

SYNTHETIC FUELS FROM COAL - OUR  
MORAL EQUIVALENT OF WAR

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Coal Synfuels

During World War II, shortly after becoming Britain's Prime Minister, Winston Churchill was asked, "What is your policy?" He replied, "To wage war." That answer was clear and was, in fact, the policy followed by England and somewhat later our own country.

During the 1960's the United States had LBJ's war on crime and war on poverty and we were informed by Jimmy Carter that we would attack our energy problems with the vigor of "...the moral equivalent of war". Had we waged "war" on our national energy problems we would, I believe, have won a number of battles and the war itself. Had we pursued victory in World War II as we have in the crime, poverty, and energy wars, I would be addressing you today in either Japanese or German.

Let me take you back a few years to November of 1972 and quote to you from a report to the Office of Science & Technology Overview by an appointed study group. The report outlined a program to develop alternate processes to produce clean low-Btu gas, clean liquid fuels and clean solid fuels from coal.

"The production of clean, synthetic fuels, from coal, is vitally important since stack gas purification systems are now known to have many unresolved technical and economic problems. Experience to date has shown that efficiencies are low, costs are high, and the powerplant waste disposal problem is accentuated. Furthermore, stack gas systems will not provide an answer to clean-burning fuels for the rapidly growing industrial energy market, whereas coal conversion problems will."

"The production of clean-burning liquid fuel from coal can be applied to existing powerplants as well as new conventional plants and new advanced cycle powerplants. An electric utility is certain to find it much easier to use a low-sulfur fuel produced from coal rather than operating a complicated processing step included in any stack gas cleaning systems. This is particularly true of the Eastern United States where power demands are high and substantially all of the coal is of the high-sulfur variety."

It remains my view, that some variation of the outlined program would have been quite successful. With such a program, 'Nationally, we would have a much stronger hand in future dealings with OPEC if a synthetic fuel industry were in an early state of development within the continental U.S.'

If plants could have been built and an industry created, why didn't it happen? President Reagan says that if there is money to be made industry will go ahead, just as they did in Detroit with the small car. The supply and demand system going strong -- loan guarantees to Chrysler, restrictions on Japanese imports. You say the automobile is a special case? I suggest you look at our national railroad system, our price supports for every commodity under the sun.

We have touched on reason number one. The U. S. industrial executive has lost the ability to take risks--unless, of course, the risk-taking is risk-free. A number of years ago, I was invited by the executive VP of a top 500 company. He (industry) and I (government) were interested in the same thing (or so he said) -- how to get a commercial-scale plant designed, built, and operating. I stated that we had been told the US could and would supply 50% of capital. He thought this was great but the company would like a loan guarantee for the private-sector half. Although not our department I felt that could be arranged. We will need a guaranteed market as well, said he. Again not my department but perhaps government could buy the product for its own use. Fine, but we will, of course, need to show and have a profit which must, also, be guaranteed -- this is a free enterprise system you know. That didn't sound like free enterprise to me then and it doesn't today.

Reason number two. Government can't decide what, if anything, it should do. Government rules and regulations are rapidly reducing the government executive to the same impotent level as his industrial counterpart. Procurement delays, management reviews, variations in the government position from budget cycle to budget cycle, congress to congress, and administration to administration deprive officials who wish to proceed (and they are fewer in number every year) with the ability to do so.

Reason number three, possibly the worst of the lot, I will call conventional/media wisdom. You have I am sure heard it all. Only Lurgi gasifiers are commercial -- solar power is all that we need-- the Arabs will cut the price of oil-- gasohol is the way to go -- the US must import a proven system. On and on and on. I personally subscribe to none of this, yet each of these pearls of wisdom (?) has diluted our efforts and thus deprived us of effective action in another area.

Reason number four -- announced plans by major industrial companies. How many of you have heard of the gas from Texas lignite plant? That plant is now about eight years and at least four major press releases old. Another might be the companies who were going to build pipeline gas plants. Gasoline from Colorado coal. The list could go on and on to no purpose. Each announcement does, however, delay actions by others and contributes to reason number two. Like others, I once thought these announcements meant something -- I stopped believing 12 or 14 years ago.

Is it any wonder that our energy war is being or perhaps has been lost? Can anything be done? I would say yes, even in this late hour.

- Step I: Go ahead with at least one of the DOE Demonstration Plants. My choice could be the Memphis project because of the great potential for that gasifier.
- Step II: Survey the industry and announce award of a project to proliquid products from coal. Do not dilute the effort with a series of evaluations. The winner would be offered loan guarantees and the government would buy or support the price of plant products.
- Step III: Design, build, and operate a plant to produce clean gas, power, and methanol with a "high" risk gasifier. Plant to be government owned and contractor operated.

Each of these steps should be undertaken as though they were a war-time, survival of the republic defense effort. Each plant should be pushed to completion as rapidly as possible. Naturally these plants are not expected to be the only energy program nor the total program. They are, however, an excellent start on a national commitment to do something with coal other than burn it. If my judgment is correct, this program will prove there is money to be made in synthetic fuel, the risk will be gone, and industry will then prove the President to be correct and will be about doing it.