



ENERGY STAR
Residential Water Heater Program

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CEE Industry Partners Meeting
New Orleans, LA
October 14 -16, 2008



Program Goal

Transform the residential water heater market to energy efficient technologies and achieve national energy savings

- 13% - 17% of national residential energy consumption
- ENERGY STAR had not yet addressed water heating
- New, more efficient technologies are available or on the way

ENERGY STAR Technology	Shipments	Market Share
High-Efficiency Gas Storage	350,000	~3.5%
Tankless	300,000	~3%
Solar	10,000	~0.1%
HPWH	0	0%
Gas-Condensing	0	0%



Program Vitals

DOE's newest ENERGY STAR program

- Takes effect January 1, 2009
- Technologies included
 - High-Efficiency Gas Storage
 - Heat Pump
 - Whole-Home Tankless
 - Gas Condensing
 - Solar
- Criteria address energy efficiency, performance, safety, and reliability

Technologies



**Gas
Condensing**



**Heat Pump
Water Heater**



Solar



Gas Tankless



HE Gas Storage





Program Strategy

Criteria Development Considerations

- Electric, gas and solar are categorically unique in efficiency
- Each technology's criteria were based on its own merits
- Certain technologies have exclusive criteria
- Fuel/energy choice decided by consumer
- Ensure reliability, performance and safety

Technologies



Technology	Minimum Efficiency	Savings	Payback
HE Gas Storage	0.62 EF (Phase I) 0.67 EF (Phase II)	~7.5% or 19 thm/yr ~14% or 37 thm/yr	~2.5 years ~8 years
Gas Tankless	0.82 EF	~30% or 78 thm/yr	~5.5-15 years
Gas Condensing	0.8 EF	~30% or 74 thm/yr	~4-9 years
Heat Pump	2.0 EF	~55% or 2,660 kWh/yr	~3 years
Solar (electric auxiliary)	0.5 SF	~50% or 2,430 kWh/yr	~10+ years
Solar (gas auxiliary)	0.5 SF	~50% or 131 thm/yr	~13+ years



Upcoming Milestones

- Signing up Manufacturers now
 - Partner Commitments are available at: www.energystar.gov
- Program launches January 1, 2009
- Program marketing materials - Winter 09
 - ENERGY STAR Web Site
 - Voice and identity of the program
 - Consumer-targeted content and tools
 - Qualified Products
 - Savings
 - Technology Features/Benefits



Upcoming Milestones

- Program marketing materials - Winter 09 (con't)
 - Partner Resource Guide
 - Assist manufacturers and retailers with promotional content
 - Technology Features/Benefits
 - Savings
 - Fun Facts
 - Cost Effectiveness



Upcoming Milestones

- Program marketing materials - Winter 09 (con't)
 - Program Design Guide for Energy Efficiency Program Sponsors (EEPS)
 - Assist EEPS with program design
 - Regional barriers and programmatic solutions
 - » Consumer Demand
 - » Service Network
 - » Distribution
 - Case Studies



Questions?

For More Information:

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