



# **ENERGY STAR® Water Coolers**

## **Version 2.0 Specification**

### **Partner Training**

### **December 12, 2013**

Kathleen Vokes  
Katharine Kaplan

# Agenda



1

**ENERGY STAR Overview**

2

**Third Party Certification**

3

**Overview of Version 2.0 Specification**

4

**Open Questions & Comments**

# Agenda



1

**ENERGY STAR Overview**

2

Third Party Certification

3

Overview of Version 2.0 Specification

4

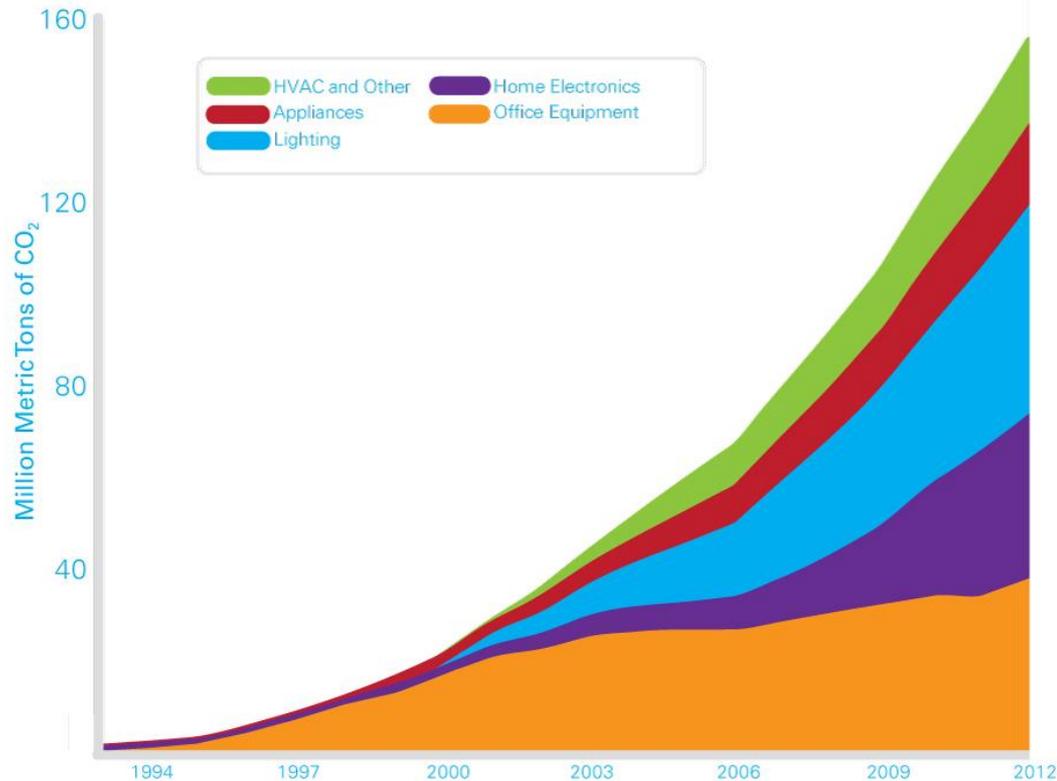
Open Questions & Comments

# What Is ENERGY STAR?



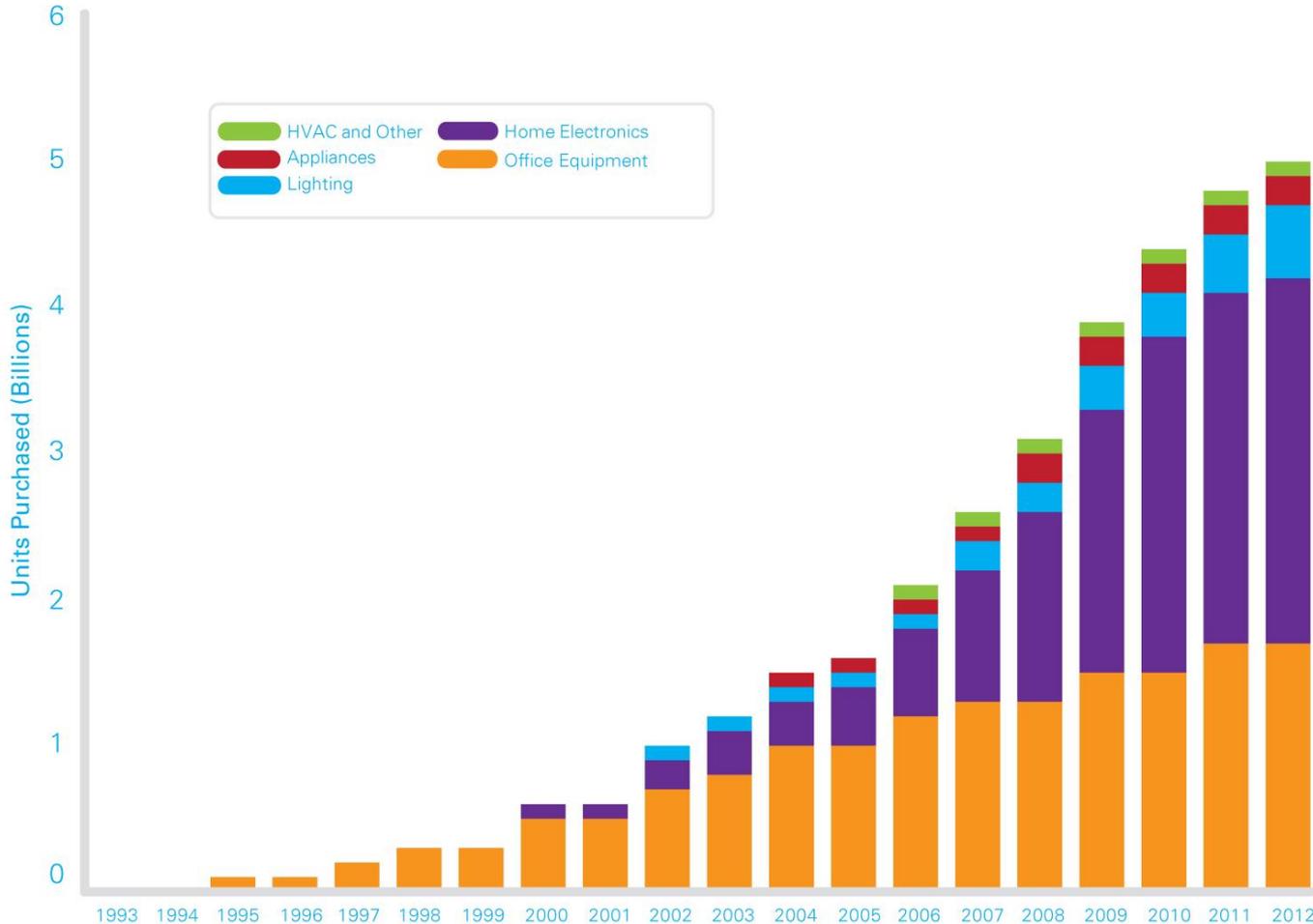
- Voluntary climate protection partnership with the U.S. Environmental Protection Agency (EPA)
- Strategic approach to energy management, promoting energy efficient products and practices
- Tools and resources to help save money and protect the environment
- Influential brand recognized by over 85 percent of Americans

# ENERGY STAR Accomplishments: Annual Greenhouse Gas Emissions Avoided



As of 2012, EPA estimates that ENERGY STAR products prevent more than 150 million metric tons of greenhouse gas emissions annually. More than 200 billion kilowatt hours (kWh) of electricity is saved per year, which represents 15 percent of U.S. residential electricity use. These savings have offset the need for more than 185 additional power plants.

# ENERGY STAR Accomplishments: ENERGY STAR Products Sold (Cumulative)\*



Since the program's inception, thousands of individuals from more than 2,200 manufacturing companies, 1,600 retailers, 800 energy efficiency programs and the federal government have worked under the ENERGY STAR banner to define, build and create both supply and demand for energy-efficient products. Over the past 20 years, Americans have purchased a total of more than five billion ENERGY STAR products.

*\*The lighting data do not include CFL sales. Product sales may not appear in every year a category was included in the program due to scale.*

# What Makes ENERGY STAR A Successful Product Label?

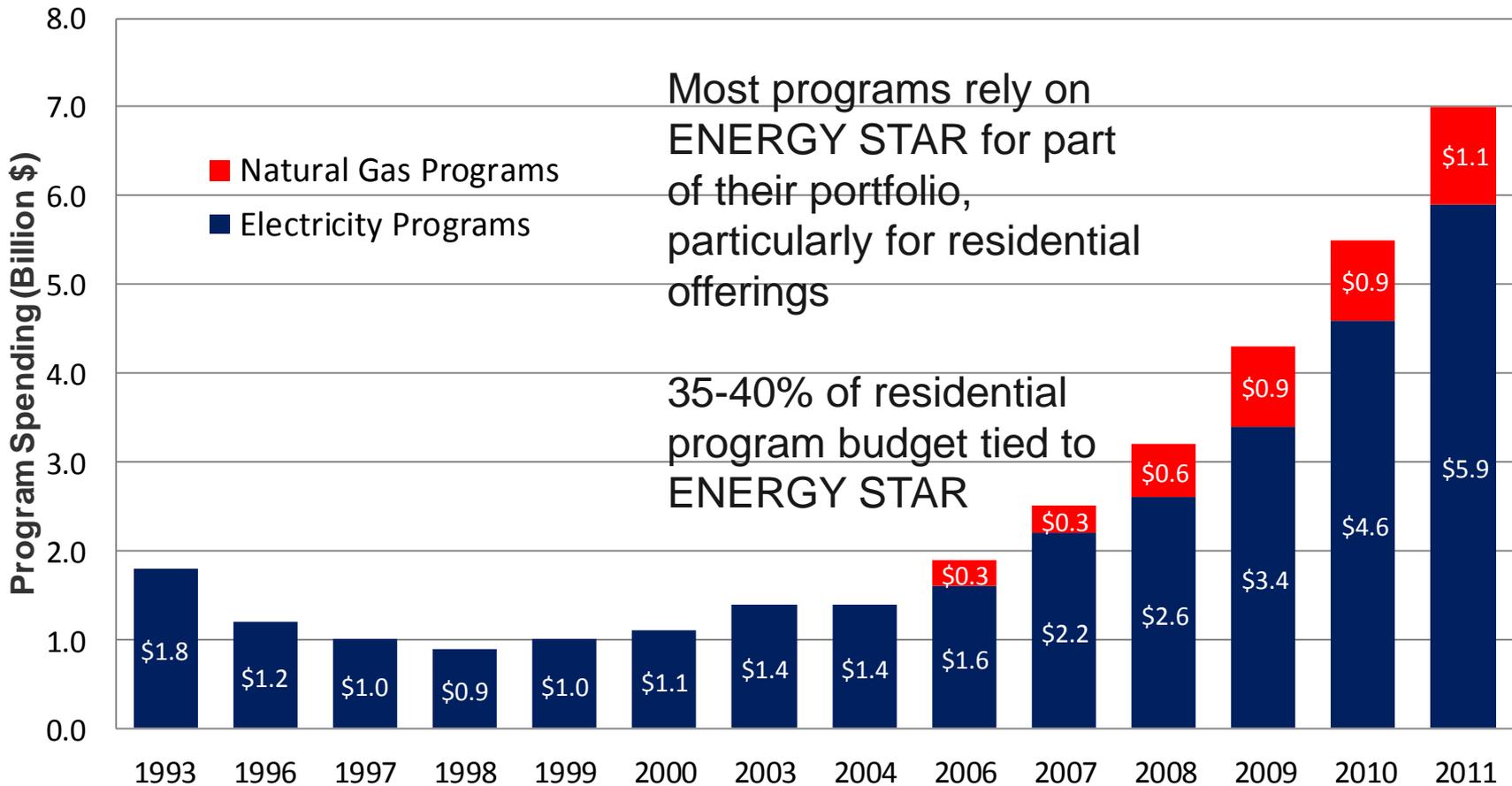


- Commitment to core principles
- Focus on integrity
- Systematic approach
  - Data-based
  - Transparent
- Wide ranging set of program partners
  - Retailers, manufacturers, utilities and other efficiency program sponsors, environmental groups, international partners
  - Re-enforcing value proposition
- Effective educational message

# Growing Program Resources



State-Level Energy Efficiency Program Spending or Budgets by Year



Source: ACEEE 2012 State Energy Efficiency Scorecard

\*All values are actual program spending (EIA Form 861) except for 2009, 2010, and 2011, which are budgets (CEE Annual Industry Reports).

# Retailers: A Critical Consumer Touch Point



- Retailers benefit from ENERGY STAR:
  - Labeling products in-store and online
  - Integrating ENERGY STAR into promotions online, in-store, and direct mail
  - Holding customer-focused events
  - Promoting Team ENERGY STAR and the ENERGY STAR Campaign through in-store events



# Retailer Events



Earth Day Search for Savings



## Ready, Set, Search!

**Kids!**  
Search the store with your parents and check off these items as you find them!

- CFL
- toilet
- clothes washer
- faucet
- window
- showerhead

**Parents!**  
Lowe's sells a wide variety of products that have earned the EPA's ENERGY STAR® and WaterSense® labels, which save you energy, water, money and, of course, the earth, too!

**Did you know?**

**CFLs:** These breath CO<sub>2</sub>—a greenhouse gas—do they help prevent climate change! If every home in America changed just 8 regular light bulbs to ENERGY STAR compact fluorescent light bulbs (CFLs), it would be like a huge forest of more than 4.5 million acres of trees breathing in harmful CO<sub>2</sub> and fighting climate change.

**TOILETS:** Don't use your toilet as a wastebasket by flushing tissues. Eliminating just one flush per day can save nearly 1,300 gallons per year, or enough to wash about 32 loads of laundry!

**CLOTHES WASHERS:** An ENERGY STAR qualified clothes washer saves energy, water and money—up to \$50 per year. That's enough to go to your favorite movie with 5 friends!

**FAUCETS:** Just by turning off the tap while you brush your teeth in the morning and before bedtime, you can save up to 8 gallons of water. That adds up to more than 200 gallons a month, enough to fill a huge fish tank that holds 6 small sharks!

**WINDOWS:** Did you know that old windows and doors leak so much air that it's like having a window open all the time? Think about that in the cold winter or hot summer. Not good. You'll be much more comfortable with ENERGY STAR windows, and you'll save money, too!

**SHOWERHEADS:** Taking a shower uses much less water than filling up a bathtub. A shower only uses 10 to 25 gallons, while a bath takes three times that. So take showers—and don't just hang out in the shower. And, if you really want to take a bath, be sure to plug the drain right away and adjust the temperature as you fill the tub.

Brought to you by   

- Lowe's engaged youth via its Build and Grow clinics to promote ENERGY STAR.



# Retailers in Social Media



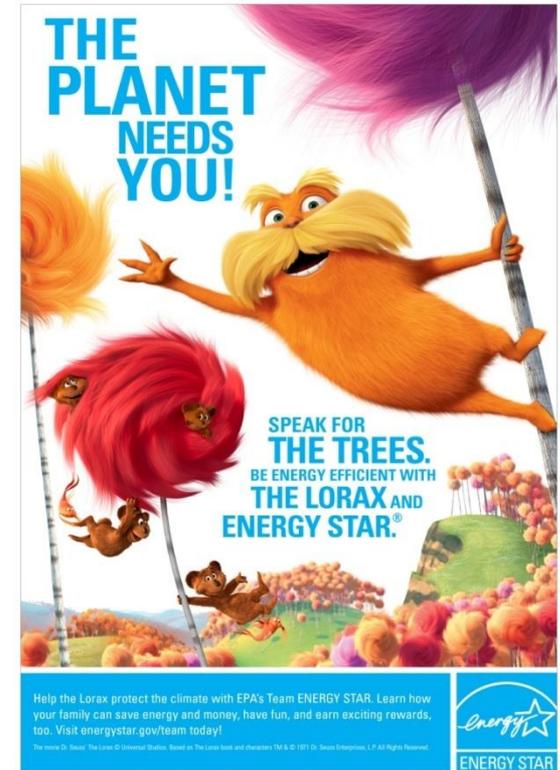
- The Home Depot created an appliances infographic that was featured on their blog and Pinterest and a decorative light string infographic that was used to promote an in-store trade-in event.



# TEAM ENERGY STAR



- Partnered with Universal Studios' Dr. Seuss' The Lorax Movie
  - PSA garnered 45 placements in national publications (28.3 million circulation, publicity value of \$1.9 million)
    - More than 10,000 children participated
    - Highlighted on Times Square billboard on ENERGY STAR Day
- Boys and Girls Club of America
- PTO Today (parent teacher organization)



# ENERGY STAR Products



- Label identifying efficient products in more than 70 categories
  - Appliances, electronics, HVAC, lighting, commercial food service equipment
- Leader in efficiency metrics and test procedures
- Platform for changing behavior
- Influential consumer brand
  - 85% awareness
  - 72% of purchasers report the label is influential
  - 82% of purchasers would recommend ENERGY STAR to a friend

# 70 Product Categories Are Covered by ENERGY STAR in the US, such as:



**Lighting**  
Luminaires  
CFLs  
LEDs  
Decorative Light Strings

**Home Envelope**  
Home sealing & insulation  
Roof products  
Windows/Doors

**Heating & Cooling**  
Central AC & ASHPs  
LCHVAC  
Boilers  
Furnaces  
Ceiling fans  
Room AC  
Ventilating fans  
Commercial  
Geothermal  
Heat Pumps

**Office Equipment**  
Computers  
Monitors  
Printers  
Copiers  
Scanners  
Fax machines  
Servers  
Storage  
UPS  
Data Center  
Storage  
SNE

**Commercial Food Service**  
Refrigerators  
Freezers  
Fryers  
Steam cookers  
Griddles  
Ovens  
Ice Makers  
Dishwashers  
HFHCs  
Vending Machines

**Appliances**  
Clothes washers  
Dishwashers  
Refrigerators  
Dehumidifiers  
Air cleaners  
Water coolers  
Water heaters  
Pool Pumps

**Home Electronics**  
Battery chargers  
Telephony  
Televisions  
Audio/Video  
Equipment  
Set-top Boxes

# Agenda



1

ENERGY STAR Overviews

2

**Third Party Certification**

3

Overview of Version 2.0 Specification

4

Open Questions & Comments

# ENERGY STAR's Third-Party Certification Process



January 2011: ENERGY STAR Labeled Products Program moved from self-certification to third-party certification.

Entities apply to become EPA-recognized laboratories, certification bodies, or accreditation bodies



Manufacturers test products with EPA-recognized laboratory or manufacturer lab (W/SMTL)



EPA-recognized certification body reviews data & certifies performance



EPA lists qualified models on website and partners market as ENERGY STAR qualified

Details available at [www.energystar.gov/3rdpartycert](http://www.energystar.gov/3rdpartycert)

# Partner Responsibilities



- **Work with EPA-recognized CB to certify to V2.0**
  - Testing must be conducted at an EPA-recognized laboratory
  - EPA-recognized CBs and Laboratories can be found [here](#)
- **Cooperate with product verification and challenge testing and outcomes**
  - Work with CB efforts to select, procure, and test products, and EPA product control measures to address product testing failures
- **Submit Unit Shipment Data**

# Timeline



**May 9, 2013:** Water Coolers V2.0 available for certification

**October 1, 2013:** CBs cannot certify to V1.3, but current certifications remain valid until February 1, 2014

**TODAY:** CBs only permitted to certify to V2.0

**February 1, 2014:** All products must meet V2.0 and only V2.0 will appear on the QPL

# Existing Inventory



## What can water cooler distributors do with their inventory of ENERGY STAR water coolers after the Version 2.0 specification goes into effect?

- Products that meet V1.3 may continue to market products as ENERGY STAR under existing contracts/lease agreements.
- On February 1, 2014, only water coolers certified to V2.0 may be marketed/represented as ENERGY STAR.
- If product is certified to V1.3 on or after February 1, 2014, then the ENERGY STAR certification mark must be covered or removed from the product and all marketing materials.

# Product Finder Tool



## ENERGY STAR Product Finder Tool:

<http://www.energystar.gov/productfinder>

- Search product by model number and additional model information
- Compare model criteria side-by-side
- Download full Excel version of the QPL
- Manufacturers are encouraged to review their listing (and contact their CB for any discrepancies)

# Agenda



1

ENERGY STAR Overview

2

Third Party Certification

3

Overview of Version 2.0 Specification

4

Open Questions & Comments

# Significant Changes Between V1.3 and V2.0



- **Test Requirements**
  - On Mode with No Water Draw
- **Scope**
  - Air-source units are ineligible
- **Qualification Criteria**
  - Distinction between hot and cold units – storage-type and on demand

# Qualification Criteria



**Table 1: Energy-Efficiency Criteria for ENERGY STAR Qualified Water Coolers**

Water Cooler Category	Qualification Levels
On Mode with No Water Draw	
Cold only and Cook and Cold units	< 0.16 kWh/day
Hot and Cold units – Storage-type*	< 0.87 kWh/day
Hot and Cold units – On Demand	< 0.18 kWh/day

\*Note: POU, dry storage compartment, and bottled water coolers are included in this category.

# Qualification Criteria Continued



Used for ENERGY STAR Certification:

- On Mode with No Water Draw – All Unit Types
  - Cold only and Cook and Cold units
  - Hot and Cold units – Storage-type
  - Hot and Cold units – On Demand

Not used for ENERGY STAR Certification:

- On Mode with Water Draw – All Unit Types
- On Mode with Water Draw – On Demand Units Only

# Test Requirements



- **A representative model shall be selected for testing per the following requirements:**
  - For qualification of an individual product model, the representative model shall be equivalent to that which is intended to be marketed and labeled as ENERGY STAR.
  - For qualification of a product family, any model within that product family can be tested and serve as the representative model.

# Test Requirements Continued



- When testing water coolers, the following test method shall be used to determine ENERGY STAR qualification.

**Table 2: Test Methods for ENERGY STAR Qualification**

ENERGY STAR Requirement	Test Method Reference
On Mode with No Water Draw	ENERGY STAR Test Method for Water Coolers (Rev. May-2013)

# Agenda



1

ENERGY STAR Overview

2

Third Party Certification

3

Overview of Version 2.0 Specification

4

Open Questions & Comments

# Useful Web Links



- ENERGY STAR Product Finder:
  - <http://www.energystar.gov/productfinder>
- ENERGY STAR Product Specification:
  - <http://www.energystar.gov/products/specs>
- ENERGY STAR Partner Resources:
  - <http://www.energystar.gov/partners>
- ENERGY STAR Third Party Certification:
  - <http://www.energystar.gov/3rdpartycert>

# Contact Information



Please send all questions to:

- Certification: [certification@energystar.gov](mailto:certification@energystar.gov)
- Technical Assistance: [watercoolers@energystar.gov](mailto:watercoolers@energystar.gov)

**Kathleen Vokes**  
Environmental Protection Agency  
[Vokes.Kathleen@epa.gov](mailto:Vokes.Kathleen@epa.gov)

**Katharine Kaplan**  
Environmental Protection Agency  
[Kaplan.Katharine@epa.gov](mailto:Kaplan.Katharine@epa.gov)

**Chris Kent**  
Environmental Protection Agency  
[Kent.Christopher@epa.gov](mailto:Kent.Christopher@epa.gov)

**Bryan Berringer**  
Department of Energy  
[Bryan.Berringer@ee.doe.gov](mailto:Bryan.Berringer@ee.doe.gov)