

Simple tips can help keep your home warm this winter

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As winter weather approaches, there are a few simple and effective steps homeowners can take to keep the warmth in and the winter out, says a Purdue University energy expert.

Home heating costs are expected to rise this season for the most popular sources of heat - natural gas, oil, propane and electricity - so it's more important than ever to make the most of the heat your furnace produces, says Athula Kulatunga, an associate professor of electrical and computer engineering technology and a certified energy manager.

"About 45 percent of the energy used in homes goes toward heating and cooling, so running your system in the most efficient way can make a big impact," he says. "There are a number of common-sense measures that can go a long way toward keeping energy bills manageable or even reducing them."

Kulatunga, who has been selected by the Association of Energy Engineers as a Legend in Energy for his accomplishments in the energy industry, offers several tips to make homes more energy-efficient:

- * Install a digital thermostat to automatically reduce the heat while you are at work or sleeping. As much as 10 percent can be saved on heating bills by turning the thermostat back 10 percent to 15 percent for eight hours. Most people won't even notice the difference while sleeping, Kulatunga says.

- * Install an insulator blanket on your water heater. This can greatly reduce the effect cold air has on a heater located in a cool basement or garage. Insulation around exposed pipes leading to the heater also will conserve heat.
- * Keep the furnace and water heater free of debris so air can flow efficiently, reducing the load on the systems.
- * Make sure the central point to which air goes into the furnace is clear and the door to that room is open so air can flow freely.
- * Inspect your home for leaks that will let in cold air. Particularly feel for cold air coming in around doors, windows and electrical sockets, and seal off leaks or cracks. Kulatunga says windows are the least insulated parts of a home, and sealing off gaps with caulk or weather stripping or applying plastic to the windows can stop cold air from flowing in.
- * Make sure there is insulation on every portion of the ceiling and every outer wall. Ideally, these spaces should be insulated to an R-value of 20, a measurement of insulation's effectiveness. In most homes, that means the equivalent of about six inches of insulation to maximize protection.
- * Use your clothes dryer sparingly. In addition to using additional energy, dryers suck out heat from a room, causing the heating system to work harder.

More energy-saving techniques are available online at the U.S. Department of Energy Web site at www1.eere.energy.gov/consumer/tips/

Source: Purdue University

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