

## **Renewable Energy Benefit Bill Unjustifiable**

BY DARREN LOMBARDO • FEBRUARY 17, 2011

The Maryland Renewable Energy Benefit bill would charge 1.3 cents per kilowatt hour for 1,000 kilowatt hours or more, which it defines as "high usage." Who decided 1,000 kilowatts for an average all-electric home is "high" usage? I have been working in building science and energy home improvement for seven years. An all-electric home that has received all Energy Star appliances and energy efficient home improvements galore will use more than 1,000 kilowatt hours per month.

The 1,000-kilowatt figure is unrealistic; it won't be achieved for an all-electric home unless the electricity supplied to the house is not used. I believe politicians selected 1,000 kilowatts as their basis, because someone knows this will never be achieved -- even by the most conservative homeowner. These revenues would be deposited into the Maryland Renewable Energy Benefit Fund in order to finance solar energy, geothermal heat pump, wind power and energy-efficiency projects. The term "benefit fund" was selected because it sounds more pleasant than the term "tax." Don't be fooled -- this is simply a tax. Who benefits? Are these projects for state government, local municipalities or taxpayers?

Here are some facts about solar energy, geothermal heat pumps and wind power. I install solar energy technologies; the panels are too expensive (because of rare silicon) and only have a lifespan of about 25 years. No return will be realized on this investment, even with state and government incentives to help with the initial purchase. Although it will lower power bills once installed, there's no savings until a complete payback is realized. By that time, the solar panels need replacing.

Solar hot water heaters don't save anything unless homeowners install and maintain them. The system requires maintenance, winterization and spring start-up, making the labor cost eat through any potential savings. This makes the technology pointless -- unless you live in a cabin where you lack access to electricity or gas.

From our load analysis performed on hundreds of homes with geothermal heat pumps, we conclude geothermal heat pumps use more electricity than standard high-efficiency air-to-air exchange heat pumps. The reason is they run pumps that circulate water from a deep well and return the water once it passes through the geothermal heat exchanger. The only time geothermal heat pumps perform better is when it's below 30 degrees, which would be more beneficial to northern states. With fewer cold days, the \$18,000-\$20,000 price tag per unit is not cost-effective in Maryland.

Wind power is good, but as a supplement. Wind cannot replace or produce enough power to carry live demand loads in large or commercial deployments. On a residential level, restrictions, regulations and neighbors make it difficult for homeowners to install on their properties, and the cost of a turbine (compared to what it can produce) outweighs the savings, including maintenance and lifespan of the turbine. Lastly, the wind is not always blowing so production of electricity is unpredictable.

Contact our Maryland senators and let them know this tax is unjustifiable, that real energy efficiency cannot be achieved by taxing consumers' dependable resources -- especially in today's struggling economy.

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<http://www.delmarvanow.com/apps/pbcs.dll/article?AID=2011102170359>