



Highlights of [GAO-07-516](#), a report to congressional requesters

Why GAO Did This Study

Because of concerns about changes in Earth's climate due to greenhouse gas emissions and the potential economic and environmental consequences of these changes, GAO (1) inventoried greenhouse gas emissions generated by legislative branch operations in fiscal year 2006, as well as identified trends in emissions starting from a base year of the average annual amount emitted in fiscal years 1998 through 2001, and (2) identified a strategy for reducing emissions. To perform this work, GAO followed the Greenhouse Gas Protocol and additional guidance from the Environmental Protection Agency, using data provided by officials responsible for legislative branch operations and the General Services Administration.

What GAO Recommends

GAO recommends that the agencies that manage the operations of the legislative branch (1) establish a schedule for routinely conducting energy audits that provide sufficiently detailed information to justify investing in projects, and (2) implement selected projects as part of an overall plan to reduce emissions that considers cost-effectiveness, the extent to which the projects reduce emissions, and funding options. The affected agencies agreed with GAO's findings and recommendations and provided technical comments that GAO incorporated, as appropriate.

www.gao.gov/cgi-bin/getrpt?GAO-07-516.

To view the full product, including the scope and methodology, click on the link above. For more information, contact Terrell G. Dorn at (202) 512-6923 or dorn@gao.gov.

LEGISLATIVE BRANCH

Energy Audits Are Key to Strategy for Reducing Greenhouse Gas Emissions

What GAO Found

Legislative branch operations generated about 316,000 metric tons of greenhouse gas emissions (expressed in carbon dioxide equivalents) in fiscal year 2006. The amount of greenhouse gas emissions generated by legislative branch operations is equal to the emissions produced by about 57,455 cars and represents an increase of about 4 percent from the average annual quantity emitted in fiscal years 1998 through 2001. The largest source of these emissions (63 percent) was the consumption of electricity purchased from an external provider that relies primarily on fossil fuel combustion to generate the electricity. The second-largest source of emissions (32 percent) was the combustion of fossil fuels in the Capitol Power Plant to produce steam for the majority of the legislative branch buildings. The remaining 5 percent of emissions came from other sources that each generated 1 percent or less of emissions, such as natural gas and chilled water purchased from outside sources and business travel in government-owned and -leased vehicles. While emissions in 2006 increased 4 percent over the base year levels, emissions in the intervening years varied depending on factors such as fluctuations in weather, the fuel mix used at the Capitol Power Plant, and the quantity of renewable energy used by legislative branch operations.

A strategy for reducing emissions includes conducting energy audits to identify and evaluate energy efficiency and renewable energy projects, as well as evaluating other emissions-reduction projects that may fall outside the scope of energy audits. Such a strategy would also involve developing an implementation plan that considers cost-effectiveness, the extent to which the projects reduce emissions, and funding options. Energy audits are a key step because the projects identified through the audits would address the largest sources of emissions—purchased electricity and fossil fuel combustion in the Capitol Power Plant—and would include information on cost-effectiveness and the potential for reducing emissions. Agencies could finance these projects through direct appropriations or contracts with utility or energy service companies. Since fiscal year 1998, the Architect of the Capitol, GAO, and the Government Printing Office have commissioned 11 energy audits of some of their facilities, but the audits have generally not been comprehensive and the agencies have varied in the extent to which they have implemented the projects identified through the audits. Another part of a strategy would involve evaluating the cost-effectiveness, emissions reduction, and funding options of projects that may fall outside the scope of energy audits—such as acquiring fuel-efficient vehicles—on a case-by-case basis. The energy audits and evaluations of other projects would provide information for legislative branch agencies to develop plans for implementing projects to reduce emissions.