methodologies

The CFI Act sets out a rigorous process for the approval, review and revocation of methodologies. Methodologies are statutory instruments made by the Federal Minister for Energy and Emissions Reductions. The Minister is assisted in this function by the Emissions Reduction Assurance Committee (ERAC).

Determining New Methodologies

The Regulator develops methodologies in consultation with industry, potential end-users, scientists and technical experts.¹ The Minister determines what new methodologies should be prepared under the scheme. In making this determination, he will consider matters such as:

- the likely volume of abatement from the relevant project activity;
- the ability to cost-effectively estimate abatement with reasonable certainty;
- the potential for adverse impacts from the project activity;
- the availability of other government incentives; and
- alignment with government priorities.²

Offset Integrity Standards

Methodologies must satisfy the offsets integrity standards, which comprise:

- **Additionality:** projects carried out in accordance with methodologies must result in carbon abatement that is unlikely to occur in the ordinary course of events;
- **Measurable and verifiable:** removals, reductions or emissions that need to be ascertained under a methodology must be capable of being measured and verified;
- **Eligible carbon abatement:** the carbon abatement must be able to be used to meet Australia's climate change targets under the Paris Agreement;
- **Evidence-based:** methodologies must be supported by clear and convincing evidence;
- **Project emissions:** any material emissions that are a direct consequence of carrying out the project should be deducted from the project's net abatement; and
- **Conservative:** any estimate, projection or assumption that is required should be conservative.

Further detail on the interpretation and application of the offsets integrity standards is set out in the [Information paper: Committee considerations for interpreting the Emissions Reduction Fund's offsets integrity standards](#).³

¹ The Regulator released "Co-designing methodologies: a framework for collaboration" in March 2021:

<http://www.cleanenergyregulator.gov.au/ERF/Pages/Method-development.aspx>. Prior to the Regulator, the Department of Industry, Science, Energy and Resources (or predecessor Departments) held responsibility for method development

² <http://www.cleanenergyregulator.gov.au/ERF/Pages/Method-development.aspx>

³ <http://www.cleanenergyregulator.gov.au/DocumentAssets/Pages/Information-Paper-on-the-Offsets-Integrity-Standards.aspx>



Role of the Emissions Reduction Assurance Committee

- The CFI Act establishes the Emissions Reduction Assurance Committee (**ERAC**) which has the role of reviewing methodologies, and making recommendations to the Minister as to whether the methodologies comply with the offsets integrity standards.
- ERAC consists of a Chair and at least 4 other members (it can have a maximum of 9 members, including the Chair).⁴ Each member is appointed by the Minister.
- The Minister may only appoint a person as a member of ERAC if the Minister is satisfied that the person has substantial experience or knowledge and significant standing in at least one field of expertise relevant to the functions of ERAC.⁵ One member must be a Department employee, and one must be an officer of CSIRO.⁶
- ERAC members must give the Minister notice of all interests, pecuniary or otherwise, that conflict with, or could conflict with, the proper performance of the member's functions.
- ERAC's functions include:
 - monitoring the compliance of methodologies with the offsets integrity standards;
 - undertaking periodic reviews of methodologies; and
 - undertaking public consultation in relation to reviews of methodologies.
- The Minister may terminate the appointment of a member for, amongst other things, misbehaviour or if the Minister is of the opinion that the performance of the member has been unsatisfactory.

Making or varying methodologies

- The Minister must obtain the advice of ERAC before making a methodology.⁷ ERAC's advice must provide an opinion on whether the methodology complies with the offsets integrity standards.⁸
- Prior to providing its advice to the Minister, ERAC must undertake a consultation exercise, and invite submissions on the proposed methodology. In preparing its advice, ERAC must have regard to any submissions received within the specified timeframe.
- In deciding whether or not to make a methodology, the Minister must have regard to:
 - whether the methodology complies with the offsets integrity standards;
 - any advice given to the Minister by ERAC;
 - whether any adverse environmental, economic or social impacts may arise from the project; and
 - any other matters that the Minister considers relevant.⁹
- Importantly, the Minister must not make a methodology if ERAC has advised the Minister that the methodology does not comply with any of the offsets integrity standards.¹⁰
- Any advice provided by ERAC to the Minister must be made public.¹¹
- A similar regime to the above applies to variations of methodologies.¹² Methodologies can be varied for a number of reasons, including to ensure methods continue to operate as originally intended, to allow additional activities to be undertaken under a method, or to account for technological advances that enable new measurement approaches.¹³

⁴ CFI Act s 256.

⁵ CFI Act s 257(1), (2).

⁶ CFI Act s 245(5),(6).

⁷ CFI Act s 106(1), 114(6).

⁸ CFI Act s 123A(2), (3).

⁹ CFI Act s 106(4), 114(2), 123(3).

¹⁰ CFI Act s 106(4B), 114(7B).

¹¹ CFI Act s 106(11), 114(8).

¹² CFI Act s 114.

¹³ <http://www.cleanenergyregulator.gov.au/ERF/Want-to-participate-in-the-Emissions-Reduction-Fund/Planning-a-project/method-variations>



Reviews of methodologies

- Any person may ask ERAC to undertake a review of a methodology. The request must address any inconsistencies between the methodology and the integrity offsets standards.¹⁴
- If ERAC is satisfied there is reasonable evidence that an approved methodology does not comply with the offsets integrity standards, ERAC has the power to make an order that the Regulator may not consider or decide upon any project applications under that methodology for a period of 12 months.¹⁵
- ERAC also conducts crediting period extension reviews, which is a review that must occur when the first project approved under a methodology is nearing the end of its crediting period. The purpose of this review is to consider whether or not a methodology should be varied in order to extend the crediting periods for projects covered by the methodology.¹⁶
- In conducting this review, ERAC must consider whether such projects would continue to comply with the offsets integrity standard relating to additionality (namely, is the abatement from the project unlikely to occur in the ordinary course of events).¹⁷

Revocation of methodologies

- Methodologies can be revoked by the Minister.
- Before revoking a methodology, the Minister must seek advice from ERAC. In preparing its advice, ERAC must have regard to the offsets integrity standards.
- In deciding whether to revoke a methodology, the Minister must have regard to whether it complies with the offsets integrity standards, as well as the advice provided by ERAC.

¹⁴ CFI Act s 255AA.

¹⁵ CFI Act s 27A.

¹⁶ CFI Act s 255A.

¹⁷ CFI Act s 255A(2).



4. Registration of projects

- Any person may apply to the Regulator for a declaration that an offsets project is an “eligible offsets project”. A project must be declared an eligible offsets project in order for it to be capable of generating ACCUs. Eligible offsets projects are listed on the Emissions Reduction Fund project register, which is publicly accessible.¹⁸
- The Regulator must be satisfied that a project meets the following criteria before declaring that a project is an “eligible offsets project”:
 - the project is carried out in Australia;
 - the project meets the requirements of the applicable methodology, and any other applicable eligibility requirements;
 - the project meets the additionality requirements, which include:
 - a) *Newness requirement*:¹⁹ this requires that the project has not yet begun to be implemented;
 - b) *Regulatory additionality requirement*: the project is not required to be carried out by or under a law of the Commonwealth, a State or Territory;²⁰ and
 - c) *Government program additionality requirement*: the project would be unlikely to be carried out under another Commonwealth, State or Territory government program in the absence of the declaration,²¹
 - the person applying for the declaration must be a fit and proper person;²² and
 - the project is not an excluded project.²³
- Persons who wish to be the registered participant for the project (known as “project proponents”) must also satisfy other requirements, for example that they have the legal right to carry out the project, and the consent of any interest holder in the land on which the project will be conducted.

¹⁸ <http://www.cleanenergyregulator.gov.au/ERF/project-and-contracts-registers/project-register>

¹⁹ CFI Act s 27; CFI Rule cl 14.

²⁰ CFI Act s 27(4A)(b).

²¹ CFI Act s 27(4A)(c).

²² CFI Act s 60, CFI Rule cl 61.

²³ Certain types of projects may be listed as excluded projects because they may have impacts on the availability of water, the conservation of biodiversity, employment, the local community or land access for agricultural productivity. The current list of excluded projects includes: (a) the planting of weed species; (b) forest under forestry management investment schemes; (c) restoring illegally cleared land; and (d) restoring land that was legally cleared within the last 7 years.



5. Reporting, notification and auditing requirements

Regular reporting requirements

- As noted above, projects are authorised for a specific period (referred to as a “crediting period”), which normally involves 7 years for an emissions reduction project and 25 years for a sequestration project. ACCUs can be issued throughout this period.
- Project proponents are required to report on the abatement achieved by their project by submitting a written offsets report to the Regulator at regular intervals. Project proponents can choose how frequently to report on their project, however must report at least every 2 years for emissions avoidance projects or every 5 years for sequestration projects.²⁴
- Civil penalties may be imposed if a project proponent does not report on their project at the nominated intervals.

Notification requirements

- Project proponents are required to notify the Regulator if certain events occur, including:
 - if they are no longer the project proponent;²⁵
 - a natural disturbance or third party beyond the control of the project proponent has or is likely to have caused a reversal of the sequestered carbon;²⁶
 - the project has become inconsistent with a regional natural resource management plan;²⁷ or
 - an event relevant to whether the project proponent is a fit and proper person has taken place.²⁸

Auditing

- In addition to reporting requirements, project proponents are also required appoint a registered greenhouse and energy auditor to audit one or more of their offsets reports.²⁹
- All project proponents are required to ensure that an “initial audit” is submitted with their first offsets report.³⁰ The Regulator will indicate whether other audit reports are required at the time of project registration, which will depend on the project size.³¹ Usually a minimum of three scheduled audits will be required.³² Audits are also required if an offsets report claims more than 100 000 tCO₂-e of abatement.³³
- The Regulator also has power to issue a notice to the project proponent to engage a registered greenhouse and energy auditor (which may be nominated by the Regulator) to undertake a compliance audit if the Regulator has reasonable grounds to suspect the project proponent has contravened, is contravening or is proposing to contravene any requirements of the CFI legislation.³⁴
- Failure to comply with a notice to conduct an audit carries a civil penalty provision.³⁵

²⁴ CFI Act s 76.

²⁵ CFI Act s 78.

²⁶ CFI Act ss 81, 82.

²⁷ CFI Act s 83.

²⁸ CFI Act s 84.

²⁹ CFI Act s 76(4)(c); CFI Rule r 73.

³⁰ CFI Rule r 74(1).

³¹ *Carbon Credits (Carbon Farming Initiative) (Audit Thresholds) Instrument 2015* cl 4.

³² CFI Rule r 75(1).

³³ CFI Rule r 77(1)(b); *Carbon Credits (Carbon Farming Initiative) (Audit Thresholds) Instrument 2015* cl 6.

³⁴ CFI Act s 214.

³⁵ CFI Act s 214(7).



Issuance of credits

- After a project proponent has submitted an offsets report, they may apply to the Regulator for a “certificate of entitlement”, which will indicate how many ACCUs the project proponent is entitled to. The Regulator will then issue an equivalent number of ACCUs to the project proponent.
- Before issuing a certificate of entitlement, the Regulator must be satisfied that:
 - the project proponent has obtained all required regulatory approvals;
 - the project proponent still meets the fit and proper person test;
 - there is no ACCU relinquishment requirement in relation to the project;³⁶ and
 - the carbon abatement being claimed has not already been credited for the project or for another eligible offsets project.

Permanence obligations

- Carbon sequestration projects must ensure that the carbon taken out of the atmosphere is stored permanently and not re-released back into the atmosphere.
- Proponents of sequestration projects can choose a permanence period of either 25 or 100 years, which starts at the same time as a project’s crediting period.
- If a disturbance occurs in the project area during the permanence period that causes a decrease in the carbon stored, land management practices must enable the carbon stock to return to previously reported levels, or alternatively ACCUs can be relinquished to the Regulator.
- A risk of reversal buffer applies to all sequestration projects, which means that the number of ACCUs issued to these projects is discounted. Projects with a permanence period of 25 years have a discount of 25%, and projects with a permanence period of 100 years have a discount of 5%. These ACCUs are held in a buffer account by the Regulator as a form of insurance to cover any loss of sequestration caused by a natural disturbance or circumstances beyond the project proponent’s control.

Relinquishment requirements and carbon maintenance obligations

- The Regulator may require a project proponent to relinquish ACCUs from a project if ACCUs were issued:³⁷
 - on the basis of false or misleading information;
 - for a sequestration offsets project, where that project has been revoked; or
 - for a sequestration offsets project, where there has been a significant reversal³⁸ of sequestration.
- If a relinquishment requirement is not met, the Regulator may declare that a carbon maintenance obligation applies to an area or areas of land for a sequestration project.³⁹
- A carbon maintenance obligation requires the landowner and occupier and any future landowners and occupiers not to engage in conduct that would reduce the amount of sequestered carbon that existed at the time the obligation was applied. If there is a reduction in the amount of sequestered carbon, the owner or occupier is required to take all reasonable steps to ensure that the amount of sequestered carbon is not less than at the time the obligations was applied.

³⁶ CFI Act s 15.

³⁷ CFI Act Part 7.

³⁸ A reversal or removal of carbon dioxide by a *natural disturbance* is a significant reversal if the size of the project area in which the reversal occurs is at least 5% of the total project area. A reversal or the removal of carbon dioxide by *conduct engaged in by a person* is a significant reversal if the size of the project area in which the reversal occurs is at least the smaller of the following: (a) 5% of the total project area; or 50 hectares (see *Carbon Credits (Carbon Farming Initiative) Rule 2015*, sections 81–82).

³⁹ CFI Act s 97(2).



- A carbon maintenance obligation may remain on the project area until the end of the permanence period for the project.⁴⁰

Regulation of ACCUs as financial products

- ACCUs are classified as financial products under the *Corporations Act 2001*. On this basis, an Australian financial services (AFS) licence may be required for persons that carry on a financial services business in relation to ACCUs.
- This enables ASIC to regulate carbon markets with the aim of promoting fair, orderly and transparent markets, and ensure that organisations that hold an AFS licence operate efficiently, honestly and fairly.⁴¹

⁴⁰ CFI Act s 97(14).

⁴¹ <https://asic.gov.au/media/5702581/rq236-published-20-may-2015-20200727.pdf>

6. Comparative Analysis of Integrity Mechanisms within Carbon Credit Schemes

The following table has been prepared for the purpose of comparing the key rules and requirements relating to integrity that exist under other major carbon market standards, including the:

- Australian Carbon Farming Initiative (CFI) Act;
- California Compliance Offset Program;
- Alberta Emissions Offset System (under the Technology Innovation & Emissions Reduction (TIER) regulation);
- VERRA Verified Carbon Standard (VCS); and
- Gold Standard for Global Goals

These programs were selected for comparison based on the following considerations:

- the inclusion of both domestic compliance standards and international voluntary standards;
- the inclusion of established schemes and standards that have been operational for long enough to have undergone review and reform;
- the inclusion of schemes and standards with approved methodologies and projects in a wide variety of sectors; and
- the inclusion of schemes and standards that have a high volume of approved projects.

This table has been prepared for the purpose of providing a high-level comparison between standards, and is not intended to be a comprehensive overview of these standards. Specific methodologies approved under these standards have not been reviewed. This table does not constitute legal advice, and has not been prepared or reviewed by lawyers qualified to practice in California or Alberta.

Integrity Measure	CFI Act	California's Compliance Offset Program	Alberta Emission Offset System	Verra's Verified Carbon Standard	Gold Standard for the Global Goals ⁴²
<p>Factors that must be satisfied before methodology will be developed</p>	<p style="text-align: center;">✓</p> <p>See paragraph 0 above.</p>	<p style="text-align: center;">✓</p> <p>When deciding on potential methodology types (referred to as protocols) for development, the California Air Resources Board (CARB) will consider:</p> <ol style="list-style-type: none"> 1. Ability to generate offsets that meet the AB 32 criteria (i.e. real, permanent, quantifiable, verifiable, enforceable, and additional);⁴³ 2. Potential for projects in California; 3. Potential offset supply; 4. Cost-effectiveness; and 5. Co-benefits.⁴⁴ 	<p style="text-align: center;">✓</p> <p>The Alberta Climate Change Office (ACCO)⁴⁵ screens applications to develop a methodology (referred to as quantification protocols). Applications must:</p> <ol style="list-style-type: none"> 1. Result in quantifiable emission reduction or sequestration in Alberta; 2. Meet all requirements in Alberta's climate legislation; 3. Not be already covered by an existing methodology.⁴⁶ 	<p style="text-align: center;">✓</p> <p>Verra will only accept a methodology concept into the Methodology Approval Process if it meets the following evaluation criteria:</p> <ol style="list-style-type: none"> 1. the project activities are not covered by an existing methodology; 2. the concept has broad applicability; 3. an overview of methodological approaches is provided and includes a well thought through method for emission reduction quantification; 4. the team developing the methodology is appropriately experienced and has sufficient funding to ensure that the methodology approval process can be completed. <p>Preference will be given to methodology concepts that include one or more of the following:</p>	<p style="text-align: center;">✓</p> <p>Before preparing a draft methodology, the Gold standard will first consider whether a methodology concept note is eligible in accordance with the following requirements:</p> <ol style="list-style-type: none"> 1. the methodology is in line with the general eligibility principles and criteria in the Gold Standard Principles and Requirements⁴⁷ as well as Activity Requirements⁴⁸; 2. the methodology provides a quantification approach to assess contribution to at least one Sustainable Development Goal (SDG). 3. the methodology should not yet be covered by another approved or under-development Gold Standard methodology. <p>We consider the general eligibility principles and criteria in the Gold Standard Principles and Requirements and the Activity</p>

⁴² We note that the Gold Standard has a regular approval procedure for new methodologies, and also a fast track approval procedure that is applicable to methods that are already approved by another scheme. In this table, we only consider the regular approval procedure.

⁴³ Health and Safety Code (Assembly Bill 32 or AB 32), Division 25.5 §38562(d)(1) and (2).

⁴⁴ California Air Resources Board's Process for the Review and Approval of Compliance Offset Protocols in Support of the Cap-and-Trade Regulation [California Air Resources Board's Process for the Review and Approval of Compliance offset Protocols in support of the Cap and trade regulation](#)

⁴⁵ We note that the Technical Guidance for Offset Protocol Development and Revision v2.0 (July 2018), which appears still to be current, sets out that the responsible entity for many of the functions contained in this table is the Alberta Climate Change Office. We note that this office from a review of the current Alberta Government directory, this does not appear to be a current office. The Ministry of Environment and Parks appears to be responsible for the Alberta Emission Offset System, and within this Ministry the Climate Regulation and Carbon Markets Branch, and within that the Climate Change Compliance Section and the Emissions Offsets Section, appear to have various functions in relation to the System.

⁴⁶ Technical Guidance for Offset Protocol Development and Revision v2.0 (July 2018) [Technical Guidance for Offset Protocol Development and Revision \(alberta.ca\)](#)

⁴⁷ <https://globalgoals.goldstandard.org/101-par-principles-requirements/>

⁴⁸ <https://globalgoals.goldstandard.org/200-activity-requirements/>

Integrity Measure	CFI Act	California's Compliance Offset Program	Alberta Emission Offset System	Verra's Verified Carbon Standard	Gold Standard for the Global Goals ⁴²
				<ol style="list-style-type: none"> 1. an innovative approach to demonstrating additionality or quantifying emission reductions or removals; 2. potential for significant environmental impact; 3. applicability to a sector or region that is underrepresented in the carbon markets; 4. proposed projects are awaiting the development of the methodology. 	Requirements in further detail below.
Public consultation prior to approval of methodology	<p style="text-align: center;">✓</p> <p>There is a public consultation period of 28 days (unless ERAC considers a shorter period is warranted) during which time a detailed outline of the methodology is published online.</p> <p>ERAC is required to consider any submissions received. All submissions received must be published online, unless the person has requested non-publication on the grounds the submission could reasonably be expected to substantially prejudice the commercial interest of the person.</p>	<p style="text-align: center;">✓</p> <p>The development process will include public workshops or technical working groups. The draft protocol is placed on public exhibition for 45 days and the regulator is required to respond to public submissions. A public hearing is held in which stakeholders can address the board of the regulator.⁴⁹</p>	<p style="text-align: center;">✓</p> <p>Methodologies are placed on exhibition for 30 days on ACCO's website. Any issues raised are sent to the protocol developer and Technical Review team to reach a consensus on their resolution. The protocol must have no unresolved objections to be considered for final approval.⁵⁰</p>	<p style="text-align: center;">✓</p> <p>There will be a public comment period of 30 days, during which time the draft methodology will be publically available on Verra's website. Verra provides all comments received to the methodology developer, who must either update the methodology on the basis of the comments received or demonstrate the insignificance or irrelevance of the comment. It shall demonstrate to the validation/verification body what action it has taken.</p> <p>All comments received are posted on Verra's website.</p>	<p style="text-align: center;">✓</p> <p>Following independent expert review (see below), the draft methodology may be published for public consultation for a 30-day period in accordance with the Gold Standard "Standard Setting Procedures".</p> <p>The Gold Standard Secretariat provides the comments received to the methodology developer, who shall address the relevant comments and incorporate them in the draft methodology.</p>
Review of methodologies by independent body prior to approval	<p style="text-align: center;">✓</p> <p>Methodologies are reviewed by ERAC, for further details see paragraphs □, □ and □ above.</p>	<p style="text-align: center;">✗</p> <p>The approval process is conducted solely by CARB, which is part of the California</p>	<p style="text-align: center;">✓</p>	<p style="text-align: center;">✓</p> <p>Verra contracts an independent validation / verification body (VVB) to assess the methodology</p>	<p style="text-align: center;">✓</p> <p>The Gold Standard Secretariat appoints two external subject matter experts with</p>

⁴⁹ California Air Resources Board's Process for the Review and Approval of Compliance Offset Protocols in Support of the Cap-and-Trade Regulation [California Air Resources Board's Process for the Review and Approval of Compliance offset Protocols in support of the Cap and trade regulation](#)

⁵⁰ Technical Guidance for Offset Protocol Development and Revision v2.0 (July 2018) [Technical Guidance for Offset Protocol Development and Revision \(alberta.ca\)](#)

Integrity Measure	CFI Act	California's Compliance Offset Program	Alberta Emission Offset System	Verra's Verified Carbon Standard	Gold Standard for the Global Goals ⁴²
		<p>Environmental Protection Agency.⁵¹ CARB consists of 16 members, 12 of which are appointed by the Governor and confirmed by the state Senate (including five who serve on local air districts, four experts in fields that shape air quality rules, two public members and a Chair),</p> <p>The other four include two representing environmental justice communities and two nonvoting members (one from the Senate, one from the Assembly) appointed for Legislative oversight.</p>	<p>The technical review includes review by a third party assurance provider.⁵²</p>	<p>and produce an assessment report. The fees of the VVB will be paid by the methodology developer.</p> <p>Verra and the methodology developer both have a role in choosing the VVB, with Verra to send the initial request to all eligible VVBs, and Verra to send a shortlist of eligible VVBs to the methodology developer who can make the final selection.</p>	<p>relevant background and two internal reviewers (one from the relevant sectoral Gold Standard Technical Advisory Committee, and one from either the energy, the land-use or the water Technical Advisory Committees) to conduct the in-depth review of the draft methodology.</p> <p>The reviewers send Corrective Action Requests (CARs) and Observations (OBs) to the Gold Standard Secretariat, which the methodology developer is required to address.</p> <p>The relevant sectoral Technical Advisory Committee then reviews the revised methodology and may open or raise new CARs and OBs, which the methodology developer must address. The Technical Advisory Committee then decides whether or not to approve the methodology.</p>
Methodologies must comply with integrity standards	<p style="text-align: center;">✓</p> <p>Yes, see paragraphs Error! Reference source not found. and □ above.</p>	<p style="text-align: center;">✓</p> <p>In order to approve a protocol the regulator must be satisfied of matters including that the protocol:</p> <ol style="list-style-type: none"> meets the AB 32 criteria (i.e. offsets generated will be real, permanent, quantifiable, verifiable, 	<p style="text-align: center;">✓</p> <p>During development protocols undergo technical review. This review assesses:</p> <ol style="list-style-type: none"> environmental integrity to ensure reductions are real, quantifiable and verifiable; completeness of sources, sinks and reservoirs; 	<p style="text-align: center;">✓</p> <p>Verra will approve a methodology if it meets all VCS Program requirements. This includes those under the VCS Program Guide,⁵⁶ the VCS Standard,⁵⁷ and the VCS Methodology Requirements.⁵⁸</p>	<p style="text-align: center;">✓</p> <p>The internal and external reviewers assess the draft methodology based on the following:</p> <ol style="list-style-type: none"> whether it satisfies the content requirements set out in 3.1.1.2 of the Impact

⁵¹ California Air Resources Board's Process for the Review and Approval of Compliance Offset Protocols in Support of the Cap-and-Trade Regulation [California Air Resources Board's Process for the Review and Approval of Compliance offset Protocols in support of the Cap and trade regulation. While we note that the any protocols must also be reviewed by the Office of Administrative Law, we understand this is for the purpose of satisfying administrative law requirements and is not related to the environmental integrity of the protocol.](#)

⁵² Technical Guidance for Offset Protocol Development and Revision v2.0 (July 2018) [Technical Guidance for Offset Protocol Development and Revision \(alberta.ca\)](#)

⁵⁶ VCS Program Guide v4.1 (Issued 19 September 2019, updated 20 January 2022) <https://verra.org/project/vcs-program/rules-and-requirements/>

⁵⁷ VCS Standard v4.2 (Issued 19 September 2019, updated 20 January 2022) <https://verra.org/project/vcs-program/rules-and-requirements/>

⁵⁸ VCS Methodology Requirements (Issued 19 September 2019, updated 20 January 2022) <https://verra.org/project/vcs-program/rules-and-requirements/>

Integrity Measure	CFI Act	California's Compliance Offset Program	Alberta Emission Offset System	Verra's Verified Carbon Standard	Gold Standard for the Global Goals ⁴²
		<p>enforceable, and additional);</p> <ol style="list-style-type: none"> 2. accurately determines extent of GHG reductions or removals; 3. establishes data collection and monitoring procedures; 4. establishes a project baseline with a conservative BAU; 5. accounts for leakage and uncertainty; 6. ensures permanence; and 7. provides that the reduction will occur in the USA.⁵³ <p>In addition the guidelines provide the CARB will require that methodologies:</p> <ol style="list-style-type: none"> 1. result in reductions not subject to a compliance obligation; 2. produce a direct reduction within a confined project boundary; 3. use conservative quantification methodologies; 4. are verifiable and enforceable; and 5. are additional to BAU.⁵⁴ 	<ol style="list-style-type: none"> 3. usability of the methodology; 4. consistency with approved protocols; 5. consistency with ISO 14064-2 (Quantification, monitoring and reporting of greenhouse gases); and 6. any other technical or scientific issues that may be developed. <p>The technical review also addresses additionality (see additionality below).</p> <p>The technical review team must achieve consensus on the above matters. A draft methodology will only proceed if there are no outstanding objections from members of the technical review team.⁵⁵</p>	<p>Under the VCS Program Guide, projects must meet the following principles: real, measurable, permanent, additional, independently audited, unique, transparent and conservative. While these principles expressly apply to projects rather than methodologies, it can be inferred that methodologies must be developed in a manner that will ensure projects approved in accordance with the methodology may satisfy these principles.</p> <p>Under VCS Standard, the project requirements also largely reflect these principles, and set out more specific requirements relating to project documentation, design, ownership, start date, crediting period, scale, location, boundary, baseline scenario, additionality, quantification, monitoring, SDGs, and safeguards relating to the environment and local communities.</p> <p>Under the VCS Methodology requirements, methodologies must satisfy:</p> <ol style="list-style-type: none"> 1. general requirements relating to methodology structure, additionality and crediting baseline approaches, standardised 	<ol style="list-style-type: none"> 2. Quantification Methodology Approval Procedure;⁵⁹ alignment with the Gold Standard Principles & Requirements⁶⁰ and the relevant Activity Requirements;⁶¹ 3. alignment with the latest version of the Gold Standard for the Global Goals Safeguarding Principles & Requirements;⁶² 4. reputational risks for the Gold Standard. <p>Under the Gold Standard Principles & Requirements, there are 5 key principles, including:</p> <ol style="list-style-type: none"> 1. Contribution to Climate Security & Sustainable Development (which includes requirements relating to a reasonable and conservative baseline and project scenario, and demonstrable positive impacts on at least 3 SDGs); 2. Principle 2: Safeguarding Principles (this requires that Projects shall conduct a Safeguarding Principles Assessment and conform to Gold Standard Safeguarding Principles and Requirements; 3. Principle 3: Stakeholder Inclusivity;

⁵³ Regulation for the California Cap on Greenhouse Gas Emissions and Market-Based Compliance Mechanisms § 95972 [Cap-and-Trade Regulation \(Unofficial Electronic Version\)](#)

⁵⁴ California Air Resources Board's Process for the Review and Approval of Compliance Offset Protocols in Support of the Cap-and-Trade Regulation [California Air Resources Board's Process for the Review and Approval of Compliance Offset Protocols in support of the Cap and trade regulation](#)

⁵⁵ Technical Guidance for Offset Protocol Development and Revision v2.0 (July 2018) [Technical Guidance for Offset Protocol Development and Revision \(alberta.ca\)](#)

⁵⁹ Impact Quantification Methodology Approval Procedure v1.0 (Published 22 October 2018) <https://globalgoals.goldstandard.org/400-sdg-impact-quantification/>

⁶⁰ Gold Standard for the Global Goals Principles & Requirements v1.2 (23 October 2019) <https://globalgoals.goldstandard.org/100-principles-and-requirements/>

⁶¹ For the various different Activity Requirements, see: <https://globalgoals.goldstandard.org/200-activity-requirements/>

⁶² Gold Standard for the Global Goals Safeguarding Principles & Requirements v1.2 (9 October 2019) <https://globalgoals.goldstandard.org/100-principles-and-requirements/>

Integrity Measure	CFI Act	California's Compliance Offset Program	Alberta Emission Offset System	Verra's Verified Carbon Standard	Gold Standard for the Global Goals ⁴²
				<p>methods, managing uncertainty, and models, default factors and proxies; and</p> <p>2. the rules relating to each required component of methodologies, including definitions, applicability conditions, project boundary, baseline scenario, additionality, baseline and project emissions/removals, leakage, quantification of GHG emissions reductions and removals, and monitoring.</p> <p>Additional requirements apply to AFOLU projects and ozone-depleting substances (ODS) projects.</p>	<p>4. Principle 4: Demonstration of real outcomes;</p> <p>5. Principle 5: Financial Additionality & Ongoing Financial Need.</p>
<p>Requirement for periodic review of methodologies</p>	<p style="text-align: center;">✓</p> <p>Yes, see paragraphs 10 to 12 above.</p>	<p style="text-align: center;">✓</p> <p>CARB monitors the legislative requirements and new developments in scientific data and quantification that could warrant a change to a protocol.⁶³</p>	<p style="text-align: center;">✓</p> <p>Methodologies may be reviewed at the discretion of ACCO based on a risk assessment process. The risk assessment covers:</p> <ol style="list-style-type: none"> 1. time since the methodology was last reviewed; 2. known issues with the methodology including any relevant results from re-verifications, or changes to additionality; 3. whether the protocol needs to be aligned with other policies or initiatives; 4. the number of projects using the methodology; 5. whether the methodology is commonly used for aggregated projects, and 	<p style="text-align: center;">✓</p> <p>Verra may review approved methodologies on occasion to ensure that they continue to reflect best practice and scientific consensus. A review may be triggered by:</p> <ol style="list-style-type: none"> (1) updates to the VCS program rules that are inconsistent with an approved methodology, (2) concerns that they do not reflect best practice or scientific consensus, or (3) Verra sanctions the consolidation of a number of 	<p>While it is evident that a number of methodologies have been reviewed, we have been unable to determine whether it is a requirement that methodologies are reviewed at specified intervals or when specified events occur.</p>

⁶³ California Air Resources Board's Process for the Review and Approval of Compliance Offset Protocols in Support of the Cap-and-Trade Regulation [California Air Resources Board's Process for the Review and Approval of Compliance offset Protocols in support of the Cap and trade regulation](#)



Integrity Measure	CFI Act	California's Compliance Offset Program	Alberta Emission Offset System	Verra's Verified Carbon Standard	Gold Standard for the Global Goals ⁴²
			<p>6. the volume of tonnes registered under the methodology.</p> <p>Third parties may also request that methodologies be reviewed.</p> <p>If ACCO determines the protocol no longer meets program requirements, the protocol may be withdrawn.⁶⁴</p>	<p>methodologies into one single methodology.⁶⁵</p> <p>The review of the methodology is undertaken by Verra, who will seek input from the developer, the validation/verification body(s) that initially assessed the methodology and appropriately qualified external experts, as required.</p>	
Projects must satisfy additionality requirements	<p style="text-align: center;">✓</p> <p>Yes, see paragraph 10 above.</p>	<p style="text-align: center;">✓</p> <p>The project must meet the following additionality requirements:</p> <ol style="list-style-type: none"> the project would not be required by any law; the project commences after the commencement of the offset legislation; the GHG reductions and GHG removals result from the offset project exceeding the project baseline.⁶⁶ 	<p style="text-align: center;">✓</p> <p>The project must consist of an action that is not required by any law.⁶⁷ Additionality requirements also apply relating to market penetration rate and supplementary barriers (including financial, technological and other types of barriers).⁶⁸</p>	<p style="text-align: center;">✓</p> <p>The project must demonstrate that it would result in emission reductions or removal that is in excess of what would be achieved under business as usual.⁶⁹</p>	<p style="text-align: center;">✓</p> <p>All projects are required to demonstrate impacts that are additional as compared to their baseline scenario. Projects are also required to demonstrate financial additionality and ongoing financial need.⁷⁰</p>
Reporting on abatement achieved	<p style="text-align: center;">✓</p> <p>Yes, see paragraphs 0 and 1 above.</p>	<p style="text-align: center;">✓</p> <p>Project proponent must submit offset project data reports to</p>	<p style="text-align: center;">✓</p> <p>An emissions offset project report must be submitted to the Alberta Emissions Offset Registry.⁷²</p>	<p style="text-align: center;">✓</p> <p>The project proponent must submit monitoring reports to a verification body.⁷³</p>	<p style="text-align: center;">✓</p>

⁶⁴ Technical Guidance for Offset Protocol Development and Revision v2.0 (July 2018) [Technical Guidance for Offset Protocol Development and Revision \(alberta.ca\)](https://alberta.ca/technical-guidance-for-offset-protocol-development-and-revision)

⁶⁵ Methodology Approval Process v4.0 (Issues 19 September 2019) <https://verra.org/project/vcs-program/rules-and-requirements/>

⁶⁶ Regulation for the California Cap on Greenhouse Gas Emissions and Market-Based Compliance Mechanisms 2019 § 95973(a)(2) [Cap-and-Trade Regulation \(Unofficial Electronic Version\)](https://www.cdpr.ca.gov/Programs/OPA/Pages/NR2019-0001.aspx)

⁶⁷ Technology Innovation and Emissions Reduction Regulation 2019 s 19(1)(b). [Technology Innovation and Emissions Reduction Regulation 2019](https://www.alberta.ca/technology-innovation-and-emissions-reduction-regulation-2019)

⁶⁸ Alberta Government Technical Guidance for the Assessment of Additionality Version 1.0 (May 2018).

⁶⁹ VCS Standard v4.2 (Issued 19 September 2019, updated 20 January 2022) <https://verra.org/project/vcs-program/rules-and-requirements/>

⁷⁰ Gold Standard for the Global Goals Principles & Requirements v1.2 (23 October 2019) <https://globalgoals.goldstandard.org/100-principles-and-requirements/>

⁷² Standard for Validation, Verification and Audit v5.1 (December 2020) [Standard for Validation, Verification and Audit \(alberta.ca\)](https://alberta.ca/standard-for-validation-verification-and-audit)

⁷³ VCS Program Guide v4.1 (Issued 19 September 2019, updated 20 January 2022) <https://verra.org/project/vcs-program/rules-and-requirements/>

Integrity Measure	CFI Act	California's Compliance Offset Program	Alberta Emission Offset System	Verra's Verified Carbon Standard	Gold Standard for the Global Goals ⁴²
		CARB or an offset project registry for each reporting period. ⁷¹			The project proponent must submit monitoring reports for verification. ⁷⁴
Independent verification of abatement achieved	<p style="text-align: center;">✓</p> <p>Yes, see requirements relating to auditing at paragraph □ above.</p>	<p style="text-align: center;">✓</p> <p>The project proponent must engage an authorised verification body to verify offset data reports.⁷⁵</p>	<p style="text-align: center;">✓</p> <p>The project proponent must engage a verification body to verify data submitted.⁷⁶</p>	<p style="text-align: center;">✓</p> <p>Verification bodies are organisations approved by Verra in accordance with international standards to carry out independent verification of monitoring reports. Verification is conducted in accordance with processes set out by international standards. A verification report is produced and submitted to Verra. Verification bodies are required to rotate between projects every 6 years.⁷⁷</p>	<p style="text-align: center;">✓</p> <p>Monitoring reports must be verified as required by an accredited, approved third party Validation and Verification Body.⁷⁸</p>
Test to ensure no double-counting	<p style="text-align: center;">✓</p> <p>Yes, paragraph □o above.</p>	<p style="text-align: center;">✓</p> <p>When applying for offset credits the project operator must attest that it has not received credits for the abatement under any other voluntary or mandatory program.⁷⁹</p>	<p style="text-align: center;">✓</p> <p>In ensuring accuracy the verification body must ensure there is no double counting of emissions.⁸⁰</p>	<p style="text-align: center;">✓</p> <p>GHG emission reductions/removals that are issued as VCU's cannot be issued as GHG allowances or other types of GHG credits under an emissions trading program, or as other forms of environmental credit such as renewable energy certificates.⁸¹</p>	<p style="text-align: center;">✓</p> <p>Yes, see generally the Gold Standard Claims Guidelines⁸² and Principles and Requirements.</p>

⁷¹ Regulation for the California Cap on Greenhouse Gas Emissions and Market-Based Compliance Mechanisms 2019 § 95976 [Cap-and-Trade Regulation \(Unofficial Electronic Version\)](#)

⁷⁴ Gold Standard for the Global Goals Principles & Requirements v1.2 (23 October 2019) <https://globalgoals.goldstandard.org/100-principles-and-requirements/>

⁷⁵ Regulation for the California Cap on Greenhouse Gas Emissions and Market-Based Compliance Mechanisms 2019 § 95977 [Cap-and-Trade Regulation \(Unofficial Electronic Version\)](#)

⁷⁶ Standard for Validation, Verification and Audit v5.1 (December 2020) [Standard for Validation, Verification and Audit \(alberta.ca\)](#)

⁷⁷ VCS Program Guide v4.1 (Issued 19 September 2019, updated 20 January 2022) <https://verra.org/project/vcs-program/rules-and-requirements/>

⁷⁸ Gold Standard for the Global Goals Principles & Requirements v1.2 (23 October 2019) <https://globalgoals.goldstandard.org/100-principles-and-requirements/>

⁷⁹ Regulation for the California Cap on Greenhouse Gas Emissions and Market-Based Compliance Mechanisms 2019 § 95981(d)(5) [Cap-and-Trade Regulation \(Unofficial Electronic Version\)](#)

⁸⁰ Standard for Validation, Verification and Audit v5.1 (December 2020) [Standard for Validation, Verification and Audit \(alberta.ca\)](#)

⁸¹ VCS Standard v4.2 (Issued 19 September 2019, updated 20 January 2022) <https://verra.org/project/vcs-program/rules-and-requirements/>

⁸² Gold Standard Claims Guidelines (30.06.2017) <https://www.goldstandard.org/project-developers/standard-documents>

Integrity Measure	CFI Act	California's Compliance Offset Program	Alberta Emission Offset System	Verra's Verified Carbon Standard	Gold Standard for the Global Goals ⁴²
Permanence requirements for projects and mechanism to address reversal of sequestration	✓ Yes, paragraphs □ to □ above.	✓ A project operator must ensure that the emissions reduction or removal is permanent. ⁸³ If reversals take place, mechanisms must be in place to replace any reversed emissions reductions (to ensure credited reductions endure for at least 100 years). ⁸⁴	✓ There is a general permanence requirement in the TIER regulation. However geological sequestration is required to be permanent, and we note that permanence requirements apply to specific methodologies which are beyond the scope of our review (e.g. permanence requirements apply under the CCS Protocol approved under the Alberta Emission Offset Program). ⁸⁵ Again, requirements to address reversals of sequestration are incorporated in methodologies (e.g. the CCS Protocol must true up reversals prior to site closure).	✓ Projects must prepare a non-permanence risk analysis. The risk analysis is assessed by verification bodies and buffer credits proportionate to the level of risk of non-permanence are placed in a buffer account. Projects that demonstrate their longevity, sustainability and ability to mitigate risks are eligible for release of buffer credits. ⁸⁶ Reversals require notification to Verra. The reversal will be accounted for such as through buffer credits being placed on hold or cancelled or no further credits being issued until the loss is made up by the project. ⁸⁷	✓ To ensure permanence, the Gold Standard requires a fixed 20% contribution for a pooled compliance buffer, which again covers risk of reversal and non-performance. ⁸⁸ If the buffer is insufficient, the Gold Standard may require further compensation/retirement of lost emissions reductions units. The Gold Standard Performance Shortfall Guidelines set out how to address performance shortfalls through the recovery of appropriate levels of carbon stocks in relation to a Land-Use and Forests project. ⁸⁹
Mechanism to address fraudulent conduct	✓ Yes, paragraph Part 13 of the CFI Act.	✓ Making false, fictitious or fraudulent statements when submitting records is a violation under the Regulations. ⁹⁰	✓ Yes, emissions offsets issued based on incorrect, false or inaccurate information may be cancelled. ⁹¹	✓ Project proponents that obtain credits through fraudulent conduct are required to compensate Verra for the benefits obtained. ⁹²	✓ Yes, see the Claims Guidelines. ⁹³

⁸³ Regulation for the California Cap on Greenhouse Gas Emissions and Market-Based Compliance Mechanisms 2019§ 95970 [Cap-and-Trade Regulation \(Unofficial Electronic Version\)](#)

⁸⁴ Regulation for the California Cap on Greenhouse Gas Emissions and Market-Based Compliance Mechanisms 2019§ 95802 'Permanent' [Cap-and-Trade Regulation \(Unofficial Electronic Version\)](#)

⁸⁵ Technology Innovation and Emissions Reduction Regulation 2019s 19(2)(h). [Technology Innovation and Emissions Reduction Regulation 2019](#)

⁸⁶ VCS Standard v4.2 (Issued 19 September 2019, updated 20 January 2022) <https://verra.org/project/vcs-program/rules-and-requirements/>

⁸⁷ VCS Standard v4.2 (Issued 19 September 2019, updated 20 January 2022) <https://verra.org/project/vcs-program/rules-and-requirements/>

⁸⁸ Gold Standard, 'The Gold Standard Difference', Land Use Activities + Nature Based Solutions.

⁸⁹ Gold Standard Performance Shortfall Guidelines (Version 1.1, April 2020) <https://globalgoals.goldstandard.org/501g-pr-performance-shortfall-guidelines/>

⁹⁰ Regulation for the California Cap on Greenhouse Gas Emissions and Market-Based Compliance Mechanisms 2019§ 96014(d) [Cap-and-Trade Regulation \(Unofficial Electronic Version\)](#)

⁹¹ Technology Innovation and Emissions Reduction Regulation 2019s 22(1). [Technology Innovation and Emissions Reduction Regulation 2019](#)

⁹² VCS Standard v4.2 (Issued 19 September 2019, updated 20 January 2022) <https://verra.org/project/vcs-program/rules-and-requirements/>

⁹³ Gold Standard Claims Guidelines (30.06.2017) <https://www.goldstandard.org/project-developers/standard-documents>



**Carbon
Market
Institute**

for more information please contact

Thomas Hann

Senior Manager, Comms & Media

thomas.hann@carbonmarketinstitute.org

+61 (0) 408 880 536

The Carbon Market Institute is at the centre of climate change policy and business in Australia. Independent and non-partisan, we bring business, policy makers and thought leaders together to drive the evolution of carbon markets towards a significant and positive impact on climate change.

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