



Are the pipes calling?

Posted by [Heading Out](#) on August 4, 2005 - 5:47am

It is probably wrong to judge a person by comments made 27 years ago, but the quote will be related to a similar recent action that makes it worth bringing up for discussion.

During the 1970's an Energy Project was started at the Harvard Business School, and in 1979 Robert Stobaugh and Daniel Yergin reported on it with the book *Energy Future*. It is interesting reading, to see how the world was viewed, and what they recommended.

The authors built their case on the energy split in 1977 (in millions of barrels a day of oil equivalence, or mbdoe). This came from a domestic supply of: 10 mbd oil; 9 mbdoe natural gas; 7 mbdoe coal; 1 mbdoe nuclear; & 1 solar (including hydro) with imports of 9 mbd of oil for a total of 37 mbdoe.

If convention were followed they predicted that the supply by the end of the 80's would be domestic oil 10 mbd; gas 9; coal 12; nuclear 3 and solar 2; with imports of 14 mbd of oil and 1 of gas, and conservation over anticipated growth yielding 3 mbdoe to give a total of 54 mbdoe as anticipated demand. (Also predicting 34 mbd of OPEC production).

This reliance on foreign oil was considered dangerous

"The United States is at the center of the world oil problem, having failed to come to grips with the decline of its influence over the world petroleum market and the true costs of its oil imports. By ignoring the even larger external costs associated with imported oil, the United States has been encouraging a form of behavior that will drain the world of the commodity. This is a reckless course, increasing the vulnerability of the entire Western world and undermining the leadership of the United States within it. In short, increased dependence on imported oil poses a threat to American political and economic interests; that much must now be clear."

To counter this they suggest a program that would encourage other energy sources and conservation, and that such a program be funded by the Government. With such encouragement, particularly of solar energy and conservation, they anticipated that the US supply could become: domestic oil 10 mbd; gas 9 mbdoe; coal 11 mbdoe; nuclear 2 mbdoe and solar 4 mbdoe. With imports of 9 mbd of oil and 1 of natural gas, a conservation program that would save 8 mbdoe would total 54 mbdoe of demand.

This was a fairly well argued case, but it hung on one awkward number in all cases they projected that the U.S. would produce 10 mbd of domestic oil in the late 80's. The choice of this number is described

"Thus, the total U.S. oil output in the late 1980's from both known and newly found oil

fields and from enhanced recovery will likely approximate 10 million barrels daily, about the same as current production. Even this level is quite speculative and perhaps on the optimistic side. To maintain that production level would require the finding of almost four billion barrels annually; but there has been only one year in the last thirty in which more than three billion barrels of oil has been found."

In other words they had built a whole case on a balanced supply of energy on a premise that they knew, even at that time, was likely false.

Why bring it up right now â€œ well [Daniel Yergin's Washington Post editorial](#), which concludes that we don't have to have any worries about oil supplies running out, includes this

Our estimate for growth in Iraq is quite modest -- only 1 million barrels a day -- reflecting the high degree of uncertainty there.

But the reality of Iraq is that the likelihood of their being able to increase production by 1 mbd over the next few years is likely zero. (As was finding 4 billion barrels of oil in the U.S. every year of the 1980's). But by putting it in, and neglecting depletion, a very rosy picture of the future could be painted. What a pity that it is built upon such a dubious foundation.

Now what was that saying about "fool me once"

Oh, and the energy supply in 1990 turned out to be 7.5 mbd domestic oil; 7.9 mbd imported oil; 9.3 mbdoe natural gas; 9 mbdoe coal; 2.88 mbdoe nuclear; 1.44 mbdoe hydro; 1.26 mbdoe wood, waste etc; 0.16 mbdoe geothermal; 0.03 mbdoe solar and 0.01 mbdoe wind, for a total of 40 mbdoe. (Source Annual Energy Review, which can be found [here](#), though I have converted the numbers from quadrillion Btu's to mbdoe for consistency).

Technorati Tags: [peak oil](#), [oil](#)



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