

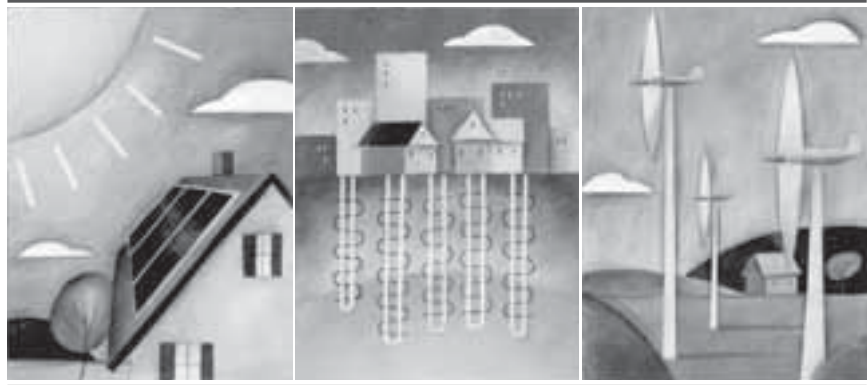
Which Is Greener?

There is a tremendous effort to promote renewable energy as the source of energy for the future. The reasons are many, but the primary two reasons are to reduce our dependence on foreign energy and have a cleaner environment. With the new Obama Administration a concerted effort has been implemented to accelerate the building of renewable energy resources.

In the past two renewable sources have been promoted and are visible upon the landscape in different areas of the country. These two sources are wind and solar. Wind farms are sprouting up in fields throughout the Great Plains and the corn and bean fields of the Midwest. Across the South and in the West solar panels are appearing on buildings, homes and in the desert sand.

But there is another renewable energy that is not visible on the landscape. It is called geothermal and quietly works under ground. Its energy source is the earth. The earth stores energy from the sun and from the heat generated in the core of the earth. Scientists have calculated that there is more energy stored in your back yard than you will ever be able to use. It works when the wind is not blowing and when the sun is not shining. In fact it works twenty-four hours per day, seven days per week and 365 days of the year. You don't need fields, roofs, transmission lines, or land leases. All you need is an area in your yard about the size of a 10' by 10' room in your house.

Each renewable energy source has its own strengths and weaknesses. Wind, when it is blowing, can be converted to electricity for lights and appliances. Solar, when the sun is shining, can be converted to electricity and used to heat water or rooms in a house. A geothermal system requires electricity to operate but it leverages the electrical use to transfer stored energy from the ground into



your home. A geothermal system can heat water and significantly reduce the overall energy for heating and cooling a home.

But which source of renewable energy will help reduce your energy costs the most? It depends on where you live, the investment in the renewable energy equipment and your existing utility costs. Approximately 60% of your monthly home energy cost is to provide domestic hot water, heating and cooling. It is the one area of energy use that potentially can be reduced the most.

What is the investment that I would make for each source of renewable energy? For approximately \$20,000 you can install a 3,000 Watt solar panel or a 5,000 Watt wind turbine. For around \$18,000 you can install a four ton geothermal system to heat and cool your home. The efficiencies for residential use in east central Illinois are 20% to 25% for wind and 15% to 20% for solar. The efficiency of a geothermal system is 400% and higher.

A member on Eastern Illini Electric Cooperative's lines that averages 1,500 kilowatt hours per month and 75,000,000 Btu's to heat their home per year would save the following:

All three forms of renewable energy reduce the need for conventional sources of electrical generation. All three forms of renewable energy reduce our dependence on foreign energy. All three forms of renewable energy reduce green house gas emissions. All three sources can reduce your energy bills. All three forms of renewable energy qualify for a 30% federal tax credit if installed between 2009 and 2016.

For more information contact the Eastern Illini marketing department at 800-824-5102 or visit our Web site at www.eiec.coop. Eastern Illini is a Touchstone Energy cooperative and your connection to energy wise living.



| System | kWh Savings per Month | \$ per Month Savings | Payback Period |
|-------------------------|-----------------------|----------------------|----------------|
| 3,000-Watt solar panel | 438 kWh's | \$37.67 per month | 37 yrs 8 mos. |
| 5,000-Watt wind turbine | 913 kWh's | \$100.00 per month | 11 yrs 8 mos |
| 4-Ton geothermal system | 60,000,000 Btu's | \$118.15 per month | 8 yrs 11 mos |