

---

# **ENERGY STAR Products Plan 2015**

# 2014 Accomplishments: New and Revised Specifications

---

## **New Specifications Completed**

Dryers

## **Revisions Completed**

Clothes Washers

Set Top Boxes

Battery Chargers (sunset)

Water Heaters

Central Air Conditioning and Air Source Heat Pumps

Ventilating Fans

Televisions

# Keeping Product Specifications Up-to-date

---

- 24 total specification updates underway in 2015; anticipate 7-11 completed
- Drivers:
  - growing market share
  - new federal standards
  - new efficiency opportunities
  - opportunity to expand coverage
- 12 specification development efforts for new products underway; anticipate completing 2-4
- Drivers:
  - significant energy savings
  - potential to differentiate products

# International

---

Program focus in two areas:

- Maintaining international agreements on ENERGY STAR products
- Promote international harmonization of test methods and approaches as well as data sharing (*as appropriate*)
  - In 2015, participate in IEA harmonization efforts regarding Networked Products and any relevant SEAD efforts
  - Facilitate consideration of SERT as a server efficiency test method by China through work with CNIS and SPECpower
  - Coordinate technical exchanges with CNIS, lighting manufacturers and other policy makers to share best practices on the development of LED lighting specifications.
  - Evaluate possible areas of harmonization with CNIS on lighting performance specifications.

# ENERGY STAR Most Efficient

---

- Maintain 11 product categories from 2014; add new category for Residential Dishwashers in 2015
- Support communications and marketing teams on promotion
- Consider high priority new categories
- Enhance the ESME website functionality (co-lead w marketing team) to pilot price and location functionality

# ENERGY STAR Revisions/Development by Product Category

---

<b>ENERGY STAR Product Category</b>	<b>Revisions Underway</b>	<b>New Developments Underway</b>
<b>Electronics</b>	<b>6</b>	<b>2</b>
<b>Heating and Cooling</b>	<b>5</b>	<b>3</b>
<b>Residential Appliances</b>	<b>3</b>	
<b>Lighting</b>	<b>2</b>	
<b>Medical</b>		<b>2</b>
<b>Commercial Food Service</b>	<b>8</b>	<b>2</b>
<b>Other</b>		<b>3</b>

---

Appendix #1:

# **DETAILED PLAN FOR REVISED SPECIFICATIONS**

# Electronics & Computing

Product Category / Product	Drivers	Testing Protocol
Imaging	Expanding the specification to include new product types.	DOE-Developed ENERGY STAR Test Procedure
Displays	Large Market Share (estimated above 80% for LCD computer monitors in 2012. Launch V 7.0 to ensure relevancy in market. Also account for DC-powered products and new larger sizes in professional signage.	DOE-Developed ENERGY STAR Test Procedure
UPSs	Large market share (estimated >70% total, with most of the share in residential/commercial). Launch to ensure relevance in market.	DOE-Developed ENERGY STAR Test Procedure
Small Network Equipment	Set new, more stringent levels given v1.0 qualification data received.	DOE-Developed ENERGY STAR Test Procedure
Audio	Current spec does not accurately account for whole home audio-need to include and develop test method. Also market share for Blu-Ray players is increasing (~60%), providing an opportunity to further differentiate more efficient products.	Work with DOE re: addition to test method to account for whole home audio.
Set –Top Boxes	In anticipation of Tier 2 of the US VA, launch development of V5.0	CEA-2043, Set-top Box (STB) Power Measurement, Rev, June2013, subject to the clarifications in Sections 4.2–4.9

# Heating, Cooling, & Other

Product Category / Product	Drivers	Testing Protocol
Ceiling Fan Review	Review based on MOU timeline	DOE Regulatory Test Procedure (Currently under rulemaking)
Dehumidifier Review	Review based on MOU timeline	DOE Regulatory Test Procedure (currently under rulemaking)
LCHVAC Revise	New federal standard	DOE Regulatory Test Procedure or DOE – Developed ENERGY STAR Test Procedure
Room Air Cleaner Review	Review based on MOU timeline	

# Appliances

Product Category / Product	Drivers	Testing Protocol
Room Air Conditioners	New Federal standard in 2014 reduced savings, consider connected criteria	DOE Regulatory Test Procedure for Room ACs/ DOE-Developed ENERGY STAR Test Procedure for Demand Response pending Product Availability (TBD)
Commercial Clothes Washers	Commercial washers unchanged by 2014 Clothes Washer 7.0 revision  Anticipating 2015 DOE Test Procedure and Federal Standard	DOE Regulatory Test Procedure for Commercial Clothes Washers
Residential Refrigerator	Scope expansion to include -Wine Chillers, Misc Refrigeration. Opportunity for energy savings, manufacturer interest, 2.7 million wine chillers sold in 2013.	TBD

# Lighting

Product	Drivers	Testing Protocol
Dimming	Evaluation of effectiveness of the basic requirements and recommended practices in Lamps specification needed to potentially refine for integration into Lamps V2 and Luminaires V2.	ENERGY STAR Dimming Test Method
Lamps Review	Evaluate revision drivers to include possible scope expansion DOE SNO PR, connected lamps	DOE Test Method for LED lamps, once final
Luminaires	1.2 effective April 2-12, rapid increases in efficacy and complications in executing program for certain product types.	

# Commercial Food Service

Product Category / Product	Drivers	Testing Protocol
Commercial Dishwashers	Add total energy metric	DOE-Developed ENERGY STAR Test Procedure DOE engaged in the ASTM F26 revision of the test method
Commercial Steam Cookers	New TM underway	Prioritize moving to 3PC while TM is under development. Test component level certification and verification. ASTM developing “a la carte” test method for batch cooking – once completed (est Q42 2015) EPA will then launch a revision effort in 2015
Hot Food Holding Cabinet	Address moisture; possible scope expansion to other types of hot food holding equipment	ASTM F2140

# Commercial Food Service (cont.)

Product Category / Product	Drivers	Testing Protocol
Commercial Ovens	Scope expansion to include Rack Ovens	ASTM F2093-11
Commercial Fryers Review	Review based on MOU timeline	ASTM F1361-07(2013) and F2144-09
Commercial Griddles Review	Review based on MOU timeline	ASTM F1275-14
Vending	Expand Scope to Snack	DOE Regulatory Test Procedure for BVM- no existing test method for snack machines
Commercial Water Heater-Heat Pump	Potential for savings; electric and gas equity	DOE-Developed ENERGY STAR Test Procedure

---

Appendix #2:

# **DETAILED PLAN FOR NEW SPECIFICATIONS**

# 2015 New Product Efforts\*

Product	Drivers	Testing Protocol	Schedule (effective)
Wireless Chargers	Nascent market with large expected growth, opportunity to build efficiency in now	TBD	2016
Large Network Equipment	Fast growing segment of IT market; manufacturer interest; enhances datacenter products suite	DOE-Developed ENERGY STAR Test Procedure	12/2015
Medical Imaging	Large energy saving opportunity, align with COCIR effort in Europe	DOE-Developed ENERGY STAR Test Procedure – Final Q3 2014	2016
Medium Voltage Distribution Transformers	Opportunity to reap significant savings beyond DOE standard.	DOE Regulatory Test Procedure	2016
Commercial Boilers	Large energy savings opportunity.	DOE Regulatory Test Procedure (Currently under rulemaking)	2016

\* As resources allow

# 2015 New Product Efforts\*

Product	Drivers	Testing Protocol	Schedule (effective)
Lab-grade Refrigerators and Freezers	Expand commercial solid door refrigeration specs to include lab-grade units	DOE-Developed ENERGY STAR Test Procedure – Q2 2014	12/2015
Residential Humidifiers	Opportunity for energy savings: roughly 1.35 MMTCO <sub>2</sub> savings potential.	TBD	TBD
Sump pumps	Opportunity for energy savings, large installed base, similar to pool pumps-with 100% of market roughly 9 MMTCO <sub>2</sub> savings potential.	TBD	TBD

\*As resources allow

# 2015 New Product Efforts\*

Product	Drivers	Testing Protocol	Schedule
Climate Controls	Opportunity for energy savings	EPA developed metric based on data from installed units	2016
Electric Vehicle Supply Equipment	Emerging product in the market place with significant growth in annual sales. Differentiation exists between products in standby and connected/network connectivity that can yield moderate savings, incentivize more efficient design in consumer and potentially commercial markets.	IEC 62301 for Standby Other network protocols: Wi-Fi, EEE Connectivity/DR: TBD	2016
Hand Dryers	Significant energy and environmental impact savings when compared to paper towel dispensers-with 100% of market roughly .1MMTCO2 savings potential.	NSF Standard ENERGY STAR Test Procedure (based on Dyson Test method) in progress	2016
Commercial Coffee Brewers	Significant energy due to large installed base – restaurant and office-dispensers-with 100% of market roughly 10MMTCO2 savings potential.	ASTM F2990-12	12/2015

\*As resources allow