

Tips for Developing a Greenhouse Gas Emissions Inventory

- 1) Make use of the Climate Leaders resources: Refer to the *Guide to GHG Management for Small Businesses & Low Emitters*, available at: www.epa.gov/climateleaders/documents/resources/lowemitter_guidance.pdf
- 2) Define organizational boundaries at the beginning of the process. Understand what this means for owned and leased facilities and vehicles. See Step 1D of the Guide to GHG Management mentioned above. For more detail, refer to Chapter 3 of the Climate Leaders Design Principles.
- 3) Identify all emission sources. Don't forget the following:
 - Vehicles -the vehicle fleet may be small and not centrally managed
 - Less-common fuels such as propane, kerosene or acetylene
 - Backup diesel generators
 - Refrigerants used in vehicles and facilities
 - Fire suppressants
- 4) CFC and HCFC refrigerants (such as R-22) can be excluded from the inventory (or reported as a memo item) because they are regulated and are being phased out by the Clean Air Act due to their ozone-depleting properties.
- 5) Determine all the data you will need before beginning to collect it. This will avoid having to make multiple requests to your colleagues, or perhaps missing data altogether.
- 6) Rely on information already being collected. For example, is someone in the company already gathering data from utility bills?
- 7) Treat the GHG inventory as a project; form a team, prepare a project schedule, establish regular check-ins, set internal deadlines for producing drafts.

Common Inventory Mistakes

- 1) Using utility specific, state, or national emissions factors to quantify electricity emissions, rather than the recommended eGRID subregion emission factors.
- 2) Not including facilities in the inventory that were open for part of the year. All such facilities, both those that opened and that closed during the year, should be included in the inventory.
- 3) Including only part of a Scope 3 source, such as commuting or travel emissions from a subset of employees. The entire source should be included.

- 4) Not entering both fuel consumption and miles traveled for vehicles. If one of these values is unknown, you can use fuel economy (miles per gallon) to calculate it. Gallons = miles ÷ mpg. Miles = gallons x mpg. You can use the rated fuel economy of your vehicles if you know it, or the Climate Leaders Simplified GHG Emissions Calculator provides default values.
- 5) Incorrect natural gas unit conversions. Natural gas can be billed in many different units. If you are using the Calculator, gas use must be converted from billing units into standard cubic feet (scf) for data entry. Conversions for common billing units are as follows:
 - 1 MMBtu = 971.8 scf
 - 1 Dth (decatherm) = 971.8 scf
 - 1 therm = 97.18 scf
 - 1 ccf = 100 scf
 - 1 Mcf = 1000 scf
 - 1 cubic meter = 35.31 scf
- 6) Adjusting base year emissions when facilities open or close. These changes are considered organic growth or decline, and the base year emissions are not adjusted for such changes.
- 7) There are a few common issues regarding Green Power purchases. For more information on eligibility and calculations, see the Green Power guidance document at www.epa.gov/climateleaders/resources/optional-module.html.
- 8) Considering renewable energy in a utility's standard generation portfolio to be "Green Power." Only Green Power that is purchased through a utility green pricing program or through Renewable Energy Certificates (RECs) is eligible to reduce emissions associated with electricity use.
- 9) When accounting for Green Power or RECs, many companies subtract kWh of green power from the total amount of purchased kWh and use the difference for Scope 2 calculations. Instead, reductions from Green Power are calculated separately from Scope 2 electricity calculations.
- 10) Companies often fail to use the non-baseload eGRID subregion factors, which are the appropriate factors to use.

Questions

If you have questions about developing your GHG inventory, please submit a question to EPA at www.epa.gov/climateleaders/smallbiz/askaquestion.html.