IDEA Carbon Count 2024 Submission Guidelines Deadline: Friday April 12th

IDEA is entering its second year collecting carbon emissions by member district energy systems and better understand the methods member systems are using to decarbonize. This voluntary program is intended to support IDEA education and advocacy efforts and should become a valuable tool for members to share best practices and demonstrate their success at reducing carbon emissions on behalf of their customers and connected buildings.

To participate, systems submit the last calendar year's emissions data along with a brief description of their decarbonization strategies. In 2023, participating systems helped establish a baseline, both individually and for the industry, and as we add data every year, we look forward to seeing clearer pictures and trends emerge!

IDEA Carbon Count was conceived as a partner to the annual District Energy Space competition. DE Space, which launched in 1990, is an annual reporting process by which member systems submit data on added buildings and square footage during the given year. DE Space has become a powerful tool for demonstrating industry growth and with time IDEA hopes Carbon Count will become equally valuable.

We would encourage system operators to provide system information even if it is preliminary / incomplete. If system operators do not have information broken down by energy service, providing information in aggregate is acceptable.

The program will not disclose carbon emissions intensity of systems without written consent from the system operators.

This year we are implementing a new and improved submission process, designed to simplify participation by leveraging EnergyCAP's CarbonHub framework. This program allows us to collect emissions data via two methodologies:

- 1. Submission of total fuel consumed, which we will use to calculate emissions on the systems behalf, or
- 2. Submission of calculated emissions

We hope this flexibility allows for more widespread participation and more accurate data collection.

In addition to the linked spreadsheets, please include in your submission email:

- 1) A brief description of your system (including size and general sectors of your customer base (residential, healthcare, etc).
- 2) A brief description of decarbonization strategies your system has implemented in the submitting year.

Please send your submissions to Sarah Crawford-Theurkauf (<u>sarah.idea@districtenergy.org</u>) by Friday, April 12th. Preliminary aggregated results and recognition of the participating systems will be presented at <u>IDEA2024</u>, IDEA's 115th Annual Conference and Trade Show, from June 17th-20th 2024 in Orlando, Florida.

Using the Submission Form

Please note that this form is designed to be imported directly into Carbon-Hub. Please DO NOT alter the column order or delete columns. A number of columns have been hidden for ease of use.

Please note that the form automatically limits the options of certain drop-downs based on your earlier selections, so, if you can't find a suitable selection for a field, be sure to check your other selections in that row.

All Submissions

Column E: Please indicate the service being provided (eg, Heating, Cooling, Cogeneration). This will allow you to indicate commodities used per service. NOTE: in some cases it may be difficult to differentiate the commodities used for each discrete service. In those cases, you may create a single line for all aggregated services (eg. A single line for "IDEA District Energy (CHW, steam)" and then indicate commodities used for that aggregated service.

Column AB: Please indicate the square footage being served

Option 1: Submitting Fuel Data

This method is designed to automatically calculate the emissions based on each commodity consumed by your system in the given calendar year. Please account for each fuel type in a separate row.

Column G: Select the fuel type consumed (eg Natural Gas, Biomass, Oil, Electricity)

Column L: Select "Use"

Column N: Select the applicable Scope Category

Column O: Select either United States or Worldwide, depending on the location of your system

Column P: Select "Stationary and Mobile Combustion" for non-electric commodities or "Utilities" for electricity

Column Q:

For Electricity, select your eGRID sub region (see appendix), or your state For direct combustion, we recommend selecting the specific factor for your fuel type

Column R: Indicate the quantity consumed in Calendar Year 2023

Column S: Indicate the unit

Option 2: Submitting Pre-Calculated Emissions Data

If your system has already calculated GHG emissions for 2023, you can submit that data directly:

Column G: Select "GHG emissions"

Column L: Select "Direct/Offset"

Column N: Select the applicable Scope Category

Column O: Select either United States or Worldwide, depending on the location of your system

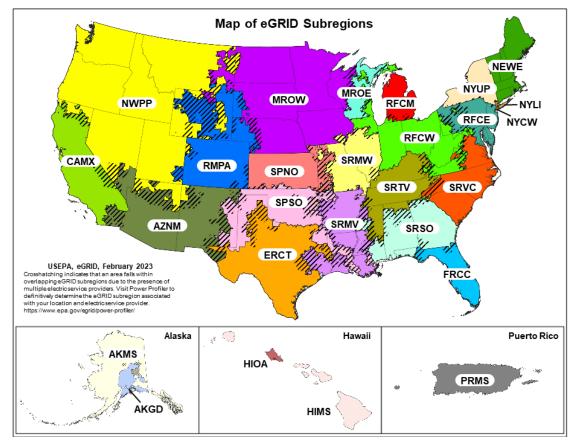
Column P: Select "Direct/Adjustment"

Column Q: Select "GHG Emissions/Adjustment"

Column X: Indicate the total GHG emissions

Column Y: Indicate the unit

US eGRID Sub Regions



Source: https://www.epa.gov/egrid/maps

Canadian Province GHG intensity values

Table 6 – Electricity consumption intensity values (g CO $_2$ e/kWh electricity consumed) 11	
Province / Territory	Consumption intensity 12
British Columbia	15
Alberta	540
Saskatchewan	730
Manitoba	2.0
Ontario	30
Quebec	1.7
New Brunswick	300
Nova Scotia	690
Prince Edward Island 13	300
Newfoundland and Labrador	17
Yukon	80
Northwest Territories	170
Nunavut	840

https://www.canada.ca/en/environment-climate-change/services/climate-change/pricing-pollutionhow-it-will-work/output-based-pricing-system/federal-greenhouse-gas-offset-system/emission-factorsreference-values.html#table_6