

Lower bills a goal in energy-saving upgrades

By MICHELE LERNER

SPECIAL TO THE WASHINGTON TIMES

The bottom line is at the top of everyone's minds these days: how to save money, where to spend money to get the most value for the dollar and how to survive the recession. For many homeowners, homebuyers and home sellers, energy efficiency is one place where spending money makes sense.

A number of elements go into what is loosely known as "green building," but for average consumers, the most important part of green building is energy efficiency. Saving the planet is a lofty goal shared by many people, but nearly everyone wants to save money on gas, electric and water bills.

"The number one focus among clients interested in green features is energy efficiency," Mr. Horgan says. "While it is more complicated to add energy efficiency to an existing home than to a newly constructed home, you can do lots of things to improve the efficiency of a home, and it is less expensive than you might think."

Mr. Horgan says BOWA recommends that every client have a professional energy audit, particularly before starting a home renovation project. A professional audit costs about \$400 for an average home and takes about three to five hours. Mr. Horgan says the audit should include a blower door test, which estimates the level of air filtration in the home. Thermography also frequently is used to estimate the air-tightness of a home.

Mr. Horgan says the two most common projects undertaken after a professional energy audit include air sealing — which typically means caulking or sealing common air leaks, especially in the attic — and adding more insulation to walls and the attic.

"A professional energy auditor can prioritize potential proj-

ects by the costs and benefits to help people decide which projects are worth doing," Mr. Horgan says. "For example, in some cases, walls can be insulated from the outside, but if the walls have to be taken apart, that might move down on the list of what makes sense in terms of costs and benefits."

Mr. Horgan says many clients choose to upgrade their heating and air conditioning systems as part of a renovation project. He says most heating and air-conditioning systems that are more than 15 years old are getting near the end of their effectiveness, so homeowners who can replace them now will improve the energy efficiency and reliability of the systems.

"If you are contemplating a home renovation or improvement project, it just makes sense to evaluate these systems at the same time and to look at the air quality in the home," Mr. Horgan says. "The outcome is a more comfortable house."

BOWA Builders is an EnergyStar partner, which means it reaches or exceeds the high standards for energy efficiency established by the Environmental Protection Agency (EPA). BOWA's employees and contractors have earned a variety of green designations, which mean they have been trained in green building techniques.

"Green building is better building, so we are just continuing to do what we've been doing for more than 20 years," Mr. Horgan says.

He adds that while some customers are interested in green building to help save the planet, others are more interested in their return on investment.

"The return on investment for increasing energy efficiency can be as high as 50 percent," Mr. Horgan says. "A few years

» see **FOCUS**, page E11 ago, it was hard to know whether a home was energy efficient or not, but now with EnergyStar certifications and the introduction of LEED for

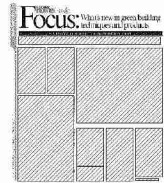
Homes [rating] standards, it will be unusual in a few more years to find a new home that doesn't have a green certification. It would be a mistake for homeowners not to address energy efficiency."

Mr. Horgan points out that Montgomery County recently implemented a law that requires home sellers to include their annual utility bills (electric, gas and heating oil) with their home listing so buyers can compare utility costs. The law, which went into effect Jan. 1, also states that sellers must include general information in the listing about any energy audits or energy improvements made to the home.

In addition to gas and electric bills, many homeowners and potential homebuyers are concerned about water usage. The EPA recently instituted a new standard for water use, EPA WaterSense, which is similar to EnergyStar certification for appliances. Consumers can go to the EPA Web site (www.epa.gov) for information about water-saving devices. The EPA says WaterSense products save about 20 percent of water compared to the average product.

Homebuyers and home sellers should become knowledgeable about water usage, energy efficiency and the air quality in a home they want to sell or one they might want to buy. Realtor June Gardner of Evers & Co. Real Estate Inc. in Northwest Washington is among the first Realtors in the Washington area to earn the EcoBroker certified designation.

"Earning an EcoBroker certification means that agents have passed courses and submitted essays that demonstrate their knowledge of green building elements," Ms. Gardner says. "With my knowledge, I can help both buyers and sellers recognize the importance of energy efficiency. There is a wide scale, from tiny projects, which can increase energy efficiency, to a complete home remodel."



Ms. Gardner says many buyers are not aware that Federal Housing Administration and Fannie Mae mortgage loans are available that allow consumers to roll the expenses associated with improving the energy efficiency of a home into the mortgage.

On a smaller scale, Ms. Gardner points out that all homebuyers and home sellers can check things like making sure the fireplace damper is tightly closed to stop cold air from leaking into the house and warm air from leaking out.

"For a few dollars, homeowners can purchase foam insulation for their electric switch plates, which will prevent outside air from leaking around them," Ms. Gardner says. "Making energy-efficient improvements boils down to saving money, which is good for you, while at the same time it is good for the environment."

As an EcoBroker, Ms. Gardner can point out to buyers things that are energy efficient in a property, things that can be converted easily to become more energy efficient and features that could be a major problem to fix.

"On the sellers' side, I can

highlight the small improvements they may want to make in order to make their home more energy efficient," Ms. Gardner says. "I can also market these features or anything in the home that is energy efficient."

For example, Ms. Gardner points out that front-loading washing machines are more energy efficient than top-loading washers.

Because the EcoBroker designation is so new, Ms. Gardner (so far) has been approached by only one client interested in promoting the energy efficiency of her home. In general, Ms. Gardner initiates conversations with both buyers and sellers about energy efficiency.

"Consumers are probably most aware of the importance of energy-efficient windows and will ask about the age of the windows and whether they are double-paned," Ms. Gardner says. "Some have heard of elements such as geothermal heating, but until demand is high for these systems [or for solar panels], they remain fairly expensive. I think the tipping point is coming when people will demand more energy-efficient features and then the prices will start to come down."

Ms. Gardner says the energy-efficient features that most interest her clients are the ones they know will result in immediate savings on energy bills.

"People are naturally more attracted by small steps, with projects that can be accomplished easily and without a lot of cost," she says.

The American Institute of Architects (AIA) Home Design Trends Survey in 2008 showed that homeowners are more interested than ever in managing their energy use. The survey of 500 architecture firms that focus on residential building showed that 69 percent of their clients are interested in energy-efficient products, compared with 62 percent in 2007. More clients expressed an interest in tankless water heaters (88 percent compared with 72 percent in 2007) and in green flooring (69 percent in 2008 compared with 62 percent in 2007). Water saving became increasingly important, with a jump in interest in this topic from 47 percent in 2007 to 62 percent in 2008.



PHOTOGRAPHS COURTESY OF BOB NAROD

A permeable concrete paver driveway absorbs rainfall and releases it slowly, reducing stormwater runoff in this new green custom-home project in Arlington by BOWA Builders.



Dehumidification equipment is coupled with the pool water system to deliver free pool heating and increase the dehumidification efficiency for this indoor pool in a home built by BOWA Builders.



COURTESY OF BOB NAROD

In this custom home by [BOWA Builders](#), the staircase features Appalachian hardwoods from nearby forests to support local industry and minimize transportation energy expenditure.