

ENERGY STAR Change the World, Start with ENERGY STAR 2008 Campaign General Assumptions Sheet

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All facts used for the Campaign are based on the following numbers:

General Assumptions:

Number of households (US):

113.44 million

[Source: Energy Information Administration's 2008 Annual Energy Outlook. Table 4 Residential Sector Key Indicators and Consumption.]

Number of households (state):

www.factfinder.census.gov

[Source: 2006 American Community Survey as reported on US Census Bureau]

Electric Rate (US residential):

\$0.1059 / kWh (can round to \$0.106 / kWh)

[Sources: US electric: Energy Information Administration's, Annual Energy Outlook 2008 edition. (convert from 2006 to 2007).

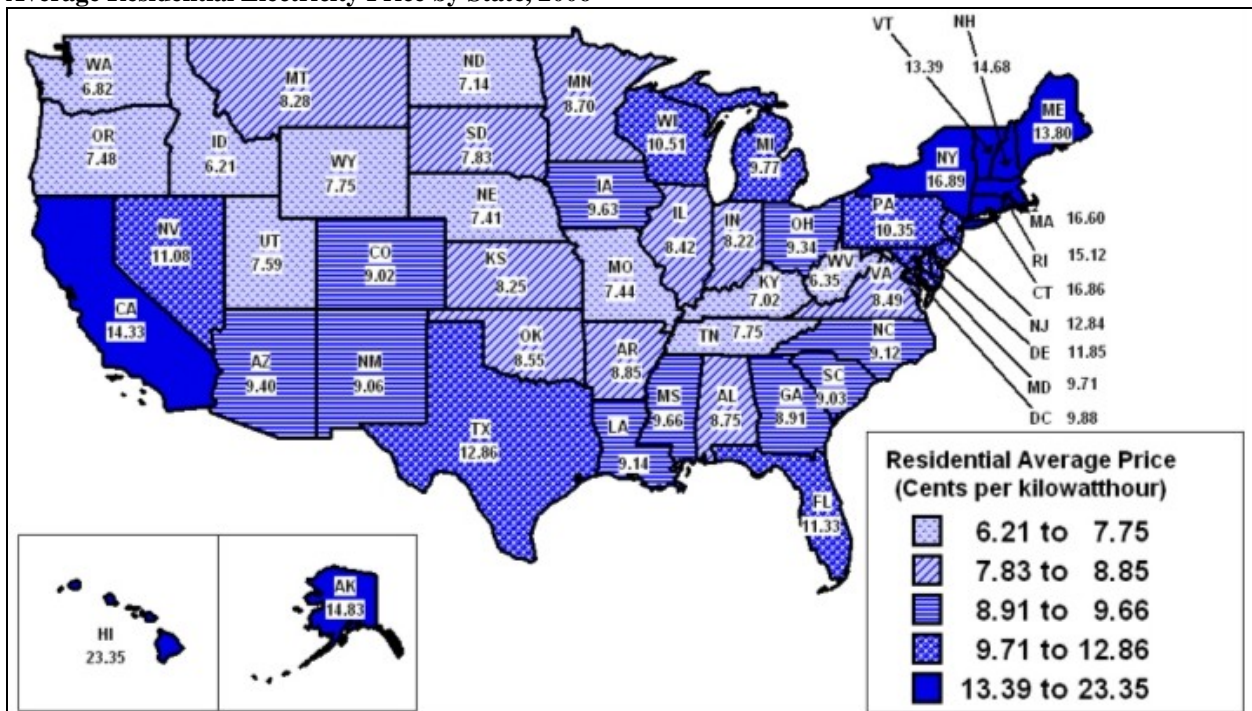
Electric Rate (US commercial):

\$0.0952 / kWh (can round to \$0.095 / kWh)

[Sources: US electric: Energy Information Administration's, Annual Energy Outlook 2008 edition. (convert from 2006 to 2007).

Electric Rate (state):

Average Residential Electricity Price by State, 2006



Annual household lighting use: **1,950 kWh / household**
[Source: Navigant 2002 (DOE EERE Office of Building Technology), "U.S. Lighting Market Characterization, Volume I: National Lighting Inventory and Energy Consumption Estimate." Cited number is in table ES-1, Pg 10.]

Emissions factor: **1.54 pounds CO₂ / kWh**
[Source: EPA's Climate Change Action Plan (CCAP) number for 2008.]

Coal Emissions factor: **2.06 pounds CO₂/kWh**
2.14 pounds CO₂/ pound coal
[Source: Unit Conversions, Emissions Factors, and Other Reference Data (Nov 2004).]

Car Emissions: **12,037 pounds CO₂/car/yr**
[Source: EPA (2007). Greenhouse Gas Equivalencies Calculator.]
<http://www.epa.gov/cleanenergy/energy-resources/calculator.html>

Annual household electricity use: **11,965 kWh**
Note: This figure is based on the annual electricity consumed by a single-family home.
[Source: EPA (2007). Greenhouse Gas Equivalencies Calculator.]
<http://www.epa.gov/cleanenergy/energy-resources/calculator.html>

Annual household emissions: **24,978 pounds CO₂/yr**
Note: This figure is based on the annual emissions of a single-family home.
[Source: EPA (2007). Greenhouse Gas Equivalencies Calculator.]
<http://www.epa.gov/cleanenergy/energy-resources/calculator.html>

Lighting Assumptions:

CFL wattage replacement: **13W CFL for 60 W Incandescent**
[Source: DOE market data]

Average daily usage (interior): **3 hours**

Average daily usage (exterior): **5 hours**
[Source: "An Evaluation of Residential CFL Hours-of-Use Methodologies and Estimates," Edward Vine, Lawrence Berkeley National Laboratory, Berkeley, CA and Diane Fielding, BC Hydro, Vancouver, Canada; August 2005.]

Lifetime – Compact Fluorescent Bulbs: **6,000 hours**
[Source: Current ENERGY STAR CFL specification minimum. Note: Many qualified CFLs exceed 6,000 hours – manufacturers may accurately assert higher hours on packaging.]

Lifetime – Fixtures: **10,000 hours**
[Source: Current ENERGY STAR fixture specification minimum.]