



## Gas vs Electric Oven Costs

1. A gas oven has much better performance: What I mean specifically, is that it takes roughly half the time to heat up compared to electric. For example, a representative electric oven takes about 45 minutes to get to max temperature, whereas the equivalent gas oven takes about 25 minutes. Why am I telling you this?? . . . because of #2 . . .
2. Gas and electric ovens run at full capacity during their ramp-up: They run at their full rated kilowatts (electric) or full BTU's (gas). Even if gas was more expensive, you're only running it at full capacity for half the time compared to electric.
3. Once they reach a set point, you can count on the ovens to run 40 – 60% of their rated power consumption (again KW or BTU's).
4. 100,000 BTU's = 1 "Therm", and a "therm" is generally what your utilities company charges (i.e. \$0.60 / "therm").

Here are some examples: Say that your utilities are \$0.60 / "Therm" for gas, and \$0.14 / kWh (just wild guesses)

Electric rise-time = .75 hours x 40kW x \$0.14 / kWh = \$4.20 to heat up  
Electric, stable for 6 hours = 6 hours x 40kW x .5 (50% power) x \$0.14 / kWh = \$16.80 for 6 hours at steady state  
TOTAL: \$21.00

Gas rise time: .41 hours x 3 "therm"/hour x \$0.60/therm = \$0.73 to heat up  
Gas, stable for 6 hours: 6 hours x 3 "therm"/hour x .5 (50% power) x \$0.60/therm = \$5.40 for 6 hours at steady state  
TOTAL: \$5.40

If you did this profile every day for a year, you'd save \$15.60/day x 365 days = ~\$5,500/year. You're going to have to play with the variables in bold – I don't know what your utility rates are in your area.

