# Spring/Summer 2017

Natural Gas: Taking Care of Our Planet (Your wallet will benefit, too!)



## FEATURES

### 04 Clean energy

Natural gas benefits the planet and the pocketbook.

### Energy efficiency: the big picture

The superiority of natural gas translates directly into customer savings.

# IN EVERY ISSUE

### naturalNews

### **03** Energy wise

Energy-saving tips benefit the planet and the pocketbook.

### naturalFit

**08** Peace of mind Natural gas generators won't leave owners in the dark.

### naturallyBetter

### 10 The great outdoors

Natural gas lets homeowners expand their living spaces outdoors.

### Plug-in convenience

Gas convenience outlets offer flexible access to natural gas supply.

### naturalChoices

14 Fire power Chefs and professional cooks rely on natural gas.

### naturallyGood

### **Back Cover** Recipes

Grilled steak with feta Holy grail baby back ribs on a gas grill



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### **Energy wise** Energy-saving tips benefit the planet and the pocketbook.

By Tonya McMurray

S. households account for 17 percent of total greenhouse gas emissions, according to the Environmental Protection Agency (EPA). With Earth Day (April 22) approaching, consumers can celebrate by taking a look at their energy habits to see where a few small changes could make a difference.

### WATCH THE HEAT

Home heating accounts for the biggest portion of household utility bills, according to the U.S. Energy Information Administration (EIA). To save both energy and dollars:

- Check for leaks and drafts around windows and doors. Add caulking and weather stripping to fix drafty areas.
- Turn your thermostat back 10 to 15 percent for eight hours a day. Not only will you save energy, but it can cut heating bills by as much as 10 percent. During the winter, keep thermostats at or below 68° F. During the summer, keep thermostats at or above 78° F.
- Install a programmable thermostat that can adjust temperature when no one is home. (Remember to update the timings if you're going out of town or if your day-to-day schedule changes significantly.)
- Close the fireplace flue damper if the fireplace is not in use.
- Clean and replace air filters. Dirty filters make air conditioners and furnaces work harder.





### **STAY OUT OF HOT WATER**

Heating water is another significant source of energy use within homes. To reduce hot water use:

- Set your water heater thermostat to the lowest temperature needed to provide sufficient hot water. While thermostats are often set at 140° F, 120° F will typically provide sufficient hot water for household needs.
- Set your washer to use cold or warm water, not hot.
- Install low-flow shower heads and take shorter showers.
- Wrap your water heater in an insulating jacket to keep heat from escaping.
- Turn faucets to cold water when using small amounts of water. Turning it to hot will use additional energy in preparation for heating the water — even if you turn off the faucet before the hot water reaches it.

(continued on page 13)

# we rely on natural gas every day



Explore the Interactive Natural Gas Home

www.naturalgashome.org

Natural gas is more than a fuel for heating and cooking The abundance and affordability of natural gas make it the ideal fuel source for many residential uses including water heating, clothes drying and power generation.

Water Heaters	
Vehicles	
Clothes Dryers ————	
Gas Ranges, Ovens & Cookto	ops
Furnaces ————	
Fireplaces ————	
Standby Generators	
Lighting	
Outdoor Living Spaces	

# **Clean energy**

Natural gas benefits the planet and the pocketbook.

By Tonya McMurray

ention clean energy and most people think about renewable energy sources. But renewable energy sources have supply limitations and often rely on more conventional energy sources as a backup. And of all the conventional energy sources, natural gas is one of the cleanest and most efficient.

"The government's U.S. Energy Information Administration (EIA) forecasts that gas will play an increasingly important part in electric generation, even as renewable energy sources grow," said Catherine Landry, vice president of communication for the Interstate Natural Gas Association of America (INGAA). "Natural gas helps complement renewable energy sources."

The increased use of natural gas, both as a direct energy source and

in electricity generation, will help achieve the nation's goals of energy efficiency, environmental protection and energy security, according to Fueling the Future with Natural Gas, a study by IHS Cambridge Energy Research Associates (CERA).

"Natural gas is definitely part of the clean energy mix — both now and in the future," Landry said.

Natural gas is a fossil fuel found deep in underground reservoirs of porous and permeable rocks. Composed largely of methane, natural gas is the cleanest burning fossil fuel and produces smaller amounts of combustion byproducts than coal or refined oil products.

Technological advances in the last several years have brought greater efficiency in production, delivery and use of natural gas. Over the past 40 years, the number of natural gas residential customers has grown



by 70 percent; however, today's consumers use nearly 40 percent less natural gas because of increased efficiency throughout North America.

A recent study by Washington State University's Laboratory for Atmospheric Research found that emissions from local natural gas distribution systems have decreased over the past 20 years. The researchers cited improved technology as a key factor in emissions reduction.

### A CLEAN FUEL SOURCE

Natural gas is the cleanest of all fossil fuels, producing half as much carbon dioxide as electricity generated by coal, according to the Environmental Protection Agency (EPA). Natural gas also produces less than a third as much nitrogen oxides and 1 percent as much sulfur oxides as electricity.

Because of that, natural gas is less a factor in environmental hazards such as smog (composed primarily of carbon monoxide and nitrogen oxides) and climate change.

Natural gas is primarily methane, which has a higher energy content compared to other fuels, and burns cleaner than oil and coal, according to the EPA. The combustion of natural gas releases very small amounts of sulfur dioxide and nitrogen oxides, virtually no ash or particulate matter and lower levels of carbon dioxide, carbon monoxide and other reactive hydrocarbons. In fact, natural gas represents only 2 percent of greenhouse gas emissions in the United States, according to the INGAA.

#### **EXPANDED USES FOR NATURAL GAS**

The IHS CERA report indicates that the abundance and affordability of natural gas allows for expanded use within the residential sector.

"The use of natural gas appliances helps improve total energy efficiency, lowering your energy bills and reducing overall greenhouse gas emissions," according to the report.

Space heating is the most common use of natural gas because of convenience, reliability and lower operating costs. Those same benefits also apply to other residential uses including water heating, clothes drying, cooking, fireplaces, outdoor equipment, on-site power generation, advanced heating and cooling systems, and energy generators.

Natural gas appliances are more efficient and use less energy than electric appliances, adding to their affordability. Natural gas dryers dry clothes quicker and with less energy than electric dryers. Natural gas *(continued on page 06)* 



(continued from page 05)

hot water heaters typically heat water twice as fast as electric hot water heaters. Natural gas furnaces last longer than electric heat pumps and deliver heat that is up to 25 degrees warmer.

Natural gas can offer a clean energy alternative for vehicles. While most natural gas vehicles currently on the market are used in commercial applications, manufacturers do make consumer cars. The EPA recognizes the Honda Civic Natural Gas sedan, which has been in production since 1998, as the cleanest commercially available internalcombustion vehicle.

While natural gas vehicles cost more than gasoline or diesel vehicles, fuel savings can offset the additional vehicle cost, especially for higher mileage drivers. And, natural gas vehicles have lower carbon emissions than traditional vehicles. IHS CERA estimates that a natural gas vehicle will save an average of \$4,500 in fuel costs over five years compared to a gasoline vehicle.

### NATURAL GAS FUELS ELECTRICITY GENERATION

Natural gas is increasingly fueling the nation's power grid, and use of natural gas for electricity generation is expected to grow. Natural gas emits up to 56 percent less greenhouse gas than coal for the same amount of electricity, according to INGAA.

The EIA estimates that natural gas-fired electric generation plants

will account for nearly one-half of all new power plants added through 2035. An analysis by the Gas Technology Institute (GTI) indicates that an increase in natural gas use in electricity production, transportation and residential, commercial and industrial applications will help the U.S. reach a 42 percent reduction in carbon emissions by 2030.

Landry notes that the U.S. has an abundance of both natural gas and renewable energy resources that can serve as allies rather than competitors.

"Many renewables, including wind and solar, are intermittent," she said. "That means they aren't there all the time. When the sun isn't shining, you can't generate solar energy, and when the wind isn't blowing, you can't generate wind energy. Natural gas provides a backstop to those fuels."

Unlike wind or sunshine, natural gas is available on demand, providing critical support to those variable resources.

### **RELIABLE ENERGY**

Technological improvements that have reduced environmental impact and increased available supply have resulted in a more stable and reliable fuel source as well. America's Natural Gas Alliance estimates that approximately 98 percent of the natural gas used in North America is produced here as well. With so much of the natural gas supply coming from domestic sources, consumers are not significantly impacted by changes in political alliances and other disruptions in foreign fuel supply.

"Because of increased use of natural gas (particularly in electric generation, where gas is backing out coal), U.S. greenhouse gas emissions are down to 1990 levels," Landry said. "Natural gas is definitely part of the solution."

### ENERGY EFFICIENCY: THE BIG PICTURE BY DREW ROBB

### The superiority of natural gas translates directly into customer savings.

Numbers can be deceptive. Energy efficiency ratings for home appliances, for instance, make it seem like electric appliances are more efficient than natural gas. But nothing could be further from the truth. When overall efficiency is considered alongside the cost to the consumer, natural gas wins hands down.

"Evaluating energy use based on equipment efficiencies does not allow us to see the entire picture as it takes approximately three times as much energy in the electrical generation process to create one unit of usable energy than it does for natural gas," said Michael Noll, an architect from Boston who is also the founder of archtoolbox. com, which provides technical tools for architects as well as advice on home efficiency and sustainability.

To understand why natural gas almost always comes out on top in terms of overall efficiency and low prices for the consumer, Noll outlined a couple of key factors.

### SITE ENERGY

Site energy is the amount of energy consumed in the home. Measures of site energy are based on the overall amount of energy converted to useful power.

### **SOURCE ENERGY**

Source energy considers the entire chain of energy production from creation to distribution and energy us-

age by the consumer.

To achieve a fair comparison between electricity and natural gas, a figure known as site-to-source ratio signifies the amount of energy used compared to the amount of energy consumed to create that power.

According to Noll, energy purchased from the electrical grid has a site-to-source ratio of around 3.14, i.e., it requires 3.14 units of energy to deliver one unit of energy to the site.

"Much of this discrepancy is due to losses on transmission," said Noll. "In contrast, natural gas provides a siteto-source ratio of 1.05."

When source energy is considered, more than 90 percent of the natural gas that enters the pipeline reaches you, compared to only 30 percent for electricity, according to the Environmental Protection Agency. Natural gas is far superior in terms of cost and overall efficiency while being better for the environment.

So when evaluating natural gas appliances against other fuel and power sources, it makes sense to use source energy. The superiority of natural gas translates directly into customer savings.

According to a study by research firm IHS Cambridge Energy Research Associates, switching from an electric to a natural gas-heated home saves U.S. consumers more than \$5,700 on average over 15 years, and households with natural gas heating, cooking and clothes drying spend an average of \$654 less annually.



Source energy for electric power includes coal transportation, power generation, transmission and final use. When all these factors are taken into account, electric appliances are far less efficient than natural gas, cost more to run and exert a far greater impact on the planet.

# Peace of mind

### Natural gas generators won't leave owners in the dark.

### By Drew Robb

n recent years, powerful storms like Hurricane Katrina, Superstorm Sandy and numerous tornadoes have left behind their fair share of destruction across the country. Thanks to the gruesome weather, thousands of devastated homeowners now know how miserable life can be when the grid is down.

Just ask Eve Hershkowitz of Brielle, New Jersey, who lived through Hurricane Sandy. "We were without power for five days, and that meant no water or flushing toilets," Hershkowitz said.

That's why she installed a whole house natural gas generator from Generac Power Systems when she moved to a new home. Such systems offer homeowners peace of mind — they never leave owners in the dark in their time of need.

While some people opt for diesel- or gasoline-powered portable generators, these come with a host of challenges. When the lights go out, someone has to run to the garage and power up the generator. Extension cords have to be run to whatever equipment needs to be energized.

"Portable generators can be troublesome, as they often sit unused for years, can be poorly maintained and, as such, may not power up during an emergency," said Jake Thomas, director of product manage"During major events such as Hurricane Sandy, those with home standby natural gas generators were able to run them continuously for weeks until grid power was restored. Natural gas is much cleaner burning than gasoline or diesel."

#### - Jake Thomas

ment, Generac. "Further challenges include the lack of fuel, and the production of dirty power that just isn't suitable for home electronics."

### **KEEPING THE LIGHTS ON**

He said with a home standby generator fueled by natural gas, those issues don't exist. The gas pipeline infrastructure is reliable despite power outages. With no fuel storage to worry about, the system is running within 10 seconds of a grid disturbance.

"During major events such as Hurricane Sandy, those with home standby natural gas generators were able to run them continuously for weeks until grid power was restored," Thomas said. "Natural gas is

much cleaner burning than gasoline or diesel."

Generac offers a range of natural gas-powered models. Whole house systems such as the Guardian 22 kW air-cooled system can take care of all lighting, home appliances and electric systems in a large property. Alternatively, the Generac PowerPact 75 kW system can take care of essential home systems such as lights, well pumps, furnaces, refrigerators and a few others. Both of these natural gas home generators can typically be installed within a day.

These natural gas generators are positioned outside the home, no further than 18 inches from an exterior wall just like a central air conditioning unit. The home backup generator delivers power directly to a home's electrical system, covering either the entire home or the most essential areas.



The Generac PowerPact 7.5 kW (left) can take care of essential home systems such as lights, well pump, furnace and refrigerator.

From her experience, Hershkowitz advises homeowners to go for an affordable, whole house unit powered by natural gas. That eliminates the worry, she said, as it does everything you might need to stay comfortable.

"If you buy something smaller, you have to cherry pick which appliances and systems to run," Hershkowitz said. "That might mean no fridge, no garage door connection and no computers. It's so much easier to have everything connected."

Generac's Thomas added: "A whole house standby natural gas generator is the most popular option for homeowners. The equipment is less than half the cost of its diesel counterpart and reliably powers the entire home whenever it is needed."

Whole house natural gas-powered systems, such as the Guardian 22 kW air-cooled one to the right, can take care of all lighting, home appliances and electric systems in a large property.





# The great outdoors

Natural gas lets homeowners expand their living spaces outdoors.

### By Tonya McMurray

ong, lazy evenings around a fire pit. Grilled food served in the flicker of light from a tiki torch. The soft hum of a patio heater chasing away the chill of an early spring night. It's not hard to understand the allure of outdoor living spaces. And, more and more homeowners are turning to outdoor rooms to expand their living and entertainment space.

The National Association of Home Builders notes that outdoor living spaces are one of the top five trends in new homes. Those outdoor living spaces have evolved beyond the simple grill on the patio to include kitchen set ups, fireplaces, fire pits, gas lights, tiki torches and patio heaters.

Part of the increased interest in outdoor living spaces comes from homeowners who choose to remodel instead of buying a new home, said Andrea Alden with Canada-based Napoleon<sup>®</sup> Products, North America's largest privately-owned manufacturer of quality wood and gas fireplaces (inserts and stoves), gas and charcoal grills, and outdoor living, heating and cooling products. Napoleon is the only gas furnaces maker in Canada.

"As recently as five years ago, it was very expensive to buy a new home," Alden said. "Instead, homeowners chose to enhance the spaces that they live in. These remodelling homeowners decided to focus on turning the outdoors into spaces that mimicked the comfort of their indoor spaces."

Those enhancements also serve to increase a home's value, said Carrie deGuzman, senior manager of communications with the Hearth, Patio and Barbecue Association (HPBA).

"From entire patio or deck renovations to simply adding a fire pit, fire table or chimenea for more relaxing evenings in the backyard, consumers are finding creative ways to increase their home's value," deGuzman said. "As the National Association of Realtors reports, outdoor entertaining upgrades are adding significant value to the home and providing people with a large return on their investment."

### **DESIGN CONSIDERATIONS**

The first step to creating an outdoor living space is to decide to use the space, Alden said. Homeowners may want separate spaces for cooking and eating as well as a place for play, whether that's a pool or a play structure for children.

The different areas can be set apart by creating decorative stone walkways or through the creative placement of furniture and appli-

PHOTO COURTESY OF NAPOLEON PRODUCTS



ances. Lounge chairs, patio swings and chaise lounges can provide comfortable seating areas.

Many consumers turn to natural gas to fuel their outdoor living spaces, relying on the comfort and convenience of a reliable, clean fuel source. Natural gas is both affordable and environmentally friendly.

### NOW WE'RE COOKING

Natural gas grills are often the centerpiece of outdoor living spaces. Whether modestly sized and freestanding or large permanent structures, natural gas grills provide an always-ready cooking appliance. With more precise temperature controls *(continued on page 12)* 

Gas grills can create the centerpiece of an outdoor living space. They can be freestanding or permanent structures that create a kitchen space complete with a dining space.

### PLUG-IN CONVENIENCE BY TONYA MCMURRAY

### Gas convenience outlets offer flexible access to natural gas supply.

Gas convenience outlets give consumers added flexibility for outdoor gas appliances. Convenience outlets are connected to the home's gas supply to provide an outdoor plug for portable gas appliances. Homeowners can then plug gas grills, patio heaters, lights and other appliances into the outlet much like electric appliances plug into electrical outlets.

"The convenience outlet offers the homeowner the opportunity to just go out and purchase an appliance and come home and plug it in," said Hoss Budde, president of Burnaby Manufacturing Ltd. "No calling a contractor to come out and install it. No having to shut down the whole house while the contractor installs it and then relighting all the appliances once he's done."

Gas outlets offer flexibility in the placement of outdoor appliances. Flexible hose up to 10 feet allows homeowners

to move appliances around the patio. Homeowners can easily store outdoor appliances for the winter. And, when homeowners move, they can simply take the appliance with them without having to call a contractor to disconnect it from the gas supply.

"The homeowners may want to have several outlets in case they would like to party on the pool deck or at another location," Budde said. There are also double outlets available so homeowners can plug in two appliances at the same time.

Convenience outlets come with a variety of safety features that are not common for propane-fueled appliances. Convenience outlets can automatically shut off if the temperature becomes too high, and most require that the manual valve be shut off before the appliance is connected or disconnected. They also come in a variety of finishes to complement any outdoor décor.



Convenience outlets offer flexibility for portable outdoor gas appliances, allowing a homeowner to plug into the home's natural gas supply in the same way electrical appliances plug into an electrical outlet.





### (continued from page 10)

than propane or charcoal grills, natural gas grills help produce more consistent cooking results and take the guess work out of outdoor cooking.

"Our nation's passion for culinary adventure continues to expand," deGuzman said. "Cable and public TV shows spotlight pit masters. Bookshelves and social/digital channels are flourishing with blogs, tips, and videos to help people improve their barbecuing skills. People are generally more confident and enthusiastic about cooking out, and are looking to higher-end grills and accessories to not only improve the flavor and quality of their food, but also their outdoor living experience."

Gas grills ignite quickly without the long warmup time required for charcoal grills, and the fuel supply is always available. Unlike propane grills, there's no chance of a tank being low or running out during a cookout. Because natural gas grills connect directly to your home's existing natural gas line, the fuel is always available and ready to go. Plus, natural gas cookouts cost about one-sixth the cost of a charcoal cookout and three-fourths the cost of a propane cookout.

### **GATHER AROUND THE FIRE**

Just as an indoor fireplace serves as both décor and heat source, outdoor fireplaces provide warmth, add flair and set the mood for outdoor living spaces. Outdoor fireplaces can be surrounded by granite, tile, stone or other material to fit the style of your home and landscaping.

Some homeowners opt for fire pits to provide outdoor ambiance. Fire pits are the modern equivalent of the old-fashioned campfire. Offering a focal point for outdoor gatherings, fire pits are an ideal place to gather around for casual conversation, roasting marshmallows or just enjoying the outdoors. Some fire pits even feature grills for cooking.

While the heat doesn't always radiate as far as a patio heater, fireplaces and fire pits combine the timeless appeal of a crackling fire with the convenience and safety of the latest natural gas technology. Because there are no sparks or hot embers flying about, gas fire pits and fireplaces are safer and can be located almost anywhere — even close to patio furniture or wood decks.

There is no hassle of gathering or buying wood or trying to start the fire. And, no need to clean out ashes after enjoying a cozy evening fire.

### **HEATING UP**

If you're looking to increase the number of months you're able to enjoy your outdoor space, outdoor heaters are essential. Patio heaters can generally warm a 12- to 20-foot area, helping to take the chill out of early spring or crisp fall nights. They are most effective when outdoor temperatures are between 40 and 60 degrees Fahrenheit and can be placed almost anywhere.

Heaters can be permanently installed in-ground, deck mounted or hung from a roofline. Other heaters are freestanding and portable to allow for greater flexibility in use.

### LIGHTING THE WAY

Gas-fueled lights and tiki torches add the finishing touches to outdoor living spaces. Whether enclosed or with open flames, outdoor lighting fueled by natural gas offers a reliable light source, even during a power outage. And, while bugs flock to electric lighting, natural gas lighting does not tend to attract insects.

From casual tiki torches to elegant brass or copper lamps, natural gas lighting can complement any outdoor space. Lights can be mounted on exterior walls, porch ceilings or on lamp posts. Light sensors and timers can help reduce fuel use by ensuring that lights are only on when you need them.

Many natural gas appliances — such as grills, lights, patio heaters or fire pits — offer the option of permanent installation or portability. When permanently installed, the appliances will be connected directly

(continued from page 03)

### **BEWARE OF VAMPIRES**

Some of the biggest energy wasters in homes are "vampire" electronics — appliances and devices that use energy even when they aren't actively being used. For example, microwaves, DVD players and any other device with a digital clock use electricity even when not in use to keep the digital clock running. And even if your computer is "asleep," it's still using energy.

Scientists at the U.S. Department of Energy's (DOE) Lawrence Berkeley National Laboratory estimate that standby power accounts for up to 10 percent of household energy consumption. You can save that energy by unplugging appliances and devices when they're not in use.

### **OTHER HANDY TIPS**

- Clean the dryer's lint filter after each use.
- Dry full loads, but don't overload the machine.
- Set refrigerator temperatures to 37° F and freezer temperatures to 3° F. If your refrigerator has an energy saver switch, be sure it is turned on.

"From entire patio or deck renovations to simply adding a fire pit, fire table or chimenea for more relaxing evenings in the backyard, consumers are finding creative ways to increase their home's value. As the National Association of Realtors reports, outdoor entertaining upgrades are adding significant value to the home and providing people with a large return on their investment."

#### — Carrie deGuzman

to an existing gas line.

If an appliance is portable, gas convenience outlets can be connected to the home's gas supply and installed to allow plug-and-play capability for various gas appliances. Grills, patio heaters, gas lights or other gas appliances then plug into the outlet much like electric appliances plug into electrical outlets.

Outdoor living spaces offer versatility and an inviting, entertaining way to enjoy your home. Whether you have a small patio with a grill or a larger outdoor living space, you can count on natural gas to bring comfort, convenience and ambiance to all your outdoor gatherings.

- Run your dishwasher when it is full. Allow dishes to air dry. Not using heat in the drying cycle can save about 20 percent of your dishwasher's total energy use.
- Replace light bulbs with compact fluorescent lights, which last longer and use less than half the energy of traditional incandescent bulbs.

• Choose appliances with the U.S. DOE's ENERGY STAR<sup>®</sup> label. For more energy saving tips, see energysaver.gov.

### DON'T FORGET TO RECYCLE

By now consumers are used to seeing the small triangle that indicates an item is recyclable, and most communities have curbside or drop off recycling locations. Recycling reduces waste sent to landfills, conserves natural resources, and prevents pollution associated with collecting new raw resources. For example, according to the EPA, recycling 1 ton of paper saves 17 trees and 7,000 gallons of water.

Recycling also saves significant energy. Recycling one glass bottle saves enough energy to light a 100-watt light bulb for four hours, according to the EPA. Recycling one aluminum can saves enough energy to run a TV for three hours. As with saving energy in your home, even a small recycling effort can have big energy-saving results.

# Fire power

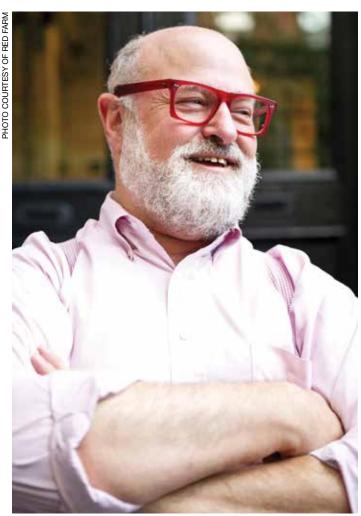
### Chefs and professional cooks rely on natural gas.

By Tonya McMurray

estaurateur Ed Schoenfeld estimates that he has cooked every day for the last 50 years, and he wouldn't think of cooking with anything other than natural gas.

"It's a no brainer," said Schoenfeld, owner and operator of Red Farm, Zagat's top-rated Chinese restaurant in New York City. "The flexibility of fire power you can get when you cook with natural gas, you can't get with electricity."

Schoenfeld is not alone in his preference for natural gas as a cooking fuel. A study conducted by Fryette Consulting Group indicates that 98 percent of professional chefs surveyed prefer to cook with natural gas.



### **KEY TAKEAWAYS**

- Professional chefs rely on natural gas primarily because it offers superior temperature control.
- Heat from natural gas is distributed more evenly, allowing food to cook quicker.
- Sooking with natural gas reduces fuel costs.

### PRECISE CONTROL

Professional chefs rely on natural gas primarily because it offers superior temperature control. Cooks can control the flow of gas, and thus the intensity of the flame to get the perfect temperature for any food.

"Cooking over gas provides greater control over temperature throughout the process, with the added benefit of warm up and cool down times being almost instant," said chef and restaurateur Jose Garces, owner of more than a dozen restaurants across the country and a Food Network Iron Chef.

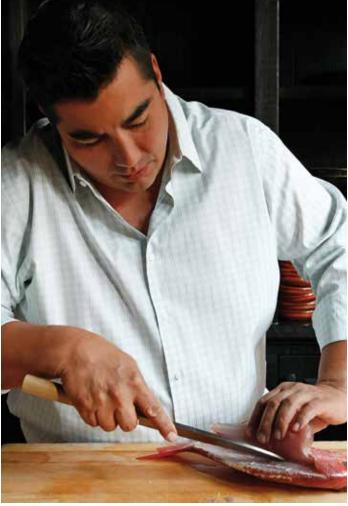
"It's a no brainer. The flexibility of fire power you can get when you cook with natural gas, you can't get with electricity."

### — Ed Schoenfeld

With natural gas, the temperature can be adjusted moment-to-moment with quick response. Unlike electric ranges, which require time to heat up and cool down, gas appliances respond to temperature adjustments almost immediately. That immediate response makes it easier to get precisely the temperature needed for every stage of cooking. Even if the temperature needed is misjudged, it can be quickly corrected.

"You can go from very low to very high instantly," Schoenfeld said. That level of control can be particularly important for one of Schoenfeld's specialties — wok cooking. But, he noted, it is also important

Ed Schoenfeld, owner and operator of top-rated New York City Chinese restaurants Red Farm and Decoy, calls the use of natural gas for cooking a "no brainer" because of its precise temperature control.



for many other types of cooking. "With a strong fast flame, you can cook sauces more quickly; you can maintain the texture of vegetables."

Natural gas ranges, cooktops and ovens provide professional-level, controllable heat for even amateur chefs. Some gas ranges and cooktops even feature special high-British thermal unit (Btu) burners for rapid heat and low-Btu burners for simmering, increasing the level of cooking control.

"Cooking over gas provides greater control over temperature throughout the process, with the added benefit of warm up and cool down times being almost instant."

### — Jose Garces

"The level of temperature control, plus the eco-friendly factor, makes cooking with natural gas suitable for any type of cooking," Garces said. "Whether it's a stew or a braise that requires a low temperature and long cooking time or a stir-fry that is cooked quickly over high heat, with natural gas you can be sure there are no 'hot spots' and that the temperature will remain consistent."

### THE BOTTOM LINE

In addition to more consistent culinary results, cooking with natural

Chef Jose Garces, a Food Network Iron Chef and winner of the Best Chef Mid-Atlantic, recommends natural gas for any type of cooking.

gas costs about half as much as cooking with electricity. Not only is natural gas cheaper than electricity, heat from natural gas is distributed more evenly, allowing food to cook quicker, further reducing fuel costs, according to the Gas Foodservice Equipment Network.

Many newer models of gas ranges, stoves, ovens and grills use an electronic ignition switch rather than a continuously burning pilot light, saving as much as an additional 30 percent on energy costs.

Whether in a professional or home kitchen, natural gas offers both the chef and the everyday cook a reliable and consistent fuel source.



### Grilled steak with feta

A sugar-and-spice herb marinade beefs up the flavor of juicy grilled steak.

### INGREDIENTS

### Greek Marinade

- 1/2 cup dry red wine or Progresso™ beef flavored broth (from 32-oz carton)
  1 tablespoon packed brown sugar
  3 tablespoons olive or vegetable oil
- 1 1/2 teaspoons dried oregano leaves
- 1/2 teaspoon salt
- 1/4 teaspoon ground cinnamon
- 2 cloves garlic, finely chopped

### Steak

- 1 boneless beef sirloin steak, about 1 inch thick (2 lb.)
- 2 medium red onions, cut into 1/2-inch slices
- 1 package (4 oz.) crumbled feta cheese (1 cup)
- Chopped fresh parsley, if desired

### DIRECTIONS

In shallow glass, plastic dish or resealable food-storage plastic bag, mix all marinade ingredients. Pierce beef with fork several times on both sides. Add beef and onions to marinade; turn to coat with marinade. Cover dish or seal bag; refrigerate, turning beef occasionally, at least eight hours but no longer than 24 hours.



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Heat gas grill. Remove beef and onions from marinade; reserve marinade. Place beef and onions on grill. Cover grill; cook over medium heat 15 to 20 minutes for medium doneness, brushing occasionally with marinade and turning once. Discard any remaining marinade.

Out beef across grain into thin slices. Sprinkle beef with feta and parsley; serve with onion slices.

RECIPE COURTESY OF BETTYCROCKER.COM

### Holy grail baby back ribs on a gas grill

### **INGREDIENTS**

- rack baby back ribs
   cup rub of your choice
   tablespoons brown sugar
   tablespoons kosher salt
   tablespoon chili powder
   teaspoon black pepper
   teaspoon onion powder
- 1 teaspoon garlic powder

### DIRECTIONS

 Set up the grill for indirect cooking with a drip pan under the indirect area with <sup>1</sup>/<sub>2</sub>- to
 1-inch of water. Stabilize temperature about 250.

Prep the ribs. Remove the inner lining and check for bone chips.

Sub with about 1/2 cup of a dry rub of your choice. The rub will work fine if applied just before grilling or the day before. If applying early, wrap with plastic wrap and refrigerate.

Place over the drip pan; grill for about 3 hours.

<sup>3</sup> The ribs are done when: 1) The read temperature is in the 185-plus range; 2) The end of the rib bones are sticking out some; and 3) When picking up the ribs with tongs and holding them about 1/3 of the way up, they crack some.



6 Allow to the ribs rest for 10 minutes before eating.

SOURCE: 101 COOKING FOR TWO