



Energy Action for a Healthy Economy and a Clean Environment

An Opportunity in Energy Policy

Association for the Study of Peak Oil & Gas – USA Chapter

From late last spring through the national political conventions, high energy prices raised the profile of energy issues to a degree not seen in the U.S. since 1980. As the price of gasoline rocketed towards and then briefly passed \$4, most U.S. citizens grew increasingly anxious. Then they responded. For the first time in decades, summer-time demand for gasoline actually declined. Sales of SUVs plummeted. Airlines announced extensive flight cutbacks for the fall; a number of regional airlines went out of business. Voters demanded action, stimulated in part by nearly 24/7 media coverage of the “pain at the pump” theme. CEOs of oil majors were predictably called to testify at widely publicized but largely symbolic Congressional hearings. For whoever won the election, the stage was being set for a bold dialogue with the American public about the dramatic need for a comprehensive energy.

True, the failure of major financial institutions during September followed by credit lockdowns and a downwardly spiraling economy grabbed the headlines during the last two months of campaigning. And crashing prices for crude oil and gasoline, plus production-cutting moves by OPEC to support prices, shoved energy issues to the back burner. But through this all, one fact seemed to evade most radar screens during this political campaign: despite steadily rising oil prices from 2002 through July 2008, world oil production remained relatively flat. Investment in new oil fields and unconventional liquid fuels was barely offsetting declines in wheezing older fields. This is the 600-pound gorilla that few want to acknowledge, let alone talk about in polite company. Consider us distinct exceptions to this rule.

ASPO – USA is a nonprofit, nonpartisan organization dedicated to educating our citizenry and our leaders about the critical role of energy amongst our current challenges. In this briefing paper, we offer sensible policy proposals that we hope will be welcomed by government officials across the political spectrum. In short, we believe that no other challenge we currently face can be successfully addressed unless we are successful in tackling our energy challenges. Based on recognition of the fundamental change that has taken place in global energy markets, critical elements of a new approach to energy policy are set out below and in the context of the issues that have framed the policy conversations during the recently concluded campaign season.

1. Smart Energy Delivery is The Real Policy Challenge. American policy makers in nearly every field have long assumed unimpeded access to ever greater amounts of inexpensive energy. Energy policy has thus rarely played a prominent part in electoral politics (except temporarily, during transient shocks). The energy challenge we now face will change that. A tripling of energy prices in the past few years has not stemmed the decline rate in existing fields, nor brought on appreciable new supply. Worse, the recent tumbling of oil and gas prices means that many planned energy expansion projects will be mothballed or delayed, leading to higher prices and supply vulnerability down the road. From today forward, every policy maker will need to consider the availability and cost of energy in nearly every policy calculation. In painful fits and starts, the American public is also becoming aware of the role of energy cost and availability in their daily lives. Political leaders and government policymakers must demonstrate an

awareness of the new reality that our energy challenge has created. They must propose sensible changes that our government can make now so that the United States can continue to grow and be secure, even as traditional forms of energy gradually become less accessible and dramatically more expensive.

A powerful start would be an announcement that recognizes this fundamental shift, and proposes the following in response: In the newly elected administration, ranging from the Presidency to small town mayoralities, every political department and regulatory agency will assign a senior deputy to consider the energy implications of every significant policy decision. The model would be budget accounting, but in energy terms. That is, government would be required to assume that energy will either be increasingly scarce, increasingly expensive, or both, and to plan accordingly. The approach offers the benefit of being proactive while easily unwound if and when our national energy situation improves. If we have any hope of effectively managing the energy crisis, it must be coordinated wisely and comprehensively.

2. Government Must Lead the Energy Transition. A far-reaching challenge over the coming years will be to prepare for the declining availability of oil, and by extension refined liquid petroleum fuels such as gasoline, diesel, and fuel oil. We can prepare for this inevitable future in three general ways. First, we can reduce our total energy consumption through conservation and more efficient use of the energy sources now known to us, beginning with a federal gasoline tax that incentivizes carpooling, high fuel efficiency vehicles and all low or no carbon alternatives. Second, we can facilitate the development and adoption of true alternative and renewable energy sources that provide more usable energy than is required to produce that energy in the first place. Third, we can ensure that we make responsible and effective use of domestic U.S. energy resources.

All three of these paths will require major investments in technology and infrastructure. Only the Federal Government can provide the leadership, R&D funding, and targeted incentives to private industry and individuals necessary to deliver us a responsible sustainable energy future.

3. Offshore Drilling – Move to the Real Debate. Democrats and Republicans became mired in a debate over offshore drilling that had no complete answer. The right debate would proceed from the demonstrable fact that we do not know whether there are sufficient recoverable resources in these offshore areas under the (recently expired) federal drilling moratorium to make the environmental and other trade-offs worth the incremental amount of available energy. At the moment, participants on both sides of the argument about off-shore drilling pretend that they know what resources exist under the Outer Continental Shelf (OCS) and what portion of them could realistically be recovered – pro-drilling voices claim billions of recoverable barrels of oil, while the anti-drilling forces insist that only a fraction of that amount exists. The US Minerals and Management Service, for its part, estimates that total “technically recoverable” yet-to-be-discovered oil throughout the OCS may be as much as 85 billion barrels of oil. Of that amount, less than 20 billion barrels is estimated to be in areas covered by the expired federal drilling moratorium.

In truth, no one has any reliable data upon which to make guesses with any confidence. As a result, a wise and bold response to this fact would be for the federal government to sponsor a massive seismic data acquisition project for the OCS. Seismic data holds the promise of providing real information upon which informed decisions may be made. In any event, seismic data acquisition will take place before any exploration drilling occurs – modern exploration rarely occurs without the benefit of seismic data acquisition beforehand. Seismic data acquisition does not involve any drilling, and so has very minimal environmental impact, while providing very high quality information about what drilling might produce. It is a project that can be undertaken while the debate continues, will help inform that debate, and will produce useful data no matter what the policy outcome. The government would fund and manage the program via contractors, and it would focus on the most promising areas for potential hydrocarbon production. The government would thus also own the resulting data exclusively, allowing it later to recoup the cost of the acquisition by selling the data to interested companies if and when drilling commences. It would be a significant research project of obvious utility.

4. **Windfall Profit Taxes/Energy Rebates send the wrong economic signal.** These may be the most self-defeating policy proposals available to address our energy challenges. Taxes on “windfall” profits would reduce domestic production, while a credit (or rebate) to consumers would stimulate consumption. If the oil price spike since 2004 is fundamentally about a stretching of stagnant supply to meet rising worldwide demand, that dynamic will simply cause prices to climb higher, because there will be little or no additional supply to meet the demand stimulated by the credit. At best, this shortfall would be met with more oil sourced from abroad, to take the place of domestic supplies suppressed by the tax. The proposal boils down to taking money from US companies (and their shareholders – major oil companies are some of the most widely held stocks in the United States) and using it to buy additional barrels of foreign oil.

Much wiser would be to place an effective *floor* on oil prices to protect investments in alternative energy. The value of past investments by the energy industry in very promising technologies has been decimated when the price of petroleum has fallen and rendered the alternatives uneconomical. This has been the single greatest barrier to the development of a viable alternative energy industry. Likewise, the domestic US oil industry was ravaged in the 1980s, and again in the 1990s, when increased foreign production reduced the price of oil to single digits per-barrel, with the related consequences of the SUV boom and the nearly complete abandonment of conservation and efficiency efforts. Many investors fear a similar outcome when the recent oil price boom hits bottom. An oil price floor could be enforced through a tariff on imported oil that falls to zero when the market price of oil is at or above \$100. Tariff receipts could fund basic research into alternative energy technologies. The result would be predictability for domestic energy industry investments in new oil production, and for private capital investments in alternative technologies. The only interest adversely affected would be foreign oil producers, whose products will be disadvantaged relative to domestic energy sources, including low/no carbon alternatives.

5. **Revitalize US Rail Networks.** In the decades before car ownership became widespread, US cities and towns had extensive rail, streetcar and trolley networks. Sensible energy policy will recognize that the unrestrained use of millions of barrels of oil per day in the U.S. for personal transportation, while worldwide demand grows and supply remains close to flat, is coming to an end. . The technology exists to recreate these former local and regional rail networks to relieve pressure on the oil supply created by personal transportation. A similar effort with respect to heavy rail will likewise ease the burden created by the current movement of goods by truck. The best available evidence is that sustained oil prices beyond the \$150/barrel level could render regional air travel forever unprofitable. In such case, regional rail networks will be essential to maintain the economic viability of thousands of small communities throughout the country. In order to enhance our rail system in spite of reduced liquid fuel availability, we should promote the development of electrified rail systems.

6. **Steadily Reduce the Subsidies for Biofuels and Ethanol.** The declining availability of oil will create a critical need for alternative liquid fuels to power our road, rail, and airborne fleets. U.S. oil production provides roughly 15 calories of useful energy for every calorie spent on production. Corn ethanol production only supplies 1.3 calories of energy for every calorie invested. Corn ethanol’s enormous comparative disadvantage hasn’t changed substantially despite decades of development and subsidies. It isn’t up to the task at hand.

Biofuels – and corn ethanol specifically – currently contribute more to our energy shortcomings and other problems (e.g., escalating prices of food) than they solve. While the lobbies in favor of corn ethanol and related subsidies are strong and entrenched, government must gradually abandon these subsidies. A far better policy would be a massive increase in public investment in basic science research.

In the past, Americans have endured a largely nonsensical debate about the *amount* of government involvement that is good for the US economy. We believe that the correct debate concerns how to make government involvement smarter. Energy policy is a perfect example.

Government is notoriously poor at “picking winners” – requiring the adoption of certain energy technologies over others, for example. What government has consistently done very well over many decades is to support basic research into new technologies, then allowing the marketplace to choose the favorites. There must be a price advantage for low or zero-carbon emitting energy resources (to internalize an obvious market externality now borne by society generally, and globally), but government ought not to choose favorites beyond that. Leaders should shift the debate about biofuels away from whether or how much to subsidize a particular technology (where government’s record is poor) to a set of real proposals to do what government does well – support basic research into fossil fuel substitutes that the market will then adopt or not as their real economic promise dictates.

7. Energy is Economic and National Security. Political leaders of every party do increasingly understand the clear relationship between energy and national security. However, that relationship goes deeper than most now appreciate. We clearly grasp that our continued addiction to foreign oil constitutes the single greatest transfer of wealth in human history, and that a great portion of this wealth has fallen into the hands of regimes that wish us harm. But we continue to assume that we will be able to feed our addiction until we choose, according to our own priorities, when and how to wean ourselves. This assumption is recklessly optimistic.

The best evidence suggests that access to foreign sources of oil is already coming under strain and that competition among oil importers will only grow more intense as time goes on. In this respect, the US finds itself far behind China in particular in terms of securing long-term access to the next generation of fossil fuel resources. To pick an example close to home, Mexico’s oil production is falling at an alarming pace. Mexico is our third or fourth (depending on the month) largest source of imported oil. Oil exports contribute more than a third of the Mexican federal government’s revenues. On current trends, Mexico will cease to export any oil at all by around 2012. Such an event poses a risk to our energy security, to Mexico’s economic security, and poses stark national security challenges to both countries. The American people will enjoy neither economic nor national security until we have adopted a comprehensively new approach to our public and private use of energy.

ASPO-USA offers this policy brief in the hopes of initiating a true national conversation about energy issues. Our membership contains many experts on topics relating to energy and resource scarcity. We offer our services and those of our members to any private group or governmental body with a sincere interest in stimulating this discussion. Please do not hesitate to contact us with any requests or comments.

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