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Miscellaneous

Stack:	Row:	Section:	Shelf:	Position:
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Specified focus $\sum$ ^{taxes} institutional body institutions
trade.

* production $\rightarrow$ Intergenerational equity
* account $\rightarrow$ Intergenerational equity
Resource accounts.

November 25, 1991

MEMORANDUM

To: Senator Gore

From: Marc Chupka

cc: Katie McGinty
Greg Simon
Leon Fuerth

Subject: Next steps for JEC

I am anxious to build on the progress made during the first JEC hearings. There are many paths that subsequent hearings could take; we need to establish basic directions and goals. I have scheduled a meeting tomorrow afternoon at 2:30 to explore potential topics, and this memo outlines some possible directions. I have grouped them into four basic areas: (1) economic implications of environmental policy; (2) economic incentive policies; (3) economic impacts of climate change and climate change policy; and (4) economic development policy.

Economic Implications of Environmental Policy

This would continue down the same path established in the first hearings, namely to identify and measure important environmental impacts, estimate the aggregate costs of pollution and the economic benefits from pollution abatement, and evaluate the overall economic effects of environmental policy. We have pretty much covered the national income measurements, and Chairman Sarbanes has requested a CBO study to evaluate the prospects for changing the U.S. accounts (see attached letter). New areas of focus could include:

other measurements → **GAP** productivity of the environment
Fresh out
• ~~XX~~ Environmental policy and economic competitiveness. This would cover the topic of **productivity** measurement, while putting the issue in a broader perspective.

• Economic costs of pollution abatement. There is a large body of economic analysis that estimates pollution abatement costs to the U.S. economy. Most of these studies ignore environmental benefits (sometimes in very sneaky ways), and such inherent bias deserves exposure.
? = valuation

air abrasion
pers
but of forest
Market Reg
Economic Incentive Policies
There for would solve?
• Long-run resource scarcity and economic growth. The broad debate between *laissez faire* and "sustainable development" has not been resolved in some circles. The idea that markets will always alleviate scarcity of natural resources has gained some adherents due to the performance of commodity markets in the 1980s. Unfortunately, the "limits to growth" proponents argued in terms of material input scarcity, and their dire predictions did not pan out (at least not yet). The new focus is on the capacity of ecological sinks as the limiting factor. This is a politically risky issue, since it is often cast in "anti-growth" terms. Nevertheless, a wide-angle picture of resource use, waste generation, and the creation of economic value would make for very interesting hearing.

After decades of economists proposing to use market forces to reduce pollution, the topic of economic incentives has become downright trendy. Congressional hearings tend to focus on a single aspect of incentive policies, such as SO₂ permits or the implications for fiscal policy. Studies like *Project 88 (I and II)* tend to look at economic incentives to solve a myriad of specific problems without clearly outlining the basic principles (in fact, many of the policy proposals had little to do with environmental incentives). JEC hearings could focus on:

yes - but with water from on trees.
• The diversity of **economic incentive mechanisms**, such as pollution taxes, marketable permits, deposit/refund schemes,) as domestic environmental policy tools, examining their implementation and economic impacts;

• ~~XX~~ Existing anti-environmental incentives such as water resource development policy (mindful of TVA, of course), mining laws, timber management rules, and agricultural policies such as grazing fees, etc. Natural resource development policies could be examined in the aggregate to see how much long-term environmental improvement could be gained by simply removing existing subsidies or reducing program support;
yes

Broader reforms in fiscal policy to shift the aggregate tax burden onto activities that cause some environmental damage such as energy production and pollution, while reducing taxes on beneficial activities such as investment and labor.

Economic Impacts of Climate Change and Climate Change Policy

Economists have begun to look at global climate change, producing analyses that range from the sublime to the ridiculous. Unfortunately, academic reputation of the analysts seems to determine the amount of attention granted to such studies, not analytical merit. A close look at the assumptions and implications of the best and the worst studies could help clarify some issues. The main areas are:

- Domestic and international **economic implications of climate change**;
- **Policy options** for CO₂ and other greenhouse gas emission reductions; and
- Domestic and international **economic impacts of climate change policy**.

Economic Development Policy

With all of the attention focused on the upcoming UNCED, it occurs to me that three basic topics deserve some attention:

- **Environmental effects of economic development.** This could go beyond the usual litany of environmental catastrophes to examine the underlying economic, social, and political determinants of environmentally sound development;
- **Environmental implications of third-world debt.** Any development issue is linked with debt and any solutions to environmental and economic problems will have to deal with debt policy;
- **Environmental impacts of trade liberalization.** My staff director has indicated support of a hearing examining this topic in the context of the U.S. - Mexico NAFTA debate.

These topics are not exhaustive, but are offered to provoke some thinking as to which topics best suit JEC and your agenda in the upcoming year. I am very eager to get moving in the right direction.

PAUL S. SARBANES, MARYLAND,
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STEPHEN A. QUICK,
EXECUTIVE DIRECTOR

Congress of the United States

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(CREATED PURSUANT TO SEC. 5(a) OF PUBLIC LAW 304, 79TH CONGRESS)

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November 6, 1991

Dr. Robert D. Reischauer
Director,
Congressional Budget Office

Dear Dr. Reischauer,

The Joint Economic Committee recently held hearings to examine how economic indicators might be revised or augmented to incorporate information about natural resource depletion and environmental degradation. In particular, the Committee heard testimony regarding the prospects for changing the National Income and Product Accounts, or certain aggregate measures obtained from the accounting framework such as gross national product (GNP) or gross domestic product (GDP).

Our hearings have revealed three basic defects in national income accounting as it relates to the environment. National income accounts are flawed because they:

- Ignore changes in the available quantity of natural resources;
- Do not account for unremedied environmental damages that decrease real welfare; and
- Add certain "defensive" expenditures into gross product or income, implying an increase in economic welfare when such costs increase.

As a result of these three defects, GNP or GDP can rise, fall, or stay the same when natural resource depletion and environmental degradation occurs. Hence, it is not a good measure of sustainable income or economic welfare with regard to our environmental endowment.

The Committee requests that the Congressional Budget Office provide a study examining these issues in the context of the U.S. economy and our system of national accounts. The report should discuss the conceptual frameworks and information needed to revise or expand the national income accounts to reflect changes in the environment. In addition, the Committee would benefit from a compilation of estimates of the physical changes in natural resources and an assessment of the available monetary estimates of environmental damages.

This study would be extremely useful as the Committee continues to examine these important issues. Beyond serving the immediate needs of the Congress, the study would be most useful if it could be completed prior to the United Nations Conference on Environment and Development (UNCED) held in June, 1992, where resource and environmental accounting will be discussed in an international context.

The Committee looks forward to the CBO study. If you have any questions, please do not hesitate to call Marc Chupka of the JEC at 224-5171.

Sincerely,

Paul S. Sarbanes
Chairman,
Joint Economic Committee

Metg. 4/Marc.
2/12/92

Carbon Tax Strategies:

Basic Dimensions

Tax Basis A CO₂ emission tax could be a straight carbon tax at the point of primary fossil energy, or some less direct measure such as a motor fuels tax. There is a broad continuum defined by how close a tax would directly penalize carbon, from straight carbon tax to end-use Btu tax. Additional basis parameters involve exemptions or complementary tariffs.

Tax Level The level of a carbon tax is determined by the goals of the tax, the basis of the tax, and the associated economic impacts. The goals may involve CO₂ emission targets, fiscal balances, and tax shifting strategies. Economic impacts will determine political support and strategies.

Distribution of Revenue The use of revenues are an important element of a carbon tax strategy. Notwithstanding the significant environmental benefits from CO₂ reductions, carbon taxes will reduce consumer purchasing power and corporate profits in the short run (as would any income tax) and stimulate inflation (as would any excise tax). Thus, the disposition of carbon tax revenues are at least as important to macroeconomic performance as are the taxes themselves. There are three basic options, which are not exclusive:

- **Reduce the federal deficit.** This would not recycle the revenues directly (but might take pressure off of capital markets) and would hurt the economy in the short run.
- **Offset the revenues with tax reductions elsewhere.** If one believes that taxes on personal and corporate income reduce incentives to work, save, and invest, then reducing rates could stimulate the economy more than other forms of tax refunds. Distributional issues would dominate policy choices.
- **Earmark revenues for environmental programs or transitional assistance.** By providing rebates on efficient equipment (appliances, cars) assistance to fossil fuel-based industries for retooling or relocating, a program funded by carbon tax revenues could reduce the costs of moving away from fossil fuels, speed up the transition, and alleviate the regressive impacts of the energy tax.

A balanced program combining all three may be economically preferred, although some combination of the last two would be the most politically attractive.

Interactions with Other Policies One useful feature of a carbon tax approach is that it works unambiguously to strengthen other

CO₂ emission reduction policies. Elimination of fossil fuel extraction tax subsidies would be a useful precursor to carbon taxes. Computation of net tax revenues would have to account for deductability of fuel expense from corporate income. An extremely aggressive carbon tax could make CAFE policy moot, and might also reduce economic attractiveness of ANWR. It would, however, increase the economic attractiveness of nuclear power, along with renewable energy sources.

The most important interaction may arise through trade; whether we could or should levy CO₂ tariffs on imported manufactured goods to reflect carbon content (unless from a country or region that has comparable energy tax structure). This is illegal under GATT or any conventional trade agreement.

Political Realities. Prognosis for any energy tax is not good now. However, if the "baseline shifts" as a result of administration committing to some version of stabilization, then the debate shifts from "whither taxes?" to "what works well to reduce CO₂?" Unfortunately, one of the drawbacks of taxes is the uncertainty of the timing and magnitude of reductions. How this could fit into a "targets and timetables" framework needs to be addressed.

Answer & for Zimmerman → reply
NAS anal of NBS?
EPA steps?

EPA - Jorgensen
DOE → AES/
Commerce → Fossil F

February 27, 1992

MEMORANDUM

To: Katie McGinty
Greg Simon
Leon Fuerth

From: Marc Chupka

Subject: JEC Carbon Tax Hearing

We must decide soon what kinds of hearing(s) would serve our interest in our quest for CO₂ policy truths. Several options:

- 1. Fratricide.** We could compare and contrast three recent administration policy analyses, from Commerce, Energy, and EPA. Commerce and Energy predictably conclude that small carbon taxes would not impact energy use, and taxes large enough to reduce emissions would wreck the economy. Details in both analyses suggest that the numbers were cooked to an unusual extent, from model selection to input assumptions to selective reporting of results. EPA analysis shows some scenarios to reduce CO₂ and increase economic growth due to revenue recycling options. By getting the bureaucrats up on the stand, we could inflict some heavy damage to the "economic suicide" scenarios.
- 2. Beauty Contest.** The agencies' testimony will be homogenized by OMB, and we may not be able to ignite a fight among the representatives. In addition to agency testimony, we could invite their consultants to talk about the issues. This kind of beauty contest would help pick the prettiest model, and could reveal the amount of agency meddling in the assumptions and conclusions.
- 3. Its Academic.** Numerous esteemed academicians are looking at carbon tax policies. I think that some would place carbon taxes in an extremely favorable light from the standpoint of conventional economic efficiency arguments.

4. Policy Roundtable. Some environmental interest groups support a carbon tax (World Resources Institute, Friends of the Earth, Alliance to Save Energy...others?) Also, Mr. Tsongas has endorsed the idea. The idea is showing up on the political radar screen, and it might be instructive to get an interest group perspective.

I have plenty of witnesses in mind for any of these ideas. We may wish to cover all of the bases, in several hearings. These should probably be conducted within a short period of time, say 1-3 hearings completed by end of March. Let me know how you feel about these ideas, I have to make phone calls very quickly.

Stabilize emissions over 10-15 yrs.

Initial benchmark proposal (Broad Outline):

TAX BASIS: Carbon content of primary fuels.

TAX LEVEL: \$50/ton, Phased in over 10 years.

*60-80 bill when
fully implemented
per year.*

EXEMPTIONS: None.

CARBON TARIFFS: Imported energy, some manufactured goods.

OFFSETS:

25% of revenue to coal states, additional energy market incentives, and worthwhile investments.

- Rebates for efficient appliances, autos, homes; Low Income Weatherization Assistance Program. Transitional adjustment assistance for coal regions. Public works, education, mass transit.

25% of revenue to corporate tax reductions

- Corporate income tax, investment tax credits, employer share of FICA, other tax preferences (R&E credit, etc.)

50% of revenue to individual tax reductions.

- Capital gains (or indexing), individual FICA contribution, income tax rates, Earned Income Tax Credit, standard deduction.

*revenue neutral → neither adds to
nor subtracts from deficit.*

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Political Realities. Prognosis for any energy tax is not good now. However, if the "baseline shifts" as a result of administration committing to some version of stabilization, then the debate shifts from "whither taxes?" to "what works well to reduce CO₂?" Unfortunately, one of the drawbacks of taxes is the uncertainty of the timing and magnitude of reductions. How this could fit into a "targets and timetables" framework needs to be addressed.

Talking points on carbon taxes

- Carbon taxes represent an efficient method to deal with the climate change threat. Compared to command and control policies, carbon taxes could save the economy billions in costs for a CO₂ stabilization policy, and tens of billions more for a reduction policy.
- There is a consensus that the current tax system exerts a significant drag on economic performance. Legitimate fairness criteria leads us to taxing beneficial activities such as working and investing, because the income derived from these activities coincides with the ability to pay. But pollution taxes in general and carbon taxes in particular present an opportunity to break out of this dilemma, since they would levy taxes on socially harmful activities.
- Therefore, a shift in tax structure could improve economic performance and help attain environmental goals.
- Nevertheless, fairness issues must be addressed, since carbon taxes would change the prices of many important goods and services in the economy. Compared to other CO₂ reduction policy, however, carbon taxes produce revenues that provided interim transitional assistance.
- These issues can be addressed from two sources of economic gain: the tax revenues themselves and the overall increase in economic activity that would occur from the reduction of tax rates on beneficial activities.
- By weighing the various properties of a fiscal policy shift -- on the distribution of the tax burdens, the prospects for more efficient energy utilization, and the environmental gains from reduced fossil fuel emissions, and the need to address those adversely affected in a transition to an economy that emits less CO₂ -- a fairer, more economically efficient, and environmentally responsible tax policy is within our reach.

Some qualitative observations about a tax-based CO₂ policy.

Basis and level; The more closely associated with carbon content, and the higher the level, the more direct the incentive to reduce CO₂. The higher the level, the more the policy looks like a fiscal restructuring, and less like a trust fund or earmarked expenditure approach, because of the enormous revenue potential. The more associated with carbon, the less need for other policies to reduce CO₂ emissions such as tax credits for high efficiency appliances or renewable energy production, but the more concentrated the impact on coal production and the greater need for targeted assistance.

One end of the continuum: broad based energy tax, low level. Could be used for targeted tax credits. Here, the primary impetus for reduced energy use (not necessarily carbon) may come from the carrot, not the stick. Trust fund idea viable, in the range of several billion dollars per year.

Other end: Pure carbon tax set at high level. Money should be used for broad fiscal policy shift, and some very targeted assistance for those directly affected (coal miners...)

GOALS: If we are going to get serious about a carbon tax, the stated goal should be (at a minimum) stabilization for a decade or two. Carbon tax in the range of \$30/ton to \$50/ton would be a consensus level for stabilization. A \$50/ton carbon tax would provide roughly \$60 billion to \$80 billion, depending on CO₂ emission impact.

February 24, 1992

MEMORANDUM

To: Katie, Greg, Leon
From: Marc Chupka
Subject: CO₂ Policy Analysis

The enclosed paper lays out the basic framework for discussing CO₂ and energy market policies. This is only the first installment: additional memos will focus on policy specifics. I'll talk to you tomorrow.

To evaluate the impact of CO₂ emission reduction policies, it is necessary to understand how energy contributes to the production and consumption of goods in the economy. Two economic perspectives are commonly employed to discuss energy. Many large-scale macroeconomic models have energy modules which consist of a stylized representation of how energy is used in the production and consumption of goods in the economy. Microeconomic energy models represent energy quantities, technologies, and prices in linked energy markets.

MACROECONOMIC VIEW OF ENERGY MARKETS.

Figure 1 shows a schematic diagram of energy flows embedded in a larger model of macroeconomic flows. The economy is partitioned into four sectors:

- The **Primary Energy** sector, which includes domestic coal mining, oil and natural gas extraction, hydroelectric and nuclear power, as well as energy imports (mainly oil and some natural gas). The primary energy sector supplies energy inputs to manufacturing and secondary energy sectors.
- The **Secondary Energy** sector, which transforms primary energy into other useful forms of energy, sometimes called end-use or final energy demands. The most important of these final energy forms are electricity generated from burning fossil fuel and petroleum products such as heating oil, jet fuel, and gasoline that are refined from crude oil.
- The **Production** sectors, including all intermediate goods and final goods and services. Intermediate goods are those produced by one industry that are used as inputs to production of another industry. Final goods and services are those sold to individual consumers and households, government, or are sold abroad as exports.
- The **Final Demand** sector, which includes the purchases of final goods and services, and secondary energy products by consumers, government, and exported goods.

The arrows indicate transactions, where the "upstream" sector represents a seller (the supply side) and the "downstream" sector represents the purchaser (the demand side).

MICROECONOMIC VIEW OF ENERGY MARKETS

Figure 2 represents the microeconomics of the U.S. energy markets, which are characterized by a flow of transactions that link primary supply to conversion and distribution, to end-use. Primary energy is broken into coal, oil, gas, nuclear, and renewable energy¹. The secondary energy sector is composed of the conversion, transportation, and distribution sector. This includes rail links (coal mines to utilities), utility generating equipment and transmission links, gas distribution networks, petroleum refineries, pipelines, and gas stations. End-use sectors are usually broken down into the residential, commercial, industrial, and transportation sectors (sometimes residential and commercial are combined into a "buildings" sector).

Diagram 1 presents a quantitative look at energy flows, from primary energy production to end-use energy consumption. Of particular note is the upper-left hand flow labeled "Electricity Conversion, Transmission and Distribution Losses" of 20.35 quads. Thus, one quarter of total energy consumption (81.44

¹ By convention, nuclear generation of electricity is classified as primary energy, although a more consistent treatment would put uranium mining and processing in the primary sector. The "primary equivalent" of nuclear (and renewable) generation is often calculated as the average amount of fossil fuel required to produce the equivalent amount of nuclear or renewable electricity.

quads) is accounted for in the energy lost in producing electricity. Combined with the reliance on coal for boiler fuel, electric generation is a particular target for CO₂ emission reduction policies. Diagrams 2 - 5 show oil, gas, coal, and electricity markets in more detail.

These frameworks are commonly used to illustrate the economic linkages that underlie policies designed to reduce CO₂ emissions. An important feature of energy markets is that the number of participants grows as energy moves downstream. While there are a limited number of mines, oil wells, gas wells (or docks, cross national rail links or pipelines) that supply the national economy with primary energy, the end-use side consists of hundreds of thousands factories or commercial establishments, millions of automobile owners, residential electricity consumers and purchasers of final manufactured goods.

The increase in market participants is accompanied by a proliferation of transactions that directly or indirectly release CO₂. For example, CO₂ emissions from automobiles can be traced to consumers purchasing cars and buying gasoline, but also to residential and employment decisions that require certain modes of transportation. Fossil fuel-fired electric power plants directly emit CO₂ as they generate electricity. However, the CO₂ release is actually a consequence of utility decisions to build certain types of generation facilities and use specific fuels, as well as consumer purchases of electricity-using appliances and manufacturer purchases of capital equipment. Policies to reduce CO₂ would have to regulate or influence billions of choices and market transactions. Since emissions are purely a function of fuel input at the primary level, addressing individual "emitters" is likely to be infeasible.

Value is added as energy moves downstream in the chain of commerce from primary supply to end-use consumption. The value of primary energy supply of coal, crude oil, and natural gas produced and imported was about \$155 billion in 1990, while end-use energy expenditures for 1990 were roughly \$450 billion. On average, therefore, primary energy costs are only about one-third of delivered energy costs, although the fraction varies across energy types.² Fuel costs are about 25% of electricity price, while the wellhead price of natural gas accounts for about 45% of average delivered price. Crude oils accounts for between 30% to 40% of the pump price of gasoline, depending on state tax rates.

CO₂ CONTROL POLICIES

Policy options commonly discussed to reduce CO₂ emissions involve extensive interventions into energy markets such as regulations, standards, taxes, or technology mandates. Before discussion specific policies, however, the objectives should be placed in perspective. Simply stated, the only method currently available to limit CO₂ release into the atmosphere is to forego the extraction of fossil fuels: keep the carbon contained in oil, coal, and natural gas stored safely in the ground. Once fossil energy resources are extracted for use, they will produce CO₂. From the standpoint of global CO₂ levels and atmospheric concentrations, it makes no difference how efficiently the fuel is used, the value of goods produced, the regional or national source of the fuel, or where CO₂ is released as a by-product of combustion. It only matters how much fossil fuel carbon is extracted. This tautology tends to get obscured in policy debates, since the economic problem -- maximizing welfare for a given amount of energy use -- is far more complex than the direct link between hydrocarbon fuel extraction and CO₂ emissions.

CO₂ control options can be classified into two basic types: those that would restrict the flow of carbon-based fuels from entering the economy (primary energy strategies) and those that would reduce demand for energy consumption (end-use strategies). The two main types of primary energy strategies are

² This is only approximate. Energy exports, primarily coal and refined petroleum products, was about \$9 billion in 1990, which does not include significant exports of fossil derived chemical products. Also, the U.S. imported about \$17 billion in imported refined petroleum products in 1990.

carbon taxes and production permits. End-use strategies include efficiency standards, end-use energy taxes, or end-use offsets or permits such as the Cooper-Synar proposal.

END-USE ENERGY STRATEGIES

Policy debates have focused on end-use strategies such as efficiency standards (e.g. CAFE and appliance standards), motor fuel and electricity taxes, or emission offsets. These strategies have advantages and limitations.

End Use Efficiency Standards: Limitations

Energy consumption is a function of energy-using equipment (cars, appliances, blast furnaces) and economic behavior. In the short run, consumers and firms can modify behavior but cannot easily change equipment. For example, consumers can turn thermostats down and drive less. As energy-using equipment naturally is replaced in the long run, consumers and firms can make decisions regarding the energy efficiency of new technologies.

Since efficiency standards only apply to new energy using technologies, they have limited impact on energy use in the short run. As more equipment is replaced over the long run, however, standards will have somewhat greater impact. But several limitations remain as a CO₂ reduction strategy.

Upstream (Primary) Supply Response. End-use energy reductions may not target CO₂ effectively because the economics of primary fossil fuels are unchanged. For example, decreases in electric "peak loads" through improved air conditioner efficiency tends to reduce utility need for building gas and oil fired capacity, but may have little impact on the level of "baseload" coal generation in a utility system. Thus, coal use and CO₂ emissions may not fall in proportion to improved efficiency, and end-use strategies can be like "pushing on a string."

Achieving CO₂ Reductions at Least Cost. Efficiency standards are unlikely to achieve least cost CO₂ reductions partly because of the upstream economics but also because the mix of standards is not likely to target the uses in a least cost way. This should not present a big political or economic problem, since efficiency standards may represent the most effective mechanism with political support, compared with some hypothetically perfect CO₂ reduction scheme that everyone opposes. However, critics of CO₂ control will relentlessly point out the inefficiencies, which may grow over time under some scenarios.³

Shifts in Behavior Can Undo Technology. This is sometimes referred to as the "snap-back" phenomena. When technologies are more energy efficient, they become cheaper to use. Consumers are likely to appropriate some of the efficiency gains in the form of greater energy service demands. In plain English: if cars, furnaces, and hot water heaters are more energy efficient, people might drive more, turn up the heat, and take longer showers. Economic welfare and satisfaction might rise, but CO₂ emission reductions will be compromised.

New Source Bias. When efficiency standards (or pollution controls in general) increase the cost of purchasing new equipment, this can retard the overall replacement rates. People hang onto old cars, refrigerators, and other items longer. One policy response is to offer a bounty on turning in older technologies. Some utilities have refrigerator buy-back programs, and the Administration has explored payments for junking old cars to decrease urban air pollution and increase mileage.

³ See Robert Crandall, "Why is the Cost of Environmental Regulation So High?" (St. Louis: Washington University, Center for the Study for American Business, February 1992), especially pp. 16 - 17.

Downward Pressure on Energy Prices. Whether spurred by energy prices or government standards, successful conservation efforts over the long run will tend to lower energy prices through reduced market demands. This can plague any end-use strategy, and would tend to cause backsliding, such as what occurred in automobile efficiency during the late 1980s. Both technology choices and consumption behavior become less influenced by energy prices.

Lack of Dynamic Incentives. Efficiency standards provide only limited incentives to innovate toward super-efficient appliances, or to change the composition of economic activity. For instance, in the very long run, the geographic distribution of employment, residential choices, and available commuting alternatives will have a great deal of influence on transportation energy use. CAFE standards would not seriously affect these long-run structural determinants of energy use.

End-Use Efficiency Standards: Advantages

Many of the criticisms of efficiency standards rely on the assumption that energy markets work fairly well, and that consumers and firms make rational decisions with reliable information. Where these conditions are not met -- and this is a source of contention among economists and efficiency advocates -- standards can be an effective conservation instrument.

Moreover, there is strong political support for efficiency standards. Most voters assume that equipment manufacturers can supply the extra efficiency without raising prices, and that consumers will be the sole beneficiaries of improved efficiency. While this is probably wrong in a narrow sense, equipment manufacturers have greatly exaggerated the costs in the past, and standards have been effective in many cases. Also, consumers do tend to focus on initial cost to a nearly irrational degree. Energy economists debate this point endlessly, but efficiency standards can provide a useful minimum for conservation.

Finally, I think that the arguments on page 350 of *Earth in the Balance* hold up pretty well: Senator Gore supports standards in general without overselling them, and acknowledges some drawbacks to CAFE. Standards can be a useful complement to an energy price strategy.

End-Use Energy Taxes

Taxes on motor fuels or electric power could reduce energy demand and raise revenues for other tax reductions or for energy-related programs. While other end-use taxes are possible, gasoline and electricity are the most commonly discussed.

Taxes could influence both the efficiency of end-use equipment (cars and appliances) and the behavior of consumers. Thus, taxes could elicit a wider range of responses than efficiency standards, possibly helping to limit the economic costs of reducing CO₂ emissions. However, end-use taxes share some of the disadvantages of standards: they may not target energy uses for which conservation is inexpensive, and they may not influence upstream energy supply decisions that affect overall CO₂ emissions.

For example, a stiff gasoline tax will affect both new car selection and driving behavior, and would encourage alternative fuels. But some of these fuels, such as coal-derived methanol and perhaps electricity, could actually increase CO₂ emissions from transportation. Another peripheral issue surrounding a gasoline tax is the reduction in federal highway trust fund taxes and state gasoline taxes as fuel demand falls. Finally, a gas tax is hugely unpopular, unless the electorate is convinced that the tax offsets will provide a compensating benefit. John Anderson's "50/50 proposal" (\$0.50 per gallon gasoline tax and a 50% reduction in FICA) was not universally praised in 1980. It will be interesting to see how Tsongas' \$0.50 tax fares in 1992. Along with the understandable aversion to taxes, it is my opinion that many voters view inexpensive

energy as virtually an entitlement. This limits the political appeal of any price-based strategy, especially one so transparent as an end-use energy tax.

As for an electricity tax, if the tax were levied on all generation, then utilities would have no incentive to alter their fuel choices or construction programs to favor less carbon-intensive energy forms. Consumers, on the other hand, would have incentives both to purchase more efficient appliances and to limit electricity use.⁴

One option for an end-use tax that is similar to a primary energy tax would be to distinguish among generation types. If renewable and nuclear generation were exempted from the tax, then utilities might have some incentives to reduce CO₂ emissions. If the electricity tax were differentiated by fossil fuel type, it could mimic a primary energy tax.

Other energy taxes on heating fuel or natural gas would provide a fairly direct incentive to limit energy use. However, unless the taxes were closely associated with carbon content, the long run fuel incentives might not effectively reduce CO₂ emissions.

End-Use Offsets: the Cooper-Synar Proposal

H.R. 2663 (CO₂ Offsets Policy Efficiency Act, or COPE) introduced by Representatives Cooper and Synar would establish an CO₂ offset requirement for new major sources of CO₂. Senator Gore introduced a companion measure as S. 201. Under the plan, a powerplant would have to secure CO₂ emission credits from "certified" sources such as appliance efficiency programs and tree planting. These credits would be marketable; the program resembles the SO₂ emission cap in the Clean Air Act Amendments.

In my view the bill is fundamentally flawed in several respects:

- Since it only applies to major stationary sources of CO₂, the bill cannot even stabilize U.S. CO₂ emissions.
- Major CO₂ sources are defined by their emission potential -- over 100,000 tons of CO₂ per year. This definition could encourage industrial and utility sources to scale down operations into smaller units to avoid the emission offset requirement.
- The EPA must certify actions that would qualify for CO₂ offsets, implying a vast bureaucratic effort.
- The calculations for CO₂ offsets are based on national average CO₂ emission rates, which can vary substantially. Therefore, some of the promised emission reductions may only exist on paper.
- If this approach were used to attain real emission reductions, new sources would have to acquire offsets that exceed their prospective emissions. This would unfairly single out one sector for emission reduction effort.

⁴ It is theoretically possible that an electricity tax could encourage perverse CO₂ emission results -- by encouraging the direct use of oil heating in the residential sector, for example. However, because of utility reliance on coal, and the generation, transmission and distribution losses, direct fuel use usually emits less CO₂ than electricity used in the same application.

- An EPA effort to monitor and facilitate trades under the system could add significant administrative burden.

The proposal seems to be unduly influenced by the SO₂ offset program featured in the Clean Air Act. But the proponents should recognize the profound differences between SO₂ and CO₂ in terms of sources and appropriate control strategies. In my view, a utility based CO₂ offset policy is unlikely to succeed.

PRIMARY ENERGY STRATEGIES

Given the link between primary fossil energy and CO₂ emissions, a strategy that would restrict the amount of carbon entering the economy would directly limit the amount of CO₂ emitted downstream. Policy that reduce the amount of hydrocarbon input used could ignore how, where, and by whom the CO₂ is eventually emitted into the atmosphere. This could be accomplished by establishing a market for a fixed supply of carbon fuel production permits, or by taxing fuel production in proportion to carbon content. Well-functioning energy and product markets could produce the greatest value of goods and services from a limited amount of fossil fuel input. But markets don't necessarily function well, and the primary energy strategies may have economic and political drawbacks.

Marketable Carbon Supply Permits

Establishing fossil fuel extraction limits and import quotas would directly fix the amount of carbon entering the U.S. energy market. The limited numbers of transactions at the point of primary energy supply would simplify enforcement; every unit of fossil fuel sold from mines, wellheads, or docks would have to be accompanied by a "carbon permit." If the permits were fully marketable, then the suppliers who wish to sell fossil fuel would have to purchase permits from current owners, which would bid prices up. The cost of obtaining permits would raise downstream energy prices and would generate windfall profits ("economic rent") to those who were initially granted the permits. The higher downstream energy prices would promote cost-effective conservation in the same manner as an equivalent carbon tax.

A primary energy carbon permit scheme is analogous to the CFC production phase out. It is also similar to the OPEC oil embargo, since it would create a domestic carbon energy cartel that could raise fossil fuel prices to the level that the market will bear. Since Congress is unlikely to give such a huge windfall to owners of fossil fuel resources, it could try to appropriate some of the profit as public revenues. This revenue could be used to reduce other taxes as a way to compensate energy users for the higher downstream prices. Two methods could be used: the government could auction the permits every year, or alternatively estimate the eventual market price of the permits and tax the production of fossil fuel at a level that would correspond to the windfall profit. An auction would eliminate the need to estimate eventual price, but the revenues could be volatile and difficult to predict. A tax would be difficult to set at the "correct" level, but would provide a reliable source of revenue since the tax base would be fixed by definition.

Carbon Taxes

Instead of directly limiting the carbon in primary energy supplies, carbon taxes would operate on the supply and demand for primary energy. Taxes on fossil fuels levies in proportion to carbon entering the economy -- at the mine, wellhead, dock, or pipeline -- will reduce demand at all latter stages as the prices work their way downstream through energy and product markets.

Like the price increases expected from a carbon permit scheme, taxes would shift production and consumption decisions away from economic activities that directly or indirectly produce the most carbon dioxide. The range of potential responses is quite wide: the mix of energy inputs could change, the energy intensity of manufacturing processes could decrease through substitution and technological change, and consumers might reduce purchases of goods produced with the most fossil fuels. In their efforts to avoid

higher prices, the participants in downstream markets will tend to make adjustments that reduce CO₂ emissions at least cost, at least theoretically. A cost effective mix of emission reduction activities will reduce CO₂ emissions with a minimal sacrifice of economic output.

Compared to the windfall profit associated with permit schemes (without an auction or tax) the difference between the price paid by the purchaser of primary energy and that received by the seller (the tax) is automatically taken in the form of government revenue. The "rent" would be public income rather than private income, and could be used to provide reductions in other taxes.

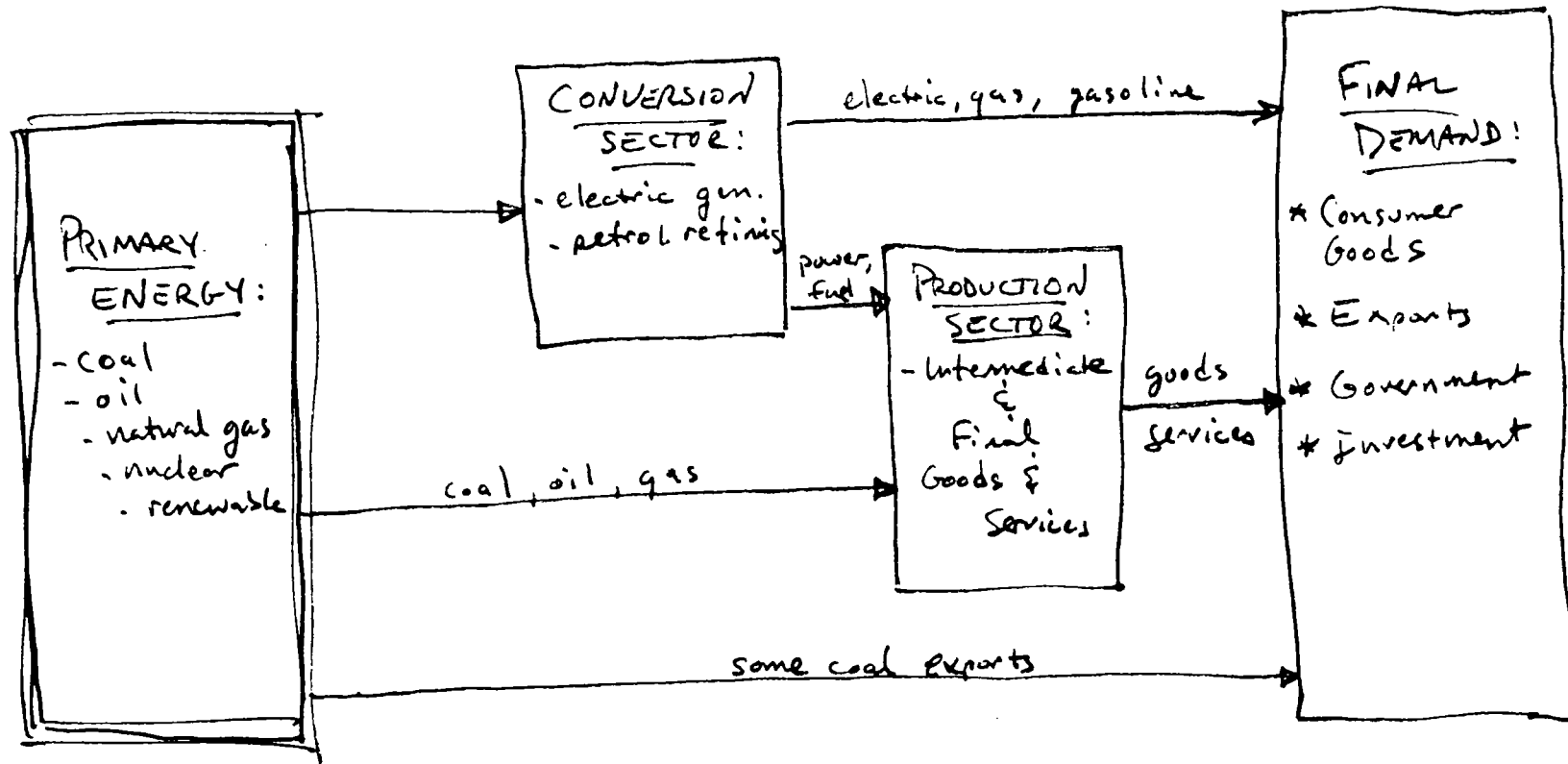
Prices vs. Quantity Controls

The major tradeoff confronted in choosing between a quantity restriction and a tax strategy is the costs associated with uncertain levels of cost and benefits.⁵ Simply stated, a permit scheme that fixes the quantity of carbon will insure a particular emission level but pose the risk of incurring very high costs, while a carbon tax strategy is likely to deliver CO₂ emission reductions at the lowest possible cost, but cannot insure a particular emission level with certainty. In order to choose among the options, we should weigh the costs and benefits of mistakes.

From an economic efficiency point of view, the carbon tax is clearly the preferred instrument for reducing CO₂ emissions. Too little is known regarding climate change to specify an exact "optimal" emission target at specific times, while the short-run economic risks are high. *This does not support the administration position of no action, but represents an evaluation of the relative risk of policy instruments in the presence of uncertainty.* What the economics indicate is that aggressive CO₂ emission reduction policy should rely on the price mechanism and risk the non-attainment or over-attainment of specific emission objectives. While distributional, institutional, or political concerns ignored by the efficiency analysis may support alternative policies, alternatives to carbon taxes would face the burden of proof of proving cost-effectiveness under conventional economic analysis.

⁵ This represents a classic dilemma first dealt with by Weitzman ("Prices vs. Quantities" *Review of Economic Studies*, 41, p.477-491, 1974). The amount and type of uncertainty regarding the abatement costs and attendant benefits will determine the relative merit of taxes and regulatory approaches to reducing externalities.

FIGURE 1



"ENERGY IN THE MACROECONOMY"

FIGURE 26 LINKED ENERGY MARKETS

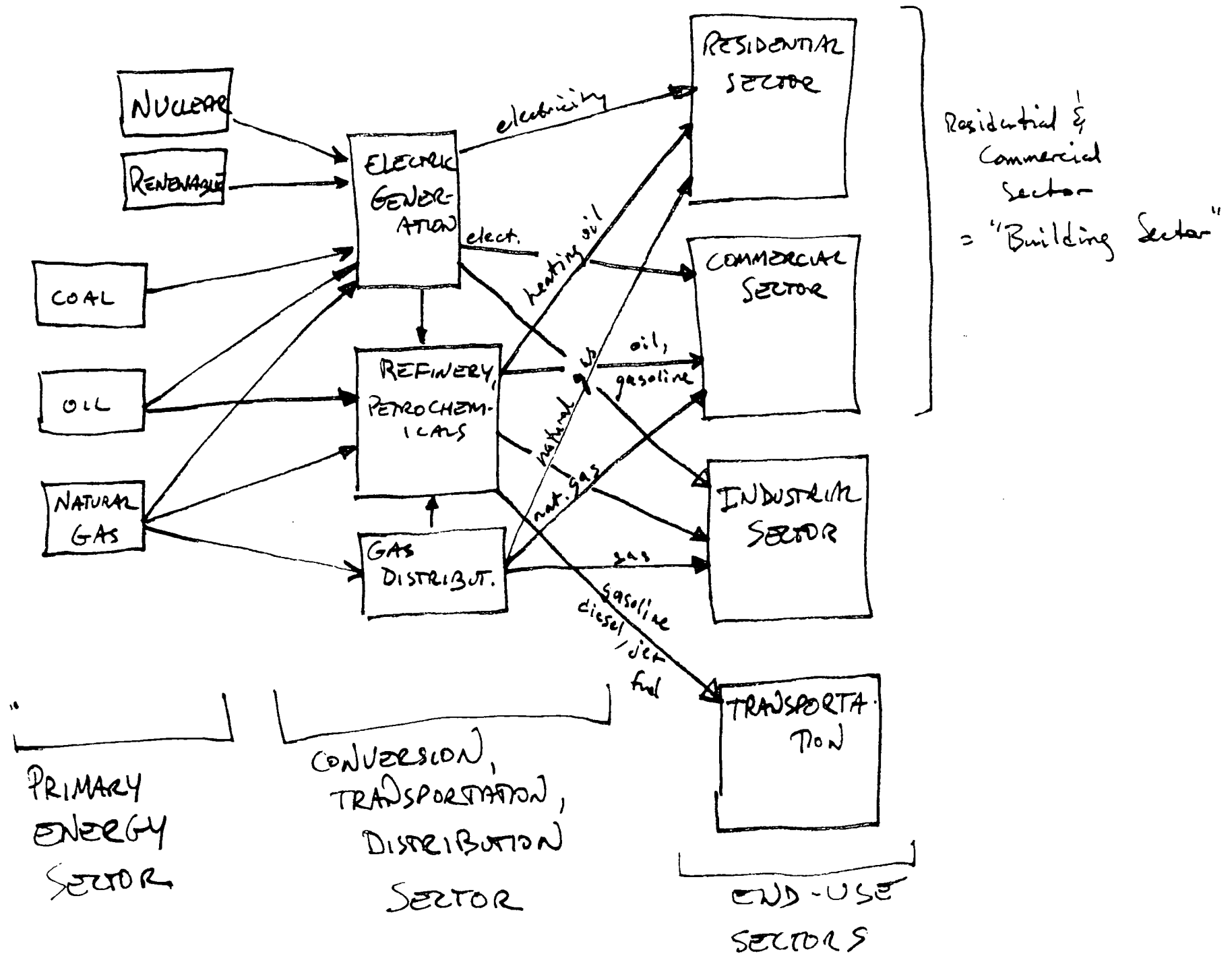
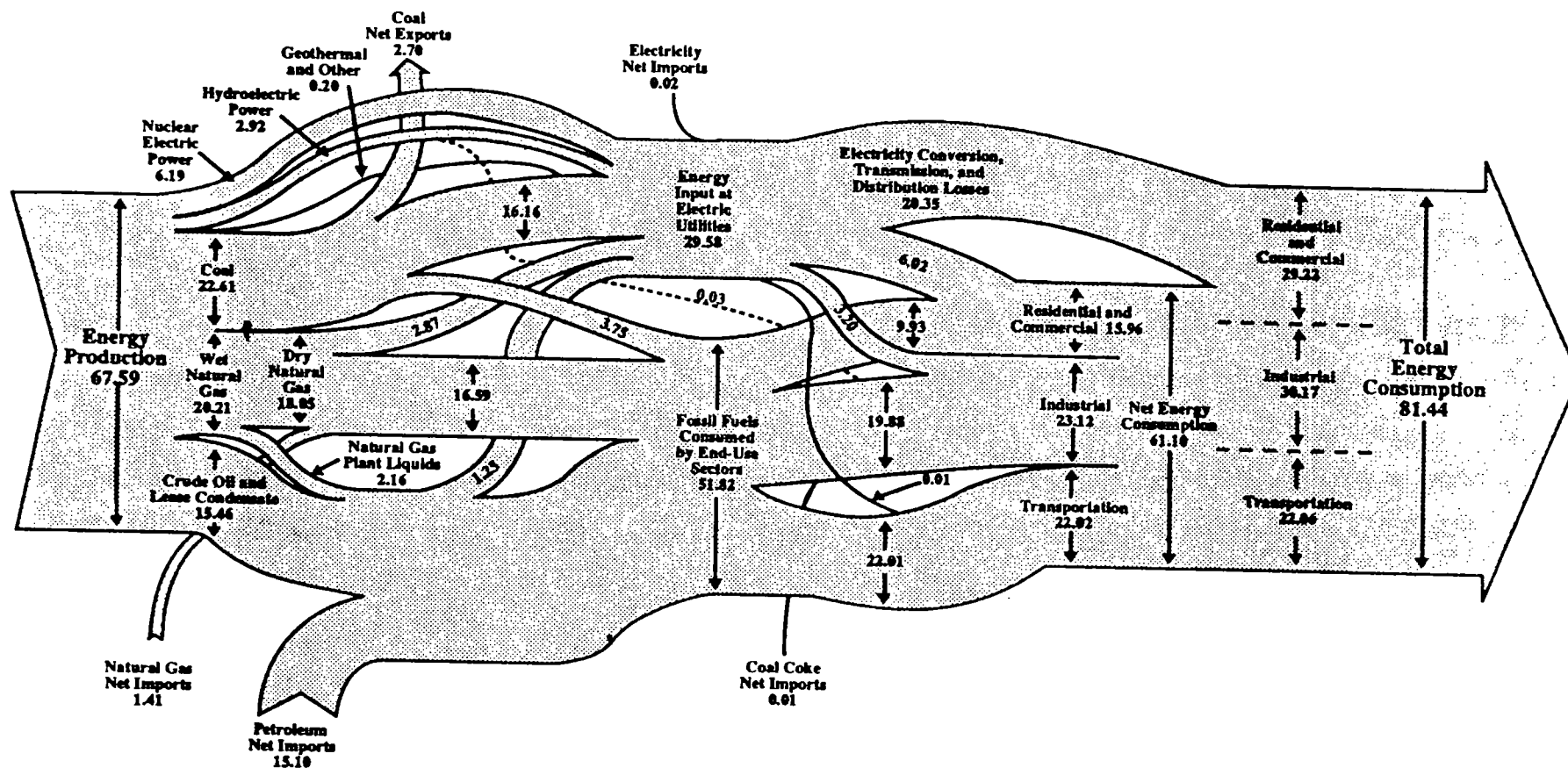


Diagram 1. Total Energy Flow, 1990
(Quadrillion Btu)



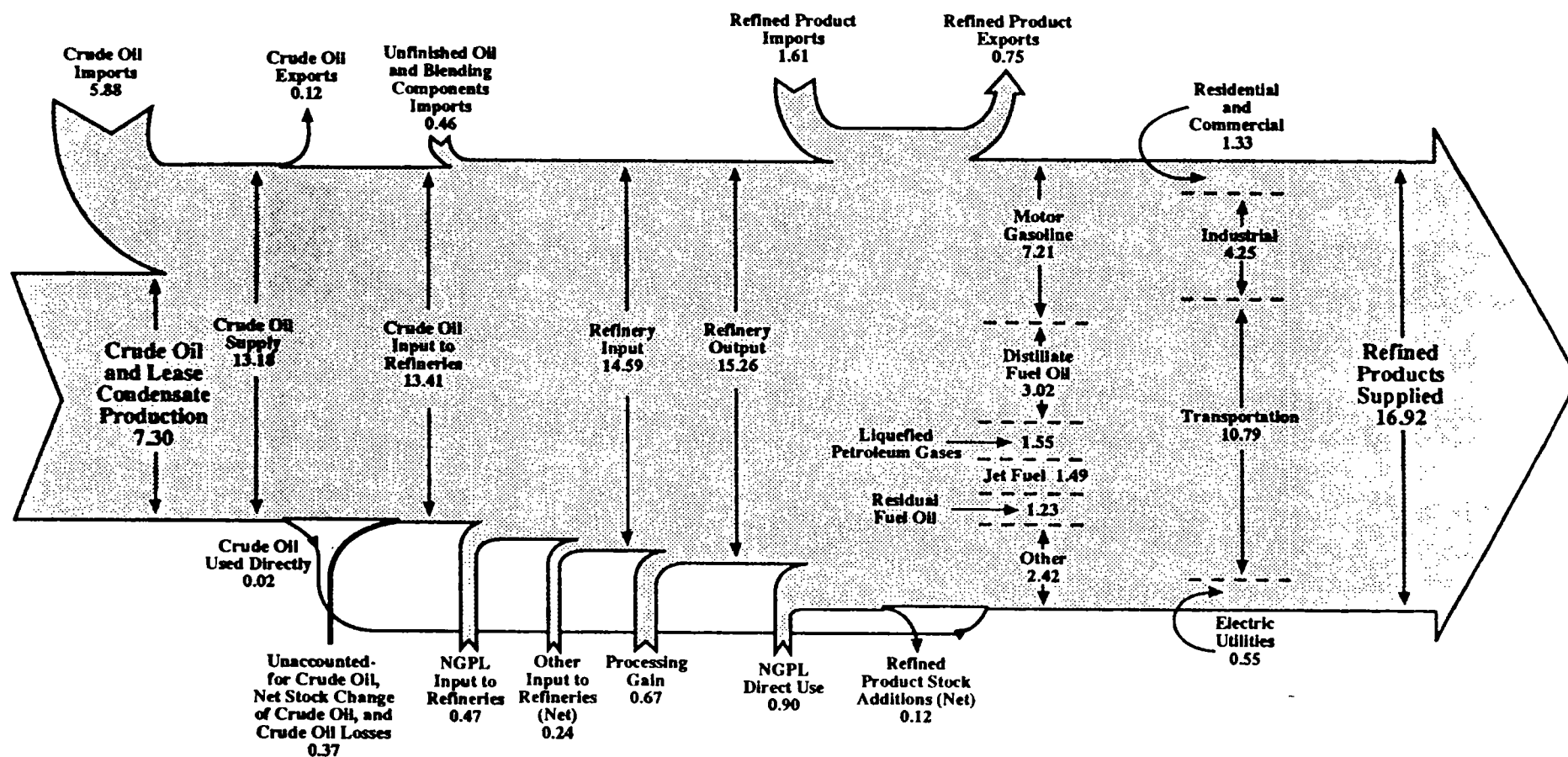
*Total energy consumed with conversion and transmission losses allocated to end-use sectors in proportion to the sectors' use of electricity.

Note: Data are preliminary.

Note: Sum of components may not equal totals due to independent rounding; the use of preliminary conversion factors; and the exclusion of changes in stocks, miscellaneous supply and disposition, and unaccounted for quantities.

Sources: See Tables 2, 4, 5, and 92, and *Monthly Energy Review*, March 1991, Tables 2.3, 2.4, and 2.5.

Diagram 2. Petroleum Flow, 1990
(Million Barrels per Day)

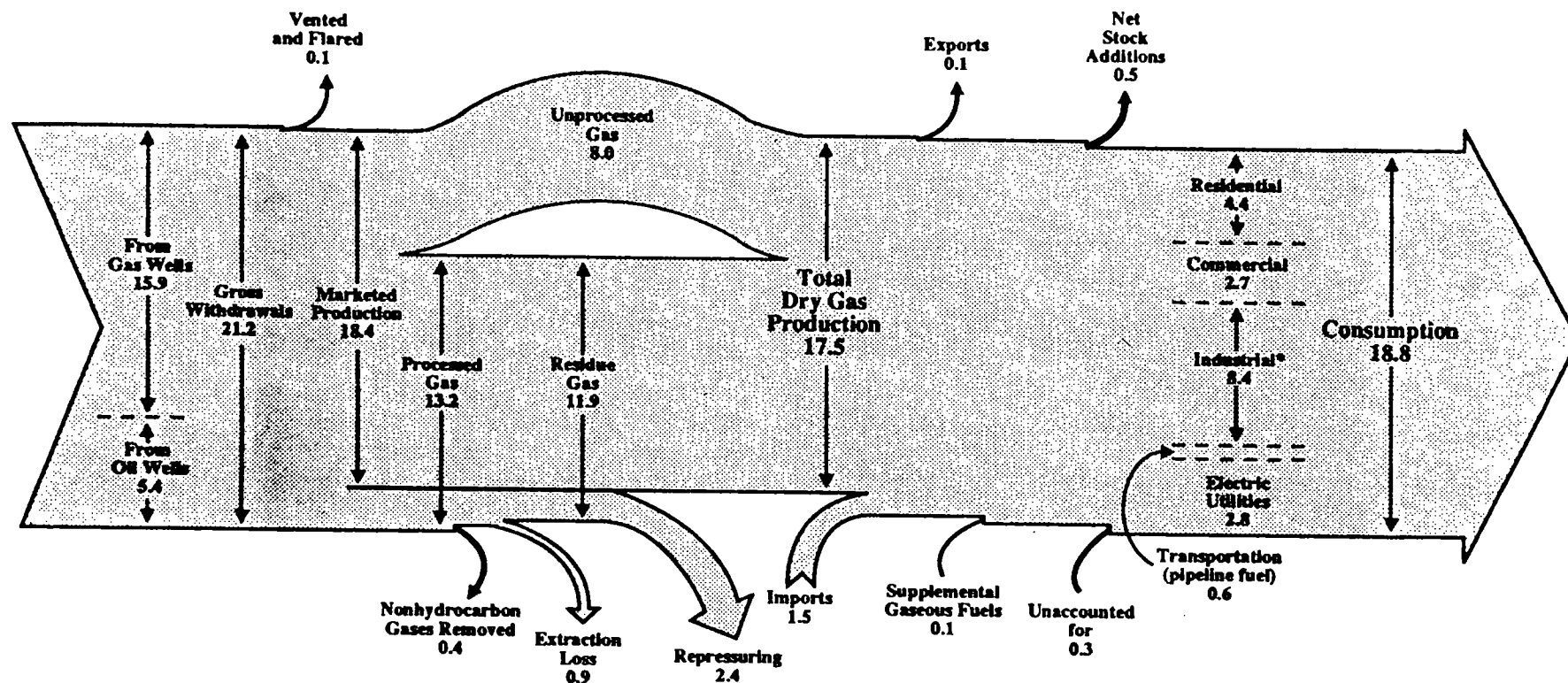


Note: Data are preliminary.

Note: Sum of components may not equal total due to independent rounding.

Sources: See Tables 51, 55, 58, 61, and 62, and *Petroleum Supply Monthly*, February 1991, Table 3.

Diagram 3. Natural Gas Flow, 1990
(Trillion Cubic Feet)



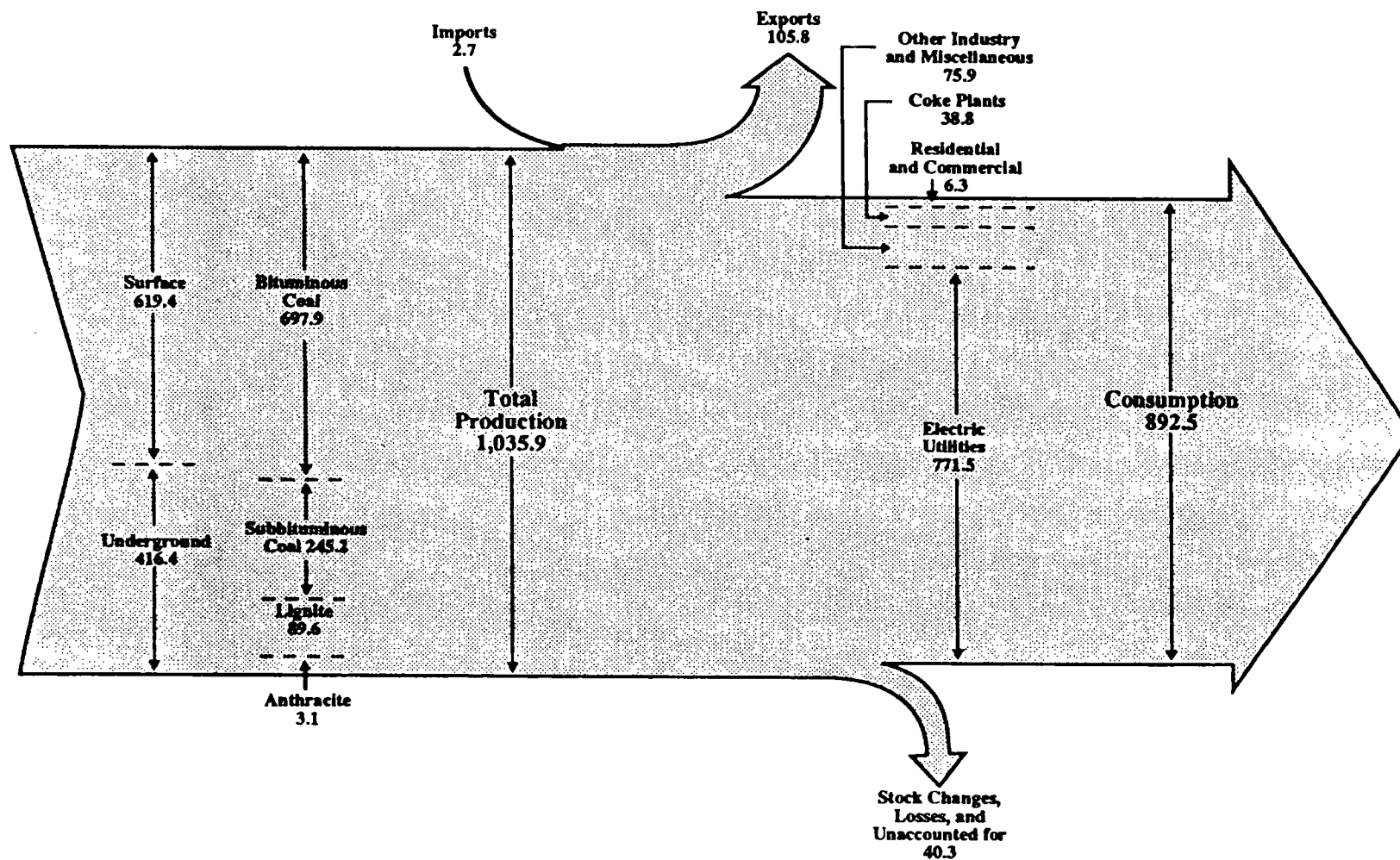
*Includes lease and plant fuel.

Note: Data are preliminary.

Note: Sum of components may not equal totals due to independent rounding.

Sources: See Tables 73, 74, and 77.

Diagram 4. Coal Flow, 1990
(Million Short Tons)

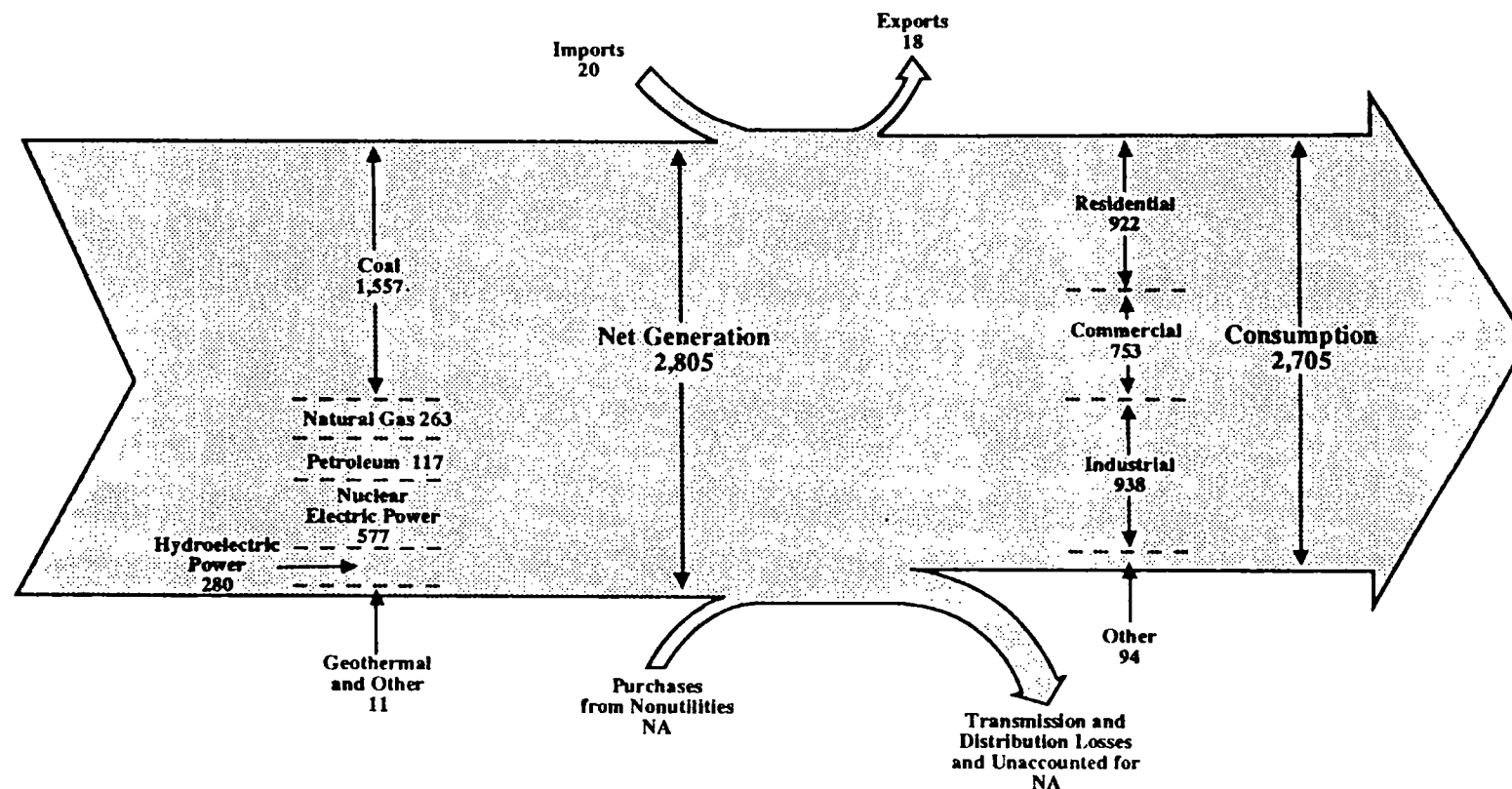


Note: Data are preliminary.

Note: Sum of components may not equal total due to independent rounding.

Sources: See Tables 81, 82, and 83.

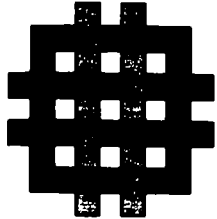
Diagram 5. Electric Utility Electricity Flow, 1990
(Billion Kilowatthours)



Note: Data are preliminary.

Note: Sum of components may not equal totals due to independent rounding.

Sources: See Tables 89, 90, and 94.



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USING POLLUTION AND CONGESTION CHARGES TO FINANCE TAX RELIEF

HEARING FOR THE COMMITTEE ON WAYS AND MEANS

U.S. HOUSE OF REPRESENTATIVES

FEBRUARY 6, 1992

**Testimony
by**

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Director, Climate, Energy and Pollution Program**

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Using Pollution and Congestion Charges to Finance Tax Relief

Roger C. Dower and Robert Repetto

INTRODUCTION

These hearings are designed to identify tax strategies that will achieve two key policy goals. In the short run, there is mounting interest in reducing the burden of taxes on the middle class and to lift the economy out of recession without unwisely aggravating the budget deficit. Over the longer term, we all share the goal of raising the productivity and competitiveness of the U.S. economy while achieving a more equitable fiscal structure.

Both of these objectives can be advanced by lowering taxes that fall on labor earnings, savings, and investment – activities vital to productivity and growth – and raising fiscal charges on, for example, traffic, pollution, congestion, and resource waste – polluting activities that lower the productivity of the economy. By adjusting the mix and levels of these tax changes, the distributional impact and budget implications can be designed to meet the goals of fairness and fiscal stability.

Testimony before this committee has, time and time again, noted the difficulty of meeting the twin goals of tax fairness and economic revitalization. Pollution and congestion charges offer part of the solution. Charges on environmentally destructive activities create opportunities to continue the 1986 tax reform initiatives sponsored by this committee, encourage a strong basis for economic growth, and enable us to meet our environmental protection needs.

THE ADVANTAGES OF SHIFTING THE TAX BURDEN FROM "GOODS" TO "BADS"

The present U.S. tax structure is extraordinarily burdensome. It penalizes precisely those activities that are essential to economic progress: work, savings, investment, and entrepreneurship. The after-tax returns to work and savings efforts are considerably reduced by taxes. As a result, people tend to work, save, and invest less than they would have done otherwise. Over time, the resulting lag in the acquisition of skills, capital, and technology greatly reduces income and productivity growth.¹

Many efforts have been made to estimate the size of the excess burden of taxes in the U.S. Even after the tax reforms of 1986, it has been estimated that the average excess burden

¹ As a technical matter, this kind of economic loss is referred to as excess burden and is a measure of the true welfare cost of taxation. A useful review of the theory and estimation of efficiency losses from taxation can be found in: Ballard, C.L., "Marginal Efficiency Cost Calculations for Different Types of Government Expenditures: A Review", 1991.

of the tax system was 18 cents for each dollar collected.² Applying this estimate to 1990 federal tax revenues of about \$1.1 trillion, the cost to the economy in terms of reduced economic resources could be in the range of \$200 billion per year. Including state revenues of \$800 billion from income, payroll, and excise taxes raises the level of potential economic costs to around \$340 billion per year.³

The numbers cited above are based on average tax rates across all federal (and state) revenues. But marginal tax rates are substantially higher than effective average rates. Thus, the efficiency costs of each new dollar raised by taxing economic "goods" are much higher than the average burden across all dollars raised. Various estimates of the marginal excess burden of taxes on labor earnings range from 30 to 48 cents for each dollar of additional tax revenue. The estimated marginal excess burden of individual income taxes, which fall partly on savings, is even higher, from 40 to 60 cents on the dollar.⁴ These extraordinarily high marginal excess burdens imply that tax reductions, if financed in non-inflationary and less burdensome ways, can make

² This is based on estimates provided in Jorgenson, Dale W. and Kun-Young Yun. "The Excess Burden of Taxation in the U.S.," HIER Discussion Paper No. 1528 (Cambridge: Harvard University, November 1990) which calculated an average efficiency cost of the entire tax system to be 18 percent.

³ The federal and state revenue estimates for 1990 were derived from U.S. Government, Economic Report of the President with the Annual Report of the Council of Economic Advisers (Washington, DC: U.S. Government Printing Office, February 1991), Tables B-81 and B-82.

⁴ These estimates are drawn from the following sources: Edgar Browning, "On the Marginal Welfare Cost of Taxation", American Economic Review, March, 1987; Charles Ballard, "Marginal Efficiency Cost Calculations for Different Types of Govt. Expenditure: A Review", paper presented at the Australian Conference in Applied General Equilibrium Analysis, Melbourne, Australia, May, 1991; Dale Jorgenson and Kun-Young Yun, "The Excess Burden of Taxation in the United States", Harvard Institute for Economic Research, Cambridge, Mass. November, 1990.

a significant contribution to productivity and welfare.⁵

An attractive way to finance such tax reductions is to increase charges on activities, such as congestion, pollution, and resource waste. Such charges discourage behavior that impose excess costs on the economy and can raise revenues while actually increasing economic productivity and welfare. A well-known characteristic of many environmentally damaging activities is that they impose non-monetary costs not reflected in market transactions. Airborne emissions of various pollutants, for example, may lead to widespread damage to crops, forests, materials, and health. In the absence of regulation or equivalent government actions, polluters are unlikely to take into account the costs their activities impose on others, and, at the margin, will spend less to prevent environmental damages than those costs would warrant.

Charges have been firmly established as one of the most cost-effective mechanisms for creating the right economic incentives for polluters. If set appropriately, a charge induces a net gain in economic welfare by incorporating environmental damages into financial decision-making. Faced with a charge, sources of environmental damage are induced to cut back on pollution, congestion, or waste generation. They will pay the charge only when it is less than the costs of

⁵ The argument applies even more strongly to State and local taxes. From the standpoint of the individual State, the marginal excess burden of State income, payroll, and profits taxes are even higher than that of Federal taxes. For the individual State, the problem is that higher taxes shift the location of work and investment to other states, as well as discouraging them altogether. There is substantial evidence that workers and investors respond to differences in State tax levels.

cutting back. Charges raise revenues but also result in a net productivity gain not an economic burden.

Substituting a billion dollars' worth of such a charge for a billion dollars' worth of tax on incomes or payrolls, for example, produces a double benefit. When marginal income tax rates are cut, their excess burden on the economy is reduced. This benefit can amount to 40 to 60 cents on the dollar. If this tax cut is financed through charges on environmental damages, there is an additional benefit; environmental damages in excess of the costs of prevention are reduced. As shown below, this can come to another 10 to 30 cents on the dollar. Combining the two measures yields impressive gains in productivity. Substituting \$100 billion in suitably designed environmental charges for \$100 billion in income and payroll taxes could provide an annual increase in economic productivity of \$40 to \$70 billion in the form of increased work and savings and reduced pollution and congestion.

TWO EXAMPLES OF POLLUTION AND CONGESTION CHARGES

Properly designed charges do not distort economic decisions but rather eliminate distortions. Substituting carefully crafted charges for existing taxes will free resources and create market signals that encourage long-term growth and competitiveness. Further, charges, like other economic incentive-based environmental protection strategies, will reduce the drag on the economy associated with less efficient command and control regulations. As the costs in total and at the margin of our environmental protection efforts grow, the ability of our economy to be

competitive depends on how cost-effectively we address the risks.

Many forms of environmental risks, but not all, can be addressed through charges. They can most readily be used where regulations are not in place and where regulatory approaches are infeasible. Further, charges have to be carefully designed if they are to generate the kinds of environmental and economic benefits we have discussed here. We outline below two examples of charges that illustrate the potential for raising revenues and protecting the environment. The risks addressed by these examples – highway congestion and accelerated risks of climate change – are not subject to existing regulation. Although very different environmental risks, they both pose substantial economic and environmental risks and offer the potential to generate significant opportunities for tax reform.

Congestion Tolls

The traffic jams that tie-up our cities are imposing huge economic and environmental costs on all of us. Already, 70 percent of rush-hour traffic endures stop-go conditions, a 30 percent increase just since 1983. This wastes time, money, fuel, and contributes seriously to air pollution. In the past 20 years, vehicle miles travelled rose by 90 percent, urban highway capacity by just four percent. There are limited funds to maintain and repair the infrastructure, let alone expand it. If things go on, the 1.5 billion hours lost annually in traffic delays will rise four-fold within fifteen years.

Congestion is massively under priced. Each driver fumes about his own lost time, but ignores the contribution he makes to overall congestion and his part in delaying everybody else on the road. Congestion increases the probability of accidents and leads to higher air pollution. If congestion tolls were set to reflect these external costs, some drivers would be induced to shift time, route, or mode of travel, or to ride with somebody else.

WRI has just finished a careful analysis of the effects of congestion tolls applied nationwide on urban highways, arteries, and collector roads. The technology has advanced so that such tolls are not just an economist's fantasy. Smart cards and electronic license plates, linked to computers, can record every car's passing by invisible toll stations. Drivers can be billed, or their cards can be debited as in the metro fare system. These traffic devices are in place in Dallas, San Diego, Oslo, and elsewhere and are planned in England, Sweden, the Netherlands, and Hong Kong.

If congestion tolls were set just to reflect the external costs of traffic delay (measured in terms of lost worker productivity), then – according to the local conditions – they would range from roughly \$0.25 to \$1.25 for a typical ten-mile urban trip. Traffic on the most congested roads during rush hour would be cut back by about seven percent. Annual revenues nationwide would total about \$45 billion. The net welfare gains, reflecting the value of time saved after accounting for the costs of adjusting the travel schedule, would be \$2.2 billion, about five cents on the dollar.

If tolls were set high enough to cover the costs of accidents and the delays from accident-related tie-ups as well, then the typical trip would pay a toll ranging from one to four dollars. Traffic on the most congested roads would be cut back 25 percent. Annual revenues nationwide would approach \$150 billion with a net economic welfare gain of over \$50 billion, roughly 30 cents on the dollar. The gains include savings in time and reduced medical and hospitalization costs.

We've also done a projection to the turn of the century. It shows that if congestion tolls are not adopted, and traffic jams are kept at today's level by increasing urban highway capacity, then the additional capital outlay on new construction would be about \$50 billion on top of the huge sums needed to maintain and rehabilitate the aging highway infrastructure. Instead of gaining revenue, a huge additional expenditure would have to be financed through distorting taxes with a heavy excess burden.

Carbon Taxes

Carbon dioxide (CO₂) is one of several "greenhouse" gases that have been associated with increased risks of accelerated global warming. CO₂ is the most ubiquitous greenhouse gas and the largest contributor to the risks of global warming. Resulting primarily from the combustion of fossil fuels (oil, natural gas and coal) and destruction of forests, CO₂ is emitted by millions of different sources and activities through the world. In terms of fossil fuel emissions,

the U.S. is the largest single contributor of CO₂ to the atmosphere, accounting for about 25 percent of all global emissions.

A strong scientific consensus has emerged on the role of CO₂ in promoting world-wide climate change. In its most recent assessment of the science of global warming, the Intergovernmental Panel on Climate Change (involving scientists from all over the world) repeated its earlier findings that, "emissions resulting from human activities are substantially increasing the atmospheric concentrations of the greenhouse gases: carbon dioxide, methane, chlorofluorocarbons, and nitrous oxide," and "The evidence from the modelling studies, from observations and sensitivity analyses indicate that the sensitivity of global mean surface temperature to doubling CO₂ is unlikely to lie outside the range 1.5 to 4.5 degree C."⁶ The work of this panel has led to the ongoing negotiations by the Intergovernmental Negotiating Committee for a Framework Convention on Climate Change, under the auspices of the United Nations, on an international agreement to reduce the risks of climate change from all greenhouse gases. In advance of a formal international agreement, most of our major trading partners in the OECD have pledged to reduce their emissions of carbon dioxide and other greenhouse gases.

As part of the ongoing international debate on a global climate change agreement, there is substantial discussion of the most appropriate national strategies for controlling CO₂ and other greenhouse gas emissions. A pollution charge on carbon dioxide, a carbon charge or tax, is one

⁶ Intergovernmental Panel of Climate Change, 1992 IPCC Supplement, Working Group 1, Scientific Assessment of Climate Change, World Meteorological Organization and the United Nations Environment Program, 1992.

widely investigated alternative. A carbon charge is based on the carbon content of the fuel and thus the potential to release carbon dioxide. Because this content varies by different types of fuels, coal, oil and natural gas will face different tax rates per unit of energy (see Table 1).

Table 1: Carbon Content of Selected Fossil Fuels (lbs of Carbon)

	BY VOLUME	BY ENERGY CONTENT (BTU)*
Coal	1440.00 (ton)	2.04
Crude Oil	6.18 (gallon)	1.60
Natural Gas	0.03 (1000 ft ³)	1.20
Gasoline	5.10 (gallon)	1.50

* (units are represented as 10⁴ lbs of CO₂ per Btu)

Levied at the earliest point in the production process (minemouth, wellhead, and dockside), the tax encourages the least costly reductions in the use of carbon bearing energy sources.⁷ A carbon charge is likely to be the least expensive method of meeting any national or international goals for carbon dioxide reductions. Already, several European countries have proposed or adopted carbon charge schemes and the European Community is evaluating a carbon tax plan for all of the EC.

⁷ A tax based on the carbon content is not strictly speaking a emissions tax. Carbon content is a reasonable proxy for emissions if no technically feasible method exists for removing emissions from the combustion process.

Finding the truly optimal charge level for carbon is much more difficult than for congestion and many other environmental problems. The scientific consensus on the increased risks of accelerated global warming from carbon dioxide belies the much greater uncertainty concerning the economic value of reducing the risks. While accelerated global warming has been associated with a wide range of potential economic and environmental damages, questions on the timing and extent of warming coupled with meager information concerning regional impacts, complicates formal estimates of economic benefits.

An alternative approach would relate the size of the charge to a specific level of carbon dioxide reductions – such as those that are likely to be agreed to under an international climate change agreement. There is no guarantee that the resulting tax level would equate marginal costs and marginal benefits – as we showed in the congestion case. On the other hand, it would be the tax level that minimizes the costs of achieving a given level of reductions and would be the least expensive way of meeting social demand for carbon reductions as reflected by the political system.⁸ As we mentioned earlier, all of the OECD with the exception of the U.S. have pledged to at least stabilizing CO₂ emissions at current levels by the turn of the century. This is a likely first target for U.S. emission reductions.

Economic models of U.S. energy markets and the macroeconomy can be used to estimate the charge level necessary to stabilize U.S. emissions of carbon dioxide. Differences

⁸ The conditions under which our political system results in decisions that reflect social willingness-to-pay are admittedly restrictive.

in model structure, baseline assumptions and time-frames as well as many other factors lead to a different set of the "right" tax rates from different studies. Representative Stark has introduced H.R. 1086 which sets out a carbon tax based on analyses by the Congressional Budget Office. The tax rate in the bill is equivalent to the tax rate that CBO estimated would roughly stabilize CO₂ emissions at current levels over a ten year period.⁹ [H.R. 1086 phases in the tax over a five year period. This would lead to higher emissions, at least for the first few years, than the CBO estimates and might push the point of stabilization several years in the future.] Table 2 presents the tax rates embodied in H.R. 1086.

Table 2: Proposed Carbon Tax Schedule of H.R. 1086

	CARBON (\$/TON)	COAL (\$/TON)	OIL (\$/BRL)	NATURAL GAS (\$/TCF)
Year 1	6	3.60	0.77	0.10
Year 2	12	7.20	1.54	0.19
Year 3	18	10.80	2.31	0.30
Year 4	24	14.40	3.09	0.40
Year 5	30	18.00	3.85	0.48

The revenues generated by H.R.1086 are significant. By the end of the phase-in period, annual revenues are estimated to be around \$35 billion.

⁹ The tax rate in H.R.1086 is the same as the CBO rate adjusted for inflation.

CONCLUSIONS

Charges on pollution and other environmentally damaging activities can link improved economic growth and competitiveness and environmental protection. Congestion tolls and carbon charges are just two examples of a potentially wide range of charges that can provide a foundation for continued tax reform and economic revitalization. Like any major change in our tax structure, tax reform built around such charges would redistribute the revenue burdens of financing the federal government. Such charges would fall on different income groups, different regions of the country and different industries than the existing system. Thus, they must still pass the test of fairness. They can pass that test. Although many pollution charges are thought to be regressive in impact, their benefits, in the form of reduced pollution damages and congestion costs, provide disproportionate returns to lower and middle income groups. It is these groups that now suffer the largest share of environmental damages. Moreover, an appropriately designed package of income and payroll tax reductions or tax credits financed in part or in total by increased environmentally beneficial charges, can provide net fiscal benefits to lower and middle income groups.

As this committee works to design a tax relief and economic growth package, it is essential to find the right combination of policies that create economic benefits in the short and long term. It is far too easy to respond to near-term demands that beggar the future. Charges on pollution and other environmental damages can provide a revenue stream to finance tax relief measures that work for the short- and long-term health of our society and economy. This

committee has made great strides in creating a more fair and productive tax system through carefully considered tax reform. Pollution charges can form a foundation for extending and expanding these achievements.



Statement of

Dawn Erlandson
Director of Tax Policy
Friends of the Earth

On the

U.S. Economy, Middle Class
Tax Relief and Economic Growth

Before the

Committee on Ways and Means
United States House of Representatives

February 6, 1992

INTRODUCTION

MR. CHAIRMAN AND MEMBERS OF THE COMMITTEE, I am Dawn Erlandson, Director of Tax Policy for Friends of the Earth (FoE). We are the U.S. affiliate of Friends of the Earth International, a worldwide environmental network with member organizations in 47 countries. My statement this morning is made on behalf of our 50,000 members and supporters.

Mr. Chairman, I thank you for the opportunity to appear before the committee. I have three main messages.

* First, please raise my taxes. My taxes are taxes on ozone-destroying chemicals, pollution and other environmentally-damaging practices. My testimony will show how the Committee can raise billions of dollars in revenues through imposition of various "green" taxes and elimination of environmentally harmful subsidies now in the tax code. In addition to revenue, such tax changes would yield environmental and public health benefits, bolster long-term sustainable economic vitality and increase employment.

* Second, pay for tax cuts with other tax increases. Don't use the peace dividend to finance tax cuts. Almost all environmental programs are domestic discretionary spending. To maintain the overall domestic discretionary budget cap, non-defense programs like the environment will have to be cut drastically by fiscal year 1994 if defense is not slashed. In short, we need the peace dividend just to stay even. FoE has endorsed the "Invest in America" statement of principles now supported by 112 organizations including the U.S. Conference of Mayors, labor unions, and advocates for educational, health, environmental, housing, children's, low-income and religious interests. This statement urges that any tax cuts be financed by tax increases.

* Third, provide several small tax incentives to promote conservation and efficient use of natural resources and thereby begin to counter the existing emphasis of government subsidies on energy- and resource-intensive production and resource depletion.

ECONOMIC GROWTH, JOBS, QUALITY OF LIFE, AND THE ENVIRONMENT

"Jobs vs. the Environment" is a headline we see more and more. The question is are they in conflict. The answer is no. As the United Steelworkers of America stated in a report, "In the long run, the real choice is not jobs or environment. It's both or neither." Indeed, ecological and economic vitality are inseparable. To assert otherwise is to believe progress can depend forever on depleting nonrenewable natural resources and fouling land, air, water, and the atmosphere.

More environmentally sound methods of production, consumption, and disposal are

consistent with employment goals because they tend to favor workers over machines. In contrast, the most energy- and resource-intensive industries (paper, primary metals, oil refining, and chemicals) favor capital over labor. They use over 20 percent of total energy but provide only 3 percent of jobs.

A German study finds that a \$580 million investment in highway construction yields 14,000 to 19,000 jobs while a similar investment in rail construction creates 22,000 to 23,000 jobs. Rail travel for both people and packages is more energy-efficient than truck or automobile travel. In Vermont, recycling generates 550 to 2000 jobs per million tons of materials processed while incineration creates only 150 to 1100 jobs and landfilling employs 50 to 360 people.

The President in his budget has put an emphasis on lowering the cost of capital in order to revive the economy and create jobs. He has also been on the campaign trail proclaiming that the environment will have to wait because jobs are the first priority. Perhaps, he should consider investing in environmental programs to provide the greatest boost to job creation.

The environment is not a luxury to be expended in the name of job creation and growth but a vital necessity for them to occur. To ignore the environment would damage long-term well-being, including public health. Increasingly, physicians and citizens are realizing that environmental conditions have direct implications for human health. Depletion of the ozone layer has been linked to higher rates of skin cancer, cataracts, and weakening of the immune system. Air pollution exacerbates heart and lung problems. Exposure to pesticides interferes with the functioning of the nervous system, and toxins can cause cancer and genetic mutation and suppress the immune system.

Given our history of ravaging the environment to benefit the economy, the convergence of economic and ecological well-being and therefore the economic and environmental policies of government is a task of great magnitude. A critical piece of that convergence is the establishment of consistency among federal tax and environmental policies. With a few exceptions, tax policy is essentially ruled by a frontier mentality; resources are unlimited and exist to be depleted and exploited. This posture is evidenced by the Code's preference for non-renewable energy over renewable energy, energy production over energy consumption, materials production over conservation and recycling, and development of land over preservation.

Fortunately, these preferences can be reversed. The Tax Code can be a powerful tool for environmental protection and sustainable resource use by sending market signals that encourage environmentally beneficial rather than harmful activities. We can begin to align tax policy with environmental and health goals much as we did with transportation and environmental and health objectives in the recently-passed Surface Transportation Act.

To do this, we need to begin to replace the environmentally harmful tax incentives now in the Code with environmentally beneficial tax incentives. We need to begin taxing activities and products that pollute, deplete natural wealth, or otherwise degrade the environment and perhaps lower other taxes that drain hard-earned income and savings or make the costs of labor or capital high. In short, we need to begin to tax bad behavior rather than good.

TAX POLICIES THAT ARE INCONSISTENT WITH EXISTING FEDERAL ENVIRONMENTAL POLICIES

Deductions for Environmental Malfeasance

All tax deductions were once subject to the so-called "public policy limitation" which disallowed a deduction in any instance where allowing the deduction would frustrate a sharply defined government policy. Today, very few deductions are disallowed under this limitation. Some that are include illegal kickbacks and bribes, treble damage payments under

the antitrust laws, and fines and penalties. Deductions related to objectionable environmental activities, however, are not disallowed. Claims for depreciation of conduit and pipe used to direct unpermitted discharge of toxic wastes into a river and deductions for losses resulting from the unlawful abandonment of dump sites laden with hazardous materials damages can be written off. Permitting taxpayers to claim deductions for environmentally destructive business behavior amounts essentially to a tax subsidy for immoral and illegal behavior.

Congressman Guarini has introduced legislation, H.R. 1726., to begin to introduce some environmental limits to business deductions. His bill would disallow deductions for clean up of certain oil or hazardous substance spills. If his bill had been law at the time of Exxon's tragic oil spill off the coast of Alaska, Exxon would not have been able to deduct roughly \$250 million, of the \$1 billion settlement, in damages and assorted cleanup costs from their federal income taxes and pass on that bill to American taxpayers.

Parking as a Tax-free Fringe Benefit

As traffic congestion chokes the air and productivity in urban areas and as metropolitan planners and transportation officials struggle to provide transportation alternatives to relieve congestion and improve air quality, our tax code provides financial incentives to drive to work rather than use mass transit or car pool.

In the interests of land conservation, air quality, and energy conservation, we urge the Committee to consider legislation introduced by Congressman McDermott that begins to equalize commuting incentives. Ideally, tax policy should provide incentives to use mass transit, car pool, bicycle or walk to work and discourage solo driving. Taxpayer-subsidized parking benefits need to be curbed through either repeal of the exclusion of the benefits from the employee's income, limits on the employer's right to deduct parking expenses or excise taxes on parking facilities. It is also worth noting in the interests of fairness that free parking benefits tend to accrue to executives and higher-paid employees while moderate- and lower-paid employees must pay their costs of commuting to work.

Capital Gains and Investment Tax Credits

The return of a significant capital gains differential and investment tax credits (ITC) without environmental restrictions raises concerns not only about fairness but also about environmental destruction. Lowering the cost of capital provides particular benefit to the most energy-intensive and polluting industries (e.g. automobile manufacturing, chemicals, mining). In addition, the ITC and reduced capital gains rates lower the cost of capital and thus on the margin encourage substitution of capital for labor, not necessarily a wise policy in a time of high unemployment or as we look to growth in the workforce.

In clear contrast with the principles behind recent Farm Bills, the return of the ITC could stimulate agricultural development of marginal and ecologically sensitive land. According to the Office of Technology Assessment, the ITC "provides the most significant Federal incentive for farmers to clear and drain wetlands." The ITC also might bias utilities toward costly supply-side technologies and against demand-side management. In combination with depletion allowances, the ITC encourages overproduction of fossil fuels and creates more financial obstacles to renewable energy, efficiency and conservation. In combination with the Forest Service's practice of below-cost timber sales, improved capital gains treatment encourages overlogging in national forests.

Accelerated Depreciation

While the 1986 Tax Reform Act modified accelerated depreciation laws, the Tax Code continues to provide accelerated depreciation as opposed to true economic depreciation. Again, the effect is to lower the cost of capital and hurt employment and the environment. Accelerated depreciation benefits those who drain and fill wetlands and plow highly erodible lands. Specifically, they can write off large investments in tractors and drainage tiles (depreciable over just 7 years) as well as ditch excavation and various other land

"improvements" (depreciable over just 15 years). Accelerated depreciation needs to be disallowed for these activities and others that may be harmful to the environment.

Expensing

Expensing, or current deduction of otherwise capitalized costs, exists for intangible drilling, exploration and development costs of oil and gas production and hard mineral extraction. Expensing is a major contributor to increased extraction rates and to a bias toward development of our primary materials industries rather than conservation or recycling. It encourages the drilling of wells over more environmentally benign exploration methods. A particular problem is excess drilling offshore, adjacent to protected public lands, and in potential wilderness areas. We urge that expensing for oil and gas exploration and mineral development be repealed.

Most costs of producing timber, including carrying costs, costs of silvicultural practices after seedling establishment, costs of disease and pest control, fire protection expenses, and management costs may be expensed rather than capitalized over time. This provision subsidizes logging on public lands and should be repealed.

Percentage Depletion Allowances

We urge the repeal of percentage depletion allowances for oil and gas production and mineral extraction, particularly for known toxic minerals such as lead and mercury. Percentage depletion allows a certain percentage of a property's gross income to be deducted, regardless of the actual capitalized costs. Thus, it amounts to a production subsidy rather than a method of cost recovery.

Second Home Mortgage Interest Deduction

While home ownership is part of the American dream, so are enjoyment of unspoiled wild beaches and scenic mountain areas. The second home mortgage interest deduction subsidizes development in fragile environmental areas while other government policies discourage it. Let us bring them in line and limit the second home mortgage deduction.

Natural Resource Protection Zones

A concept advocated by Chairman George Miller, natural resource protection zones would be the opposite of urban enterprise zones. If established, they would be zones where economic activity would be discouraged. Such areas include wild and scenic rivers, wetlands, old growth forests, and national parks. While some government policies protect these areas, tax benefits continue to flow to those who develop them.

TAXES TO DISCOURAGE POLLUTION, RESOURCE DEPLETION AND DEGRADATION

Ozone-depleting Chemicals

Despite the many international and national efforts to protect Earth's fragile ozone layer, this vital barrier against the sun's harmful ultraviolet radiation continues to deteriorate. Alarming new scientific evidence from NASA shows that the highest level of ozone-destroying chemicals ever measured were found in skies over Maine and Canada last month, and it is likely that a hole in the ozone layer over the Arctic is imminent. This disturbing evidence underscores the need for us to take every feasible action to eliminate ozone-destroying chemicals as rapidly as possible.

In this regard, Mr. Chairman, we urge the Committee to bring extra protection to the ozone layer by expanding the existing tax on ozone-depleting chemicals. The CFC tax is one of the most powerful tools Congress has created to protect the ozone layer. This economic instrument has successfully encouraged industry to adopt alternatives to CFCs and increase

CFC recycling. In the short period since the tax took effect in 1990, U.S. CFC production has dropped significantly. According to the Environmental Protection Agency, domestic CFC production is now 42 percent below the limit allowed by the Montreal Protocol, the international ozone protection agreement.

In addition to stimulating reductions in CFC consumption, the CFC tax is a source of significant revenue. The Administration reports that the existing tax on ozone-depleting chemicals will bring in over \$650 million in revenue in 1992 and \$905 million next year. In this light, we advocate the following actions:

1. Raise the tax's base rate. The current base tax rate per pound of chemical is \$1.67 in 1992 and will rise to \$2.65 in 1993 and \$3.10 in 1995. (The total tax per chemical equals the base rate multiplied by the chemical's ozone depletion potential (ODP).) We propose raising the base rate to \$2.00 in 1992, \$4.00 in 1994 and \$5.00 in 1995. This approach would make it more expensive for industry to delay eliminating CFC use.

2. Add HCFCs to the list of taxed chemicals. HCFCs are ozone-destroying chemicals and should not be exempt from taxation. Industry is developing these compounds as "bridge chemicals" for use until completely ozone-safe compounds can be found. Since HCFCs have 2 to 15 percent as much ozone-depleting strength as CFCs, industry acknowledges they are not the final solution. Some HCFCs, such as HCFC-141B, are more potent than methyl chloroform which is currently taxed.

Congress recognized the environmental impact of HCFCs in the Clean Air Act Amendments of 1990. The Act will require HCFC recycling, ban certain HCFC applications, and phase out HCFC production. While the U.S. was the first government to limit HCFCs, others, such as Germany and Switzerland, have followed with even stronger measures. International discussions on how to add HCFCs to the Montreal Protocol have begun, and in light of the latest evidence, they will likely lead to further amendment of the protocol when the Parties meet in October 1992.

The latest scientific findings stress that the ozone layer will never recover unless HCFCs are eliminated. In response, Du Pont, the world's largest CFC maker, announced it will restrict HCFC production beyond what is required by the Clean Air Act. The need for stringent controls on these chemicals is now widely accepted. Congress can accelerate action to reduce HCFC use by taxing these chemicals.

3. Add methyl bromide to the list of taxed chemicals. Methyl bromide is a major contributor to stratospheric bromine. While all the sources of methyl bromide are not known, the chemical is used as a soil fumigant for certain crops and for pest control in buildings. We have requested that the EPA list methyl bromide as a Class I substance and prohibit production by January 1, 1993. Methyl bromide use in buildings can be stopped immediately, and alternatives exist for many of the chemical's agricultural applications. Similar to other Class I substances, methyl bromide should be taxed in order to accelerate industry action to eliminate its use.

4. Tax all chemicals at a minimum of 50 percent of the base rate. The tax on ozone-depleting chemicals should be high enough to create a financial incentive for industries to implement conservation measures or better yet to stop using them all together. While the current tax formulation appropriately provides a mechanism to place a heavier tax on the more potent chemicals, it results in too light a tax for chemicals with ODPs smaller than 1.0, such as HCFCs and methyl chloroform.

For example, because methyl chloroform's ODP is .1 the tax is currently about \$.17 per pound. This tax is so light that there is little incentive for industry to switch away from using this solvent. Further, it may encourage industry to switch from CFC-113, another ozone-depleting solvent, to methyl chloroform. Raising the tax on methyl chloroform to at least 50 percent of the base rate (\$.84 per pound) will provide industry a greater incentive to adopt ozone-safe solvents. This change would raise significant additional revenue. Similarly,

HCFCs should be taxed at 50 percent of the base rate. (Note: the base tax rate per pound of chemical will rise from \$1.67 in 1992 to \$2.65 in 1993 and \$3.10 in 1995.)

4. Eliminate the reduced tax rate for halons and foam blowers. Even though fire fighting chemicals called halons are up to ten times more potent in destroying ozone than CFCS, they are taxed at a reduced tax rate of \$.25 per pound through 1993. The tax applies the same special rate on CFCs used by manufacturers of rigid foam insulation. Both of these exemptions are unnecessary. Ozone depletion is too serious to allow special treatment for certain users of ozone-destroying chemicals.

New data on the huge surplus of existing halon stocks especially underscores the need for a heavier halon tax. NATO military experts have concluded that essential military and civilian uses of halon are small and can be completely served by existing stocks of the chemicals if "halon banks" can be established. The banks would store recycled halons for future use. Unnecessary continued production of these most destructive chemicals should not take place at a reduced tax rate.

In addition to these enhancements, the Committee also should consider diverting some of the revenue to fund research for innovative safe alternatives to ozone-depleting chemicals, and should examine the viability of providing tax credits for equipment retrofit expenditures. An early CFC phaseout will require adaption of existing equipment to operate on substitute compounds. For example, tax credits to cover the cost of retrofitting a car air conditioner could lighten the financial burden on consumers who wish to stop using CFC-based technologies as soon as possible.

Global Warming and Fossil Fuels

A variety of energy taxes have been discussed in recent years as ways to raise substantial revenues and to encourage energy efficiency and conservation, reduce dependence on traditional energy sources, and stimulate renewable energy production. Such a broad-based energy tax would stem global warming and air pollution. We wholeheartedly support a carbon tax like that offered by Congressman Stark as a means to accomplish all of these goals. Some of the large revenues raised could then be used to ameliorate any economic dislocation for low-income persons and coal-producing regions.

FoE believes that the existing tax on motor fuels is not heavy enough to result in needed improvements in fuel efficiency and conservation or the use of alternatives such as mass transit, ridesharing, or bicycling in order to curb air pollution, carbon dioxide emissions or dependence on oil. Furthermore, the dedication of the bulk of existing gas tax revenues to highway construction does little to move us toward more environmentally-sound travel.

Pesticides, Herbicides, and Fertilizers

As runoff from agricultural and lawn chemicals chokes lakes and rivers, as evidence of groundwater contamination increases and as awareness of the health effects of agricultural chemicals on farmers and farmworkers increases, we ask the Committee to consider the imposition of tax on these chemicals. Such a tax could give a boost to low-input, sustainable agricultural practices if funds were dedicated to the Department of Agriculture's Low-Input Sustainable Agriculture program.

Heavy Trucks

Federal treatment of heavy trucks is inconsistent with efforts to improve transportation efficiency and reduce congestion and air pollution. The U.S. Department of Transportation (DOT) estimated in a 1988 study that big trucks pay only 65% of their "fair share" in taxes to cover maintenance and construction costs. At the same time, their growing numbers, size, and weight are pounding roads and bridges. One 80,000 pound truck causes as much damage as 9,600 cars. Further, the heavy public subsidy of big trucks diverts freight from rail transport which is at least three times more energy efficient. As our roads crumble, excess

rail capacity goes untapped.

We urge the Committee to enact a Weight-Distance Tax (WDT) on heavy trucks so that they pay their "fair share." The U.S. DOT found that a national WDT is both feasible and "would serve to help protect highways from excessively heavy vehicles..." The experience of eight states with WDTs demonstrates their feasibility and effectiveness. A WDT would improve equity among highway users and enhance environmental protection, energy-efficiency and safety.

Water and Air Pollutants

Consideration should be given to effluent fees on the wide range of water and air pollutants that fill our lungs and contaminate our lakes, rivers, and streams.

Virgin Materials/ Solid Waste

Where we put our waste is becoming one of the most contentious issues in the country. We are running out of landfill space, and incinerators raise a number of environmental concerns. Citizens have embraced recycling, but recycled materials are facing market obstacles. We urge the Committee to consider a virgin materials tax, packaging tax, waste end tax or some other tax to discourage the use of virgin materials and encourage source reduction, reuse of materials and recycling.

TAX INCENTIVES FOR EFFICIENCY, RENEWABLE ENERGY, AND CONSERVATION

Business Energy Tax Credit

The foundation for long-term economic growth requires Congress to address the twin concerns of domestic energy security and environmental safety. The tax code now favors environmentally costly energy resources even as domestic reserves of fossil fuels are declining. Current tax policy, as well as regulatory and market practices heavily impede the commercialization of renewable energy.

In contrast to the U.S., European energy and environmental policies have led to major government commitments to renewable energy development. The ensuing rapid pace of technological advances in Europe and Japan will deepen the U.S. reliance on foreign technology and manufacturing in these two vital areas of national concern. As a consequence, stable, long-term American economic growth will be precluded by our growing dependence on foreign energy supplies and foreign energy technology.

Consequently, FoE strongly favors the extension of the existing Business Energy Tax Credit for solar and environmentally responsible geothermal energy for at least ten years. In addition, we urge the Committee to increase the credit from 10% to 20%, make small-scale wind eligible for the credit, and allow taxpayers who pay AMT to qualify for the credit, as Congressman Thomas has advocated in his legislation, H.R. 1652.

Production Credit for Renewable Energy

Likewise, FoE strongly recommends the creation of a production tax credit for renewable energy as proposed by Congressman Sharp in H.R. 780 and was initially proposed in the Department of Energy's energy package. The benefit is tied directly to the desired result of producing environmentally safe, renewable energy. This approach will stimulate the resurgence of domestic technology and manufacturing in two areas which are crucial for future economic expansion.

Over the last few years, renewable energy has made great strides. For example, wind energy costs have dropped from \$3,100 per installed kilowatt to \$1,100. Availability is 95% or better, and kWh costs have gone from 25 to 30 cents to between six and eight cents.

Utility Rebate for Energy and Water Conservation

Likewise, tax policies need to encourage, not discourage, energy conservation and efficiency both in home energy use and transportation. Rebates for energy and water conservation are popular because they help to overcome a principal obstacle, high initial cost, to purchasing energy-efficient equipment. Taxing such rebates discourages energy conservation. FoE acknowledges the leadership of Congresswoman Kennelly in introducing H.R. 1007 and urges the Committee to overturn the Internal Revenue Service ruling that makes utility rebates over \$600 to consumers (residential, commercial, and industrial) for energy and water conservation and efficiency improvements taxable.

Tax Credit for Retrofit of Home Heating Units for Conservation

Similarly, for those consumers who rely on fuel oil, we recommend that the Committee adopt a tax credit for the retrofit of residential oil heaters like that suggested by Congressman Lent in H.R. 1543.

Transit and Van/Car Pool Benefits

Friends of the Earth strongly endorses the increase in the amount of employer-provided public transit benefits that may be excluded from an employee's income from \$21 per month to \$60 per month as called for in the President's budget. However, we also encourage the Committee to exclude van and car pool benefits from taxation and hope that similar incentives can be offered to those who bicycle or walk to work.

Tax-exempt Bonds for High Speed Rail Development

As our highways and skyways become increasingly congested and polluted, we will need to find new ways to move people and goods. High speed rail offers a proven safe, energy-efficient and environmentally sound way to move people between cities. In Japan, France, and Germany, over 4 billion passengers have traveled between cities at speeds nearing 200 miles per hour without one fatality. High speed rail systems consume less land than highways. One train track has the carrying capacity of ten lanes of highway. Moreover, a strategically-planned network of high speed rail trains could reduce the need for additional airports such as in Chicago and Boston.

High speed trains require approximately one-third of the energy consumed by automobiles and one-quarter used by airplanes. Assuming regional high speed rail systems are phased in starting in 2000, the cumulative nationwide energy savings would be 6.6 billion barrels of oil over the first decade of the 21st century.

Every trip taken on an existing transit system instead of by car in this country cuts smog-producing hydrocarbons by 90 percent, carbon monoxide by 75 percent, and nitrogen oxides by a range of 15 to 75 percent depending on how power is generated. In the Northeast corridor, it is estimated that high speed rail would emit 70% less pollution than auto and air alternatives. Furthermore, one can assume that congestion relief due to people choosing rail travel over auto or air travel would result in even greater energy savings as well as reduced air pollutants.

The development of high speed rail in the United States has been impeded by a lack of access to capital needed to build the rail infrastructure. Legislation introduced by Congressmen William Coyne and Clay Shaw, H.R. 3348, addresses this problem. It would amend the tax-exempt bond provisions of the Internal Revenue Code to help provide critical financing for private development of high speed trains in the United States. The bill proposes to provide the same tax-exempt bond financing treatment that is enjoyed by airports and seaports, 100 percent of the bond issue, for the construction of intercity high speed rail. Current law restricts tax-exempt bond financing for high-speed rail systems to 75 percent of the bond issue. The other 25 percent must be allocated from the state's private activity bond volume cap. Since most states are operating at or near their cap, the restriction effectively

serves as a barrier to the use of tax-exempt bonds to stimulate private-sector investment in high-speed intercity rail.

The development of high-speed rail in the United States represents not only a prudent transportation alternative but also a wise environmental choice. Assuming people are going to move, it is in society's interest to move them in a way that is energy efficient, mitigates the disruption of the natural environment, and limits air pollution and greenhouse gas emissions.

Gas Guzzler/Gas Sipper

Consumer demand for fuel-efficient vehicles could be greatly enhanced with the strengthening of the gas guzzler tax both by increasing the rate further and improving the fuel economy standards. This stick should be complemented with a carrot, a gas sipper rebate. Various versions of the "feebate" have been proposed including consideration of safety factors. Thought should also be given to "feebates" for other purchase of other efficient equipment and appliances.

Trust Fund for Lead Abatement/Excise Tax on Lead

As the Administration has stated, "[l]ead poisoning remains the most common and societally devastating environmental disease of young children." Well over three million children under age six are affected by this preventable problem, which causes permanent neurologic harm to children and impairs their ability to learn and to function as productive members of society.

The most severe and intractable aspect of the problem is the high-dose exposures caused by deteriorating lead-based paint in low-income housing. While lead-based paints have been banned from use in residential housing since 1978, an estimated three million tons of lead remain in the paint on the walls and windows of American homes. As the paint surface ages and deteriorates, lead is released as dust or chips. Children can--and all too often do--absorb dangerous amounts of lead-contaminated dust as a result of their normal hand-to-mouth activity.

While the Administration proposes to spend \$74 million in FY93 for lead-based paint abatement in moderate- and low-income housing, over \$10 billion is needed during the next decade for low-income housing alone.

If we mean to prepare a highly-skilled workforce able to keep America economically strong, we cannot in good conscience neglect a preventable disease that already afflicts millions of children. Prevention is a proven investment.

The Environmental Defense Fund, Friends of the Earth and a large coalition of other environmental, education, public health, and children's advocates have endorsed legislation, H.R. 2922, sponsored by Congressman Cardin to create a federal trust fund, financed by an excise tax placed on lead as it enters commerce, to be used for abatement of lead in low-income housing and day care centers. Mr. Cardin's revenue-neutral bill embodies the "polluter pays" principle that has become a fundamental tenet of American law, by requiring the industry that initially created the problem to help bear the cost of solving it.

Land Conservation

FoE supports the use of tax policy to encourage the preservation of ecologically sensitive and publicly valuable land as a supplement to direct government acquisition efforts. The President's budget has proposed modification of the Alternative Minimum Tax rules to allow deductions for charitable contributions including land. Consideration should also be given to estate tax changes to encourage similar donations.

IMPACT OF TAX CUTS ON ENVIRONMENTAL PROGRAMS

In considering how a tax bill will impact spending programs, Friends of the Earth urges the Committee to remember the rule of the ancient physician: "First, do no harm." In writing a tax bill under the political pressures of a recessionary election year, Congress has enormous potential to do more harm than good.

It is widely agreed that we must take a long-term perspective on the economy if we are to climb out of recession and stay out. We must invest in key programs that will increase the productivity and sustainability of our economy. These include education, research and development, infrastructure, and various environmental programs. Most of these investments are financed with domestic discretionary spending.

Tax breaks which are not paid for by other tax changes could hurt many of these investment programs, not to mention other essential spending programs such as law enforcement. Friends of the Earth generally opposes plans like S. 1921 (the Bentsen plan), which rely on cuts in domestic discretionary spending. On their fiscal merits, we strongly prefer plans such as H.R. 3730 (Rostenkowski, et al), which rely on tax increases and do not touch discretionary spending.

A recent Congressional Budget Office (CBO) study proves that domestic discretionary spending in FY94 and FY95 is threatened by the current Budget Enforcement Act. The Bentsen bill would make it much worse. According to CBO, if levels of defense spending are maintained as planned in the Administration's FY92 budget, appropriations for domestic discretionary programs will have to be cut by \$14.9 billion in FY94 and \$21.9 billion in FY95 in order to keep overall discretionary spending under its ceilings in FY94 and FY95. According to CBO, to avoid cuts in domestic and international programs in FY94 and FY95, defense spending would have to be reduced below the FY93 defense cap by \$24.9 billion in FY94 and \$42.8 billion in FY95. Coming on top of this shortfall, the Bentsen plan would devastate domestic programs.

Almost all environmental programs are domestic discretionary spending. Many of these programs have suffered a decade of stalemate during the exact time when environmental problems and expectations exploded. For example, the EPA operating budget is just now surpassing its level in real dollars in 1979 -- 14 years ago. Meanwhile, the EPA's workload has doubled with the passage of nine major environmental laws. That is why FOE endorses the Invest in America principles mentioned earlier. They are:

1. Congress and the Administration should reduce defense expenditures in FY 1993 significantly below the levels projected in the President's FY 1992 five-year plan. These savings should be used for needed public investment that can redress unmet domestic needs, build human capital and promote long-term economic growth.
2. Congress and the Administration should allow for the transfer of funds from defense to domestic discretionary spending programs in FY 1993, while maintaining the overall deficit reduction goals set forth in the budget agreement.
3. Congress and the Administration should not use defense savings or other discretionary funds for tax cut purposes. Instead, the Congress and the Administration should finance any personal income tax relief package by shifting the tax burden by shifting the tax burden to upper-income taxpayers.

Polls show that less than 20 percent of the public supports using military savings to provide middle class tax relief. They prefer investments that advance the national interest over tax break for their own pockets.

In closing, I suggest that the "green" tax changes suggested in this testimony are not exhaustive. We look forward to expanding on these ideas with the Committee.



Statement of

Dawn Erlandson
Director of Tax Policy
Friends of the Earth

On the

U.S. Economy, Middle Class
Tax Relief and Economic Growth

Before the

Committee on Ways and Means
United States House of Representatives

February 6, 1992

INTRODUCTION

MR. CHAIRMAN AND MEMBERS OF THE COMMITTEE, I am Dawn Erlandson, Director of Tax Policy for Friends of the Earth (FoE). We are the U.S. affiliate of Friends of the Earth International, a worldwide environmental network with member organizations in 47 countries. My statement this morning is made on behalf of our 50,000 members and supporters.

Mr. Chairman, I thank you for the opportunity to appear before the committee. I have three main messages.

* First, please raise my taxes. My taxes are taxes on ozone-destroying chemicals, pollution and other environmentally-damaging practices. My testimony will show how the Committee can raise billions of dollars in revenues through imposition of various "green" taxes and elimination of environmentally harmful subsidies now in the tax code. In addition to revenue, such tax changes would yield environmental and public health benefits, bolster long-term sustainable economic vitality and increase employment.

* Second, pay for tax cuts with other tax increases. Don't use the peace dividend to finance tax cuts. Almost all environmental programs are domestic discretionary spending. To maintain the overall domestic discretionary budget cap, non-defense programs like the environment will have to be cut drastically by fiscal year 1994 if defense is not slashed. In short, we need the peace dividend just to stay even. FoE has endorsed the "Invest in America" statement of principles now supported by 112 organizations including the U.S. Conference of Mayors, labor unions, and advocates for educational, health, environmental, housing, children's, low-income and religious interests. This statement urges that any tax cuts be financed by tax increases.

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"Jobs vs. the Environment" is a headline we see more and more. The question is are they in conflict. The answer is no. As the United Steelworkers of America stated in a report, "In the long run, the real choice is not jobs or environment. It's both or neither." Indeed, ecological and economic vitality are inseparable. To assert otherwise is to believe progress can depend forever on depleting nonrenewable natural resources and fouling land, air, water, and the atmosphere.

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consistent with employment goals because they tend to favor workers over machines. In contrast, the most energy- and resource-intensive industries (paper, primary metals, oil refining, and chemicals) favor capital over labor. They use over 20 percent of total energy but provide only 3 percent of jobs.

A German study finds that a \$580 million investment in highway construction yields 14,000 to 19,000 jobs while a similar investment in rail construction creates 22,000 to 23,000 jobs. Rail travel for both people and packages is more energy-efficient than truck or automobile travel. In Vermont, recycling generates 550 to 2000 jobs per million tons of materials processed while incineration creates only 150 to 1100 jobs and landfilling employs 50 to 360 people.

The President in his budget has put an emphasis on lowering the cost of capital in order to revive the economy and create jobs. He has also been on the campaign trail proclaiming that the environment will have to wait because jobs are the first priority. Perhaps, he should consider investing in environmental programs to provide the greatest boost to job creation.

The environment is not a luxury to be expended in the name of job creation and growth but a vital necessity for them to occur. To ignore the environment would damage long-term well-being, including public health. Increasingly, physicians and citizens are realizing that environmental conditions have direct implications for human health. Depletion of the ozone layer has been linked to higher rates of skin cancer, cataracts, and weakening of the immune system. Air pollution exacerbates heart and lung problems. Exposure to pesticides interferes with the functioning of the nervous system, and toxins can cause cancer and genetic mutation and suppress the immune system.

Given our history of ravaging the environment to benefit the economy, the convergence of economic and ecological well-being and therefore the economic and environmental policies of government is a task of great magnitude. A critical piece of that convergence is the establishment of consistency among federal tax and environmental policies. With a few exceptions, tax policy is essentially ruled by a frontier mentality; resources are unlimited and exist to be depleted and exploited. This posture is evidenced by the Code's preference for non-renewable energy over renewable energy, energy production over energy consumption, materials production over conservation and recycling, and development of land over preservation.

Fortunately, these preferences can be reversed. The Tax Code can be a powerful tool for environmental protection and sustainable resource use by sending market signals that encourage environmentally beneficial rather than harmful activities. We can begin to align tax policy with environmental and health goals much as we did with transportation and environmental and health objectives in the recently-passed Surface Transportation Act.

To do this, we need to begin to replace the environmentally harmful tax incentives now in the Code with environmentally beneficial tax incentives. We need to begin taxing activities and products that pollute, deplete natural wealth, or otherwise degrade the environment and perhaps lower other taxes that drain hard-earned income and savings or make the costs of labor or capital high. In short, we need to begin to tax bad behavior rather than good.

TAX POLICIES THAT ARE INCONSISTENT WITH EXISTING FEDERAL ENVIRONMENTAL POLICIES

Deductions for Environmental Malfeasance

All tax deductions were once subject to the so-called "public policy limitation" which disallowed a deduction in any instance where allowing the deduction would frustrate a sharply defined government policy. Today, very few deductions are disallowed under this limitation. Some that are include illegal kickbacks and bribes, treble damage payments under

the antitrust laws, and fines and penalties. Deductions related to objectionable environmental activities, however, are not disallowed. Claims for depreciation of conduit and pipe used to direct unpermitted discharge of toxic wastes into a river and deductions for losses resulting from the unlawful abandonment of dump sites laden with hazardous materials damages can be written off. Permitting taxpayers to claim deductions for environmentally destructive business behavior amounts essentially to a tax subsidy for immoral and illegal behavior.

Congressman Guarini has introduced legislation, H.R. 1726., to begin to introduce some environmental limits to business deductions. His bill would disallow deductions for clean up of certain oil or hazardous substance spills. If his bill had been law at the time of Exxon's tragic oil spill off the coast of Alaska, Exxon would not have been able to deduct roughly \$250 million, of the \$1 billion settlement, in damages and assorted cleanup costs from their federal income taxes and pass on that bill to American taxpayers.

Parking as a Tax-free Fringe Benefit

As traffic congestion chokes the air and productivity in urban areas and as metropolitan planners and transportation officials struggle to provide transportation alternatives to relieve congestion and improve air quality, our tax code provides financial incentives to drive to work rather than use mass transit or car pool.

In the interests of land conservation, air quality, and energy conservation, we urge the Committee to consider legislation introduced by Congressman McDermott that begins to equalize commuting incentives. Ideally, tax policy should provide incentives to use mass transit, car pool, bicycle or walk to work and discourage solo driving. Taxpayer-subsidized parking benefits need to be curbed through either repeal of the exclusion of the benefits from the employee's income, limits on the employer's right to deduct parking expenses or excise taxes on parking facilities. It is also worth noting in the interests of fairness that free parking benefits tend to accrue to executives and higher-paid employees while moderate- and lower-paid employees must pay their costs of commuting to work.

Capital Gains and Investment Tax Credits

The return of a significant capital gains differential and investment tax credits (ITC) without environmental restrictions raises concerns not only about fairness but also about environmental destruction. Lowering the cost of capital provides particular benefit to the most energy-intensive and polluting industries (e.g. automobile manufacturing, chemicals, mining). In addition, the ITC and reduced capital gains rates lower the cost of capital and thus on the margin encourage substitution of capital for labor, not necessarily a wise policy in a time of high unemployment or as we look to growth in the workforce.

In clear contrast with the principles behind recent Farm Bills, the return of the ITC could stimulate agricultural development of marginal and ecologically sensitive land. According to the Office of Technology Assessment, the ITC "provides the most significant Federal incentive for farmers to clear and drain wetlands." The ITC also might bias utilities toward costly supply-side technologies and against demand-side management. In combination with depletion allowances, the ITC encourages overproduction of fossil fuels and creates more financial obstacles to renewable energy, efficiency and conservation. In combination with the Forest Service's practice of below-cost timber sales, improved capital gains treatment encourages overlogging in national forests.

Accelerated Depreciation

While the 1986 Tax Reform Act modified accelerated depreciation laws, the Tax Code continues to provide accelerated depreciation as opposed to true economic depreciation. Again, the effect is to lower the cost of capital and hurt employment and the environment. Accelerated depreciation benefits those who drain and fill wetlands and plow highly erodible lands. Specifically, they can write off large investments in tractors and drainage tiles (depreciable over just 7 years) as well as ditch excavation and various other land

"improvements" (depreciable over just 15 years). Accelerated depreciation needs to be disallowed for these activities and others that may be harmful to the environment.

Expensing

Expensing, or current deduction of otherwise capitalized costs, exists for intangible drilling, exploration and development costs of oil and gas production and hard mineral extraction. Expensing is a major contributor to increased extraction rates and to a bias toward development of our primary materials industries rather than conservation or recycling. It encourages the drilling of wells over more environmentally benign exploration methods. A particular problem is excess drilling offshore, adjacent to protected public lands, and in potential wilderness areas. We urge that expensing for oil and gas exploration and mineral development be repealed.

Most costs of producing timber, including carrying costs, costs of silvicultural practices after seedling establishment, costs of disease and pest control, fire protection expenses, and management costs may be expensed rather than capitalized over time. This provision subsidizes logging on public lands and should be repealed.

Percentage Depletion Allowances

We urge the repeal of percentage depletion allowances for oil and gas production and mineral extraction, particularly for known toxic minerals such as lead and mercury. Percentage depletion allows a certain percentage of a property's gross income to be deducted, regardless of the actual capitalized costs. Thus, it amounts to a production subsidy rather than a method of cost recovery.

Second Home Mortgage Interest Deduction

While home ownership is part of the American dream, so are enjoyment of unspoiled wild beaches and scenic mountain areas. The second home mortgage interest deduction subsidizes development in fragile environmental areas while other government policies discourage it. Let us bring them in line and limit the second home mortgage deduction.

Natural Resource Protection Zones

A concept advocated by Chairman George Miller, natural resource protection zones would be the opposite of urban enterprise zones. If established, they would be zones where economic activity would be discouraged. Such areas include wild and scenic rivers, wetlands, old growth forests, and national parks. While some government policies protect these areas, tax benefits continue to flow to those who develop them.

TAXES TO DISCOURAGE POLLUTION, RESOURCE DEPLETION AND DEGRADATION

Ozone-depleting Chemicals

Despite the many international and national efforts to protect Earth's fragile ozone layer, this vital barrier against the sun's harmful ultraviolet radiation continues to deteriorate. Alarming new scientific evidence from NASA shows that the highest level of ozone-destroying chemicals ever measured were found in skies over Maine and Canada last month, and it is likely that a hole in the ozone layer over the Arctic is imminent. This disturbing evidence underscores the need for us to take every feasible action to eliminate ozone-destroying chemicals as rapidly as possible.

In this regard, Mr. Chairman, we urge the Committee to bring extra protection to the ozone layer by expanding the existing tax on ozone-depleting chemicals. The CFC tax is one of the most powerful tools Congress has created to protect the ozone layer. This economic instrument has successfully encouraged industry to adopt alternatives to CFCs and increase

CFC recycling. In the short period since the tax took effect in 1990, U.S. CFC production has dropped significantly. According to the Environmental Protection Agency, domestic CFC production is now 42 percent below the limit allowed by the Montreal Protocol, the international ozone protection agreement.

In addition to stimulating reductions in CFC consumption, the CFC tax is a source of significant revenue. The Administration reports that the existing tax on ozone-depleting chemicals will bring in over \$650 million in revenue in 1992 and \$905 million next year. In this light, we advocate the following actions:

1. Raise the tax's base rate. The current base tax rate per pound of chemical is \$1.67 in 1992 and will rise to \$2.65 in 1993 and \$3.10 in 1995. (The total tax per chemical equals the base rate multiplied by the chemical's ozone depletion potential (ODP).) We propose raising the base rate to \$2.00 in 1992, \$4.00 in 1994 and \$5.00 in 1995. This approach would make it more expensive for industry to delay eliminating CFC use.

2. Add HCFCs to the list of taxed chemicals. HCFCs are ozone-destroying chemicals and should not be exempt from taxation. Industry is developing these compounds as "bridge chemicals" for use until completely ozone-safe compounds can be found. Since HCFCs have 2 to 15 percent as much ozone-depleting strength as CFCs, industry acknowledges they are not the final solution. Some HCFCs, such as HCFC-141B, are more potent than methyl chloroform which is currently taxed.

Congress recognized the environmental impact of HCFCs in the Clean Air Act Amendments of 1990. The Act will require HCFC recycling, ban certain HCFC applications, and phase out HCFC production. While the U.S. was the first government to limit HCFCs, others, such as Germany and Switzerland, have followed with even stronger measures. International discussions on how to add HCFCs to the Montreal Protocol have begun, and in light of the latest evidence, they will likely lead to further amendment of the protocol when the Parties meet in October 1992.

The latest scientific findings stress that the ozone layer will never recover unless HCFCs are eliminated. In response, Du Pont, the world's largest CFC maker, announced it will restrict HCFC production beyond what is required by the Clean Air Act. The need for stringent controls on these chemicals is now widely accepted. Congress can accelerate action to reduce HCFC use by taxing these chemicals.

3. Add methyl bromide to the list of taxed chemicals. Methyl bromide is a major contributor to stratospheric bromine. While all the sources of methyl bromide are not known, the chemical is used as a soil fumigant for certain crops and for pest control in buildings. We have requested that the EPA list methyl bromide as a Class I substance and prohibit production by January 1, 1993. Methyl bromide use in buildings can be stopped immediately, and alternatives exist for many of the chemical's agricultural applications. Similar to other Class I substances, methyl bromide should be taxed in order to accelerate industry action to eliminate its use.

4. Tax all chemicals at a minimum of 50 percent of the base rate. The tax on ozone-depleting chemicals should be high enough to create a financial incentive for industries to implement conservation measures or better yet to stop using them all together. While the current tax formulation appropriately provides a mechanism to place a heavier tax on the more potent chemicals, it results in too light a tax for chemicals with ODPs smaller than 1.0, such as HCFCs and methyl chloroform.

For example, because methyl chloroform's ODP is .1 the tax is currently about \$.17 per pound. This tax is so light that there is little incentive for industry to switch away from using this solvent. Further, it may encourage industry to switch from CFC-113, another ozone-depleting solvent, to methyl chloroform. Raising the tax on methyl chloroform to at least 50 percent of the base rate (\$.84 per pound) will provide industry a greater incentive to adopt ozone-safe solvents. This change would raise significant additional revenue. Similarly,

HCFCs should be taxed at 50 percent of the base rate. (Note: the base tax rate per pound of chemical will rise from \$1.67 in 1992 to \$2.65 in 1993 and \$3.10 in 1995.)

4. Eliminate the reduced tax rate for halons and foam blowers. Even though fire fighting chemicals called halons are up to ten times more potent in destroying ozone than CFCS, they are taxed at a reduced tax rate of \$.25 per pound through 1993. The tax applies the same special rate on CFCs used by manufacturers of rigid foam insulation. Both of these exemptions are unnecessary. Ozone depletion is too serious to allow special treatment for certain users of ozone-destroying chemicals.

New data on the huge surplus of existing halon stocks especially underscores the need for a heavier halon tax. NATO military experts have concluded that essential military and civilian uses of halon are small and can be completely served by existing stocks of the chemicals if "halon banks" can be established. The banks would store recycled halons for future use. Unnecessary continued production of these most destructive chemicals should not take place at a reduced tax rate.

In addition to these enhancements, the Committee also should consider diverting some of the revenue to fund research for innovative safe alternatives to ozone-depleting chemicals, and should examine the viability of providing tax credits for equipment retrofit expenditures. An early CFC phaseout will require adaption of existing equipment to operate on substitute compounds. For example, tax credits to cover the cost of retrofitting a car air conditioner could lighten the financial burden on consumers who wish to stop using CFC-based technologies as soon as possible.

Global Warming and Fossil Fuels

A variety of energy taxes have been discussed in recent years as ways to raise substantial revenues and to encourage energy efficiency and conservation, reduce dependence on traditional energy sources, and stimulate renewable energy production. Such a broad-based energy tax would stem global warming and air pollution. We wholeheartedly support a carbon tax like that offered by Congressman Stark as a means to accomplish all of these goals. Some of the large revenues raised could then be used to ameliorate any economic dislocation for low-income persons and coal-producing regions.

FoE believes that the existing tax on motor fuels is not heavy enough to result in needed improvements in fuel efficiency and conservation or the use of alternatives such as mass transit, ridesharing, or bicycling in order to curb air pollution, carbon dioxide emissions or dependence on oil. Furthermore, the dedication of the bulk of existing gas tax revenues to highway construction does little to move us toward more environmentally-sound travel.

Pesticides, Herbicides, and Fertilizers

As runoff from agricultural and lawn chemicals chokes lakes and rivers, as evidence of groundwater contamination increases and as awareness of the health effects of agricultural chemicals on farmers and farmworkers increases, we ask the Committee to consider the imposition of tax on these chemicals. Such a tax could give a boost to low-input, sustainable agricultural practices if funds were dedicated to the Department of Agriculture's Low-Input Sustainable Agriculture program.

Heavy Trucks

Federal treatment of heavy trucks is inconsistent with efforts to improve transportation efficiency and reduce congestion and air pollution. The U.S. Department of Transportation (DOT) estimated in a 1988 study that big trucks pay only 65% of their "fair share" in taxes to cover maintenance and construction costs. At the same time, their growing numbers, size, and weight are pounding roads and bridges. One 80,000 pound truck causes as much damage as 9,600 cars. Further, the heavy public subsidy of big trucks diverts freight from rail transport which is at least three times more energy efficient. As our roads crumble, excess

rail capacity goes untapped.

We urge the Committee to enact a Weight-Distance Tax (WDT) on heavy trucks so that they pay their "fair share." The U.S. DOT found that a national WDT is both feasible and "would serve to help protect highways from excessively heavy vehicles..." The experience of eight states with WDTs demonstrates their feasibility and effectiveness. A WDT would improve equity among highway users and enhance environmental protection, energy-efficiency and safety.

Water and Air Pollutants

Consideration should be given to effluent fees on the wide range of water and air pollutants that fill our lungs and contaminate our lakes, rivers, and streams.

Virgin Materials/ Solid Waste

Where we put our waste is becoming one of the most contentious issues in the country. We are running out of landfill space, and incinerators raise a number of environmental concerns. Citizens have embraced recycling, but recycled materials are facing market obstacles. We urge the Committee to consider a virgin materials tax, packaging tax, waste end tax or some other tax to discourage the use of virgin materials and encourage source reduction, reuse of materials and recycling.

TAX INCENTIVES FOR EFFICIENCY, RENEWABLE ENERGY, AND CONSERVATION

Business Energy Tax Credit

The foundation for long-term economic growth requires Congress to address the twin concerns of domestic energy security and environmental safety. The tax code now favors environmentally costly energy resources even as domestic reserves of fossil fuels are declining. Current tax policy, as well as regulatory and market practices heavily impede the commercialization of renewable energy.

In contrast to the U.S., European energy and environmental policies have led to major government commitments to renewable energy development. The ensuing rapid pace of technological advances in Europe and Japan will deepen the U.S. reliance on foreign technology and manufacturing in these two vital areas of national concern. As a consequence, stable, long-term American economic growth will be precluded by our growing dependence on foreign energy supplies and foreign energy technology.

Consequently, FoE strongly favors the extension of the existing Business Energy Tax Credit for solar and environmentally responsible geothermal energy for at least ten years. In addition, we urge the Committee to increase the credit from 10% to 20%, make small-scale wind eligible for the credit, and allow taxpayers who pay AMT to qualify for the credit, as Congressman Thomas has advocated in his legislation, H.R. 1652.

Production Credit for Renewable Energy

Likewise, FoE strongly recommends the creation of a production tax credit for renewable energy as proposed by Congressman Sharp in H.R. 780 and was initially proposed in the Department of Energy's energy package. The benefit is tied directly to the desired result of producing environmentally safe, renewable energy. This approach will stimulate the resurgence of domestic technology and manufacturing in two areas which are crucial for future economic expansion.

Over the last few years, renewable energy has made great strides. For example, wind energy costs have dropped from \$3,100 per installed kilowatt to \$1,100. Availability is 95% or better, and kWh costs have gone from 25 to 30 cents to between six and eight cents.

Utility Rebate for Energy and Water Conservation

Likewise, tax policies need to encourage, not discourage, energy conservation and efficiency both in home energy use and transportation. Rebates for energy and water conservation are popular because they help to overcome a principal obstacle, high initial cost, to purchasing energy-efficient equipment. Taxing such rebates discourages energy conservation. FoE acknowledges the leadership of Congresswoman Kennelly in introducing H.R. 1007 and urges the Committee to overturn the Internal Revenue Service ruling that makes utility rebates over \$600 to consumers (residential, commercial, and industrial) for energy and water conservation and efficiency improvements taxable.

Tax Credit for Retrofit of Home Heating Units for Conservation

Similarly, for those consumers who rely on fuel oil, we recommend that the Committee adopt a tax credit for the retrofit of residential oil heaters like that suggested by Congressman Lent in H.R. 1543.

Transit and Van/Car Pool Benefits

Friends of the Earth strongly endorses the increase in the amount of employer-provided public transit benefits that may be excluded from an employee's income from \$21 per month to \$60 per month as called for in the President's budget. However, we also encourage the Committee to exclude van and car pool benefits from taxation and hope that similar incentives can be offered to those who bicycle or walk to work.

Tax-exempt Bonds for High Speed Rail Development

As our highways and skyways become increasingly congested and polluted, we will need to find new ways to move people and goods. High speed rail offers a proven safe, energy-efficient and environmentally sound way to move people between cities. In Japan, France, and Germany, over 4 billion passengers have traveled between cities at speeds nearing 200 miles per hour without one fatality. High speed rail systems consume less land than highways. One train track has the carrying capacity of ten lanes of highway. Moreover, a strategically-planned network of high speed rail trains could reduce the need for additional airports such as in Chicago and Boston.

High speed trains require approximately one-third of the energy consumed by automobiles and one-quarter used by airplanes. Assuming regional high speed rail systems are phased in starting in 2000, the cumulative nationwide energy savings would be 6.6 billion barrels of oil over the first decade of the 21st century.

Every trip taken on an existing transit system instead of by car in this country cuts smog-producing hydrocarbons by 90 percent, carbon monoxide by 75 percent, and nitrogen oxides by a range of 15 to 75 percent depending on how power is generated. In the Northeast corridor, it is estimated that high speed rail would emit 70% less pollution than auto and air alternatives. Furthermore, one can assume that congestion relief due to people choosing rail travel over auto or air travel would result in even greater energy savings as well as reduced air pollutants.

The development of high speed rail in the United States has been impeded by a lack of access to capital needed to build the rail infrastructure. Legislation introduced by Congressmen William Coyne and Clay Shaw, H.R. 3348, addresses this problem. It would amend the tax-exempt bond provisions of the Internal Revenue Code to help provide critical financing for private development of high speed trains in the United States. The bill proposes to provide the same tax-exempt bond financing treatment that is enjoyed by airports and seaports, 100 percent of the bond issue, for the construction of intercity high speed rail. Current law restricts tax-exempt bond financing for high-speed rail systems to 75 percent of the bond issue. The other 25 percent must be allocated from the state's private activity bond volume cap. Since most states are operating at or near their cap, the restriction effectively

serves as a barrier to the use of tax-exempt bonds to stimulate private-sector investment in high-speed intercity rail.

The development of high-speed rail in the United States represents not only a prudent transportation alternative but also a wise environmental choice. Assuming people are going to move, it is in society's interest to move them in a way that is energy efficient, mitigates the disruption of the natural environment, and limits air pollution and greenhouse gas emissions.

Gas Guzzler/Gas Sipper

Consumer demand for fuel-efficient vehicles could be greatly enhanced with the strengthening of the gas guzzler tax both by increasing the rate further and improving the fuel economy standards. This stick should be complemented with a carrot, a gas sipper rebate. Various versions of the "feebate" have been proposed including consideration of safety factors. Thought should also be given to "feebates" for other purchase of other efficient equipment and appliances.

Trust Fund for Lead Abatement/Excise Tax on Lead

As the Administration has stated, "[l]ead poisoning remains the most common and societally devastating environmental disease of young children." Well over three million children under age six are affected by this preventable problem, which causes permanent neurologic harm to children and impairs their ability to learn and to function as productive members of society.

The most severe and intractable aspect of the problem is the high-dose exposures caused by deteriorating lead-based paint in low-income housing. While lead-based paints have been banned from use in residential housing since 1978, an estimated three million tons of lead remain in the paint on the walls and windows of American homes. As the paint surface ages and deteriorates, lead is released as dust or chips. Children can--and all too often do--absorb dangerous amounts of lead-contaminated dust as a result of their normal hand-to-mouth activity.

While the Administration proposes to spend \$74 million in FY93 for lead-based paint abatement in moderate- and low-income housing, over \$10 billion is needed during the next decade for low-income housing alone.

If we mean to prepare a highly-skilled workforce able to keep America economically strong, we cannot in good conscience neglect a preventable disease that already afflicts millions of children. Prevention is a proven investment.

The Environmental Defense Fund, Friends of the Earth and a large coalition of other environmental, education, public health, and children's advocates have endorsed legislation, H.R. 2922, sponsored by Congressman Cardin to create a federal trust fund, financed by an excise tax placed on lead as it enters commerce, to be used for abatement of lead in low-income housing and day care centers. Mr. Cardin's revenue-neutral bill embodies the "polluter pays" principle that has become a fundamental tenet of American law, by requiring the industry that initially created the problem to help bear the cost of solving it.

Land Conservation

FoE supports the use of tax policy to encourage the preservation of ecologically sensitive and publicly valuable land as a supplement to direct government acquisition efforts. The President's budget has proposed modification of the Alternative Minimum Tax rules to allow deductions for charitable contributions including land. Consideration should also be given to estate tax changes to encourage similar donations.

IMPACT OF TAX CUTS ON ENVIRONMENTAL PROGRAMS

In considering how a tax bill will impact spending programs, Friends of the Earth urges the Committee to remember the rule of the ancient physician: "First, do no harm." In writing a tax bill under the political pressures of a recessionary election year, Congress has enormous potential to do more harm than good.

It is widely agreed that we must take a long-term perspective on the economy if we are to climb out of recession and stay out. We must invest in key programs that will increase the productivity and sustainability of our economy. These include education, research and development, infrastructure, and various environmental programs. Most of these investments are financed with domestic discretionary spending.

Tax breaks which are not paid for by other tax changes could hurt many of these investment programs, not to mention other essential spending programs such as law enforcement. Friends of the Earth generally opposes plans like S. 1921 (the Bentsen plan), which rely on cuts in domestic discretionary spending. On their fiscal merits, we strongly prefer plans such as H.R. 3730 (Rostenkowski, et al), which rely on tax increases and do not touch discretionary spending.

A recent Congressional Budget Office (CBO) study proves that domestic discretionary spending in FY94 and FY95 is threatened by the current Budget Enforcement Act. The Bentsen bill would make it much worse. According to CBO, if levels of defense spending are maintained as planned in the Administration's FY92 budget, appropriations for domestic discretionary programs will have to be cut by \$14.9 billion in FY94 and \$21.9 billion in FY95 in order to keep overall discretionary spending under its ceilings in FY94 and FY95. According to CBO, to avoid cuts in domestic and international programs in FY94 and FY95, defense spending would have to be reduced below the FY93 defense cap by \$24.9 billion in FY94 and \$42.8 billion in FY95. Coming on top of this shortfall, the Bentsen plan would devastate domestic programs.

Almost all environmental programs are domestic discretionary spending. Many of these programs have suffered a decade of stalemate during the exact time when environmental problems and expectations exploded. For example, the EPA operating budget is just now surpassing its level in real dollars in 1979 -- 14 years ago. Meanwhile, the EPA's workload has doubled with the passage of nine major environmental laws. That is why FOE endorses the Invest in America principles mentioned earlier. They are:

1. Congress and the Administration should reduce defense expenditures in FY 1993 significantly below the levels projected in the President's FY 1992 five-year plan. These savings should be used for needed public investment that can redress unmet domestic needs, build human capital and promote long-term economic growth.
2. Congress and the Administration should allow for the transfer of funds from defense to domestic discretionary spending programs in FY 1993, while maintaining the overall deficit reduction goals set forth in the budget agreement.
3. Congress and the Administration should not use defense savings or other discretionary funds for tax cut purposes. Instead, the Congress and the Administration should finance any personal income tax relief package by shifting the tax burden by shifting the tax burden to upper-income taxpayers.

Polls show that less than 20 percent of the public supports using military savings to provide middle class tax relief. They prefer investments that advance the national interest over tax break for their own pockets.

In closing, I suggest that the "green" tax changes suggested in this testimony are not exhaustive. We look forward to expanding on these ideas with the Committee.

Copy given to -- say on
Chadwick, Child, G-
Camp (San Jose CA),
Hickman Club and on EPA

AGJ ON THE ENVIRONMENT

o VIRGIN MATERIALS TAX:

[BASIC MESSAGE HERE IS THAT THIS IS JUST ONE POSSIBLE ELEMENT OF A CAMPAIGN TO REDUCE OUR GROWING SOLID WASTE PROBLEMS AND, AS A MARKET-BASED, RATHER THAN A COMMAND AND CONTROL TYPE APPROACH, IT MAY BE A PREFERRED POLICY OPTION.]

Every year, each of us -- every man, woman and child in the United States -- generates one ton of municipal solid waste. We throw enough away every 12 months to build a 12-foot-high wall stretching from New York to Los Angeles. Our "throw away" society is building these mounds of garbage at an ever increasing rate -- and we are rapidly losing landfill space to dispose of our trash. Fearing contamination of land and water, communities often strongly resist having new landfills sited near their homes, schools and areas where children play. We know that human health and the environment are at risk. What we are just beginning to appreciate is that our economy also suffers when we waste resources. The fact of the matter is that much of what we throw away is actually material that could be used as an important manufacturing feedstock. And, in many industrial processes, such as aluminum manufacturing, we save on energy when we use recycled rather than virgin materials.

We need an effective strategy now to address this growing problem of garbage build up -- and to take advantage of the many important opportunities presented by reusing materials. I would propose the following: First, we need to reduce waste at its source -- we need to encourage manufacturers to develop streamlined, efficient manufacturing processes. Second, we need to encourage recycling efforts. For example, I have worked hard on an initiative in Congress that would reward manufacturers who use recycled materials by requiring federal agencies to purchase their products in preference to products made completely from raw materials. Third, we should resort to incineration only where the materials are non-recyclable and only then when we are certain that the emissions from the facility do not threaten the health of those living near the facility. Moreover, wherever possible, we should try to harness the energy produced by incineration and thereby reduce other energy needs. Finally, we need to begin to explore ways to get the economic rules of the road right. For example, right now, because of the huge amounts of taxpayer dollars that go to subsidizing logging operations in our national forests -- we are selling our ancient trees for less than the price of a cheeseburger -- it often is cheaper for a paper manufacturer to use freshly cut trees as a feedstock rather than recycled pulp and paper. I believe we need to begin to change that situation -- we should investigate the idea, for example, of setting up a system where

double mpg limit
trade barriers limit
affirming → small cars
→ unsafe cars

Joe Good
Gunn Hykin →

manufacturers who want to invest in recycling equipment would be given tax credits for doing so, while those who do not want to recycle would pay a fee based on the amount of raw, virgin materials they use. We are learning that this kind of market-based, rather than the traditional command-and-control approach, may be the most efficient way to achieve environmental goals.

With this kind of strategy, I believe we can successfully and efficiently take on our garbage problems; improve our economy; and preserve our natural resources.

o CAFE

o CAFE regulations are in need of reform. The current uniform mileage standard penalizes those manufacturers who produce a full line of automobiles. This works to the competitive disadvantage of US automakers because they, unlike their Japanese counterparts, have historically produced a full line of automobiles and have offered a variety of sizes and classes of cars. The CAFE reforms I have supported would change this situation and call on ALL auto manufacturers to improve their CAFE ratings. The Bush administration, to the contrary, has blocked reform efforts and allowed this unlevel playing field to persist.

o While I emphasize the need to level the playing field, I do believe that we need to -- and can -- improve fuel efficiency. CAFE reform must be one part -- but just one part -- of what must be a truly global, comprehensive, and strategic approach to the dangerous situation we have placed ourselves in with regard to oil use. We currently import more than half of our oil needs. This jeopardizes our national security and imperils our economy -- oil imports account for the lion's share of our trade imbalance, and our foreign competitors use less than half the amount of energy than we do to produce the same amount of products. We also know that, because we burn so much oil, we put more CO2 into the atmosphere than any other nation.

o President Bush apparently does not think this is a problem -- the energy plan he submitted to Congress had virtually no conservation measures in it and -- as determined by his own experts -- would have resulted in a further increase in our dependence on foreign sources of oil. In addition, President Bush was the only leader of the industrial world to oppose a Climate treaty with binding commitments to reduce greenhouse gas emissions.

o I believe that increased CAFE requirements should be part of our strategy, and I am a cosponsor of a measure that would raise standards (to 40 mpg by 2001). It is estimated that this initiative will save 2.5 million barrels of oil per day by 2005 and reduce projected CO2 emissions by 440 million tons. In addition, because it

will reduce our fuel needs, the bill is expected to save consumers as much as \$74 billion.

o Will increased CAFE reduce auto safety? The evidence is to the contrary. Between 1974 and 1990, when US fleet fuel efficiency increased from 14 mpg to 27.8 mpg, US traffic fatalities decreased per 100 million vehicle miles travelled to 2.1 deaths in 1990 from 3.5 deaths in 1974. This is because fuel efficiency increases have not happened in a vacuum -- we have also made important strides in improving auto safety -- and we will continue that trend as fuel efficiency improves further. The National Highway Traffic Safety Administration predicts, for example, that by 1995, 95% of all cars will use airbags. Further advances are also being made in materials science, vehicle design, and anti-lock brakes systems that will further improve vehicle safety. And it is not the case that improvements in fuel efficiency can only be achieved through vehicle downsizing. The Office of Technology Assessment and other experts have testified before Congress that significant improvements could be achieved while the size and performance mix of the fleet is maintained. A study by the Bush administration reaches the same conclusion. The EPA 1990 "Trends Report" showed that, with no changes in size mix, a 45% gain in CAFE was possible with a fleet that included "Thunderbirds, Buick station wagons, and Rolls Royces."

o Are further improvements in fuel efficiency technically feasible? The best evidence that significant gains are possible is the Honda Civic VX. In just one product cycle, the fuel economy of this car was improved by 44%, and even the California version of this car -- which meets the toughest emissions standards -- is rated at 55 mpg. In addition, the car seats 5 passengers rather than the 4 passenger-capacity of earlier models.

Moreover, there is a wealth of technology on the shelf that can be used to further enhance fuel efficiency. Transmission control, variable valve timing, engine friction reduction, improved aerodynamics, lean-burn engines, and two-stroke engines are just some of the technologies that will improve fleet efficiency if used more extensively by auto manufacturers.

[Finally, it should be noted that the Bryan bill offers credits for flexibly and alternatively fueled vehicles that offset the mileage requirements and gives the Secretary of Transportation to roll back the requirements if it is found that they are infeasible.]

o Are improved fuel efficiency requirements to the competitive disadvantage of domestic auto makers? During the 1981-1991 period -- when the Reagan/Bush team repeatedly rolled back CAFE standards -- the Big three share of the US auto market fell from 71 to 60%. At the same time, imports of fuel efficient cars rose by 300%. Clearly there is a strong market for fuel efficient automobiles and Detroit would be wise to move aggressively to capture it.

I suppose it could be argued that President Bush -- who opposes increased CAFE standards -- really has served the best interests of the US auto industry. Just look at how he even took the heads of the Big three with him to Tokyo....

o CO2 TAX

It makes sense to tax pollution -- rather than productivity and hard-earned savings as we now do. I believe that a political consensus is building that would support the imposition of a carbon tax -- if it were revenue neutral -- that is, if the revenues raised were given back to consumers through payroll deductions or to offset the added cost of purchasing the most efficient appliances, for example. It would also be important that our competitors adopted similar measures -- and indeed, leaders in Japan and the European Community have already signaled their interest in doing so. We need to investigate this issue thoroughly. Recent studies by the EPA and others have shown that, if designed along the lines described, this type of tax could strengthen and stimulate our economy.

o THE GLOBAL MARSHALL PLAN

o First and most importantly -- this is not proposed as an initiative that would be undertaken solely by the United States. Rather it is described "within a framework of global agreements that obligate all nations to act in concert." (EITB, p. 301).

o Funding is to come from all developed nations -- and the oil rich Arab nations -- not from the US alone.

o This would not be a give-away of the proprietary rights of US companies. To the contrary, "better protection for patents and copyrights" and "significant improvements in the current patchwork of laws, especially in those countries that fail to safeguard the rights of inventors and developers of new technology" (EITB, p. 320) are express elements of the Strategic environment initiative proposed as part of the Global Marshall Plan.

October 13, 1992

~~CONFIDENTIAL~~

THE ON-GOING CAMPAIGN OF DISINFORMATION AND DISTORTION AT THE HANDS OF THE "EDUCATIONAL" PRESIDENT AND CERTAIN SECTORS OF THE ENERGY INDUSTRY, MAINLY COAL AND OIL, FOREIGN AND U.S.-BASED.

PART 1 - DR. SHERWOOD IDSO/THE INSTITUTE FOR BIOSPHERIC RESEARCH/WESTERN FUELS ASSOCIATION, INC. (COAL INDUSTRY)/U.S. DEPT. OF ENERGY'S CO-2 FERTILIZATION PROGRAM/U.S. DEPT. OF AGRICULTURE'S GLOBAL CHANGE PROGRAM/OPEC/BUSH-QUAYLE ADMINISTRATION (STATE DEPT.)

Sherwood Idso is, and has been (1967 to present), a full-time research scientist with the U.S. Dept. of Agriculture, part of the Environmental and Plant Dynamics Research Group based in Phoenix, AZ. Dr. Idso also has an appointment as an adjunct professor in the depts. of geology, geography, botany, and microbiology, at Arizona State University.

Dr. Idso is particularly noted for his singular view that this planet's biosphere is "undernourished" with respect to CO-2, and that the biosphere (plants, trees, algae, etc.) would proliferate and grow boundlessly in a world with higher levels of atmospheric CO-2. Idso further maintains that a world with higher levels of atmospheric CO-2, is a world with significantly higher crop yields, up to 30 to 40% higher, and conceivably much higher, even limitless. Consequently, Idso has suggested that the U.S. should be providing financial incentives to utility companies, to emit more CO-2 into the atmosphere, as opposed to taxing such companies as a means decreasing the amount of CO-2 being emitted into the atmosphere. Idso has often stated this position as an expert witness on behalf of Western Fuels Association, Inc. (coal industry), despite being, and having been, in the full-time employment of the federal government, as a research scientist.

EXCERPTS FROM IDSO'S TESTIMONY, AS AN EXPERT WITNESS ON BEHALF OF WESTERN FUELS ASSOCIATION, INC., TO THE COLORADO UTILITIES COMMISSION, FEBRUARY 14, 1992 (ACTUAL

DETERMINED TO BE AN ADMINISTRATIVE

MARKING INITIALS: MM DATE: 01/19/2017

**TESTIMONY WAS IN THE FORM OF A WRITTEN DEPOSITION DATED
NOVEMBER 4, 1991.**

Question: And I suppose you feel that those responsible for the CO-2 rise should be rewarded for it?

Idso: Definitely. The evidence for biospheric benefits arising out of atmospheric CO-2 enrichment is so conclusive that the same logic that would penalize electricity providers who generate power by fossil fuel combustion for the mere possibility of global warming literally cries out for them to receive credits for the demonstrable good produced by the CO-2 they emit.

Cross-examination of Idso and other expert witnesses before the Public Utilities Commission of Colorado was to take place on June 17, 1992. However, sometime before June 17th, between April 10 and June 17 (probably May) Idso's testimony was withdrawn by Western Fuels Association, Inc., most likely either at the request of the U.S. Dept. of Agriculture, or at the request of Idso himself and/or Western Fuels Association, Inc., as a consequence of Dr. Idso's testimony, and that of others, at Senator Gore's roundtable hearing on Global Warming and the Biosphere, April 9, 1992.

**EXCERPTS FROM IDSO'S TESTIMONY BEFORE SENATOR AL GORE'S
HEARING ON GLOBAL WARMING AND THE BIOSPHERE, APRIL 9, 1992**

Senator Pressler: ...Is there a genuine disagreement here?

Dr. Idso: ...I believe that there is a tremendous wealth of evidence to indicate that plants are definitely going to be benefited by the enrichment of the air with carbon dioxide.

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...In other words, the biosphere throughout the entire period of human history has been basically starved for carbon dioxide.

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...Such a thing has never existed throughout all of human history, but the planet is going to be tremendously benefitted by what is going to occur in the future.

Senator Pressler: So what you are saying is that the emissions of industry, cars, and people is synergistically good, obviously, for the growth of trees.

Dr. Idso: I am saying that the end product of the combustion process - - there are small pollutant byproducts that may

have deleterious effects, but the end product, carbon dioxide, is tremendously beneficial. It is even more than a fertilizer, it is the very primary building block of life. The more of it you put into the air, the better plants grow, the more they produce. This puts more organic matter into the soil, this builds up many beneficial soil properties, this enables plants to grow better still and the thing just builds itself up.

Senator Pressler: So, in other words, some of our efforts at controlling pollution are actually contrary to putting more carbon dioxide into the air. I mean what you are advocating, what are you saying here?

Dr. Idso: I am saying that the increase in the carbon dioxide content of the atmosphere that is resulting from mankind's burning of fossil fuels is something that is actually beneficial to the biosphere.

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Senator Pressler: So what is your bottom line, then, to a policy maker? If we are policy makers in Congress, and I hope we are, what is your bottom line?

Dr. Idso: The bottom line is that there is no need to be concerned about the rising carbon dioxide content to the atmosphere. There is nothing that could be detrimental about it, and there are many things that can be proven to be beneficial about it....

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Senator Gore: All right. On how many occasions have you been an expert witness for the coal industry?

Dr. Idso: I am not sure what you mean by expert witness. I do not know that I have appeared before any kind of thing such as this where I am an expert witness.

Senator Gore: Did you appear before the Colorado Utilities Commission in behalf of the coal industry?

Dr. Idso: No, I have not.

Senator Gore: I may be mistaken. I was informed that there was a proceeding to look at utility rates, and specifically, the question of externalities associated with increased production of carbon dioxide levels in Colorado. And you appeared as a witness in behalf of the coal industry. Am I mistaken about that?

Dr. Idso: I have not appeared, but they may have submitted something I may have written to them.

Senator Gore: Was there a deposition, then? It says testimony, that is where I made my mistake, I suppose. It says testimony of Dr. Sherwood Idso, last month or two months ago. Do you remember that?

Dr. Idso: Okay. I have not appeared but that is something I have produced.

Senator Gore: Was there a fee associated with this?

Dr. Idso: No. (INSERT - THERE IS REASON TO BELIEVE THAT IDSO/HIS WIFE'S COMPANY RECEIVED A FEE OF \$50,000.00 FOR PRODUCING THE FILM "THE GREENING OF PLANET EARTH")

Senator Gore: This (indicating) is rather extensive. It looks like 32 pages worth of detailed questions and answers from the Western Fuels Association. Is that your common practice, to respond to depositions of that kind in utility cases?

Dr. Idso: No, this is just sort of starting now as this topic gets more and more into the public purview....

Through a grant totaling \$250,000.00 (according to Idso), made possible by consumer-owned electric utilities (best guess is EPRI - Electric Power Research Institute, the founder of which is Chauncey Starr), through Western Fuels Association, Inc., Idso has produced a film, through The Institute for Biospheric Research, entitled "THE GREENING OF PLANET EARTH". Western Fuels Association, Inc., has a 1991 copyright on this film.

The film essentially portray's Idso's near-singular philosophy, that the biosphere (trees, plants, etc.) is undernourished with respect to CO-2 in the atmosphere, and thus, will grow vastly more prolifically, and volumetrically, in an atmosphere enriched in CO-2. This film also discusses the experimental basis for Dr. Idso's contention that CO-2 acts as a natural fertilizer, hence, the so-called phenomenon of "CO-2 fertilization" of the biosphere.

The film itself is an incredibly deliberate distortion of science, aimed, in particular, at those in this society who are most susceptible to this message, those least capable of sorting it out, and those least inclined to do so, and more inclined to accept this as fact. Unfortunately, Western Fuels Association, Inc., actively and aggressively shows this film around the country to groups such as Rotary Clubs and the like. In fact, for their road show, they have packaged a 15-minute version of this film, the longer version is 28 minutes.

What is the Institute for Biospheric Research, and who owns it? It exists on paper only, and was originally created and thus, owned by Sherwood Idso who, according to Idso's testimony before Senator Al Gore, and the U.S. Senate Subcommittee on Commerce, Science, and Transportation, on April 9, 1992, Idso turned the Institute over to his wife approximately 1 and 1/2 years ago. Idso's wife is presently the president of the Institute for Biospheric Research.

Through something called the Institute for Biospheric Research Press, another paper company set up by Idso, Idso published, and distributed/sold, for profit, two books written by himself: Carbon Dioxide: Friend or Foe, published in 1982, and Carbon Dioxide and Global Change: Earth in Transition, published in 1989. Neither book was peer reviewed, and prefaces were written by Idso himself.

EXCERPTS FROM THE TESTIMONY OF DR. IDSO AT SENATOR GORE'S ROUNDTABLE HEARING ON GLOBAL WARMING AND THE BIOSPHERE

Senator Gore: Just for the record, your film, which has been widely circulated by the coal industry and by OPEC, was financed by the coal industry. Is that correct?

Dr. Idso: It was.

Senator Gore: And it was made by a company which you established on the side. Is that correct?

Dr. Idso: It was helped to be made by a company which I established on the side, but which I have not been associated with for about a year now.

Senator Gore: Who is the head of that company, for the record?

Dr. Idso: My wife.

Senator Gore: How much did the coal industry pay the company for this film?

Dr. Idso: To produce the film, do you mean?

Senator Gore: All told.

Dr. Idso: I do not know the exact figure that it cost to produce the film.

Senator Gore: Could you estimate?

Dr. Idso: I think that they spent somewhere around the order of a quarter million dollars....

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Senator Gore: I see. This was the same lobbying group (Western Fuels Association, Inc. - insert) that also paid a quarter of a million dollars to your wife's company to produce the film that has been distributed, correct?

Dr. Idso: No, that money did not go to my wife's company. It went to the people who actually, physically produced it, it is my understanding.....

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Senator Gore: Has Western Fuels Association provided either you or your wife's company or Institute other grants for publications?

Dr. Idso: They have bought a lot of books that I have published.

Senator Gore: The film's credits say this program was made possible by a grant from consumer-owned public utilities through Western Fuels Association, Inc. Have they bought books in bulk?

Dr. Idso: Yes. Two or three times, I believe so.

Senator Gore: Approximately how many would you estimate?

Dr. Idso: I think they originally bought 100 at one time, and maybe a couple of hundred at another time, and maybe 400 or 500 another time.

Senator Gore: If you could search your memory and records and supplement your response for the record, I would appreciate it....

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Senator Gore: You have never received , I take it, a retainer or fees for testimony or depositions from any companies. Is that correct?

Dr. Idso: That is correct.

Senator Gore: ...In addition to the bulk purchases of your books and the grants for the film, are there any other financial arrangements between either OPEC, the oil industry, or the coal industry with you, your Institute, or your wife's company?

Dr. Idso: I do not think so....

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. Senator Gore: In addition to the production of the video, is there any distribution arrangement?

Dr. Idso: I am not sure. What do you mean, exactly, by that?

Senator Gore: Any compensation for distribution arrangements.

Dr. Idso: I do not distribute the video, I distribute the book.

Senator Gore: If you could supplement that for the record, I would appreciate it very much.....

The experimental/laboratory, or scientific basis for Idso's contention regarding the so-called CO-2 fertilization effect of higher levels of atmospheric CO-2 is the following:

1. 8 sour orange trees, grown in pots, over a period of approximately 3-4 years (more recent work on 3 species of Australian trees as well).
2. 4 trees were used as the control group, and thus were kept at present atmospheric concentrations of CO-2, roughly 355 ppmv (parts per million by volume). The other 4 trees, the experimental or test group, were subjected to levels of atmospheric CO-2 approximately double the concentration of CO-2 presently in the atmosphere, roughly 600 ppm, and continuously resupplied to each tree.
3. The experiment was conducted under optimal conditions, that is: plenty of water at all times; maximum sunlight; unobstructed; a continuous, plentiful supply of nutrients such as nitrogen, phosphorous and/or potassium compounds, to the soil; predator and insect-free environments; and isolation or lack of competition for space from other trees.
4. The amount and type(s) of nutrients supplied to the soil are never given in any publications describing the experiment/results, nor are they given in Idso's/the coal industry's film, the Greening of Planet Earth.
5. Over the period of time in question, the experimental group of sour orange trees showed an increase in size/mass of 200 to 300%. The Australian trees used allegedly increased in size/mass, by as much as a factor of 9, or an increase of 900%.
6. On the basis of the above results, Idso proclaimed that the entire terrestrial biosphere (the sum total of trees, plants, flowers, algae, etc., on land) can, under higher

concentrations of atmospheric CO-2, by at least 30 to 40%, even 900% or more, even linearly limitless over the surface of the planet. Thus, food crop yields would increase likewise, by the same amounts.

Evaluation of Idso's experimental results and projections:

1. Probably the most critical flaw in Idso's experiment is the experimental design itself. In other words, the first order of business should have been to determine if there existed, in fact, a fertilizing effect upon the biosphere, due to higher concentrations of atmospheric CO-2, a so-called fertilizing effect upon the biosphere (trees and certain crops in the case of the experiments of Idso and colleagues), or whether the additional growth observed was largely in response to something else such as the volume of nutrients supplied to the soil. Thus, it would have been critical to determine the amount of nutrients the trees/crops had taking in, or had been used, relative to the amount of carbon present within the trees/crops, which would have been a measure of its growth or size.

If there was a CO-2 fertilization phenomenon operating the trees would have been growing (storing more carbon) without any additional input of nutrients into the soil. However, if an additional input of nutrients was necessary for the trees to store additional carbon under conditions of elevated CO-2 levels, then it would appear that it was business as usual in the natural world, or in other words, that any additional uptake of atmospheric carbon by trees (growth), was dependent upon the availability or supply of nutrients to the soil. Thus in the latter case, growth of trees, even in the presence of elevated concentrations of CO-2, was limited by the availability, or lack thereof, of nutrients such as nitrogen and/or phosphorous and/or potassium, thus no so-called CO-2 fertilization effect, or no net beneficial (additional growth) effect of additional atmospheric CO-2 upon the biosphere, contrary to the assertions of Sherwood Idso.

2. Since Idso never revealed (never monitored?) the specific levels of carbon taken into the trees, resulting in additional growth, versus the amount of nutrients used by the trees or stored within the trees, the question of the existence of a genuine CO-2 fertilization effect on the biosphere, in the presence of elevated concentrations of CO-2, remains essentially unanswered.

3. Instead, Idso's experiments were designed to maximize the uptake and storage of carbon in trees and crops, under elevated concentrations of atmospheric CO-2, thus designed to maximize growth and not determine what was growth-limiting,

the additional CO-2 or the undisclosed volume of nutrients supplied to the soil in his experiments, or something else. In fact, Idso supplied the soil with abundant levels of nutrients at all times - maximal or ideal conditions.

4. Had Idso sought to determine if there was, in fact, a CO-2 fertilization effect in operation under elevated levels of atmospheric CO-2 in the first place, he could have then conducted a second suite of experiments aimed at assessing the question of how much additional growth could one expect under such conditions.

5. Why did Idso use sour orange trees in his experiments, and later 3 species of Australian trees (unnamed)? Most likely because there was already some experimental evidence that such trees were highly sensitive to CO-2, again in an attempt to elicit a maximal effect, as opposed to determining what is limiting growth in the first place. Thus Idso's experiment was, in part, an illusion. One is left to take his word for it.

6. There were no replications of these experiments in order to verify and cross-check the results.

7. For Idso to extrapolate the results of his experiments on a paltry 8 sour orange trees (actually 4), and much later, 3 species of Australian trees, to the entire biosphere was absolutely preposterous, even if everything Idso claimed about his experiments were true. A claim based upon 8 of anything, especially given the global implications and applicability which Idso ascribes to 8 sour orange trees, is patently outrageous. Idso's linear, one-for-one, direct extrapolation of the 200 to 900% or more (limitless as well) growth he measured in these isolated trees, grown under the idealst of conditions, in the complete absence of pests and insects as well, to the entire real-world biosphere, is reckless and unwarranted at best. Most graduate students would have been severely rebuked for such so-called science. This is horrifyingly bad science.

8. Idso again maintained in his film, distributed by Western Fuels Association, Inc. (the coal industry), that the 30 to 40% increase in the yield of certain food crops (in other words, more food), and higher, possibly unlimited, under elevated levels of atmospheric CO-2, should be observed in the real world. This assertion is again preposterous, and on one additional count as well.

Even if there was, in fact, a real fertilization effect upon the biosphere, at elevated concentrations of atmospheric CO-2, as Idso maintains, if certain food crops took in more CO-2 (grew larger by adding more carbon in the form of living tissue), but did not, in fact, take in additional nutrients from the soil, (the real so-called growth-limiting factor in

the real world in the vast majority of instances), as the phenomenon of CO-2 fertilization would imply or necessitate, what additional food value would there be in this 30 to 40% increase in the yield of food crops? None. Carbon is not a nutrient. Thus, one would have to eat 30 to 40% more crops, under these circumstances, in order to get the same nutritional value, in terms of essential, life-giving and life-sustaining nutrients, and expend more energy in doing so, thus a net loss of energy per unit food injected.

How then do the implications of these experiments translate to higher food yields, in real terms? If there is no point, in that there is no real increase in real food value and content, then what's the point of all of these experiments and the overt implications that more CO-2 emissions are good for the biosphere, all of which will result in vastly more food. Just in time (serendipitously no less, of course) to meet the worlds increased food demands (?) resulting from exponential increases in population worldwide. How convenient? And philosophically correct with this administration's policies of doing nothing on the energy front, and advocating right to life on the other front. Is it not amazing indeed how the science and the scientific results just happen to fall into place at the right time and circumstance? Politically correct science?

To further bolster the prior point, Sherwood Idso was the 1977 recipient of the Arthur S. Fleming award, for "innovative research into fundamental aspects of agricultural climatological interrelationships affecting food production and the identification of achievable research goals whose attainment could significantly aid in assessment and improvement of world food supplies."

9. Based upon reliable and knowledgeable sources of information, it seems reasonably clear that there is an historic and on-going move afoot within at least two federal research agencies, the Dept. of Energy's CO-2 fertilization program, and the U.S. Dept. of Agriculture's Global Change Program, and its joint role with the Dept. of Energy's CO-2 fertilization program to prove, insofar as possible, or perhaps contrive if necessary, and therefore, legitimize and popularize within the federal government, and in the public perception, the notion of CO-2 fertilization, with all of its implications regarding increased world food supplies, and no threat due to global warming via greenhouse gases because CO-2 is good for life/growth, consistent with the policies of this administration to undermine the science and implications of the threat of global climate change (global warming), and therefore, no need to act in the face of imminent danger due to global climate changes on the horizon, via the role of greenhouse gases.

Reliable sources have maintained that many programs within the Dept. of Energy, in particular, have their origins steeped in knee-jerk, negative reactions, to concerns about the threat of global climate change resulting from greenhouse gas emissions. Thus, in the Reagan-Bush administration many programs within the Dept. of energy, in particular, owe their origin and driving force to concerns and mounting evidence regarding the threat of global climate change - global warming. Two DOE programs which figured prominently, and remain so, in this ideological campaign of anti-science and neo-McCarthyism ("political correctness" in the Bush-Quayle era, with a new focal point, science, and a new enemy, the "eco-terrorists and eco-anarchists, otherwise referred to as environmentalists), are DOE's carbon dioxide program, principally CO-2 fertilization, which the U.S. Dept. of Agriculture is also enmeshed in, as part of its own global change program, on eof the focal points of which is higher food yields and greater food storage capacity and greater preservability of food in storage.

The second most prominetly anti-global warming program within DOE is ARM - Atmospheric Radiation Monitoring program, whose goal, among many, is to monitor ozone levels and incoming radiation, including ultraviolet radiation in conjunction with further depletion of the Earth's protective ozone layer. Why is it that there have been at least three separate occasions within the past two years alone, when new data on depletion of the ozone layer, indicated more rapid and more pervasive depletion of the ozone layer, and on each of these occasions there was no alarm sounding from within DOE? Where was DOE? Just business as usual. No need for concern. Everything is alright.

Each of these programs should be looked at in great detail, especially their linkages to the oil, coal and automobile industries.

**EXCERPTS FROM THE TESTIMONY OF ALLAN BROMLEY, SCIENCE ADVISOR
TO THE PRESIDENT, BEFORE A SENATE HEARING CHAIRED BY SENATOR
AL GORE, ON MAY 21, 1992.**

Senator Gore: ...First of all, are you familiar, Dr. Bromley, with the work of Dr. Sherwood Idso and the work he has done on so-called CO-2 fertilization effects, as well as his advocacy of the so-called benefits of doubling CO-2 in the Earth's atmosphere?

Dr. Bromley: Yes, I am, sir.

Senator Gore: Are you also familiar with Dr. Idso's film, "The Greening of Planet Earth"?

Dr. Bromley: I have not seen the film. But I know about it....

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....Let me return to Sherwood Idso. The work that he has done - - as you correctly state - - shows that enhanced concentrations of CO-2 can, in fact, under laboratory conditions, cause enhanced growth rates in certain plants. But I would have to say, specifically, a species of orange plant, orange tree....

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...The work that Idso has been doing is a beginning -- but only a beginning in a very artificial, laboratory environment. And so it would be a great mistake to try to draw too general conclusions from that work....

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Senator Gore: ...Dr. Idso says that he believes that his experiments with 6 sour orange trees that are given as much additional nutrients and as much additional water as they can consume, proved that it is likely that as CO-2 concentrations worldwide double, that plants all over the world are likely to grow 3 to 10 times faster. Do you think that is likely?

Dr. Bromley: I do not believe that the evidence available from these experiments can be generalized to that degree, Senator.....But frankly no one -- as I indicated before -- there is not anywhere close to enough data yet on this matter (CO-2 fertilization effects - insert) for anyone to make any general statements.

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Senator Gore: ...Dr. Idso recommends rewarding CO-2 producers for increasing CO-2 in the environment. Do you agree that that would be a good idea?

Dr. Bromley: No, Senator.

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Senator Gore: ...in the real world.....the limiting factor on plant growth is almost never CO-2 availability; but is almost always nutrient availability; water availability; crowding by other plants nearby; or a combination of all 3 factors.....

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Dr. Bromley: ...But you are obviously correct. That in large fractions of the Earth's surface, the CO-2 concentration is not the dominant controlling factor. It is, in fact, just as you say. I would not argue with you at all on that...

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Senator Gore: Now what about this film? It has had a big influence on views within the administration. I hear that people in the administration refer to it often. Do you think that it is a fairly competent statement of the science involved here?

Dr. Bromley: I am afraid, sir, that I would have to say that it oversells and overgeneralizes.

Senator Gore: Well, the administration has sponsored showing this film. The department of Energy and Commerce sponsored a debut of "The Greening of Planet Earth" film. The Secretary of Energy spoke at the event. And again, individuals in the administration have repeatedly cited this film as a reference point for their understanding of the science....

Senator Gore: ...Do you know the genesis of this film? Are you aware of it?

Dr. Bromley: I do not, sir.

Senator Gore: Do you know who made it?

Dr. Bromley: I do not.

Senator Gore: Do you know who financed it?

Dr. Bromley: I do not.

Senator Gore: The coal industry financed it, and gave \$250,000.00 to a company that Dr. Idso set up, and a company of which his wife is president.

Dr. Bromley: I emphasized, sir, that I have never seen the film, nor do I intend to.

Senator Gore: What do you think about -- as a matter of -- I mean here we have cabinet-level advisors to the president sponsoring the showing of this film; advisors to the president referring to it in laudatory terms; individuals within the administration citing it as a reason why they think we do not really have to worry very much about global warming. And the author of this film is a government scientist in the Dept. of Agriculture who is personally profitting to a handsome degree from money given for the creation of the film from a narrow, special interest with a commercial motive for promoting uncertainty in the minds of policymakers so as to allow the continued belcjing of greenhouse gases at undiminished rates? That is a little bizarre, is it not?

Dr. Bromley: ...If it is as you describe, I agree that it does sound somewhat bizarre.....

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Senator Gore: ...In the federal science establishment, are there any regulations pertaining to business-related activities outside of one's activities as a federal research scientist at the Dept. of Agriculture, and elsewhere, where those activities might be in conflict with activities carried out on behalf of the federal government?

Dr. Bromley: There are very clear regulations, Senator -- certainly with respect to activities involving government employees outside of their normal responsibilities.

Senator Gore: If Dr. Idso had, for example, prepared a written summary of his work and published it, himself, in book form and then the coal industry had bought the book in bulk quantities -- as many as 500 copies at a time in transactions that resulted in large cash transfers to Dr. Idso in return for the bulk quantities of his views on this which are, as I said earlier, contrary to those of the established scientific consensus -- would that raise questions in your mind about the validity of his work or of the propriety of his work?

Dr. Bromley: ...it would strike me as very unusual...My understanding of the rules at the moment are, in fact, that you are not permitted to receive payment for writing which related to the work for which you are being paid by the federal government.

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Senator Gore: Well, I would ask you to supplement your response for the record, after you have had a chance to investigate this matter, to give us your determination as to whether all of this is okay, and represents a good pursuit of science in the administration -- understanding that the commercial interest which has paid for the film and given money to the government researcher, has also collected vast sums of money to show the film to civic groups, Rotary clubs, Kiwanis Clubs, all over the United States, to put the film on television; to promote the coal industry's view of the science; and it has been distributed internationally. When the Bundestag took up the question of CO-2 taxes, for example, the film was said to be influential. Do you know who distributed it internationally?

Dr. Bromley: I have no idea. Senator.

Senator Gore: OPEC.

Between May and June, 1991, a group of electric energy and coal companies launched a 1/2 million dollar test advertising and public relations campaign to cast doubt

on the international scientific consensus on the threat of global warming due to greenhouse gas emissions. The group called itself the Information Council for the Environment (ICE). Its goal, of course, was through careful marketing strategy techniques targeting certain segments of the population, specifically, the group hoped to muster public support for the unrestricted use and burning of fossil fuels.

A Boston Globe article of March 8, 1992, cites the involvement by the Bush administration to interfere with state plans to cut CO-2 emissions at power plants.

The test markets for the ad campaign were: Fargo, ND, Flagstaff, AZ, Bowling Green, KY, and Chattanooga, TN. ICE enlisted the aid of 3 scientists: Dr. Robert Balling of Arizona State University, Dr. Patrick Michaels of the Univ. of VA, and Dr. Sherwood Idso, of the U.S. Dept. of Agriculture and Arizona State University.

Michaels was also later used as an expert witness, along with Idso and Balling, by Western Fuels Association, Inc., in the Colorado Utilities Commission hearings, from which Idso's testimony was later withdrawn sometime immediately following his attendance at a hearing on global warming and the biosphere, chaired by Senator Gore, April 9, 1992. However, during a cross-examination period on June 17, 1992, an attorney on behalf of the Public Utilities Commission of Colorado asked Michaels how much he was being paid by Western Fuels Association, Inc., to testify on their behalf, as an expert witness. The attorney for Western Fuels objected to the question and the matter was not pursued, or recorded. However, Pat Michaels quipped that he assured them that he did not come cheap.

Consequently, if Pat Michaels was implicitly being paid a fee, as an expert witness on behalf of Western Fuels, by Western Fuels, how could Sherwood Idso have proclaimed that he was not receiving a fee for his testimony in this utility hearing, and that he was not an expert witness for Western Fuels, when asked directly by Senator Gore in the U.S. Senate hearing on Global Warming and the Biosphere, on April 9, 1992? Would this not have been discriminatory on behalf of Western Fuels, if, in fact, Idso is at all credible on these points?

To go on however, with ICE, according to Ice's own internal memo's their strategy was the following: "Reposition global warming as theory (not fact)." The plan further targeted radio and television interviews and talk shows, by the three principals, along with a media ad campaign for radio and television, and marketing letters. The results of their marketing study pointed to two possible target audiences, principally. "One possible target audience includes those who are most receptive to messages describing

the motivations and vested interests of people currently making pronouncements on global warming.....People who respond most favorably to such statements are older, less educated males from larger households, who are not typically active information-seekers, and are not likely to be green consumers. Members of this group are skeptical about global warming, predisposed to favor the ICE agenda, and likely to be even more supportive of that agenda following exposure to new information....They are not however, accustomed to taking political action. They are good targets for radio advertisements."

"Another possible target segment is younger, lower-income women. These women are more receptive than other audience segments to factual information concerning the evidence for global warming. They are likely to be green consumers, to believe the Earth is warming, and to think the problem is serious. However, they are likely to soften their support for federal legislation after hearing new information on global warming. These women are good targets for magazine advertisements."

Richard Lindzen from MIT, probably the most noted and most scientifically-respected greenhouse naysayer, was interviewed at length in Idso's/the coal industry's film, "The Greening of Planet Earth".

Richard Lindzen himself, has been on the lecture circuit of industry, mostly those not wanting to agree to carbon cutbacks. He most recently spoke to a gathering in Australia, at the invitation and financial sponsorship of the coal industry in Australia. Earlier this Spring, I believe, Lindzen attended a global climate conference in Germany, giving his same talk. The political climate of the greenhouse debate, and greenhouse doubt. I suspect again that his expenses were paid for by the German coal industry. Sometime this spring as well, Lindzen attended the OPEC conference, most likely at the request and sponsorship of OPEC countries.

THE NORTHWEST AND THE TIMBER CRISIS
TIME MAGAZINE INTERVIEW
9/16/92

STRATEGY -- Focus the interview on the fact that Bush concentrates on finding something to blame our problems on (in this case, the Spotted Owl and environmentalists), rather than taking any real action to solve them. Contrast that with Governor Clinton's determination to work for solutions.

ISSUES

SPOTTED OWL -- The U.S. Forest Service and the Bureau of Land Management (BLM) supply about 1/3 the timber in the northwest. Over the past decade, harvest on these lands has been about 7 billion board feet a year. The rest -- another 14 billion board feet -- comes from private and state-owned lands. Timber harvest on many of the federal lands has been stopped by court injunctions due to violation of environmental laws, including violation of the need to protect owl habitat under the Endangered Species Act.

ANCIENT FORESTS -- The northwest's ancient forests are an ecosystem of 250-1,000 year old conifers. About 10% of the original forest remains. The big trees are very valuable, and profitable, to harvest. At current logging rates, it might last another decade. After that, timber supply will crash in the northwest, as it will be another 15-20 years before much of the second-growth forest in the region is big enough to harvest.

SAVING JOBS -- Bush blames job losses on having to protect the Spotted Owl. Forest Service says saving the owl will cost 30,000 jobs. But the logging, milling, paper and plywood industry lost 30,000 jobs in the 1980's -- before the Spotted Owl controversy -- and Bush did nothing. Even if there wasn't a spotted owl, state governments project that these industries would lose more than 50,000 jobs over the next 20 years to automation, the industry's shifting investment to the southeast, and other factors.

LOG EXPORTS -- The northwest exports 3 billion board feet of raw, unprocessed logs a year (25% of the region's harvest). If the logs were processed into lumber, plywood, wood products and paper in the U.S., it would create 18,000 direct jobs, and perhaps another 18,000 indirect jobs.

SINCE MANY INDUSTRIES ARE COMPLAINING THAT THE COURT INJUNCTIONS MEAN THEY CAN'T GET THE LOGS THEY NEED, THIS IS A KEY ISSUE. Bush has refused a request from Senator Gorton and others to increase restrictions on log exports. His tax bills have never addressed revising the Foreign Sales Corporation tax break, which may provide \$100 million a year to subsidize log exports. He has not made much progress in getting Japan to change its very high tariffs on wood products, which allow the Japanese to buy logs to process in Japan, but prevent them from buying wood products made in the U.S.

OTHER FOREST VALUES -- The same federal forests which sell timber also provide key spawning habitat for the Pacific Salmon. Commercial and recreational salmon fishing is a 60,000 job, \$1.2 billion industry in the northwest. Salmon runs are at an all-time low, and many strains of salmon are going to be listed as endangered. While dams and hydro generation on northwest rivers are a major part of the problem, much of the best spawning habitat for salmon lies in federal forest areas and may be threatened by erosion, silt, and water temperature increases caused by logging.

The federal forests are all open to hunting, fishing, and recreation, and their environmental quality is an essential part of the quality of life that has attracted thousands of businesses and hundreds of thousands of people to the northwest over the past several decades.

BUSH-QUAYLE RECORD

- o Bush has complained about the spotted owl's effect on logging in national forests, but HAS DONE NOTHING ABOUT THE BIG PICTURE.

- Has done nothing to help private landowners who supply twice the timber federal forests do in the Northwest.

- Has done nothing to curb export of logs to Japan, and has refused the request of the Washington delegation (including Senator Gorton) to tighten restrictions on log exports, so that the logs can be used in the U.S.

- Has never addressed the \$100 million a year in tax breaks the IRS gives to log exporters (through the Foreign Sales Corporation provisions of the tax code).

- Has not developed programs to help timber workers or timber communities retrain and diversify.

- >> These communities are losing jobs to automation and the lumber industry move to the Southeast.

- >> The region has lost 30,000 jobs in logging and wood products to automation over the past decade, and that that trend is going to continue -- owl or no owl.

- Opposed extending unemployment benefits.

- o BUSH IGNORED THE TIMBER PROBLEMS IN THE NORTHWEST UNTIL THEY GREW INTO A CRISIS. Like our overall economic problems, they've been neglected for 12 years.

- o The legal morass and court-ordered halts of timber sales in the Northwest were largely caused by Bush's political appointees ignoring their scientists and forest managers and deciding to cut timber without having followed their own regulations.

-- Judge Dwyer -- who was nominated to the federal bench by Republican Senator Slade Gorton and appointed by President Reagan -- wrote that the agency actions "exemplify a deliberate and systematic refusal by the Forest Service and the Fish and Wildlife Service to comply with the laws" (Judge William Dwyer, Memorandum Decision and Injunction, U.S. District Court, May 23, 1991).

- o The Administration proposed stopping citizens from appealing decisions about how to manage our national forests, and supports limiting citizens' ability to go to court to stop the Forest Service from violating environmental laws.

-- THAT'S TYPICAL OF THE BUSH ADMINISTRATION'S APPROACH. THEIR SOLUTION TO PEOPLE COMPLAINING ABOUT PROBLEMS IS TO TELL THEM THEY AREN'T EVEN GOING TO LISTEN.

- o Has presided over a flat and stagnant economy that has dramatically cut housing starts -- and timber demand -- not just in the northwest, but all over the country.

CLINTON-GORE PLANS

- o Governor Clinton promised to convene a meeting of all the parties affected by the current controversy in the forests of the Northwest to work out solutions to the very real economic and environmental problems that have become a crisis under the Bush Administration.

- o A Clinton-Gore Administration will:

- Make economic growth and diversification a priority;
 - Carry out the laws of the land, and protect a significant part of the ancient forest;
 - Work to see that the rest of the federal forests, and the private lands on which have twice as much timber, are managed for a sustained yield of timber that will keep a timber industry going not just for a year or two, but forever.
 - Stop tax subsidies for exporting logs, so that the taxpayer isn't paying to put U.S. workers out of a job.
 - Work with the states and local communities to diversify their economies and put people back to work. If we don't diversify, we'll have even worse problems in 5 or 10 years, when we've cut the remaining forests down.
 - Fight for balance. The President says the situation is "out of balance". But if you've ever flown over the northwest, you can see where the balance is. Most of the forest is already gone, and what remains will only last a few years, unless we change the way we do business.
 - Help protect timber workers and timber dependent communities, by providing retraining opportunities, working with them to bring new industry to their

region, and most important, get the national economy going again.

REGARDING BUSH SPEECH IN COLVILLE, OREGON, SEPTEMBER 14, 1992

There was a major "misstatement" in the remarks of George Bush to the employees and families at the Vaagan Brothers Lumber Company, Colville, Washington, September 14, 1992:

BUSH: "--not far from here is a timber town called Forks. And like Colville, Forks supported a mill and the mill supported a community. And because of a lack of timber the mill had to close, and today unemployment in Forks is at 20 percent. ... And Forks is in crisis for a simple reason. The balance that I was talking about, that balance has been lost. And I've come here because we must restore the balance."

TRUTH: The last sawmill and "shakemill" (processes cedar shingles) in Forks were auctioned off on May 15, 1990 and May 31, 1990, respectively. They were not the victims of the spotted owl. The spotted owl was not even listed as "threatened" until

June 1990. In fact, there were no restrictions on the cutting of timber from federal lands in the Washington old growth forests on account of the owl until May 1991, when Judge Dwyer (a Reagan appointee) of the District Court of Washington issued an injunction against the Forest Service for failure to comply with the National Environmental Policy Act.

[NOTE: Prior to Dwyer's decision, there were injunctions in place for NEPA violations which had the effect of preventing the sale of timber from some national forests in Washington. But at the time, there was in excess of 2-years supply of timber sold but not yet cut (therefore, it could be cut at any time, in spite of the injunction), so the effect was that there was no shortage of timber available to the forest products industry.]

Rather than the Endangered Species Act, the timber industry in Forks fell victim to a one-two punch delivered by (1) log exports to Japan and Korea, which put the logs out of the reach of local processors, and (2) the recession, with its attendant fall in housing starts, which dramatically decreased demand for construction wood. In addition, the shakemill fell victim to competition from Canadian mills, which had the advantage of subsidies, a favorable exchange rate, and more abundant resources. A 1986 MOU between the U.S. and Canada effectively raised Canadian prices to offset the subsidies on softwood products (including shakes), but the exchange rate and resource abundance advantages remained.

It certainly wasn't the fault of the spotted owl.

In the same speech, Bush later remarked that you stated (in reference to your book: "...Senator Gore said this -- and I

quote: 'I helped lead the successful fight to prevent the overturning of protections for the spotted owl.' And Senator Gore wrote -- and I quote: 'The jobs will be lost anyway.'

The relevant pages from your book are attached.

SUCCESS STORIES OF TIMBER COMMUNITIES THAT HAVE DIVERSIFIED THEIR ECONOMIES

The attachment provides success-story anecdotes regarding what timber communities have done to diversify their economies from former timber-dependence. The stories come from a September 1991 conference: "Rural Northwest: Exploring Common Ground." The primary sponsor of the conference was the Wilderness Society. Other sponsors included Bonneville Power Administration, Ellison Timber and Properties, Fred Meyer Corporation, James River Corporation, Northwest Natural Gas Company, U.S. Forest Service, and the state of Washington.

Oakridge, Chewelah, and Oroville were once towns whose economies were heavily dependent on the timber industry. (Not sure about the former status of Fossil.) Each town developed a strategy to diversify their economy.

Fossil, Oregon, focussed on attracting retirees, by putting together a variety of projects that included hiring a professional grant writer, developing a mini-park for tourists to dig for fossils, invested in a new sewage treatment plant, and retrofitting a Victorian House in the city into a bed-and-breakfast. They also retrofitted an apartment building into a senior citizen home, and set about recruiting seniors to live in the community.

Oakridge, Oregon, was a timber-dependent town in the Umpqua National Forest. In the late 1980s, both sawmills had shut down, and the town faced an unemployment rate of 18%. They didn't give up, but rather set out to revitalize their town. They formed a volunteer group of community activists called the "Community Response Team." Then, Oakridge implemented steps to beautify the town in order to attract new businesses; set out to attract disgruntled California industries; developed a rest-and-recreation area to lure some of the 3000 vehicles that traveled Highway 58 daily; and conducted an acreage swap with the Forest Service to acquire industrial lands and attract more new industries.

Chewelah, Washington is a rural northeast Washington city with a secondary dependence on timber and mining. When the Alcoa plant laid off half of its workforce, and the timber industry began to decline, the city decided to diversify its economy. Like Fossil, Chewelah decided to attract retirees to its community, and has had tremendous success.

Oroville, Washington, near the Okanogan National Forest in north-central Washington is heavily dependent on apples, timber, and cattle. The community focussed on maximizing its advantage in location -- the second-busiest border

crossing in Washington. Today, with the addition of an industrial park has succeeded in diversifying its economy.

ENERGY POLICYClinton-Gore Position

o Support a national energy policy that promotes national security, energy diversity, economic growth and environmental protection through:

-- Increased energy efficiency and conservation; studies by NAS, OTA, EPA and others suggest 20% to 30% cost-effective reductions are easily possible.

-- Increased use of natural gas; especially in electricity generation and transportation.

>> Expand markets for natural gas.

>> Speed development and certification of new natural gas pipelines

>> Convert the federal vehicle fleet to natural gas.

>> Use federal research and development funds to develop new natural gas applications.

-- Expand the use of renewable energy.

>> Aggressive research, development and commercialization of renewable energy sources; after being ravaged during the Reagan-Bush years, overall funding levels are now less than half of 1982 levels.

>> Create a civilian DARPA that will support civilian R&D of renewable technologies and renewable fuel programs.

>> Reorient the national laboratories from defense R&D to more work on commercial renewable energy projects.

>> Create tax incentives for renewable energy use.

>> Give incentives to utilities to adopt "least-cost planning," which factors environmental, social, and economic costs into fuel-use decisions.

o Support developing and implementing revenue-neutral market incentives that reward conservation and penalize polluters

and energy-wasters.

- o Oppose increased reliance on nuclear power until issues of safety, nuclear waste, costs, and proliferation are resolved. Would work to ensure that existing plants are used as efficiently as those in Japan or Western Europe (i.e. on-line 70% of the time) and that aging plants are retired and decommissioned safely and cost-effectively.

- o Oppose expanded offshore drilling and exploitation of wilderness areas proposed by the Bush administration.

- o Oppose federal excise gas tax increases.

Bush-Quayle Record

- o Anyone who lived through the 1970s knows for certain how an energy crisis can put the economy into a tailspin. But here again, we see the problem with George Bush's near-sighted lack of vision.

- o The Bush NES is based on the proposition that there is no energy-related security, environmental, or economic problem sufficient to warrant government using its resources to address it.

- Despite the Gulf War, there is no energy security problem.

- Despite the air pollution in our cities, acid rain, and a growing list of global problems associated with energy-related emissions, there is no environmental problem.

- Despite the fact that *oil imports accounted for almost two-thirds of our trade deficit in 1991*, there is no economic problem.

- o The NES generally relies on increasing energy supply, rather than increasing energy efficiency:

- **Would increase our reliance on imported oil, already at 50% of oil use, to 70% by 2030.**

- >> Even by 2010, NES-proposed reductions in oil imports are managed by large imports of fuel methanol, most of which would be derived from natural gas reserves that are located in the same place as the oil it replaces -- the volatile Middle East.

- >> The NES does not serve long-term U.S. interests, which will only be served by increasing energy efficiency, and finding alternatives to reduce and

replace oil use in our economy, particularly the transportation sector -- where two-thirds of U.S. oil consumption occurs.

-- Would increase reliance on nuclear power.

>> NES would require over 100 new power plants in the next 20 years (OTA estimate).

-- Would drill for oil in the Alaska National Wildlife Refuge.

>> ANWR oil, if it indeed exists, would supply only about 2% of U.S. daily needs between the years 2000 and 2010.

>> President Reagan said the chances of finding oil are 1 in 5. KEY POINT: We do not know if there is any oil there at all.

-- Would provide only limited support for energy efficiency and renewable energy programs.

>> *Incredibly, the NES not only fails to promote many renewables, but there is less solar, wind, and geothermal electricity with the NES than there would be without the NES, based on the DOE's own "business-as-usual" base-case projections.* The numbers are (in 1,000 GWh):

	Geo- thermal	Photo- voltaic	Solar- thermal	Wind
DOE Base Case 2030	184	14	84	111
With NES	180	10	64	74

>> Would provide only limited financial incentives for renewable energy facilities, and rely solely on the market to encourage energy efficiency.

-- On the positive side, the NES--

>> Would increase development of natural gas.

Clinton Record

o In 1979, created a state Department of Energy which emphasized renewable energy development, encouraged energy efficiency and the development of new energy sources. [Many states actually established energy agencies during this period -- under the EPCA program, states were required to set up such an office in order to receive federal energy efficiency funding.]

- o Established an Alternative Fuels Commission.
- o Arkansas ranks 10th in the nation in energy research funding.

Gore Record

o Consistently supported a balanced energy policy, promoting energy efficiency and development of alternative, cleaner fuels.

o During the 102nd Congress, offered the following amendments, all of which were adopted by the Senate as part of the 1992 Energy Bill, the Comprehensive National energy Policy Act, which provides for improved energy efficiency (Roll Call No. S. 102/2):

-- The Gore Resolution (S.R. 95) calling for an accelerated phaseout of ozone destroying chemicals pursuant to the Clean Air act amendments of 1991; the Resolution passed 96-0 in March, 1992, after being filibustered by the Republicans at the end of the previous session.

-- An amendment to establish energy diagnostic centers where engineering students and their professors can work with small businesses to improve their energy efficiency and cut their energy bills; and accelerated the government's efforts to procure the most energy efficient products and provide grant money to states to fund energy efficiency and conservation initiatives.

-- An amendment to accelerate the government's efforts to procure the most energy efficient products and to provide grant money to states to fund energy efficiency and conservation initiatives.

o Also in 1992 --

-- Reintroduced S. 201, which includes provisions to save energy in transportation through market-based incentives for fuel-efficient vehicles.

-- Cosponsored S. 279, Senator Bryan's CAFE bill, the Motor Vehicle Fuel Efficiency Act. Enactment of the Act would save America 2 million barrels of oil per day by the year 2008, would help decrease the incidence of many health problems, such as respiratory ailments and disease, as well as reduce emissions of global warming gasses. According to Energy Conservation Coalition estimates, if all automobiles met the

standards of the Act, American families would save over \$650 per year by the year 2010.

-- Cosponsored S. 742, the National Energy Efficiency and Development Act, introduced by Senator Wirth, a bill that promotes energy efficiency and renewable energy development in the U.S., natural gas production, alternative fuel use, and exports of energy efficiency and renewable energy technologies.

o In 1992, voted for the Energy Bill (S. 2166, Vote no. 2028, passed 94-4), which on balance represents a positive step forward in energy policy by promoting the use of natural gas, energy efficiency, renewable energy, and alternative fuels. Gore won approval of several amendments to the Senate version of the bill--

-- An amendment to encourage energy efficiency in small businesses;

-- An amendment to promote government purchasing of energy efficient products;

-- An amendment to provide assistance to states for energy efficiency and renewable energy initiatives.

o During the 101st Congress--

-- Cosponsor of S. 488, Senator Fowler's Renewable Energy and Energy Efficient Technology Competitiveness Act, which called for sharply increasing DOE funding for energy efficiency and renewable energy R&D programs, and promoted demonstration projects for a variety of energy efficient and renewable energy technologies. This bill signalled the end of the erosion of federal funding for these programs (funding was reduced by more than 70 percent for both renewables and energy efficiency during the Reagan presidency).

-- Gore's World Environment Policy Act (S. 201) included a title promoting market-based incentives for the purchase of energy-efficient autos.

-- Co-sponsored S. 1224, Senator Bryan's CAFE legislation.

-- Leading co-sponsor of Senator Wirth's energy policy bill, S. 324, which formed the basis for the energy efficiency, renewable energy and natural gas provisions in the 1992 energy bill.

- o Voting tends to vary on the use of nuclear energy, but he consistently supports nuclear safety and cleanup.

- In 1991, voted to restore \$118 million of federal funding to help clean up nuclear weapons sites by shifting funds from the nuclear production program.

- o In 1987, voted to override President Reagan's veto of the Appliance Energy Standards Act (S. 83). The bill set federal energy efficiency standards for 13 categories of major household appliances, which was estimated to save consumers \$250-\$350 per household on their utility bills, and yield energy savings of up to 22,000 megawatts by the year 2000.

- o In 1981, held hearings on energy demand forecasting and concluded that the policy emphasis on energy supply should be better balanced with efforts to forecast future energy demand. He also held a hearing on the Synthetic Fuels Corporation and several proposed improvements.

- o Supported development of domestic and alternative fuels during the oil crises of the 1970s.

- Supported in 1977 (House Roll Call 326) funding for research on electric vehicles (Good contrast to Administration's Battery Consortium).

- Supported throughout the latter years of the 1970s the now defunct synfuels program.

- Voted in favor of the National Energy Act of 1977, which imposed a gas guzzler tax, a tax on crude oil, and the fuel use act -- discouraging the use of oil and gas as a boiler fuel.

- Supported the windfall profits tax (Roll Call S. 99/2 170), and overcharges and consumer fraud. Introduced legislation to appoint a special prosecutor to investigate oil industry overcharges, and made several statements about oil companies misleading the public about oil shortages..

- Has generally opposed an oil import fee. Once, in 1980, he voted to reject an amendment that would eliminate President Carter's proposed oil import fee. However, all other votes were opposing an oil import fee.

- Has generally voted in favor of coal research efforts.

- Although he has not usually voted in favor of nuclear power development efforts, he did vote in 1979 (House Roll

Call No. 390) to reject termination of funding for the Clinch River breeder reactor in Tennessee (1981 House Roll Call No. 151). Voted to prohibit interim licenses for nuclear power plants (1981 House Roll Call No. 293). Also made several floor statements about stockpiling helium in preparation for later nuclear technologies.

Quayle Record

- o In 1988, voted to sustain Reagan's veto of a bill (S.R. 394) authorizing \$88 billion for highway and mass transit programs through fiscal year 1991.

- o Voted twice to kill an amendment to create an independent Defense Safety Review Board to oversee DOE health and safety practices and place DoE under OSHA coverage (Roll Calls 59, 62).

- o Voted to kill an amendment giving the DOE power to sue negligent contractors to recover part of the cost of a nuclear accident (Roll Call 55).

- o In 1987, voted against an amendment requiring DOE to give primary consideration to public health safety in selecting a site for a permanent repository for nuclear wastes (Roll Call 375, failed 37-56).

- o In 1986, voted against tabling an amendment to repeal the windfall profit tax on domestic crude oil (S.V. 2170, failed 47-51).

- o In 1985, voted against a Bradley amendment to require the President to prepare and implement a program of emergency block grants to states to enable them to deal with the effects of suddenly higher oil prices during an oil emergency (S.V. 1127, failed 44-55).

- o In 1983, voted for the appropriation of energy and water development program funds (S.V. 1168).

- o In 1981, voted against a successful measure authorizing the President to allocate supplies of crude oil and petroleum products during a severe petroleum supply shortage (S.V. 1343). He subsequently voted against the conference report (S.V. 2042, March, 1982).

- o In 1978, voted for the SBA Solar Energy Sources Loan Program, which passed.

- o In 1977, voted against an amendment proposing a 5-cent increase in the gasoline tax, earmarking half the proceeds for

public transportation and half for highway improvement (the amendment was rejected 82-339).

- o Voted against the National Energy Act of 1977, which provided a tax on gas-guzzlers, a crude oil tax, weatherizing credits, and numerous other programs (the bill was adopted 244-177).

- o Quayle voted against closing the Clinch River Breeder Reactor and reducing funding for the project, and in favor of limiting federal contributions and requiring private industry to pay the remainder of the cost (9/20/77).

MEMORANDUM

To: CLINTON ENVIRONMENTAL TEAM
From: Jeremy Rosner
Date: September 8, 1992
Re: Crystal River

This memo recommends that a key piece of Gov. Clinton's environmental strategy be a visit to the Homestead development on the Crystal River in Michigan. An excellent background memo by Bob Dreher on the issue is attached. In short:

- o **The site.** A politically well-connected developer has sought to build an 18-hole golf course on a pristine wooded site, located on a canoeing/fishing river that runs through the adjacent Sleeping Bear Dunes National Lakeshore, on the northeast shore of Lake Michigan, about 150 miles north of Grand Rapids. Building the course requires filling in three acres of wetlands; maintaining it would result in runoff of dangerous fertilizers, herbicides, and pesticides into the Crystal River. Although the Regional EPA, National Park Service, and Fish and Wildlife Service all opposed issuing a permit, the DC EPA overruled them, after the developer and his allies heavily lobbied the White House. The local press calls the project "environmental barbarism." [clip attached]
- o **Political value.** There are at least five reasons why this is a superb hit:
 - 1. **"Whose side are they on?"** Part of the value of the environmental issue for Clinton-Gore is that it helps illustrate that they are on the side of average-income Americans, while Bush-Quayle are on the side of the rich and powerful (developers and polluters). *There are few better symbols of that split than golf courses*, which invoke "country-club Republicans," and remind people of Bush's and Quayle's penchant for golf -- a good metaphor for this administration's record of inaction.
 - 2. **Rebuttal to "jobs vs. environment."** This site implicitly makes the point that the Bush/Quayle rhetoric on jobs vs. environment is simply a smoke screen. In this case, as in many others, there are few if any jobs at stake (certainly no blue-collar ones); the real trade-offs are environment vs. short-term developer profits, and environment vs. GOP elite lifestyle.
 - 3. **Middle class side of environment: fishing, canoeing, parks.** Both substantively and rhetorically, our campaign should be stressing the side of the environment that average Americans directly experience and care about. For the most part, that's not global warming or even the definition of wetlands; much more, it's hunting, fishing, canoeing, camping, and using the national parks. (46 million Americans camp

annually; 41 million freshwater fish; 23 million hike; 18 million hunt; 75%+ in each of these categories is from households under \$50,000.)

4. **Michigan and the Great Lakes.** The site is in a key state. Further, as some of us have discussed, one of the most potent offensive weapons against Bush-Quayle on the environment may be highlighting their inaction on the Great Lakes, and this site is right on one of them.
 5. **Environmental visual.** One of the best things going for us on the environment is that the visuals are on our side -- if we can find events that showcase them. I'm told this site is an instant visual winner -- an old maple forest on the banks of a pristine river. I'm not sure if there's a vantage point for staging an event that would allow the press to capture that visual, but it seems to me it's worth finding out.
- o **Downside.** As far as I've been able to determine there are very few angles to this site that argue against it. The two main ones appear to be:
1. **Reigle and political connections.** While it appears this developer is a contributor to some Republicans, like the state's Lt. Gov., he does not appear to have made any contributions to Bush/Quayle (which would have made a better story), and he has been a contributor to Sen. Reigle (who reportedly helped in some of the lobbying on this project), which might cause embarrassment.
 2. **State regulatory discretion.** The EPA claims their override of Regional EPA was based on their policy of trying to give states more autonomy to resolve these kinds of issues (which I'm not sure Gov. Clinton opposes, or should oppose). The specific action EPA overrode was the Regional EPA's decision to transfer authority over the permitting of the site from the state's Department of Natural Resources to the Corps of Engineers (in order to block MI DNR from issuing the permit). I would guess that Bush/Quayle would defend the case by citing this procedural concern for state discretion, and would criticize Clinton for implicitly endorsing "heavy handed federal pre-emption of local decision-making." However, this seems like a thin defense for them; and it seems we could easily build in a nod to state discretion on our part.

On balance, I strongly recommend that a visit to this site be built into Gov. Clinton's travel agenda, and be used as one of the key environmental hits for the general election. While some additional research on the substance and the site would be necessary, all preliminary research suggests this is an ideal hit.



Suevia, Mt. McKinley

Ansel Adams

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MEMORANDUM

To: Jeremy Rosner, Progressive Policy Institute
From: Bob Dreher
Date: August 19, 1992
Re: Crystal River case

As we discussed yesterday, I represent the Friends of the Crystal River, a citizens' group, and a number of Michigan, midwest regional, and national environmental groups (National Wildlife Federation, Michigan United Conservation Clubs, Michigan Council of Trout Unlimited, Lake Michigan Federation, Sierra Club, and the Indiana Division of the Isaak Walton League of America) in litigation challenging EPA's decision to withdraw its regional office's longstanding objections to a wetlands permit that the Michigan Department of Natural Resources' intends to issue to a major resort in northern Michigan, the Homestead, to construct a golf course.

The proposed golf course is adjacent to the Crystal River, a pristine, 7-mile long stream popular with canoeists and fishermen, and to the Sleeping Bear Dunes National Lakeshore. The Lakeshore attracts 1.2 million visitors each year, according to the National Park Service; accurate figures for visitor use of the Crystal River do not exist, but one commercial canoe outfitter rents more than 1900 canoes and kayaks to people interested in boating the river each year.

The potential damage that operation of the course may pose to the national park has raised serious concerns among environmentalists, the National Park Service, and the U.S. Fish and Wildlife Service, and led EPA's Regional Administrator, Valdas Adamkus, to issue formal objections to the permit, thereby blocking its issuance under the federal Clean Water Act. The primary environmental concerns involve the potential release of fertilizers, pesticides and



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herbicides used in maintaining the course into the pristine waters of the river and the park; environmentalists are also disturbed that the permit does not comply with federal law, which prohibits filling wetlands if there are alternative sites available. The developer refuses to consider alternative sites, claiming that the course must be built adjacent to its resort lodgings to be economically successful. Conservationists and the Park Service are also offended by the developer's proposal to use the Crystal River as a water hazard; several of the projected fairways would cross the river.

The federal case challenges EPA's abdication of its oversight responsibility under the federal Clean Water Act, and its illegal attempt to remove federal permitting authority from the U.S. Army Corps of Engineers and return that authority to the State DNR so that it may issue the controversial permit. On June 8, 1992, U.S. District Judge Richard A. Enslin granted summary judgment against EPA, and permanently enjoined EPA from attempting to remove the Corps' authority over the permit. That decision has been appealed to the 6th Circuit Court of Appeals. There is also a suit pending in the Michigan state courts that challenges the original decision by the Michigan DNR to issue the permit as arbitrary and capricious. That case was argued to the state judge in June, and has not yet been decided.

As you note, the case can be characterized as the Bush administration's improper intervention in the responsibilities of EPA's regional office to favor a politically well-connected and wealthy resort developer, at the expense of the public whose enjoyment of the national lakeshore and the river will be threatened by the course's operation. The Bush administration views the case as a politically-critical demonstration to Michigan and other states interested in assuming wetlands permit authority under the federal Clean Water Act that the federal government will not interfere in the states' administration of such permit programs. The Clean Water Act expressly requires EPA to review the states' administration of federal permit programs, however, and authorizes it to block proposed permits where, as here, it believes that the state has failed to properly weigh environmental impacts or to comply with federal law. In effect, the Bush administration has abdicated its responsibility to ensure fair and even-handed implementation of the federal Clean Water Act.

You should know that the Michigan press has generally been supportive of the environmentalist position, and highly critical of Governor Engler for interfering with EPA's decision. I enclose editorials from the Detroit Free Press and Grand Rapids Press. I have also included a short (although longer than you had hoped for) background memo.

Crystal River Background

Kuras Properties Inc., a corporation controlled by Robert Kuras, applied to the Michigan Department of Natural Resources in 1988 for a state wetlands permit to construct a golf course in conjunction with its resort, the Homestead, near Traverse City in northern Michigan. Because Michigan has assumed administration of the federal dredge and fill permit program under § 404(g) and (h) of the Clean Water Act, the state wetlands permit sought by the Homestead would also have authorized it to fill the affected wetlands under the federal law.

The Homestead golf course project contemplates the filling of more than three acres of high-value wetlands, and extensive disturbance (clearcutting) to a larger forested wetland area, adjacent to the Crystal River, a pristine stream that flows through the Sleeping Bear Dunes National Lakeshore and the Homestead resort property before entering the waters of the Lakeshore in Lake Michigan. The National Park Service, the U.S. Fish and Wildlife Service, the U.S. Army Corps of Engineers, and the Regional office of the Environmental Protection Agency ("EPA") all expressed serious concerns in letters to the Michigan DNR regarding the impacts of golf course construction and operations on water quality and fish and wildlife habitat, and noted the apparent availability of alternative sites for the project.

Based on these concerns, EPA's Regional office objected to the issuance of the Homestead permit on July 7, 1988. Under the federal Clean Water Act, EPA's objections served to block issuance of the permit by the state unless the state revised the permit to address EPA's concerns, or sought a hearing before EPA. If the state fails to respond to EPA's concerns, authority to issue the federal permit is transferred automatically after 90 days to the U.S. Army Corps of Engineers, which administers the federal wetlands permit program under § 404 in other states.

In this case, the Michigan DNR neither sought a hearing on EPA's objections nor sought to revise the permit. Instead, the DNR initially rejected Kuras's application in July 1988, and rejected it again when resubmitted in 1989. The DNR's decision was appealed by Kuras, and the Michigan Natural Resources Commission, a citizen board that governs the DNR, on November 1990 ordered the DNR to issue the permit. EPA's regional office had several times reiterated its objections to the permit during this period, and upon learning of the Commission's decision to approve the permit, EPA Regional Administrator Valdus Adamkus notified the DNR on November 21, 1990 that authority over the permit had been transferred to the Corps of Engineers.

In response to lobbying by Kuras and by Michigan Lt. Governor Connie Binsfield, however, EPA's Regional Administrator in March 1991 formed a three-member ad hoc advisory panel to review the environmental and policy issues raised by the

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Homestead application. The final report of the ad hoc advisory panel, issued in August 1991, confirmed that the Homestead project raised serious environmental concerns. EPA's regional office continued to maintain its objections to the project, and directed Kuras to apply to the Corps of Engineers if he wanted a permit.

Kuras refused to apply for a federal permit from the Corps, however, and has enlisted political support from his allies, Lt. Governor Connie Binsfield and Senator Don Reigle, to change EPA's position. We understand that both EPA and the White House were lobbied heavily by Kuras, Governor Engle, Lt. Governor Binsfield, and Senator Reigle.

On April 16, 1992, EPA Administrator William Reilly withdrew authority from Regional Administrator Adamkus to oversee Michigan's implementation of the federal dredge and fill permit program, and transferred that authority to Assistant Administrator LaJuana Wilcher. Reilly directed Wilcher to make a "final determination" concerning EPA's position on the proposed Homestead permit. Subsequently, on May 8, 1992, Ms. Wilcher issued a decision withdrawing EPA's objections to the Homestead permit, and purporting to transfer authority over the permit application back from the Corps of Engineers to the state DNR.

Friends of the Crystal River and other environmental groups filed suit in federal district court on the same day, alleging that EPA lacked any authority under the Clean Water Act to transfer permitting authority back from the Corps of Engineers to the state after the statutory deadline had passed, and that EPA's decision was in any event arbitrary and capricious in the face of the extensive record showing serious environmental risks to the national lakeshore and the availability of alternative sites. On May 11, 1992, U.S. District Judge Richard A. Enslen entered a temporary restraining order prohibiting DNR from issuing a federal dredge and fill permit. On June 8, 1992, after a full hearing, Judge Enslen granted summary judgment to the environmental groups against EPA, and permanently enjoined EPA from attempting to transfer the Corps' authority over the permit. That decision is now on appeal to the U.S. Court of Appeals for the 6th Circuit, and will likely be argued this fall. A related case is pending in Michigan state court, challenging the original decision of the Michigan DNR to issue the permit.

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IN OUR OPINION

GOLF CRUSADE

Engler should give up fight to get course built

The saga of Michigan's most controversial golf project — an 18-hole course to be built on a partially filled wetland, on the bank of a scenic river next to the Sleeping Bear Dunes National Lakeshore — acquired a new chapter this week.

U.S. District Judge Richard Enslen effectively stopped the project, ruling that the U.S. Environmental Protection Agency's central office in Washington, D.C., had no right to restore Michigan's authority to allow the construction of the course, after that permit was denied by the EPA's regional branch in Chicago.

Such authority rests with the U.S. Army Corps of Engineers, Judge Enslen ruled, adding: "The EPA chose to act outside the authority of Congress and the law."

This outcome is at least a temporary setback for the Engler administration, which applied its political muscle to influence top EPA officials, lobbied furiously at the White House, and spent a lot of taxpayers' money arranging numerous meetings and working on behalf of the project.

Depending on whom you choose to believe, the administration's animus stemmed either from a noble urge to defend Michigan's authority to handle wetlands cases, or from cronyism: The developer, Robert Kuras, is said to be a friend of Lt. Gov. Connie Binsfeld.

The administration vows to appeal, but perhaps this is a good moment for Gov. John

Engler to stop and think whether it is really such a good idea to continue this crusade.

Put aside the complex legal issues of whether the EPA regional office had the right to block the permit — we believe it did — or of who should have jurisdiction over the case. Look at the basics: Building a golf course on the banks of a nearly pristine river is environmental barbarism.

Even a responsibly maintained golf course would adversely impact surrounding ecosystems. The EPA concluded that the use of herbicides, insecticides, fungicides and fertilizers on the Homestead Resort course would affect water quality and aquatic life well beyond the specific site. The loss of plant diversity and wildlife habitat would cause more harm than state officials have been willing to acknowledge.

We'd hope that, in this enlightened age, developers would have enough sense not to propose such projects, and that governors would know better than to pitch them. Mr. Kuras' course was opposed from the beginning by the Corps of Engineers, the Fish and Wildlife Service and the National Park Service, along with the EPA. The state Department of Natural Resources twice denied the permit for environmental reasons before state politicians intervened.

This is a poor case for Michigan to cite in defending its right to handle wetlands permits without federal interference. And it raises disturbing questions about the governor's priorities and judgment.

Detroit Free Press 6/10/92

Gerard Kapriel Kuras

5/17/92 FL
EDITORIAL

Enslen's turn in the wetlands

If a federal court can drain the political swamp surrounding the Homestead Resort wetlands project in Leelanau County, this state may yet get to a scientifically sound decision on the matter.

There is little cause to think the Engler administration will reach that point on its own. Gov. John Engler sees the affair as a state-federal turf battle and a test of his political might, not a decisive moment for a sensitive natural resource. U.S. District Court Judge Richard Enslen, in whose Kalamazoo court the controversy now rests, has a chance to judge priorities back toward their proper order — specifically, by determining whether the politically-wired conclusion engineered by Mr. Engler is legal.

Nut of the dispute is a plan by the Homestead Resort of Glen Arbor to build a golf course and to fill 3.68 acres of wetlands in doing it. The filled area, to accommodate three holes of the course, would adjoin and cross the Crystal River, a pristine stream which feeds into the adjacent Sleeping Bear National Lakeshore.

The negatives in the proposal go far beyond the actual bulldozing of wetlands. Most serious is the likelihood that fertilizer chemicals and pesticides used to build and maintain the golf course would run into the river and groundwater. Degradation of those waters would affect the surrounding wetlands and the ecosystem of Sleeping Bear Dunes.

For such reasons, the Homestead for six years has been unable to get a state permit to proceed. Twice, the Department of Natural Resources refused. When Homestead owner Robert Kuras sued and won favorable court rulings, the DNR's parent — the Natural Resources Commission — ordered that a fill permit be issued. Then, in 1990, the federal Environmental Protection Agency's regional office in Chicago stepped in, declaring its particular concern for the federally-protected lakeshore. The office revoked the DNR permit and held firm, despite pressure applied by Mr. Engler through the Bush administration. But now the governor has broken through, getting the EPA in Washington to take over wetlands authority from the Chicago office and kick the Homestead case back to the state.

The question before Judge Enslen is whether EPA Administrator William Reilly, in satisfying Mr. Engler, acted legally. Environmental plaintiffs argue that the U.S. Army Corps of Engineers, not the EPA, has ultimate jurisdiction over wetlands. And, indeed, the Corps does issue most wetlands permits nationwide. Traditionally in Michigan, however, it has deferred to the expertise of the DNR. Mr. Engler stretches reason in arguing that federal authorities, in effect, promised never to intervene in Michigan.

If the Corps jurisdiction is recognized, then perhaps scientific opinion will be, too. A key element there is an independent study done in 1991 by a team of three wetlands experts, jointly picked by the EPA and DNR. The panel included Prof. Frederick Bevis, chairman of the biology and natural resources management departments at Grand Valley State University and a researcher with GVSU's Water Resources Institute. The consensus report of the three was negative about the Homestead project, citing damage to the Crystal River, groundwater, surrounding wetlands and the Sleeping Bear Dunes. The group recommended shifting the golf course away from the wetlands.

There is no denying here that the Homestead's Mr. Kuras has worked hard to minimize environmental effects of his plan, spending millions of dollars on design changes to get a permit. Also probably true is that he needs the golf course to compete with the many other northern resorts that have developed courses since the Homestead opened. The jobs and tourism generated by the Homestead are legitimate considerations, too. There is, however, no government obligation to assure that any enterprise is profitable, particularly when the price could be the spoiling of an invaluable public resource. Nor is there any compelling public purpose in construction of a golf course.

Because of the emphasis given to it in Washington, this case has drawn national attention as a symbol of Bush administration wetlands policy. That is all the more reason for Judge Enslen to focus closely on it. The precedent set of political steering of environmental decisions, overriding expert opinion and established procedures, will have destructive effects far beyond Glen Arbor.

For such reasons, Michigan's Sen. Carl Levin, D-Detroit, should respond to environmentalists' requests that he inquire into how the Homestead decision was made. Natural resources panels in the state Legislature should do the same. Finding out how environmental policy-making got caught in the political bogs of Washington and Lansing is the best way to prevent it from happening again.