Some of my Suggestions for the Future of Energy in the United States

To free us from high priced foreign oil, this country needs to switch from gasoline powered cars to electric cars for everyday use. After the initial investment, wind power, solar power, hydro electric power, etc. will produce free electrical power to the grids lowering the overall cost. It would initially be expensive to switch, but at the present cost of $700 billion dollars a year to purchase foreign oil, it would in the long run free us of this devastating drain on the US economy.

Amory Lovins group (Rocky Mountain Institute ® RMI) has designed a new safer more efficient automobile made stronger with advanced carbon fiber materials. Known as the Hypercar ® this design has less drag and would make a great plug-in electric car. It was designed to be powered by fuel cells and would use hydrogen as fuel, but I personally feel that it is an excellent candidate for a plug-in electric car. I think hydrogen powered cars are years away, but hydrogen powered electric plants might be feasible in the interim. I suggest that if photovoltaic (PV) panels are incorporated into the roof of electric cars the batteries could be charging while in the parking lot at work, at the mall or at home thereby increasing the total driving range. They could be plugged in to the grid at night during low use hours. There are at least 17 electric cars now planned to be in production in the next 3 years. Those who can afford a personal PV charging station could charge them independent of the grid as well as provide a portion of their home energy use.

I know a lot people complain about the looks of wind towers and photovoltaic panels, but when this country is energy independent and the overall rates are stabilized and reasonable they will be surprised by how beautiful these structures will appear then. I think large photovoltaic and wind farms dotting the landscape are a small price to pay for energy independence. What a wonderful secure feeling knowing that whatever other countries do will not affect our independence. Wood powered electric plants and offshore wind energy farms are another possibility.

Many homes could be heated with wood using the efficient CO2 neutral masonry heaters common throughout Europe. (See Masonry Heater paper.) Firewood is a renewable fuel that is available in large amounts and can help the economy by providing additional income for farmers and landowners. Requiring all homes to be well insulated would save energy for heating in the North and for air conditioning in the South.

Geothermal energy for home and business heating would save additional resources.

The use of solar clothes dryers and old fashioned clothes lines would also conserve electricity.

There is a big push to produce ethanol, but ethanol IS NOT the answer for several reasons:
1) cars would still require expensive internal combustion engines.
2) they would still pollute albeit not quite as much.
3) land that could produce food is required to produce the plant sources.
4) currently ethanol is made from corn requiring the richest farmland (desperately needed to grow food) and requiring the highest energy input of any crop I can think of.
5) The use of farmland for growing corn has been the cause for the steep increase in food prices.

Additional information and pictures can be found on the following websites:

Electric Cars:
http://www.treehugger.com/files/2008/07/affordable-electric-car.php#ch02

Mitsubishi All-Electric Car:
http://www.treehugger.com/files/2007/09/mitsubishi_unve.php

OffShore Wind Energy Farms:
http://www.dw-world.de/dw/article/0,2144,3478173,00.html

Rocky Mountain Institute:
http://www.rmi.org/sitepages/pid191.php

Solar Clothes Dryer:
http://blogs.heraldtimesonline.com/greenhouse/?p=46

T. Boone Pickens Plan:
http://www.pickensplan.com/