



The Restaurant Footprint... How BIG Is It?

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Have you ever given thought to what your restaurant footprint really is? No, we're not talking about the square footage of your facility and how much space it takes up on your particular lot or retail site. What we're talking about here is your restaurant's "carbon footprint" and how much it contributes to the global warming phenomenon.

The most recently published Energy Information Administration's Commercial Buildings Energy Consumption Survey shows some 217 trillion BTUs of electricity (or 63 billion kilowatt hours) are consumed annually by the U. S. foodservice market. Coal-fired plants are the #1 source of electric generation in the world today and generate 49% of the total electricity produced in the U.S. (EIA 2006 data). Given the fact

that each coal generated kilowatt hour of electricity can release up to 2.185 pounds of carbon dioxide into the atmosphere, this amounts to a staggering 85 billion pounds of CO₂ emitted into our atmosphere on an annual basis! And we're just talking about the commercial foodservice industry. No wonder the arctic is melting!

Let's Take a Closer Look...

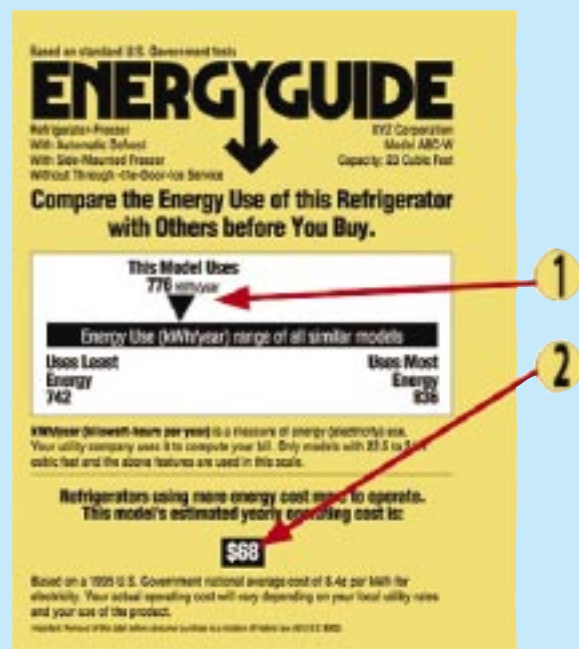
Upon examining a typical casual dining restaurant's "menu" of appliances, we can expect to find:

- 1 — 60" Griddle @ 120,000 BTU/hr. gas or 27 kW electric

Will CO₂ Emissions Be Added?

A number of years ago the U.S. Department of Energy enacted an "Energy Guide" policy for all appliances sold on the consumer level, from refrigerators, washing machines, water heaters, air conditioners, etc. You know, that familiar yellow sticker that compares the new energy-efficient model to older comparatives. Today, with the term "carbon footprint" rapidly becoming a household term, will we one day see appliance CO₂ emissions added to this guide that advises the consumer as to how much carbon a particular appliance will contribute to global warming and green house gases? Only time will tell.

Source: DOE



- 2 — Convection Ovens @ 90,000 BTU/hr. each = 180,000 BTU/hr. gas or 48 kW electric
- 2 — 6 Eye Range Tops @ 120,000 BTU/hr. each = 240,000 BTU/hr. gas or 44 kW electric
- 2 — Fryers @ 80,000 BTU/hr. each = 160,000 BTU/hr. gas or 44 kW electric
- 1 — Warewasher (hi-temp) @ 200,000 BTU/hr. gas or 36 kW electric
- 1 — Water Heater @ 360,000 BTU/hr. gas or 2 electric units = 108 kW

Adding up the electric energy inputs of all these appliances and assuming a diversity (use factor) of full-on two hours each day and a 360 day/year operation, we arrive at some astounding carbon numbers. If the restaurant is supplied with electricity produced by a coal-fired plant, nearly 483,000 pounds of carbon dioxide will be emitted into the atmosphere on an annual basis. That's a whopping 241 tons of CO₂ from this single electric restaurant!

Let's compare this to the same facility using the gas models. According to the EIA, natural gas releases .0001168 pounds of carbon dioxide into the air per BTU. Thus our gas appliance facility would emit 106,000 pounds of carbon dioxide into the atmosphere annually — or less than one fourth of its electric counterpart!

Clean and environmentally-friendly natural gas is clearly the way to go when it comes to fueling your restaurant's energy needs. By choosing gas-fired appliances for cooking, warewashing and water heating, you can not only keep your energy costs down but you can also substantially reduce the carbon footprint of your establishment. You can additionally reduce your costs and carbon emissions by employing natural gas for space conditioning, humidity control, and even on-site generation of electric power.

So it's worth thinking about what your restaurant's real footprint is and start evaluating possible environmental initiatives for your restaurant. Simple choices, like switching from electric to natural gas, can make a big difference, not just for your bottom line, but for the health of the planet and all of us living on it.

To learn more about natural gas appliances for your foodservice operation and how they can help reduce your carbon footprint, log onto the Gas Foodservice Equipment Network at www.gfen.info.

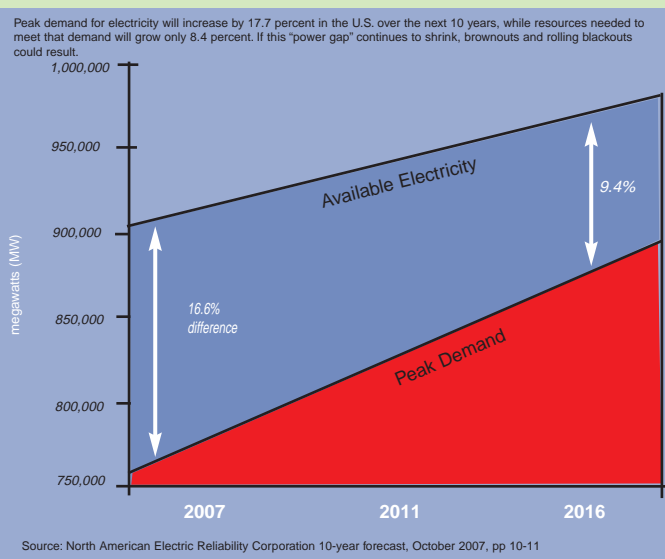


Running Out of Power: Electricity Supply isn't keeping up with demand

Electricity forecasters tell us the demand for power will increase by some 18% over the next ten years, but confirmed generation capacity — the sources of electricity that we will need — will grow by only 8.5%. Furthermore, the expansion and strengthening of the power grid, and the hardware needed to transmit and deliver that power to your restaurant, continues to lag. To further appreciate the meaning of that forecast, one must consider the following:

- Electricity cannot be stored. It must be generated immediately and flow continuously to the point of use.
- Not every power plant generates electricity all of the time. Across the country and at any given time, it is typical for numerous facilities to be shut down for routine maintenance, lack of fuel availability, or due to low water levels.
- High voltage transmission lines carrying electricity from generating plants to distribution substations need regular and emergency maintenance.

All this means that a sudden surge in weather related disruptions, i.e. hurricanes, tornadoes, etc. or power plant construction delays could leave you facing periodic disruptions in electrical power for your foodservice facility. By increasing use of natural gas for many foodservice and other applications, we could help reduce future electric generation demand.



This chart provides support for the need of natural gas to shoulder increasing point-of-use loads which will aid in reducing the amount of electricity produced from coal and other power-generating sources.