

Energy Myths in the United States

By Dick Miller

There are a number of pervasive myths about our energy situation in the U.S. today that are stifling our ability to become energy independent.

Myth One: The U.S. Produces Too Little Oil to Become Energy Independent. So We Must Heavily Invest in Renewable Sources.

This myth, espoused by President Obama himself, is that we have less than 2% of the world's oil reserves. So it is not possible for the United States to become self-sufficient in fossil-based energy production.

This is the Peak Oil thesis: that we have hit the limits of new discoveries, and will soon run out of fossil fuel energy resources. One might conclude that we should institute severe conservation measures and spend most of our time and money searching for replacement energy sources – especially ones that are renewable, such as wind and solar.

Except, this way of thinking assumes there will be no further innovation in extraction from known resources. And, it assumes no more oil fields will be found. But both these assumptions are wrong.

An example is the Green River Formation, an assemblage of shale rocks beneath Colorado, Utah and Wyoming. The United States Geologic Service (USGS) now estimates that there are three trillion barrels of oil contained in that shale, half of which can be economically recoverable now from emerging technology and reasonable assumptions about oil prices. The Rand Corporation, a nonprofit research organization, similarly estimates that 30 to 60 percent of the Green River oil shale can be economically recovered. This source of new oil alone would approximate the entire world's proven oil reserves today!

Detractors need only look at the economic boom taking place in North Dakota and Montana right now from the Bakken oil shale discovery, where relatively new methods like “fracking” are unleashing a local economic boom. Fracking is a method of horizontal drilling and extracting that allows access to oil and natural gas reserves once thought unreachable.

There are thousands of job openings in energy companies already extracting oil from shale rock using technologies that were effectively untested just 20 years ago and competing with Middle East oil at \$80 a barrel, and unemployment rates are less than 1% in the areas around those discoveries.

Natural Gas is Also an Energy Boom

This also ignores the natural gas boom. Vast resources are now accessible in areas beneath the Appalachian mountains in eastern states, such as Pennsylvania and New York.

Environmentalists have already objected to tapping these fields for fear it may pollute our drinking water. Recently, there was a brief furor when the EPA found increased benzene levels near a fracking operation in Montana. However, their initial findings were found to be flawed.

Retesting showed conclusively that there is no chemical contamination resulting from this operation.

Experts now agree that if gas production companies rigorously follow the regulations governing the processes now established, there are adequate protections in place. Especially given this new procedure's ability to increase our energy independence.

Vigorously pursuing this opportunity seems like a no-brainer. Where production can be established on non-federal lands, it is already underway. If fracking has been proven to be safe and unleashes vast amounts of domestic resources as well as local economic booms, why would the EPA so vigorously oppose this? Do they have ulterior motives? (See last section.)

Off-Shore Sources Also Abound

There are also vast known offshore resources. And new deep-water technologies have expanded the realistic recoveries of still more traditional oil fields. President Obama was not shy about the U.S. government granting loans to Brazil to do the same types of deep water drilling, the recipients of which oil would not even be U.S. customers.

Currently there is a government moratorium on offshore development dating back to 1987 when data showed only 18 billion barrels of oil recoverable in these controlled areas. Today it is clear that the Gulf of Mexico, coastal Alaska and coastal California have estimated future recoverable amounts of nearly 100 billion barrels. The Gulf of Mexico potential alone has grown from nine billion to 45 billion recoverable barrels. That oil didn't just appear there. New technologies allowed its discovery.

Yes, there are risks in offshore drilling—like the BP tragedy. But since then, firms have recommitted to stringent safety procedures. The greater risk may be having to rely on the Middle East as a source for oil. From an environmental perspective, the Gulf coast is recovering—as is normal after an oil spill. Saddam Hussein caused significantly more damage than any spill when he set the Kuwaiti oil assets afire in an attempt to delay the Allied forces in 1991 than any oil spill in the last century.

Aside from the political risks in the Middle East, there are also the unfavorable balance of payments in the U.S. where we spend \$400 billion a year to import oil at nearly \$100 a barrel. Wouldn't it be better to spend that on U.S. jobs to extract our own energy sources?

The U.S. petroleum consumption is currently about 20 million barrels of oil a day. If we were free to exploit all the probable domestic reserves, we could be totally independent of all foreign oil source needs for more than 200 years. That would also give us time to exploit alternative energy sources that have been heralded of late but are nowhere near practical solutions for likely decades.

Myth Two: Renewable Energy Sources are an alternative that might produce sufficient replacement in the next five to ten years.

About 31% of America's energy is needed for industrial (production) use, 28% for transportation, 22% for residential use and 19% for commercial (e.g. offices, hospitals).

Today's (2010) energy sources for these uses are: 39% oil, 23% natural gas, 23% coal, 8% nuclear and 7% renewables (principally hydro at 4%). That leaves about 2% for ethanol, and less than 1% total for solar, wind, geothermal and biomass combined.

The real question is how or when the expansion of renewable energy sources rise astronomically to meet America's needs now being supplied by fossil fuel sources which comprise 85% of our needs today?

Windmills – produce electricity, but not economically.

- only function long and hard enough in a few places
- require a huge grid system to export it to where it is needed
- can't readily be used for cars and trucks

Solar Panels - produce electricity, but not yet economically

- don't work at night, so storage and recovery of electricity is crucial
- require huge grid system to export from the large production areas (e.g. Mojave Desert); yet California found out that environmentalists successfully protested using that huge desert for solar energy, and the state caved.
- Can't be used readily for transportation

Ethanol – initially was thought to help alleviate gasoline shortages

- now is shown to be costly and inefficient to convert
- makes engines less efficient
- if produced from corn, lessens the food supply, and makes food more expensive.
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Biomass - technology still being verified, but has some promise

- not good as a gasoline additive for same reasons as corn ethanol
- as diesel fuel, offers promise, but needs much more technology before truck fleets are converted, and sources other than corn are pursued (algae, sugar?)

Hydro – not popular among environmentalists as the fish suffer

- very efficient as storing potential energy behind big dams, and useful and often crucial in water starved areas, such as the southwest.

In short most of today's renewable energy is from water and ethanol (now discredited as a valid future source). It is not from the favored ones quoted as wind and solar which today produce only a miniscule portion of our energy.

The truth is that colossal breakthroughs will be needed in the favored sources – wind, solar, biomass – to make even a small dent in America's needs for energy to keep its world class economy growing and creating jobs.

If today's energy companies see a way to productively exploit new sources, they will not hesitate. Should the federal government pick winners and losers (i.e., Solyndra) and waste

precious financial resources when our national debt is skyrocketing? Of course not. Bet on the private sector to jump on board when new winners are perceived to potentially emerge.

The free enterprise system has driven the growth and development of our nation since our founding. Today, in this crucial arena, government policies dictate direction and divide spoils. It is counter to founding philosophies and must be reversed. Put necessary safeguards against pollution and exploitation into place, and then get government out of the way.

Is There an Alternative Motive By Liberals For Not Pursuing Oil and Gas Resources?

Why did the current Administration choose to kill the Keystone pipeline project, in a time of high unemployment with rapidly increasing energy prices? The only logical explanation is their fear that carbon based energy is creating an alarming risk of global warming.

A companion essay deals with the myth of global warming as a real threat, but there are a few perspectives to bring to bear on this perceived risk:

1. If indeed our planet is warming due to man's actions, we have plenty of time to react in the future without destroying our economy in the meantime.
2. Cap & Trade legislation, passed in the House, but never brought to the Senate, was more of a government revenue generator than a true mechanism to prevent global warming.
3. The UN itself revealed its true aims by proposing that the world's largest industrial nations pay reparations to third world countries, as the latter would be kept from developing by curtailing worldwide oil and gas production.

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