

Akron Resident Provides Enhanced Solar Tour

As a three-year participant on the Ohio Solar Tour, our family always looks to add something new and exciting for tour visitors to our 84 year old solar powered home. This year, we decided to team up with HomeEnergyMD, a local energy audit and comfort improvement company, to provide the public with an "Enhanced Tour." The Enhanced Tour incorporated a 'before-and-after home energy audit' to show visitors the impact and benefit of energy efficiency and conservation.

In August, a baseline home energy audit was conducted. For the size and age of the home, the auditor expected to see air flow during the blower door test of 5,000 cfm, but to his surprise it was only 3,480 cfm. These results were better than expected, but still a far cry from the 1,500-2,000 cfm that an Energy Star rated home of this size would measure. Retrofit recommendations included sealing the air infiltration along woodwork, in the basement, and from the attic to the second floor. It was further suggested that I add R-60 cellulose insulation in the attic and insulate an uninsulated wall in our living room.

During the Ohio Solar Tour in October, HomeEnergyMD conducted a live energy audit. Along with the casual solar-interested parties, many people visited just to see the energy audit, which included blower door testing and thermal camera imagery. Upon completion of the tests, proof of a successful energy audit and retrofit was in the numbers and shown on



Tom Deneen shares details about his 5.2 kW photovoltaic installation during the Solar Tour

the camera. Cold bands of air infiltrating along baseboards and windows that the camera previously showed had disappeared, and airflow measured during the blower door test improved from 3,480 cfm to 2,571 cfm. Although it is still short of the performance of an Energy Star rated home, it is a >26 percent improvement!

Our family is eager to see the continuing decrease in energy consumption for our home, adding this work to our PV array will drive us closer to our net-zero energy

goals. We will continue to share our story and show that not only is it possible to design and build fabulous energy-efficient homes, but it is also possible to make great cost effective energy-efficient retrofits. For more information on energy auditing and insulation and efficiency improvements, visit <http://www.energystar.gov> or participate in the 2010 Ohio Solar Tour where there is sure to be many more "Enhanced Tours."

Tom Deneen

Offshore Wind Turbines in Lake Erie Bring Energy & Money

On Dec. 1, the Lorain County Commissioners hosted speakers from the Great Lakes Energy Development Task Force (GLEDTF) to discuss the results of an offshore wind turbine feasibility study and the corresponding plan to install an *Initial Commercialization Project (ICP)* in Lake Erie off the shores of Cleveland. While there are hundreds of offshore turbines installed in Europe with plans to install thousands more, presently no offshore turbines are installed in North America, even though there are many being planned.

Commissioner Ted Kalo followed the GLEDTF presentations to discuss the benefits that installation of wind turbines



in Lake Erie would bring to Lorain County. Commercial-scale offshore windfarms represent hundreds of millions of dollars in investments, and their deployment in Lake Erie would help to retain existing manufacturing jobs while creating jobs in new industries. Because of this large economic opportunity, the Lorain County Commissioners announced the county will join the Lake Erie Energy Development Corporation, which is being formed to develop the ICP.

Visit www.loraincountychamber.com/membership/?f=759 for the PowerPoint presentation.

Mike Challender