

# What's cooking?

# Using a targeted approach to selling ENERGY STAR<sup>®</sup> certified commercial water heaters.

February 24, 2016





# **The Commercial Water Heater Market**

- Commercial shipments roughly 2% of residential shipments
  - Almost all storage but percent tankless growing
- Storage mostly gas 94,247 commercial gas storage vs. 73,458 commercial electric storage units shipped in 2014<sup>1</sup>
- ENERGY STAR covers gas storage and gas tankless only
  - 42% of units shipped are ENERGY STAR certified<sup>2</sup>
- Market structure simple: makers sell directly to distributors who sell to installers
- Barriers are similar to RWH:
  - Almost all emergency replacements
  - Higher first cost for capital and installation: generally cost 30% more
  - Building owners/managers, and design engineers unaware of benefits





## **ENERGY STAR Certified Commercial Water Heaters – The Basics**

Eligible Product Types				
Туре	Capacity Requirements			
Gas Storage	> 75,000 BTU/hr input; <= 140 gallons storage capacity			
Gas Tankless	>= 4,000 BTU/hr per gallon of stored water; industrial equipment			

Efficiency Requirements						
Metric	Туре	Requirement	Federal Standards			
Thermal Efficiency (TE)	Storage; Tankless	TE >= 0.94	TE >= 0.80			
Maximum Standby Loss (BTU/hr)	Storage	<= 0.84 * [(Input Rate / 800) + 110(Volume <sub>r</sub> ) <sup>1/2</sup> ]	<= [(Input Rate / 800) +110(Volume <sub>r</sub> ) <sup>1/2</sup> ]			



# **Manufacturer Participation is Excellent**

- 19 different brands
- 409 certified models
  - 334 gas storage models
  - 75 gas tankless models
- Searchable (type, size, brand) list online



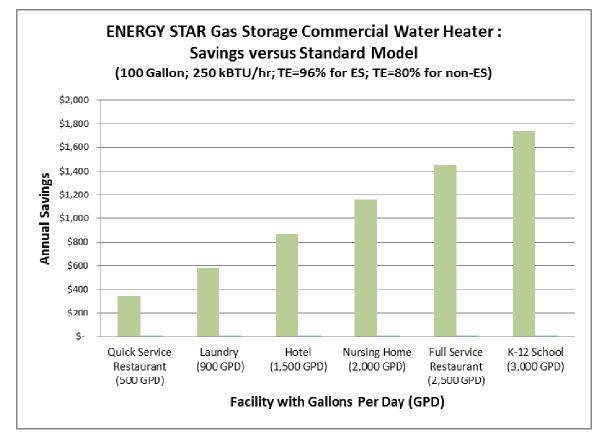


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#### Savings for ENERGY STAR Commercial Gas Storage Water Heater

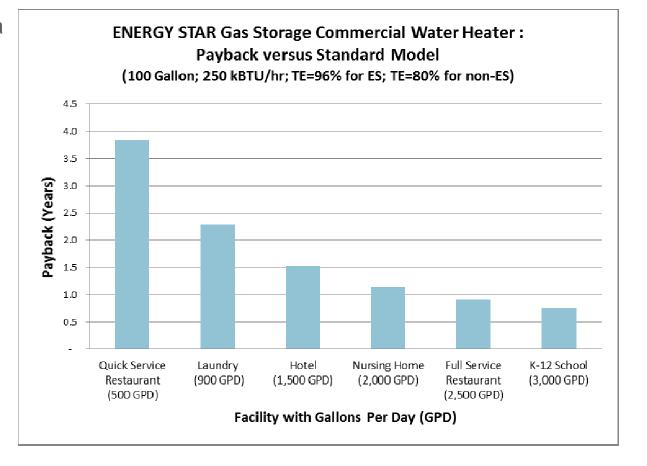
Over \$1,000 in annual savings for full service restaurants





#### Paybacks for ENERGY STAR Commercial Gas Storage Water Heater

Paybacks less than a year for full service restaurants





## **Considerations for Energy Efficiency Programs for CWH**

- Utilize ENERGY STAR specification for CWH programs
- Target food full-service restaurants
- Upsell on \$1000 annual energy savings and less than 1 year payback



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