Hydrofluorocarbons (HFCs) are greenhouse gases (GHGs) commonly used by federal agencies in a wide variety of applications, including refrigeration, air-conditioning (AC), building insulation, fire extinguishing systems, and aerosols. HFCs have high global warming potential (GWP), raising concern about their impacts as they become increasingly used as replacements for ozone-depleting substances (ODS), and as economic growth spurs demand for new equipment, especially in the refrigeration/AC sector. Information about ongoing domestic efforts and tools to address HFCs, particularly those in the federal sector, is provided below.

Federal Acquisition Regulation (FAR): High-GWP HFCs

The federal government has set out to reduce emissions of HFCs by purchasing alternatives whenever feasible and transitioning to equipment that uses safer and more sustainable alternatives to HFCs. In May 2016, the Department of Defense (DoD), General Services Administration (GSA), and National Aeronautics and Space Administration (NASA) published a final rule to amend the FAR to procure, when feasible, alternatives to high-GWP HFCs. In particular, the FAR refers to EPA’s [Significant New Alternatives Policy (SNAP) Program](https://www.epa.gov/snap) to identify other acceptable alternatives that have lower GWP. The SNAP Program— established in 1994 to evaluate and regulate substitutes for ODS that are being phased out under Title VI of the Clean Air Act (CAA)—identifies and approves climate-friendly alternatives while prohibiting certain uses of the most harmful chemical alternatives. The SNAP program has reviewed over 400 substitutes—including HFCs—for various industrial sectors including refrigeration and air conditioning, foam blowing, solvent cleaning, fire suppression and explosion protection, aerosols, sterilization, and adhesives, coatings, and inks. The final rule also encourages improved refrigerant management and the use of reclaimed (instead of virgin) HFCs as examples of sustainable procurement under the FAR.

To help agencies monitor progress, the amendment also requires contractors to keep track of and report on the amounts of HFCs added or removed during routine maintenance, service, repair, and disposal of all government equipment, appliances, and supplies. The reporting requirement applies only for equipment or appliances normally containing 50 pounds or more of HFCs or refrigerant blends containing HFCs.

In November 2016, DoD, GSA, and NASA published a final rule amending the FAR to have certain offerors to the federal government “indicate if and where they publicly disclose greenhouse gas emissions and greenhouse gas reduction goals or targets.” This supports efforts to reduce greenhouse gas emissions at the Federal level by improving understanding of “both direct and indirect greenhouse gas emissions that result from Federal activities.” The requirement for representation applies to offerors that are registered in the System for Award Management (SAM) database and received $7.5 million or more in Federal contract awards in the prior Federal fiscal year.

Federal Actions on HFCs

Federal Reporting of HFC Emissions

[Executive Order 13693](https://www.whitehouse.gov/the-press-office/2015/03/19/executive-order-planning-federal-sustainability-next-decade) on Planning for Sustainability in the Next Decade includes various energy and sustainability requirements for agencies and departments within the Federal Government. This Executive Order sets GHG emission reduction targets and requires annual federal GHG inventory reporting for domestic source emissions and the tracking of such emissions relative to reduction targets. Estimating GHG emissions, including HFCs, must be in accordance with the White House Council on Environmental Quality’s (CEQ) [Federal Greenhouse Gas Accounting and Reporting Guidance](https://www.whitehouse.gov/ceq/sustainability).

Commitments to Reduce HFC Emissions

GSA invited technology manufacturers and industry stakeholders, including those that offer HFC refrigerant alternatives, to submit information on innovative and transformational building technologies that can be used in federal buildings through its [Green Proving Ground (GPG) program](http://www.gsa.gov/portal/category/102491). The GPG program leverages GSA's real estate portfolio for pilot programs that evaluate emerging building technologies that promise to improve the environmental performance of GSA's portfolio while reducing operational costs. Technologies selected by the program are being matched with federally owned buildings and evaluated to inform public- and private-sector investment decisions and accelerate the commercialization and adoption of such technologies within the federal government.

Tools to Support the Federal Sector in Reporting and Reducing HFC Emissions

Accounting Tool to Support Federal Reporting of HFC Emissions

To assist agencies in calculating and reporting HFC emissions, EPA developed the Excel-based HFC Emissions Accounting Tool. This tool provides several methodologies for estimating HFC emissions in accordance with the CEQ guidance, depending on the level of information available to each agency about HFC-containing equipment. Use of this tool is optional but is designed to complement data entry for the [Federal Energy Management Program (FEMP) Data Report](http://energy.gov/eere/femp/downloads/annual-greenhouse-gas-and-sustainability-data-report).