

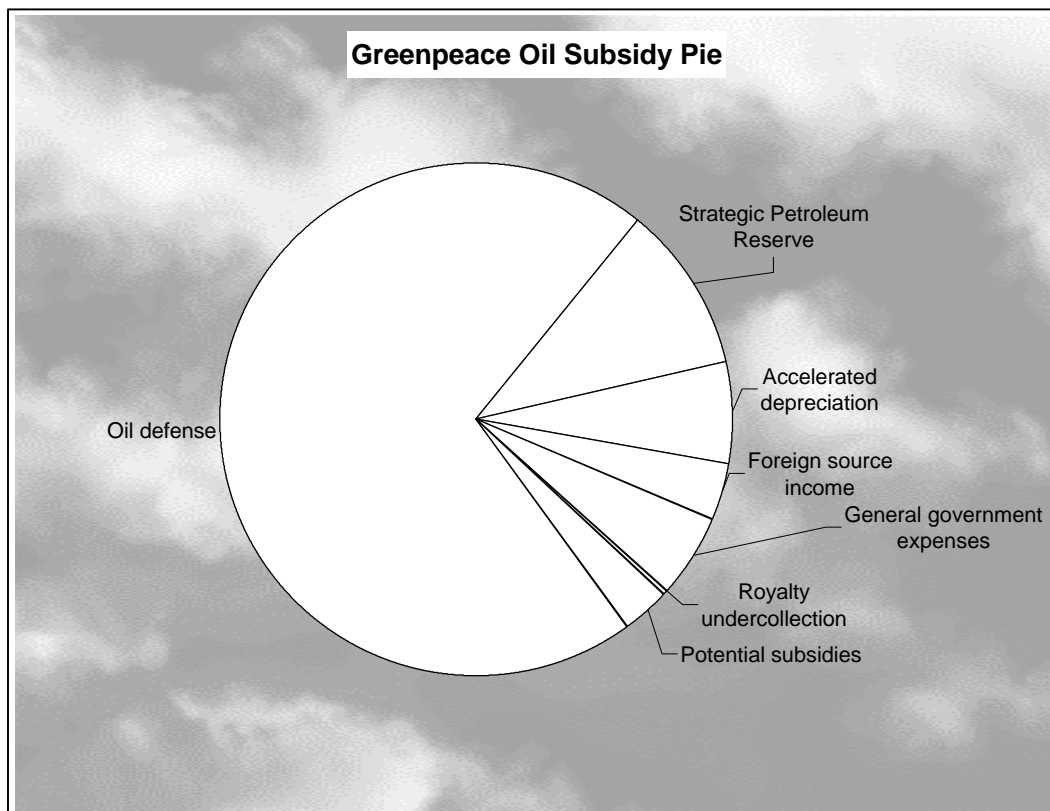
Fueling Confusion: Deceptive Greenpeace Study Premised on Flawed Estimates of Subsidy

In a study, called "Fueling Global Warming: Federal Subsidies to Oil in the United States," Greenpeace challenges estimates of the cost of the Kyoto protocol for reducing global carbon emissions. These studies, such as reports by the U.S. Energy Information Administration (EIA), WEFA, Inc. and Charles River Associates, estimate that achieving the goals associated with that protocol would require severe restrictions on U.S. economic activity. The EIA study, for example, estimates that the protocol could cost as much as \$454 billion (1997\$). This is equal to about \$1,500 per capita or the equivalent of \$4,100 per family. Studies presented by the Clinton Administration put the cost lower, but are premised on assumptions widely regarded as unrealistic--unrestricted global trading of emissions permits and near-total conversion of U.S. coal burning electric utilities to natural gas. In what is billed as a contribution to this debate, Greenpeace now goes even further, suggesting that emissions can be reduced costlessly, or even beneficially, by simply eliminating what it alleges are massive current federal subsidies to the production and consumption of oil. As the administration struggles to justify what is increasingly regarded as unrealistically costly and unworkable commitments made in Kyoto, it might welcome the discovery of such a magic bullet as the one offered by Greenpeace. Unfortunately, the \$15 to \$34 billion dollars in "subsidies" discovered by Greenpeace are largely fictitious, and have already been widely discredited by the Government's own studies. The Greenpeace study serves only to confuse the legitimate public debate now ongoing over the cost and feasibility of climate change policies.

A Flawed Approach

The Greenpeace study represents a carefully constructed, but conceptually flawed, exercise. At its heart is a comprehensive and well-documented accounting of numerous federal expenditures and tax provisions related to oil production or consumption. However, the key conclusions of the study simply do not follow from this accounting exercise, insofar as:

- only a small portion of these expenditures or provisions actually represent "subsidies"
- of those items that do represent subsidies, most affect the size and composition of the domestic industry relative to imports, not the level of consumption or global production
- a significant part of what can defensibly be called subsidies consists of incentives to produce alternative fuels, such as natural gas, not oil



Subsidy Estimates are Grossly Overstated

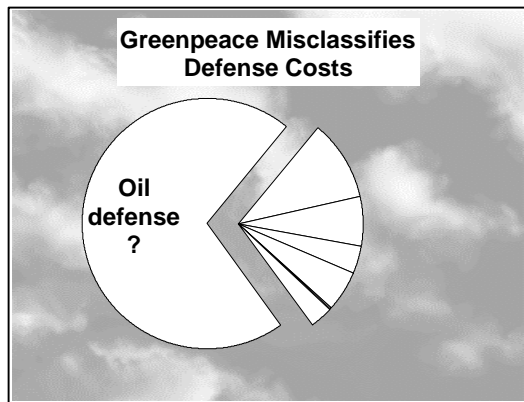
By far the most significant flaw in the Greenpeace study is the simplistic concept of subsidy used. A conventional definition of subsidy is a monetary payment or special tax treatment intended to increase demand or lower production cost so that the level of production and consumption are higher than they otherwise would be. An even broader definition would net out the cost of government regulations with offsetting impacts. No attempt is made in the Greenpeace study to net out provisions that raise revenues from petroleum or regulations that impose costs on it, though both are highly relevant to the petroleum industry.

Even apart from this, however, there is a strong tendency in the study to misclassify as oil subsidies general government spending aimed at broader goals to which oil is incidental, or tax provisions that are generally applicable to all industry. The following examples from the \$15 to \$34 billion dollars in "subsidies" estimated by Greenpeace stand out. The pie chart above shows the relative size of these examples, or categories of oil "subsidies" identified by Greenpeace.¹

¹ The relative size of the slices in the Greenpeace Oil Subsidy Pie vary slightly depending on the total size of the subsidy. The slices depicted in the chart above are based on subsidies totaling \$15 billion.

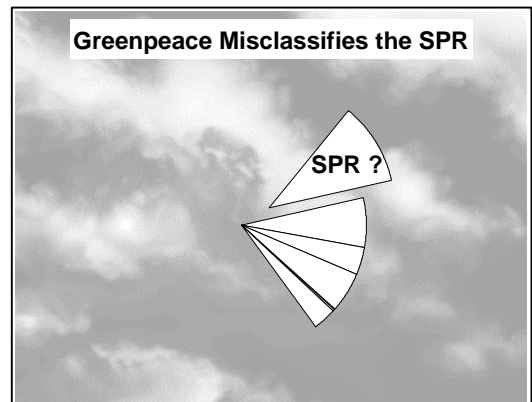
➤ **Defense costs related to far broader security concerns than just oil.**

The largest misclassification of subsidy is the defense cost associated with operations in the Persian Gulf. This cost represents the lion's share of the Greenpeace oil subsidy pie. Such expenditures, which Greenpeace estimates at \$10.5 to \$23.3 billion, serve a range of purposes more general than simply protecting U.S. oil imports. Even if the U.S. imported no oil, military expenditures would be required to maintain secure commerce, prevent regional hegemony by Iran or Iraq, promote the security of Israel and the moderate Gulf states, prevent weapons proliferation, and to demonstrate the capability of the U.S. to project force into an area of strategic interest. A 1992 Congressional Research Service study (*The External Costs of Oil Used in Transportation*, Report 92-574-ENR) argued that the incremental cost attributable solely to protecting Middle Eastern oil supplies amounted to 1.4% of the total cost of maintaining a presence there.



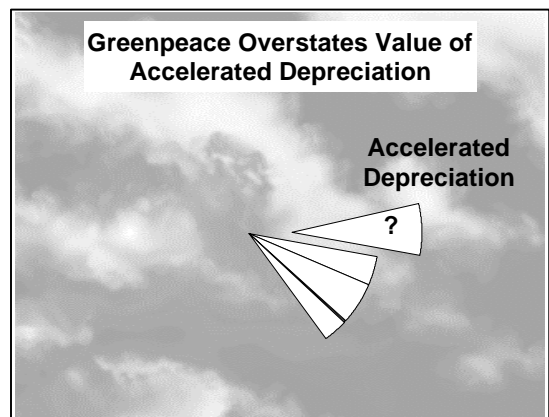
➤ **Strategic Petroleum Reserve costs.**

The second largest item on the Greenpeace list of oil subsidies is the estimated \$1.6 to \$5.4 billion cost of the SPR. Apart from an assortment of questionable methods applied to valuing the SPR, its characterization as a subsidy to oil is an overstatement. The purpose of the SPR was to exploit the potential market power of the government in an emergency to offset the macroeconomic costs to the U.S. and the world of a short-term supply disruption. To the extent that this is successful, there is a benefit accruing here not only to the consumer of oil but also to the economy as a whole that needs to be netted against such costs. Analogous to defense spending, such benefits associated with smoothing global price hikes accrue to the economy as a whole, in the U.S. and worldwide, rather than simply to U.S. oil consumers.

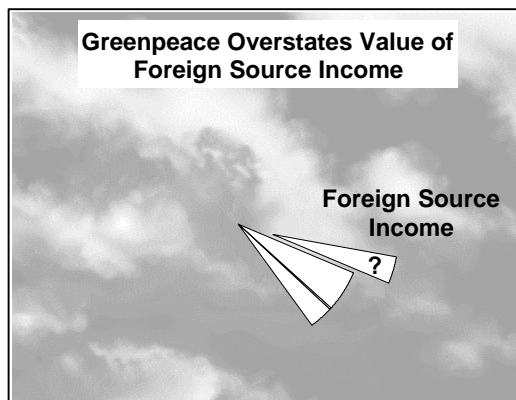


➤ **Systematic overstatement of value of tax provisions.**

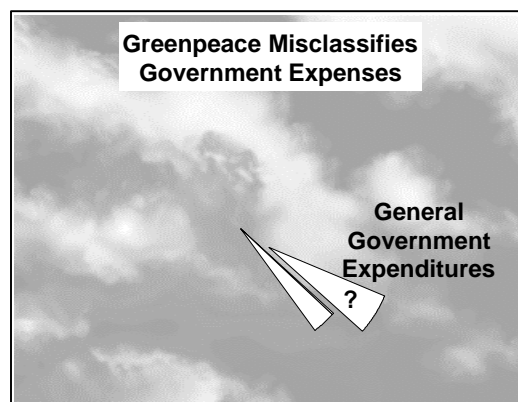
The third major category of overstated subsidies involves the misinterpretation of federal tax provisions affecting the recovery of capital costs and foreign tax payments. The value of *accelerated depreciation* is estimated to represent \$0.9 to \$1.4 billion in subsidies to oil, when in fact these provisions are generally available to all industries. Similarly, the *treatment of foreign source income* is estimated to represent a \$0.5 to \$1.4 billion subsidy to oil, despite the fact that these provisions apply to all industry engaged in



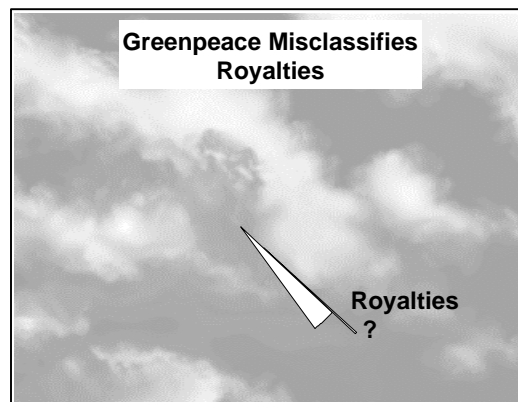
foreign operations, and that in fact the treatment given the petroleum industry is more restrictive than that applicable to most other industries. In this area, the study is particularly egregious in misrepresenting the facts. Based on a modified version of Table B-19 of the Department of Energy's Performance Profiles of the Major Energy Producers, the study argues that the average effective tax rate paid by major oil producers was 12% in 1995, far below the statutory rate of 35%, and that "this differential is evidence of the substantial tax breaks they have received." A careful reading of the modified table reveals that the so-called "effective" rate of 12% is computed by Greenpeace as U.S. taxes divided by worldwide taxable income. The original table from the DoE document computes the effective rate correctly, as worldwide taxes divided by worldwide taxable income, or 37%. Note that the correctly computed rate was actually *above* the statutory rate, reflecting both the prevalence of higher marginal rates abroad and the failure of the foreign tax credit to fully correct the problem of double taxation of foreign source income. Far from indicating the extent of "tax breaks," the original DoE document also pointed out that this rate was slightly *higher* than that paid by the Standard & Poor's Industrials group as a whole, which was 36% in the same year.



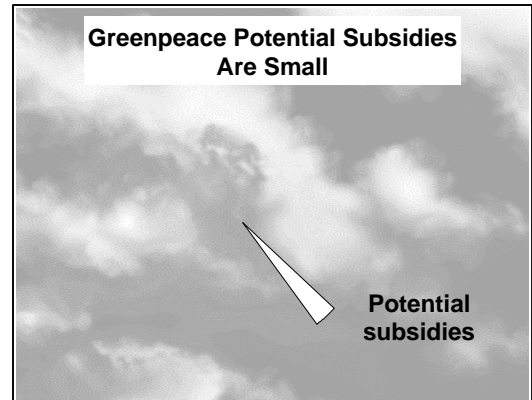
➤ **General government expenses counted as subsidies.** A number of general government costs of doing business, such as providing statistical information and surveys, and administering programs associated with the development of oil resources on public lands, are characterized by Greenpeace as subsidies. The former may involve some benefit to industry as a user of portions of this information, though probably far less than the full cost. The benefit of the latter accrues principally to the government itself, in performing its stewardship role in protecting the value of federally owned resources.



➤ **Royalties are not underpaid.** Greenpeace is wrong to assert that oil companies cheat the Federal government out of \$30 to \$130 million a year in royalty payments through the use of artificial transfer prices that underestimate the true value of oil extracted. Oil companies pay royalties based on the market value of oil at the lease. They do not set market prices; the market sets market prices. The so-called underpayment reflects the increased revenues the government would get *if* the government implements a new valuation rule for royalties. The estimate reflects the impact of a proposed new royalty rule, not underpayments.



➤ **True potential subsidies are small.** Of all the items cited by the Greenpeace study, only a few, such as the excess of percentage over cost depletion, the expensing of intangible drilling costs (IDC), and the Low Income Home Energy Assistance Program (LIHEAP) are commonly classified as subsidies by independent analyses. Together, these items are estimated to be \$0.4 to \$1.3 billion, or about 3% of the total estimated by Greenpeace. Even this may be overstated, since the treatment of intangible drilling costs is regarded by many experts to be recovery of production costs, something all businesses are entitled to.



Oil consumption is not being artificially stimulated

Even if one scales back the Greenpeace estimates of \$15 to \$35 billion to the \$0.4 to \$1.3 billion that some serious analysts might arguably classify as subsidies, the items included here do not cause oil consumption to be higher than it would otherwise be, for several reasons. First, the effect of the depletion allowance and the treatment of IDC's would be to encourage production of oil by U.S. firms. However, since those firms are a very small portion of production in the world market, there would be no effect on price. Potentially, it could reduce imports by encouraging domestic production, but not the aggregate consumption level. The LIHEAP program, on the other hand, does increase consumption of oil, but only by low-income households. By including LIHEAP in their oil subsidy pie, Greenpeace in effect is advocating that the government end such payments designed to help the poor. Further, studies have shown that LIHEAP impacts total energy expenditures only marginally; the poor would spend almost as much on heating without the subsidy. However, they would have to reduce purchases of other goods and services.

In the aggregate, consumption for oil is not stimulated, however, because of excise taxes on oil far in excess of any such subsidy (which Greenpeace has not netted out). A 1992 government study done by the Department of Energy entitled *Federal Energy Subsidies*² measured these effects and found that when excess taxes are netted out, the net subsidy to oil was \$-2 billion. That is, in the aggregate the net "subsidy" to oil was negative. Consequently, the level of oil consumption was actually lower on balance than it would be in the absence of government action, although the level of domestic production was probably higher.

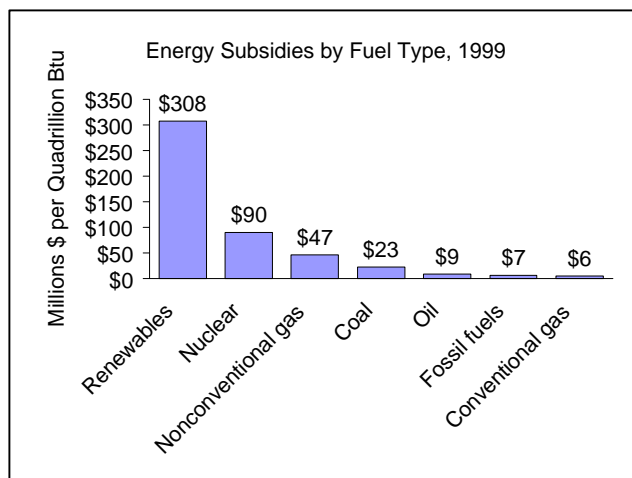
In the government's most recent study done by DoE in 1999 entitled *Federal Financial Interventions and Subsidies in Energy Markets*,³ both excess taxes and programs that cover end-use energy were excluded from the analysis. In this study, subsidies to oil are estimated to amount to about \$0.3 billion, largely from enhanced oil recovery credit.

² See Energy Information Administration, *Federal Energy Subsidies: Direct and Indirect Interventions in Energy Markets*, SR/EMEU/92-02, November 1992. Also listed at www.eia.doe.gov/bookshelf/multi.html

³ See Energy Information Administration, *Federal Financial Interventions and Subsidies in Energy Markets 1999: Primary Energy*, SR/OIAF/99-03, September 1999.

Most subsidies are devoted to alternative fuels

A final issue confused by the Greenpeace study is the relative degree of subsidization across fuels. The gross overstatements of oil subsidies by Greenpeace lead to outrageous claims that alternative fuels are being relatively discriminated against. In fact, the 1999 DoE study showed precisely the opposite. More than 70 percent of all government energy subsidies go to alternative and renewable energy sources. Fossil fuels account for only 30 percent of government subsidies, and of this just 8 percent goes to oil. According to DoE's estimates, government subsidies to renewable energy forms are 36 times greater per unit of energy consumed than they are for oil. In 1999 subsidies to renewables amounted to approximately \$308 million dollars per quadrillion British thermal units. In comparison, the subsidy to oil was less than \$9 million per quad, or about 0.1 cent per gallon of oil consumed.



Fueling Confusion

Climate change options negotiated to date by this administration are extremely costly. This is borne out by a wide range of studies, done by dozens of researchers, both academic and private. Unfortunately, there are no magic costless bullets like subsidies that can be removed to soften that blow. Development of sound policies to deal with the climate change issue deserves serious analysis. The Greenpeace study does not provide it.