

BERDO GUIDANCE: CUSTOM EMISSIONS FACTORS

May 8, 2024

Version 1



BACKGROUND

Per Section VIII.b. of the [BERDO Regulations](#), the Air Pollution Control Commission (“the Commission”) may adopt, via policies and procedures, Emissions Factors for fuels not referenced in the Regulations.

Any Owner or entity that generates or delivers Energy with fuels or Energy sources without Emissions Factors covered by the BERDO Regulations, policies, or procedures may petition the Commission to approve custom Emissions Factors for Building Owners to use when calculating compliance with the Emissions standards.

This document establishes guidance for the submission and review of petitions for custom Emissions Factors.

If you have questions about this guidance document or the petition process, please reach out to us at energyreporting@boston.gov or 617-635-3850 Ext. 5.

PROCESS TO PETITION FOR A CUSTOM EMISSIONS FACTOR

1. Review emissions factors from ENERGY STAR Portfolio Manager and the U.S. EPA Greenhouse Gas Emissions Hub

Per Section VIII.a.i of the [BERDO Regulations](#), Emissions Factors for natural gas, propane, fuel oil, diesel oil, and kerosene, and any other fuels not otherwise specified in the Regulations or policies and procedures issued by the Commission or Environment Department, shall be the most recent Emissions Factors reported by ENERGY STAR Portfolio Manager.

Prior to preparing your petition, please review the most recent Emissions Factors reported by [ENERGY STAR Portfolio Manager](#) to confirm whether there is a default emissions factor for the fuel or Energy source for which the custom Emissions Factor is being requested.

If there is no default Emissions Factor referenced in ENERGY STAR Portfolio Manager, please review the most recent Emissions Factors published by the [U.S. EPA Greenhouse Gas Emissions Hub](#).

2. If you determine a custom Emissions Factor is needed for the fuel or Energy Source, prepare a petition with the following information and supporting documentation:

- a. Name and contact information of the petitioner.
- b. A description of the fuel or Energy source for which the custom Emissions Factor is being requested.
- c. A description of how the fuel or Energy source is produced and/or sourced.
- d. If applicable, a description and supporting documentation of the chemical composition of the fuel or Energy source, including its carbon content.
- e. If applicable, the heating value of the fuel or Energy source.

- f. If applicable, the default Emissions Factor for the fuel or Energy source reported by [ENERGY STAR Portfolio Manager](#) and the [U.S. EPA Greenhouse Gas Emissions Hub](#).
- g. An explanation of why a custom Emissions Factor is needed for the fuel or Energy source and, if applicable, why the default Emissions Factors provided by [ENERGY STAR Portfolio Manager](#) and the [U.S. EPA Greenhouse Gas Emissions Hub](#) do not adequately represent the fuel or Energy source.
- h. The custom Emissions Factor proposed by the petitioner.
 - i. The custom Emissions Factors must represent the emissions of Carbon Dioxide Equivalent that result from the combustion of the fuel or the consumption of the Energy source.
 - ii. The custom Emissions Factors must be expressed in kilograms of Carbon Dioxide Equivalent (kg CO₂e) per unit of fuel or Energy source consumed, as appropriate. Examples include, but are not limited to, kg CO₂e per MMBTU, kg CO₂e per kWh, kg CO₂e per gal, kg CO₂e per lb, and kg CO₂e per L.
 - 1. Emissions of methane (CH₄), nitrous oxide (N₂O) and other greenhouse gasses must be (i) reported separately and (ii) converted to CO₂e using the U.S. EPA's most recent 100-Year Global Warming Potentials and integrated into the custom Emissions Factors.
 - 2. It is recommended to provide an Emissions Factor that aligns with the units that are used to sell and/or bill the fuel or Energy source to customers (e.g., MMBTU, kWh, lb, gal, L, etc.)
 - i. If the proposed Emissions Factor has been calculated by the petitioner, an explanation of the methodology and data sources used to calculate the proposed Emissions Factor. The methodology, calculations, and resulting Emissions Factor must be verified and signed by a qualified professional with expertise in emissions accounting.

- j. If the proposed Emissions Factor has been sourced from a third party (e.g., a government agency, GHG Protocol, etc.), an explanation of why the proposed Emissions Factor adequately represents the amount of Carbon Dioxide Equivalent produced per unit of the fuel or Energy source. Please provide any documentation published by the third party related to the relevant Emissions Factor.
- 3. Send an email with your petition and supporting documentation as a single PDF document to the Commission at apcc@boston.gov and energyreporting@boston.gov.** Petitions may take the form of a memorandum that addresses the points and documentation detailed above.
- 4. Prepare to present your case at a public hearing of the Commission.**

PROCESS FOR THE REVIEW OF PETITIONS FOR CUSTOM EMISSIONS FACTOR

1. The Environment Department shall review each petition for completeness, evaluate the petition, and recommend approval or denial to the Commission.
2. The Environment Department may secure outside consultants to advise in the technical review of petitions for custom Emissions Factors.
3. Within forty-five (45) Days of receiving a petition for a custom Emissions Factor, the Environment Department shall inform the petitioner whether the petition is complete.
 - a. If the petition is incomplete, the petitioner will be asked to submit additional information and/or documentation. Within forty-five (45) Days of receiving a revised submission, the Environment Department shall inform the petitioner whether the updated petition is complete.
4. Within forty-five (45) Days after the Environment Department's finding of completeness, the Commission shall review the petition at a regularly scheduled public hearing, provided however, that the hearing must be publicly noticed at least ten (10) days prior to the date of the hearing.

- a. Petitioners shall be prepared to present their case to the Commission and answer questions from the Commission and the public.
5. A written copy of the Commission's decision shall be provided to the applicant within seven (7) Days of the decision.