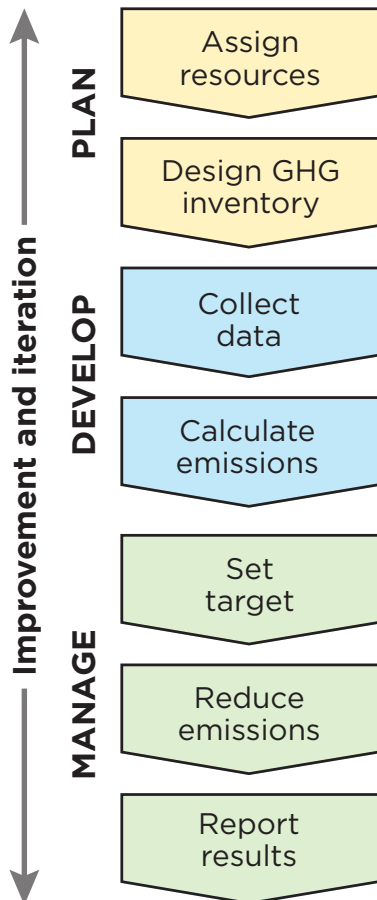


## Greenhouse Gas Management Program Overview

The U.S. Department of Energy (DOE) Federal Energy Management Program (FEMP) assists Federal agencies with managing their greenhouse gas (GHG) emissions. GHG management entails measuring emissions and understanding their sources, setting a goal for reducing emissions, developing a plan to meet this goal, and implementing the plan to achieve reductions in emissions.



Greenhouse gases trap heat in the lower atmosphere, warming the earth's surface temperature. *Photo from iStock/11814587*



Managing and mitigating greenhouse gases involves a constantly evolving process for inventorying, targeting, and reducing emissions.

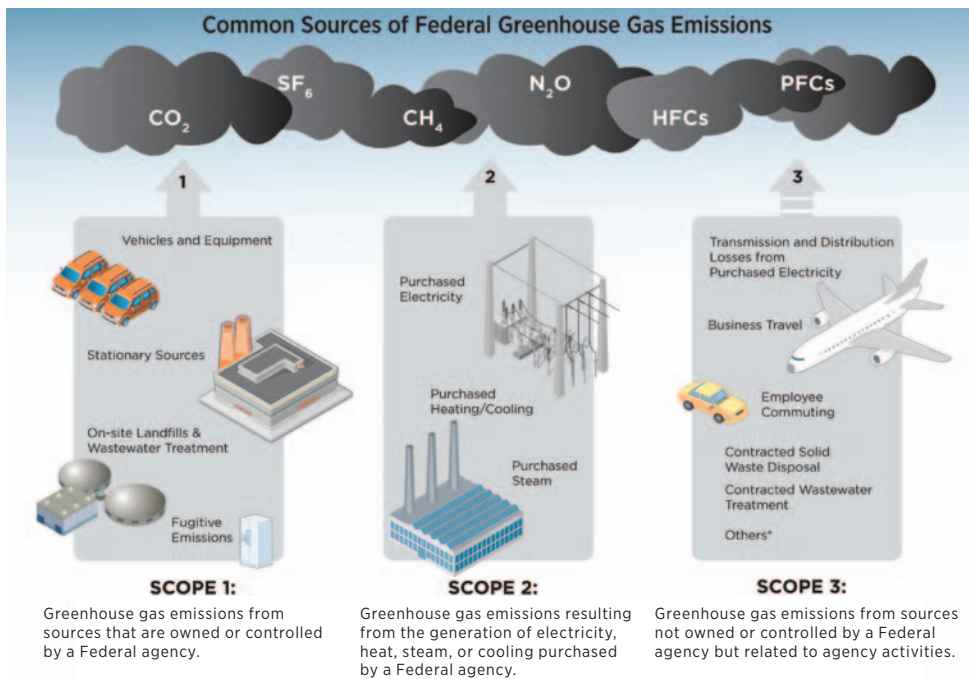
### FEMP Services

FEMP provides the following services to help Federal agencies meet the requirements of inventorying and reducing their GHG emissions:

- FEMP offers one-on-one technical assistance to help agencies understand and implement the Federal Greenhouse Gas Accounting and Reporting Guidance and fulfill their inventory reporting requirements.
- FEMP provides training, tools, and resources on FedCenter to help agencies complete their annual inventories.
- FEMP serves a leadership role in the interagency Federal Working Group on Greenhouse Gas Accounting and Reporting that develops recommendations to the Council on Environmental Quality (CEQ) for the Federal Greenhouse Gas Accounting and Reporting Guidance.
- As the focus continues to shift from measuring emissions (completing inventories) to mitigating emissions (achieving reductions), FEMP is developing a strategic planning framework and resources for agencies to prioritize among a variety of options for mitigating their GHG emissions, so that they achieve their reduction goals in the most cost-effective manner. These resources will help agencies analyze their high-quality inventories to make strategic decisions about where to use limited resources to have the greatest impact on reducing emissions.

### Greenhouse Gases and Climate Change

Greenhouse gases trap heat in the lower atmosphere, warming the earth's surface temperature in a natural process known as the "greenhouse effect." GHGs include carbon dioxide (CO<sub>2</sub>), methane (CH<sub>4</sub>), nitrous oxide (N<sub>2</sub>O), perfluorocarbons (PFCs), hydrofluorocarbons (HFCs), and sulfur hexafluoride (SF<sub>6</sub>). Human activities have caused a rapid increase in GHG concentrations. This rising level contributes to global climate change, which contributes to environmental and public health problems.



The Federal Government is the nation's single largest energy consumer and a significant emitter of GHGs, operating approximately 500,000 buildings and 660,000 vehicles and employing more than 1.9 million civilians. The Federal Government has the opportunity and responsibility to lead by example in reducing its GHG emissions, mitigating climate change, and enhancing the nation's energy security.

### Federal Requirements

President Obama issued Executive Order (E.O.) 13514, Federal Leadership in Environmental, Energy, and Economic Performance, on October 5, 2009. E.O. 13514 makes reducing GHG emissions a priority for Federal agencies. Under E.O. 13514, each agency must:

- Set agency targets for reducing Scope 1 & 2 and Scope 3 emissions by fiscal year (FY) 2020, relative to

an FY 2008 baseline. The resulting Government-wide reduction target is 28 percent for Scope 1 & 2 emissions, and 13 percent for Scope 3 emissions.

- Develop an annual Strategic Sustainability Performance Plan that includes the agency's plan to achieve its emissions reduction targets.
- Complete an annual, comprehensive inventory of emissions across all three scopes to measure progress toward meeting the agency's reduction targets. Federal agencies completed their first inventories for FY 2008 and FY 2010 in January 2011. Subsequent annual inventories are due each January for the preceding fiscal year.

### Additional Resources

FEMP Greenhouse Gas Management Program [www.femp.energy.gov/program/greenhousegases.html](http://www.femp.energy.gov/program/greenhousegases.html)

FedCenter Greenhouse Gas Inventory Resource Site [www.fedcenter.gov/programs/greenhouse/inventoryreporting/](http://www.fedcenter.gov/programs/greenhouse/inventoryreporting/)

Federal Greenhouse Gas Accounting and Reporting Guidance and Technical Support Document [www.whitehouse.gov/administration/eop/ceq/sustainability/fed-ghg](http://www.whitehouse.gov/administration/eop/ceq/sustainability/fed-ghg)

Executive Order 13514 [edocket.access.gpo.gov/2009/pdf/E9-24518.pdf](http://edocket.access.gpo.gov/2009/pdf/E9-24518.pdf)

U.S. Public Sector Greenhouse Gas Protocol [www.ghgprotocol.org/files/ghgp/us-public-sector-protocol\\_final\\_oct13.pdf](http://www.ghgprotocol.org/files/ghgp/us-public-sector-protocol_final_oct13.pdf)

Federal Agency Strategic Sustainability Performance Plans [www.whitehouse.gov/administration/eop/ceq/sustainability/plans](http://www.whitehouse.gov/administration/eop/ceq/sustainability/plans)

Federal Agency Greenhouse Gas Inventories [www.data.gov/raw/4769](http://www.data.gov/raw/4769)

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