

NOVEMBER 17, 2008

How to Kick Our Oil Addiction Despite Plunging Oil Prices

Old habits die hard. So we asked six experts for their ideas on reducing energy demand.

The good news: Oil prices have fallen. The bad news: Oil prices have fallen.

Though the soaring cost of oil squeezed consumers' wallets and corporate balance sheets, it had one important benefit: Oil demand in the developed world is projected to decline in 2008 for the third year in a row -- something it hasn't done since the early 1980s -- as motorists kept their cars parked and shifted away from gas guzzlers, and businesses aggressively trimmed fuel costs.

Higher prices also spurred development of alternative-energy sources, like solar and biofuels, that cheap oil made uneconomical.

Now that oil prices are less than half their July peak, what's to keep consumers from returning to their profligate ways? In other words: How do we keep our oil addiction at bay?

We put that question to a group of energy experts. How do they see the problem? And what can be done to keep the conservation and efficiency momentum going, despite falling oil prices?

Their prescriptions, presented below in their own words, run the gamut from government mandates that new cars be fuel-flexible to government repeal of all subsidies aimed at fostering energy efficiency. But all agree that there's still plenty to be done to ensure that energy is used efficiently and conservatively, regardless of the price.

--Michael Totty and Spencer Swartz



R. James Woolsey
Venture Partner with VantagePoint Venture Partners; former U.S. Director of Central Intelligence

DIAGNOSIS: Oil first skyrocketed to over \$140 a barrel, and then tanked (well, relatively) to under \$60. Will we now forget our earlier resolution to kick the oil habit as we have before?

No. It's true that after oil prices dipped in the mid-1980s and the late '90s, work on several alternative fuels was abandoned. But important developments in the past five to 10 years should enable us to use competition to destroy the 96% monopoly that oil enjoys over transportation. Added taxes on oil or gasoline aren't necessary -- we just need to use government's power to open up competition in the transportation fuel market.

PRESCRIPTIONS

- Congress needs to condition some part of the \$25 billion for rescuing auto companies on their moving rapidly to produce vehicles that use electric power. It should also require that some significant share of cars purchased by the government use electricity. With a plug-in hybrid you will be able drive all-electric at a cost of only two to four cents a mile for the first 20-40 miles each day. For an average amount of daily driving your electricity cost will beat the pants off gasoline costing 10 cents to 20 cents a mile. OPEC can't drop oil's price enough to compete with electricity.
- Congress should use rescue funds to mandate that new cars be fuel-flexible for a range of fuels. Several alcohol-based, low-carbon-emitting fuels produced from biomass and waste feedstocks are developing as important potential partners with electricity in breaking oil's monopoly. The transition to fuel flexibility costs under \$100

per new car and should be rapid. Brazil took only three years to transition from 5% of new cars being fuel-flexible vehicles to 75%.

- We should borrow the successful German model of the "feed-in tariff" -- which requires utilities to pay customers who generate renewable energy a fixed, above-market rate for power. The dropping costs of both solar panels and electricity storage will soon let you charge your plug-in at night from new "flow" batteries in your basement, and then drive the next day powered by the sunlight that fell on your roof the day before. Let OPEC see if it can figure out how to monopolize that.
- Charging cars' batteries at night means that driving on electricity won't require new power plants. But Congress needs to improve the grid's security and resilience against thunderstorms, hackers and terrorists by giving the Federal Energy Regulatory Commission needed emergency authority.
- We need to grow and maintain substantial battery development and manufacturing technology in the U.S. Congress should establish a battery version of Sematech, the public-private partnership that was set up in the 1980s to ensure that the U.S. stayed in the business of developing and manufacturing semiconductors in the face of international competitors that were often heavily state-aided. We shouldn't replace foreign oil dependence with foreign battery dependence.