

# Connecting Higher Fuel Taxes to Energy Security

by Stephen V. Arbogast

The current national debate on energy security is politically stalemated. One camp wants to maximize conservation and move away from burning fossil fuels. Its proponents deride efforts to increase conventional oil and gas production and consider energy independence a chimera. The other camp wants to maximize conventional production in safe locations; it denounces energy taxes as discouraging new supply and considers energy independence a national economic and foreign-policy imperative.

In fact, this debate rests upon a false dichotomy. Any effective national energy policy will have to combine elements from both camps. Relying on only one approach involves too little new energy, overly painful adjustment costs or both.

This polarized discussion has obscured important points that indicate a much-improved situation is readily obtainable. For example, couching the debate in terms of "energy independence" obscures the fact that security based upon enhanced diversification of imported supplies is much more feasible than excluding imports altogether.

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All through the late 1980s and the 1990s, the United States relied upon growing imported energy supplies, yet energy security was a nonissue. Substantial new supplies were coming on stream from non-OPEC sources; as a result, many suppliers of the Organization of the Petroleum Exporting Countries (OPEC) had substantial spare capacity. The cartel found it difficult to share this surplus capacity within the group. Cheating against assigned quotas was common, and eventually open competition broke out among OPEC members. The results: Any temporary outage or political disruption was readily compensated from the available spare, and consumers enjoyed bargaining power in world energy markets.

Recreating this set of circumstances should be the immediate objective of our energy security policy. In concrete terms, this means adding about 3 or 4 million barrels per day of additional spare capacity to the global petroleum supply chain. If this were accomplished, terrorist raids in the Niger delta or Hugo Chávez's latest retroactive tax scheme would not threaten consumers and would probably disappear as tactics.

The devil in the details here is that recreating this amount of spare capacity via production increases looks difficult. The last generation of "safe" oil and gas projects – the North Sea, Alaska's North Slope and Mexico – are all now well into decline. Just replacing their diminishing output with new, safe sources has proved challenging enough. Meanwhile,



hopes for Russia, the Caspian and Iraq have been dented by disappointing political or geological outcomes. On the demand side, higher prices have, for the moment, merely blunted the explosive growth momentum of a world economy almost all parts of which are expanding.

Thus, there are difficulties to surmount on both sides of the energy supply-and-demand equation. This fact underscores the difficulties of employing only one-sided solutions; such an approach may not completely overcome the challenges it directly addresses and does nothing for the other side of the equation. Successful design of two-sided policies, in turn, rests upon two insights into our current predicament:

- 1) Fears about a future oil-price collapse (à la 1986) are constraining an all-out response by private energy companies to present supply tightness.
- 2) OPEC's key swing producers doubt the determination of the United States to impose adjustment costs on its consumers.

Put another way, U.S. private-sector response is impeded by memories of the last price collapse, whose roots lay in OPEC's late-1970s mistake of pushing real prices too high. Meanwhile, an OPEC confident that the United States lacks policy discipline has raised its sustainable target price from approximately \$40 to \$60 per barrel. The organization increasingly believes it can calibrate its capacity to keep prices at these higher levels without incurring a massive response of new supplies entering the market.

This calculus must be upset. The way to do it is to link policies that signal determination to restrain demand growth with policies that provide a stable price outlook for new energy development.

## Revaluating the Federal Fuel Sales Tax

There is no better place to start than with a revaluation of the federal fuel sales taxes. At present, these amount to \$0.18 per gallon for gasoline and \$0.24 per gallon for diesel. Both taxes were last adjusted in 1993. Over the intervening 13 years, they have lost about 20 percent of their value to inflation. Is it any wonder that OPEC ministers take quiet satisfaction in the United States' lack of policy discipline?

Immediately restoring the purchasing power of federal fuel taxes and then scheduling future real increases would send a powerful signal confounding to OPEC's planning assumptions. This would require immediately instituting a tax increase of about a nickel per gallon. This should be combined with an automatic adjustment mechanism to prevent future inflationary erosion. Starting at current tax levels, this would involve annual increases of less than 1 cent per gallon. In the context of pump prices, which climbed by more than \$1 per gallon during 2005, a tax increase of \$0.05 to \$0.06 per gallon in 2006 should be politically digestible. Public opinion data has shown increasing support for paying higher energy prices, so long as consumers can see a bona fide link to energy security.

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However, for the tax increases to restrain demand, they are going to have to accomplish more than is implied by this correction of past errors. That means a third element, a schedule of real increases in fuel taxes, needs to be included. To modify consumer behavior without unnecessary dislocations, these real increases will have to be phased in. The exact mechanism for accomplishing this will be the subject of a subsequent commentary.

What, then, to do with this new stream of cash flowing to the federal government? This question is critical to the political acceptability of meaningful fuel tax increases, for consumers will only support steadily rising taxes if they believe the money is being well spent on the intended goal: enhanced energy security.

The answer lies in an understanding of the pricing dilemma bedeviling new, "safe" supply development. The private sector can be counted on to develop all of the "safe area" conventional resources that are economic to produce. Current levels of natural gas drilling, Canadian tar sands development and construction of liquefied natural gas terminals illustrate the point. The price problem lies on the next plateau of the "new supply" staircase.

Take the prospects for clean-coal gasification as one illustration. Both the technology and the resources are readily available to the United States (and to other heavy consumers like China and India). However, the plants are hugely capital intensive; roughly \$2 billion must be invested to develop a clean-coal gasification facility that produces 15 thousand barrels per day of quality fuel products. While such a facility can later be tripled in size, the initial price-per-volume output ratio is a huge barrier. Current estimates see crude oil prices

of \$30 to \$35 per barrel as needing to be sustained over 15 to 20 years to pay out such an investment. Therein lay the rub. Few prudent energy CEOs want to bet \$2 billion on such a price outlook, especially when the initial gain in production from such an outlay is relatively small.

Pricing floors are thus needed to support the commercialization of projects like coal gasification. There is a strong economic case for the federal government to be the provider of such insurance. The need for such floors relates to the mitigation of national risks: those related to physical disruption of energy supplies, sudden pricing spikes and the hostaging of foreign policy to the need not to offend the government of any major energy exporter. It makes sense for the federal government to both target the cost of energy-supply insurance on users and to spread that cost over the widest possible pool: motor fuel users nationwide. It makes even more sense to channel the proceeds from such tax into an efficient promotion of production, which will reduce the need for such insurance down the road.

The charms of such a two-sided policy are many. Gradually rising fuel taxes not only signal consumers to plan around higher fuel costs, but also provide funding for the price-floor insurance needed to commercialize the next generation of safe energy sources. The federal government has ample experience with insurance schemes. These already exist, for example, in cases like the Export-Import Bank. Price-floor insurance can then be purchased by either the project developer or a customer who has conceded such a term in its purchase contract and is looking to reinsure the risk. Either way, the effect will be to build a floor that modifies the "bust" potential in the fuel-price cycle. This should unlock a pent-up mass of domestic energy projects, especially on the part of major oil and gas firms eager to show foreign governments that they have alternatives to their current (punitive) fiscal terms.

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The most important thing is to establish new facts that signal clearly America's determination to go down this road. The United States' ability to optimize and expand once it breaks out of its policy paralysis is well understood. Some specific ideas for getting the first generation of "unconventional" fuel plants will be provided in the next commentary. We can hardly get started down this road too soon. ♦

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