



Guidance Brief

Carbon Estimation Area Data Release

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prepared by

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Background

The Clean Energy Regulator (CER) now publishes data on carbon project boundaries in the form of 'geospatial shapefiles' on its website. These Carbon Estimation Area (CEA) shapefiles cover the areas within a carbon project where abatement is calculated, and from which Australian Carbon Credit Units (ACCUs) can be issued.

This public data release is an initial response by the Government to recommendation 4 of the Independent Review of ACCUs, which called for legislation changes to "maximise transparency, data access and data sharing. The default should be that data be made public, including carbon estimation areas". The release is enabled by amendments to the Carbon Credits (Carbon Farming Initiative) Act 2011 (CFI Act) made by the Safeguard Mechanism (Crediting) Amendment Act 2023.

The release follows a 30-day grace period, during which existing projects proponents could apply for an exemption based on privacy or commercial concerns.

CMI supports maximum feasible disclosure of project information and notes concerns raised by some project proponents about how the published data may be misinterpreted or misunderstood without appropriate context and resources.

To address this in the short-term, the CER has facilitated a proponent-led voluntary release of supporting data to accompany the published CEA shape files. This document provides further guidance on additional information that can assist people to draw informed conclusions from these datasets. Separately, CMI will continue to advocate for the establishment of a separate National Data Platform, independently managed by the newly created Environment Information Australia or the Australian Bureau of Statistics, in order to more effectively present this information in future. A National Data Platform would enable transparency of key attribution data such as project management details, while protecting key personal and commercial details.

Information being released

A project's CEA is a large package of information, including billions of pixels of validated spatial data, integrated with land management activities and livestock information which covers the decade before and throughout the life of the project (which could be 25 or 100 years). The project boundary data being released accounts for only a fraction of this dataset.

CEA boundaries will also only be published for a single year, meaning multiple depictions of a single CEA over the span of a project's lifetime will not be made available. This will only offer a snapshot of overall project performance at a singular point in time and will not take into account any changes over the extensive project periods (including the ability to factor in drought, flood, fire, or other natural or human-induced impacts).

All land-based projects which use CEAs are covered under the release, including the following:

The applicable active methodologies² with carbon estimation areas include:

- Human-Induced Regeneration of a Permanent Even-Aged Native Forest



- Estimation of Soil Organic Carbon Sequestration using Measurement and Models
- Estimating Sequestration of Carbon in Soil Using Default Values
- Avoided Clearing of Native Regrowth
- New Farm Forestry Plantations
- Native Forest from Managed Regrowth
- Plantation Forestry
- Reforestation and Afforestation 2.0
- Reforestation by Environmental or Mallee Plantings

As part of the CER's interim decision to allow additional data to be submitted to its website registry, it is up to each project proponent to submit data independently to accompany the raw shapefiles.

What the published CEA boundary data can & can't tell us about a project

The below table shows the limits of only having snapshot Carbon Estimation Area data for a particular year, and not having key supplementary information. This can significantly impact how the project performance is assessed, and in-turn the ACCU entitlements for a project.

Can tell us	Can't tell us
<ul style="list-style-type: none"> • CEA boundary location compared to the project area boundary <i>at a single point in time</i> 	<ul style="list-style-type: none"> • Whether the CEA meets applicable method eligibility requirements • Whether vegetation growth in the CEA is a result of project activities or not • How the project area was managed in the baseline period (measured prior to project commencement) • How land has been managed – or management practices have changed – throughout the project period • How the CEA boundaries were originally developed and verified – including methods used for this • How abatement has been modelled for the project

Additional information assisting effective measurement & monitoring

In addition to CEA boundary file, there are a number of additional datasets collected and audited as part of the process to assess project eligibility, monitor implementation, audit and calculate abatement. Datasets are collected as a time series covering multiple years of the project baseline (typically 10 years prior to



commencement) and then for the project crediting period (typically 25 years). HIR projects are also subject to additional 5-yearly regeneration and forest attainment checks.

A summary of accompanying datasets that can assist with understanding a project, including abatement performance, and data analysis includes:

- a) Processed satellite imagery which has been classified into ineligible areas (e.g. baseline forest or non-regenerating areas) and eligible areas (e.g. regenerating or planted areas) in line with specific method requirements for a project;
- b) High resolution data used to verify the accuracy of the processed satellite image to a minimum of 85% threshold of accuracy (for example: field plots, Lidar or drone plots);
- c) The standard operating procedure or workflow used to classify the imagery – such as the processes used by qualified Geographic Information System (GIS) mapping technicians. The outputs they produce are also then verified to ensure they comply with method requirements;
- d) Land and agricultural or forestry management data, which can include but are not limited to:
 - i) Financial records;
 - ii) Livestock stocking rates;
 - iii) Information relating to feral animal numbers and management practices;
 - iv) Information relating to native animal populations and grazing impact;
 - v) Planting techniques and species;
 - vi) Historic management regimes; and
 - vii) Current management regimes.
- e) Modelling points and property-specific management calibrations required to run carbon abatement models (such as FullCAM software), which also set the model commencement dates;
- f) The project registration and project commencement date (the former is publicly available on the CER register and is when the project is formally declared, while the latter is generally not publicly available and denotes when the project's ACCU crediting period commences);
- g) Date of management changes for individual CEAs, which can vary across the project;
- h) Regeneration or other gateway checks, as outlined in the methodology;
- i) Independent auditing outcomes or adjustments.

Next Steps

Given the complexity and nuance of the CEA data being released, CMI strongly recommends that market participants and commentators understand the limitations of single-year CEA boundary data and fully consider the breadth of additional information required to effectively measure & monitor abatement. To address this in the short term, project proponents should consider publishing or submitting relevant additional data to the CER registry to allow full consideration of project outcomes.

To more effectively present this information in future, and maximise the more than \$100 Million for data collection allocated in the Federal Budget across different agencies and portfolios, CMI and others are advocating for the establishment of a separate National Data Platform. This should be independently managed by the newly created Environment Information Australia or the Australian Bureau of Statistics, and would enable transparency of key attribution data such as project management details, while protecting key personal and commercial details.



for more information please contact

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