

# naturalLiving

Fall/Winter 2011

your home. your world.

## Efficient & Stylish Heating Options

*What's new? What's next?*



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**INNOVATIONS FOR TODAY  
AND TOMORROW**



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# Power to the People

Backup power generators eliminate outages, restore peace of mind.

As our world experiences more frequent and more severe weather events, consumers are wise to consider an alternative form of power. Backup power generators can ensure that your home's systems keep running smoothly, even when power is disrupted.

"Nobody controls the weather," says Bob Heller, business development manager for Generac. "And in big weather events, it's not just losing the power that's a problem; it's getting it back up."

Consumers are discovering what commercial customers have known for years. In times of power outages, there's nothing like a backup generator.

"Electricity is not a luxury," Heller points out, noting that being without it causes everything from minor irritations like losing phone and Internet connections to larger problems like food spoilage and even property damage. Individuals relying upon electricity to operate medical devices are put at risk during these times.

Heller says that, unlike portable generators, automatic backup generators will run continuously during outages, whether it's a few hours or several days. Because they're fueled by natural gas, they have an unlimited power supply – in contrast, portable generators have to be refueled every eight to 10 hours, and getting the fuel is often impossible during outages.

"Having an automatic home standby generator is the most convenient, fool-proof way to protect your property during power outages and keep everything running smoothly," Heller says. "It's stable, it's safe, and there's a solution for every size home and application." ■



Power outages may be a fact of life, but there's no reason for anyone to have to suffer through one when backup power solutions exist. Many people consider portable generators as their only backup power option, but automatic backup power generators are actually the best solution.

## PORTABLE GENERATOR PROS AND CONS

### Pros

- Portable, so available for other applications, like tailgating
- Readily available from home centers
- Familiar to use
- No installation required

### Cons

- Need to operate outside—in the inclement weather
- Need to run extension cords
- Need to refuel every 8 – 10 hours with gasoline, which may or may not be available
- Need to be able to start manually, unless electric start
- Heavy and challenging to move
- May not start unless they were used recently or properly maintained

## AUTOMATIC HOME BACKUP GENERATORS

### Pros

- Permanently installed
- Connected to your electrical system
- Start and stop automatically
- Run for as long as necessary on natural gas
- Automatic weekly startup
- Can backup essential circuits or the whole house

### Cons

- Not portable
- More expensive

SOURCE: GENERAC

# Turning Up the Heat

Natural gas heaters add warmth without excessive cost.

By Tonya McMurray

As days grow shorter and the air becomes cooler, a cozy and inviting home means a warm home. Achieving a comfortable temperature in a cost-effective, earth-friendly way can make even the coldest winter day more bearable, and natural gas heaters offer many options to keep homes warm and cozy all winter long.

Natural gas is the cleanest of the fossil fuels, emitting fewer harmful pollutants than other fossil fuels, according to Environmental Protection Agency comparisons. And since natural gas tends to be cheaper than electricity, it's an ideal choice for a heating fuel in new installations and remodels as well as a good source for supplementary heat.

Many homeowners find that zone heating with gas-powered systems reduces overall energy consumption and costs, notes Mike Eimers, regional sales manager for Louisville Tin & Stove Co., which

makes the Cozy line of gas heaters.

"It's a great way to save money on utility costs because you're putting more heat into the areas where you spend the most time, rather than trying to heat the whole house," he said.

Eimers explains that even homeowners who have electric heat systems often opt to add gas-powered heaters for supplemental zone heating in highly used rooms or in areas that are harder to heat. Zone heating can also be turned on and off as needed, allowing for better control of energy consumption.

## WARMING UP

Homeowners looking to add gas heat — whether to one room or throughout an entire house — have several options. Most gas heaters and furnaces are easy to install and require minimal space.

For example, the Cozy High Efficiency Direct Vent Heater requires only a 3 ½-inch hole for the vent and takes up minimal wall space. While direct vent heaters have traditionally been installed on an outside wall due to venting issue, today many direct vent heaters can be installed a few feet from the vent source, allowing for installation on an interior wall.

In more moderate climates, larger high efficiency direct vent heaters, such as the 65,000 BTU unit produced by Williams Furnace Company, can heat an entire home. In colder climates, a larger unit can offer efficient space heating for basements, garages or large rooms.

High efficiency direct vent heaters contain a sealed combustion chamber that draws air for combustion from outside and exhausts the combustion byproducts outdoors to keep indoor air fresh. Units often include blowers to expand the heated space.

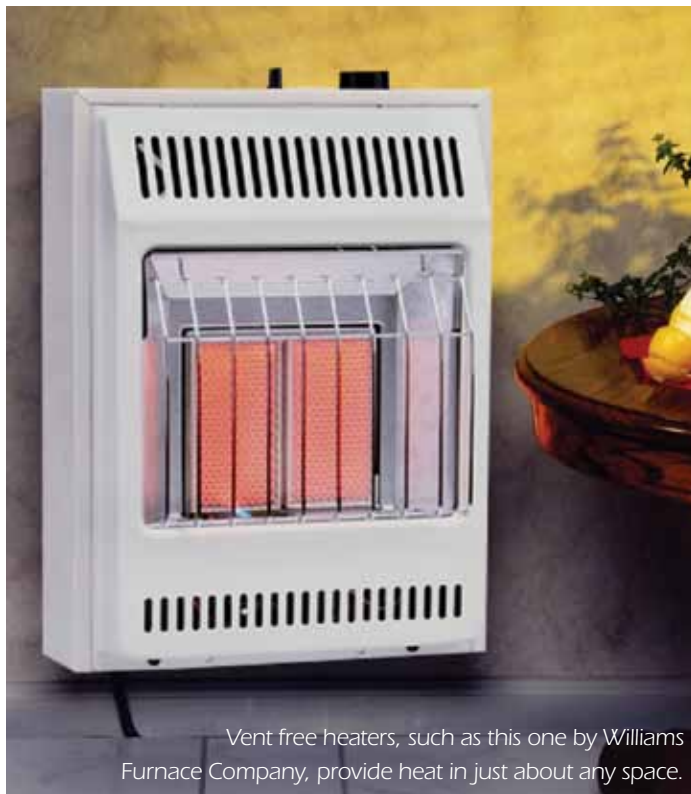
One advantage of direct vent heaters is that they require no ductwork, says Ruth Ann Davis, vice president of sales for Williams Furnace Company. Leaky ducts can result in significant heat loss, but a direct vent system keeps more heat in the room, she explains.

Other wall heaters, such as Williams' Monterey model, fit inside the wall to offer maximum space efficiency. These heaters have a grill on each side to heat two adjacent rooms with one unit.

Featuring sleek and contemporary designs and neutral colors, wall heaters blend with most decors so they are not obtrusive to the design of a room.

Operating without electricity, these heaters are an ideal secondary

PHOTO COURTESY WILLIAMS FURNACE COMPANY



Vent free heaters, such as this one by Williams Furnace Company, provide heat in just about any space.



Direct vent baseboard heaters provide an excellent solution for areas where space is an issue.

heat source for areas prone to nuisance outages, Davis said, noting that direct vent heaters are also good for garages.

“Generally speaking, when you build a home, the contractor doesn’t size the heating equipment to cover the garage,” she said. “But people want to maximize every inch of living space and so they may want to finish out their garage or use it for parties or just simply make it more comfortable. And a space heater is an easy way to do that.”

Another popular option for gas heat is a direct vent baseboard heater. Installed along the baseboards on outside walls, baseboard heaters are a good solution for areas where space is an issue. Based on technology developed by three utility companies in Canada, Cozy’s baseboard heaters are even approved for use in mobile homes.

Eimers notes that gas-powered baseboard heaters can be used to retrofit existing electric heaters, resulting in a 75 percent savings on operating costs.

### FLEXIBLE SOLUTIONS

Vent-free and free-standing heaters offer additional flexibility, al-

lowing for installation in virtually any room.

Vent-free heaters come in both wall-mounted and free-standing units and offer 99.9 percent efficiency. To ensure safe operation, vent-free units come with oxygen depletion sensors that automatically shut the unit down if there is an inadequate oxygen supply. Vent-free units offer both infrared and blue flame options.

Freestanding gas stoves can add some of the ambiance of a fireplace while bringing additional warmth to a home. Freestanding stoves can be vented through an existing chimney or on an outside wall, and some are vent-free. Gas stoves come in a variety of styles and colors, allowing them to complement almost any room.

When looking to add a gas heater, it’s important to know the specifications and clearances needed for installation. Most manufacturers are happy to help determine this, Eimers said. In addition, it’s important to check building codes to ensure compliance. (Vent-free heaters, for example, are not allowed in Canada or all areas of the U.S.)

With cost-efficient and environmentally friendly warmth, gas heaters keep the chill out and the savings in for a warm and comfy winter. ■

# Winning combination

New tankless water heaters can warm your home's air, too.

By Kristy Alpert

**A**lthough there's new buzz about tankless water heating (commonly referred to as "on-demand" or "continuous" water heating) the technology has been around since the late 1800s, and first made its way to North America in the mid 1900s.

Before the arrival of tankless technology, most forms of heated water generally relied upon conventional tank water heaters where the water is heated inside the tank for some amount of time. According to Marc Heffner, marketing manager for KD Navien, storage tanks for conventional water heaters have limitations on how much hot water can be provided before the water turns cold and they need to regenerate hot water.

"In general, the performance benefits of tankless technology – especially the continuous hot water it provides — make tankless water heaters a superior hot water source," Heffner says. "Since tankless water heaters never run out of hot water, hot water capacity is a non-issue."

## THE NEW TANKLESS

Touting numerous benefits like energy-efficiency (24 to 34 percent more efficient than conventional systems), reduced storage space (size of a carry-on suitcase) and reliable performance, tankless systems already outperform other systems on the market. But with the introduction of combination tankless units, these units are more popular than ever.

"Our combination unit pairs a Rinnai tankless water heater with our hydronic furnace unit," explains Tracy Young, product management specialist for Rinnai America Corporation. "These two products work together to provide domestic hot water and whole-home heat. In homes with a tankless/hydronic furnace combination, the hot water from the tankless unit is used to heat the air in the home, creating a comfortable indoor environment."

Aside from the enormous amounts of space these units save, combination systems are extremely easy to use and generally rely only on a regular thermostat to regulate the home's indoor air temperature, so



Rinnai America Corporation's R75LSi tankless unit.



Navien tankless gas water heater.

there's not even a learning curve on operating this new technology. "When the thermostat recognizes a demand for heat, it sends a signal to the hydronic furnace to turn on its pump, which causes the tankless unit to produce hot water," adds Young. "A fan in the hydronic furnace then begins to blow air over the hot water coil, extracting the heat and distributing the heated air throughout the home via its existing ductwork."

### THE BENEFITS

Those who prefer the combination tankless units say the systems are cost effective and efficient. The innovative technology allows the unit to perform two completely separate actions: supplying domestic hot water and generating heated air. One benefit of these units is that they run off just one gas line and a single vent, resulting in a simplified, streamlined system.

"In addition, the hydronic furnace gives domestic hot water priority, so a home is never without hot water," says Young. "To accomplish this, a flow sensor in the system detects when there is a hot water demand and temporarily suspends the air heating process until hot water is no longer needed. Heating resumes once the hot water demand is met. Some additional benefits are that tankless units last up to twice as long as traditional tank water heaters and their components

are all replaceable, so there is no need to completely discard a tankless unit. On top of their energy savings, comfort, convenience and longevity, tankless systems take up significantly less space in a home."

Young also notes that these combination hydronic furnaces and water heaters are good for retrofit projects since they work well with existing ductwork and air conditioning systems and can act as a replacement for a traditional gas furnace.

Since these combination systems use high efficiency tankless technologies, the tankless combination systems have gained significant momentum in the marketplace. Especially in today's economy when homeowners are looking for more efficient products. "Generally homeowners need a new water heater before they need a new furnace," says Heffner. "Once they realize they can have one unit to do both applications, they will take advantage of the cost savings and gain precious space since they are only using one unit."

He adds that the tankless water heater alone can cut a homeowner's water heating gas consumption by 20 percent or more. In addition, the unit can also cut down on harmful CO2 emissions and reduce the amount of other green house gases released into the atmosphere by as much as 50 percent when compared to an electric tank water heater, which makes it eco-friendly as well. ■



Inside look at a Navien tankless water heater.

# STEPPING UP

Radiant floor heat creates an inviting environment while saving money.

By Cindy Baldhoff

**N**othing takes the chill off of a room like a warm floor. And with radiant floor heating, you can not only relax in a more comfortable environment, but also enjoy greater energy efficiency. “Radiant floor heating provides several benefits over forced-air systems,” says Mark Hudoba, product manager, Radiant Heating and Cooling for Uponor North America. Among the benefits he cites are warm, comfortable floors, even temperature distribution and reduced heating bills.

With radiant floor heating, the heat warms the floor as well as the air around it. Hydronic systems use liquid running through tubing beneath the floor to conduct the heat.

“Water has 3,500 times the heat-carrying capacity of air, so it can heat a structure with greater efficiency than forced-air systems,” Hudoba says. “In addition, forced-air systems create hot air that rises, wasting heat at the ceiling. Radiant floor heating systems keep the warmth near the floor where people are located, making it a much more logical form of heating.”

In addition to providing additional comfort and being more economical, radiant heat is also better for the environment, explains

Mary Carson, president of Roger Carson Enterprises, Inc. and a hydronic heating consultant.

“This heating system keeps the home environment cleaner, since the heat is radiating from the floors,” she says. “It is considered hygienic because there is no forced air circulating dust, odors, spores, particles or germs throughout the home. It is much like being in the sun – the body feels the heat of the sun and is warmed by it.”

Zone controls allow users to warm and cool specific rooms according to use – for example, keeping a bedroom comfortable overnight while letting the living room cool down, then warming the bathroom floor in the morning before you step out of bed.

PHOTO COURTESY ROGER CARSON ENTERPRISES, INC.



Radiant floor heating warms the floor through tubing that is installed beneath the home's floor.



PHOTOS COURTESY ROGER CARSON ENTERPRISES, INC.

“There are no hot or cold spots, or drafts in the room because of the distribution system,” she adds.

Better yet, the new high efficiency boiler models can be 98 percent energy efficient and qualify for tax rebates. (Many utility companies offer rebates as well.) To find out more about tax credits and rebates in the U.S., go to [www.energysavers.gov](http://www.energysavers.gov); in Canada, visit [www.homeperformance.com](http://www.homeperformance.com) – or check with your local utility company for current rebates.

And, according to Hudoba, there are many new innovations that make radiant floor heating systems even more attractive. New controls integrate radiant heating with the rest of the home’s heating and air conditioning system, increasing efficiency. These more sophisticated controls also provide Internet accessibility, so homeowners can control the system remotely.

As renewable energy sources such as geothermal and solar con-

tinue to grow in popularity, expect radiant floor heating to get even more attention.

“Rising energy costs and federal and local tax incentives have made these systems a lucrative investment for the homeowner,” Hudoba says. “I believe North American heating and cooling systems will migrate to more radiant applications for the same reasons many of the European and Asian countries already primarily use radiant – for comfort and energy efficiency.” ■



Today’s radiant floor heating system integrate radiant heating with the rest of the HVAC system to increase efficiency. Some can even be operated remotely.



# Warming Trend

Fireplaces add warmth, style –  
and save money on your heating bills.

By Cindy Baldhoff

O

iginally designed for cooking and heating, today's fireplace has evolved into a stylish focal point of the home. And, while it still performs the basic function of heating a room, it is doing that in new and exciting ways as technology expands and evolves.

"Fireplace style has been the most dramatic change over the last five years," says Leslie G. Wheeler, director of communications for the Hearth, Patio & Barbecue Association. "The new contemporary modern look is now offered by all of the manufacturers, not just a select few. A fireplace can be a design element in a room, and the fireplace surround is sleek and very cool. This is a totally new look for the traditional fireplace."

It isn't just the look that has changed, though. The popularity of the wood-burning fireplace has been replaced by natural gas, which is cleaner and more efficient.

"According to our data, natural gas products represent 70 percent of the total hearth product industry," Wheeler says. "It's convenient and clean burning. With the flip of a switch or remote, you have an instant fire – with no fussing with wood. Nothing can top it."

### STYLE AND SUBSTANCE

But it isn't just the convenience that has made natural gas fireplaces so popular. As they've moved beyond the living room and into kitchens, master bedrooms and even the bathroom, their contemporary style has helped them enhance the look of any room.

"Modern designs, primarily the linear designs of a fireplace, are definitely leading the way right now," says Greg Thomas, director of sales for Wolf Steel Ltd., which

manufactures the Napoleon line of fireplaces. "People are getting away from that square box traditional look and getting into a linear fireplace that looks more like a fish tank. There's a lot of glass, not a lot of steel or metal or brick – they want something clean and very modern-looking."

Thomas says the HGTV-driven renovation mindset has introduced consumers to the sleek new looks and has made the fireplace a great candidate for a makeover.

"What they see on these home design shows is definitely geared toward that modern look," he says. "The designer influence has been huge in renovating fireplaces to more modern looks. You don't want to renovate a home, and then have this old, dated fireplace that doesn't fit the motif."

As an answer, today's fireplaces have a sleek, clean and unclut-



PHOTOS COURTESY NAPOLEON FIREPLACES AND GRILLS



tered look, and since they're moving into other rooms of the house, they're not confined to a wide horizontal space.

"We have a vertical fireplace called the Torch, which is very narrow and tall with a big flame shooting up the middle," Thomas says. "They put out a little bit of heat, but are more for lighting. And we're also seeing these going into modern bathrooms and even in restaurants and hotels. The sales numbers we're seeing tells us this isn't just a trend – it's the next generation of fireplaces."

Further enhancing the appeal of the natural gas fireplace is the intermittent pilot ignition system, which provides an ignition flame to light the fireplace when needed. Since the pilot doesn't burn continuously, it saves money on energy, yet it's available immediately, even in the event of a power outage. Even the fire itself seems to have become more modern, as it can now be controlled remotely. Users can control the temperature and the height of the flame without ever getting off the couch.

### IT'S WHAT'S INSIDE THAT COUNTS

As the design of the fireplaces be-

comes more contemporary and stylish, so do the materials that are being burned in them. Natural gas has opened the door to new options far beyond the traditional logs. Today, gas log inserts are more than just logs. They include glass beads and gemstones and even cones, spheres and cubes that burn in place of logs.

"We're seeing a growing trend in contemporary styling," says Jerry Scott, vice president of H.R. Peterson Co. "The traditional logs still dominate the market, because there are still people who want



the look and feel of a real fire. But we introduced the crushed glass, geo shapes and gems in 2007, and since then our sales in that product category have tripled.”

In fact, today they offer 15 different colors of glass and 15 different colors of gems.

“Retailers who carry our lines say the designers are very particular about the colors and styles they want, and that’s why we’ve expanded to that level,” Scott says.

H.R. Peterson is far from being alone in that expansion. Today, many companies offer glass beads and gemstones, which are available in a variety of shapes and colors to complement the room’s décor. Scott says these are most popular among Generation X, who also are using them in outdoor fireplaces and fire pits. Thomas agrees that such innovations have ignited fresh interest in fireplaces, particularly among younger users.

“Fireplaces have a lot of versatility, so not only do you get to pick the look, but you can choose what look you want inside,” he says. “We’ve got some metal art deco design elements we can put inside fireplaces.”

Among them are nickel sticks, which are sticks made of nickel and welded together, then placed on the burner. The flames then shoot through the welded design.



“We’re calling this ‘fire art’ and it’s taken on a whole marketing shift,” Thomas says. “We can be a lot more creative. With traditional fireplaces, you were limited; with the new fireplaces, we’re dealing with a different type of consumer who is looking for something different. And all of it uses clean burning natural gas.”

For manufacturers, shifting their focus and products has been a result of listening to consumers and making sure they’re providing the products that are topping buyers’ wish lists. That also means understanding what drives them to buy.

“Number one is the beauty, number two is the convenience and number three is the environmental aspect,” Scott says. “And with the abundance of natural gas, it’s more economical to burn gas than it is to purchase firewood.” ■

## IN THE ZONE

In addition to making a stylish statement, a natural gas fireplace can be a great way to cut energy bills. When used as a zone heater, a fireplace can keep a designated room comfortable, enabling users to turn down the central heating system a degree or two.

Experts advise using zone heating to warm areas where your family spends the most time - such as the living room. Heating bedrooms, bathrooms and areas like the utility room when they aren’t in use is simply burning money.

Jerry Scott, vice president of H.R. Peterson Co., says people can save money by not heating rooms that aren’t being used.

“You don’t have to use your central heating system to heat rooms where there’s no occupancy, you simply light the fire to warm the room that you are in,” he says. “We do that in our house in Southern California; our fireplace is located in the family room and that’s where everyone gathers.”

It is important to remember that a fireplace is meant to be a supplemental heat source, not a permanent substitute for a central heating system.



# Heat Wave

Micro CHP units cut waste while increasing efficiency.

By Mark Stuertz

They've been deployed successfully in factories and other industrial facilities for years. Yet they've never been small enough, cheap enough, or quiet enough for the home until now.

In Japan, more than 100,000 micro CHP units have been installed since 2003. Thousands more are gaining a foothold in the U.K., where they are as small as dishwashers and slip sleekly under kitchen counters. On U.S. shores, with threats of spotty power grid reliability and looming utility rate spikes, micro CHP technology is poised to revolutionize power generation.

Micro CHP is, quite simply, micro combined heating and power. Micro CHP systems simultaneously generate power and heat from the same system. Often referred to as cogeneration systems, micro CHP units harness the waste heat from power generation to heat homes, produce hot water—even warm swimming pools.

“In a nutshell, CHP units use the heat that is produced in the act of generating power,” says Karl Mayer, marketing director for Climate Energy. “They are 80 to 90 percent efficient. Typical fossil-fueled power plants have no use for the heat produced in the act of generating power, so it is wasted in rivers, lakes or cooling towers. They are typically only 30 to 40 percent efficient.”

Because these units wring up to 90 percent of the useful energy from a given fuel, they can potentially lower costs while shrinking carbon footprints. Climate Energy's Freewatt micro CHP systems utilize an internal combustion engine manufactured by Honda Motor Company. Powered by natural gas, the engine produces 1,200 watts of electric power and roughly 12,000 BTUs of heat per hour. As quiet as a refrigerator, these units can easily be located in a basement or utility room.

Many systems installed in Europe employ a Stirling engine, a high-efficiency external combustion engine that operates through the cyclical compression and expansion of a gas. These engines are also fueled by natural gas.

Instead of combustion, a fuel cell generates power and hot water from the hydrogen in natural gas. ClearEdge Power's fuel cell, hooks directly to a home's natural gas supply line. As gas is fed into the unit's fuel processor, a catalyst triggers a chemical reaction that breaks apart the natural gas hydrocarbon molecules. Then, through an electrochemical process that combines hydrogen with oxygen,



Roughly the size of a refrigerator, the ClearEdge5 fuel cell connects directly to your natural gas supply. Through an electrochemical process in its fuel processor, the unit generates up to 5kW of electricity and enough excess heat to warm about 750 gallons of water. It operates at 90 percent efficient and can cut energy costs as much as 50 percent.



The Warm Air Freewatt plus system combines a 95 percent efficient two-stage variable speed condensing furnace with a Honda MCHP natural gas engine to provide space heating and electric power.

the processor generates electricity with hot water as a byproduct.

A coil wrapped around the fuel cell captures the waste heat, which is channeled to a heat exchanger. Heating water up to 150 degrees, the system can supply up to 750 gallons of hot water per day for water heaters, swimming pools, or radiant floor heating.

“Typically our residential customers use these systems for 5,000-square-foot homes or larger,” says Mike Upp, vice president of marketing for ClearEdge. “They have pretty significant power and heating bills. And we can typically reduce that to zero or cut it by 80 to 90 percent.”

### MORE POWER, FEWER PENNIES

Upp says the units generate electricity at cost of roughly nine to 12 cents per kilowatt-hour over its roughly 15- to 20-year life span, so they operate most economically in regions with high electricity costs. In Northern California, for example, owners of large homes with high power consumption can pay up to 40 cents per kilowatt-hour.

These systems are also effective in climates where there is substantial thermal demand (living space and hot water) for a significant part of the year. The ripest markets for micro-CHP technology are in cooler climates, where electric costs are high. Sales of micro-CHP systems in Northeastern states are boosted by the relatively cool climate as well as legislation promoting net metering. Net metering allows owners of alternative energy systems to recover costs by sell-

ing surplus power back to the grid.

“Micro CHP units are typically heat led...they run when you need heat,” says Mayer. “The colder it is and the more heat you need, the more the unit will run and produce electricity. Thus the more expensive electricity is from the local utility, the more valuable the electricity generated by the micro-CHP system will be.”

### GROWING POPULARITY

While the residential market in United States is in its infancy, smaller micro CHP units can earn a 10 percent tax credit from the U.S. government, which could trigger robust demand. These units offer substantial power generation and environment advantages. Large-scale installation of these systems could forestall power plant construction and reduce dependence on coal-fired power. And since power generation is at or near the point of consumption, these systems eliminate power losses that typically occur through transmission over long-range power lines.

Large-scale adoption of these units could also potentially free up existing transmission line capacity for power generated from other alternative sources such as solar and wind. Upp foresees microgrids springing up in the future, with three or more homes powered by one large micro CHP unit. Eventually, micro CHP “farms” could power entire neighborhoods. ■



## Italian Sausage Soup with Tortellini

Prep Time: 20 minutes  
Cook Time: 1 hour, 15 minutes  
Ready In: 1 hour, 35 minutes  
Servings: Eight

### INGREDIENTS

1 pound sweet Italian sausage, casings removed  
1 cup chopped onion  
2 cloves garlic, minced  
5 cups beef broth  
1/2 cup water  
1/2 cup red wine

4 large tomatoes - peeled, seeded and chopped  
1 cup thinly sliced carrots  
1/2 tablespoon packed fresh basil leaves  
1/2 teaspoon dried oregano  
1 (8 ounce) can tomato sauce  
1-1/2 cups sliced zucchini  
8 ounces fresh tortellini pasta  
3 tablespoons chopped fresh parsley

### DIRECTIONS

1 In a five quart Dutch oven, brown sausage. Remove sausage

and drain, reserving one tablespoon of the drippings.

2 Saute onions and garlic in drippings. Stir in beef broth, water, wine, tomatoes, carrots, basil, oregano, tomato sauce, and sausage. Bring to a boil. Reduce heat; simmer uncovered for 30 minutes.

3 Skim fat from the soup. Stir in zucchini and parsley. Simmer covered for 30 minutes. Add tortellini during the last 10 minutes. Sprinkle with Parmesan cheese on top of each serving.

## Pizza On The Grill

Prep Time: 2 hours, 45 minutes  
Cook Time: 15 minutes  
Ready In: 3 hours  
Servings: 16 servings

### INGREDIENTS

1 (.25 ounce) package active dry yeast  
1 cup warm water  
1 pinch white sugar  
2 teaspoons kosher salt  
1 tablespoon olive oil  
3-1/3 cups all-purpose flour  
2 cloves garlic, minced  
1 tablespoon chopped fresh basil  
1/2 cup olive oil  
1 teaspoon minced garlic  
1/4 cup tomato sauce  
1 cup chopped tomatoes  
1/4 cup sliced black olives  
1/4 cup roasted red peppers  
2 cups shredded mozzarella cheese  
4 tablespoons chopped fresh basil

### DIRECTIONS

1 In a bowl, dissolve yeast in warm water, and mix in sugar. Allow it to dissolve for 10 minutes, or until frothy. Mix in the salt, olive oil, and flour until dough pulls away from the sides of the bowl. Turn onto a lightly floured surface. Knead until smooth, about eight minutes. Place dough in a well oiled bowl, and cover with a damp cloth. Set aside to rise until doubled, about one hour. Punch down, and knead in garlic and basil. Set aside to rise for one more hour, or until doubled again.

2 Preheat grill for high heat. Heat olive oil with garlic for 30 seconds in the microwave. Set aside. Punch down dough, and divide in half. Form each half into an oblong shape 3/8 to 1/2 inch thick.



3 Brush grill grate with garlic flavored olive oil. Carefully place one piece of dough on hot grill. The dough will begin to puff almost immediately. When the bottom crust has lightly browned, turn the dough over using two spatulas. Working quickly, brush oil over crust, and then brush with 2 tablespoons tomato sauce.

Arrange 1/2 cup chopped tomatoes, 1/8 cup sliced black olives, and 1/8 cup roasted red peppers over crust. Sprinkle with one cup cheese and two tablespoons basil. Close the lid, and cook until the cheese melts. Remove from grill, and set aside to cool for a few minutes while you prepare the second pizza.

