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Fall/Winter 2012

The Home Front

Reducing energy costs while saving Mother Earth begins at home

Plus

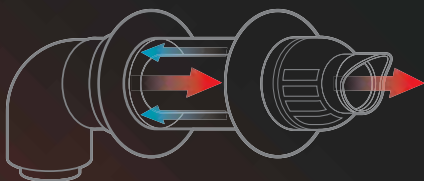
ROOM-BY-ROOM GUIDE TO ENERGY SAVINGS

HEARTH PRODUCTS SAVE MONEY IN STYLE

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Do-it-Yourself Energy Audits

Online tools make it easy and inexpensive to discover ways to improve your home's energy efficiency.

By Michelle Coulter

Those who are curious about their home's energy efficiency and want to know what they can do to chip away at household expenses now have several tools at their fingertips. In fact, there's no better place to start than an online home energy audit.

An audit provides you with practical ideas for energy cost savings and also gets you thinking about the various ways in which your home uses energy and ways for you to conserve energy.

I tried a free audit on www.energysavvy.com, and another site that can help you is www.myenergysolution.com.

It doesn't get easier than the online audit, and it's actually fun! I plugged in my home information first — that I live in a single-family house built in the 1920s in Monroe County, Pennsylvania. Four people live here in a space of 2,100 square feet on two floors.

Next, I answered questions about the type of foundation we have, insulation types and locations in our home, what kind of windows we have and how drafty the house is.

The survey requests other information on heating and air conditioning sources, thermostat settings, duct work, appliances, water heater and refrigerators, lighting, showers and electronics used within the house.

QUICK FIX

After about five minutes of taking the survey, I received immediate results on how my house rated in terms of energy efficiency, along with steps I can take to improve my results.

My score was 87 out of 100, which puts my house in a position

better than 90 percent of the homes in my county for energy efficiency. (A score that's below 80 means a less efficient home.)

The main suggestions for improvement included sealing up cracks and openings in this very drafty old farmhouse and getting rid of our second refrigerator — or upgrading it to an ENERGY STAR®-rated, more modern refrigerator.

This survey was convenient and easy, taking just a few minutes of my day and delivering real-life, practical and doable suggestions for improvement.

The second option for a free home energy audit is www.myenergysolution.com. This survey site asks for financial information — including monthly energy costs — and then provides suggestions of savings by switching to other forms of energy. Because I provided them with my email address, they also sent me tips on energy-efficient products and appliances for the home. ■



IN CANADA:

For a list of programs in Canada, go to:

<http://oee.nrcan.gc.ca/residential/personal/retrofit/272>

To find energy auditors in Canada, visit:

<http://oee.nrcan.gc.ca/residential/6551>

NEED HELP WITH YOUR ENERGY AUDIT?

Those who are interested in hiring someone else to conduct an energy audit can visit www.energyca.gov/HERS and www.energysavers.gov.

Toni Turnbull, director of marketing and business development for CalCERTS Inc., an organization that trains people (called "raters") to perform HERS (Home Energy Rating System) audits, says audits can range from \$300 to \$1,000, depending on the square footage of a house and other factors. A HERS rater inventories the physical elements of a home that relate to energy, then calculate the home's energy efficiency profile. The rater also provides

a list of potential improvements that could reduce energy consumption.

The U.S. Green Building Council's website's "Ask A Pro" page estimates professional home energy audit costs at "Free to \$1,500."

Energysavers.gov features links to a directory of audit providers across the United States. To get there, just click on "products and services." Selecting the first option, "Find a certified energy rater," will take you to www.resnet.us. This link gives information on professional auditors based on the type of auditor desired and your ZIP code.

Get with the Program

Convenience and energy savings make programmable thermostats a good investment.

Today's savvy consumers are always on the lookout for tools that can help save them time, energy and money. And few investments are better at meeting those needs than a programmable thermostat.

According to ENERGY STAR®, the average household spends more than \$2,200 every year on energy bills. Of that money, about half goes to pay for heating and cooling expenses. With a programmable thermostat, homeowners can save about \$180 a year – not bad for a device that can be found for as little as \$20 at your local home improvement store.

The key to success with a programmable thermostat is knowing how to use it properly. Taking time to program it properly, and then maintaining those settings, will create more efficient heating and cooling patterns in the home and lower energy bills year round.

HOW IT WORKS

Programmable thermostats come with pre-programmed settings, which you can then adjust to suit your own household's patterns and lifestyle. The idea is to keep temperatures at energy-saving setpoints for long periods of times – such as during the day when nobody is home, or at night, when everyone is in bed. It is possible to override these settings temporarily and make the area warmer or cooler, but be aware that you'll use more energy (and, therefore, spend more money) every time you override the programmed settings.

If you're going to be away for a weekend or for a vacation, you can use a "hold" or "vacation" feature to temporarily override your regular settings and keep the house warmer or cooler while you're gone. (You can also set it to begin cooling or heating your house to your preferred settings a few hours before you arrive home, so your home is comfortable when you arrive.)

To find what settings will work best for you, and will provide both home comfort and energy savings, use the ENERGY STAR programmable thermostat calculator (<http://www.energystar.gov/index.cfm?c=thermostats.progThermostat>).

CHOOSING AND INSTALLING

Programmable thermostats have several different features, but come in three basic models:

- 7-day. Great for people whose schedules change throughout the week, because 7-day models offer the most flexibility and allow you to set different programs for different days of the week.
- 5+2-day. This model keeps one schedule during the weekday and another on weekends.
- 5-1-1 days. This model keeps a certain schedule during the week, but allows another schedule for Saturday and a third program for Sunday.

After choosing the model that is right for your household's needs, you'll want to make sure it is properly installed. All power should be shut off during installation, and if you're not comfortable with installing it yourself, consider having a professional do the job. If you are installing the new programmable thermostat while upgrading your heating and cooling system, your HVAC contractor will be able to help determine which thermostat would work best for you and maximize the efficiency of the new system.

Finally, remember to program it! The thermostat can only save you money when used properly. ■



Hot Property

Natural gas hearth products offer energy-saving perks with modern style.



Just because you want to save money on your heating bill doesn't mean that you need to sacrifice your personal comfort. Today, a variety of modern natural gas hearth products can provide heat for rooms anywhere in the home – and save money at the same time.

Cost-conscious consumers are turning to options that can heat a specific space instead of an entire house. While fireplaces have long been a popular way to heat a single room, many people have discovered that wood-burning units are messy and high maintenance. And, of even greater concern for those trying to heat a space while saving money, is the fact that the draft from wood-burning fireplaces actually sucks warm air right out of the room when not in use, offsetting the savings you may enjoy when the fire is burning.

Natural gas fireplace inserts, and other natural gas hearth products such as log sets, natural gas fireplaces and freestanding stoves, can help increase energy efficiency without denting your bank account or demanding home demolition. Because of that, these products have become increasingly popular, and there are more options available than ever before. Today, according to the Hearth, Patio & Barbecue Association, gas products represent 70 percent of the total hearth product industry.

NATURAL GAS INSERTS

Instead of replacing a wood-burning fireplace, make it more efficient with a natural gas fireplace insert.

An insert is placed inside an existing fireplace, creating a gas-burning fireplace to replace the wood-burning unit. Inserts come with either a thermostat or a remote control, allowing homeowners to control flame height and blower speed. Inserts can cost as little as a few hundred dollars and go up to around \$2,000.

Inserts can provide considerable savings on energy bills, are extremely economical and provide an energy-efficient way to heat a room. They can turn a drafty fireplace into an efficient “zone heater,” allowing you to heat up the family or living room and turn down the central heating system thermostat a degree or two.

That means you won't pay to heat rooms that aren't in use.

It's important to remember that hearth products are meant as a supplement to the main heating system, not a replacement.

GAS LOGS

Manufactured gas log sets provide another way to eliminate the hassle and mess of a wood-burning fireplace. The sets can be installed into existing fireplaces – all you need is a gas line – and they come in

styles that simulate real wood like oak, birch, pine and walnut.

The beauty and appearance of burning wood is evident, without the hassle of ashes to discard, and with the abundance of natural gas, it is very economical as well.

NATURAL GAS FIREPLACES

Natural gas fireplaces are self-contained and generally are permanently installed. They are often directly vented to the outdoors.

One appealing characteristic of the modern natural gas fireplace is the intermittent pilot ignition system, which provides flame when needed without continuously burning a pilot light, saving on energy costs.

FREESTANDING STOVES

For those thinking outside their existing heating system, freestanding gas stoves provide yet another option. Freestanding stoves allow for creative placement because they can be installed in almost any room where extra heat is needed.

According to Vermont Castings, one of North America's largest suppliers of natural gas products, freestanding stoves offer more flexibility in venting options. They can be vented either through an existing chimney or through any outside wall. Some models can be installed without vents. (It's important to note that installation is



dictated by codes in specific areas of North America. Always check codes before buying.)

These freestanding natural gas stoves burn clean energy like the other hearth products, but look more like a wood stove than a fireplace.

SAVE ENERGY WITH STYLE

Gas hearth products are not short on style or flair. As they've moved beyond the living room and into kitchens, master bedrooms and even bathrooms, their contemporary look has helped enhance the cozy feel of any room.


Modern designs, primarily the linear designs of a fireplace, are definitely leading the way right now. The boxy, traditional appearance is giving way to a more linear look, sometimes reminiscent of a large aquarium. There's more glass, and a lot less metal and brick, as people reach for a clean, modern style.

With the design of more modern fireplaces, materials being burned in them also have become more diverse and aesthetically pleasing. They now include glass beads, gemstones and even cones, spheres and cubes that burn in place of logs.

Though traditional logs still dominate the market because people often want the look and feel of a real fire, newer materials are a fresh, increasingly popular option. ■



The Home Front



Look for ways to reduce energy – and save Mother Earth at the same time.

By Cindy Baldhoff

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With rising energy prices and higher demands on an aging electrical infrastructure, saving power today is more important than ever. Making a change for the better doesn't just benefit your bottom line; it's a move that is vital for the entire planet.

Today's consumers are looking at conserving energy for more reasons than ever before. The possibility of rolling blackouts in summer months due to the high demand for cooling during peak hours has made many people more aware of the need to better conserve, while rising heating costs cause concern for other regions. Overall, today we are more aware of the need to cut our energy usage, but knowing where to start can be tricky.

According to ENERGY STAR®, a government-supported program that aims to protect the environment by increasing energy efficiency, the average home emits twice as many greenhouse gases as an automobile. And carbon emissions – which are considered a major contributing factor to climate change – account for nearly three-fourths of those gases. Taking steps now to make your home more efficient is a move that is becoming increasingly important to secure the planet for the future.

Here are a few steps worth taking today to ensure a healthier planet (and lower energy bills!) tomorrow.

Lose the leaks.

One of the most effective ways to save money and energy is actually quite simple – and it doesn't require a lot of money, either. Sealing

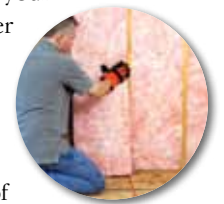
the leaks in your home can make a significant difference on your heating and cooling costs. Two easy and obvious ways to seal your home's leaks are caulking and weather stripping, which you can buy at your local home improvement store and install during



a single weekend. If your home still isn't as efficient as you think it should be, consider bringing in a professional energy rater who has the diagnostic tools to determine exactly where you are losing hot and cold air. (Keep in mind that leakage can also contribute to problems with moisture, which could cause health problems.)

Add more insulation.

While sealing off leaks will keep out more of the cold or hot air around your home, proper insulation can lower your heating and cooling costs as well. Most older homes have less insulation than those being built today, but sometimes even newer homes can benefit from additional insulation – and the investment typically pays for itself through lower energy bills. To find out more about what type of insulation (and how much) your home needs, visit www.energysavers.gov and look under “Insulation & Air Sealing.”



(continued on page 10)



(continued from page 9)

Hit the “off” button...then pull the plug.

Even though today’s appliances have become more energy efficient, we’re using far more of them than before – and that is driving our usage higher. With flat-screen televisions in multiple rooms – not to mention the connected games – and the addition of home computers, printers, scanners and even phone chargers, our circuits are carrying a heavier load than ever before. A study released last year by the U.S. Energy Information Administration indicates the use of electronic gadgets has offset many of the gains made by these energy-conscious appliances. Make a difference by investing in a “smart strip” that lets you turn off your computer and all its peripherals with a single switch – and immediately stops that “phantom” energy drain we’ve heard so much about. Make sure appliances are off when not in use and unplugged when possible.



Dim your lights.

Another common energy user is your lighting – which, according to the American Lighting Association, accounts for about 17 percent of your energy consumption. Today’s new lighting options, which include dimmers, timers and sensors, can help turn off the lights when not in use or use less light when needed. Consider changing your bulbs, too. One of the least expensive but effective ways to cut energy costs is to switch your incandescent bulbs with compact fluorescent lights (CFLs) or LEDs. These new technologies use fewer watts to give the same light, which immediately starts lowering your energy bills. They also have a much longer lifespan: CFLs last about 10 times longer than incandescent bulbs, and LEDs have an even greater lifespan, so you won’t have to change them nearly as often! And of course, remember your mom was right – you should turn off the light when you leave a room.



Change the way you wash.

Hot water can burn up a lot of energy, so it’s time to reevaluate how you use it. According to the U.S. Department of Energy, water heating can account for as much as 25 percent of the energy your home uses. One way to cut that cost is with a more energy-efficient water heater. But if you’re not ready to spring for a new model, there are other ways to reduce usage and cut costs. They include:

- Aim for shorter, lower temperature showers. The hotter the shower, the more energy it takes to heat the water. Keep your showers short to reduce the amount of hot water used – and you’ll save precious water, too!

- Insulate hot water pipes. According to the Department of Energy, insulating your hot water pipes reduces heat loss and can raise water temperature by 2 to 4 degrees Fahrenheit compared to uninsulated pipes, which means two things: you can use a lower temperature setting and you won’t have to wait as long for hot water when you turn on a faucet.
- Invest in an energy-efficient dishwasher. An energy-efficient dishwasher, when used properly, consumes less energy than washing dishes by hand. Make sure to use it only when the dishwasher is full, and be sure to buy one that’s the right size for your family’s needs. If the capacity is too small, you’ll run it more often; if it’s too large, you will waste hot water by running a partially empty load.
- Lower the temperature on your washing machine. If you’re still washing clothes on the “hot water” cycle, you are wasting energy. Heating water for the washing machine accounts for about 90 percent of its energy usage, according to ENERGY STAR, and in most cases cold- or warm-water washes and rinses are sufficient.



Then, change the way you dry.

The washing machine isn’t the only culprit when it comes to energy usage; the dryer can burn up energy not only because of its output, but also because it can raise the temperature in the home, making your cooling system work harder during summer months. Dryers aren’t ENERGY STAR rated because there is very little difference in usage from one model to the next. However, a good practice for all dryers is cleaning the lint filter after every use. If you’re in the market for a new dryer, spring for one with a moisture sensor, which will automatically shut off the machine when clothes are dry – saving energy as well as wear and tear on clothes. One more way to save both energy and wear and tear? Use a drying rack or hang clothes outside.



Re-evaluate your usage.

Of course, one of the easiest ways to lower your energy usage is simply to invest in appliances and equipment that use less energy. To find those, turn to ENERGY STAR (www.energystar.gov or <http://oee.nrcan.gc.ca/equipment/17614>), where you’ll find listings of the most energy-efficient products to help you make the most energy-efficient purchases. Also, consider getting a complete home energy audit, also known as a home energy assessment, done by a professional energy auditor. Your local utility company can recommend a company, or in some cases may even offer residential energy assessments themselves. ■



In Hot Water

Tankless water heaters can enhance your comfort while saving energy and money.

Hot water is one of those things that you don't truly appreciate until it runs out. But with new gas tankless water heaters, you can enjoy an endless supply of hot water – and save money and energy, too. Unlike traditional storage tank water heaters, which are always “on” and continuously keep an entire tank of water hot, tankless units only heat the water when the tap is turned on. The water heats up to the desired temperature and stays there until the tap is turned off. Best of all, residential tankless water heaters can generally support up to three hot water uses at the same time – and still maintain adequate water pressure.

The idea of unlimited hot water is certainly appealing, but it's not the only reason to consider buying a tankless water heater. The main reason many households look at a tankless water heater is for energy savings. The heater is triggered by the flow of water, so when a faucet is turned on the water is heated as it passes through the unit, providing on-demand hot water with very little consumed energy. Because it isn't heating and reheating water around the clock like traditional tank-style water heaters, a tankless unit can save money on energy bills. For maximum energy savings, experts recommend a natural gas water heater instead of electric, because gas water heaters have higher first hour ratings and recover more quickly than electric water heaters. This is true for tank as well as tankless water heaters. In most markets in both the United States and Canada, natural gas is considerably less expensive than electricity, which further adds to the savings.

MORE BENEFITS, BIGGER SAVINGS

In addition to savings on energy bills, tankless water heaters offer customers a few other benefits:

- The units are smaller than traditional storage tank water heaters, which means they save space as well as energy.
- Tankless water heaters typically last 20 years or more and have easily replaceable parts.
- There is no pilot light constantly running and no standby heat loss from stored water.
- Certain models can be installed outdoors.

Their versatility is a huge selling point, but it's important to remember to do your research before buying. Retrofit installation of a tankless water heater will cost more than installing a traditional tank-type heater, and in some cases special venting may be needed. Some other things to consider when purchasing a tankless water heater include:

Size. To make sure your unit will deliver enough hot water, you'll probably want to bring in a trained professional who can help determine the flow rate and temperature rise you'll need. Make sure the unit you buy is able to deliver the most common temperature rise of 70 degrees Fahrenheit/21 degrees Celsius at the desired flow rate.

Flow rate. Tankless water heaters require a minimum flow of water (usually about one-half gallon per minute) through the heating mechanism. Make sure the flow rates at outlets connected to the heater exceed the unit's minimum requirements.

Compatibility. Ask your plumber to verify that your current gas and water lines are sized properly for the tankless water heater to operate correctly. ■



Room by Room



Every space in your home offers an opportunity to save money on energy.

In recent years, the focus on saving energy has gone beyond simply saving money; it's also about doing the right thing. Saving money on heating, air conditioning and energy expended by our household appliances is important. Increasingly, consumers also place value on cutting back on energy to help save the planet.

Regardless of your motive or how big – or how small – your home is, chances are that there are plenty of ways for you to trim energy use and cut costs. Energy savings isn't a one-size-fits-all proposition, so you have to take into account the climate you live in, what is best for your home and any individual budgetary considerations. For some, replacing an electric hot water heater with a natural gas tankless heater is a worthwhile investment, while for others it might simply be too large of a cash outlay. So let's walk through the typical home, see where there's room for improvement (and savings) and let you decide for yourself which ones are right for you.

The Entry Way

Let's start at the beginning – when you enter your home. Did you know that doors and windows that aren't properly sealed can account for a huge amount of energy loss? While you would never think about leaving a window open in the dead of winter or heat of summer, you might as well be doing that if you have leaks or cracks that aren't properly sealed. The fix for this is simple and cost-efficient: weather stripping and caulking.

The addition of storm windows can also help keep drafts out and reduce heat loss from the home, as can heavily insulated drapes.

If you have an older front door, consider adding a storm

door to keep warmth in the home and help save energy. (Newer doors are generally better insulated, so the expense of a storm door probably would not make a significant difference in comfort and energy consumption.)

Living (and Sleeping) Spaces

There are several ways to improve energy efficiency in bedrooms, living rooms and family rooms. Of course, the window improvements discussed above are good advice for every room in the house, and keeping the thermostat lower in the winter and higher in the summer is a good start, too. Recommended temperatures for winter are 68 degrees Fahrenheit/20 degrees Celsius during the day, and lower during the night or when no one is at home. In the summer, boost the thermostat to 78 degrees Fahrenheit/25 degrees Celsius during the day, and you'll see a noticeable difference in your cooling bills.



Consider adding a programmable thermostat to help you maintain temperatures. (See page 5 for more on installing a programmable thermostat.)

Ceiling fans are another low-cost way to increase comfort year round. In the winter, they help push warm air down and in the summer they help circulate the air. (Always check the operation guide to make sure your ceiling fan's blades are turning in the appropriate direction for the season you're in.)

Living rooms with a natural gas fireplace or stove come with built-in energy savings; using the fireplace or stove as supplemental heat when you're in the room allows you to turn down the thermostat, which means you aren't paying to heat rooms that aren't being used.



The Kitchen

The kitchen offers several ways to save money and energy, beginning with the appliances. Today's more energy-efficient appliances mean that the investment in new equipment could offer energy savings that offset the purchase price. Modern dishwashers use one-third less water than their older counterparts, and they consume less energy, too. In fact, if you have a dishwasher that was made before 1994, you are paying about \$40 a year more on energy than you would if you bought a new model.

An ENERGY STAR® refrigerator uses 20 percent less energy than models that haven't earned the logo. And, if you still have a fridge from the 1980s, replacing it with a modern model will save you about \$100 a year on utility bills.

When it comes to cooking, those who use gas will want to make sure they have an energy-efficient range hood that vents directly outside.

Bathrooms

Most of the energy used in the bathroom comes from water – and that is literally money down the drain. To save money, start by installing low-flow faucets and showerheads, which can cut water usage by as much as 40 percent. If your showerhead was made before 1992, it probably puts out five gallons of water per minute, while today's showerheads put out half that amount. For further savings, an adjustable showerhead can put out just one gallon of water a minute. Toilets can also benefit from making the switch to low-flow or dual-flush models.

Another effective way to save water is also the most obvious: Take shorter showers, and don't insist on "heating up the water" before getting in the shower. Cutting a 10-minute shower to eight minutes adds up, and changing other habits – such as turning off the water when shaving or brushing your teeth – are small steps that can add up to significant savings.

Laundry Room

The kind of equipment in your laundry room can save money, too. For example, did you know that a front-loading washing machine uses 40 percent less water than top-loading machines, and can wash larger loads, too? Switching from electric to a natural gas dryer can save money because natural gas is much less expensive than electricity.

Conserve water and become more efficient by washing laundry once a week instead of "as needed" – you will save water compared to washing items as you need them, and using a dryer that is already warm means you won't have to wait for it to heat up each time – which means it will use less energy. (For more ways to save money and energy while using your washer and dryer, see "The Home Front" on page 8.) ■



ELECTRICITY

100»
MMBTU
source
energy



Extraction, processing and transportation losses

88»



Conversion losses

29»



Distribution losses

27»



Delivered to customer

NATURAL GAS

100»
MMBTU
source
energy



Extraction, processing and transportation losses

92»



Distribution losses

90»



Delivered to customer

Thanks to lower conversion losses, three times more energy reaches the customer with natural gas than with electricity.

Save Money and Reduce Waste

Why natural gas is good for the planet and your pocketbook.

Although it's something that we often take for granted, electricity is not something that "just happens." In fact, when you walk into a room and flip a switch, the light that comes on is the end result of a lot of hard work.

Electricity is produced by using another source of fuel – coal, oil, natural gas or even nuclear power. The process of making electricity is actually one that creates a lot of waste and also wastes a lot of energy. In fact, according to the U.S. Energy Information Administration (EIA), slightly less than 30 percent of the energy used to produce electricity actually makes it to the end user. So more than 70 percent of the energy used to make electricity is wasted, chalked up to what the industry refers to as "conversion losses."

As homes have gotten bigger, and we have started using more appliances – as well as adding multiple televisions and computers to the home – the demand and usage of electricity has increased. As we look for more ways to attain greater efficiency, and to reduce the impact of electric usage on the environment, natural gas becomes a logical choice.

Natural gas is a popular alternative energy source because it pro-

vides greater efficiency, and unlike electricity, 90 percent of the natural gas produced and piped to your home goes directly to appliances. As the world's cleanest-burning fossil fuel, natural gas has a lower level of carbon emissions, nitrogen oxides and sulfur dioxide than coal and oil. Switching to natural gas appliances can significantly lower your carbon footprint – and you'll see the savings on your energy bill as well.

If you're already using natural gas, and want to learn ways to further save energy, review the age and efficiency ratings of your current appliances. New models are going to be more energy efficient, and you may find that the lowered cost of operating the appliance helps offset the purchase price. To compare, check the EnergyGuide® label on U.S. appliances and EnerGuide label on Canadian appliances to see what kind of savings the appliance might provide. ■

For more on how to use the EnergyGuide® (U.S.) and EnerGuide (Canada) label, go to www.ftc.gov/bcp/edu/pubs/consumer/homes/rea14.shtm oee.nrcan.gc.ca/equipment/appliance/1799



Saucy Green Bean Bake

Prep Time: 30 minutes

Ready In: 30 minutes

Servers 4

INGREDIENTS

- 1 (8 ounce) can tomato sauce
- 2 Tbsp diced pimientos
- 1 Tbsp prepared mustard
- 1/4 tsp salt
- 1/8 tsp pepper
- 1 pound fresh or frozen cut green beans, cooked
- 1/2 cup chopped onion
- 1/3 cup chopped green pepper
- 1 garlic clove, minced
- 2 Tbsp butter or margarine
- 3/4 cup shredded process cheese (Velveeta)

DIRECTIONS

- 1 In a bowl, combine the first five ingredients. Add the green beans; toss to coat.
- 2 Transfer to an ungreased one quart baking dish. Cover and bake at 350° F for 20 minutes.
- 3 Meanwhile, in a skillet, saute onion, green pepper and garlic in butter until tender. Sprinkle over beans. Top with cheese. Bake, uncovered, for three minutes or until cheese is melted.

SOURCE: ALLRECIPES.COM

Hearty Holiday Turkey Stew

Prep Time: 25 minutes

Cook Time: 6 hours

Serves 4

INGREDIENTS

- 3 pounds turkey drumsticks, skin removed
- 1 small onion, diced
- 1 Tbsp honey
- 1 Tbsp cider vinegar
- 1 1/2 tsp finely chopped fresh ginger
- 1 tsp salt
- 1/2 tsp black pepper
- 1 cup chicken stock

- 1 pound sweet potatoes, peeled and cut in small cubes
- 1/2 cup dried cranberries

DIRECTIONS

- 1 Combine turkey, onion, honey, vinegar, salt, pepper and stock in large pot. Cover and cook over low heat for five hours, then add potatoes and cranberries. Cook about 45 minutes more, until potatoes are tender.
- 2 Remove turkey from stew and remove bones. Return meat to stew; toss and serve.



BAXI LUNA

If a compact, high efficiency boiler can heat a home in Alaska reliably, it can heat a home anywhere



Proven performance, plus substantial fuel and space savings, make the gas-fired Baxi Luna condensing wallhung boiler a preferred heating solution, anywhere in North America. No bigger than a kitchen cabinet, this whisper-quiet wallhung appliance saves valuable living space. It normally reduces fuel consumption by up to 50% and greenhouse gas emissions by up to 90% over conventional boilers.

- ◆ **Range:** Up to 98% thermal efficient, Baxi Luna is ideal for new construction or retrofit applications – from in-floor radiant, heated towel racks and snow melt systems to forced air with a hydronic air handler. In addition to heating-only models, Baxi offers a combination heating and domestic hot water boiler, the first of its kind in North America. The modulating, condensing Baxi Luna HT 380 satisfies a heat load up to 113 BTU/hr, fully modulating to 32 MBTU/hr. The unit prioritizes to domestic hot water demand, producing endless hot water at a rate 3.9 gallons per minute ($\Delta T 80 F$) – enough for two concurrent showers.
- ◆ **Quality and Safety:** Baxi Luna is CSA and Energy Star approved. The boiler's nickel chrome stainless steel pre-mix burner (AISI 316L) bears the ASME H-Stamp. All Baxi products comply with lead-free standards.

Other Baxi residential boiler built-in safety features include: electronic, gradual ignition (no open flame); flue high limit, central heating high limit, fan pressure and differential pressure switches; flame sensing electrode; back flow prevention; circulator pump with integrated air vent; expansion tank; automatic self-diagnostics; frost protection and a Legionella prevention function.

Baxi Luna wall-hung boilers must only be installed by qualified plumbing and heating contractors who are Baxi trained and certified, and who purchase Baxi supplies through authorized regional Baxi distributors. The manufacturer and Marathon International, the exclusive Baxi products distributor in North America, are committed to quality, safety and environmental protection, and will not authorize the sale of Baxi equipment over the Internet.

www.wallhungboilers.com

