



# At a Glance

*Catalyst for Improving the Environment*

## Why We Did This Review

We initiated this review to examine the validity and accuracy of the reported energy savings for the U.S. Environmental Protection Agency's (EPA's) ENERGY STAR program. This was part of our agenda to assess new approaches to environmental protection. We specifically sought to determine whether the savings reported were valid and fully supportable.

## Background

ENERGY STAR is a voluntary program designed to help businesses and individuals enhance their energy efficiency. In 2006, the ENERGY STAR program reported avoiding a total of 37.6 million metric tons of carbon equivalent. It further reported that ENERGY STAR helped prevent greenhouse gas emissions equivalent to those from 25 million vehicles while savings Americans \$14 billion on their energy bills.

**For further information, contact our Office of Congressional, Public Affairs, and Management at (202) 566-2391.**

**To view the full report, click on the following link:**  
[www.epa.gov/oig/reports/2009/20081217-09-P-0061.pdf](http://www.epa.gov/oig/reports/2009/20081217-09-P-0061.pdf)

## **Improvements Needed to Validate Reported ENERGY STAR Benefits**

### **What We Found**

Reported ENERGY STAR benefits represented one-half of EPA's total greenhouse gas emissions avoided in 2006. ENERGY STAR benefits are a major component of efforts reducing such emissions. The accuracy of the program's reported energy savings is important in monitoring the United States' efforts to reduce greenhouse gas emissions.

We found the ENERGY STAR program's reported savings claims were inaccurate and the reported annual savings unreliable. We identified several deficiencies with the shipment data and the process used in calculating benefits. Deficiencies included the lack of a quality review of the data collected; reliance on estimates, forecasting, and unverified third party reporting; and the potential inclusion of exported items. Also, EPA included savings for one Department of Energy (DOE) product that DOE also claimed.

Additionally, sales of formerly qualified products are used to determine ENERGY STAR's market transformation benefits, but we found that this benefit was computed inconsistently. Also, the methodology used to compute the ENERGY STAR commercial sector benefits uses unverified assumptions.

### **What We Recommend**

We recommended that EPA:

- Establish and implement improved quality controls.
- Develop and consistently apply a data-driven methodology to compute market transformation effects.
- Validate the model for calculating the benefits of the ENERGY STAR commercial sector to ensure it accurately reflects the sector's impacts.

EPA disagreed with many of our conclusions, but stated it had implemented some of the recommendations. However, some of EPA's planned actions do not meet the intent of our recommendations, and we consider these recommendations open and unresolved.