



U.S. Department of Energy Energy Efficiency and Renewable Energy

Bringing you a prosperous future where energy
is clean, abundant, reliable, and affordable

3 Equipment Standards and Analysis

Building Technologies' Equipment Standards and Analysis Activities address our continuing legislative requirements to improve the minimum efficiency for buildings by implementing energy efficiency standards for appliances and building equipment.

National standards provide manufacturers with a single set of requirements rather than an array of potentially conflicting State and local regulations. By eliminating the most inefficient technologies, Equipment Standards and Analysis activities complement the other BT strategies which develop and promote advanced, highly efficient technologies and practices.

3.1 Appliance and Commercial Equipment Standards

Congress legislated initial Federal energy efficiency standards and established schedules for DOE to review and revise these standards. For some products, Congress has directed DOE to set standards in the absence of initial standards or to determine if such action is necessary. Standards benefit consumers by requiring that appliance manufacturers reduce the energy and water use of their products—and thus the costs to operate them. BT's subprogram carries out activities in three areas: test procedures, mandatory energy conservation standards, and labeling.

- **Test Procedures:** DOE outlines the test procedures that manufacturers must use to certify that their appliances meet the standards. The test procedures measure the energy efficiency and energy use, providing an estimate of the annual operating cost of each appliance. Test procedures are typically maintained by industry associations and incorporated by reference into the rules set by DOE.
- **Mandatory Energy Conservation Standards:** DOE establishes Federal standards to keep consistent, national energy efficiency requirements for selected appliances and equipment. By law, DOE must upgrade standards to the maximum level of energy efficiency that is technically feasible and economically justified. DOE strives to establish standards that maximize consumer benefits and minimize negative impacts on manufacturers and other stakeholders.
- **Labeling:** The Federal Trade Commission (FTC) is required to prescribe labeling rules for residential appliances. DOE and FTC share responsibility for labeling commercial equipment.

In January 2006, DOE outlined its approach to appliance and equipment standards to Congress. The report covers the MYP associated with appliance and equipment standards, providing background on the subprogram. Specifically, it:

- Presents a history of appliance and equipment standards that gives the reader a full understanding of the historical context and statutory requirements for the subprogram.

- Summarizes all rulemaking activities and requirements under existing statutes, including EPACT 2005.
- Provides a detailed description of DOE's rulemaking processes and the statutory requirements for conducting rulemakings.
- Describes the reasons for delays in completing rulemakings, including the unintended consequences of the 1996 Process Rule that introduced delays into rulemaking activities.
- Presents DOE's plan for addressing the problems and issues identified, and explains several productivity enhancements that will be used to significantly increase the creation of energy conservation standards.
- Presents and explains the multi-year schedule the Department will follow as it addresses the backlog and implements the requirements of EPACT 2005.

The entire report can be downloaded at:
http://www.eere.energy.gov/buildings/appliance_standards/pdfs/congressional_report_013106.pdf.

The recent passage of the Energy Independence and Security Act of 2007 modified some of the scheduled rulemakings and increased the number of rulemakings DOE must issue beyond the obligations set forth in EPACT 2005. It brings the level of activity within the Appliance Standards program to unprecedented levels. DOE is currently reviewing the statute to determine the full scope of the requirements and corresponding actions to be undertaken by the agency.

In addition, section 141 of EPACT 2005 and section 305 of EISA 2007 require semi-annual implementation reports. The most recent semi-annual implementation report (February 2008) can be downloaded at:
http://www.eere.energy.gov/buildings/appliance_standards/pdfs/congressional_report_0208.pdf