

- To Inform the Public Debate. You may wish to provide data which will contribute to more informed public debate on national policy on greenhouse gas reductions. Although a database built upon voluntary reports cannot provide a complete picture of national or sectoral emissions, it could provide credible information on emissions reductions and carbon sequestration projects to evaluate their potential for broader application.

- To Participate in Educational Exchanges. Data reported under the voluntary reporting program may provide useful information to others seeking ways to reduce their own emissions. New, innovative, and more economical means of reducing or avoiding emissions may be more widely deployed as better information becomes available.

GG-3 May I Report and What Should I Report?

You may report under this program if you initiate, control, or in some other way participate in activities that (1) contribute to greenhouse gas emissions, (2) result in reducing greenhouse gas emissions, or (3) sequester carbon. The activities may be part of your regular operations, pilot studies, prototype projects, or demonstration projects. They may take place in your community, in your workplace, at a location controlled by a third party, or at a foreign location. You must be a legal U.S. entity, that is, any U.S. citizen or resident alien; any company, organization, or group incorporated under or recognized by U.S. law; or any U.S. Federal, state, or local government entity.

DOE encourages you to submit as comprehensive a report as you can. Elements of a comprehensive report include information about both your emissions levels and your emissions reduction projects. Emissions information could include data on the entire organization and all its greenhouse gas activities, including historic baseline emissions data for 1987 through 1990, and annual emissions for subsequent years. Comprehensive information about emissions reduction projects could include both emissions reductions and carbon sequestration projects, emissions factors used to determine reductions, assumptions about the project, and data sources. The extent to which you provide information for each of these elements is determined by your assessment of what is necessary for others to clearly understand your project and its effects. Users of the database will be able to gauge the comprehensiveness of your report relative to these elements.

You may report both *direct* and *indirect* emissions. As the name implies, direct emissions result directly from fuel combustion or other processes that release greenhouse gases on-site.

You produce emissions indirectly when your activities cause emissions to be generated elsewhere. For example, a manufacturer would report as direct emissions the carbon dioxide emitted from the stack of its assembly plant. The same manufacturer could report indirect emissions from the electricity used to light that assembly plant, since the electricity use causes emissions to be generated by an electric utility.

GG-4 What Is Involved in Reporting Emissions?

Section 1605(b) addresses the reporting of annual emissions as well as emissions reductions and carbon sequestration. You are strongly encouraged, but are not required, to report your greenhouse gas emissions (1) for the baseline period of 1987 to 1990 and (2) for subsequent calendar years on an annual basis. You may wish to report this data for all or as much of your organization as possible, particularly if it would be important to the users of your reports.

GG-4.1 Gases and Sources

These guidelines initially provide for reporting four types of greenhouse gases: carbon dioxide, methane, nitrous oxide, and halogenated substances. These are listed below, along with the major activities associated with emissions of these gases. For each gas listed in your emissions report, you should indicate your total emissions; for example, if you report two gases, carbon dioxide and methane, you should report total emissions numbers for both gases.

Greenhouse gases	Related activities
Carbon dioxide (CO ₂)	Fossil energy combustion, electricity generation and use, industrial processes, forestry and agriculture.
Methane (CH ₄)	Landfill operation, coal mining, oil and gas systems, stationary combustion, animal production.
Nitrous oxide (N ₂ O) ...	Stationary combustion, adipic acid production, forestry and agriculture.
Halogenated substances (for example, CFCs, HCFCs, PFCs).	Chemical manufacture, use in industrial processes.

The guidelines and supporting documents do not generally discuss other radiatively enhancing gases. However, after the second reporting cycle (that is, after the 1996 cycle), you will be able to report other radiatively enhancing gases, including nitrogen oxides (NO_x), nonmethane volatile organic compounds (NMVOCs), and carbon monoxide (CO). In some cases, the supporting documents contain data such as emissions factors for some of these gases. However, in general, you will have to determine how to evaluate your emissions of these gases. Your report must meet the minimum reporting requirements of the program, as described in Section GG-6.

GG-4.2 Use of Existing Information

Many organizations keep accurate data on projects that involve energy efficiency, fuel switching, conservation, pollution prevention, waste minimization, and/or carbon sequestration. If you keep related data for other purposes, reporting greenhouse gas emissions effects under this program will be especially simple and straightforward.

Many potential reporters under EPA Act 1605(b) already gather and report emissions information. If you already report similar information (for example, to comply with the Clean Air Act Amendments or under another air quality program) or can easily derive it (for example, from data you submit to regulatory agencies, from smokestack monitoring technologies, or fuel use data kept for internal purposes), you are encouraged to use such information to the extent practical in reporting emissions and emissions reductions under this program. However, you must report the information in a manner that is consistent with these General Guidelines.

GG-4.3 Scope of Emissions Reporting

You should report on the most comprehensive basis possible to broaden the usefulness of your emissions reports. However, you may define the scope of your emissions reports. In most cases, the needs of your potential audience will dictate the boundaries you draw. If you are able to report emissions for your entire organization, you should consider providing a comprehensive accounting so that your audience can gain a clear understanding of your overall activities. However, reporting total emissions for a single plant or establishment may be more consistent with other elements of your report and may be based on more precise or more readily available data.

Reporting emissions for your entire organization will show the most complete picture of your activities. Entity-level emissions reports can also provide all the data you need to submit reports on emissions reductions at the entity level or can increase the credibility of reports of emissions reductions at an individual project level.

You do not need to report total organization emissions in order to report individual emissions reductions and carbon sequestration projects. In fact, some reporters may not be able to report their organization's or unit's total emissions, because information needed for the baseline years may not be available, or because it is not feasible to estimate their organization's or unit's total emissions even for the current year. Remember, however, that most users of the database will find your reported estimates of emissions reductions more credible if they are accompanied by records of your organization's total emissions for the baseline years 1987 to 1990 and subsequent years.

GG-5 How Should I Analyze Projects I Wish To Report?

Accurate and credible reporting under this program requires sound project analysis. Rigid rules do not exist for such an analysis, and you may define the emissions reductions and carbon sequestration projects that you report. Your project may consist of all emission-producing activities for your organization; several activities, perhaps as parts of an energy efficiency program; or only one activity, undertaken for its projected cost savings (such as a relighting project) or as a pilot project (for example, an experimental industrial process change). Given the broad range of possible types of projects, it is impossible to establish guidance that