## **Alternative Options for Renewable Energy**

As much as we all want to make changes to live a "green" lifestyle and help to make the environment cleaner, the sad fact is that most of our homes produce more greenhouse gas emissions than the average car, even twice as much. Energy usage to keep a home running is costly and excessive, with 50% of the expenditure used in heating and cooling.

However, times are quickly changing. People everywhere are looking to cut costs on household expenses. Rocketing oil prices, combined with government incentives to go green and increase energy efficiency, are motivating households across the nation to take steps to switch over from traditional fossil fuels to alternative sources of renewable energy.

Without even changing the source of your energy use, there are many ways to save energy around the home. Effective insulation is integral to making a home more energy efficient. It can help to tighten up a home's thermal envelope, which is the barrier that keeps the environment inside the home protected from the outside elements. The tighter the thermal envelope, the less a home's heating and cooling system has to work to keep the home comfortable.

Making small changes such as investing in energy efficient appliances, line drying clothes, or only running clothes washers and dishwashers when they're full, all can make a huge difference when it comes to reducing a home's energy use and saving costs. Just setting a programmable thermostat a few degrees lower in the winter and a few degrees higher in the summer can make a significant impact. Or set the heating or cooling to come on a little while before someone is due home if it is vacant for long periods during the day. Any of these ideas can help increase energy efficiency before opting to switch over to renewable energy.

If you are ready to investigate natural, alternative energy for your home, there are multiple options worth looking into. They all require considerable investment and installation, but are all well worth it if saving energy and costs over the long run is your goal. Be sure to look into tax rebates and government incentives before you get started.

## Solar Energy

Solar homes produce all or most of their own energy from the sun. Newer technology and thin film photovoltaic cells have made it easier than ever to install solar energy collectors, even right to roofing shingles. With adequate battery storage and backup, energy can be saved to get through long periods of overcast or inclement weather.

## Micro Hydropower

Micro hydropower can generate power for more remote locations, even those farther from the mainstream power grid. Water wheels, which rotate with the flow of small streams or rivers, can be installed to produce power without disrupting the environment or using a dam.

Wind Energy

Wind energy can meet many different energy needs. Generated by turbines, it is completely eco-friendly and renewable, and is similar in cost to other kinds of electricity.

These are just a few of the many kinds of renewable, natural energy sources that are increasing in popularity. If you care about the environment and are interested in saving costs in your home, they're all well worth looking into.