

"Energy Strategy for the 1990s"

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The Department of Energy is in the process of fashioning a National Energy Strategy to guide the nation into the 21st century. That strategy will be concerned both with assuring an adequate supply of energy and with the environmental consequences of energy use.

An Oil Dependent Nation

According to DOE officials, even assuming substantial energy conservation, fuel switching in industry and buildings, and cars achieving fuel economy above 40 miles per gallon by the year 2000, U.S. oil consumption will not decline over that period. However, domestic production will decline, and import dependence will rise steadily.

Gone is the Nixon-era talk of "Energy Independence - 1980; The Carter-era talk of "Capping imports at 8.6 mbd"; or the 1980's rhetoric of "keeping the 50% import percentage from being breached". The U.S. appears to be recognizing the oil situation for what it is. The U.S. is dependent on oil imports and the situation isn't going to change any time soon.

Official statistics confirm growing demand for petroleum and refined products and a continuing decline in U.S. crude oil production. Economics, geology, and governmental prohibitions on exploration and production in ecologically sensitive areas are the determining factors. The Department of Energy estimates U.S. imports of oil and products will rise from today's 50% to 62% of total consumption by 2000.

If base case predictions by the DOE with respect to rising oil prices and imports are correct, the annual oil import bill, corrected for inflation, will triple from \$34 billion in 1988 to \$104 billion by the end of the coming decade.

Imports of natural gas are also on the rise. Today we import 6.6% of our gas. By 2030 that figure could rise to 30% if gas is used extensively in utilities.

Energy Security is Price Security

The threat of an oil price run-up is at the heart of oil security concerns. The numbers are staggering. If the price of oil on world markets goes up by a dollar, the U.S. will transfer an extra \$6 million abroad for oil each and every day thereafter. The cost of oil to the economy will jump \$6 billion per year.

The value of keeping oil prices in line is substantial. For example, the world price of oil in 1988 dollars is projected to rise to \$28 by the year 2000. Suppose the real price of oil in the coming decade were \$1 less each year than projected, rising to \$27 rather than \$28 in 2000. The cumulative savings in the cost of imported oil over the decade could approach \$39 billion in today's dollars.

In the 1990's, oil consuming nations could face a price squeeze from a deliberate cartel strategy to tighten supply. To pre-empt this, it is important that U.S. officials stress the shared destiny and common interests in stability between the oil consuming and producing nations. And, quite frankly, we are hearing a lot these days about the new era of cooperation between consumers and producers that could come about in the interests of oil market "stability". There is much to be said for stability in oil markets -- providing that the stable price isn't too dear. But ultimately, the best defense for the consumer in the face of undue economic power in the hands of the producers is to improve one's bargaining position. To paraphrase a skillful negotiator of recent past, "Cooperate, but have an alternative!"

Lost Market Share: The OPEC Nightmare

Many observers agree that the OPEC cartel is concerned at the potential loss of markets that could result from engineering too little supply. The movement toward conservation, non-OPEC production, and substitute fuels that followed the overreaching price increases of the 1970s taught the cartel a bitter lesson.

There is a lesson for the U.S., as well. Strategy in this country should aim to increase the likelihood that cartel efforts to restrict oil supplies will lead to lost oil markets. This is precisely the benefit of

measures to promote fuel flexibility, and to encourage new energy and conservation options. The problem is that industry cannot support these efforts adequately when oil prices are low.

There can be no doubt that the OPEC cartel has learned from the recent past. Recently, Iraq's oil minister said that growing oil demand will be met by the top five nations oil reserve nations: Saudi Arabia, Iran, Iraq, United Arab Emirates, and Kuwait. He went on to say that the five had a common aim, namely: a "fair and remunerative price" high enough to furnish the income needed by the Middle eastern nations but low enough not to encourage a new alternative fuel effort in the industrial world.

Importance of Options

As a major consumer, the U.S. has a stake in lowering the cost of fuels that can replace imported oil. Most of these options will not be economically competitive with cheap oil any time soon. But we need not aim for the large scale substitution of these fuels for imported oil absent the economic justification for doing so. The strategic value lies in steady progress in reducing the cost of these technologies.

Following this logic, the United States should determine the extent to which substantial additional reserves of oil and gas exist offshore and in Alaska. Technologies that increase the efficiency of energy use are as important as technologies that produce energy. Fuel technologies that seem far distant today, such as electric powered vehicles, should not be neglected simply because private industry is unable to invest heavily in their development. Encouraging fuel options in the transportation sector through introduction of multi-fuel vehicles brings the potential of fuel competition to the one sector of our economy where oil has no competition. We should remember that competition is mother's milk for consumers.

Lower the Cost of Liquids from Coal/Shale

It is high time the United States got over the disappointing experience with synthetic fuels during the early 1980's and got serious about lowering the cost of producing liquid and gaseous fuels from our vast reserves of coal and oil shale. Given the enormity of our liquid fuels production potential with these technologies, there is strategic deterrent value in demonstrating a decline in their cost.

If progress in synthetic fuel technologies were to evoke an OPEC response that kept oil prices a dollar below the DOE base case forecast through the next decade, the cumulative reduction in the cost of oil to the U.S. economy in 1988 dollars would approach \$80 billion.

A decade ago, Republicans and Democrats alike voted to spend about that much to produce 2 million barrels of oil per day from coal and shale. That was too much production too fast and the entire effort was abandoned by industry, Congress and the Reagan Administration in the wake of falling oil prices. Synthetic fuels were discredited as a result of a program flawed in concept and execution. One lesson is clear from that experience; no energy program based on substituting expensive domestic fuels for cheap imports can long survive.

Synthetic fuels policy in the years immediately ahead should emphasize cost reduction over production. This will require some demonstration-scale projects. The near-term strategic value of a synthetic fuels program in the U.S. will not be found in the imported oil backed out but, rather, in the fear that reductions in the cost of these technologies strikes in the heart of the OPEC cartel, and the increased bargaining power that flows to the U.S. The knowledge thus gained will support the efficient production of these fuels in the next century, if needed.

Today, despite our enormous potential to supply liquid fuels from domestic solid fossil fuel reserves, we spend comparatively little to lower the cost of these technologies. If continued, this course of inaction is tantamount to accepting dependence on the OPEC cartel, abandoning even a modest program to develop technologies the cartel is loath to see us perfect, and betting heavily that the OPEC of the year 2000 will look more like that of 1988 than that of 1978.

Conclusion

In the final analysis, in the oil arena, the U.S. is headed toward becoming more of a importing than a producing nation and we ought to think more like an importing nation.

Cheap energy is better for the economy than expensive energy. With growing oil import dependence and a stronger producers' cartel a likely part of our future, U.S. energy strategy ought to aim at keeping the oil price in line. Yes, it is important that we foster a

sense of interdependence between producers and consumers. But, in the last analysis, the best way for oil consuming nations to protect their interests is to keep the producers fearful that their interest in raising prices is likely to result in lost markets. One of the best ways to do this is to demonstrate a variety of technologies for reducing the cost of producing oil from the vast deposits of oil shale the United States is fortunate to possess.