***Wednesday September 8, 2010***

**The Energy Debate:** Back in July, I was on the dais for a Joint Economic Committee hearing on the topic of energy. At one point during the hearing, one of my Democratic colleagues from New York made the statement that we could get rid of all oil usage in this country by using solar power.

This is a nice thought, but one not rooted in any understanding of reality. I then presented the challenges and opportunities facing our energy policy and challenged my colleague's assertion with the three panelists (from MIT, Texas A&M, and a New York consulting firm – 2 Democratic panelists and one Republican). All three agreed with me.

If you take the emotion and proprietary interests out of it, our energy solutions are much clearer and in less dispute than conventional wisdom would have you believe. This is the first in a 3-part laptop report on energy discussing where our opportunities do and do not exist.

The first thing to understand is that we must separate the solutions for fixed source energy generation (electricity and heating) from the solutions for mobile source energy generation (trains, planes, and automobiles). The solutions for fixed energy are much easier and have fewer technological hurdles than those for mobile energy. This is because fixed energy can be big and heavy and require a lot of space in order to store whatever fuel you need. Mobile energy, on the other hand, has to fit inside that plane, train, or automobile. Whether it's energy stored in a battery or in a gallon of gas, you have to carry it onboard. So, it can't be too big, too heavy, or too unstable. Or you have to set up a set of electrical connections (like old streetcars), which has its own cost and infrastructure challenges and limits mobility to where there are wires.

So, let's talk about fixed energy first. Electrical energy in the United States is largely produced from coal and natural gas, with lesser amounts from nuclear and hydro-electric. Only 1% of electrical power in the US is still generated using oil. Coal and natural gas are in abundant supply in the US, so there is no economic or foreign policy requirement to move away from these fuels. However, if you want to move to less polluting fuels, nuclear and hydroelectric are already there and they are cost-effective now. I really don't understand all the focus on wind and solar. With the exception of rooftop solar supplemental energy (to which I have absolutely no objection) wind and solar farms arguably deface a lot of land, are very expensive, and can only be supplemental as the sun does not always shine and the wind does not always blow.

Nuclear and hydro-electric have zero emissions of any kind, are cheap, and have a small footprint on land or sea.

I don't understand the opposition to nuclear energy. I'm sure you have all heard that countries like Japan, France, and Sweden provide over 80% of their power from nuclear today. Such plants exist or are under construction in many other countries around the world, as well. The 3-Mile Island event was over 30 years ago and was contained. But, the technology of producing nuclear power has advanced as much since then as computers have advanced in the last 30 years. The only real reason I can find to oppose nuclear power is that opponents simply don't want more energy production of any kind. I understand that some people have that view, but it is not shared by this writer or most of the American population.

The obstacles to cheap, abundant, and domestically sourced fixed energy in whatever quantities we want are political, not technological or environmental. We can use coal, natural gas, nuclear, and hydro-electric. We can use a lot more of the latter two if we want zero emissions. There is no need to eliminate wind or solar, and they can be a part of the mix as supplemental energy sources, but no energy policy should rely on them for baseload. Nor should we waste scarce resources on subsidies.

This truly is not rocket science. We just have to overcome the political obstacles to allow these plants to be built as the need arises. We also need an infrastructure plan so that energy can be distributed around the country. That, as I suggested a few weeks ago, can be funded by the private sector through master limited partnerships. In fact, all of this can be funded by the private sector if public policy allows. No public debt, no taxes.

Mobile energy (planes, trains, and automobiles) however, is not so easy. More on that tomorrow.

I remain respectfully,

Congressman John Campbell
Member of Congress