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Energy Debate Fact Check #2 - Is Energy Independence Good For the Nation?

Posted by Nate Hagens on October 15, 2008 - 10:28am
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Last weeks Debate Fact Check #1 highlighted the realities of offshore drilling often glossed over in political discussions. Tonight, with less than 3 weeks remaining before the national election,we will view the final head-to-head presidential debate. Beyond the immediate concern of roiling financial markets, candidates are at least somewhat aware of the complex challenges that lie ahead in the coming energy transition. One popular (and pleasing to the ear) phrase that is frequently used is 'Energy independence'. In my opinion, true energy independence, if possible, will require significantly more focus on reducing energy demand than on increasing energy supply, something we are hearing little about (perhaps because its...err...less likely to win votes?) A slightly different take on this was posted here 2 years ago summarizing Council of Foreign Relations report on the infeasibility of energy independence.)

Below the fold is the second in a series of brief fact-checking exercises regarding the major energy issues in the campaign by Professor Cutler Cleveland.

Senators McCain and Obama—and every President since Richard Nixon—have argued that energy independence should be at the core of national energy policy. Energy independence typically is defined as zero reliance on energy imports. The underlying assumption is that relying on "unfriendly" Middle East nations for energy is bad for our economic and national security.

The argument for energy independence is flawed for economic, strategic, and environmental reasons:

1. "Unfriendly" nations are not our primary source of oil. Only 44% of U.S. oil imports are from members of OPEC, the international oil cartel that is dominated by Middle East producers. Canada and Mexico are the two largest single sources for imported oil in 2007. (*Editors note: through 6/08, Mexico has dropped to #3, though this changes seasonally and may revert in 2nd half of year*)

2. The U.S. oil resource base is depleted to the extent that it could not yield the roughly 3.7 billion barrels of oil the U.S imported in 2007 (not to mention the additional refined products imported). Domestic oil is far more expensive to produce than oil in most other regions, especially OPEC nations. Increased reliance on domestic oil will put upward pressure on oil prices.

3. Increased U.S. production would have little impact on the level or volatility of oil prices. The price of oil is determined in a global market by a complex array of forces including speculation, weather, geopolitics, decisions by OPEC, and most importantly, by market fundamentals--short and long run supply and demand forces. At the margin, producing decisions made in the U.S. have little influence on this process.

4. Global price determination also means that energy independence won't protect our economy from supply disruptions abroad. A refinery strike in Venezuela, civil war in the Niger Delta, and other similar events could quickly reduce oil production. Oil instantly becomes more expensive everywhere -- the UK, Japan, China, and the U.S. all pay pretty much the same price.

5. The sensitivity of our economic well being to changes in the price of oil stems from the overriding importance of oil to human existence, not to our dependence on imported oil per se. A nation can reduce its economic vulnerability to oil price increases only by using less oil in total, regardless of whether it is produced domestically or imported.

6. Oil imports are a hedge against domestic supply disruptions. For example, the hurricanes of 2005 that damaged New Orleans and other Gulf Coast communities also damaged refineries, causing an immediate gasoline shortage in a number of southern U.S. cities. But increased imports of gasoline from Venezuela and other nations offset the loss of domestic supply, and thereby helped mitigate the increase the price of gasoline.

7. The costs of substitutes for oil (ethanol, electric cars, fuel cell propulsion) are more expensive than oil, and will be for at least the next decade. Forcing a transition to these fuels now will raise costs and prices. Many substitutes also carry a significant environmental cost.

8. The U.S. cannot wall itself off from the international energy market. We import oil from Venezuela, electricity and natural gas from Canada, and wind turbines from Denmark. We export coal to the Netherlands, motor gasoline to Mexico and photovoltaic modules to China. The nation benefits from energy trade. For example, weak European natural gas demand in 2007 released additional LNG to the global market, and thus helped keep U.S. natural gas prices at a record low compared to fuel oil. Cutting ourselves out of the increasingly interconnected global trade in energy would raise domestic energy prices. Zero net imports is also impossible to achieve in the foreseeable future.

9. Energy independence would not significantly reduce the risk of terrorism. Terrorism thrived when oil was $10 per barrel—it doesn't need $100 a barrel oil. Terrorism can be done on the cheap: the 9/11 Commission found that those attacks were accomplished with as little as $500,000.

10. Energy independence would accelerate climate change. A push towards independence would inevitably lead to increased reliance on our substantial domestic resources of coal, the most carbon-intensive energy source.

The notion of energy independence is comforting and makes for a great sound bite, but it is not a sound basis for a national energy policy

Professor Cutler Cleveland
Boston University

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Some of Dr. Clevelands previous work posted on theoildrum:

Presidential Energy Debate Fact Check #1 - Is Offshore Drilling the Answer? Cutler Cleveland
On Energy Transitions Past and Future - Cutler Cleveland
Ten Fundamental Principles of Net Energy Analysis - Cutler Cleveland
Energy Return from Wind - Cutler Cleveland and Ida Kubiszewski