

# Carbon market infrastructure for holding and trading certificates and units

## Coversheet for submissions

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Do you want this submission to be treated as confidential? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	

## Submission instructions

Submissions are due by **Friday 22 November 2024**. Any submissions received after this date will be considered at our discretion. Submit your submission via [carbonmarkets@cer.gov.au](mailto:carbonmarkets@cer.gov.au). Include this coversheet with your submission.

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The agency will deal with personal information contained in, or provided in relation to, submissions in accordance with the [privacy policy](#).

# CER Consultation: Carbon market infrastructure

BeZero Carbon submission

November 2024



BeZero

# Executive Summary

- BeZero welcomes the ongoing efforts of the Clean Energy Regulator (CER) to improve the transparency of its domestic carbon market schemes and design a functioning and well-suited registry.
- BeZero Carbon agrees with the CER that ‘complete, trusted and accurate data’ is crucial to scaling of carbon markets. BeZero Carbon has been a consistent advocate for market transparency and promotes easily accessible public information, which the CER registry is posed to facilitate.
- We believe the features and functionalities necessary for a best-practice registry include publication of project documents, detailed carbon accounting, and the publication of verification and monitoring reports for both carbon and co-benefit elements of a project.
- We would be pleased to discuss any of our recommendations with the CER, and provide additional detail as required. Please get in touch with Sebastien Cross, Co-Founder and Chief Innovation Officer [REDACTED] and Joel Gould, Senior Manager of Government and Market Engagement [REDACTED]

## Background

### Introduction to BeZero Carbon

BeZero Carbon is a global ratings agency for carbon credits. As the world’s leading provider of ratings-based risk analysis, we use our technology, ratings, and research to help participants in the market channel capital into the solutions that will have the greatest impact on the path to net zero.

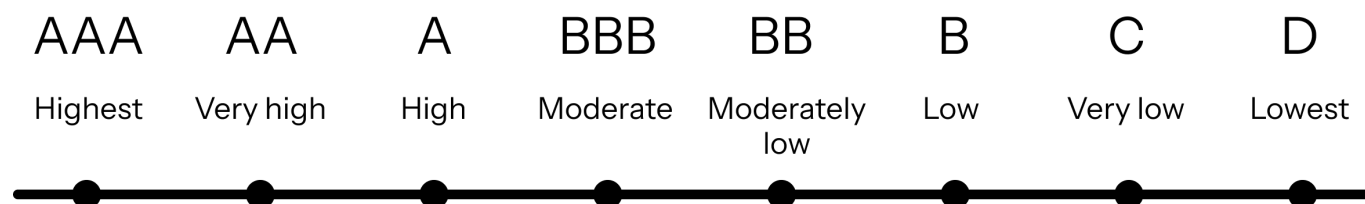
We have over 180 members of staff worldwide and clients in Australia, Asia, the US, Europe and the Middle East. We have rated and provided detailed risk analysis for over 460 projects, and that list is constantly expanding. Our team of remote sensing scientists, machine learning engineers, field ecologists, and financial analysts collect and analyse data and information from a wide range of sources to assess the effectiveness of carbon credit projects and monitor them on an ongoing basis. Our technology and insight is trusted by a global client base including government, investment, commodities and corporate sectors and our ratings are hosted on a wide range of international platforms.

We are a mission-based organisation with the belief that robust carbon markets can help to accelerate the climate transition, reducing cost for businesses and helping to mobilise finance to where it is needed most.

# Our ratings approach

The BeZero Carbon Rating is a metric which assesses the risk that a given carbon project fails to deliver on its stated carbon impact (see Figure 1 below for our ratings scale). Our ratings are always project-specific, and are informed by deep, ongoing assessment by our multidisciplinary ratings team. We make all our headline ratings publicly available for free on [our platform](#), along with our [ratings methodologies](#). Our ratings have been heavily adopted across a range of market actors in the voluntary carbon market (VCM), to the extent that a [strong relationship has developed between our ratings and price](#).

**Figure 1.** The BeZero Carbon Rating scale



Our risk assessment framework considers three overarching factors:

- **Additionality:** the risk that a credit purchased and retired does not lead to a tonne of CO<sub>2</sub>e being avoided or sequestered that would not have otherwise happened. Additionality tests are fundamental to accrediting carbon credit projects. At BeZero Carbon, our assessment of [additionality](#) takes into account variables beyond the project boundaries and what the project self-reports. Inputs include the presence of global or national barriers to project delivery, the role of carbon finance in the overall revenue stream, and the effectiveness of policy instruments and governance for either pre-existing conservation or decarbonisation practices frequency to reflect underlying additionality conditions. Additionality tests function like a benchmark for minimum quality. A nuanced approach is needed to test additionality across sections and project-types.
- **Permanence:** The risk that the carbon avoided or removed by the project will not remain so for the time committed. Mitigating permanence risks are vital in ensuring that carbon markets act as a truly effective long-term form of climate action. If such risks - whether human or natural - are not addressed, carbon can be re-emitted and undermine a project's carbon benefits, resulting in reversals. [Permanence](#) is an element that BeZero Carbon utilises to gauge carbon integrity of projects. The assessment of non-permanence risks includes the analysis of the risks of future reversals at a project, regional and country level.
- **Carbon Accounting:** The risk that more credits are issued than tonnes of CO<sub>2</sub>e achieved by a given project due to factors such as unrealistic baseline assumptions. Our carbon accounting assessment encompasses both leakage and over-crediting. These risks must be considered on a project by project basis, and take into account project safeguards. Only when such a holistic approach is employed can [leakage](#) risks be comprehensively evaluated and compared across different sectors, with the benefit of promoting fungibility within the market. BeZero Carbon assesses leakage by interrogating the extent of possible risks, including those associated with activity within and around a project area, as well as any safeguards put in place to mitigate such risks. The likelihood of emissions avoided or removed by a project being pushed outside its

boundaries is an important factor when assessing a credit's level of carbon efficacy. Assessing both the top-down and project-specific leakage risk is essential. [Over-crediting](#) is “the risk that more credits than tonnes of CO<sub>2</sub>e achieved are issued by a given project” due to factors such as unrealistic baseline assumptions or employing data with large uncertainties. Accurate credit issuance is crucial for a project's integrity. Assessing integrity around credit issuance requires transparency around how issuance is calculated through the identification of the most plausible baseline scenario, as well as estimates of the carbon stocks in both the baseline and project scenarios.

# **Response to the discussion paper: *Enabling deep, liquid, transparent and accessible carbon markets in Australia***

**BeZero Carbon welcomes the Clean Energy Regulator's (CER) efforts to further the integrity and climate impact of carbon markets in Australia.** As the CER has identified, creating a deep, liquid, transparent and accessible carbon market will facilitate greater and more cost-effective decarbonisation in the country.

**BeZero Carbon agrees with the CER that access to 'completed, trusted and accurate data' that underpins the listed environmental units is crucial to market effectiveness and efficiency.** This has been a priority of our work in the voluntary carbon market (VCM) and resulted in producing a substantial data set of thousands of data points and key parameters across a wide range of carbon project sub-sectors, known as 'Project Fundamentals'. We have included more information on this below and in the Annex.

**As an independent carbon credit ratings agency, BeZero Carbon can comment on relevant aspects of the registry design which enable third-party assessment and transparency.** However, due to that independence, we would not comment on the specifics of the proposed exchange-traded model as we do not transact carbon credits. Please find our responses to those questions we are able to provide insight on below.

## Registry consultation questions

1. *What registry features and functionality will be the most important to address the current challenges faced by carbon markets?*

### **The principal challenge faced by carbon markets globally is that of environmental integrity.**

Scientific studies and media reports criticising carbon crediting projects have contributed to low-levels of public confidence that carbon crediting projects truly represent climate action. The lack of transparency in many carbon markets exacerbates this lack of trust, as found in the [independent review of ACCUs in 2022](#). Combatting this underlying challenge will help markets unlock additional climate finance and generate greater climate action from carbon projects with strong environmental integrity.

### **A well functioning, clear, and transparent registry could go a long way to address these issues.**

**The CER should prioritise public information disclosure across all feasible categories for this registry.** BeZero Carbon welcomed the Department of Climate Change, Energy, the Environment and Water's (DCCEEW) [request for feedback](#) on their proposed public disclosure requirements for ACCUs earlier this year. This is a positive step towards additional disclosure in Australian carbon markets. Once the amendment is finalised, the display of this information in an accessible and digestible format by the CER on the new registry, alongside some additional criteria detailed below, will enable further engagement with the ACCU market.

### **It is a core belief of BeZero Carbon that transparent and accessible data is a vital component of an effective market for carbon credits, and therefore we welcome the CER's efforts to improve this.**

In Table 1 below we contextualise the disclosure requirements proposed in the recent exposure draft amending the Carbon Credits (Carbon Farming Initiative) Rule 2015 with current practices for registries in the VCM. This highlights the existing alignment between the two and emphasises the work the DCCEEW and the CER are already taking to improve transparency. The areas in green are those the CER is already providing on the CER's existing [ACCU project and contract register](#) or is posed to provide based on the proposed amendment, the areas in orange are for the CER's consideration to enable greater data access in Australian carbon markets.

**Beyond this, carbon market registries should look to best practise in other markets for disclosures including standardised, digitised reporting and transparent document versioning.** Consistency in reporting is critical for allowing comparison between units and enabling due diligence. BeZero Carbon developed a [standardised carbon accounting template](#) to facilitate collecting clean and comparable data, a feature recognised in the discussion paper.

**Table 1.** Common criteria for each project on a carbon credit registry, including whether this is already under consideration of the CER or the proposed amendments to the Carbon Credits (Carbon Farming Initiative) Rule 2015 (**green**) or whether this is an additional step the CER could consider (**orange**).

<b>Common criteria in VCM registries</b>	<b>Description</b>	<b>Current status</b>
<b>Project ID</b>	Unique identification number of the project	The CER's current registry includes the 'Unique Key', which we would recommend as an individual and searchable field in the new registry.
<b>Project Name</b>	Name of project	The CER's discussion paper and current registry includes the project name, which should be a searchable field .
<b>Project design documents</b>	The project design documents should include details of how the project has assessed eligibility against additionality tests, conducted its carbon accounting, and its financial structure.	While explicitly including project documents was not mentioned in the discussion paper or proposed amendment, BeZero Carbon implores the CER to consider their publication. However, project details will be provided under the following proposed amendment provisions: (1) improved description or detail of project activities for all projects under all methods (2) description of any suppression mechanisms identified and removals of suppressors relating to the project (3) type of estimation approach used (5) project permanence start date
<b>Proponent</b>	Proponent of project.	This is included on the CER's registry and will be bolstered by the provision: (8) the names of all agents involved in a project's management.
<b>Type</b>	Sector or sub-sector of the project	The current CER registry includes a 'Method Type' field. This could become filterable and searchable.
<b>Methodology</b>	Methodology name or identifier.	The publication of the associated methodology is included in the discussion paper and is already required for those credits surrendered for Safeguard Mechanism obligations.
<b>Status</b>	Status of the project's approval with the accreditor or regulator.	Including this status will improve usability and provide an additional filtration feature.
<b>Location</b>	The location of the project, the shape file of the project boundary should be included here including relevant coordinates to allow replication.	The discussion paper recognises the necessity of including project location and project shapefiles are included on the existing ACCU registry. This will benefit further from the information under the proposed provision: (6) start date for the chosen tool or modelling approach used to calculate abatement for each carbon estimation area (CEA) or a project
<b>Project crediting period dates</b>	The dates the project crediting period will start and end.	Crucial information for any market participant which would be required under the following proposed disclosure requirement: (4) project crediting period start and end dates



<b>Monitoring reports</b>	Third-party audit reports of the project including how project specific parameters have been obtained and the associated monitoring protocols.	This was not included in the proposed amendments but was a recommendation BeZero Carbon made to the DCCEEW. Publicly available and accessible monitoring data are critical for market effectiveness.
<b>Co-benefits and safeguards</b>	Co-benefits generated by the project and the safeguards in place when the project was implemented, including how and if these are verified.	Co-benefit information and verification is further addressed in question 3. BeZero Carbon advocates for the inclusion of co-benefits and safeguards details on the proposed registry.

**In addition to consistent information for each project, the CER registry will include information on individual transactions to fulfil the criteria of enabling users to transact units.** In the absence of specific details on what would be included for each transaction, we would like to highlight the data points we would expect to see in the VCM. Table 2 details the relevant criteria a registry should include to track individual transactions, including the parties involved, number of credits and their unique identifiers. This is necessary information to bring greater transparency to the market and is now common practice in the VCM.

**Table 2.** Criteria relevant for individual transactions on the registry.

<b>Common criteria in VCM registries</b>	<b>Description</b>
<b>Credit vintage</b>	The year credit was issued.
<b>Type of transaction</b>	Issuance, retirement, or cancellation.
<b>Quantity transacted</b>	Number of credits transacted.
<b>Unique identification of credits</b>	The serial number or unique identifier of individual credits transacted.
<b>Project ID</b>	Identification for the individual project.
<b>Entity that transacted the credits</b>	The legal entity that registered the transaction.
<b>Transaction description</b>	Description of the reason for transaction (e.g. 'Retired for compliance with Safeguard Mechanism obligation')

2. *What registry features and functionality will be the most important to take advantage of the opportunities presented by the growth in carbon markets?*

**To take advantage of the growth in carbon markets and scale them to the size necessary for a meaningful impact for the climate and Australia's own national targets, the discussion paper identifies that consistent, transparent and trusted data as critical.** The features mentioned above provide the project-level information that will enable independent assessment of the listed projects, which is crucial to allowing comprehensive due diligence. In terms of identifying the necessary parameters and data points for various project types, BeZero Carbon has worked extensively to map this across the largest sectors of the VCM. This has resulted in our project fundamentals database which delivers standardised statements covering dozens of critical sector-specific parameters that underpin the performance of a given project type.

**BeZero Carbon's Project Fundamentals provides ready-to-consume datasets on critical parameters and carbon accounting information for projects across the VCM and provide an opportunity for Australian project-based carbon.** They are available on BeZero Carbon's platform as live dashboards and downloadable files that can easily plug into in-house workflows. The data delivers standardised statements covering dozens of critical sector-specific parameters that underpin the performance of a given project type. For example, this could include the commitment period for a forestry project. This is not only crucial for procurement purposes of interested companies but also for third-parties to access appropriate and accurate project-level information. All data comes from registry documents and is updated when projects release new information (e.g. Project Design Documents, Monitoring Reports etc.). We have included the information sheet as an Annex to this document.

**To ensure this, the registry should have sufficient interoperability with other market platforms through API access, as addressed in the discussion paper.** The features included should provide observers with the ability to compare projects on a like-for-like basis. Including publicly available information to enable third-parties to reconstruct project calculations will enable this. To that end, BeZero Carbon has introduced cleaned and organised datasets on over 1000 projects in the VCM, an approach the CER could also adopt.

**In employing this approach to data for ACCU projects, the CER could be a world-leading regulator in vastly improving the provision of trusted data in its domestic carbon market.** We have included an example of the project level data with our submission email.

- Should information about the co-benefits associated with units and certificates, (for example First Nation community outcomes and environmental benefits) be made available in the registry? If so, should this include third-party verified and unverified information?

**Yes, information about co-benefits should be documented alongside other project attributes in the registry.** Firstly, this information should be readily available to support any claims, including appropriate application of safeguards when engaging with local communities and the environment. Secondly, there is substantive [research](#) demonstrating that buyers attribute a [price premium](#) to projects which claim SDGs or First Nation community involvement. If such claims can be made without verification this can create an incentive to claim co-benefits without the corresponding action. Therefore, this information should be verified alongside the carbon impacts of a project.

a) What existing frameworks could be relied upon to verify co-benefits?

**BeZero Carbon’s Beyond Carbon team have identified several VCM initiatives the CER could look to for examples of measuring co-benefits.** BeZero Carbon has conducted detailed research into project [safeguards](#) and [co-benefit claims in the VCM](#), including project’s claims of Sustainable Development Goals (SDGs). Co-benefits is the umbrella term for positive project impacts, and SDG claims are the framework most projects use to communicate co-benefits, for more information on this topic please read our [Q&A document](#). The VCM and other carbon markets have developed programs which allow for verification of safeguards and co-benefits for project-based carbon, these are listed below and could be used as a reference for the CER’s own framework:

- Verra’s SD VISTa programme: (<https://verra.org/programs/sd-verified-impact-standard/>)
- Gold Standard for the Global Goals (GS4GG): (<https://globalgoals.goldstandard.org/>)

**Table 3.** Comparison of the SDG claim characteristics and assessment for the mentioned claims above, more detailed analysis can be found at <https://bezerocarbon.com/insights/mapping-the-sdg-claim-lifecycle-2023-update>

SDG claim system characteristics		SDG claim system requirements										
Adherence to asset/product methodology	Additional cost with standards body	Financial needs assessment	Qualitative evidence	Quantitative evidence	SDG impact reported at target scale	Identification of impact metric	Impacts compared to a baseline	Ex-post and ex-ante assessment	Monitoring	Validation/ verification by third party	Consideration of additionality	
SD VISTa Assets	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	~ Where assets are eligible for offsetting purposes
GS4GG Certified Impact Products	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓

**Key**  
 ✗ No    ? Unsure    ✓ Yes    ~ Depends, see comment in table

In addition, The World Bank’s International Finance Corporation Performance Standards are often cited as a foundational framework for the development of safeguards standards and can be used as a base to develop a framework specific to the Australian context. (<https://www.ifc.org/content/dam/ifc/doc/mgrt/ifc-performance-standards.pdf>)

## **Consultation questions: exchange trading model**

As an independent carbon ratings agency that does not facilitate the trading of credits we would not provide an opinion on the specifics of the proposed exchange trading model. However, we think it is important to raise one issue to consider when creating standardised contracts: project-level specifics are not captured, such as risk. This should be carefully considered when designing the model.

# BeZero Carbon Project Fundamentals



BeZero

## Essential carbon project data, ready to use on and off BeZero's platform

Fundamental data is the backbone of effective carbon project analysis. Analysts and risk managers need accurate information about a project's performance and carbon accounting over time for reliable due diligence and evidence-based decision making.

Until recently, accessing and assessing fundamental data for carbon projects was manual, time-consuming and inconsistent. Now, BeZero's robust and reliable Project Fundamentals datasets are available to platform subscribers, ready for use in quantitative analysis, risk modelling, and benchmarking.

The data delivers standardised statements covering dozens of critical sector-specific parameters that underpin the performance of a given project type. **Standardised, digitised, decision-ready data.**

### Essential carbon project data

BeZero's Project Fundamentals provides ready-to-consume datasets on critical parameters and carbon accounting information for projects across the market. They are available on BeZero's platform as live dashboards and downloadable files that can easily plug into in-house workflows. The data delivers standardised statements covering dozens of critical sector-specific parameters that underpin the performance of a given project type. All data comes from registry documents and is updated when projects release new information (e.g. Project Design Documents, Monitoring Reports etc.).

### Standardised information

In financial statements, companies can report values in different ways specific to their firm. Consequently, the same type of data can look slightly different in various filings, making it difficult to compare. In carbon projects, this would be an understatement. BeZero has identified, collected, cleaned, and structured the key parameters for different sectors in consistent formats. Using best-in-class scientific knowledge and data science techniques, as well as proprietary datasets, users can now easily compare projects in the same sector. Because BeZero delivers the data with standardised fields, it's ready to use *immediately*.

### Extensive coverage

On first release, the Project Fundamentals datasets cover 1,000+ carbon projects that have issued over 100k credits in their lifetime, across nine sub-sectors within the Forestry, Cookstoves, and Renewable Energy sectors. Coverage includes 60+ static and time series parameters totaling 100k+ individual values. The data spans 65+ countries, providing users a global view to assess and benchmark projects across regions. New sectors and parameters will continually be added to our datasets, helping users build data-driven views of projects at scale, over multi-decade time spans.

### Unparalleled data quality

BeZero's global team of 100+ climate and data scientists have collaborated to present robust and reliable project data. Our sector experts have identified the key parameters that underpin different project types, and our data science team have rigorously defined the data templates to ensure a systematic and reliable process for sourcing, validating and structuring project data at scale. This includes 100+ data capture validation rules, and 1,000+ automated tests that monitor data quality across input, standardisation, and presentation layers.

### Content

- Dozens of sector-specific parameters
- Baselines
- Credit issuance
- Types of monitoring
- Ratios, ranges, absolute values

### Coverage

- 1,000+ rated and unrated projects
- Largest projects from major registries\*
- Nine sub-sectors across Forestry, Cookstoves, and Renewable Energy
- 65+ countries

### History

- Time series going back as far as 20 years
- Static parameters
- Updated when new project documentation made public

\*Verra, Gold Standard, Climate Action Reserve, American Carbon Registry, Plan Vivo (Markit), Cercarbono, Global Carbon Council, Clean Development Mechanism. Registry documents include Project Design Documents, Monitoring Reports, Non-permanence Risk Reports, emission reduction calculation sheets, Verification Reports, Validation Reports, and exemption letters or other relevant letters available.

### Disclaimer

The BeZero Carbon Rating of voluntary carbon credits represents BeZero Carbon's current opinion on the likelihood that carbon credits issued by a project achieve a tonne of CO<sub>2</sub>e avoided or removed. The BeZero Carbon Rating and other information made publicly available or available through the BeZero Carbon Markets platform ("Content") is made available for information purposes only. The Content and in particular the BeZero Carbon Rating sets out BeZero Carbon's opinion on a particular carbon credit or project based on publicly available information as at the date expressed and BeZero Carbon shall have no liability to anyone in respect of the Content, opinion and BeZero Carbon Rating. The Content is made available for information purposes only and you should not construe such Content as legal, tax, financial or investment advice. The Content is a statement of opinion as at the date expressed and does not constitute a solicitation, recommendation or endorsement by BeZero Carbon or any third party to invest, buy, hold or sell a carbon credit. The Content is not a statement of fact and should not be relied upon in isolation. The Content is one of many inputs used by stakeholders to understand the overall quality of any given carbon credit. BeZero Carbon shall have no liability to you for any decisions you make in respect of the Content. If you have any questions about BeZero Carbon, the BeZero Carbon Rating, the BeZero Carbon Rating methodology, qualifying criteria, rating process, any element of Content, the BeZero Carbon Markets platform or otherwise please contact us at: [commercial@bezzerocarbon.com](mailto:commercial@bezzerocarbon.com)

