View and Analyze GHG Emissions Data in CRIS

Climate Registry Information System (CRIS)

Version 4.0
NOTE to TCR Members and Verifiers

If you belong to or are working with an organization that is a member of The Climate Registry (TCR), and you see the screen below, you have not been granted access to that organization’s emissions data in CRIS yet.

You'll need to complete one more step in the registration process before you can begin working on your organization’s inventory, or begin your third-party verification process. Please ask that an Entity Administrator or Verifier Admin CRIS user on your team grant you access to the appropriate inventory.

Consult the CRIS User Guide for Members or Verifiers in the Reporting Toolkit, or contact the help desk (help@theclimateregistry.org) if you have any additional questions.

Blank boxes indicate that access has not been granted to an organization’s GHG inventory.
What is CRIS?

CRIS is The Climate Registry’s greenhouse gas (GHG) measurement, reporting, and verification platform, accessible at https://www.cris4.org.

This tool is used by TCR’s reporting members, TCR-recognized Verification Bodies, and the general public to measure and/or communicate the carbon impacts of organizations of all sizes, across all sectors.

Through CRIS:

- TCR members calculate and report an annual carbon footprint to The Climate Registry;
- Verification Bodies review and verify members’ GHG reports and submit verification opinions;
- The general public views verified emissions reports, and can sort and analyze verified data through the Emissions Summary Reports feature.

CRIS gives TCR’s clients confidence in the annual greenhouse gas data they measure, report, and review. Each year, the tool is audited and updated to reflect changes in international best-practice for GHG accounting. CRIS is also equipped with the best-available emission factors, which are aggregated and vetted by TCR. Among other benefits, CRIS offers:

- A streamlined system with multiple data entry options;
- Accurate and up-to-date emission factors curated and vetted by TCR (There’s no need to hunt down each updated emission factor in each new year of reporting – simply plug data into CRIS to calculate and report!);
- Confidence that users are abreast of changes in international GHG reporting practices;
- The ability to easily track emissions over time, and compare organizational emissions with others in the same industry;
- The ability to complete reporting, verification, and data or document management all in one place;
- The option to provide varying levels of access to each member of your team; and,
Getting Started

- Flexibility in reporting carbon offsets and energy attribute certificates (such as RECs) to capture emissions reductions or green energy claims in reports.

Emissions data that has been verified by a third-party is published by The Climate Registry to the CRIS public reports page, where members of the general public can view and analyze the data free of charge. This verified public reports page provides a credible forum for reporters to transparently communicate their greenhouse gas mitigation efforts or other sustainability goals.

If your organization is interested in using CRIS, you can find more information about TCR membership and other available services in the “Programs and Services” section of our website. Or, contact us at help@theclimateregistry.org to discuss how CRIS can meet your greenhouse gas reporting needs.

NOTE: The Climate Registry’s homepage is located at https://www.theclimateregistry.org. You will need to create a profile to be able to view the General Reporting Protocol or TCR’s annual emission factor document. CRIS 4 is located at https://cris4.org. You will also need to create a login to view public data in CRIS.

The login for the website and the login for CRIS 4 are separate, and require separate user names and passwords.

TCR provides its reporting protocols and curated default emission factor database to the public free of charge. We promise not to sell, rent or share your personal information with any third parties. Registration information is used by TCR to track the resources that are most useful to each of our audiences, and to inform decisions about future improvements, but never for marketing purposes.

Getting Started

To access CRIS, first navigate to https://cris4.org. If you haven’t done so already, create an account by clicking “Register for a new account” and completing the registration form.

Members of the public have access to all emissions inventories that have been reported to and verified under TCR’s voluntary program since its inception. Please note that not all TCR members report and verify an emissions inventory each year. Thus, there may be gaps in the data available for any one organization.

There are two ways that the public can review and analyze GHG inventories reported to TCR:

1. Filter, sort, and analyze verified data in bulk via the “Analyze All Emissions Data” feature. The Emissions Summary Reports allow you to view and manipulate aggregated emissions totals from groups of organization’s by applying multiple parameters like industry, emissions year, activity type, scope of emissions, geographic location and more.

2. View individual emissions reports for a single entity and year via the “Climate Registered™ Reports” feature. These reports show entity-wide and facility-level emissions totals for a single emissions year (the calendar year that emissions occurred, commonly abbreviated as EY).

From the front page of CRIS, access both the “Analyze All Emissions Data” and “Climate Registered™ Reports” features by hovering over the “Review & Analyze” menu option.
View Individual Emissions Reports and Supporting Documents

Verified GHG inventories are published to CRIS’ public reports page, and are accessible through the Climate Registered™ Reports menu option. These reports contain entity- and facility-level emissions summaries for a single emissions year (one calendar year of data). In addition to these reports, you’ll find supporting documents published alongside each inventory.

You can browse for a specific entity, or view every entity with at least one published inventory, by clicking the Entity dropdown box. Alternatively, you can search for an entity by name. Choose an available emissions year for the selected entity, and specify whether you’d like to view the reports or documents associated with that entity and year.

Historical CCAR Inventories

Some entities in the “Entity” dropdown menu are labeled “[Entity Name] (Historical CCAR)”. These inventories were reported to the California Climate Action Registry (CCAR), a predecessor organization to The Climate Registry. As these inventories were reported to a different protocol than those currently reported to TCR, they are labeled as “historical” inventories. For more information on historical inventories, please see Chapter 9 of the General Reporting Protocol.

If you’d like to view an organization’s emissions report, click “Show reports.” The available report options will then appear so that you can tailor the report type that you would like to preview and/or download:

- First, specify whether you’d like to review an organization’s global footprint (worldwide), or just a snapshot of the organization’s North American or non-North American emissions. The default geographical boundary for TCR members is North America, and worldwide reporting is optional.
- Next, specify whether you’d like to view a detailed report of an entity’s emissions, including facility-level emissions totals, or just a summary of the entity’s overall organization-wide emissions.
- Then, specify the organizational boundary you would like to apply. “Control” indicates that the report will include emissions from all facilities that the specified entity controls. “Equity Share and Control” indicates that the report will include emissions from all facilities that the entity you specified controls, with the appropriate equity share percentage applied.
to each facility. "Equity Share Only" indicates that the report will include emissions from all facilities that the entity you specified does not control, with the appropriate equity share percentage applied to each of those facilities. Please note that Equity Share Consolidation approaches are not applied by all entities to their inventories, and therefore are not available as a report option for all organizations.

Once you’ve specified the data filters that you’d like to include, click “View report.” You can review the report in the preview window by clicking through the pages, or you can download the report (PDF recommended) by clicking the floppy disk icon and saving to your computer.

Understanding Climate Registered™ Reports

When you preview or download an emissions report from CRIS, the front page of the report will provide contact, reporting and verification information about the organization and inventory you're reviewing. Most of this information on the front page is straightforward. However, some of the details are related to specific GHG reporting and verification policies that are outlined in TCR’s General Reporting or Verification Protocols.

Below is an example front page of a report that will be used to provide explanation for some of those more technical sections. For further details on the concepts outlined below, please see the General Reporting Protocol (GRP) Version 2.1.
View Individual Emissions Reports and Supporting Documents

1. This indicates the level of detail presented in the report. This is an example of public, detailed report (as opposed to a private report or a summary report), and includes all emissions that fall under the organization’s control.
2. This logo indicates that an inventory is Climate Registered™ under The Climate Registry’s program. Climate Registered™ inventories are complete or transitional inventories that have successfully undergone third-party verification. **Note:** some inventories on the public reports page are historical inventories, which cannot earn Climate Registered status.
3. Emissions reports published on CRIS’ public reports page are marked as complete, transitional or historical depending on the amount of information reported by the organization and/or the program that the inventory was originally reported to. For more information, please see the General Reporting Protocol Chapters 1 (complete & transitional) and 9 (historical).
4. Reporting Protocol: This field indicates the version of the General Reporting Protocol that the inventory was reported to. The current version is GRP v 2.1, published in January 2016.
5. GWP Standard: When reporting an inventory, TCR members have the ability to choose to apply a Global Warming Potential standard from the IPCC’s Second (SAR), Third (TAR), Fourth (AR4) or Fifth (AR5) Assessment Reports. The default assessment report is AR5, the latest standard. A complete list of these factors can be found in TCR’s annual Default Emission Factor document.
6. Base Year: Establishing and/or disclosing a base year is optional for members who report to TCR’s voluntary reporting program. If a base year has been officially set, it will be displayed here.
7. Consolidation Methodology: TCR members report under either an operational control or financial control approach. An equity share consolidation approach can also optionally be applied in addition to either of the aforementioned approaches. You can learn more about these consolidation methodologies in Chapter 4 of the GRP.
8. Status: “TCR Accepted” status indicates that the report has been third-party reviewed and published by TCR.
9. Verification Body: This field indicates the name of the third-party verification body that conducted verification of the published inventory. You can find more information, including contact details, for each TCR-recognized verification body in the Verification section of our website.
10. Level of Assurance: Inventories that are verified under TCR’s program are verified to either a limited or reasonable level of assurance, depending on how in-depth the review was. More information on levels of assurance can be found in the General Verification Protocol.

**Interpreting Emissions Data**

**Scopes**

On the following pages of the reports, you’ll find GHG emissions data separated by Scopes:

- **Scope 1** emissions are direct emissions that include activities like stationary combustion, mobile combustion, physical and chemical processes, and fugitive sources (i.e., intentional or unintentional releases, or leakage, of emissions).
- **Scope 2** emissions are indirect emissions that result from the purchase of electricity, heat, steam or cooling.
- Emissions that result from the direct and indirect combustion of biomass are reported separately from the Scopes, and therefore will be housed within their own separate grid in these reports (these grids will only include biogenic CO₂ emissions).
- **Scope 3** emissions are optionally reported to TCR’s voluntary program, and are generally not verified.

**Location- and Market-Based Scope 2 Reporting**

Under GRP v. 2.1, complete inventories reported to TCR’s voluntary program must include both a location-based and a market-based Scope 2 emissions total:
**View Individual Emissions Reports and Supporting Documents**

- **Location-based** Scope 2 emissions account for the local impacts of purchased energy. For electricity, location-based emissions are generally calculated by applying a regional, grid-average emission factor. The location-based method does not account for choices an organization has made regarding electricity purchases, but aims to provide a transparent overview of an organization's actual grid-based emissions.

- On the other hand, the **market-based** method does account for the choices that an organization has made regarding purchased electricity.
  - TCR members account for any special electricity products, long-term energy contracts, unbundled renewable energy certificates, or utility-specific emission factors from suppliers under the market-based method.
  - TCR members are also provided the option to hide location-based Scope 2 emissions from their public reports. If no location-based Scope 2 emissions are included in the report that you’re reviewing, you can likely find this information on the Indirect Emissions Disclosure form, which is accessible via the “Show documents” button.

**Simplified Estimation Methods (SEMs)**
TCR members are permitted to use rough, upper-bound estimations, otherwise known as Simplified Estimation Methods (SEMs), to report up to five percent of a total emissions inventory. The 5% SEMs threshold is evaluated separately against entity totals using both Scope 2 calculation methods (location-based and market-based totals). As a result, there are two SEMs line items presented in public reports: one for SEMs as a percentage of total emissions as calculated with the location-based method, and one for SEMs as a percentage of total emissions as calculated with the market-based method.

**Carbon Offsets**
Carbon offsets applied to an inventory also appear as a line item in public reports. If offsets have been applied to a Scope of emissions, a line item for those offsets will appear beneath the emissions totals. The resulting net emissions (after offsets were applied) will then display in the Net Total emissions line.

Offsets can be applied to any Scope of emissions in TCR’s reporting program. **When offsets are applied to Scope 2 emissions, they are applied equally to emissions reported under both the location- and market-based methods.**

<table>
<thead>
<tr>
<th>Scope 1 - Direct Emissions</th>
<th>Total CO₂e (t)</th>
<th>CO₂ (t)</th>
<th>CH₄ (t of CO₂e)</th>
<th>N₂O (t of CO₂e)</th>
<th>HFC (t of CO₂e)</th>
<th>PFC (t of CO₂e)</th>
<th>NF₃ (t of CO₂e)</th>
<th>SF₆ (t of CO₂e)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stationary Combustion</td>
<td>78.957417</td>
<td>78.047463</td>
<td>0.210756</td>
<td>0.299198</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Mobile Combustion</td>
<td>212.4</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>212.4</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Fugitive</td>
<td>212.4</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>290.957417</td>
<td>78.047463</td>
<td>0.210756</td>
<td>0.299198</td>
<td>212.4</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td><strong>Applied Offsets</strong></td>
<td>-290.957417</td>
<td>-78.047463</td>
<td>-0.210756</td>
<td>-0.299198</td>
<td>-212.4</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td><strong>NetTotal</strong></td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

Inventories reported to GRP v. 2.0 or earlier will not show reported offsets directly in the public report. Information on carbon offsets applied to these earlier inventories can be found on a separately uploaded Net Inventory Form. This form, if applicable, is accessible via the “Show documents” button. (See **View Supporting Documents** below.)
Renewable Energy Certificates (RECs) & Other Contractual Instruments
Renewable Energy Certificates (RECs) are accounted for differently than offsets in CRIS, and thus are displayed differently in public reports. RECs (along with any other contractual instruments) are only accounted for within Scope 2 Market-Based emissions activity types and therefore will not appear as a separate line item in public reports. Information about contractual instruments reported in an inventory can be found in the associated Indirect Emissions Disclosure Form, accessible via the “Show documents” button.

View Supporting Documents
TCR members upload a number of documents to CRIS to help them clearly and transparently support the greenhouse gas emissions inventories that they report. To access these documents, select an entity and emissions year from the dropdown box in the blue bar and click “Show documents.”

At minimum, all published emissions reports will include a verification statement and an Indirect Emissions Disclosure Form (Indirect Emissions Disclosure form is only applicable to inventories reported to GRP v. 2.1). Public documents that accompany a published GHG inventory might include any of the following:

- **Verification Statement**: This is the official documentation of an inventory’s successful third-party verification, which is signed by both the verification body and the reporting organization.
- **Indirect Emissions Disclosure Form**: This form provides more detailed information about an entity’s reported indirect emissions, including their location-based total if it has not been disclosed on their public report.
- **Self-Defined Inventory Boundary Form**: TCR members with transitional inventories use this form to disclose their self-defined reporting boundaries (e.g., which emissions are included and which are excluded from their report).
- **Exclusion of Miniscule Sources Form**: TCR members are permitted to declare and exclude, rather than measure and report, a number of very small emissions sources that are dictated by TCR. These excluded emissions are miniscule by comparison to the overall emissions totals (<1%), and are publicly disclosed using this form.
- **Standard Inventory Report**: This report is required for any TCR members in the local government sector.
- **Electric Power Sector Protocol Report**: This report is required for members that deliver (and/or generate) electricity and report to TCR’s Electric Power Sector Protocol.
- **Net Inventory Form**: This form was previously used to document the application of offsets to inventories that were reported to GRP v. 2.0 or earlier.
- **Documentation of Renewable Energy Certificates (RECs) or other contractual instruments used to source energy will also be included as “Contractual Instrument Documentation.”**
- **Climate action plans, organizational charts or inventory management plans.**

Analyze Bulk Emissions Data Reported to TCR
Would you like to review, analyze, and sort groups of emissions inventories reported by one or more organizations all at one time? You’re in the right place. Using the Analyze All Emissions Data page, you can filter through all public data that has been reported to and verified under TCR’s voluntary reporting program. You’ll also have the option to sort all public emissions data by multiple parameters, including: emissions year, industry sector, Scope of emissions, specific entities, and more.

To get started, navigate to “Analyze All Emissions Data” via the Reports menu. Clicking the “Emissions Summary” button will bring up a list of all available filters, which you can then use to sort and analyze all public emissions data in The Registry.
Filter Results for Aggregated Emissions Totals

You have the option to include or exclude specific categories of emissions data in the report template that you craft. To get started on creating a report, first click on a filter category (e.g., “Filter by Industry”). Then, select the items that you would like to include or exclude. In this example, the report will include the “Utilities,” “Construction,” and “Manufacturing” industries. Alternatively, you can choose to exclude a specific industry or group of industries. Then, the report that you run will not include information reported by organizations from that industry, and instead will include data reported by organizations from all other industries. It is possible to both include AND exclude data in a single search.
Analyze Bulk Emissions Data Reported to TCR

You can continue to add filter distinctions until you have narrowed down the prompts to the specific information that you are hoping to review or analyze. The gray box located below the list of filters will provide a summary of all information that you’ve told CRIS to either include or exclude from your report.

Once you have selected all applicable filters, you can view the results in two different ways:

1. First, you can run or download a report, which will display the results in the same format as an individual organization’s Summary Report – Control (Public). By default, these reports will only include a summary of the emissions that fall within the filters that you’ve specified. If you would like to see a more information about the organizations that have contributed to the overall emissions totals displayed in that summary, be sure to check the “Include Entity-level Summaries” check box at the top of the list of filters.

2. Alternatively, you can choose to view or download a pie graph of the emissions that fall within the filters you’ve specified. Before running a graph, you should be sure to tell CRIS how you’d like to group the emissions that are displayed in that graph. For example, using the filters listed above, if you’d like to find out more about the industry that contributed most to the emissions included in this report, you can tell CRIS to group the corresponding graph by industry. If you’d prefer to find out more about where the emissions in the report are occurring within the United States, you should tell CRIS to group the graph by state/province (examples below).
Analyze Bulk Emissions Data Reported to TCR

Note: If the filters you’ve specified in your query return too many results for CRIS to process, you may be asked to specify additional filters (trying clicking “download report/graph” first, and if that doesn’t work, narrow down your search a bit). Reports or graphics with a larger number of results will take longer to generate or download.

Analyzing Emissions Trends for an Individual Entity
You can use the Emissions Summary Reports to filter and sort the data reported by multiple entities in CRIS, or you can use these reports to view and analyze emissions trends for a single entity (or specified group of entities). From the list of filters, click “Filter for a Specific Entity.” Then, include an entity, or a number of entities, from the list. The search bar in the upper right hand corner of the window can help you locate specific entities quickly.

From there, you can continue to add filters to specify emissions from that entity or group of entities.

Note: If you would like to see emissions trends over time for a selected entity, be sure to set the “Group Graph By” dropdown menu as “Emission Year” before clicking “Run Graph” or “Download Graph.”

Interpreting Emissions Summary Graphs
The emissions summary graphs are color coded and a key is provided to help you identify the sections of the graph that correspond with each color. The top leftmost color in the key below the graph will always correspond with the 12 o’clock spot on the pie chart (i.e., the very top middle section of the chart). From there, the rest of the graph and corresponding
color coded key can be read in a clockwise direction around the pie chart, and from top to bottom, left to right in the key. In the example below, 2010 corresponds with the first most section of the pie chart. Then, all subsequent years listed in the key below the graph correspond with the next colored section that appears in a clock wise direction around the pie chart.

**Emissions presented in the graphs are always in terms of metric tons of CO2e.**