

## Maryland Energy Efficiency Standards Act of 2007

### Policy Description

The Maryland Energy Efficiency Standards Act of 2007 (“EESA” or “the Act”) became effective on July 1, 2007. The Act required the Maryland Energy Administration shall to adopt regulations before January 1, 2008 that establish minimum efficiency standards for the following types of new products: Bottle-type water dispensers; commercial hot food holding cabinets; metal halide lamp fixtures; residential furnaces; single-voltage external AC to DC power supplies; state-regulated incandescent reflector lamps; walk-in refrigerators and freezers.

Seven appliances from this Act are also included in the federal Energy Independence and Security Act of 2007.<sup>1</sup> Under the general rules of federal preemption, Maryland may enforce their state standards up until the federal standards become effective.

The energy savings from the appliances not covered by the Energy Independence and Security Act—bottle-type water dispensers, commercial hot food holding cabinets, and residential furnaces—are discussed here.

Compact audio products and DVD players and recorders were also included in the original bill, but removed before the bill became law.

### Policy Design

- **Timing:** January 1, 2008
- **Parties Involved:** Maryland Energy Administration
  - **Other:** Residential, commercial, and industrial customers

### Implementation Mechanisms

### Related Policies/Programs in Place

- Maryland Energy Efficiency Standards Act (became law per Maryland Constitution, Chapter 2 of 2004 on January 20, 2004):

Maryland standards apply to 9 appliances: Torchiere lighting fixtures; unit heaters; low-voltage, dry-type distribution transformers; ceiling fans and ceiling fan light kits; red and green traffic signal modules; illuminated exit signs; commercial refrigeration cabinets; large packaged air conditioning equipment; and commercial clothes washers. Standards become effective in March 2005. The exceptions to this general rule relate to commercial clothes washers, and ceiling

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<sup>1</sup> The seven appliances also covered by the 2007 federal legislation include metal halide lamp fixtures; single-voltage external AC to DC power supplies; state-regulated incandescent reflector lamps; and walk-in refrigerators and freezers.

fan light kits. Commercial clothes washers and ceiling fan light kits do not have to meet the new efficiency standards until March 1, 2007. Commercial clothes washers and ceiling fan light kits not meeting the standards may be installed until January 1, 2008.

- Energy Independence and Security Act of 2007:

This federal law establishes new minimum efficiency standards for several appliance types: residential boilers; state-regulated incandescent reflector lamps; single-voltage external AC to DC power supplies; metal halide lamp fixtures; and walk-in refrigerators and freezers. This legislation will supersede the standards established in the Maryland Energy Efficiency Standards Act of 2007, where applicable.

### Types(s) of GHG Reductions

Reduction in GHG emissions (largely CO<sub>2</sub>) from avoided electricity production or on-site fuel combustion.

### Estimated GHG Reductions and Net Costs or Cost Savings

	GHG Reductions (MMtCO <sub>2</sub> e)			Gross Costs (Million \$)	Gross Benefits (Million \$)	Net Present Value 2008–2020 (Million \$)	Cost-Effectiveness (\$/tCO <sub>2</sub> e)
	2012	2020	Total 2008–2020				
EESA *	0.0	0.1	0.07	NA	NA	NA	NA

\* The numbers shown above include GHG emission reductions predicted for bottle-type water dispensers and commercial hot food holding cabinets as a result of the EESA. The energy savings from the residential furnaces standard are not quantified here due to a lack of available data. (See Quantification Methods.)

#### Data Sources:

- U.S. Congress. House. *Energy Independence and Security Act of 2007*. H.R.6. 110<sup>th</sup> Cong., 1<sup>st</sup> sess.
- *Maryland Energy Efficiency Standards Act*, Annotated Code of Maryland, sec. 9-2006 2004.
- *Maryland Energy Efficiency Standards Act of 2007*, Annotated Code of Maryland, sec. 9-2006, 2007.
- Nadel, Steven, Andrew deLaski, Maggie Eldridge, and Jim Kleisch. *Leading the Way: Continued Opportunities for New State Appliance and Equipment Efficiency Standards, ASAP and ACEEE*, Report Number ASAP-6/ACEEE-A062, March 2006.
- Nadel, Steven, Andrew deLaski, Maggie Eldridge, and Jim Kleisch. *Energy Efficiency Standards Benefits – 2006 Model Bill: Maryland, ASAP and ACEEE*, [http://www.standardsasap.org/documents/a062\\_md.pdf](http://www.standardsasap.org/documents/a062_md.pdf) (accessed December 7, 2007).

- Prindle, Bill. Energy Efficiency in Maryland's Electricity Future. American Council for an Energy-Efficient Economy, ACEEE Report Number E077, September 2007.

#### **Quantification Methods:**

- Projected electricity and natural gas savings are taken from the 2006 Appliance Standards Awareness Program data for Maryland for bottle-type water dispensers and commercial hot food holding cabinets, covered under the Maryland Energy Efficiency Standards Act. The residential furnace standard only applies to furnaces that use natural gas or propane in new construction, not to retrofits of existing buildings (and are thus expected to have a small impact on energy consumption). The emissions reductions from the residential furnaces standard are not quantified here, because available analyses consider all furnace replacements, not just furnaces in new construction.
- These annual energy savings are adjusted to fit the analysis period and target implementation year.
- The appropriate GHG emissions factors are applied.

#### **Key Assumptions:**

- Savings from efficiency improvement via standards are similar in Maryland to those indicated in the ASAP/ACEEE report.

#### **Key Uncertainties**

#### **Additional Benefits and Costs**

- Electricity system benefits: reduced peak demand, reduced capital and operating costs, improved utilization and performance of electricity system
- Reducing pollutants from emissions, improved health from fewer pollutants and particulates and reduced water use for cooling
- Reducing dependence on imported fuel sources
- Reducing energy price increases and volatility

#### **Feasibility Issues**