Energy & Transportation Subsidies

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for the Atmosphere Alliance (now ClimateSolutions)

Subsidy	Description	Value of Subsidy	Agencies and Legislation
Airlines. Airport grants-in-aid.	Direct subsidies for airline terminal projects.	Ending subsidies would save $6.7 B over 5 years.[1]	
Airlines. Essential Air Service program.	Subsidizes airline service to 125 small cities.[2]	$22.6 M appropriated in 1996.[3]	U.S. Dept. of Transportation.
Alcohol fuel. Alternative fueled vehicles: federal purchase preference.[4]			
Alcohol fuel. Excise tax exemption.[5]			
Alcohol fuel. Income tax credit.[6]			
Alternative fuel. Non-conventional fuels tax credit.	Benefits only one fuel.[7] (Which one?)	Phase-out would save $5.7 B over 5 years.[8]	
Automobiles.	Direct and indirect subsidies include employer-subsidized parking, accidents, health costs, pollution, congestion, traffic policing, fire protection, traffic planning and engineering, street and highway construction and maintenance, crop and property damage, oil industry tax breaks, government research and engineering.	Estimates for U.S. auto subsidies range from $200 to $730 B to $1.4 T per year.[9] The $1.4 trillion estimate was derived by adding costs like worktime loss due to traffic jams[10]; this estimate would raise the price of a car to $200,000.[11]	
Automobiles. Crop and property damage.	Property damage includes to buildings from acid rain.	$100 billion per year.[12]	

Automobiles. Externalities of congestion.	National productivity losses and truck delay costs.	Productivity losses cost $100 B annually; truck delays cost $24 to $40 B annually.[13] See also first entry under Automobiles for estimate of worktime loses due to traffic jams.	
Automobiles. Externalities of pollution.	Conventional air pollution from mobile sources is estimated to cost 4 cents per vehicle mile.[14]	$8.3 B annually.[15]	
Automobiles. Health effects of pollution.	Auto accidents kill 50,000 Americans per year; traffic injuries and deaths cost $400 billion per year.[16] Every year, air pollution from burning 130 billion gallons of gasoline and diesel fuel kills 120,000 Americans prematurely by respiratory disease, and costs $40 to $50 B in health care expenses; this is equivalent to 35 cents per gallon of gas[17]; another estimate shows $100 billion in medical bills for respiratory disease caused by auto exhaust.[18]		

Automobiles. Highway construction and maintenance.	Much of the $74 billion spent in the U.S. each year[19] on road construction and maintenance comes from revenues unrelated to the use of those roads; highway user fees such as gas taxes and tolls account for only 55-60 percent of the money spent on highways[20]; the rest comes from local property and sales taxes, bonds, and general fund sources, amounting to a $29 billion subsidy[21]; additional money is spent on local roads and streets.	Federal, state, and local governments spend $300 billion per year on auto-related costs like road construction and maintenance and enforcement of traffic laws -- a hundred times what is spent on public transportation.[22] "Direct federal expenditures between 1956 and 1981 for the National Highway Program totaled between $200 and $300 billion... Since World War II, state and local highway debts rose from $3.6 billion to $24 billion... Overemphasis on highways has created many other fiscal burdens as well, including high levels of expenditure on police and safety services, local road construction, and snow removal. In 1973, the Federal Highway Administration estimated that these services cost well over $20 billion annually".[23]	
Automobiles. Highway demonstration projects.		FHWA earmarked demonstration projects appropriated $352 M in 1995; zero in 1996.[24] Rescinding funding for projects not eligible under state transportation plans or highway grant programs would save $7.9 B over 5 years.[25]	
Automobiles. Highways in the Northwest (Washington, Oregon, Idaho, and British Columbia).	In 1992, local, regional and federal government spent $3.9 B on road construction, maintenance, admistration, and interest on bonds; 76 percent came from gas taxes, vehicle registration, and license fees charged to road users; the other 24 percent, $938 M, came from unrelated sources such as property taxes and general fund appropriations.[26]	Northwest highways cost $938 M in 1992; of that total, $319 M came from ID, OR, and WA property taxes; $166 M came from ID, OR, and WA general fund appropriations.[27]	Federal and state governments.

Automobiles. Highway I-69 (Indiana).	Part of the NAFTA "Superhighway" construction project from Mexico City to Laredo, Houston, Memphis, Indianapolis, Port Huron, Toronto, Montreal, and Quebec.	Project would cost at least $1 B.[28] A location study will cost $850,000 in FHWA funds; every 20 miles of cropland covered will potentially cost $385,000 in income.[29]	
Automobiles. Labor training.	PACCAR trained 400 prospective employees for its new truck manufacturing plant in Renton, Washington, in conjunction with Renton Technical College; a $175,000 state grant paid for the training.[30]		
Automobiles. Local subsidies.	An estimate for the city of Pasadena, CA found local government costs of $16 M in 1985, of which drivers paid for only a quarter.[31]	Since World War II, state and local highway debts rose from $3.6 billion to $24 billion.[32]	Municipal governments.
Automobiles. Parking benefits tax exemption.[33]	The U.S. tax code exempts employers' costs of providing free parking for employees, up to $155 per month per employee; only $60 per month can be deducted by employers that provide transit passes or carpool vehicles.[34] It costs more to build and maintain a parking lot space for 20 years ($10,000-$15,000) than it does to provide an employee with free transit.[35]	$85 B annually in U.S.[36], where 90 percent of Americans park free. Free parking at government buildings in Vancouver, BC is worth $26 M.[37]	
Autombiles. State police support.	In 1992, state police support for highways cost $63 M in Maryland and $67 M in Virginia.[38]		
Biofuels.	See the U.S. GAO's Motor Fuels: Issues Related to Reformulated Gasoline, Oxygenated Fuels.[39]		
Biomass. Closed loop biomass production credit.[40]			

Coal. Black Lung Trust Fund.	Surface and underground mines pay differential per ton rates, which are placed in two funds: the Abandoned Mine Reclamation Fund, and the Black Lung Benefits Revenue Act fund.[41]	$349 M.[42]	U.S. Dept. Of Labor. Black Lung Benefits Revenue Act.
Coal. Black lung victims Social Security payments.	Tax-exempt payments.[43]	$892 M.[44]	U.S. Social Security Administration.
Coal. Capital tax treatment of royalties.		$10 M.[45]	
Coal. Clean Coal Technology Program.	Established in 1984 to address acid rain air pollution; provides 50 percent matching funds to encourage industry to develop clean technology for electricity-generating coal plants.[46] Some opponents say Clean Air Act amendments in 1990 provide adequate incentives for reducing emissions.[47]	$2.5 B appropriated in 1995-1997 for bid solicitations for selected CCTP projects; over $1.5 B has been obligated to actual projects.[48] $337 M in 1995; $150 M in 1996.[49] $300 M over 5 years could be saved by ending program.[50] $912 M could be saved over the life of the projects.[51]	
Coal. Coal Research & Development.	Research for producing, refining, and burning coal; is redundant with Clean Coal Technology Program; includes low-priority and unpromising technologies such as magnetohydrodynamics.[52]	$167 M in 1994; $154 M in 1995; $121 M in 1996; eliminating program could save $90 M per year, and $450 M over 5 years.[53]	U.S. Dept. of Energy.
Coal, fossil fuels, renewables. Clean coal technology agreements, fossil research, renewable energy inventions and technology integration.	Direct assistance.	$600 M in 1994[54] (includes non-fossil fuel energy); $288 M in 1995.[55]	
Electric cars. Electric car tax credit.			

Energy. Accelerated depreciation of energy-related capital stock (ACRS).	No longer in effect for new investments.[56]	$9.6 B.[57]	
Energy. Basic energy research.	Direct assistance.	$400 M in 1994.[58]	
Energy. Conservation.	Seattle City Light gave energy conservation subsidies to Boeing, Sabey, Seafirst, and other large corporations.[59] The U.S. gave energy conservation R&D subsidies to Union Carbide for producing an energy-saving industrial process for polypropylene.[60]		
Energy. Energy Supply, Research & Development Grants.		$3.2 B in 1995[61]; $2.7 B in 1996.[62] $6.9 B over 5 years.[63]	
Energy. Exclusion of interest on state and local government industrial bonds for energy production facilities.	Overlaps with "Public power energy facilities tax-exempt interest on bonds" entry?	Part of the $180 M annual benefits go to the oil industry.[64] $100 M in 1994.[65]	
Energy. Fossil Energy R&D.		$430 M appropriated in 1995; $417 M in 1996.[66]	
Energy. General investment tax credit (ITC) for new machinery & equipment.	No longer in effect for new investments.	$2.0 B.[67]	
Energy. Local subsidies.	Most states use federal tax returns to calculate state taxable income, so federal benefits are also benefits at the state level, whereas federal tax credits do not generate local benefits.[68]	Augments federal subsidies by about 3 percent.[69]	
Energy. Low income energy assistance.	Provides funds to families at or below 100 percent of the poverty level.[70]	$1.3 billion.[71]	

Energy. Pollution control equipment tax-exempt bonds.		$563 M.[72]	
Energy. U.S. Coast Guard.	Grants.[73]	$484 M.[74]	U.S. Coast Guard.
Energy. U.S. DOE research & development	The U.S. DOE does not generally require repayment of federal costs in shared technology development programs. Four programs: fossil energy, energy efficiency and renewable energy, environmental management, and nuclear energy -- plan to recover about $2.5 billion of $8 billion in federal funding.[75]	$2.1 B.[76]	U.S. Dept. Of Energy.
Ethanol. Alternative fuel income tax credit.[77]			
Ethanol. Ethanol feedstocks crop insurance.[78]			U.S. Federal Crop Insurance Corporation.
Ethanol. Ethanol feedstocks price supports and disaster payments.[79]			U.S. Commodity Credit Corporation.
Ethanol. Ethanol loans and loan guarantees for production facilties.[80]			U.S. Dept. Of Agriculture; U.S. Dept. Of Energy.
Fossil fuels. Fossil Energy Research & Development.		$430 M in 1995.[81]	
Fuels (non-oil & gas). Excess of percentage over cost depletion, (non-oil fuels).		$200 M in 1994.[82]	
Hydropower. PURPA purchases.	PURPA-required purchases of small-scale hydropower.[83]		

Hydropower. Tax exempt bonds for environmental improvements.[84]			
Hydropower. U.S. Bureau of Reclamation (BuRec) and Army Corps of Engineers (COE) site and modification assessments.[85]			U.S. Bureau of Reclamation (BuRec); U.S. Army Corps of Engineers (COE).
Hydropower. U.S. Export-Import Bank.	Subsidized loans, loan guarantees, and defaults on export loans for hydroelectric equipment and services.[86]	$499 M.[87]	U.S. Export-Import Bank.
Hydropower. U.S. Federal Energy Regulatory Commission (FERC).	Licensing of hydropower facilities; FERC power to require wheeling; FERC transmission line licensing and approval.[88]		U.S. Federal Energy Regulatory Commission (FERC).
Hydropower. U.S. Fish & Wildlife Service.	Dam repair and rehabilitation; flow assessments.[89]		U.S. Fish & Wildlife Service.

Hydropower; aluminum; irrigation. U.S. Bonneville Power Administration (BPA) below-cost sales to direct service industries (DSIs) (aluminum plants and smelters).	Federal government sells a third of the electricity from 30 dams and one nuclear power plant to aluminum DSIs at prices linked to world aluminum prices[90], or about 15 percent below cost.[91] DSIs are also exempt from paying their $7 B share of WPPSS debt.[92] DSIs also have an exclusive "retail wheeling" deal on long-tern access to federal power.[93] Power is also sold below-cost for irrigated agriculture.[94] Dams kill 80 percent of Columbia River juvenile salmon every year.[95] Two pounds of carbon dioxide is released for every pound of aluminum produced.[96] Subsidized Northwest aluminum smelters are less efficient than the average.[97]	The aluminum industry's huge energy requirements are possible because BPA provides reduced rates tied to the fluctuating price of aluminum; estimated $200 million per year in hydropower subsidies.[98] $935 M loss to aluminum industry 1986-1995[99]; losses to agribusiness and irrigation districts $45 M per year; BPA could save $60 to $70 M per year by not purchasing power from WPPSS nuclear plant.[100]	U.S. Bonneville Power Administration.
Hydropower; irrigation. BPA below-cost power rate charged to U.S. Bureau of Reclamation (BuRec).	BuRec uses 480 megwatts to pump irrigated water; two-thirds of BuRec power is purchased at 1940s prices, less than 5 percent of BPA's normal utility rate; encourages water waste.[101]	Charging BuRec the same rate as other BPA customers would save $32 M annually, or $160 M over 5 years.[102]	U.S. Bonneville Power Administration.
Hydropower; irrigation; nuclear. U.S. Power Marketing Administrations (PMAs).	Subsidized loans and long debt repayment periods for five PMAs which sell federal hydropower in 33 states, producing 6 percent of U.S. electricity.[103] Cross subsidies to irrigation and nuclear power (eg, BPA sells nuclear energy through WPPSS WNP-2 plant) by hydropower users at U.S. Power Marketing Administrations (PMAs) and Tennesee Valley Authority(TVA).[104]	$616 M.[105] PMAs budgeted $390 M in 1995.[106] PMA appropriations $272 M in 1995, $312 M in 1996.[107] Reforms could save $150 M in 1995 and $66 M annually, and $1.08 B over 5 years.[108]	U.S. Power Marketing Administrations (PMAs) and Tennesee Valley Authority(TVA).
Hydropower; utilities. Below-cost sales of federal hydropower to private utilities.		Recovering costs would save $2 B over 5 years.[109]	

Incinerators. Waste-to-energy tax exempt bonds for construction.	Federal issuance of state and local tax-exempt bonds for incinerator construction.[110]	$404 M.[111]	
Low-income homeowners. Low-Income Home Energy Assistance.	Subsidizes low-income homeowners' energy bills and weatherization.[112]	$1.5 B.[113] $1.4 B.[114]	U.S. Dept. Of Health and Human Services.
Mass transit. Employer-provided benefits tax deduction.[115]			
Mining. Reclamation and enforcement.	Grants regulation.[116]	$879 M.[117]	U.S. Office of Surface Mining.
Natural gas, coal, renewables.[118] PURPA.[119]	Requires purchases of small-scale energies.[120]		

Nuclear. Types of subsides.	Koplow[121] shows nine categories of subsidies in the nuclear power "life cycle": *Exploration Support*: U.S. Geological Survey mineral surveys for uranium. *Pre-Production Phase*: DOE fission reactor research. *Primary Transport/Distribution*: Price-Anderson Act indemnification for uranium-transport accidents (for transport of raw materials or nuclear wastes). *Refinement*: DOE Uranium Enrichment Enterprise; ALVIS enrichment research; and operation of enrichment facilities at a loss. *Production*: Capital subsidies through investment tax credits, accelerated depreciation, and subsidized loans through the Rural Electrification Administration and the Export-Import Bank; Price-Anderson Act liability cap for nuclear reactors. *Secondary Transportation/Distribution*: Capital subsidies and rights-of-way for power transmission infrastructure. *Marketing, Sales, Service, and Consumption*: Below-cost sales of enriched uranium; absence of risk sharing with industry on long-term power contracts between UEE and the Tennessee Valley Authority. *By-Product Disposal*: Federal responsibility for nuclear waste disposal in return for a small per-KwH surcharge; DOE cleanup of uranium mill tailings. *Post-Operational Closure*: Allowance if under-accrual for plant decommissioning.	Nuclear subsidies: One estimate says nuclear energy has received $97 billion in subsidies over the past forty years in research and development, regulation, construction, enrichment, insurance programs, environmental damage, state government appropriations, etc[122] -- but nuclear waste clean-up alone cost the public $23 billion just between 1989 and 1994; $7.5 billion was spent on 1989-1994 Hanford clean-up.[123]	

Nuclear. Advanced light-water research.	Federal subsidy for utilities' reactor design costs and regulatory aid.[124] Regulatory and engineering assistance including design assistance, design certification, and attorneys fees for early site permit application preparation.[125] Includes major funding to the Advanced Reactor Corporation (including General Electric $60 B in 1994, Westinghouse $9 B in 1994, and ABB ASEA Brown Boveri/Combustion Engineering $4 B in 1994); contract with ARC ends in Sept. 1996.[126] PAC links documented.[127]	$58 M in 1993 and 1994; $65 in 1995.[128] $275 M from 1992-1996; $40 M in 1996.[129] Canceling program would save $65 in 1995, $40 M in 1996, and $200 to 300 M over 5 years.[130]	U.S. Dept. Of Energy; U.S. Nuclear Regulatory Agency.
Nuclear. Advanced liquid metal reactor and other plutonium pyroprocessing	ALMR program killed in 1994, but other plutonium pyroprocessing programs continue at U.S. DOE and Argonne National Laboratory in Idaho and Illinois.[131] PAC links documented.[132]	ALMR up to $3 B.[133] $9 B spent on all breeder reactors.[134] Other plutonium pyroprograms appropriated $25 M in 1996.	U.S. Dept. Of Energy; Argonne National Laboratory.
Nuclear. Advanced Neutron Source (Oak Ridge, TN).	Civilian research reactor using highly-enriched uranium for materials research and medical use; has been under development for more than 10 years.[135]	$17 M in 1994; $21 M in 1995. $9.1 B 40 year total cost estimate, including $2.9 B for construction and $6.2 B for operating.[136]	U.S. Dept. Of Energy.
Nuclear. Atomic Energy Defense Activities: Worker and Community Transition Program.		$133 M in 1995.[137]	
Nuclear. Nuclear Gas Turbine-Modular Helium GT-MHR reactor (San Diego, CA).	Proposed construction of a gas-cooled nuclear reactor for generation of electricity and disposal of plutonium stockpiles.[138] PAC links documented.[139]	$5.3 B in construction; taxpayers would pay 50 percent. Taxpayers have already spent $900 M for gas-cooled reactor research.[140]	

Nuclear. Price-Anderson Act nuclear insurance.	Since 1959, Price Anderson has limited the liability for nuclear accidents; estimate is based on annualized expected cost of the indemnification.[141] In 1988 the limit was raised from $560 million $7 billion.[142]	$2.8 B.[143]	
Nuclear. Savannah River Site Reprocessing Canyons.	Reprocessing nuclear fuel by separating out plutonium and liquid high-level waste; justified as way to stabilize nuclear waste, which can be done by other means, and more than half the cost of cleaning up U.S. DOE nuclear weapons complex is due to reprocessing.[144]	$406 M operating costs in 1996; operating both H and F Canyons will cost at least $3.4 B over 10 years.[145]	U.S. Dept. of Energy.
Nuclear. Temelin Reactor (Czech Republic).	U.S. Export-Import Bank financial guarantees to Westinghouse to finish construction of Temelin nuclear power plant.	$1.4 B to finish construction.[146]	U.S. Export-Import Bank.
Nuclear. Uranium Supply and Enrichment Activities.		$100 M in 1996.[147]	
Nuclear. Uranium Enrichment Enterprise (UEE) and now called U.S. Enrichment Corporation (USEC).	USEC operates enrichment facilities in Paducah KY and Portsmouth OH in order to market nuclear fuel.[148] U.S. GAO estimates privatization could recover $1.7 to $2.2 B, but the taxpayer would still lose $600 M to $2.2 B, and U.S. DOE would still be required to take the USEC's nuclear waste.[149]	UEE lost $10 B.[150] Recovery of costs could save $1.6 B over 5 years.[151] Another estimate of $1.0 B.[152]	U.S. Dept. Of Energy; U.S. Enrichment Corporation. The Energy Policy Act of 1992 shifted UEE from U.S. DOE in preparation for its privatization.[153]
Nuclear. Uranium enrichment: Atomic Vapor Laser Isotope Separator (AVLIS) (Lawrence Livermore National Laboratory, CA).	High-energy laser separation of U-235 from U-238 for fuel production. AVLIS project halted in 1992. In 1994, USEC announced plans to proceed with commerceial development of AVLIS.	$1 B spent on AVLIS by 1992; $2 B estimate for USEC's 1994 AVLIS plan.[154]	

Nuclear. U.S. Bonneville Power Administration (BPA) purchase of WPPSS power.	BPA underestimated construction costs for WPPSS nuclear power plants; agreed to pay costs for 3 plants; only WNP-2 was completed; BPA is also paying debt for WNP-1 and WNP-3; due to this, BPA's priority firm power rate increased 600 percent between 1979 and 1983; up to 25 percent of BPA revenue goes to support WPPSS debt.	Terminating purchasing would save $60 to $70 M per year, or $300 M over 5 years. BPA ended the mothballing of WNP-1 and 3, saving $10 M per year.[155]	U.S. Bonneville Power Administration.
Nuclear fission.	Nuclear fission received more than 50 percent of all federal energy research & development support between 1948 and 1995.[156]	Nuclear energy has received $97 billion in subsidies over the past 40 years in R&D, regulation, construction, enrichment, insurance programs, environmental damage, and state government appropriations.[157] $47 B in 1995.[158]	
Nuclear fusion. Magnetic fusion energy research grants.		$389 M in 1995; included in the Energy Supply, Research & Development Activities budget noted above.[159]	
Nuclear fusion. Research.	On basis of economics, market, and envionmental risk, a 1991 U.S. DOE memo ranked fusion 22nd out of 23 energy technologies.[160]	Total $30 B over next 45 years.[161]	
Nuclear fusion. Research.	U.S. DOE's fusion program focuses on the tokamak reactors (see separate entry), which have cost $10 B in the past 40 years. Commercial fusion is at least 45 years away, ata cost of $1 B per year.[162]	$244 M in 1996.[163] Reducing nuclear fusion research grants could save $1 B over 5 years.[164]	U.S. Dept. of Energy.
Nuclear fusion. Tokamak Physics Experiment (TPX) Reactor (Princeton, NJ).	U.S. DOE has 3 tokamak nuclear fusion reactors, which use outdated 1960s technology, in operation; hopes to have an electricity-generating commercial reactor by year 2040. Princeton reactor is next step in program.[165]	$42 M appropriated in 1995 for TPX design.[166] U.S. DOE estimates $2.2 B for TPX facility, including $694 M for construction and $150 M in operating costs.[167] $5 total cost of TPX/ITER.[168]	U.S. Dept. Of Energy.

Nuclear waste. Waste management.		The U.S. DOE Office of Environmental Management has spent $34 billion on clean-ups since 1989; clean-up could take 75 years and cost $350 billion.[169] Nuclear waste clean-up cost the public $23 billion between 1989 and 1994; $7.5 billion was spent on 1989-1994 Hanford clean-up[170], and just determining wat wastes Hanford has could cost more than $36 billion.[171] The U.S. DOE estimates that cleaning up 50 years worth of operations at nuclear weapons production facilities could cost $1 trillion and take 30 years.[172]	U.S. Dept. Of Energy.
Nuclear waste. Environmental restoration for abandoned mines & nuclear energy.	Direct assistance grants.	$2 B in 1994[173] (includes non-energy mines?)	
Nuclear waste. Nuclear Waste Fund disposal fees.	Below-cost fees to electric utilities to fund storage and disposal of high-level nuclear waste; established in 1983, eroded 45 percent by inflation.[174]	Indexing fees for inflation would save $80 M annually when phased in, and $255 M to $315 M over 5 years.[175] $4 to 8 B eventual funding shortfall.[176]	
Nuclear waste. Waste Isolation Pilot Plant (New Mexico).		U.S. DOE estimates it will cost $11 billion over several decades to prepare nuclear waste for shipment to the WIPP plant, plus $8 billion over 35 years on operations at the plant.[177]	

Nuclear waste. Yucca Mountain High-Level Nuclear Waste Repository (Nevada).	In 1994 construction began on an underground exploratory studies facility.[178] Program should be funded by the Nuclear Waste Fund generated from nuclear power ratepayers fees, which provides $500 million per year but is declining as nuclear plants are shut down.[179]	$380 M in 1994; $525 M in 1995; the $640 M requested for 1996 was reduced to $250 M. The U.S. General Accounting Office estimated a total cost of $30 B to $50 B.[180]	U.S. Dept. Of Energy. 1987 amendment to Nuclear Waste Policy Act.
Nuclear weapons. National Ignition Facility (U.S. DOE Lawrence Livermore National Laboratory, CA).	Proposed research to simulate above-ground nuclear weapons testing, with potential inertial fusion energy applications. Would create 230 jobs.[181]	$61 M in 1996 for construction and engineering.[182] $4.5 B total cost, including $1.1 B for construction and $3.5 billion for operation over 30 years.[183]	U.S. Dept. Of Energy, U.S. Dept. Of Defense.
Nuclear weapons. Nevada Nuclear Weapons Test Site.	"Stand-by" maintenance costs during nuclear weapons testing moratorium.[184]	In 1995, $160 M of the Test Site's $271 M budget was for test site readiness; 1996 funding was $259 M.[185]	
Oil and gas. Accelerated depreciation.	Overlaps with other entries (eg, IDCs and expensing oil and gas exploration and development costs)? Straight-line depreciation gives equal tax deductions each year over the life of the asset; accelerated depreciation alllows lower tax bills earlier on.[186]	$113 M to $4.4 B annually, depending on how the depreciation and tax expenditures are calculated.[187]	
Oil and gas. Alaska Native Corporations petroleum tax subsidies.	Alaska Native corporations receive favorable tax treatment; some have oil and gas income.[188]	$15 M annually.[189]	
Oil & gas. Alternative minimum tax (AMT) relief for oil and gas income.	The AMT was created to ensure that profitable businesses do not avoid taxation because of extensive write-offs; the AMT also subsidizes the oil industry's intangible drilling costs (see IDC entry).[190]	$172 M.[191]	

Oil & gas. Deep Water Drilling Royalty.	The DWDR Act of 1995 reduced or eliminated the usual 12.5 percent federal oil drilling royalty for deep water drilling leases in parts of the Outer Continental Shelf in the Gulf of Mexico; justification is to reduce dependence on foreign oil.[192] PAC links documented.[193]	Fair return would generate $400 M.[194]	
Oil and gas. Deferral of income from controlled foreign corporations.		$180 to $286 M annually.[195]	
Oil and gas. Enhanced oil recovery tax credit.	Began in 1990 as a 15 percent income tax credit for the costs of domestic oil drilling by enhanced oil reovery methods; also allows expensing (immediate write-off) of tertiary injectants used in enhanced oil recovery; expensing allows write-offs faster than machinery actually wears out; combination creates subsidy through a negative tax rate.[196]	$97 M annually.[197] Could cost $500 M over 5 years.[198]	U.S. Internal Revenue Code, Section 43 (enhanced oil recovery) and Section 193 (tertiary injectants).
Oil & gas. Environmental and health costs.	Oil industry receives more subsidy than clean energy technologies; at least nine federal environmental laws have exemptions or allowances for oil and gas operations, including Superfund, Clean Water Act, Clean Air Act, Safe Drinking Water Act, Emergency Planning and Community Right to Know Act, Hazardous Liquid Pipeline Safety Act, and Oil Pollution Act.[199]	Environmental and health subsidies range from $25 to $267 B annually.[200]	
Oil & gas; mining. Expensing oil and gas exploration & development costs.	Allows oil & gas (and mineral) corporations to immediately deduct (rather than depreciate) certain capital costs of exploration and development, regardless of how long those investments are expected to generate further income.[201]	$10 to $275 M annually.[202] $500 M in 1994.[203] $140 M in 1996; up to $275 M in some years.[204] Phase-out of oil & gas and mineral deductions would save $5.9 B over 5 years.[205]	

Oil and gas. Externalities of pollution.	Includes clean-up of storage tanks, spills (oil in groundwater costs $790 M annually[206]), health impacts and expenses ($42 to $182 B annually), reduced crop yields ($2 to $9 B annually[207]), and global warming ($3 to $60 B annually).[208] The U.S. GAO ha reviewed oil industry clean-up.[209]	$25 to $267 B annually; includes $25 to $240 B for water, soil, and air pollution, and $633 M to $27 B for global warming; oil spills cost $2 to $6 B annually.[210]	
Oil and gas. Foreign tax credit.	U.S. corporations are taxed on their worldwide profits but allowed a credit for taxes paid to other governments. One loophole involves establishing overseas subsidiaries to time the repatriation of dividends (since profits are not taxed until they return to the U.S. as dividends); this deferral of income subsidized the oil industry by $180 to $286 M in 1996.[211] Another loophole is to obtain tax credits for non-tax items like royalty payments; this cost taxpayers $3.4 billion in 1996; recent attempts to close this loophole have failed.[212]	$777 M to $3.4 B annually.[213] $5 B in 1992.[214]	
Oil and gas. Intangible oil drilling and development costs (IDC) tax deductions.	Allows immediate deduction of 70 percent of IDCs (which are most of the expenses, including wages, fuel, repairs, hauling, supplies, and site preparation); the other 30 percent is deductible over 5 years; immediate deduction (expensing) allows write-offs to be faster than machinery actually wears out; unlike the percentage depletion allowance, this one benefits large producers. IDCs are also subsidized through the Alternaive Minimum Tax (AMT).[215]	Requiring IDCs to be deducted over time would save $1 B over 5 years.[216]	

Oil and gas. Military protection of oil supplies.	Troops & equipment maintainance ($25 to $63 B), the annualized cost of combat ($300 M to $6.3 B), petroleum reserve maintainance ($201 M), petroleum reserve moving ($5 to $10 M), foregone use of funds ($724 M to $1 B), and research & development ($180 M).[217]	$1 B to $70 B.[218] $27 to $71 B.[219] $56 to $73 B annually to defend the Persian Gulf and Middle East.[220]	U.S. Dept. of Defense.
Oil and gas. Naval Petroleum & Oil Shale Reserve.		Suspending new purchases would save $1.3 B over 5 years.[221]	
Oil and gas. Overseas Private Insurance Corporation.	Corporations are insured against foreign political risk by the U.S. Dept. of State's OPIC. Recently-insured corporations include Texaco and Conoco.[222]		U.S. Dept. Of State's Overseas Private Insurance Corporation.
Oil and gas. Passive loss tax shelter for oil and gas investors.	The 1986 Tax Reform Act, which reduced tax shelters, did not apply to oil and gas investors; this diverts investment from cleaner or more productive activities.[223] This exception expired in 1993, but transition rules mean the subsidy will still cost $60 M in 1996 and $320 M from 1996 to year 2000.[224]	$60 M annually.[225] $665 M over 5 years.[226]	Expired in 1993.
Oil & gas; and non-fuel minerals. Percentage depletion allowance: excess of percentage over cost depletion.	Established in early 1900s; allows independent oil & gas (and non-fuel mineral[227]) corporations to tax-deduct 15 percent of their gross income to reflect the declining value of wells as they are drained; the deduction is more than the actual decline, and may be up to 100 percent of income for certain operators; in combination with other oil subsidies, it may actually exceed value of energy produced; it encourages production in marginal & sensitive fields.[228]	$985 M for 1996.[229] Other estimates: $530 M.[230] $300 M in 1994.[231] $2.4 B savings over 5 years.[232] $4.1 B savings over 5 years.[233]	1926 act, 1969 act, Tax Reduction Act of 1975, 1989 act, 1990 act, Energy Policy Act of 1992.[234]

Oil and gas. Research and development: Petroleum Research & Development Program (U.S. DOE).	Focuses on enhanced recovery, exploration, and refinement of crude oil in order to reduce dependence on foreign oil.[235]	$82 M in 1995; $61 M in 1996. National Institute of Petroleum Energy Research in Oklahoma received $5 M in special fuding in 1996; PAC links documented.[236]	U.S. Dept. Of Energy.
Oil and gas. Research & experimentation.	Favorable tax treatment of oil and gas research and experimentation costs expired in July 1995, but will be phased out from 1996 to year 2000; will cost $114 M in 1996.[237]	$114 M annually.[238]	Phased out in July 1995.
Oil and gas. Strategic Petroleum Reserve.	Production and sale of oil for market planning.[239]	$2.1 B.[240] Suspending new purchases would save $1.1 B over 5 years.[241]	
Oil and gas. Tax breaks.	Defined and estimated by Wahl.[242]	$3.3 to $11 B annually.[243]	
Oil; alternative fuel. Alternative fuel production credit.		$756 M annually.[244] $700 M in 1994.[245]	
Oil shale. Research.	Program killed in 1993-94.[246]	$100 M.[247]	
Oil; timber. Fuel tax exemption for logging trucks.	Trucks owned by the timber industry are exempt from fuel taxes for the 44,000 miles they are driven on National Forests every year.[248]	$10 M annually.[249]	
Public power. Public power energy facilities tax-exempt interest on bonds.	Same as entry titled “Exclusion of interest on state and local government industrial bonds for energy production facilities”?	$1.4 B.[250]	
Public utilities. Public utilities tax exemption.		$283 M.[251]	
Railroads; rail passengers. Amtrak operating subsidies.	Amtrak has cost the federal government $18 billion since 1971, yet its long-term viability is seriously threatened.[252]	$18 billion since 1971.[253] Reducing operating subsidies by 50 percent would save $1.3 B over 5 years.[254]	

Synthetic fuel. Nonconventional fuels production tax credit.	Since 1980, a production tax credit (of $3.00[255] or $5.75[256] per barrel of oil-equivalent) for certain liquid and gaseous fuels produced by "nonconventional" means, including shale or tar sands, synthetic fuels from coal, gas from geopressurized brine, Devonian shale, tight formations, biomass, and methane from coalbeds) placed in service between 1979 and 1993; due to expire in years 2002 and 2007; has not increased production.[257]	Carter synfuel program $88 B; cost $4.5 B over 5 years.[258] The oil industry captures 75 percent of the tax benefits; Texaco reduced its tax bill by $29 million in 1994.[259]	Crude Oil Windfall Profit Tax Act of 1980; Internal Revenue Code Section 29.
Tennessee Valley Authority.	Subsidizes electricity consumption and recreation.[260] TVA is $26 billion in debt, and has invested $14 billion in nonproducing nuclear facilities that are not included in its electricity rates.[261]	$109 M appropriated in 1996.[262]	
Utilities. Electric co-op tax exclusion.		$565 M.[263]	
Utilities. Rural Utilities Service (RUS); formerly Rural Electrification Administration (REA).	Created in 1935 to bring electricity and telephone service to rural areas; provides low-cost loans and grants to subsidize electric and telephone companies primarily serving rural areas.[264] Restructured in 1994; loan rates were increased to 5-7 percent, credit subsidies were reduced, and mission was expanded to include financing water, wastewater, and other facilities.[265]	$1.2 B.[266] Eliminating program would save $110 million in first year and $550 M over 5 years. Only a small percentage of ratepayers' bills are interest payments, so cutting subsidy would have little effect.[267]	USDA Rural Utilities Service.
Utilities. Utility normalization of excess deferred taxes.		$996 M.[268]	
Utilities. Utility rebate tax exemption.		$12 M.[269]	

Waterways. Inland waterways operation and maintenance.	Develops and maintains 11,000-mile federal inland waterway system; users pay fee to fund new construction; taxpayers fund 90 percent of total annual cost.[270] Waterways are more subsidized than highways, aviation, and rail.[271] Waterways are heavily used to transport bulk cargo such as coal, oil, chemicals, grain, and construction products; 20 corporations own 82 percent of the barges on the Gulf-Intercoastal and Mississippi River systems.[272]	$786 M in 1995; $440 M annually.[273] $643 M.[274] Charging inland waterways users the full cost of federal maintencance would save $2.2 B over 5 years.[275] Enforcing federal fees for harbor maintenance would save $200 M over 5 years.[276]	U.S. Army Corps of Engineers Civil Program; Inland Waterway Users Board.
Wind. Wind energy production credit.[277]			

Endnotes

[1] Shapiro, 1994, p. 15, citing U.S. Congressional Budget Office, Feb. 1993, Reducing the Deficit: Spending and Revenue Options.
[2] Shapiro, 1994, p. 15, citing National Performance Review, Sept. 7, 1993, From Red Tape to Results: Creating a Government that Works Better and Costs Less.
[3] Cato Institute data in U.S. Senate, Mar. 7 , 1996, p. 13.
[4] Koplow, 1993, p. 52.
[5] Koplow, 1993, p. 52.
[6] Koplow, 1993, p. 52.
[7] Shapiro, 1994, p. 17.
[8] Shapiro, 1994, p. 17, citing U.S. Congress Joint Committee on Taxation, 1993, Estimates of Federal Tax Expenditures for Fiscal Years 1994-1998.
[9] According to reports by Ketcham and Komanoff ($730 B); Littman; David Morris; MacKenzie et al., 1992 ($400 B); Moffet and Miller, 1993 ($378 to $600 B); State of the Community/Seattle; Vorhees, 1992 ($631 B); and Zepezauer and Naiman, 1996, citing the Media Foundation ($1.4 T).
[10] See also entry for Automobiles: Externailities of Congestion.
[11] Zepezauer and Naiman, 1996, pp. 126-127, citing the Media Foundation, The End of the Automotive Age, www.adbusters.org/~adbusters/main.html.
[12] Zepezauer and Naiman, 1996, pp. 126.
[13] MacKenzie et al, citing U.S. GAO.
[14] Feeding the Auto Habit, p. 1, citing The Many Costs of Driving.
[15] Feeding the Auto Habit, p. 1, citing The Many Costs of Driving.
[16] Zepezauer and Naiman, 1996, pp. 126.
[17] Roth and Carrel, 1995, p. citing The Many Costs of Driving, Transportation Resource Book 1(3), June 1993.
[18] Zepezauer and Naiman, 1996, pp. 126.
[19] Feeding the Auto Habit with Hidden Subsidies, Transportation Resource Book 1(4), Sept. 1993.
[20] Estimates by Heycke; and by Feeding the Auto Habit.
[21] Heycke, Christine, Employer-Based Programs Offer Incentives to Drive Less, Willamette Green Directory, October 1996, p. 17.
[22] Zepezauer and Naiman, p. 126.
[23] Whitt, 1987, p.124.
[24] Cato Institute data in U.S. Senate, Mar. 7 , 1996, p. 13 and 16.
[25] Shapiro, 1994, p. 15, citing National Performance Review Sept. 7, 1993.
[26] Roth, April 1995.
[27] Roth, April 1995.
[28] Sandra Tokarski, Proposed NAFTA Ssuperhighway Gains Steam, Auto-Free Times, Summer 1996, p. 20-21.
[29] Auto-Free Times, Winter 1996-97, p. 9, citing report by Citizens for Appropriate Rural Roads, Box 54, Stanford IN 47463; see also xxx Road to Ruin.
[30] Stevens, John H., PACCAR Gets Ready to Hire, *Seattle Times*, Apr. 29, 1992, p. D8.
[31] Roth, April 1995, citing Hart and Spivak, 1993.
[32] Whitt, 1987, p.124.
[33] Koplow, 1993, p. 16.

[34] Roth, April 1995, citing Donald C. Shoup, Cashing Out Employer-Paid Parking, Washington, DC: U.S. DOT, Federal Transit Administration, Office of Technical Assistance and Safety, 1992.
[35] Feeding the Auto Habit, p. 1.
[36] Mike Wyatt, How We Subsidize the Automobile, New Transportation Alliance, May 5, 1996, citing David Briscoe, Drivers Subsidized, Wisconsin State Journal, June 10, 1992; and U.S. DOT Urban Mass Transportation Administration, Transit and Parking Public Policy, March 1989.
[37] Roth, April 1995, citing Transport 2021: The Cost of Transporting People in the British Columbia Lower Mainland. Vancouver, BC: Greater Vancouver Regional District and the Province of BC, Tech. Rep. 11, 1993.
[38] Feeding the Auto Habit, p. 1.
[39] U.S. General Accounting Office. Jun 27, 1996.
[40] Koplow, 1993, p. 31.
[41] U.S. Dept. of Energy, October 1979, p. 10.
[42] Koplow, 1993, p. 14.
[43] Koplow, 1993, p. 8.
[44] Koplow, 1993, p. 10.
[45] Koplow, 1993, p. 25.
[46] 1995 Green Scissors Report, which cited a 1991 U.S. General Accoounting Office report on program waste and mismanagement, including U.S. Dept. of Energy payment requirement waivers.
[47] Green Scissors '96.
[48] 1995 Green Scissors Report; and Green Scissors '96.
[49] 1995 Green Scissors Report; and Green Scissors '96.
[50] Shapiro, 1994, p. 13, citing U.S. Congressional Budget Office, Feb. 1993.
[51] Green Scissors '96.
[52] 1995 Green Scissors Report.
[53] 1995 Green Scissors Report; and Green Scissors '96.
[54] Donahue, 1994, p. 6, citing U.S. Office of Management and Budget, 1993, Catalogue of Federal Domestic Assistance.
[55] Moore and Stansel, May 1995, citing Budget of the U.S. Government Fiscal Year 1996 appendix.
[56] Koplow, 1993, p. 12.
[57] Koplow, 1993, p. 12.
[58] Donahue, 1994, p. 6, citing U.S. Office of Management and Budget, 1993, Catalogue of Federal Domestic Assistance.
[59] Washington Free Press, Feb-Mar. 1995, p. 8.
[60] Draffan, Union Carbide Corporation research notes.
[61] Moore and Stansel, May 1995, citing Budget of the U.S. Government Fiscal Year 1996 appendix.
[62] Cato Institute data in U.S. Sentae, Mar. 7, 1996, p. 13.
[63] Shapiro, 1994, p. 13, citing Heritage Foundation, Real Deficit Reduction Demands Real Spending Cuts, Backgrounder No. 913, Aug. 28, 1992.
[64] Wahl, Aug. 1996, p. 5 and 8.
[65] Donahue, 1994, p. 3, citing U.S. Congress Joint Committee on Taxation, 1993, Estimates of Federal Tax Expenditures for Fiscal Years 1994-1998.

[66] Cato Institute data in U.S. Senate, Mar. 7 , 1996, p. 13.
[67] Koplow, 1993, p. 10.
[68] Wahl, Aug. 1996, p. 8.
[69] Wahl, Aug. 1996, p. 8.
[70] Zepezauer and Naiman, 1996, p. 158.
[71] Zepezauer and Naiman, 1996, p. 158.
[72] Koplow, 1993, p. 10.
[73] Koplow, 1993, p. 14.
[74] Koplow, 1993, p. 14.
[75] U.S. General Accounting Office, Aug 1, 1996.
[76] Koplow, 1993, p. 10.
[77] Koplow, 1993, p. 52.
[78] Koplow, 1993, p. 52.
[79] Koplow, 1993, p. 52.
[80] Koplow, 1993, p. 52.
[81] Moore and Stansel, May 1995, citing Budget of the U.S. Government Fiscal Year 1996 appendix.
[82] Donahue, 1994, p. 3, citing U.S. Congress Joint Committee on Taxation, 1993, Estimates of Federal Tax Expenditures for Fiscal Years 1994-1998.
[83] Koplow, 1993, p. 51.
[84] Koplow, 1993, p. 31.
[85] Koplow, 1993, p. 51.
[86] Koplow, 1993, p. 51.
[87] Koplow, 1993, p. 10.
[88] Koplow, 1993, p. 51.
[89] Koplow, 1993, p. 51.
[90] Friends of the Earth et al, February 1996.
[91] Green Scissors '96.
[92] Friends of the Earth et al, February 1996.
[93] Friends of the Earth et al, February 1996. Friends of the Earth et al, February 1996.
[94] Green Scissors '96.
[95] Green Scissors '96.
[96] Ryan, 1995, p. 35.
[97] Friends of the Earth et al, February 1996, citing Ryan, April 1995..
[98] Sara Patton of the Northwest Conservation Act Coalition, *Seattle Weekly*, July 20, 1994, p. 4.
[99] Friends of the Earth et al, February 1996, citing Columbia Research Corporation, May 1994 report.
[100] Green Scissors '96, citing U.S. House Committee on Natural Resources, August 1994, Taking From the Taxpayer.
[101] Friends of the Earth et al, February 1996.

[102] Friends of the Earth et al, February 1996.
[103] 1995 Green Scissors Report; the 5 PMAs are the Alaska, Southeastern, Southwestern, Western Area, and Bonneville Power Administrations.
[104] Koplow, 1993, p. 51.
[105] Koplow, 1993, p. 10.
[106] The $390 million figure is the combined 1995 budget for the five Power Administrations, from Moore and Stansel, May 1995, citing Budget of the U.S. Government Fiscal Year 1996 appendix.
[107] Cato Institute data in U.S. Senate, Mar. 7 , 1996, p. 13.
[108] 1995 Green Scissors Report, citing the U.S. House Committee on Natural Resources's Bonneville Power Administration Task Force's May 1994 recommendations.
[109] Shapiro, 1994, p. 14, citing Friends of the Earth, Mar. 23, 1993.
[110] Koplow, 1993, p. 18.
[111] Koplow, 1993, p. 18.
[112] Koplow, 1993, p. 12.
[113] Koplow, 1993, p. 10.
[114] Donahue, 1994, p. 36, citing U.S. Office of Management and Budget, 1993, Catalogue of Federal Domestic Assistance.
[115] Koplow, 1993, p. 31.
[116] Koplow, 1993, p. 14.
[117] Koplow, 1993, p. 10.
[118] Koplow, 1993, p. 78.
[119] Koplow, 1993, p. 16.
[120] Koplow, 1993, p. 78.
[121] Koplow, 1993, p. 4.
[122] Multinational Monitor, Jan/Feb 1993, p. 5.
[123] Los Angeles Times, Nov. 27, 1994.
[124] Shapiro, 1994, p. 14.
[125] 1995 Green Scissors Report.
[126] 1995 Green Scissors Report; and Green Scissors '96.
[127] U.S. Public Interest Research Group, April 1996.
[128] 1995 Green Scissors Report.
[129] Green Scissors '96.
[130] Shapiro, 1994, p. 14, citing Friends of the Earth, March 23, 1994, The Green Solution to Red Ink; 1995 Green Scissors Report; and Green Scissors '96.
[131] 1995 Green Scissors Report; and Green Scissors '96.
[132] U.S. Public Interest Research Group, April 1996.
[133] 1995 Green Scissors Report.
[134] Green Scissors '96.
[135] 1995 Green Scissors Report.

[136] 1995 Green Scissors Report.
[137] Moore and Stansel, May 1995, citing Budget of the U.S. Government Fiscal Year 1996 appendix.
[138] 1995 Green Scissors Report.
[139] U.S. Public Interest Research Group, April 1996.
[140] 1995 Green Scissors Report.
[141] Koplow, 1993, p. 13.
[142] Zepezauer
[143] Koplow, 1993, p. 10.
[144] Green Scissors '96.
[145] Green Scissors '96.
[146] 1995 Green Scissors Report.
[147] Moore and Stansel, May 1995, citing Budget of the U.S. Government Fiscal Year 1996 appendix.
[148] Green Scissors '96.
[149] Green Scissors '96.
[150] Green Scissors '96.
[151] Shapiro, 1994, p. 14, citing Friends of the Earth, Mar. 23, 1993.
[152] Koplow, 1993, p. 10.
[153] Koplow, 1993, p. 31.
[154] 1995 Green Scissors Report; 1995 Green Scissors Report (AVLIS entry), citing 1990 National Taxpayers Union estimate.
[155] Friends of the Earth et al, Feb. 1996, citing Northwest Conservation Act Coalition of U.S. BPA, March 1995 study.
[156] Green Scissors '96.
[157] Multinational Monitor, Jan-Feb. 1993, p. 5.
[158] Green Scissors '96.
[159] Moore and Stansel, May 1995, citing Budget of the U.S. Government Fiscal Year 1996 appendix.
[160] 1995 Green Scissors Report.
[161] 1995 Green Scissors Report, citing U.S. Congressional Research Service.
[162] Green Scissors '96.
[163] Green Scissors '96.
[164] Shapiro, 1994, p. 14, citing Friends of the Earth, Mar. 23, 1993.
[165] 1995 Green Scissors Report.
[166] 1995 Green Scissors Report.
[167] 1995 Green Scissors Report, citing U.S. Dept. of Energy estimate.
[168] Green Scissors '96, citing U.S. President's Committee of Advisors on Science and Technology. The ITER (International Thermonuclear Experimental Reactor) program is a proposed partnership with Russia, Europe, and Japan which is estimated would cost $10 to $13 billion over 8 to 10 years.
[169] U.S. General Accounting Office. July 9, 1996.
[170] Los Angeles Times, Nov. 27, 1994.

[171] U.S. General Accounting Office. Jan 26, 1996.
[172] U.S. General Accounting Office. May 8, 1995.
[173] Donahue, 1994, p. 6, citing U.S. Office of Management and Budget, 1993, Catalogue of Federal Domestic Assistance.
[174] Shapiro, 1994, p. 14; and Green Scissors '96.
[175] Shapiro, 1994, p. 14; 1995 Green Scissors Report; and Green Scissors '96, citing U.S. Congressional Budget Office, Feb. 1993.
[176] Green Scissors '96, citing U.S. Dept. of Energy and Nevada State review.
[177] U.S. General Accounting Office. Jul 16, 1996.
[178] 1995 Green Scissors Report.
[179] 1995 Green Scissors Report.
[180] 1995 Green Scissors Report; and Green Scissors '96.
[181] 1995 Green Scissors Report; and Green Scissors '96.
[182] Green Scissors '96.
[183] Green Scissors '96.
[184] 1995 Green Scissors Report; and Green Scissors '96.
[185] Green Scissors '96.
[186] Wahl, Aug. 1996, p. 7.
[187] Wahl, Aug. 1996, p. 5.
[188] Wahl, Aug. 1996, p. 8.
[189] Wahl, Aug. 1996, p. 8.
[190] Erlandson et al, 1995.
[191] Koplow, 1993, p. 25.
[192] Green Scissors '96.
[193] U.S. Public Interest Research Group, April 1996.
[194] Green Scissors '96, citing U.S. Congressional Budget Office.
[195] Wahl, Aug. 1996, p. 5.
[196] Erlandson et al, 1995; and Wahl, Aug. 1996, p. 6.
[197] Wahl, Aug. 1996, p. 5.
[198] Erlandson et al, 1995, citing U.S. Congress, Joint Committee on Taxation, 1995, Estimates of Federal Tax Expenditures for Fiscal Years 1996-2000. JCS-21-95, Sept. 1, 1995; and Wahl, Aug. 1996, p. 6.
[199] Erlandson et al, 1995; Green Scissors '96; Wahl, Aug. 1996, p. 17, note 57.
[200] Wahl, Aug. 1996, p. 1, 4, 8.
[201] Wahl, Aug. 1996, p. 6.
[202] Wahl, Aug. 1996, p. 5.
[203] Donahue, 1994, p. 3, citing U.S. Congress Joint Committee on Taxation, 1993, Estimates of Federal Tax Expenditures for Fiscal Years 1994-1998.
[204] Wahl, Aug. 1996, p. 6.
[205] Shapiro, 1994, p. 17, citing U.S. Congressional Budget Office, Feb. 1993.

[206] Wahl, Aug. 1996, p. 12, citing ABB Environmental Services, The OPA Liner Study, Jan. 24, 1993, p. 57.
[207] Wahl, Aug. 1996, p. 13, citing EPA data.
[208] Wahl, Aug. 1996, pp. 10-14, citing various sources.
[209] U.S. Gnereal Accounting Office, Offshore Oil and Gas Resources, May 11, 1994.
[210] Wahl, Aug. 1996, p. 12, citing DeLucchi.
[211] Wahl, Aug. 1996, p. 6.
[212] Wahl, Aug. 1996, p. 6.
[213] Wahl, Aug. 1996, p. 5.
[214] Wahl, Aug. 1996, p. 6.
[215] Erlandson et al, 1995.
[216] Dirty Little Secrets, U.S. Congress, Joint Committee on Taxation, 1995, Estimates of Federal Tax Expenditures for Fiscal Years 1996-2000. JCS-21-95, Sept. 1, 1995.
[217] Wahl, Aug. 1996, pp. 8-10.
[218] Koplow, 1993, p. 13.
[219] Wahl, Aug. 1996, p. 1.
[220] Wahl, Aug. 1996, p. 9, citing U.S. Congressional Research Service, The External Costs of Oil Used in Transportation, June 17, 1992.
[221] Shapiro, 1994, p. 14, citing Budget of the U.S. Government, Fiscal Year 1994.
[222] Wahl, Aug. 1996, p. 8.
[223] Erlandson et al, 1995.
[224] Wahl, Aug. 1996, p. 7.
[225] Wahl, Aug. 1996, p. 5.
[226] Erlandson et al, 1995, citing U.S. Office of Management and Budget, Analytical Perspectives: Budget of the United States Government. Fiscal Year 1996.
[227] Green Scissors '96.
[228] Erlandson et al, 1995; and Wahl, Aug. 1996, p. 5.
[229] Wahl, Aug. 1996, p. 5.
[230] Koplow, 1993, p. 10.
[231] Donahue, 1994, p. 3, citing U.S. Congress Joint Committee on Taxation, 1993, Estimates of Federal Tax Expenditures for Fiscal Years 1994-1998.
[232] Erlandson et al, 1995, citing U.S. Congress, Joint Committee on Taxation, 1995, Estimates of Federal Tax Expenditures for Fiscal Years 1996-2000. JCS-21-95, Sept. 1, 1995.
[233] Shapiro, 1994, p. 17, citing U.S. Congressional Budget Office, Feb. 1993.
[234] Wahl, Aug. 1996, p. 5.
[235] Green Scissors '96.
[236] U.S. Public Interest Research Group, April 1996.
[237] Wahl, Aug. 1996, p. 7.
[238] Wahl, Aug. 1996, p. 5.
[239] Koplow, 1993, p. 13-14.

[240] Koplow, 1993, p. 10.
[241] Shapiro, 1994, p. 14, citing U.S. Congressional Budget Office, Feb. 1993.
[242] Wahl, Aug, 1996, pp. 5-8.
[243] Wahl, Aug. 1996, p. 5.
[244] Wahl, Aug. 1996, p. 5.
[245] Donahue, 1994, p. 3, citing U.S. Congress Joint Committee on Taxation, 1993, Estimates of Federal Tax Expenditures for Fiscal Years 1994-1998.
[246] 1995 Green Scissors Report.
[247] 1995 Green Scissors Report.
[248] Auto-Free Times, Winter 1996-97, p. 10, citing Sierra Club and CALPIRG, July 25, 1996, Christmas in July: Gifts to the Timber Industry.
[249] Auto-Free Times, Winter 1996-97, p. 10, citing Sierra Club and CALPIRG, July 25, 1996, Christmas in July: Gifts to the Timber Industry.
[250] Koplow, 1993, p. 10.
[251] Koplow, 1993, p. 12.
[252] U.S. General Accounting Office, Jul 24, 1996.
[253] U.S. General Accounting Office, Jul 24, 1996.
[254] Shapiro, 1994, p. 15, citing Heritage Foundation, Aug. 28, 1992.
[255] Wahl, Aug. 1996, p. 6.
[256] Erlandson et al, 1995.
[257] Erlandson et al, 1995, citing U.S. Congress, Joint Committee on Taxation, 1995, Estimates of Federal Tax Expenditures for Fiscal Years 1996-2000. JCS-21-95, Sept. 1, 1995. See also Wahl, Aug. 1996, p. 6.
[258] Erlandson et al, 1995, citing U.S. Congress, Joint Committee on Taxation, 1995, Estimates of Federal Tax Expenditures for Fiscal Years 1996-2000. JCS-21-95, Sept. 1, 1995.
[259] Wahl, Aug. 1996, p. 6.
[260] Shapiro, 1994, p. 13.
[261] U.S. General Accounting Office. Aug 17, 1995.
[262] Cato Institute data in U.S. Senate, Mar. 7 , 1996, p. 13.
[263] Koplow, 1993, p. 10.
[264] 1995 Green Scissors Report; Koplow, 1993, p. 12; Shapiro, 1994, p. 13.
[265] 1995 Green Scissors Report; and Green Scissors ‘96.
[266] Koplow, 1993, p. 10.
[267] 1995 Green Scissors Report; and Green Scissors ‘96.
[268] Koplow, 1993, p. 10.
[269] Koplow, 1993, p. 25.
[270] 1995 Green Scissors Report.
[271] 1995 Green Scissors Report, citing U.S. Congressional Budget Office.
[272] Koplow, 1993, p. 12.
[273] 1995 Green Scissors Report.

[274] Koplow, 1993, p. 10.
[275] Shapiro, 1994, p. 15, citing U.S. Congressional Budget Office, Feb. 1993.
[276] Shapiro, 1994, p. 15, citing Friends of the Earth, Mar. 23, 1993.
[277] 1995 Green Scissors Report; and Koplow, 1993, p. 31.