Flex fuel vehicles hold the key

Oil drilling, conservation measure not enough to address America’s energy security challenge

April 7, 2010

Two policy announcements last week revealed the Obama administration's core strategy in addressing the nation's growing dependence on oil. On Wednesday, President Barack Obama announced that his administration would allow new oil exploration along the Atlantic Coast and in the eastern Gulf of Mexico. The following day, the administration announced new mandatory fuel efficiency standards of 35.5 mpg average within six years, up nearly 10 mpg from now.

By simultaneously promoting supply-side solutions (drill baby, drill) and demand-side solutions like increased efficiency, Mr. Obama is throwing bones to the two camps that for decades have dominated the nation's energy debate. This may be smart politics, but when it comes to effectiveness – though there is nothing wrong fundamentally with either efficiency or drilling – both policies will do very little to address America's energy security challenge, as they fail to address the root of the problem: oil's virtual monopoly over transportation fuel (only 2 percent of U.S. oil demand is due to electricity generation).

Last year, the U.S. Energy Information Administration (EIA) estimated that opening the Outer Continental Shelf to exploration would affect oil prices by 11 cents per barrel by 2020, which would translate to less than a penny per gallon. On the flip side, going on an efficiency diet would not even offset the growth in demand due to natural growth.

Furthermore, consider OPEC's response. The history of the past 30 years shows that when non-OPEC producers increase their production, OPEC responds with production cuts, essentially keeping the same amount of oil in the market. Conversely, when we use less due to higher gasoline taxes, stricter fuel efficiency standards or simply in response to a hike in gasoline prices, as was the case in 2008, OPEC, again, cuts its production. In other words: when we drill more, OPEC drills less; when we use less, OPEC drills less.

While both drilling and efficiency promise little relief, with growing instability in the Middle East and millions of Chinese and Indians moving from bicycles to cars, it is almost a given that we will face further painful oil crises as the decade progresses. Contrary to popular belief, our oil dependence problem is not a function of the amount of oil we consume or import (we don’t care how many bananas we consume or how many computers we import) but about the fact that oil is a strategic commodity second to none. More than 95 percent of transportation energy is petroleum based. Therefore, solutions that perpetuate the petroleum standard rather than producing new vehicles in a way that enables fuel competition are vastly insufficient.
A transformational approach is needed. Until the 19th Century, salt had a position similar to that of oil today because it was the only means of preserving food. Salt-rich countries had inordinate power on the world stage. Wars were fought over salt. Today, salt is still a useful commodity for a range of purposes. We import much of our salt, but canning, electricity and refrigeration decisively ended its monopoly over food preservation, diminishing its strategic importance.

To truly address our oil dependence problem, we must do to oil what humanity did to salt: turn it into just another commodity. The cheapest and easiest technology to strip oil of its strategic status is the flex fuel vehicle. This technology, which costs less than an extra $100 per new vehicle, enables cars to run on any blend of gasoline and alcohol fuels like ethanol or methanol. Such fuels can be made cheaply from a variety of non-petroleum energy sources ranging from coal to natural gas to biomass.

In the future, technologies to produce alcohol fuels from carbon dioxide may offer an elegant way to achieve energy independence while reducing greenhouse gas emissions. If every car sold around the world was flex fueled, gasoline would have to compete at the pump against a variety of alternative fuels, and the oil barons in the Middle East would be challenged by fuels made elsewhere, including in poor countries in Africa, Latin America and South Asia.

President Obama has expressed several times his support for flex fuel vehicles. So did Secretary of Energy Steven Chu. A bipartisan bill, the Open Fuel Standard Act, which requires that 50 percent of new cars be flex fuel by 2012, was introduced before both the House and the Senate. Now that Mr. Obama has satisfied the wishes of both drillers and dieters, its time for him to focus on the third leg of the stool and ask Congress to enable Americans what they need and deserve most – fuel choice at the pump.

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