Energy Matters

Geothermal Utilities Are A Hot Topic

(NAPSA)—Those who think geothermal heating and cooling systems are just for individual homes may be in for a surprise.

A number of cities, both in the U.S. and elsewhere, are exploring how to best implement the technology to create a geothermal utility. They believe such a utility can offer consumers lower energy costs as well as tax savings.

How It Works

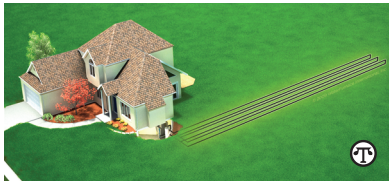
A geothermal heat pump (GHP) works very similarly to a normal heat pump except that it exchanges heat with the ground instead of the outdoor air. A GHP uses a system of underground pipes filled with water to transfer thermal energy to and from the home and brings it up to temperatures suitable to heat or cool.

Using the earth as a natural energy source, a geothermal system can operate more efficiently than ordinary heating and air-conditioning systems because it can deliver five units of energy for every one unit of electrical energy used. That translates to a 500 percent efficiency rating.

An Example In Michigan

The city of Wyandotte, Michigan is creating a geothermal utility and installing geothermal heating and cooling systems in 48 structures located in the city.

Tentative plans call for the city's municipal services to cover the average $8,000 cost for each well and charge home and building owners a monthly service fee and energy charge, based on the capacity of the system installed.



Experts say homeowners who use a geothermal utility may save as much as 70 percent on heating and cooling costs and be eligible for a tax break.

It's projected that homeowners using the utility will save as much as 70 percent compared to the costs associated with more conventional heating and cooling systems.

Plus, homeowners will be able to take advantage of a 30 percent tax credit on the cost of purchasing and installing a geothermal system. This means the system can provide savings both by costing less than a traditional air source heat pump and delivering even greater efficiency.

"In addition to savings, a geothermal system provides precise distribution of comfortable air all year long, eliminating hot and cold spots throughout the home and providing quiet operation," said Jeff Caplan, the principal contractor on the project. He selected a geothermal heat pump from WaterFurnace to provide efficient heating and cooling to the original homes in the project.

WaterFurnace International, Inc. is a leading manufacturer of geothermal and water source heat pumps.

To learn more, you can visit www.waterfurnace.com.