Suboptimal Supply Side Environmentalism

Craig S. Marxsen

University of Nebraska at Kearney

> "Our enemies are innovative and resourceful and so are we. They never stop thinking about new ways to harm our country and our people, and neither do we." -- George W. Bush

The inauguration of the Reagan Administration marked a swing in favor of "supply side economics,' or so the political rhetoric of that period suggested. While proponents of laissez faire policy may have wanted more than Reagan actually accomplished, the new President did end the "energy crisis" by diminishing government interference with fuels supply. The idea of shifting emphasis to the "supply side," however, seems to have caught on with people who are concerned with pollution and global warming. Having been relatively unable to alter such consumer behavior as choosing sport utility vehicles instead of small fuel-efficient cars, and finding resistance to the use of taxation to moderate carbon fuel consumption, they turned their effort toward the supply side of fuels markets. This strategy conceals the cost to consumers since it percolates up to the retail level through an opaque complex of intermediate supply and demand relationships. By relentlessly tightening environmental regulations, by expanding protections that make fuel deposits off limits for producers to extract, by encouraging litigation and punitive settlements, and by increasing permitting and construction obstacles, they reduced carbon fuel supply. Philip K. Verleger, Jr. (2008), one of America's leading authorities on the petroleum market, explains that the doubling of oil prices from January 2007 to January 2008 largely resulted from regulations requiring removal of almost all sulfur from diesel fuel and gasoline, combined with the government's subsequent campaign to purchase low sulfur crude oil for the strategic petroleum reserve. Andrew P. Morriss (2007) elaborates a relentless regulatory effort to control gasoline. In his article, "Putting a

Bureaucrat in Your Tank: Gasoline Markets and Regulation," he outlines the relentless mandates including "boutique fuels" requirements that specified many details on location specific gasoline formulation. In addition, oxygenates were required, meaning that gasoline had to contain a certain percentage of either MTBE or ethanol. This paper focuses on some of the hidden costs and repercussions from such regulation, especially from efforts to eliminate MTBE and thus tacitly require ethanol as a constituent of our liquid fuels supply. While a transient windfall for corn growers seemed to result, there were troubling repercussions in global food markets and in the global economy – the petroleum price spike played a role in triggering the financial collapse of 2008.

Does supply side environmentalism really enjoy massive grassroots support? The supply side attack on carbon fuels probably proved politically self-sustaining because it was able to amalgamate enough political interest groups to gain political traction. As George Stigler explained in his classic 1971 article, lobbying to influence regulation affords the opportunity to gain monopoly power wherever incumbent business interests might impede the entry of competitors into their markets or industries. Regulation becomes a major source of monopoly power underlying what economists call "monopoly profits," or "rent" that would otherwise shrink as competitors attracted by its presence proliferate to increase the supply of a good or service. Producers of carbon fuels thus find a conflict of interest blunting their potential resistance to regulation seemingly aimed against them because such regulation actually impedes their competitors more than it does them. By lobbying, incumbent producers can design regulations to work like antibiotics that are relatively harmless to themselves while being fatally toxic to their potential competitors. Unusually low demand elasticity is also vitally helpful in explaining the behavior of fuels producers since it meant that supply reductions tended to result in large revenue increases for the whole industry. Petroleum producers, among others, thus stand to benefit from interventions that raise the prices of liquid fuels.

Bruce Yandle reinforced Stigler's idea with his "Bootlegger and Baptists" model of demand for regulation. "Rent" seekers get behind idealists to amplify the political effort to create or strengthen regulations that enhance and preserve monopoly profit ("rent" in the sense that it is a reward beyond the payment necessary to induce supplying of a good or service). We would add to Yandle's observation that a kind of soft corruption pervades the efforts of some idealists and of political entrepreneurs who exploit the game in order to hold political office. Private organizations that lobby for regulation and that litigate and launch public relations campaigns against firms or industries, gain sustenance and contributions, partly through a kind of extortion. Vulnerable business enterprises end up making financial contributions to organizations such as the Sierra Club partly for Stigler's rent seeking motives, and partly in an effort to avoid the Sierra Club's enmity in some future environmental protection concern.

Political candidates exploit the fundraising power of a similar kind of extortion that effectively extracts campaign contributions from business enterprises hoping to obtain impediments for their competitors and protection from new legislation that they hope will exempt them by grandfathering clauses. Such underlying mechanisms propel the destructive weapons of regulation, litigation, prohibitions and punishments that constrain and contract industries supplying carbon based fuels. The entry of new producers is stifled as the reserves of existing producers recede continuously. Due to low demand elasticities, the dwindling reserves tend to appreciate in aggregate value in spite of declining in volume. In sum, producers fail to resist, and they even encourage, the multiplying of restrictions both for rent seeking benefits and as a defensive appeasement of potential adversaries and litigants. Like bootleggers who got behind Baptists' temperance efforts, fuel producers quietly back environmentalists' efforts to constrain fuel production, as Yandle observed. The environmental lobby benefits oil producers as the Texas Rail Road Commission did in the last century with its devices to limit oil production for the sake of upholding the price. The regulatory obstacles to national productive efficiency accordingly multiply like the barnacles on a ship, much as was broadly explained by Mancur Olson, in his famous 1982 book, *The Rise and Decline of Nations*. Energy supply constraints become a major instrument of America's stagnation and decline.

Contrast an efficient approach to achieving a desirable reduction in prospective global warming due to anthropogenic carbon dioxide emissions. Economists calculate the economic damage attributable to an additional ton of carbon dioxide emitted to the atmosphere. Emitters are required then to pay a tax on each ton of carbon dioxide emitted so that they will refrain from going beyond burning quantities of carbon fuels that yield an apt amount of benefits. To be appropriate, the benefits must be at least as valuable as the cost of producing the fuels plus the tax that equals the additional value of the harm that those quantities will add to the global warming problem. In theory, such a strategy avoids wasting resources. At present, an efficient tax on carbon might range between $0.10 and $0.15 per gallon of gasoline equivalent, a figure near the median $29 per ton of carbon value reported for the 232 published estimates studied by Richard Tol and cited in his recent article in *The Journal of Economic Perspectives* (2009, p. 41). At the same efficient rate per ton of carbon dioxide, an optimal subsidy would induce the sequestration of carbon in whatever ways people might conceive of capturing it. Burying carbonaceous waste in a landfill might earn a subsidy, as might using wood products in the construction of a residential or commercial structure. Injecting carbon dioxide into an oilfield could merit a subsidy payment, as might fertilization of an ocean with iron to enhance phytoplankton growth for the sake of stimulating ocean fish harvests. The phytoplankton sink carbon as calcium

carbonate and as biochemical carbon compounds that fall to the bottom of the sea.

Peter Huber (2009) emphasizes that we really cannot "…stop the world's 5 billion poor people from burning the couple of trillion gigatons of cheap carbon that they have within easy reach." Efforts to restrict carbon fuel use in the United States drive manufacturing into the developing world where carbon and labor are both more available. With non-nuclear alternatives unable to replace very much of the energy needed from fossil fuels, Huber suggests geoengineering as perhaps humankind's only realistic option for resisting global warming. Strategies to withhold nature's black gold from humanity will prove ineffectual. Controlling global warming through geoengineering approaches, including both the sequestration of carbon and adjustment of the earth's albedo, impresses Huber as being realistic. He suggests that the United States has demonstrated the potential to sequester substantial amounts of atmospheric carbon dioxide through reforestation. Huber, advocating carbon sinking, disdains "the assumption that carbon already sunk by nature in what are now hugely valuable deposits of oil and coal can be kept sunk by treaty and imaginary cheaper-than-carbon alternatives."

Two components of America's gasoline supply seem particularly well suited for discussion in the context of politically driven efforts to fight global warming by means of supply side initiatives. The first is methyl tertiary butyl ether, or MTBE, and the second is ethanol made from corn. Much of the MTBE sold in America came from a Canadian firm, Methanex, which was impaired in its political ability to influence legislative and judicial actions in the U.S. Ethanol, in contrast, enjoyed political support originating from millions of Americans dependent on corn and related agricultural industries. As the outcome of a political tug-of-war between interest groups, we might better call the combined modifications to these two sources of America's gasoline supply the "bozo-fuels revolution" as a parody of the environmentally lauded, more popular, "biofuels revolution" appellation.

The End of MTBE

Developed decades ago, the nation's most successful synthetic gasoline program has died a quiet death in recent years, helping to propel gasoline prices to their 2008 stratospheric levels. MTBE, a derivative of methyl alcohol, mostly came from natural gas rather than from crude oil and thus had a smaller carbon footprint than oil or other synthetic fuels. Gasoline fortified with this synthetic component was relatively inexpensive compared with today's. Numerous old leaking underground storage tanks later enabled the detection of an insignificant MTBE odor in various groundwater supplies, resulting in the abandonment of this program although large corporations had invested billions in production infrastructure and both large and small businesses had invested billions, in total, to correct the leaking underground storage tank problem. The recent energy and food crisis has partly resulted from an inadequacy of

energy infrastructure compounded by a reluctance of companies to invest in infrastructure expansion for fear of the manifest disregard for their property rights. The frivolously motivated, uncompensated, and unremorseful ruin that came down on suppliers and retailers vulnerable to this contrived MTBE financial disaster now stands as an investment deterrent.

MTBE became a constituent of gasoline at the end of the 1970s when refiners needed a lead-free octane booster to replace tetra-ethyl lead. Because it was also an "oxygenate," meaning that it raised the proportion of oxygen atoms relative to hydrogen and carbon atoms in gasoline, it tended to make carbureted engines run leaner and, therefore, cleaner. MTBE became the most widely used oxygenate mandated by subsequent laws enacted to create "reformulated gasoline." With much of the nation's reformulated gasoline containing about 11% MTBE by volume (U. S. Energy Information Administration, 2002, p. 2) it constituted about 3% of the nation's total gasoline supply – roughly equal to ethanol's contribution today. MTBE's removal was equivalent to a loss of more than 3% of our gasoline because losing MTBE's gasoline performance enhancing qualities hindered use of other petroleum constituents which it had enabled using. Moreover, in a global sense, food taken from the mouths of the poor is now replacing the lost MTBE.

Ignoring the controversial impact of pumping biofuels that require much fossil fuel to produce, low demand elasticity implies a very large isolated price effect from taking away MTBE's 3% contribution to gasoline. Allowing 1.5 months for quantity to fully adjust to price changes, Jonathan Hughes, et al. (2008, p. 129), statistically estimated U. S. short-run gasoline demand price elasticity to be about -0.05 over the period from 2001 to 2006. This means that each 1% price change reduced the quantity of gasoline demanded by consumers by only 0.05%. An abrupt 3% reduction in gasoline supply, therefore, would result in a 60% increase in the price of gasoline (3% divided by 0.05), according to the theory of supply and demand. The long-run percentage quantity change, from each one percent price change, is doubtlessly greater, but still very low. William Nordhaus (2007, p. 4), estimating that the short-run (1-year) elasticity of demand for crude oil is about -0.04, reports a long-run (10-year) crude oil price elasticity of -0.24. Applying this long-run elasticity to the price of gasoline would suggest a 3% quantity reduction would ultimately still leave an over 12% increase in gasoline prices remaining even after the elapse of 10 years during which people could more fully adapt by changing their lifestyles. A more than 3% reduction in the supply of gasoline's source materials thus causes a big increase in the amount people are spending on gasoline, even though they are buying less of it, because price elasticity is very low or near zero. It seems doubtful that the benefits of eliminating MTBE, if any, have been worth paying a price between 12% and 60% higher for gasoline!

A series of lawsuits (alleging petroleum companies are responsible for contaminating water supplies), and

of state government actions and bans, culminated in the virtual elimination of MTBE as a constituent of gasoline in America. Petroleum companies, previously forced by law to use MTBE, have now dropped it after Congress refused to enact legislation to protect petroleum companies from pending lawsuits. Yet, MTBE was no more a threat to human health than ethanol, according to testimony by Jack Snyder, a Professor of Toxicology at Thomas Jefferson University (Williams, 1995). Although often described as smelling like turpentine, drinking a shot of MTBE would merely produce, in the average person, a feeling of intoxication much like alcohol, as can be substantiated by a 2000 Clinton Administration White House website Interagency Report that was still available on the internet on May 6, 2008. The effects wear off harmlessly much like the effects of alcohol. Doctors, in the past, routinely injected MTBE full strength into gallbladders to dissolve gallstones in human patients (Marxsen, 2001). Except for its odor, vodka contamination of ground and surface water would be just about as harmful to human health as MTBE contamination. Objection to small traces of MTBE found in ground and surface water was really the only basis for eliminating it from our nation's fuel supply.

Virtually all of the MTBE found in water wells got there from leaking underground storage tanks, buried principally because of concern for fire safety. Public ignorance that bacteria spontaneously clean up gasoline spills prompted public overreaction to the contamination of groundwater from leaking gasoline storage tanks, resulting in excessive remedial expenditures and losses including huge sums spent on pump and treat remediation programs (Marxsen, 2001). By the end of 1998, the EPA's deadline for remedying leaking underground storage tanks, about 1.25 million underground fuel tanks (the majority) had been closed altogether (Marxsen, 2001), while the remaining 891,686 had been leak proofed at a cost of about $100,000 each, on the average. The MTBE turning up in water wells at the beginning of this decade had come from tanks leaking during the years before remediation completed in the late 1990s. After this tremendously costly forced repair and closure of the leaking underground storage tanks, government then forced the elimination of MTBE as a constituent of our fuel supply because it had leaked into the groundwater at various locations. While having a population of leak proofed fuel tanks remains a substantial benefit, we, nonetheless, could have continued enjoying a greater benefit by continuing to use MTBE. Modern underground fuel tanks now have leak detection systems and robust leak resistance, and MTBE would not be problem for today's system of tanks.

The MTBE saga is but one part of a story of how regulation and litigation, driven by ill-informed hysteria, have brought an energy crisis and famine. It is part of a larger and hidden story of regulatory persecution of petroleum producers and refiners, of ridiculously tightened sulfur and particulate restrictions, and of looming extremism to sacrifice carbon fuels usage in a gesture against global warming (Marxsen, 2008). It is as if an absurdly

finicky fanatic, in charge of a dinner, saw a fly land on a serving platter and has therefore insisted on throwing out the whole supper and sending the children to bed hungry.

The Hunger for Ethanol

The energy sector has contributed to rising food prices and has increased the attractiveness of converting crops to biofuels. The demise of MTBE was not accompanied by a curtailment of the oxygenate mandate for gasoline, so a massive increase in fuel ethanol usage took MTBE's place because ethanol was MTBE's only practical substitute. Sallie James (2008) explains that ethanol capacity increased 40% during 2007 due to government incentives and farmers achieved the increase partly by reducing acreage devoted to rice, cotton and soybeans by 3, 18 and 16 percent, respectively. Although food prices were rising significantly as a result already, a new energy bill signed in December 2007 mandated a near doubling of corn-based ethanol use in 2008 and a fivefold increase by 2022. The European Union likewise agreed to use renewables (primarily canola oil) for 20% of power production and 10% of transportation fuel by 2020. This is quite a turnabout from the past technological revolution that, in effect, was transforming abundant fossil energy supplies into bountiful supplies of food for a hungry world feared to be facing starvation. In the past, when it appeared that global famine was imminent, agricultural innovation (e.g., the "green revolution") exploited bioengineering and synthesis of fertilizers and pesticides from fossil sources to head off an apocalyptic outcome.

Rosamond Naylor, et al. (2007, pp. 34-35) review the impact of converting, to fuel ethanol, a sizeable fraction of U.S. maize production that accounts for roughly 40% of the world's total. Government policies driving rapid expansion of the corn ethanol industry included a $0.51 per gallon ethanol tax credit, a $0.54 per gallon tariff on imported ethanol (plus an additional 2.5% import duty), and mandates to phase out MTBE, the fuel oxygenate synthesized from natural gas, according to Naylor, et al. The U.S. produced 18.5 billion liters of bio-ethanol in 2006, amounting to 2.5% of U.S. gasoline consumption. Output projections, rising to 30 billion liters of ethanol by the end of 2007, were to rise to 45 billion by the end of 2009, say Naylor, et al. The resulting rapid increase in demand for maize had already caused its price to increase from $2.60 per bushel in July 2006 to $4.25 per bushel by March 2007. Corn acreage planted increased 19% from 2006 to 2007 and soybean acreage planted decreased by 15%. From 2000 to 2007 the price of U.S. farmland increased by an average of 74%, explain Naylor, et al. (2007, p. 35). In commodity futures markets, corn rose above $7 per bushel. No one should have expected the struggling corn farmers of Nebraska (or elsewhere) to protest such developments!

Aditya Chakrabortty (July 10, 2008) provided a downloadable copy of a draft report of a World Bank study that attributes 75% of the rise in global food prices to diversion of food crops to biofuel production. While the report written by Donald Mitchell, cashed by

Chakrabortty, is labeled as a "draft not for circulation or citation," World Bank Group President, Robert Zoellick (2008) reported elsewhere that global food prices were soaring, with staples in 2008 more than 80% higher than their 2005 prices. Hunger was forcing children even 4 and 5 years old to flee into cities and participate in food riots while the World Bank estimated that 33 countries faced potential social unrest because of the extreme increase in food and energy prices. Zoellick reported that malnutrition accounted for 3.5 million deaths of children less than 5 years old each year, implying that rising food scarcity threatened an enormous and immediate carnage at the time of his writing. A related 2008 World Bank Report emphasized that 36 countries were in crisis because of rising food prices, explaining that major causes included increased grain demand for making biofuels, rising prices for fertilizer, and rising energy prices. Fertilizers (containing nitrogen compounds synthesized using natural gas or other fossil energy sources, or using electricity) had increased in price by over 150% during the previous 5 years and fertilizer accounted for 25% to 30% of the cost of producing grain in the U.S., which supplied over 40% of world grain exports. The World Bank Report emphasized that the U.S. supplied over 60% of world maize exports and a quarter of the then recent U.S. crop (11% of the world total) went into biofuel production while the U.S. government, at that time, doubled the biofuels mandate to be achieved by 2015. Zoellick says, "Hunger and malnutrition are the forgotten Millennium Development Goal…."

Environmental activism was manufacturing this absurd global food crisis. Jerry Taylor and Peter Van Doren (2007, p. 18) cite U.S. Department of Agriculture figures indicating that corn ethanol involved $0.96 in variable costs and $1.57 in capital costs per gallon, for a total of $2.53. Ethanol, they reason, would not have been a constituent of gasoline in 2006 without subsidies of between $1.05 and $1.38 per gallon, including those received by processors. They obtain this more comprehensive estimate of U. S. ethanol subsidies from a 2006 report from the International Institute for Sustainable Development headquartered in Geneva, Switzerland. Even supposing that ethanol production itself contributes no carbon dioxide emissions, so that the net gain equals the entire amount of carbon that the gasoline it displaces would have emitted, still leaves ethanol costing $250 per ton of carbon withheld from the atmosphere. This is an unacceptably high cost among strategies to mitigate carbon emissions, explain Taylor and Van Doren (2007, p. 23). They emphasize that William Nordhaus calculated that an optimal policy of carbon emission abatement should cost around $15 to $22 per ton of carbon in the U.S. at the time of their writing (2007, p. 24). To understand the government effort to promote fuel ethanol, one must note that the program concentrates benefits on a politically influential minority while dispersing costs invisibly over a vast number of consumers. In addition to Taylor and Van Dorn's observations, we might note that the success of ethanol mandates stands also on a long established apparent public desire to

preserve farming capability in the United States, perhaps for fear of future hunger. Maintaining an excess grain production capacity by requiring the use of biofuels might ultimately prevent a future famine. Ironically, a serious global famine, not over yet, is already an outcome.

Robert Hahn (2007) reports the results of a cost-benefit analysis of ethanol as a petroleum substitute in America's motor fuel supply – a substitute that he says, in 2005, displaced less than 2% of the gasoline that Americans used, while absorbing about 15% of America's corn supply. Assuming that ethanol production will increase by 3 billion gallons by 2012, Hahn reports that costs will exceed benefits by about $1 billion per year. The U.S. Energy Department's more optimistic projection of the increase in ethanol production makes costs exceed benefits by more than $2 billion per year in 2012, according to Hahn's study that he conducted in collaboration with Caroline Cecot. They reportedly give ethanol the benefit of the doubt, moreover, assuming that ethanol actually reduces greenhouse gas emissions. One well-known controversy surrounds allegations that corn ethanol production increases the demand for fossil fuels so much that their extra combustion for producing the ethanol burns about as much fossil fuel as the ethanol replaces for motorists. Recent advances in ethanol production, however, have substantially reduced the fossil energy input over the life cycle of the production of a gallon of ethanol, according to Kenneth Cassman (as reported in a February 2009 *Business Week* interview by John Carey). Cassman reports findings published in the *Journal of Industrial Ecology* (Liska, et. al., 2009, p. 58) that show recently produced ethanol, compared with petroleum-derived gasoline, reduces greenhouse gas emissions by 48% to 59%, because of improvements in production technology. This is much better than previous studies showing no net reduction in carbon dioxide at all. However, Hahn and Cecot do not even raise this ethanol production issue, but rather observe that recent science suggests that ethanol fortified gasoline strikes out because it emits more nitrous oxide, a more potent global warming offender than carbon dioxide.

Nonetheless, even if we give Cassman's numbers a similar full benefit of the doubt, another caveat needs pronouncing. Recent research suggests that this costly biofuel substitution strategy to slow global warming worsens the greenhouse problem rather than mitigating it, due to its impact on land use. Robert Frederick's February 8, 2008 interview for *Science* Magazine obtained a Timothy Searchinger summary of some startling findings about biofuels. Diverting land to production of ethanol, or bio-diesel fuel, results in land use changes that increase rather than decrease greenhouse gas emissions. Higher grain prices induce farmers to plow additional land and clear forests all over the world, releasing carbon stored in soils, trees, and foliage. Searchinger estimates a substantially negative net effect based on this land use problem alone.

The Great Recession of 2008-2009

If Americans have failed to notice the global famine, eclipsing by the recent financial crisis may be the reason. James Hamilton (2009), probably the most cited authority on the role of energy shocks in causing recessions, emphasizes that the oil price shock and spike in gasoline prices triggered the recession that greatly intensified in 2008. He first focuses on the role of the economically collapsing automobile industry in the initial contraction of consumer spending. He then cites Joseph Cortright (2008) to argue that rising fuel prices devastated commuters' demand for suburban housing. Houses located close to city central business districts where commuters worked actually appreciated while houses located further away declined in market value in proportion to their distances from central business districts. Moreover, houses in those cities that had urban cores populated by better-educated inner city residents did not fall in value while houses in and around those cities that had urban cores populated by low socioeconomic groups collapsed in value. Hamilton (2005) shows the strong connection between past fuel price shocks and past recessions, reasoning that the delaying of the most recent recession seemed mysterious. Lutz Kilian (2009) shows that the delay between rising energy prices and the resulting recent recession is explainable by a difference in the causes of the last energy shock and previous ones. Specifically, Kilian emphasizes that rising energy demand, in the face of a failure of supply growth to keep up with it, caused the energy price spike that preceded the 2008 financial crisis. Previous energy shocks came from circumstances involving larger supply disruption elements, relative to demand increases. We submit that supply side environmentalism, especially illustrated by elimination of the component of gasoline supply being synthesized from natural gas – the MTBE component – restrained much of the would be growth of our fuels supply. The MTBE and ethanol story are but a small part of a much greater effort to diminish the supply of carbon fuels. The results are proving to be devastating!

Conclusion

Ironically, the Jeffersonian spirited corn farmer, while applauding the better price for his product, probably disdains the advance of the regulatory state that is bringing it about. Yet, supply side environmentalism gathers great political force, beyond the small group of agricultural interests benefiting from a transient come back of farming profitability. People who would never have consented democratically to inexorably rising fuel and food prices find themselves politically impotent because their supplies are not attacked at the pumps and grocery stores, but back down the supply chain and out of view. Skyrocketing gasoline prices thus seem a mysterious surprise. The relentless exhaustion of existing reserves and the producer reluctance of unfriendly foreign petroleum producers obscure and confuse much of the causal origin of price changes. The political process has similarly created a sort of beast

consisting of a regulatory and law enforcement mechanism that amplifies the ill-conceived will of people who thought they would use it to do good. While some might applaud the reduction in carbon dioxide emissions that seems to result, the achievement of these phantom reductions results from a kind of vandalism. Efficiency of fuels production declines and greater amounts of resources become diverted to producing carbon fuels. The results also alter the terms of trade so that America must export greater amounts of goods and services, or take on greater debt, to pay for larger amounts of fuel imports for which she must pay higher prices. By 2008, the waste had tended toward an extreme in which fuels cost increases were approaching a full order of magnitude!

The problem, then, with the current approach to global warming mitigation is that, while climatologists and other practitioners of the atmospheric and other sciences dominate the call for public policy intervention, they are ignoring economists' calls for policy efficiency. Political expediency has led to reliance on domestic supply side environmentalism that sabotages the production of fuels and the industries that use them. A terrible decline in the standard of living and even a mortality-laden famine appear to be among the results. The nation needs either to persuade the global warming prevention zealots of the need for efficiency in the choice of methods or to re-empower those individuals who would expand our supply of fuels. Supply side environmentalism should no longer dominate the actions of a government that has come to encourage a lynch mob strategy to control global warming by means of a carnival of rent seeking.

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