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## **The Political Economy of Energy Taxes: An Assessment of the Opportunities and Obstacles**

HENRY LEE\*

### **I. Introduction**

In the spring of 1993, President Clinton signed into law an aggressive package of measures to reduce the federal government deficit by \$500 billion over five years.<sup>1</sup> Included in this package was a small increase in gasoline taxes — the surviving remnants of a much broader energy tax, including a “Btu tax” on fossil fuels, which had fallen victim to an onslaught of blocking coalitions and special interests.<sup>2</sup> To many pundits, the demise of the Clinton Btu tax was not a surprise. The United States Congress had repeatedly rejected higher taxes on energy despite the arguments by environmentalists, and more recently, some economists, that such taxes would provide substantial environmental benefits, and if properly

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\* Director, Environment and Natural Resources Program, Center for Science and International Affairs, Kennedy School of Government, Harvard University. This paper was extrapolated from a luncheon talk by the author at The Pollution Tax Forum held at the Pace University School of Law on November 13, 1993. The author would like to thank Dale Jorgenson, Adam Jaffe and Carter Wall for their advice and comments and Karen Rothschild for her patience in converting his scribbled notes into a coherent paper.

1. Omnibus Budget Reconciliation Act of 1993, Pub. L. No. 103-66, 107 Stat. 312 (codified as amended in scattered sections of 26 U.S.C.).

2. See Brad Knickerbocker, *Green Activists Are Seeing Red on Record of 103rd Congress*, CHRISTIAN SCI. MONITOR, Oct. 3, 1994, at 6.

designed, might even spur economic growth. In light of continuing political opposition and the fate of the Clinton Btu initiative, many advocates have concluded that federal and state governments will not expend the political capital to increase energy taxes in the near future, and that it is now time to turn our attention elsewhere. I suggest that such a retreat is premature.

While interest in both federal and state energy tax policy issues has dropped off the political agenda, it will inevitably cycle back. Even if the projections contained in the Clinton program are correct, the size of the federal deficit will begin to balloon again starting in 1998. The present package, while an impressive first step, is at best a five year solution, not a permanent one. There is a high probability that revenue enhancement, tax reform, and deficit management will return to the national agenda sometime after the 1996 election.

Changing public perceptions and garnering Congressional support for energy or environmental taxes will be a difficult undertaking. Americans believe that they have a right to cheap gasoline and low cost energy, and any attempt to tamper with that right has been met with a firestorm of protest. Bolstered by past success in defeating energy tax initiatives, major energy producing and consuming industries are very familiar with which political buttons to push in order to ignite public passions. The vast number of organizations that lined up against the Clinton Btu tax is testimony to their success.

While the potential losers from higher energy taxes are easily identified, the beneficiaries are diffuse, unorganized, and usually timid. Even if the net results to an organization are positive, why should that organization support a measure so uniformly unpopular? Many environmental groups sat on the sidelines out of concern that the political cost was too high when President Bush suggested a double digit gasoline tax hike.

There are four primary conditions under which the federal and state governments might consider energy or pollution taxes:

- 1) A present need for additional revenue to reduce the federal deficit or balance the state budget;
- 2) A national security concern over vulnerability to a new disruption in petroleum supplies, leading to a desire to dampen energy consumption;
- 3) A leadership commitment that the externality costs of pollution have to be reduced, and the realization that fees or taxes are an effective means to realize those reductions;
- 4) Further commitment to tax reform, advancing both the interests of efficiency and equity.

None of these conditions existed at the federal level in the fall of 1993. Congress believed that it had dealt with the deficit reduction problem and was not interested in revisiting it. Further, the concerns over energy security that dominated the national debate in 1978 and 1979 had evaporated in the face of low oil prices and the United States's victory in the Gulf War. Apprehensions regarding the regressivity of energy taxes or fees, and political reluctance to increase any taxes or fees until the country was clearly out of the recession outweighed any concerns about environmental issues.

The terms of the debate must change to alter this situation. The only way to change these terms is to develop a substantively robust set of arguments, identify opportunities to market those arguments, and then to proactively set the terms of the debate. This process has the potential to coalesce the diffuse constituencies into a coherent force.

It will take several years to alter the political environment. New ideas and new concepts do not gain acceptance overnight. With an issue as contentious as energy taxes, it will be impossible to garner sufficient support if the debate is engaged only when the issue reaches the committee rooms of Congress. It is true that in a democracy one needs a focusing event to create change, but the opportunity quickly dissipates if one is not prepared to structure the ensuing debate. In all likelihood, proponents have a three year window to plant the seeds for the next round of the national tax debate. After 1996, this window will rapidly close.

## II. The Window of Opportunity

In addition to the potential reemergence of the budget deficit debate, there are several other factors which may contribute to the existence of this window of opportunity. The prolonged period of depressed oil prices may come to an end sometime between 1997 and 1999. The low oil prices of the 1993-95 period will spur consumption, especially in the Far East. The Organization of Petroleum Exporting Countries (OPEC) surplus, which created the present era of low prices, will be gradually consumed. Saudi Arabia could expand its physical capacity and guarantee the continuation of this surplus, but internal and external political pressures may make that course of action politically difficult.<sup>3</sup> The bottom line is that in 1997, projected oil prices for 1998 and 1999 may be higher than we presently anticipate. The level of United States imports will certainly be higher, and the political situation in the Middle East may be less stable. Since the residual or marginal barrel of oil to the industrialized world will come from that region, it is likely that energy security concerns will reappear, and with them, the debate over oil import tariffs and other measures to reduce consumption.

The public's continuing concern about cleaning up the environment may be constrained by the spiralling costs of environmental remediation. These expenses will force governments to look towards market mechanisms to achieve their environmental goals. When the total cost of environmental clean-up was fifty to sixty billion dollars, society was willing to tolerate the inefficiencies inherent in command and control regulations and technology-based standards. When the cost is \$120 billion and rising, society will not be as tolerant. Pol-

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3. Some people believe that Russia has significant potential to increase its oil production. Even under optimistic projections there will be an eight to ten year lag between the time these resources are identified and the time the infrastructure to produce and transport them to market is in place. It is fair to say that Russia *could* make a major contribution somewhere around 2003-2005. Therefore, if Saudi Arabia decided to gradually increase its production from eight million barrels per day to seventeen to twenty million barrels, and the most optimistic resource scenarios from Russia turned out to be true, low oil prices would continue into the first two decades of the next century.

lution fees may be one of the market mechanisms that will allow the government to reduce the rate of growth in these costs without retreating from its environmental goals.

The central driving force of the debate will be the perception that budget deficits will rise, thereby setting up a situation where government borrowing will push out private investment. While renewed interest in energy security and environmental goals could alter the terms of the debate, fears of measurable declines in economic welfare will control the debate's ultimate direction. Economic factors will put tax policy issues back on the agenda; however, energy and environmental considerations will help shape the end result. If environmentalists and other parties believe this scenario, what should their strategy be? What tactics should they follow?

### III. Economic Impacts of Energy Taxes

Proponents of energy taxes should begin by making a dispassionate and objective assessment of the economic and distributional impacts of imposing such taxes. Energy taxes not only increase the cost of fuels, such as gasoline, coal, electricity, and natural gas, but also products such as plastics, petrochemicals, food and cars. Almost every consumer product will be more expensive to produce, especially in the short run. Dr. Larry Goulder, a Stanford economist, has rigorously analyzed the welfare losses to the economy for several tax options and concluded that a gasoline or Btu tax imposes much larger welfare losses<sup>4</sup> on the United States economy than an increase in income taxes.<sup>5</sup> On the other hand, Goulder found that taxes imposed at the point of consumption (gasoline taxes), result in lower costs than those added at the point of production (Btu taxes).

Professor Dale Jorgenson of Harvard has also done extensive work on this subject, and he points out that each dol-

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4. Welfare or efficiency costs are those costs on the economy above and beyond the revenue derived from a tax.

5. Lawrence Goulder, *Energy Taxes: Traditional Efficiency Effects and Environmental Implications*, in *TAX POLICY AND THE ECONOMY* 105-58 (James M. Poterba ed., 1994).

lar of revenue raised from all taxes costs the private sector a dollar of foregone investment or consumption, plus a loss in growth opportunities of eighteen cents.<sup>6</sup> He terms this loss the "average excess burden," defined as the gain in efficiency that would result from replacing the whole United States tax system with a non-distorting system.<sup>7</sup> However, if the focus is on changing the existing system, the more relevant number is the marginal excess burden, or the efficiency loss per dollar for the final dollar of revenue raised. Jorgenson calculates that the marginal excess burden of raising a dollar from taxes on capital income is over a dollar (\$1.02), while the analogous figure for sales or consumption taxes is almost four times lower (\$.26).<sup>8</sup> Any shift from taxes on capital to taxes on consumption could produce significant gains to the United States economy. Jorgenson's analysis does not specifically include energy taxes, which would invariably have a higher marginal excess burden (MEB) than consumption taxes, because of the narrower base from which they are collected. However, even if the MEB of energy taxes is twice as high as that for consumption taxes, any shift away from taxes on capital to taxes on energy would still provide net benefits to the economy.<sup>9</sup>

What these studies tell us is that the design of an energy tax is very important. First, imposing an energy tax without offsetting reductions in another tax will have a negative effect on United States production and consumption. Therefore, designing the energy tax to be revenue neutral provides an opportunity to reduce the burden of that tax on the economy. Yet, if you believe Goulder's analysis, a Btu tax accompanied by an equivalent reduction in income taxes would make the economy worse off. A revenue neutral energy tax only begins to look good in terms of economic welfare if the offsetting re-

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6. DALE W. JORGENSEN & KUN-YOUNG YUN, HARVARD INSTITUTE OF ECONOMIC RESEARCH, *THE EXCESS BURDEN OF TAXATION IN THE UNITED STATES*, 6 J. ACCT. AUDITING & FIN. 487, 488 (1991).

7. *Id.*

8. *Id.* at 488, 504.

9. Goulder's analysis supports Jorgenson's findings, but suggests that the benefits would be smaller. Goulder, *supra* note 5, at 26.

ductions are on capital taxes. Unfortunately, a trade-off of higher energy taxes for lower capital taxes will be perceived as regressive and will be very hard, if not impossible, for Congress to support.

Energy tax advocates will, therefore, have to demonstrate that the environmental benefits from such taxes are substantial and would offset most of the economic welfare losses. For pollutants such as particulates, volatile organic compounds, and nitrogen oxides, this calculation can be made more easily than for greenhouse gases, such as carbon dioxide, where there is a wide disparity of scientific opinion on the magnitude and imminence of the problem.

Although this assessment of the current state of the debate on the future of energy taxes may seem pessimistic, this need not be the case. Depending on their focus and design, the environmental benefits from such taxes could be substantial and could offset much of the loss to the economy. Proponents will need to make this argument clearly and convincingly in order to build a constituency for such taxes.

#### A. Political Feasibility

Any strategy to gain public acceptance of energy taxes must be cognizant of the historical pitfalls that have plagued past efforts. Three are of particular prominence. First, since energy is an important input to most manufacturing processes and is a major expense for most households, the initial reaction to any attempt by the government to raise the cost of energy will be received with skepticism and hostility. To counter this response, proponents must demonstrate that there is a pressing problem to which higher energy taxes are an answer, and that the alternative solutions to the problem are much less attractive. A majority of interest groups must conclude that they will be better off with higher energy taxes than with the more unpleasant alternatives.

Second, energy taxes always stimulate intense regional political warfare, since states are continually competing with each other economically. Interstate competition takes place both in attracting new industries and maintaining the ex-

isting industrial base and the accompanying jobs. Energy use is not homogenous across states, and more importantly, the demand for particular energy products, such as gasoline, electricity and heating oil, is not the same in each region. Therefore, energy taxes, and their impact on particular fuels, triggers the formation of regional blocks to amend or kill such taxes. Historically, members of Congress from the northeast have opposed taxes which increase the cost of heating oil, western senators have not favored gasoline tax hikes, representatives from the farm belt have fought to keep diesel fuel prices from rising, and energy-producing state senators have opposed energy taxes generally, and those levied at the point of production specifically.

Outside of pointing out the sensitivity of regional politics, it is unclear how the lessons from past battles can inform the strategy for future energy tax initiatives. If such initiatives are designed to equalize the pain for all regions, they may merely stimulate all regions to oppose it. If, on the other hand, they are designed to hit certain fuels harder than others, then the states that are negatively impacted will fight to kill it, while the support from the potential beneficiaries may be lukewarm.

Third, the federal government is not the only center of debate over energy or pollution taxes. Fifty state governments, many of whom are desperate for additional revenue, must also participate in the decision. In the next three years, states may be more receptive to discussing alternative tax policies than the federal government. State legislatures provide a forum to raise issues and change perceptions. For example, policy initiatives first passed in California have had a profound impact on the environmental policy debate in Congress. In the remaining pages, the paper briefly examines some of the political feasibility dimensions of three types of tax initiatives: gasoline taxes, carbon taxes, and pollution fees.

## B. Gasoline Taxes

Over the next three years, there may be sporadic discussion of instituting federal consumption taxes, most likely focusing on versions of the Nunn-Domenici proposal.<sup>10</sup> Higher gasoline taxes will be periodically suggested, but most members of Congress tend to approach this topic with extreme caution. The policy arguments in favor of higher gasoline taxes remain strong, since without such taxes, it will be very difficult to increase the efficiency of the nation's motor vehicle fleet. Yet, consumers may not rush to buy higher priced, super-efficient or alternative fuel vehicles if the real price of gasoline remains below 1973 levels. In that year, the average fuel efficiency for new cars was approximately one-half of what it is today; if the price of gas remains artificially low, the inefficiency of the car will not act as a deterrent to the consumer. As the statutory deadlines for producing and selling alternative fuel vehicles approach,<sup>11</sup> pressure to raise gasoline taxes will increase, especially from the automobile manufacturers who face the prospect of producing thousands of low-emission, alternative fuel vehicles without any assurance that consumers will purchase them. If gasoline prices remain at 1993 levels, these cars will not be bought unless consumers are required to buy them by government regulation, a highly unlikely scenario, or unless government provides even higher tax credits and subsidies. Given present cost projections, which may turn out to be optimistic, such subsidies would have to equal approximately twenty-eight

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10. Announced Sept. 30, 1992 by senators Sam Nunn (D-Ga.) and Pete Domenici (R-N.M.), the proposal called for phasing out the current income tax system in favor of a consumption-based income tax structure coupled with a gradual reduction in government spending to eliminate the federal deficit by 2002. Under the new tax system, individual taxpayers would be taxed on the difference between their annual income and savings, or their "consumption." Businesses would be taxed on cash flow. CENTER FOR STRATEGIC AND INTERNATIONAL STUDIES, *THE STRENGTHENING OF AMERICA* COMMISSION REPORT (1992).

11. Under California law, ten percent of the vehicles sold in the early part of the next decade must be low-emission vehicles, i.e., primarily powered by something other than gasoline. CAL. HEALTH AND SAFETY CODE § 44001(c)(2) (Deering 1994). The federal programs are aimed more at fleet vehicles, but even in this instance, the comparative cost of the vehicle will be an important factor.

percent of the cost of the car in order for that car to be competitive in the market.

United States negotiators will find it increasingly difficult to push countries to take costly actions to reduce CO<sub>2</sub> and other greenhouse gases, when United States gasoline prices are three to four times lower than prices in those countries. Our ability to credibly negotiate protocols within the Framework Convention on Climate Change<sup>12</sup> will be limited.

Congress is familiar with gasoline taxes. This familiarity is both an advantage and a disadvantage. It is an advantage in that Congress is acquainted with the political arguments for and against gasoline taxes and would not be deterred by political and substantive uncertainties. Further, some groups, including automobile manufacturers, have supported higher gasoline prices, and more may follow. With effective leadership, there is a possibility of creating a constituency for such taxes, especially if the revenue is targeted to concerns high on the public's priority list.

Congressional familiarity can also be viewed as a disadvantage, because gasoline taxes are perceived negatively from a political perspective. Elected officials are well aware of the history of past failures. They saw how, then presidential candidate Bill Clinton, successfully defeated Paul Tsongas in key Democratic primaries by attacking Tsongas's support of gasoline taxes. They do not want to be placed in the same position. There is also a perception that the distributional effects of gasoline taxes are regressive, especially in large western states, where driving distances are great. Whether the magnitude of this regressivity is as large as some elected officials claim is a debatable question.

### C. Carbon Taxes and Pollution Fees

Carbon taxes and pollution fees face a more difficult political road. The former are preferable to gasoline or Btu taxes, only if one believes that there are substantial environmental benefits from reducing carbon dioxide emissions. The

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12. See AGENDA 21 AND THE UNCED PROCEEDINGS 1685 (Nicholas A. Robinson et al. eds., 1992).

American public remains uncertain or even skeptical that this is the case. Unless this changes, coalitions of the coal, steel and petrochemical industries will be strengthened in their efforts to prevent passage of a federal carbon tax.

Pollution fees face a different problem. The existing system of command and control regulation for pollution reduction has a built-in constituency, since firms have made significant investments in response to this system. Introducing pollution fees changes the existing dynamics, and particularly the identity of winners and losers. The losers will figure out quickly who they are and will oppose such fees, while the possible winners will sit on the sidelines. Unless a strong case can be made to get the potential winners onto the political playing field, the opponents will win. The trick is to identify clearly and credibly the benefits, so that the beneficiaries will be willing to expend the necessary political capital to obtain them.

The task of building a constituency for carbon taxes and pollution fees is daunting. It can only be accomplished through a concerted effort to characterize and document the benefits derived from such taxes and familiarize the public and potential constituencies with that documentation. The states can provide an effective forum for this process. Some states, including Maryland and California, have already debated the merits of a carbon tax.<sup>13</sup> There will be opportunities to do the same in other states, especially those facing budget crises. While carbon taxes will be a non-starter in most energy producing states, they may be politically preferable to other taxes in energy consuming states.

Critics might argue that it is ineffective for a state to pass a carbon tax, since climate change is a global problem. Carbon dioxide reductions in one state would be a proverbial drop in the bucket toward reducing greenhouse gas concentrations. Further, a state carbon tax might not result in a net reduction in carbon dioxide emissions since sources might

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13. See Frank Muller & J. Andrew Hoerner, *Greening State Energy Taxes: Carbon Taxes for Revenue and the Environment*, 12 PACE ENVTL. L. REV. — (1994).

relocate or expand elsewhere. Yet, a state such as California is a larger source of carbon dioxide than all of the Scandinavian countries combined.

It is unrealistic to think that states would pass a carbon tax solely in response to the threat of climate change. Other factors would have to be the driving force. Revenue concerns, opposition to state income taxes, or the possibility of using the additional revenues to meet a new state priority — such as improving the transportation infrastructure, education, or environmental clean-up — must be the primary motivating influence behind such a tax. Finally, advocates must remember that the larger the state tax, the greater will be the distorting impacts on incentives for companies to invest in that state.

Even if energy taxes are rejected in most states, the debate will create a better informed electorate, thereby legitimizing carbon taxes as a plausible revenue enhancement option. These benefits may be especially valuable if the science of global warming triggers a renewed interest in a strong government response in the future.

The case for state pollution fees may be easier to sell. First, in many cases, the environmental externality benefits can be shown to be equal to the economic costs, so that these fees do not face the marketing challenge confronting carbon taxes. In addition, state environmental programs to clean up the air and water and protect public health are facing severe budget cutbacks. Federal dollars have not kept pace with federal mandates. Some states, such as Indiana, have threatened to return the federal government's delegation of authority to implement major pollution programs.

Pollution fees provide two benefits to states struggling to maintain their environmental initiatives. First, such fees often are more cost-effective than command and control regulation. They provide firms with the flexibility to explore a myriad of options including process changes, pollution prevention, and the development of new technologies. Second, they raise revenues that could be used to partially fund the states' environmental programs and offset declining appropriations.

Certain industries will fight any effort to introduce such fees. In some states they will succeed. Yet the problem of funding state environmental priorities is likely to worsen over the next five years, sowing the seeds of greater public demand for pollution fees. Some critics argue that revenue from a pollution fee would merely replace existing environmental appropriations on a dollar-for-dollar basis. However, even if this occurs, a revolving fund for the environment funded by such fees may provide more financial security for state programs than the current system.

#### IV. Conclusion

There is a strong possibility that some time between 1997 and 1999, the federal government will once again initiate a debate over taxes and budgets. The political environment in which this debate will take place will be very different than that of 1993. Oil markets are likely to be more volatile, and the President's Climate Action Plan,<sup>14</sup> with its emphasis on voluntary measures, may by then fall short of its reduction targets. Other western governments will be calling for the United States to assert stronger leadership in reducing the growth in its use of fossil fuels. Traffic congestion in major metropolitan areas may be worse, the market for alternative fuel vehicles may be undercut by low gasoline prices, and there will be a growing concern about the future fiscal health of the nation.

Energy and environmental taxes may face a less hostile political reception than in the past, but only if the advocates for such taxes succeed in efforts to educate the public and expand their constituencies. Further, they must not delude themselves with the belief that higher energy taxes will, as a rule, provide double benefits — the benefits of less energy

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14. Unveiled Oct. 19, 1993 by President Bill Clinton, the plan provides American industry with the challenge and opportunity to voluntarily reduce greenhouse gas emissions to 1990 levels by the year 2000 with minimal governmental intervention. Should these levels not be reached through the combination of forty-four different pollution reduction and energy efficiency initiatives, additional regulatory and legislative actions would be required. William J. Clinton & Albert Gore, Jr., *The Climate Change Action Plan* (Apr. 22, 1993).

use, and a more efficient tax structure. It is theoretically possible to design a revenue neutral energy tax that improves the economy, but the perceived regressivity of that design may make it very difficult to garner political support. Therefore, energy and pollution taxes will have to emphasize their benefits — a better environment, more energy security, less traffic congestion, and improvements in the quality of life. If these benefits cannot be credibly explained, quantified, and marketed, increased energy and environment taxes will once again fail to attract sufficient support to pass into law.

The next three years provide a window of opportunity to change the way Americans think about energy and environmental taxes. Proponents can either seize that opportunity, or face the distinct possibility that the United States will enter the next century without any significant changes in its approach to energy and environmental taxes.