

RENEWABLE ENERGY IN MICHIGAN

Breakout Sessions

Solar Energy Options- Peter VonBuskirk

10:45 – 11:45 am

There are many ways to utilize the sun's constant rays to supplement household energy usage. This presentation covers a variety of solar thermal energy concepts that are scaleable to fit most residential and commercial applications. A thorough description of the makeup, method, and benefits of each concept is given. Also, a consideration of each system's potential return and suitability is incorporated.

Alternative Fuel – Jim Pitts

10:45 – 11:45 am

This seminar will encompass an overview of the alternative fuels available for vehicles; including compressed natural gas, propane, ethanol, methanol, electric, hybrids, and fuel cells. Emphasis will be made on fuel cells and hybrids. Jim will discuss the current status of each of the fuels in Michigan.

Geothermal Heating and Cooling – Kirk Patten

10:45 – 11:45 am

Discover how you can save on your heating and cooling cost using a geothermal system. The earth absorbs almost 50% of all solar energy and remains a nearly constant temperature of 50°F to 70°F depending on geographic location. Working with an underground loop system, geothermal heating and cooling systems utilize this constant temperature to exchange energy between your home and the earth as needed for heating and cooling.

Building an Energy Efficient Home – Arn McIntyre and Bob Kildea

1 – 3:10 pm (Two-part session)

This seminar will focus on the fundamentals of energy efficiency and a common sense approach to applying these principles. It is important that home owners use a systems approach that starts with an energy analysis on the design. Learn how all the different areas of the home need to work and interrelate as a system. See pictures of the different areas of the system, foundation, framing, insulating, air sealing, heating, cooling, ductwork, appliances, lighting, etc. The seminar will conclude with a comparison of cost energy efficient vs. renewable energy.

Wind Energy – Phil Holdom

1 – 2 pm

What is a small wind turbine and what are its benefits? Join Phil Holdom, as he answers these questions and so much more. At the end of the session you will learn the potential of wind energy in Michigan, and if a turbine is right for you. Mr. Holdom will also cover different types of installation; determining where to locate the system; how to work with your neighbors, local officials, and utility company; and how to install your system.

The End of Cheap Oil – How and When?- John Richter

1 – 2 pm

The finite resource of oil will be exhausted – eventually. This workshop presents an analysis of the world’s oil resource and predictions of its exhaustion. The “Hubbert’s curve” is used to forecast the peak, and then permanent decline, in world oil extraction rates. This will likely be the most important event of the next decade, with catastrophic effects on humankind. This story doesn’t have a happy ending.

Wind Energy – A Homeowner’s Perspective – Art Toy

2:10 – 3:10 pm

Art will talk about his adventure in finding, bidding, and winning an online auction for a 15 year-old used 10KW Bergey Wind Turbine. He will share his experiences of what it entailed to travel to the owners’ location to disassemble the turbine, the arrangements needed to transport the 2,600 lb turbine/tower system from upstate New York to Lawrence, Michigan, and the process for assembling the tower/turbine at its new home.

The Natural Gas Crisis in North America – John Richter

2:10 – 3:10 pm

Natural gas prices have more than tripled in the last decade. This workshop examines the reasons why, and the outlook for the future. Imports from Canada have topped-out. Increased drilling has yielded diminishing returns. Imports of liquefied natural gas from overseas have proven far more expensive than expected. Yet demand for heating and power production have been abated only by extraordinary weather. What consequences await us?