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# **ENERGY STAR Products Plan 2014**

# 2013 Accomplishments: New and Revised Specifications

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## **New Specifications Completed**

Commercial Water Heaters  
Pool Pumps  
Small Network Equipment  
Storage

## **Revisions Completed**

Boilers  
Commercial Refrigeration  
Commercial Ovens  
Computers  
Imaging Equipment  
Lamps  
Refrigerators/Freezers  
Roofs  
Servers  
Telephony  
Water Coolers

**Also:** Efficiency criteria for game consoles

# Keeping Product Specifications Up-to-date

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- 18 total specification updates underway in 2014; anticipate 8-10 completed
- Drivers:
  - growing market share
  - new federal standards
  - new efficiency opportunities
  - opportunity to expand coverage
- 13 specification development efforts for new products underway; anticipate completing 3-5
- Drivers:
  - significant energy savings
  - potential to differentiate products

# International

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Program focus in two areas:

- Maintaining international agreements on ENERGY STAR products
  - In 2014, renew agreements with – EU, NRCan, EFTA, Japan
- Promote international harmonization of test methods and approaches as well as data sharing (*as appropriate*)
  - In 2014, participate in IEA harmonization efforts regarding Networked Products
  - Facilitate consideration of SERT as a server efficiency test method by China through work with CNIS and SertPower

# ENERGY STAR Most Efficient

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- Maintain 11 product categories from 2013; support communications and marketing teams on promotion
- Consider high priority new categories
- Enhance the ESME website functionality (co-lead w marketing team)

# ENERGY STAR Revisions/Development by Product Category

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ENERGY STAR Product Category	Revisions Underway	New Developments Underway
Electronics	5	3
Heating and Cooling	4	1
Residential Appliances	3	2
Home Envelope and Lighting	1	1
Medical		1
Commercial Food Service	2	1
Other	2	4

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Appendix #1:

# **DETAILED PLAN FOR REVISED SPECIFICATIONS**

# Electronics & Computing

Product Category / Product	Drivers	Testing Protocol
Televisions	Large Market Share (estimated at 84% in 2012, which included partial update of V 6.0 before it took effect). Launch V 7.0 to ensure relevancy in market.	DOE Regulatory 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
Set Top Boxes	High Market Share of 88%	DOE-Developed ENERGY STAR Test Procedure
Computers (scope expansion)	Inclusion of slates/tablets in scope of the Computers specification	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	Scope Whole Home Audio, growing in prevalence, opportunity to transfer CE/IT savings strategies in looking at a system-wide approach.	TBD
Convergence of CE devices	Scope impact/opportunities specific to the overlap of functions provided by STB, SNE, Game Consoles, and Media Players	TBD

# Heating, Cooling, & Other

Product Category / Product	Drivers	Testing Protocol
CAC/ASHP	ASHP MS 46%; CAC 27%, January 2015 Federal standards change (in court)	DOE Regulatory Test Procedure (currently under rulemaking)
Residential Water Heaters	April 2015 Federal standards change	DOE Regulatory Test Procedure (Currently under rulemaking)
Ceiling Fan Review	Review based on MOU timeline	DOE Regulatory Test Procedure (Currently under rulemaking)
Ventilating Fans	2012 market share 70%	HVI or ANSI/AMCA test methods for airflow and sound rating
LCHVAC Review	Review based on MOU timeline	DOE Regulatory Test Procedure or DOE – Developed ENERGY STAR Test Procedure
Room Air Cleaner Review	Review based on MOU timeline	
Furnaces	Revise to reference new Federal Test Method for fan efficiency	DOE Regulatory Test Procedure

# Appliances

Product Category / Product	Drivers	Testing Protocol
Dishwashers	New Federal standard in 2013 reduced savings, high ENERGY STAR market share, address cleaning performance, consider connected criteria.	DOE Regulatory Test Procedure for Dishwashers DOE-Developed ENERGY STAR Test Procedure for Cleanability and Demand Response Product Pending Availability (TBD)
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)
Residential Clothes Washers	New Federal standard in 2015, high ENERGY STAR market share, address cleaning and rinse performance, consider connected criteria.	DOE Regulatory Test Procedure for CWs / DOE-Developed ENERGY STAR Test Procedure for Cleanability and Demand Response pending Product Availability (TBD)

# Home Envelope & Lighting

Product	Drivers	Testing Protocol
Building Products		
Windows	21012 IECC building codes	NFRC
Lighting		
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	
Decorative Light Strings Review	Review based on MOU timeline	ENERGY STAR Test Method for Decorative Light Strings
Luminaires Review	1.2 effective April 2-12, rapid increases in efficacy and complications in executing program for certain product types.	DOE Regulatory Test Procedure for Luminaires

# Commercial Food Service

Product Category / Product	Drivers	Testing Protocol
Commercial Dishwashers	Add total energy metric	DOE-Developed ENERGY STAR Test Procedure
Commercial Steam Cookers (EPA Lead)	New TM underway; ASTM developing “a la carte” test method for batch cooking – once completed (est Q4 2014) EPA will then launch a revision effort in 2015	ASTM F-1484-99
Hot Food Holding Cabinet Review	Review based on MOU timeline	ASTM F2140

# Commercial Appliances; Other

Product Category / Product	Drivers	Testing Protocol
Vending	Expand Scope to Snack	DOE Regulatory Test Procedure for BVM- DOE-Developed ENERGY STAR Test Procedure for Idle Mode
Connected Pool Pumps	Allow for remote control, consumer info, and savings through demand response	DOE-Developed ENERGY STAR Test Method for Demand Response Pending Product Availability (TBD)
Commercial Water Heater-Heat Pump	Potential for savings and heat pump and gas equity	DOE-Developed ENERGY STAR Test Procedure

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Appendix #2:

# **DETAILED PLAN FOR NEW SPECIFICATIONS**

# 2014 New Product Efforts\*

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

\* As resources allow

# 2014 New Product Efforts\*

Product	Drivers	Testing Protocol
Lab-grade Refrigerators and Freezers	Expand commercial solid door refrigeration specs to include lab-grade units	DOE-Developed ENERGY STAR Test Procedure – Q2 2014
Inverters for Residential Solar-Scope	Optimize solar to grid power, ensure delivery of energy that is viable to the grid; need for educating homeowners on maximizing environmental benefits of solar. <b>Scoping complete in early 2014. No action specification development action planned.</b>	N/A
Residential Humidifiers	Opportunity for energy savings roughly 1.35 MMTCO2 savings potential.	TBD
Sump pumps	Opportunity for energy savings, large installed base, similar to pool pumps-with 100% of market roughly 9 MMTCO2 savings potential.	TBD

\*As resources allow

# 2014 New Product Efforts

Product	Drivers	Testing Protocol
Clothes Dryers	New technologies and test procedure changes provided opportunity to recognize better auto termination, significant long term savings with super efficient dryers, consider connected criteria.	DOE Regulatory Test Procedure for Clothes Dryers / DOE-Developed ENERGY STAR Guidance for Cycle Time and Test Procedure for Demand Response pending Product Availability
Wine Refrigerators and other Misc. Res R/F	Efficiency opportunities, growing market segment, DOE standards some years off so opportunity to move market sooner.	DOE Regulatory Test Procedure
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)
Commercial Coffee	Significant energy due to large installed base – restaurant and office-dispensers-with 100% of market roughly 10MMTCO2 savings potential.	ASTM Test Procedure final