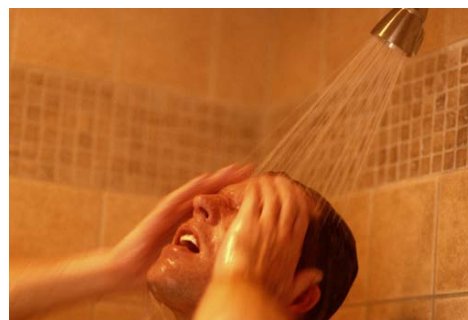


# Homeowner Energy Pricing for Hot Water

- Homeowners enjoy long term benefits of lower energy pricing.
- Natural Gas water heaters have higher First Hour Ratings and quicker recovery than comparable sized electric water heaters.
- It typically takes a 50-60 gallon electric water heater to match the capabilities of a 40 gallon natural gas water heater.



## Representative Average Residential Energy Costs

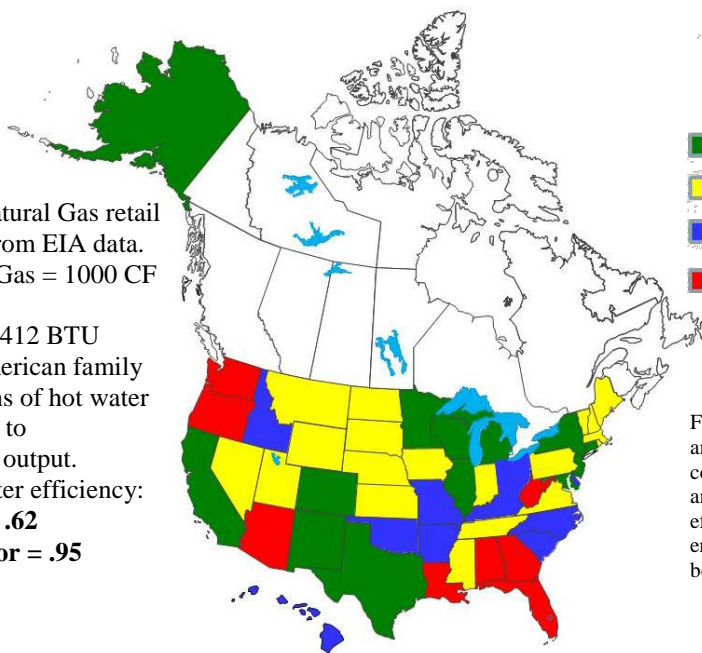
Type of Energy	Cost per million BTU
Electricity	\$34.14
Natural Gas	\$11.01
No. 2 Heating Oil	\$24.59
Propane	\$27.70
Kerosene	\$28.81

As reported per DOE in the Federal Register, 3/10/2011

Average U.S. Price per year for Residential Water Heating	
Price of Natural Gas for Hot Water	Price of Electric for Hot Water
\$ 305	\$ 581

### Assumptions:

- US Electric and Natural Gas retail residential prices from EIA data.
- 1 MCF of Natural Gas = 1000 CF = 1,032,000 BTU
- 1KWH electric = 3412 BTU
- Average North American family of 4 uses 70 Gallons of hot water per day, equivalent to 16.3MMBTU/year output.
- Average water heater efficiency:
- **Gas E.F. factor = .62**
- **Electric E.F. factor = .95**



### Natural Gas vs. Electric pricing for Water Heating

- Save > 100% with Gas
- Save 51% - 100% with Gas
- Save 26% - 50% with Gas
- Up to 25% savings with Gas

For comparison purposes, average annual electric and gas prices were converted to equivalent \$/MMBTU and then divided by average efficiency to derive a price of the energy delivered to the hot water being produced

## Cost of Natural Gas versus Electricity for Hot Water

Standard electric tank style water heaters have a higher Efficiency Factor (EF) factor than similar gas water heaters, but the cost to produce residential hot water is higher with an electric water heater than a natural gas water heater everywhere in the U.S.



For more information, please contact the Energy Services Department at 302.736.7894.