



# Welcome to Newport!

**Richard H. Karney, PE**  
ENERGY STAR Products Manager  
US Department of Energy

September 27, 2006

# Meeting Overview



- This year's meeting structure was revised to provide more time for sharing ideas, opportunities, and networking.
  - Marketing Summits
  - Partner Breakout Meetings
  - Evening Event

# Meeting Overview



## Marketing Summits

- Provides a forum for a manufacturer or retailer to present its 2006–07 ENERGY STAR appliance promotional plans and collaboration opportunities to all of the utilities, states and Energy Efficiency Program Sponsors (EEPS).
- Only utility, state, and EEPS partners are allowed to attend the Marketing Summits.

# Meeting Overview



## Partner Breakout Meetings

- Provides a venue for partners to discuss specific opportunities for cooperation on 2006–2007 ENERGY STAR qualified appliance promotions.
- Manufacturers and retailers will host the breakout sessions and EEPS will rotate in regional groups between breakout meeting rooms.
- Each session will last 30 minutes.
- A detailed schedule of meeting times and locations is contained in your registration packet.

# Meeting Overview



## Evening Event

Enjoy an authentic New England evening tonight with your host, Whirlpool, from 7:00 – 9:00 PM at the Waterfront Pavilion.



# Meeting Sponsors



## 2006 ENERGY STAR Appliance Partner Meeting Sponsors



# Host Sponsors



And a BIG thank you to our host sponsors.....

**nationalgrid**

**Efficiency Vermont**

*your resource for energy savings*



**Western Massachusetts  
Electric**

The Northeast Utilities System



[www.lipower.org/cei](http://www.lipower.org/cei)



**Connecticut  
Light & Power**

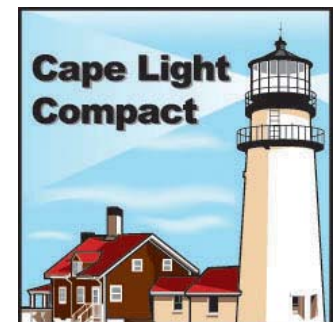
The Northeast Utilities System



[www.CTSavesEnergy.org](http://www.CTSavesEnergy.org)



*The United Illuminating Company*



Connecticut's Energy Efficiency Programs are funded by the Conservation Charge on customer electric bills.



# ENERGY STAR

## Appliance Market Update

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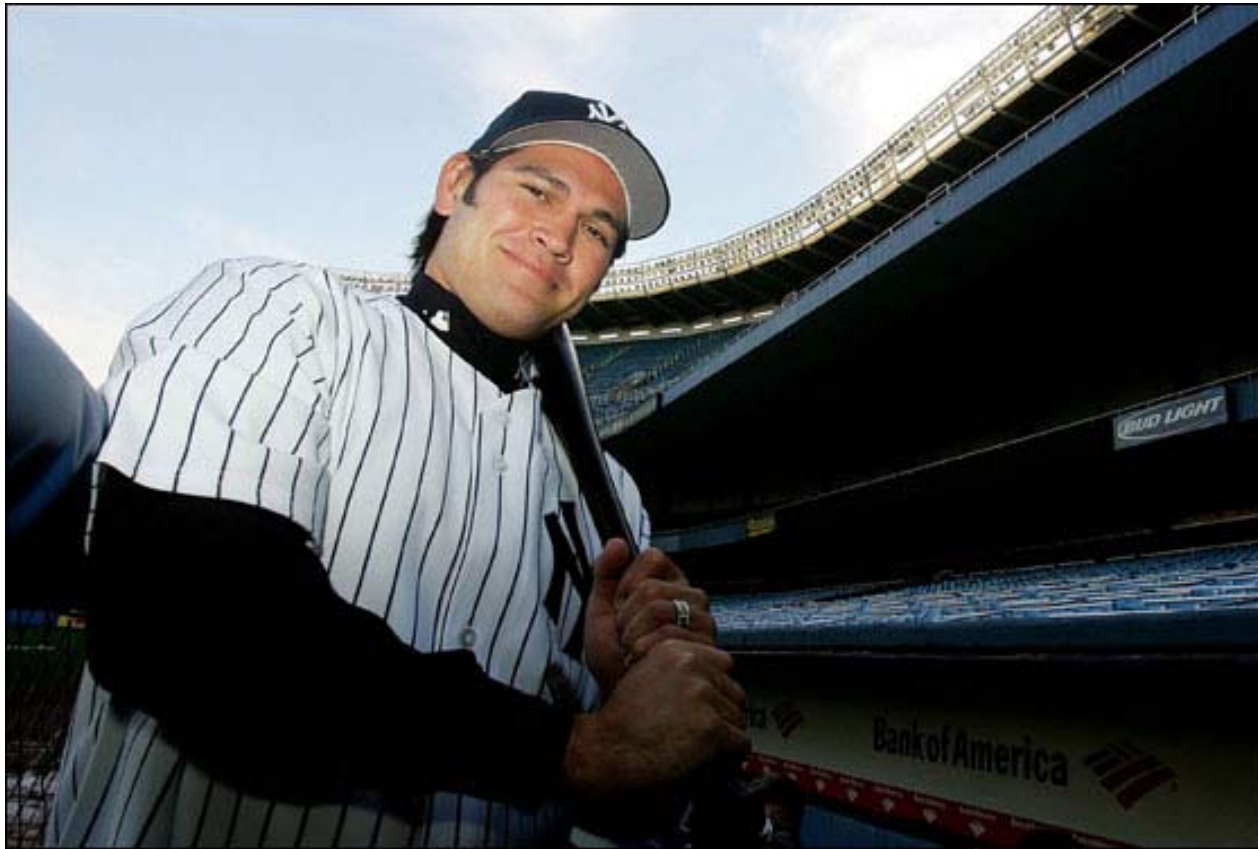


Great To Be In New England  
This Time of Year



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Johnny says, “The second year of the next eighty-six is now complete.”

# ENERGY STAR Appliance Program Goals

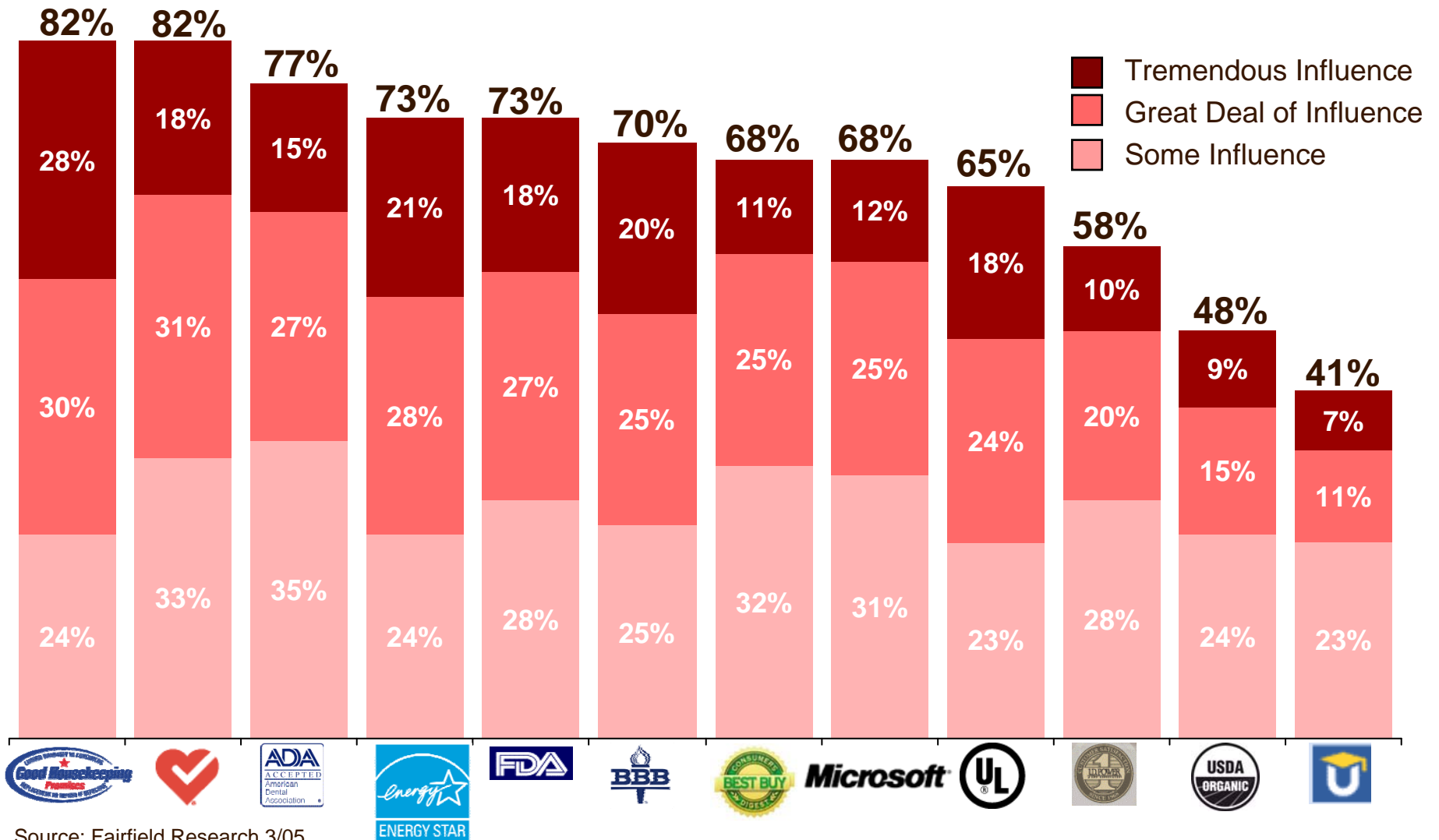


An objective of the ENERGY STAR appliance program is:

To encourage and educate homeowners and the public on the benefits of replacing inefficient appliances with ENERGY STAR qualified appliances.

As a result of the effort, increase the overall use of ENERGY STAR qualified appliances and meet national energy savings goals.

# CONSUMER EMBLEM **influence**

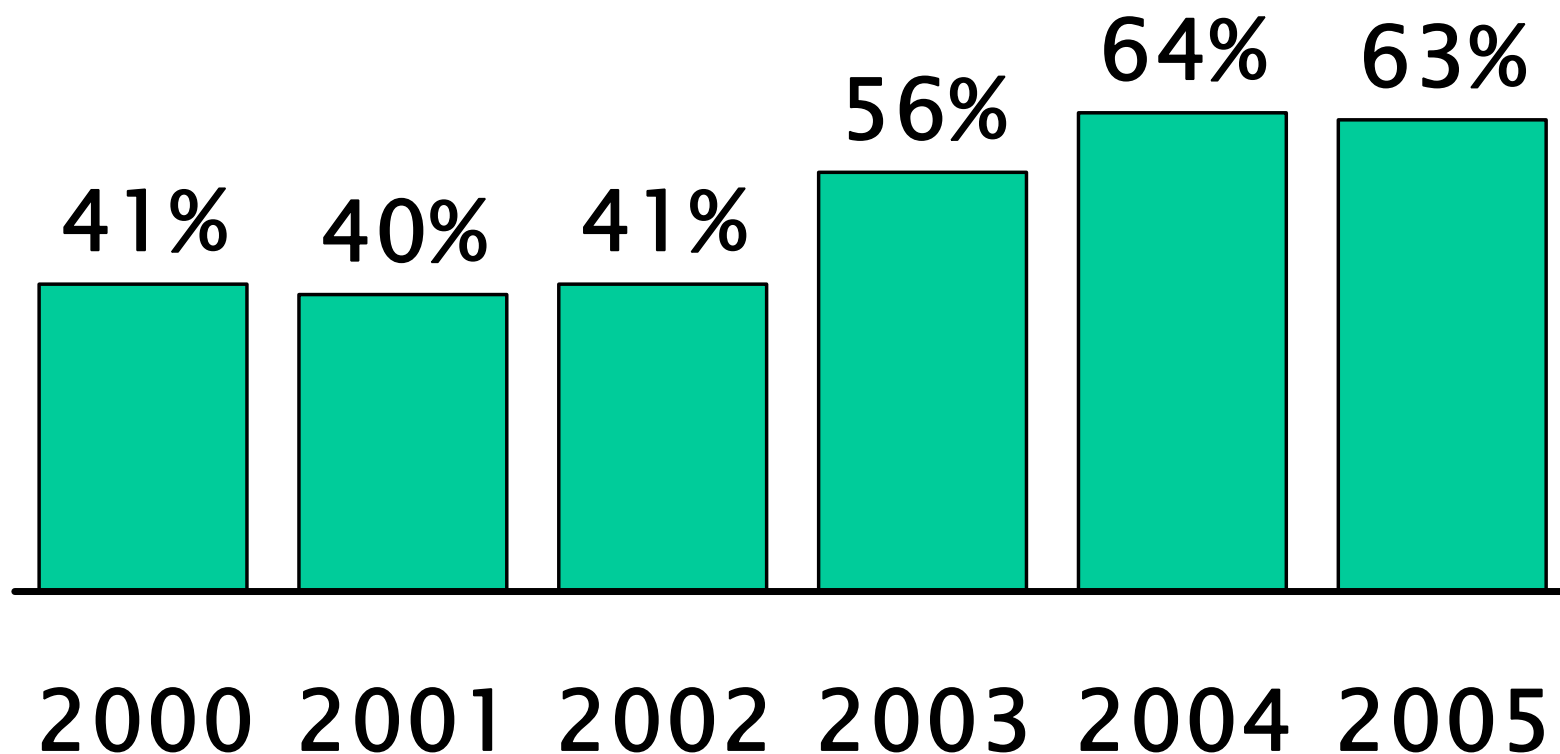


Source: Fairfield Research 3/05

# ENERGY STAR Awareness



## Aided Recognition of ENERGY STAR Label



Source: Consortium for Energy Efficiency Household Surveys (2001-2005). Standard errors vary between 1.5% and 2.2%.

# ENERGY STAR Awareness



Based on the 2005 Consortium for Energy Efficiency (CEE) Household Study:

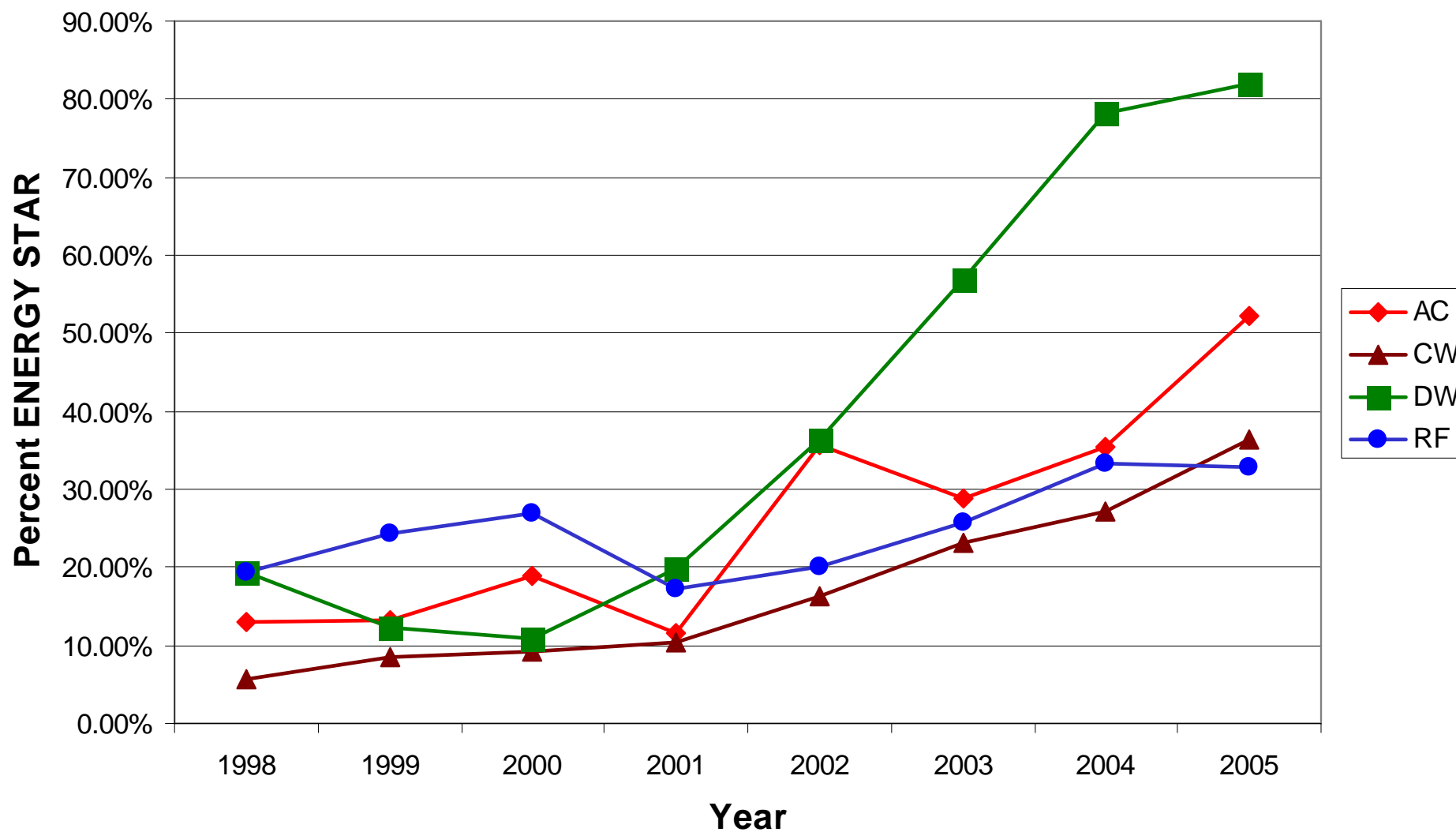
Approximately 43% of households can identify the ENERGY STAR mark (unaided).

Products most associated with ENERGY STAR are:

Refrigerators:	72%
Clothes Washers:	60%
Dishwashers:	57%
Room A/C:	44%

However, An Interesting Fact: 31% percent of households associated microwave ovens with the ENERGY STAR label, which do not in fact have an ENERGY STAR criteria.

# ENERGY STAR Market Share





# Appliance Federal Standards & ENERGY STAR Criteria



# Federal Standards Background



- The Department of Energy (DOE) establishes Federal standards to keep consistent, national energy efficiency requirements for selected appliances and equipment.
- By law, DOE must upgrade Federal 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 others.
- DOE will hold public meetings throughout this year and 2007 to discuss Federal standard or Federal test procedures changes.

# Federal Standards Activities



## Timeline for Appliance Federal Standards Revisions

Product Category	Final Action Date
Dishwashers	March 2009
Commercial Clothes Washers	March 2009
Residential Water Heaters	March 2010
Room Air Conditioners	June 2011
Clothes Dryers	June 2011

# Guiding Principles for Criteria Development & Revisions



- Significant energy savings
- No impact on product performance
- ENERGY STAR qualified product is cost effective
- Several technology options can achieve criteria setting (one of which is non-proprietary)
- Energy consumption can be quantified
- Label differentiates products and is visible to purchasers

# Criteria Update: Clothes Washers & Dishwashers



*As a reminder...*

Effective January 1, 2007, the following criteria changes will go into effect:

## CLOTHES WASHERS CRITERIA

- Minimum Modified Energy Factor (MEF) increasing from the current level of 1.42 to 1.72
- Introduction of a maximum water consumption factor (WF) of 8.0

## DISHWASHERS CRITERIA

- Minimum Energy Factor (EF) increasing from the current level of 0.58 to 0.65

# Criteria Update: Clothes Washers & Dishwashers



## 2007 Criteria Implementation Plan

- Any product manufactured after January 1, 2007 must meet the new criteria efficiency levels to be designated as ENERGY STAR.
- Any product manufactured prior to January 1, 2007 may be labeled as ENERGY STAR at the factory and on the EnergyGuide label if the products meets the current or the January 1, 2007 ENERGY STAR criteria.
- Retailers will only be permitted to promote previous qualified products as ENERGY STAR for the first three months of 2007.
  - After March 31, 2007, old products may still be sold, but they cannot be designated as ENERGY STAR qualified by the retailer.

# Criteria Update: Clothes Washers & Dishwashers



## Qualified Product Lists and Searches

- On January 1, 2007, the ENERGY STAR qualified clothes washer and dishwasher product lists and searches will be changed to only show available products that meet the new criteria.
- Explanatory text will be placed above the product lists and searches to provide details on the new criteria requirements and to state that some previously qualified products may be still available for sale at retail.
- Lists to identify products that met the old criteria and no longer qualify as ENERGY STAR will be posted on the product and appliance partner resources pages.

# Criteria Update: Clothes Washers & Dishwashers



## 2007–2008 Activities:

### CLOTHES WASHERS

- Per EPCA 2005, Subtitle C—Energy Efficient Products, SEC. 131. ENERGY STAR Program, section 324  
(d) DEADLINES.—the Secretary of Energy “shall establish new qualifying levels—  
(2) not later than January 1, 2008, for clothes washers, effective beginning January 1, 2010.”

### DISHWASHERS

- Preparation for potential ENERGY STAR criteria revision
- Dishwasher Working Group
  - Continue efforts to gather water use data

# Criteria Update: Refrigerators & Freezers



The national market share of ENERGY STAR qualified refrigerators is above 30% and some regions have surpassed a 40% market share.

Based on this, DOE will be implementing a refrigerator market impact analysis to identify whether it is feasible to increase the efficiency requirements.

## Potential Criteria Revision Schedule:

December 2006: Distribute refrigerator market impact analysis for review and comment

March 2007: Finalize the updated criteria

January 1, 2008: Updated criteria goes into effect



# Criteria Update: Refrigerators & Freezers



## Potential Impact of Criteria Revision

- Incremental change in ENERGY STAR criteria will have marginal effects on overall savings due to expected declines in market share:

ENERGY STAR Criteria Level	ENERGY STAR Market Share	Annual Savings (kWh/year)
Current Criteria (15% above Federal standard)	33%	295.6 million kWh/year
20% above Federal standard	25%	299.3 million kWh/year
25% above Federal standard	20%	299.3 million kWh/year

- DOE is currently looking into revising the Federal test procedure.
- Any criteria change would affect the EPCACT 2005 manufacturer tax credits.

# Revision to Test Procedure for ENERGY STAR



## Definitions:

National Appliance Energy Conservation Act (NAECA) (no changes)

Adjusted Volume (AV) (no changes)

Compact(no changes)

Utility Feature: means a feature that serves a function other than the major function of the refrigerator, refrigerator-freezers and freezers (i.e., refrigerated food storage).

## Test Criteria Revision:

- Residential refrigerator manufacturers must self-test their equipment according to DOE's test procedure defined in 10 CFR 430, Subpart B, Appendix A1.
- Residential freezer manufacturers must self-test their equipment according to DOE's test procedure defined in 10 CFR 430, Subpart B, Appendix B1;
- Refrigerators and freezers that include utility features that serve functions other than refrigeration are to be tested with the utility feature(s) in the standby mode; and,
- Test results shall include the energy used in the typical operation of refrigerators, refrigerator-freezers and freezers, other than those utility functions covered by subsection b) above.

# Future ENERGY STAR Products



## Residential Water Heating

- Water heating represents 17% of residential energy consumption, making it the third largest energy end use in homes, behind HVAC and kitchen appliances.
- Conventional electric and gas storage water heaters have maximized their energy savings potential.
- Water heating is the only major residential energy end use that ENERGY STAR does not address at this time.



# Residential Water Heaters



## Advanced Technology Water Heaters

The most predominate advanced technologies are:

- tankless
- high-efficiency atmospheric gas burner
- gas condensing
- solar
- heat pump water heaters

Any ENERGY STAR water heater program would strive to be fuel neutral and incorporate the best performers by technology.

# Residential Water Heaters



## Market Barriers for Advanced Technology Water Heaters

### HIGH INITIAL COST

- Initial cost exceeds consumer expectations
- Low consumer demand for advanced technology water heaters

### PRODUCT AVAILABILITY + RELIABILITY

- Consumers are skeptical about the reliability of unfamiliar technologies.
- Limited availability of market-ready advanced technology options
- Lack of data on reliability and savings for several advanced technology options.

### INSTALLATION + MAINTENANCE

- need for more trained installers and technicians, particularly for solar and heat pump water heaters.
- Difficulty in replacing existing conventional water heaters with advanced technology water heaters.

# Residential Water Heaters



## Jumpstart the Market

The Department's primary objective for water heaters is to speed the market adoption of advanced water heater technologies through coordinated national efforts with industry, states, utilities, and efficiency stakeholder groups.

Currently developing relationships with key manufacturers and researchers to gain intelligence on market and product achievements.

# Future ENERGY STAR Products



## Packaged Terminal Air Conditioners & Heat Pumps

Packaged Terminal Air Conditioners (PTACs) and Packaged Terminal Heat Pumps (PTHPs) are designed primarily to provide complete heating and cooling for a room or zone and are specifically for through-the-wall installation.

PTAC/PTHPs are primarily used in small zones on the perimeter of buildings such as:

- hotels and motels
- apartments
- hospitals
- nursing homes
- office buildings



# Packaged Terminal Air Conditioners & Heat Pumps



## Packaged Terminal Air Conditioners & Heat Pumps

Annual U.S. shipments of PTACs and PTHPs are approximately 400,000\* and are largely driven by hotel and motel demand:

- Hotel/Motel Room Replacement and Renovation: 50%
- New Hotel/Motel Construction: 40%
- Multi-family dwellings, nursing homes, others: 10%

Total sales are anticipated to grow 2.5% per year until 2008.

\* Data taken from the 2003 BSRIA, U.S. Market for Residential and Specialty Air Conditioning: Packaged Terminal Air Conditioning Report.



# Packaged Terminal Air Conditioners & Heat Pumps



## Potential Criteria Development Schedule:

October 2006: Distribute PTAC/PTHP market impact analysis for review and comment

December '06: DOE reviews submitted comments and releases draft ENERGY STAR criteria

February 2007: Finalize the criteria

November 2007: Criteria goes into effect

# Future ENERGY STAR Products



## Other Technologies Under Consideration

- Solar Products (PV)
- Microturbines + cogeneration units
- Advanced Window Technologies
  - Window films, coverings + attachments
  - Certification of IG Units

# EnergyGuide Label Update



- The Federal Trade Commission (FTC) is currently conducting a rulemaking to examine the EnergyGuide label.
- The FTC has published several notices and held a public workshop on May 3, 2006.
- Currently FTC is preparing to conduct consumer research, the results of which will be used to propose amendments to the EnergyGuide label.
- Further information is available at [www.ftc.gov/appliances](http://www.ftc.gov/appliances).





# ENERGY STAR Sales Data Collection

# Importance of ENERGY STAR Market Share Data



- Provides one of the few quantifiable metrics to gauge the success of ENERGY STAR programs.
- Key benchmark to determine the success of the ENERGY STAR program over time.
- Indicator of the success of regional programs and promotions.
- Tangible proof of the cost effectiveness of public funds programs for regulators and policymakers.
- Evidence for manufacturers and retailers of the progress and success of energy-efficient product penetration.

# Appliance Sales Data Collection Process



1. ENERGY STAR Sales Data is submitted quarterly.
2. Retailers submit the total sales and the ENERGY STAR sales by store or by state.
3. D&R has confidentiality agreements with the retailers that prohibit the release of any retailer data that is not aggregated.
4. Once D&R receives enough data, it aggregates the sales data and releases a data report by state, region, quarter, and appliance type.
5. Specific reports are available on request for states and utility territories provided that the data is still aggregated.

# ENERGY STAR Qualified Product Sales Data



What does DOE want to do with requiring retailers to submit appliance sales data?

- retail partnership agreement revision?
- Partner of the Year?

# Contact Information



**Richard H. Karney, P.E.**  
**U.S. Department of Energy**  
**Office of Energy Efficiency and Renewable Energy**  
Phone: (202) 586-9449  
Email: [richard.karney@ee.doe.gov](mailto:richard.karney@ee.doe.gov)





Michael C. Thompson  
1945 – 2003