95th Congress }

SENATE

REPORT No. 95-529

# ENERGY PRODUCTION AND CONSERVATION TAX INCENTIVE ACT

### REPORT

OF THE

# COMMITTEE ON FINANCE UNITED STATES SENATE

ON

H.R. 5263

together with

# ADDITIONAL, SUPPLEMENTAL AND DISSENTING VIEWS



OCTOBER 21, 1977.—Ordered to be printed

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95TH CONGRESS
1st Session

SENATE

**REPORT** No. 95-529

# ENERGY PRODUCTION AND CONSERVATION TAX INCENTIVE ACT

OCTOBER 21, 1977.—Ordered to be printed

Mr. Long, from the Committee on Finance, submitted the following

## REPORT

together with

# ADDITIONAL, SUPPLEMENTAL, AND DISSENTING VIEWS

[To accompany H.R. 5263]

The Committee on Finance, to which was referred the bill (H.R. 5263) to suspend until the close of June 30, 1980, the duty on certain bicycle parts, having considered same, reports favorably with an amendment and with an amendment to the title and recommends that the bill as amended do pass.

House bill.—H.R. 5263 as it passed the House would continue until June 30, 1980, the existing suspension of duties on certain bicycle parts.

Committee bill.—The substance of the House bill has been approved by the Senate as a provision of H.R. 2982. The committee amendment strikes all after the enacting clause, and inserts in lieu thereof the committee's decisions with respect to energy production and conservation tax incentives. The amendment is shown in italic in the bill as reported.

#### I. OVERVIEW

## Need for an energy program

The Nation's excessive reliance on oil imports and the inability to satisfy domestic natural gas demand with domestic supply pose a serious threat to the U.S. economy and national security. Presently, the United States is importing nearly half its oil, and last winter tens of thousands of workers were laid off their jobs because their employers could not obtain natural gas. Clearly, the country needs immediate action to reduce demand for imported oil and to increase domestic

supply of oil and gas.

This bill uses tax incentives in an effort to reduce demand for energy, to induce conversion from oil and gas to more abundant domestic energy sources, and to increase U.S. production of a broad range of energy sources. The committee believes this approach will be more effective than an approach which relies largely on tax increases to reduce demand for energy. Also, unlike the House bill (title II of H.R. 8444), which emphasized reducing consumption, the committee's bill balances incentives for conservation and incentives for increased energy production. The cost of these tax incentives will be very small in relation to the economic and strategic costs of failing to take decisive action to deal with the energy import problem.

It is estimated that these incentives will reduce oil imports in 1985

by about 2 million barrels per day.

# Summary of major tax provisions

Insulation credit.—The committee bill includes a tax credit of 20 percent of the initial \$2,000 of expenditures on home insulation and other residential energy conserving components (for a maximum credit of \$400). This credit may exceed tax liability (that is, it is a refundable credit).

Renewable energy source equipment credit.—Homeowners would also be eligible for a credit for renewable energy source equipment, which includes solar, wind and geothermal energy systems. The credit would be 30 percent of the first \$2,000 of expenditures and 20 percent of the next \$8,000 (for a maximum credit of \$2,200). This credit would also be refundable.

Business energy investment credit.—The committee bill contains a business energy investment credit which is a considerably more effective incentive than the comparable credit in the House bill. This new credit would be available in addition to the regular 10-percent investment tax credit. The rate of the new credit would be 40 percent for alternative energy property, which includes geothermal, solar, wind, hydroelectric, nuclear, coal, ocean thermal, tidal and biomass energy property as well as certain equipment related to the business use of energy sources other than oil and gas. For utilities, the credit would be available only to the extent that existing oil- or gas-fired power plants are replaced or phased down.

The rate of the additional investment credit would be 10 percent for property used in the cogeneration of electricity and other useful forms of energy, certain kinds of property used by businesses to conserve energy by modifying existing buildings or processes (called specially defined energy property), recyclingg equipment, equipment used to produce geopressurized methane gas, vehicles used for vanpooling, and energy saving devices for cars, trucks and buses used by businesses.

The 40-percent business energy investment credit and the 10-percent credit for specially defined energy property would be refundable and available to tax-exempt charitable organizations and State and local

governments.

Additional incentives.—The committee bill contains language which is intended to give the conferees flexibility, with respect to any new taxes which may be in the bill agreed to by the conference, to use a portion of the revenues raised by such taxes to provide tax and other economic incentives for increased energy production, conservation and conversion to alternative sources of energy and to mitigate adverse consequences, such as inequities, resulting from the energy situation.

Energy trust fund.—The committee bill also provides that a portion of any funds which may be raised by new taxes in the bill be used for an energy trust fund, which would finance outlays for energy production, energy conservation and energy-efficient forms of

transportation.

### Other provisions

Tax provisions

Other energy-related tax provisions in the committee's bill include

the following changes:

Extension through September 30, 1985, of the existing 4-cent-pergallon tax on gasoline and other motor fuels, which otherwise is scheduled to decline to 1½ cents per gallon after September 30, 1979.

---Removal of the 2-cents-per-gallon refund or credit for gasoline and other fuels for motorboat and other nonbusiness, off-highway

use

-Exemption from the 4-cent gasoline tax for gasoline-alcohol blends (gasahol) if such blends contain at least 10 percent ethanol and/or methanol and if the alcohol is made from agricultural or forestry products; and a reduction in the tax rate to 3 cents per gallon for gasahol containing alcohol made from other products (such as coal).

A tax credit for intercity bus companies, which would be used to reduce rates and improve or expand bus terminal facilities and

to purchase or improve buses and bus equipment.

-Repeal of the 10-percent excise tax on buses and the 8-percent

excise tax on bus parts.

—Exemption of privately-owned intercity, local and school buses from excise taxes on fuels, tires, tubes and tread rubber, and lubricating oil.

--A \$300 tax credit for the purchase of electric cars for personal

use.

-Exemption from income tax of employees for energy-efficient transportation provided by employers.

Exemption of rerefined lubricating oil from the excise tax on new

oil.

-Extension of the existing 10-percent investment tax credit to business insulation.

-An increase in the rate of percentage depletion from 5 percent to

10 percent for peat used directly or indirectly for fuel.

—An allowance for percentage depletion and for expensing of intangible drilling costs for geothermal energy under rules similar to existing provisions for oil and gas.

-Provision of 10-percent depletion and expensing of intangible drilling costs and geological and geophysical costs for geopres-

surized methane gas.

—A \$3 per barrel tax credit for production of shale oil, and a 50-cent per mcf credit for production of geopressurized methane gas and gas from other nonconventional sources.

-Permanent exemption from the minimum tax for intangible drilling costs to the extent of oil and natural gas production income.

—Tax exemption for industrial development bonds used for bioconversion facilities and for coal liquefaction and gasification facilities.

### Nontax provisions

In addition, the committee bill includes the following nontax provisions relating to reports by the President and the President's authority with respect to oil imports:

—An annual report to the Congress by the President on the energy

saving and revenue effects of the bill.

—Limitation of the President's power to impose tariffs, license fees, or quotas on crude oil imports to wartime or actual hostilities and limitation of his authority to adjust imports of refined petroleum products to adjustments necessary for national security.

#### II. REASONS FOR THE BILL

The United States is faced with an extremely serious energy problem. Consumption of oil is rising rapidly while domestic production is declining. The resultant dependence on oil imports poses a serious threat to our economic wellbeing, our national security and our ability to conduct an independent foreign policy. For natural gas, where large quantities of imports are not available, the result of rising demand and declining domestic production has been severe gas shortages, which last winter caused widespread layoffs of workers in businesses dependent on natural gas. Clearly, the United States must curtail the growth in demand for imported oil, encourage conservation of oil and gas, increase domestic production of energy, and accelerate the shift to more abundant domestic sources of energy. This bill is designed to move toward these goals by providing a variety of tax incentives.

The Finance Committee's bill differs significantly from the House-passed energy tax provisions (title II of H.R. 8444). The House bill relies heavily on energy-related tax increases designed to encourage conservation by raising the price of oil and gas to consumers and by increasing the price of fuel inefficient automobiles, and relies relatively little on positive tax incentives. The committee bill takes a different approach and attempts to induce consumers of oil and gas to conserve energy and convert to alternative energy sources through the appropriate tax incentives. The tax provisions of the House bill also place relatively little emphasis on increased domestic production of energy. The committee believes that conservation, by itself, cannot do the full job of meeting the nation's energy needs; therefore, the committee's bill provides major tax incentives for the production of such new sources of energy as geopressurized methane gas, oil shale, geothermal resources and bioconversion.

# Energy consumption and production trends

Table 1 shows recent trends in U.S. energy consumption and production. Energy consumption grew steadily until 1974, declined in 1974 and 1975, and grew rapidly again in 1976. Domestic energy production grew until 1972, although at a slower rate than demand, and has been declining since then. In 1950 domestic energy production exceeded consumption, but by 1976 it was only about 80 percent of consumption.

<sup>&</sup>lt;sup>1</sup> Energy is measured in quadrillions of British thermal units, or Btu's. A Btu is the amount of energy needed to raise the temperature of one pound of water by one degree Fahrenheit. A 42-gallon barrel of crude oil contains 5.8 million Btu's. Natural gas contains about one million Btu's per thousand cubic feet (mcf). One million barrels of oil per day equ'ls about two quadrillion Btu's. or quads, per year; and one trillion cubic feet of natural gas is about one quad per year.

Table 1.—U.S. energy consumption and production

[Quadrillion Btu's]

Year	Consumption	Domestic production	Domestic production as percent of consumption
1940	23. 91	<b>25</b> . 09	104. 9
1950	00.00	34. 35	101. 1
1960		41. 55	93. 2
1965	<b>#0.04</b>	49. 07	92. 0
1967		<b>54</b> . 83	94. 1
1968		<b>56. 58</b>	91. 6
1969		59. 41	91. 4
1970		62. 48	93. 1
1971	40.50	61. 67	89. 8
1972		62. 94	87. 5
1973		62. 37	83. 7
1974	<b>TO</b> 00	61. 14	84. 2
1975		60. 13	85. <b>2</b>
1976		<b>59</b> . 83	80. 6
			. 12

Sources: Monthly Energy Review (1972-76) and Statistical Abstract of the United States 19/6 (1940-71).

The United States must reverse this trend towards greater dependence on energy imports. This will require a combination of curtailing the growth of energy demand through conservation and increasing

the domestic production of energy.

The possibilities for energy conservation can be seen by comparing U.S. energy consumption per capita with that of other countries with high standards of living. This comparison is made in table 2, which shows that U.S. energy consumption per capita is twice that of Germany and Sweden and more than three times that of Switzerland. In all three of these countries, the average standard of living is not

markedly different from that in the United States.

About one-half of the difference in per capita energy consumption between the United States and Europe occurs in the transportation sector. European automobiles get much higher gas mileage than U.S. autos and are used less. About one-quarter of the difference is due to the greater energy consumption in homes, even after adjustments for differences in climate. Residences in Sweden, Germany and Switzerland are better insulated than those in the United States; air conditioning is used less in these countries; the United States contains larger homes and a larger proportion of less energy-efficient single-family homes; and U.S. homeowners heat their homes to higher temperatures than do European homeowners. European industry also is more energy-efficient than U.S. industry.

These data show that significant energy conservation is possible without a major change in living standards if people are willing to

Table 2—Energy consumption per capita in various countries, 1974

Country	Consumption of energy—coal equivalent (million metric tons)	Consumption of energy per capita (kilograms of coal equivalent)
United States	2, 433. 5	11, 485
Germany	353.0	<b>5, 68</b> 9
United Kingdon	306. 5	5, 464
France	227. 6	4, 330
Italy		3, 227
Japan.	421.0	3, 839
Sweden	47. 4	<b>5</b> , 804
Switzerland	23. 3	<b>3, 6</b> 08
World total	7, 953. 0	2, 100

Source: Statistical Abstract of the United States 1976.

concentrate on saving energy. The committee's bill contains tax in-

centives designed to encourage such behavior.

Conservation alone, however, is not sufficient to solve our energy problem. The United States contains substantial energy resources which businesses have not found profitable to develop at past and current energy prices. These include oil from shale, geopressurized methane gas, geothermal energy, energy from bioconversion, and other energy sources. These energy sources are not now largely exploited and will be expensive to develop. Yet some of these sources may be the key to the long-term future of the American economy, and it is essential that the United States move quickly to develop as many of them as feasible.

# Oil supply and demand

Because the United States and many of its allies are so heavily dependent on oil imports from only a few countries, the need to restrain demand and increase supply is especially serious for oil. Table 3 shows the U.S. supply and demand for petroleum in the past two decades. Since 1955, demand has grown from 8.49 million barrels per day (mbd) to 17.44 mbd. U.S. production of petroleum did rise between 1955 and 1970, but at a slower rate than demand; correquently, there was a gradual rise in imports. Since 1970, however, U.S. oil production has declined, and the growth in oil imports has accelerated rapidly. In 1976, oil imports were 7.3 mbd—42 percent of consumption; and in the first half of 1977, oil imports accounted for almost half of domestic consumption. This dependence on imported oil is an obvious threat to national security.

The committee bill contains several incentives to encourage oil conservation and conversion from oil to other energy sources. Also, it provides significant incentives for production of expensive, unconventional energy sources which are not now being used in the United

Table 3.—U.S. oil demand, supply and imports, 1955-76
[In millions of barrels per day]

Year	U.S. demand for petroleum	U.S. pro- duction of crude oil	U.S. pro- duction of natural gas liquids	U.S oil
1955	8.49	6. 81	. 77	1. 25
1956	0.00	7. 15	. 80	1. 20 1. 44
		7. 17	. 81	1. 57
1957		6. 71	. 81	
1958				1. 70
1959		7.05	. 88	1. 78
1960		7. 04	. 93	1. 82
1961		7. 18	. 99	1. 92
1962		<b>7</b> . <b>3</b> 3	1. 02	2. 08
1963		7. 54	1. 10	2. 12
1964	11. 03	7. 61	1. 16	2. 26
1965	11. 52	<b>7.</b> 80	1. 21	2. 47
1966	12. 10	8. 30	1. <b>2</b> 8	2. 57
1967	12. 57	8. 81	1.41	2. 54
1968	13. 40	9. 10	1. 50	2. 84
1969	14. 15	9. 24	1. 59	3. 17
1970	14.71	9. 64	1. 66	3. 42
1971	15. 23	9. 46	1. 69	3. 93
1972	16. 37	9. 44	1. 74	4.74
1973	17. 31	9. 21	1. 74	6. 26
1974	16. 65	8. <b>77</b>	1. 69	6. 11
	16. 32	8. 38	1. 63	6. 06
1975				
1976	17. 44	8. 12	1. 60	7. 30

Source: Independent Petroleum Association of America (1955-71) and Monthly Energy Review (1972-76).

States. Together these tax incentive provisions will reduce oil imports by about 2 million barrels per day by 1985.

## Natural gas supply and demand

It is also essential that the demand for natural gas be reduced and U.S. gas production be increased. Production of natural gas in the United States peaked in 1972 at 22.6 trillion cubic feet and has declined at an alarming rate since then, amounting to 19.9 trillion cubic feet in 1976. Most of this decline has been reflected in reduced sales to interstate pipelines. The result has been widespread layoffs in industries dependent on natural gas and the inability of homeowners in many areas to obtain natural gas hookups.

The committee bill contains significant tax incentives for conservation of natural gas and conversion from gas to other sources of energy. In addition, the bill creates substantial tax incentives to develop more expensive sources of gas, such as geopressurized methane and gas from tight rock formations (such as from Devonian shale and coal seam methane deposits).

#### III. SUMMARY OF THE BILL

### A. Residential Energy Credits

### 1. Residential insulation and energy conservation credit

The committee bill provides a refundable credit of 20 percent on the first \$2,000 of cumulative expenditures on home insulation and other energy conserving components for a maximum credit of \$400. The credit is to be available for installations made from April 20, 1977,

through December 31, 1985.

Insulation means materials that will reduce the heat loss or heat gain of a residence. Attic, floor and wall insulation made of fiberglass, rock wool, cellulose or styrofoam are examples of insulating materials. Energy conserving components include a replacement furnace or boiler providing more efficient energy utilization, a replacement burner for a furnace which provides increased combustion efficiency, devices to modify flue openings, electrical or mechanical ignition systems that replace a gas pilot light, exterior storm or thermal doors or windows, any automatic energy-saving setback thermostat, any heat pump replacing an electrical resistance heating system, exterior caulking or weatherstripping of doors or windows, meters which display the cost of energy usage, and fluorescent replacement lighting systems.

The expenditures must be made for a principal residence that was in existence on April 20, 1977. Vacation homes and other residences do not qualify for the credit, nor do residences that were constructed after April 20, 1977, or were substantially completed after that date. If a taxpayer moves to another principal residence after taking the credit on a previous principal residence, qualifying property would be eligible for another \$400 credit for the new residence before January 1,

**1986.** 

Owners and renters will be eligible for the credit. Cooperatives and condominium housing owners are each eligible for the credit up to the \$400 maximum on their proportionate shares of the common qualifying expenditures. Joint occupants of a principal residence must allocate the credit.

# 2. Residential renewable energy source equipment credit

A refundable credit up to \$2,200 is to be available on the first \$10,000 of expenditures on solar, wind and geothermal energy equipment. The credit is 30 percent of the first \$2,000 spent and 20 percent of the next \$8,000 spent for installations of this equipment from April 20, 1977,

through December 31, 1985.

Eligible equipment covers equipment that uses solar or geothermal energy to heat or cool, or to provide hot water for a principal residence, and equipment that uses wind to generate electricity and other forms of energy. This equipment need only be installed in connection with a residence rather than in or on it. Qualifying equipment does not include backup systems of conventional heating or cooling equipment.

For solar, wind, and geothermal energy equipment, the principal residence may be either an existing or newly constructed residence. Owners and renters are eligible for the credit. Members of cooperative and condominium associations are each eligible for the credit to the maximum amount for their proportionate shares of the common qualifying expenditures. Joint occupants of a principal residence must allocate the credit.

## B. Transportation Tax Provisions

## 1. Extension of excise tax on gasoline and other motor fuels

The current Federal excise taxes of 4 cents a gallon on gasoline and other motor fuels will be continued at that rate through September 30, 1985. These taxes are currently scheduled to be reduced to one and one-half cents a gallon after September 30, 1979. The committee took no action at this time on the current Highway Trust Fund, which will continue to receive these funds under present law through September 30, 1979.

## 2. Exemption or reduction of rate of fuels taxes for gasahol

Gasahol that is at least 10 percent ethanol or methanol made from agricultural or forestry products would be exempted from the Federal excise taxes on motor fuels on or after January 1, 1978, and before October 1, 1985. Between these dates, gasahol that is at least 10 percent ethanol or methanol made from nonagricultural and nonforestry products would be subject to Federal excise taxes of 3 cents a gallon (rather than 4 cents a gallon).

# 3. Removal of certain refunds of excise taxes on motor fuels and lubricating oil

The committee bill repeals the 2-cents-a-gallon reduction (through refund, credit, or exemption) of the excise taxes on gasoline and special motor fuels, and the refund (or credit) of the 6-cents-a-gallon tax on lubricating oil, with respect to gasoline, special fuels, and lubricating oil used (1) for nonbusiness, off-highway purposes (such as lawn mowers, snowmobiles, etc.) and (2) in motorboats (whether or not such use is business use). To the extent that increased revenues are attributable to fuels used in motorboats, they will be transferred to the Land and Water Conservation Fund (as are the present fuels taxes attributable to motorboat use).

# 4. Repeal of excise taxes on buses and bus parts

The 10-percent excise tax on buses and the 8-percent excise tax on bus parts and accessories are repealed. Parts and accessories that may be interchangeable between trucks and buses will be taxed on sale unless the purchaser provides the manufacturer with an exemption certificate which indicates that the part or accessory is purchased for use on a bus. If tax-paid parts are acquired from a dealer and are used on a bus. a credit or refund is to be available.

## 5. Removal of excise taxes on items used with certain buses

The bill removes the excise taxes on tires, inner tubes, tread rubber, and lubricating oil sold for use on or in connection with privately

owned intercity, local, and school buses. It also provides a credit or refund for the taxes imposed on gasoline and other motor fuels to the extent the fuels are used in qualified operations of privately owned intercity, local, and school buses.

# 6. Tax credit for vans used in vanpooling

The bill provides that, if an employer purchases a new van with a useful life of at least 3 years, seating nine or more persons (including the driver) and substantially all the use of the van is for transporting employees to and from work, the employer is entitled to the full 10-percent investment credit and the additional, special 10-percent business energy investment credit.

### 7. Exclusion from income of certain employer-furnished transportation

The committee bill also provides that, in the case of a taxpayer who is an employee, gross income does not include the value in excess of the employee's cost of transportation to or from work furnished by an employer, if such transportation is in a commuter van.

#### 8. Tax credit for electric motor vehicles

New electric cars purchased for personal use by individuals on or after April 20, 1977, and before January 1, 1986, will be eligible for a tax credit equal to the first \$300 of the purchase price. A qualified electric motor vehicle is a 4-wheeled vehicle manufactured for use on public roads that is powered by an electric motor which receives electric current from rechargeable storage batteries or other portable sources.

### 9. Intercity bus credit

The bill provides a refundable tax credit for intercity bus operators based on the operator's bus passenger miles and the per passenger mile fuel efficiency of the taxpayer's intercity buses in comparison to the per passenger mile fuel efficiency of automobiles. It is designed so that the operator is required to use the credit (estimated to be about \$200 million per year for the industry) for fare reductions and investment in equipment and terminals: 50 percent of the credit will be earmarked for fare reductions and the remaining 50 percent will be earmarked for investment in terminals and equipment.

# C. Business Energy Credits

# 1. Refundable tax credit for alternative energy property and specially defined energy property

A 40-percent credit is provided for certain conversion property, called alternative energy property, and a 10-percent credit is provided for certain conservation property, called specially defined energy property, during the period after April 19, 1977, and before January 1, 1986. These credits are in addition to any regular investment credits to which such property may be entitled. If eligible property is constructed by the taxpayer, the credit will be available only for construction that is completed during the period after April 19, 1977, and before January 1, 1986, to the extent of costs incurred during this period.

The credit is refundable, so that the amount which the taxpayer is allowed is not limited by tax liability. Charitable, educational, re-

ligious and other organizations which are exempt from Federal income tax under Code section 501(c)(3), electric utility cooperatives exempt under sec. 501(c)(12), as well as State and local governments, are eligible to receive the credit. Any excess of the credit above tax

liability may be claimed as a refund.

These credits will be applied using rules generally similar to the regular investment credit provisions. As a result, the rules for applying the regular investment credit, such as the rules which limit the extent to which any credit to a utility may be flowed through to its customers, will also generally apply to the alternative energy property investment credit. Special rules are provided in a number of areas; for example, the credit will be allowed only to the extent an existing oil or natural gas fueled boiler owned or used by an electric utility is phased down. The loading and structural component limitations are also made inapplicable to such property. In addition, recapture of credits will occur if the property ceases to be qualifying property, and the credits are reduced where such property is financed by industrial development bonds (except in the case of bioconversion equipment) or federal grants.

In order to qualify, equipment must be new property and located within the United States, with a useful life of three years or more.

Alternative energy property.—In general, alternative energy property is equipment involved in the use of an alternate substance (one other than oil, natural gas, or a derived product) as a fuel or feedstock. The following types of property are specifically included:

(a) a boiler whose primary fuel will be an alternate substance:

(b) a burner and equipment necessary to supply fuel to a combustor other than a boiler for which the primary fuel will be an alternate substance;

(c) equipment used in the production of energy by nuclear power, but not including turbines or equipment beyond the turbine stage, or by hydroelectric power, including turbines and equipment up to (but not including) the electrical transmission stage;

(d) equipment for converting an alternate substance in a syn-

thetic fuel;

(e) equipment to produce a chemical feedstock from coal or lignite;

(f) equipment which modifies an existing facility to replace the use of oil or natural gas as a fuel or feedstock with at least 25 percent coal or another alternate substance;

(g) pollution control equipment required to be installed in equipment described above (other than equipment required on

April 20, 1977, to be installed on a facility using coal);

(h) equipment used for unloading, transferring, storing, reclaiming from storage and preparation of an alternate substance for use in the equipment described above or in a facility which uses coal as a feedstock for products other than coke;

(i) equipment to convert ocean thermal and tidal power into

useful energy;

(j) equipment to convert solar and wind energy into useful energy;

(k) equipment used to produce, distribute or use energy from a geothermal deposit but not including electrical transmission, in the case of electricity generated by geothermal power, and

(1) plans and designs for any other qualifying alternative en-

ergy property.

Specially defined energy property.—This category of property is generally equipment which, when added to an existing production or processing activity, reduces energy consumption. The following items of property, specifically covered here, qualify for the credit if they are added to existing buildings, industrial processes and utility facilities: recuperators; heat wheels; regenerators; heat exchangers; waste heat boilers; heat pipes; automatic energy control systems; turbulators; preheaters; combustible gas recovery systems; economizers, and industrial heat pumps.

In addition to these types of property, the Secretary is authorized to specify other similar items of energy conservation equipment eligible for this credit, including modifications which are made to existing industrial processes (such as modifications to smelters or alumina electrolytic cells) the principal purpose of which is the reduction in the

amount of energy consumed or heat wasted.

### 2. Business energy conservation credit

There would generally be an additional 10-percent business energy tax credit for investments by business in qualified property intended to reduce the amounts of oil, natural gas, or other energy consumed in heating or cooling a building or used in an industrial process.

The credit would be available for investments in qualifying property

made after April 19, 1977, and before January 1, 1986.

Qualifying property.—For the business energy tax credit, qualifying property includes equipment to start or expand the cogenerating capacity in an existing facility, to recycle solid waste to recover solid recyclable materials, burn solid waste as a fuel, or convert solid waste into a fuel and to recover oil from oil shale rock and gas from geopressurized water deposits and also commuter vans and energy saving equipment added to existing trucks.

In order to qualify, property or equipment under these categories generally must be new property which would be used in connection with a vehicle, building or facility in existence or substantially com-

pleted by April 20, 1977.

#### 3. Business insulation credit

For purposes of the regular investment credit, insulation installed in connection with an existing building or industrial facility would be qualifying property through 1985. Insulation includes storm doors and windows, thermal glass and double glazing.

# D. Tax Incentives for Alternative Energy Sources

### 1. Coal gasification and liquefaction and bioconversion facilities—use of tax-exempt industrial development bonds

The committee amended sec. 103 of the Code (relating to interest earned on certain governmental obligations) to provide that tax-exempt industrial development bonds can be used for the financing of

coal gasification and liquefaction facilities for the furnishing of synthetic gas, or liquid fuels. The amendment also provides that tax-exempt industrial development bonds may be used for the financing of bioconversion facilities for the conversion of municipal and agricultural wastes, and other organic matter, into energy, or into synthetic gaseous, liquid, or solid fuels.

### 2. Geothermal tax provisions

A current deduction would be allowed for intangible drilling costs related to the exploration and development of geothermal resources. To the extent that these intangible drilling costs exceed the taxpayer's income from the production of geothermal resources, these costs would

be subject to the minimum tax on preference income.

In addition, the committee bill provides percentage depletion for geothermal deposits at the rate established generally for oil and gas. The committee amendment also provides that gain on the disposition of geothermal properties will be subject to recapture. In addition, the amount of any loss (otherwise allowable for the year) which may be deducted in connection with exploring for, or exploiting, geothermal deposits cannot exceed the aggregate amount with respect to which the taxpayer is at risk at the close of the taxable year.

### 3. Geopressurized methane gas

A current deduction would be allowed for geological and geophysical exploration costs, and for intangible drilling costs related to the exploration for, and development of, geopressurized methane gas. To the extent that the intangible drilling costs exceed the taxpayer's income from the production of geopressurized methane gas, these costs

would be subject to the minimum tax on preference income.

In addition, the committee bill provides percentage depletion at a 10-percent rate for geopressurized methane gas. Gain on the disposition of geopressurized methane gas properties will be subject to recapture. The amount of any loss (otherwise allowable for the year) that may be deducted in connection with exploring for, or exploiting, geopressurized methane gas cannot exceed the aggregate amount with respect to which the taxpayer is at risk at the close of the taxable year.

In addition, the committee bill provides a production credit of 50-cents per thousand cubic feet of geopressurized methane gas pro-

duced by the taxpayer.

# 4. Credit for production of oil and gas from nonconventional sources

The committee bill provides a \$3 per barrel tax credit for the production of oil from shale. A tax credit of 50-cents per thousand cubic feet of gas has been provided for gas produced during the taxable year from all geopressurized methane gas properties and from all tight rock formation properties. The credits only apply to domestic production.

# 5. Percentage depletion for peat

The committee bill increases the percentage depletion allowance from a 5-percent rate to a 10-percent rate for peat used as a fuel, or otherwise used to produce energy.

# E. Additional Tax Incentives; Energy Trust Fund

The bill includes a provision which is intended to give the Senate conferees flexibility in attempting to reach agreement with the House on this bill. The committee bill provides that no new taxes in this bill, such as the gas guzzler tax, the crude oil equalization tax and the industrial user tax in the House bill, are to go into effect unless they are accompanied by tax and other economic incentives for energy conservation, conversion and production as well as provisions to mitigate undesirable consequences of the energy situation, such as inequities. This provision is intended to give the conferees flexibility in devising suitable uses for any revenue raised by new taxes or other positive incentives to accompany any tax increases.

In addition, the bill establishes a trust fund to finance energy-related outlays, including spending for energy-efficient transit. All outlays from the trust fund will be subject to the normal authorization and appropriation process. Revenues from any new taxes added by the

bill would be appropriated into the trust fund.

### F. Limitation of President's Authority to Adjust Oil Imports

The President's discretionary authority to adjust imports of petroleum and petroleum products under section 232(b) of the Trade Expansion Act of 1962 and titles I and V of the Trade Act of 1974 is nullified except for military or defense emergencies involving actual hostilities or for situations where the national security requires adjustments in the imports of refined petroleum products.

#### G. Other Provisions

# 1. Minimum tax on intangible drilling costs for oil and gas wells

The committee extended without time limit the provision in present law relating to the minimum tax on intangible drilling costs. As a result, the minimum tax on preference income applicable to intangible drilling costs for oil and gas wells would be modified to treat these intangible costs as a preference income only to the extent they exceed the taxpayer's oil and gas production income.

# 2. Rerefined lubrcating oil

New lubricating oil would be exempt from the 6-cents-per-gallon excise tax, if it is combined with rerefined oil and the new oil makes up 55 percent or less of the mixture. If the new oil in the mixture exceeds 55 percent of the contents, the exemption would apply only to the new oil that would make up 55 percent of the mixture. In any case, the mixture must contain at least 25 percent waste or rerefined lubricating oil in order to qualify for the exemption.

# 3. Annual report on energy savings and revenue effects

Beginning in August 1978, the President will report each year to the Congress on the savings in energy use accomplished, the revenue received, and the revenue disbursed under each specific program contained in the committee bill.

#### 4. Reconciliation with budget resolution

The Secretary of the Treasury is authorized to postpone the effective dates of tax reductions in the bill to a date no later than October 1, 1978, to the extent necessary to ensure that the revenue floor (\$397 billion) in the Second Concurrent Resolution on the Budget for fiscal year 1978 is achieved.

The bill includes a sense-of-the-Senate resolution that the Senate conferees, to the extent practicable, should keep the revenue loss from the bill in fiscal year 1978 at no more than \$972 million, which is the revenue loss from the House energy bill and is the amount anticipated

in the Second Budget Resolution.

## IV. BUDGET AND ENERGY SAVINGS EFFECTS

#### A. BUDGET EFFECTS

Table 1 summarizes the estimated budget effects of the Energy Production and Conservation Tax Incentive Act for fiscal years 1978 through 1985 and also shows, by part, the cumulative budget effect

through 1985.

By the end of fiscal year 1985, the net decreases in budget receipts under the bill are estimated to total \$20.3 billion. The revenue raising provisions are in Part II, and almost the entire gain results from extension of the existing 4-cents-a-gallon tax rate on gasoline and other motor fuels through fiscal year 1985. The cumulative effects of all the provision in this part are expected to yield \$20.0 billion by the end of fiscal year 1985. The major revenue losing provisions during this period are in Part III (changes in business investment credits to encourage conservation of fuels and conversion of oil and gas to alternative fuels), which are expected to reduce budget receipts by \$30.3 billion. The provisions in Part I (residential credits) and Part IV (ttax incentives relating to alternative fuel sources) are expected to reduce budget receipts by \$7.1 billion and \$2.4 billion, respectively, during this period.

The overall net budget effects of the bill on fiscal year receipts are decreases of \$1.9 billion in fiscal year 1978, \$2.6 billion in fiscal year 1979, and a negligible amount in fiscal year 1980, \$1.0 billion in fiscal year 1981, \$2.4 billion in fiscal year 1982, \$3.5 billion in fiscal year 1983, \$4.2 billion in fiscal year 1984, and \$4.6 billion in fiscal year 1985.

Table 2 shows the estimated budget effects of the bill in greater de-

tail and classifies them by subpart and by section.

Table 3 shows the estimated revenue impact of the various business energy tax credits by type of property.

<sup>&</sup>lt;sup>1</sup> Sections 1056 and 0057 of the bill limit the revenue loss for fiscal 1978 to \$972 million. (Otherwise, the revenue loss would be \$1,912 million.)

Table 1.—Summary of Estimated Budget Effects of the Energy Production and Conservation Tax Incentive Act as
Reported by the Committee, Fiscal Years 1978-85

[In millions of dollars]

		l.	III IIIIIIII OMB	VI (4422227)	)				
Part of Bill	1978	1979	1980	1981	1962	1983	1984	1985	Tetal, 1978–85
Pt. I.—Residential energy credit Pt. II.—Transportation Pt. III.—Changes in business in- vestment credit to encourage	-473 -149	-674 -221	-828 3, 078	-881 3, 178	-939 3, 269	-1, 019 3, 476	-1, 107 <b>3,</b> 640	-1, 178 3, 729	-17,099 20,000
from oil and gas or to encourage	<b>-1, 26</b> 9	-1, 592	<b>-2,</b> 132	-3, 046	<b>-4</b> , 359	-5, 492			<b>-80,</b> 38°
Pt. IV.—Tax incentives relating to alternative fuel sources Pt. V.—Miscellaneous provisions	-18 -3	-50 -35	<b>-40</b>	-45	-51	59	-68	<b>—77</b>	<b>—37</b>
	_1 972	<b>-2,</b> 572	-44	-1,003	<b>-2, 395</b>	<b>-3</b> , 527	<b>-4, 22</b> 8	<b>-4,</b> 580	_ '20, 26

<sup>&</sup>lt;sup>1</sup> In addition, this provision is estimated to decrease budget receipts by \$1,002 million in fiscal year 1986.

'This total includes the full revenue loss for fiscal 1978 of \$1,912 million as indicated in footnote 3.

Treasury agrees with these estimates under the assumption of no extraordinary increase in the prices of qualifying property. While difficult to forecast, investment tax credits of this magnitude could allow equipment manufacturers to increase prices and therefore increase the cost of this proposal.

Sections 1056 and 1057 of the committee bill provide that revenue losses in fiscal year 1978 are to be limited to \$972 million. (The total revenue loss of the individual parts of the committee bill for fiscal 1978 would total \$1,912 million.)

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Table 2.—Estimated Budget Effects of the Energy Production and Conservation Tax Incentive Act, as Reported by the Committee, by Part, Subpart, and Section, Fiscal Years 1978-85

	•	[In mil	lions of do	llars]					
Part, subpart, and section	1978*	1979	1980	1981	1982	1983	1984	1985	1978-86 Total
Pt. I.—Residential energy credit: Sec. 1011: Credit for insulation and other									
energy-conserving com-	-446	-616	<b>-761</b>	-805	-844	-898	<b>-953</b>	<b>-992</b>	<sup>1</sup> -6, 315
Credit for renewable energy source equipment	<b>—27</b>	-58	<b>-67</b>	<b>-76</b>	<b>-95</b>	-121	-154	-186	2-784
Total, pt. I	-473	<b>-674</b>	-828	-881	<b>-939</b>	-1,019	-1, 107	-1,178	*-7,099
Pt. II.—Transportation:  Supt. A—Motor fuels:  Sec. 1021. Extension to 1985 of existing rate of tax on gasoline and other motor fuels; exemption or reduction of rate for certain blended fuels.  Sec. 1022-1023. Denial of credit or refund for nonbusiness, nonhighway use of gasoline and amendment of motor boat fuel provisions.  See footnotes at end of table.		4	3, 300 4	3, <b>4</b> 00 4	3, 492 4		3, 668 4		21, 201 28

Table 2.—Continued

# [In millions of dollars]

Part, subpart, and section	1978*	1979	1980	1981	1982	1963	1984	1985	1978-85 Total
Subpt. B—Provisions related to buses:									
Sec. 1024. Removal of excise tax on buses	-13	-9	-9	-9	-9	-9	-9	-9	<b>-76</b>
Sec. 1025. Removal of excise tax on bus partsSec. 1026. Removal of excise tax	-3	-3	-3	-3	-3	-3	-8	-3	-24
on certain items used in con- nection with intercity, local, and school buses	-13 (4)	-13 ( <sup>6</sup> )	-13 (4)	-13 (4)	-13 (4)	-13 (4)	-13 (4)	-13 (4)	-104 (*)
Sec. 1028. Credit for qualified electric motor vehicles	(4)	(4)	-1	-1	-2	-4	-7	-10	•—25
Subpt. D.—Intercity bus credit: Sec. 1029. Intercity bus credit	-120	<b>-200</b>	-200	-200	<b>-200</b>	-80			-1,000
Total, pt. II	-149	-221	3, 078	3, 178	3, 269	3, 476	8, 640	3, 729	20, 000

Pt. III.—Investment credits to encourage conservation of, or conversion from, oil and gas or to encourage new energy technology: Sec. 1031. Additional credit for investment in certain energy -994 -1, 297 -1, 784 -2, 636 -3, 868 -4, 896 -5, 435 -5, 533 -26, 443related depreciable property --Sec. 1032. Additional percentage for investment credit with respect to certain energy -589 -2,863-523-443-356-295-250-212-195property\_\_\_\_\_ Sec. 1033. Payment in lieu of credit to tax exempt organiza--195 -1,031-172-153-135-115**-98** -83-80tions\_ -1,269 -1,592 -2,132 -3,046 -4,359 -5,492 -6,130 -6,317 -30,337Total, pt. III.

See footnotes at end of table.

Table 2.—Continued

[In millions of dollars]

Part, subpart, and section	1978*	1979	1980	1981	1982	1983	1984	1985	1978-85 Tetal
Pt. IV.—Tax incentives relating to alternative fuel sources:						7			
Sec. 1041. Use of industrial development bonds for coal gasification and liquefaction and bioconversion facilities.		_2	<b>G</b>	-14	S.e	40	<b>~</b> 0		
Section. 1042. Percentage depletion:	• • • • • •	-0	-0	-14	<b>-26</b>	-42	<b>-58</b>	<b>—77</b>	-226
Peat	(4)	(4)	(4)	(4)	(4)	(4)	(4)	(4)	(6)
Geothermal	(4) (4)	(4)	(•)	(*) <b>-2</b>	(4) -5	(4) -7	—10	(°) -14	(*) -38
Geopressurized methane			<b>—</b> i	-3	-5	-8	-10	<b>—14</b>	<b>-41</b>
Sec. 1043. Option to deduct in- tangible drilling costs:					_			••	41
Geothermal	<b>-5</b>	-12	-14	-17	<b>-2</b> 1	-25	-30	_36	-160
Geopressurized methane Sec. 1044. Tax credits for production of oil and gas from nonconventional sources:	-9	-12 -16	-14 -17	-18	<b>-21 -20</b>	-25 -20	-30 -21	<b>-36</b> -23	-100 -144
50 cents credit per mcf of geo- pressurized methane gas 50 cents credit per mcf of gas from nonconventional			<b>-7</b>	-14	-22	<b>-3</b> 1	-40	-52	-166
source			-29	<b>-58</b>	<b>-90</b>	-124	<b>—154</b>	-194	-649

\$3 credit per barrel of shale oil.	-4	-19	<b>-4</b> 8	-83	-126	-176	-240	-327	-1,023
Total, pt. IV	-18	-5y	-122	-209	-315	-433	<b>563</b>	<b>-837</b>	-2, 447
Pt. V. — Miscellaneous provisions:									
Sec. 1051. Treatment of intangible drilling costs for purposes of minimum tax		-32	-37	-42	-48	-56	-65	-74	<b>-354</b>
Sec. 1052. Rerefined lubrication	-3	-3	-3	-3	<b>—3</b>	-3	-3	-3	-24
Total, pt. V	-3	-35	-40	-45	-51	-59	-68	<b>—77</b>	<b>-378</b>
Total, pts. I-V	* 972 -	-2, 572	-44	<b>-1,003</b>	<b>−2, 395</b>	<b>-3</b> , 5 <b>2</b> 7	<b>-4, 22</b> 8	<b>-4</b> , 580	-°20,261

<sup>1</sup> In addition, these provisions are estimated to decrease budget receipts by \$778 million in fiscal year 1986.

In addition, these provisions are estimated to decrease budget

receipts by \$224 million in fiscal year 1986.

Less than \$1,000,000.

\* Less than \$5,000,000.

difficult to forecast, investment tax credits of this magnitude could allow equipment manufacturers to increase prices and therefore increase the cost of this proposal.

\* Sections 1056 and 1057 of the bill limit the revenue loss for fiscal 1978 to \$972 million. (Otherwise, the revenue loss would be \$1,902 million.)

\*This total includes the full revenue loss for fiscal 1978 of \$1,902 million as indicated in footnote 8.

\*All numbers for fiscal 1978 are subject to possible reduction under sections 1056 and 1057 of the committee bill. (Under these sections, the total revenue loss of the bill for fiscal 1978 is limited to \$972 million.)

In addition, these provisions are estimated to decrease budget receipts by \$1,002 million in fiscal year 1986.

In addition, this provision is estimated to decrease budget receipts by \$13 million in fiscal year 1986.

Treasury agrees with these estimates under the assumption of no extraordinary increase in the prices of qualifying property. While

Table 3.—Estimated Budget Effect of Tax Credits for Business Qualified Energy Property by Type of Property Under Pt. III of the Energy Production and Conservation Tax Incentive Act, as Reported by the Committee, Fiscal Years 1978-85

[In millions of dollars]

Credit prevision	1978:	1979	1980	1981	1982	1983	1984	1985	Teta 1978–8
Alternative energy property	<b>-731</b>	-1,046	-1,525	-2,371	-3, 596	<b>-4,</b> 616	-5, 142	<b>-5</b> , 230	-24, 257
Cogeneration property	-28	-41	-74	-111	-156	-224	-286	-325	-1,248
Recycling equipment	-32	-31	-33	-38	-41	-46	-50	<b> 54</b>	-325
Business insulation property 4	-103	-101	-107	-113	-119	-125	-132	-141	<b>-94</b> 1
Specially defined energy property 45.	-303	-295	-312	-328	-347	-365	-386	<b>-407</b>	-2,743
Industrial heat pumps 4	-40	-39	<b>-45</b>	<b>-52</b>	<b>-60</b>	<b>68</b>	<b>-79</b>	-91	-474
Fruck retrofit equipment	-25	-20	-10	( <sup>6</sup> )	<b>(6)</b>	<b>(</b> <sup>6</sup> <b>)</b>	(*)	(*)	-58
Shale oil equipmentGeopressurized methane equip-	-3	-10	-17	-24	<b>—30</b>	<b>—37</b>	-44	-57	-222
ment	-4	-9	-9	<b>-9</b>	-10	-11	-11	-12	-78
Total	-1, 269	-1,592	-2, 132	-3, 046	-4, 359	-5, 492	<b>-6, 130</b>	-6,317	<b>—30, 33</b> 7

<sup>&</sup>lt;sup>1</sup> These classifications are by property and show the credits received by taxpayers, tax exempt organizations, and state and local governments.

difficult to forecast, investment tax credits of this magnitude could allow equipment manufacturers to increase prices and therefore increase the cost of this proposal.

Only if applied to or within a structure in existence before Apr. 20, 1977.

Includes energy credits for heat recovery equipment and mixed fuel burning conversion equipment.

Less than \$5 million.

<sup>&</sup>lt;sup>3</sup> All numbers for fiscal 1978 are subject to possible reduction under sections 1956 and 1057 of the bill (which limit the total revenue loss for fiscal 1978 to \$972 million).

<sup>3</sup> Treasury agrees with these estimates under the assumption of no extraordinary increase in the prices of qualifying property. While

# B. Estimates of Oil Import Savings

Table 1 summarizes the estimated oil import savings under the committee bill by major provision. Overall, it is estimated that the bill

will reduce oil imports in 1985 by 2.1 million barrels per day.

In addition to oil import savings, it is expected that the committee bill will have a major effect on natural gas availability by freeing up industrial use of natural gas for residences, encouraging greater supplies of substitutes for natural gas (such as coal-gas), and encouraging

greater conservation in the use of natural gas.

Table 2 displays the estimated energy savings by major tax provision of the committee bill in 1985. Part I of the bill, which deals with residential energy credits, is expected to save 325,000 barrels a day in oil imports in 1985. Part II, which deals with transportation, is estimated to result in an energy saving of 26,000 barrels per day of oil in 1985. It is estimated that the investment credits to encourage conservation and conversion from oil and gas in part III of the committee bill will reduce oil imports in 1985 by 1.5 million barrels per day. It is estimated that the tax incentives for alternative fuels contained in part IV of the committee bill will reduce oil imports by 265,000 barrels per day in 1985.

Table 1.—Summary of Estimated 1985 Energy Savings from the Energy Production and Conservation Tax Incentive Act, as Reported by the Committee

Part of the bill	1985 savings of oil imports (b/d) <sup>1</sup>
Pt. I—Residential energy credit	325, 000
Pt. II—Transportation	<b>26,</b> 000
Pt. III—Investment credits to encourage conservation	
and conversion	1, 508, 000
Pt. IV—Tax incentives relating to alternative fuels.	<b>265,</b> 000
Pt. V—Miscellaneous	Negligible
Total	2, 124, 000

<sup>&</sup>lt;sup>1</sup> Barrels per day.

Table 2.—Estimated Oil Import Savings by Major Tax Provision of Committee Bill in 1985

Provision of bill	1985 savings of oil imports (b/d)
Part I: Residential energy credits:	
Insulation and other energy conserving components	
(sec. 1011)	<b>300, 0</b> 00
(sec. 1011)Renewable energy sources (sec. 1011)	<b>25, 0</b> 00
Total	<b>325,</b> 000
Part II: Transportation provisions:	
Extension to 1985 of 4 cents gas tax; exemption or	
reduction of rate for certain blended fuels	
A	<b>26, 00</b> 0
(sec. 1021) Denial of credit or refund for nonbusiness, non-	,
highway use of gasoline and amendment of	
motor-boat fuel provisions (secs. 1022-23)	Negligible
Removal of excise tax on buses, bus parts, and	
certain items used with intercity, local and school	
buses, and credit for vanpooling (secs. 1024-7)	<b>Negligi</b> ble
buses, and credit for vanpooling (secs. 1024-7) Credit for qualified electric motor vehicles (sec.	
1028)	<b>Negligi</b> ble
Total	<b>26, 0</b> 00
=	
Part III: Investment credits to encourage con- servation of, or conversion from oil and gas or to encourage new energy technology:	
Alternative energy property	1, 256, 000
Cogeneration property	<b>25, 00</b> 0
Recycling equipment	12,000
Business insulation property	<b>160, 0</b> 00
Specially defined energy property	100,000
Payment in lieu of credit to tax-exempt organiza-	
tions	<b>55, 00</b> 0
Total	1, 508, 000
l Porrele non dest	<del></del>
<sup>1</sup> Barrels per day.	

Provision of bill	1985 savings of oil imports (b/d)
Pt. IV—Tax incentives relating to alternative fuel sources:	
Use of industrial development bonds for coal gasification and bioconversion (sec. 1041)	Negligible
Percentage depletion for peat, geothermal and geo- pressurized methane (sec. 1042)	20,000
Option to deduct intangible drilling costs for geothermal and geopressurized methane (sec. 1043)	Negligible
Tax credit for production of oil and gas from non- conventional sources (sec. 1044)	245, 000
Total	265, 000
Pt. V—Miscellaneous provisions	Negligible
Total (Pts. I-V)	2, 124, 000
Table 3.—Estimated 1985 Oil Import Savings Attribu III of the Energy Production and Conservation tive Act, as Reported by the Committee	
Credit provision	1985 savings of oil imports (b/d) <sup>1</sup>
	oil importa (b/d) <sup>1</sup>
Alternative energy property	oil imports (b/d) <sup>1</sup>
	1, 256, 000 25, 000 12, 000

<sup>&</sup>lt;sup>1</sup> Excludes savings attributable to nontaxable entities.
<sup>2</sup> Barrels per day.

## V. EXPLANATION OF ENERGY TAX PROVISIONS

#### A. RESIDENTIAL ENERGY CREDITS

1. Residential Insulation and Other Energy-Conserving Component Credit (sec. 1011 of the bill and new sec. 44C of the Code)

#### Present law

Under present law, no special tax credit or deduction is allowed for the installation of insulation or other energy-conserving components in or on a taxpayer's residence. However, if these installations constitute capital improvements to a residence, the amount of the expenditures involved are added to the taxpayer's basis in the residence for purposes of determining gain or loss on a subsequent sale of that residence.

#### Reasons for change

A substantial portion of our domestic energy consumption is used to heat or cool residences. Currently, about 23.7 percent of U.S. domestic energy consumption, or about 7 percent of total world demand, is used for residential purposes. Surveys have indicated that many residences in the United States are not adequately insulated.

Because of the substantial energy savings that may be effected by proper insulation of homes and other energy-conserving measures, and to reduce the potential problems in the event of any future energy shortages (such as the 1973-74 shortage which resulted from the oil embargo), the committee's bill includes a refundable income tax credit to provide homeowners and tenants with an incentive to conserve energy by immediate installations of insulation and other energy-conserving components.

The committee is mindful of potential supply problems that the fiberglass insulation industry might encounter. Thus, while the credit is provided for a limited number of years, that period of time was made sufficient in length (through 1985) so that the demand generated for this insulation by the credit would not be sharply increased in any

one year.

The committee hopes that the States and localities will recognize the need for enacting laws in the immediate future which provide property tax exemptions for increases in value resulting from insulation and other energy-conserving component improvements.

# Explanation of provisions

Nature, amount, and period of credit

The committee's bill provides a refundable income tax credit for insulation and other energy-conserving component expenditures for installations in or on the principal residence of the taxpayer. The credit is 20 percent of the first \$2,000 of qualifying expenditures. Thus, the maximum credit would be \$400.

This credit is to be refundable. Thus, the credit will be applied against the taxpayer's tax liability, and, to the extent it exceeds the amount of tax liability, the taxpayer would be entitled to a refund. However, individuals whose residences are the subjects of weatherization grants under the nontax energy provisions of the National Energy Conservation Policy Act (title II, H.R. 5037, passed by the Senate, September 13, 1977) are not to be entitled to the credit. It is anticipated that the amount of any loan issued under these provisions would be reduced by the amount of the credit allowed.

In determining the credit, the \$2,000 maximum allowable expenditures amount is to be reduced by previous expenditures by the tax-payer which were taken into account in computing the credit for prior taxable years. An individual will be eligible for the maximum credit each time he changes his principal residence. Thus, an individual would be eligible for the maximum credit for qualifying expenditures on his new principal residence, notwithstanding the allowance of the credit for qualifying expenditures on his previous principal residence and notwithstanding the allowance of the credit to a prior owner of

the individual's new principal residence.

The entire cost of insulation or other energy-conserving component property is allowed toward the credit only if at least 80 percent of the use of the property is for personal residential purposes. If less than 80 percent of its use is for personal residential purposes, the amount is reduced proportionately. For example, if an expenditure of \$3,000 is made, but only 50 percent of the use of the property installed is for personal residential purposes (the other 50 percent of use being for business purposes), the allowed credit would be \$300 (the allowable credit on \$1,500, which is 50 percent of \$3,000). For purposes of this provision, use for a swimming pool is not to be treated as personal residential use.

In order to avoid administrative burdens which could result from a credit for only a small amount of qualified expenditures in a year, a minimum credit amount of \$10 for any taxable year is required with respect to any tax return (joint or separate) if any credit is to be allowed. This minimum credit requirement applies to the aggregate of the credits claimed for a taxable year for renewable energy source expenditures and for insulation and other energy-conserving com-

ponent expenditures.

The credit is to be available for expenditures made on or after April 20, 1977, and before January 1, 1986.

# When qualified expenditures are treated as made

Expenditures for insulation and other energy-conserving components (including expenditures for installation) are to be treated as made when the original installation of the property is completed. Consequently, for purposes of this provision, the time of payment or accrual of amounts for insulation or other energy-conserving components would not be determinative of when the expenditures for such property have been made.

# Qualifying residences

In order to qualify for the credit, installations of insulation or other energy-conserving components must be in or on an individual's prin-

cipal residence, and that residence must be located in the United States, Guam, or the U.S. Virgin Islands. The credit is available, however, only with respect to residences the construction of which was substantially completed before April 20, 1977. Owners and renters will be eligible for the credit; moreover, an individual who owns stock in a cooperative housing association or who is a member of a condominium management association will be treated as having expended an allocable share of amounts expended by the association for insulation and other energy-conserving components and will be eligible for the maximum \$400 credit.

The cooperative stockholder's allocable share of the qualifying expenditures is to be the same as his proportionate share of the cooperative's total outstanding stock. The condominium management association's member's allocable share is to be the amount he is assessed by the association as a result of the energy conservation expenditures.

The determination of whether a dwelling unit is used by a taxpayer as his principal residence will be made under principles similar to those applicable to section 1034 of the Code (relating to a sale or exchange of a principal residence) except that ownership of the dwelling unit will not be required for renters. Moreover, in making this determination, the period for which a dwelling will be treated as a taxpayer's principal residence will include the 30-day period immediately preceding the date the dwelling unit would, under principles similar to those applicable to section 1034, be treated as being used as the taxpayer's principal residence. Thus, installations which are completed within the 30-day period immediately preceding the date the residence would (but for this provision) be treated as being used as the taxpayer's principal residence will be eligible for the credit.

Qualifying property

The credit applies to qualifying insulation and other energy-conserving components. The credit is to be allowed also for the original installation of qualifying insulation (or of a qualifying energy-conserving component) in a residence. Therefore, expenditures for such purposes as the reinstallation in the fall of storm windows which had been taken down in the spring are not to qualify for the credit. Expenditures for installing insulation or other energy-conserving components removed from one structure and placed on the taxpayer's principal residence will also not qualify because of this requirement.

Insulation is defined as any item specifically and primarily designed to reduce, when installed in or on a dwelling or water heater, the heat

loss or gain of the dwelling or water heater.

In most cases, an individual renting a residence from a member of a condominium management association could not obtain the credit because he would not be assessed for any of the association's expenditures. However, qualifying expenditures made directly by this individual would be eligible for the credit.

<sup>&</sup>lt;sup>1</sup> For these purposes, the term "condominium management association" means an association meeting the requirements of section 528(c)(1) of the Code, other than subparagraph (E) of that subsection (which requires an election to be taxed under section 528), with respect to a condominium project substantially all of the units of which are used as residences.

It is contemplated that the date when habitation of the dwelling unit by the taxpayer begins would constitute in most cases the date the dwelling would be treated (but for this provision of the bill) as being used as the taxpayer's principal residence.

Except for items which qualify as "other energy-conserving components" (such as storm or thermal windows or doors), items which qualify for this credit are to be primarily and specifically designed for use as insulating materials. Materials which are primarily structural or decorative in purpose would not qualify. For example, carpeting, drapes, wood paneling, and exterior siding would not qualify although they may have been designed in part to have an insulating effect. Moreover, the replacement of an existing wall or the addition of a new wall (except for the qualifying insulation installed in the wall) would not qualify for credit. Attic, floor, and wall insulation made of fiberglass, rock wool, cellulose, or styrofoam are examples of insulating materials qualifying for the credit.

The term "other energy-conserving component" means any item

(other than insulation) which is:

(1) a replacement furnace or boiler which is designed to provide more efficient energy utilization by improved heat generation or lowered heat losses;

(2) a furnace replacement burner designed to achieve a reduction in the amount of fuel consumed as a result of increased com-

bustion efficiency;

(3) a device for modifying flue openings designed to increase the efficiency of operation of the heating system;

(4) an electrical or mechanical furnace ignition system which

replaces a gas pilot light;

(5) a storm or thermal window or door for the exterior of the dwelling;

(6) any automatic energy-saving setback thermostat;

(7) caulking or weatherstripping of an exterior door or window;

(8) any heat pump which replaces an existing electrical resistance space heating system;

(9) meters which display the cost of energy usage; (10) fluorescent replacement lighting systems; or

(11) an item of a kind which the Secretary of the Treasury specifies by regulations as increasing the energy efficiency (by

conversion or otherwise) of the dwelling.

In promulgating regulations, the Secretary is to consider, among other things, whether polyester window film, attic fans, fireplace jets, and glass fireplace screens constitute items of a kind which increase the energy efficiency of a dwelling. In exercising his authority under this provision, the Secretary is to take into account the relative supply of the type of energy used by the component or equipment under consideration.

The Secretary is directed to prescribe guidelines setting out the criteria which an equipment item must meet if it is to be added to the list of qualifying equipment. The Secretary is also directed to establish procedures under which a manufacturer might apply to have a product added to the qualifying expenditure list. It is contemplated that included among the criteria in making this determination will be whether the item would be available to consumers at a competitive and reasonable price.

The heat pump equipment for which the credit may be claimed includes the heat pump and the parts solely related to the functioning of

the heat pump. It is usually necessary to use conventional heating units as "back-ups" to the heat pump for use or supplemental use during periods when the outdoor temperature falls below approximately 25 degrees Fahrenheit. However, the credit is not to be available for

expenditures for these back-up units.

Qualifying storm or thermal windows or doors are to include any multiglazing arrangement whereby a pane of glass is so affixed that it is separated from another pane of glass (or thermal-type window) by air in a space which tends to be enclosed, such as by window sills or other structures containing the glasses; they are also to include heat-absorbing or heat-reflective glazed windows and doors and heat-absorbing or heat-reflective window and door materials. Where an additional pane of glass, plexiglass or other appropriate material is added to an existing window to create the insulating air space, it may be installed either inside or outside the existing exterior opening.

Meters which display the cost of energy usage would include computerized electricity meters and meters which show the cost of energy

used by a particular appliance.

In the case of both insulation and other energy-conserving components, the original use of the property must commence with the taxpayer. Both must also be reasonably expected to remain in operation three years and meet performance and quality standards prescribed by the Secretary (after consultation with the Secretary of Energy, Secretary of Housing and Urban Development and other appropriate agencies, such as the National Bureau of Standards). Performance standards would include standards relating to safety in both the installation and operation of the insulation and other energy-conserving components. However, the performance and quality standards will not apply to insulation and other energy-conserving components purchased prior to the promulgation of such standards. The committee is concerned with the potential for consumer fraud in the absence of definitive standards which are to apply to the insulation and energyconserving components qualifying for the credit. Thus, it is the committee's desire that the regulations establishing these standards be promulgated by the Secretary without unnecessary delay.

In determining whether an item for which the credit is claimed is eligible, and in determining whether a particular item meets performance and quality standards, on-site inspections which are not already authorized and used by a governmental agency in the assessment and collection of income taxes are prohibited, except with the written con-

sent of the resident claiming the credit.

## Expenditures by joint occupants

If two or more individuals install qualifying property in or on a dwelling jointly occupied by them as their principal residence, the amount of the credit for any calendar year is to be determined by treating all of the joint occupants as one taxpayer. Thus, a total of \$2,000 of qualifying expenditures may be made for that residence, rather than \$2,000 for each of the occupants. The amount of the credit allowed to each occupant is to be apportioned according to the same ratio as the amount of qualifying expenditures made by that occupant bears to the total amount of qualifying expenditures made by all the occupants.

The fact that a joint occupant may be unable to claim his credit because his allowable credit does not equal the \$10 minimum credit amount is to have no effect upon the computation of the amount of the

allowable credits for the other joint occupants.

The maximum expenditure amount (\$2,000) is to be reduced by the aggregate of prior years' expenditures on the residence by any of the joint occupants, which expenditures were taken into account in computing the credits for such years. This aggregate amount of prior years' expenditures is not broken down and is not applied in the current year to take account in any way of the specific expenditures of the individual occupants in prior years. For example, assume A and B have together made prior years' qualifying expenditures of \$1,600 (A has made qualifying expenditures of \$1,200 and B has made qualifying expenditures of \$400) on their principal and jointly occupied residence. In the current year, each makes qualifying expenditures of \$300, for a total of \$600 of current expenditures. Of the \$400 of expenditures qualifying for the credits (\$2,000-\$1,600), \$200 will be allocated to A (\$300/\$600×\$400) and \$200 will be allocated to B (\$300/\$600×\$400). The fact that A had previously computed his credit in prior years with respect to \$1,200 out of the total \$1,600 of expenditures is not relevant to the apportionment of expenditures made in the current year.

Effect on tax basis of residence

In order to avoid a double tax benefit (allowance of a credit and also a reduced gain on a subsequent sale of the residence), the bill requires that any increase in basis of the residence on account of qualified expenditures for insulation or other energy-conserving components be reduced by the amount of the credit which is allowed with respect to the expenditures. The amount of allowed credit would include that part of the credit which was refunded to the taxpayer. For example, assume a taxpayer made \$2,000 of qualified expenditures which would normally increase the tax basis of his home by that amount. Assuming the taxpayer was allowed the maximum credit allowable in this case, \$400 (of which \$200 was refunded to him), the taxpayer's basis in his residence would be increased by only \$1,600 (the \$2,000 of expenditures minus the \$400 allowed credit).

Of course, an owner of a residence would not be entitled to an increase in tax basis with respect to qualifying expenditures of a lessee

who uses the residence as his principal residence.

#### Effective date

The amendments made by this provision are to apply to taxable years ending on or after April 20, 1977, for expenditures made on or after that date and before January 1, 1986.

#### Revenue effect

This provision is estimated to reduce receipts by \$446 mmillion for fiscal year 1978, \$616 million for fiscal year 1979, and \$992 million for fiscal year 1985.

## Energy savings estimate

It is estimated that as a result of the tax credit provisions for residential insulation, oil imports will be reduced by 300,000 barrels of oil per day in 1985.

## 2. Residential Renewable Energy Source Equipment Credit (sec. 1011 of the bill and new sec. 44C of the Code)

#### Present law

Under present law, no special tax credit or deduction is allowed for solar, wind, or geothermal energy equipment installed in connection with a residence. However, if installations constitute capital improvements to a residence, the amount of the expenditures involved are added to the taxpayer's basis in the residence for purposes of determining gain or loss on a subsequent sale of that residence.

## Reasons for change

Residential use of oil and natural gas energy represents a major portion of the country's total consumption of these fossil fuels. In view of the substantial potential oil and natural gas savings that could result from the use of alternate-energy-source measures for residential purposes, the committee believes that it is appropriate to encourage residential use of solar, wind, geothermal, and other renewable energy source equipment.

At the same time, the committee recognizes that solar, wind, and geothermal energy equipment technology is presently at an early stage of commercialization. In view of this, the committee feels that there is a need to encourage the purchase and installation of this equipment. Thus, the committee decided to provide a credit for a limited number of years in order to accelerate the purchase and installation of this equipment and the development of solar, wind, geothermal, and other

renewable energy source technology.

The committee recognizes that presently the most practical and least costly method of use of solar energy is with respect to hot water heaters. In order to encourage the use of solar energy in this manner, the committee decided to provide a two-tiered credit structure, with the first \$2,000 of expenditures (the approximate cost of many solar hot water heaters) subject to a higher level of credit (30 percent) than the next \$8,000 of expenditures (subject to a 20-percent credit).

Presently, as many as twenty-three States provide tax incentives (principally, property tax exemptions) with respect to residential use of solar energy equipment. The committee hopes that the other States and localities will recognize the need to enact laws in the immediate future which provide property tax exemptions for increases in value resulting from solar, wind, geothermal, and other renewable energy source equipment improvements.

## Explanation of provisions

## Nature, amount, and period of credit

The committee's bill provides a refundable income tax credit for renewable energy source expenditures for installations in connection with the principal residence of the taxpayer. Renewable energy source expenditures include expenditures for solar, wind, and geothermal

Secretary, by regulation, specifies as using any other form of renewable energy and which results in an overall energy savings. The credit is 30 percent of the first \$2,000 of qualifying expenditures and 20 percent of the next \$8,000 of qualifying expenditures. Thus, the maximum credit on the total qualifying expenditures of \$10,000 (\$2,000 plus

\$8,000) is to be **\$2,200**.

This credit is to be refundable. Thus, the credit will be applied against the taxpayer's tax liability, and to the extent it exceeds the amount of tax liability, the taxpayer would be entitled to a refund. Individuals who obtain loans under the nontax energy provisions of the National Energy Conservation Policy Act (Title II, H.R. 5037, passed by the Senate, September 13, 1977) are nevertheless to be entitled to the refundable credit for the amount of their qualifying expenditures, but it is anticipated that the amount of any loan issued under these provisions would be reduced by the amount of the credit allowed.

In determining the credit, the maximum allowable expenditures (the first \$2,000 subject to a 30-percent credit and the next \$8,000 subject to a 20-percent credit) are to be reduced by previous expenditures by the taxpayer which were taken into account in computing the renewable energy source credit for prior taxable years. Thus, if a taxpayer expended \$2,500 for renewable energy source equipment in 1978 and obtained a credit of \$700 (\$600 of the credit representing 30 percent of \$2,000 plus \$100 of the credit representing 20 percent of \$500), and he expended another \$2,000 for renewable energy source equipment in 1979, his credit for 1979 would be \$400, or 20 percent of \$2,000.

An individual will be eligible for the maximum credit each time he changes his principal residence. Thus, an individual would be eligible for the maximum credit for qualifying expenditures on his new principal residence, notwithstanding the allowance of the credit for qualifying expenditures on his previous principal residence and notwithstanding the allowance of the credit to a prior owner of the in-

dividual's new principal residence.

The entire cost of a renewable energy source property is allowed toward the credit only if at least 80 percent of the use of the property is for personal residential purposes. If less than 80 percent of its use is for personal residential purposes, the amount is reduced proportionately. For example, if a full expenditure of \$10,000 is made, but only 50 percent of the use of the property is for personal residential purposes (the other 50 percent of use being for business purposes), the allowed credit will be \$1,200 (the allowable credit on \$5,000, which is 50 percent of \$10,000). For purposes of this provision, use of a swimming pool is not to be treated as personal residential use.

In order to avoid undue administrative burdens due to de minimis claims, a minimum credit amount of \$10 for any taxable year is required with respect to any tax return (joint or separate) if any credit is to be allowed. This minimum credit requirement applies to the aggregate of the credits claimed for a taxable year for renewable energy source expenditures and for insulation and other energy-conserving

component expenditures.

The credit is to be available for expenditures made on or after April 20, 1977, and before January 1, 1986.

When qualified expenditures are treated as made

Generally, renewable energy source property expenditures are to be treated as made when the original installation of the property is completed. Consequently, for purposes of this provision, the time of payment or accrual of amounts for renewable energy source energy property would not be determinative of when the expenditures for

such property have been made.

However, in the case of renewable energy source energy expenditures in connection with the construction or reconstruction of a dwelling, the expenditures are to be treated as made when the taxpayer commences original use of the dwelling as his principal residence. Reoccupation by a taxpayer of a reconstructed dwelling, which he occupied as his principal residence prior to reconstruction, would not constitute the commencing of the original use of the dwelling as his principal residence. In this situation, the general rule stated above, i.e., time when original installation is completed, is to apply in determining when the renewable energy source property expenditure was made.

## Qualifying residences

In order to qualify for the credit, installations of renewable energy source equipment must be in connection with an individual's principal residence, and that residence must be located in the United States, Guam, or the U.S. Virgin Islands. The credit is available for existing and newly constructed and reconstructed dwellings. Owners and renters will be eligible for the credit; moreover, an individual who owns stock in a cooperative housing association or who is a member of a condominium management association will be treated as having expended an allocable share of amounts expended by the association for renewable energy source property and will be eligible for the maximum \$2,200 credit.

The cooperative stockholder's allocable share of the qualifying expenditures is to be the same as his proportionate share of the cooperative's total outstanding stock. The condominium management association's member's allocable share is to be the amount he is assessed by the association as a result of the renewable energy source expenditures.

<sup>1</sup>The term "reconstruction" contemplates the destruction and replacement of most of a dwelling's major structures (i.e., floors, walls, ceiling).

For these purposes, the term "condominium management association" means an association meeting the requirements of section 528(c)(1) of the Code, other than subparagraph (E) of that subsection (which requires an election to be taxed under section 528), with respect to a condominium project substantially all of the units of which are used as residences.

It is contemplated that during the period of reconstruction, when the taxpayer must temporarily reside in another dwelling, the reconstructed dwelling would continue to be treated as (assuming it originally was) the taxpayer's principal residence.

In most cases, an individual renting a residence from a member of a condominium management association could not obtain the credit because he would not be assessed for any of the association's expenditures. However, qualifying expenditures made directly by this individual would be eligible for the credit.

The determination of whether a dwelling unit is used by a tax-payer as his principal residence will be made under principles similar to those applicable to section 1034 of the Code (relating to sale or exchange of a principal residence) except that, in relation to renters, ownership of the dwelling unit will not be required. Moreover, in making this determination, the period for which a dwelling will be treated as a taxpayer's principal residence will include the 30-day period preceding the date the dwelling unit would, under principles similar to those applicable to section 1034, be treated as being used as the taxpayer's principal residence. Thus, installations which are completed within the 30-day period preceding the date the residence would (but for this provision) be treated as being used as the taxpayer's principal residence will be eligible for the credit.

Qualifying property

The credit for solar energy property applies to solar equipment (and parts solely related to the functioning of such equipment) which, when installed in connection with a dwelling, uses solar energy to heat or cool the dwelling or to provide hot water for use within the dwelling. Expenditures in connection with the leasing of solar energy equipment (as well as those for the acquisition of this equipment) will qualify for the credit. Subject to the expenditure limitations (30 percent of the first \$2,000 and 20 percent of the next \$8,000), the yearly solar equipment lease payments will be eligible for the credit. Generally, a solar energy equipment system involves the transformation of sunlight into heat or electricity through the use of such components as collectors (to absorb sunlight and create hot air), rockbeds (to store hot air), thermostats (to activate fans which circulate the hot air) and heat exchangers (to utilize the hot air to create hot water).

The credit for solar energy property applies to "passive solar systems" as well as "active solar systems," or any combination of both these systems. An "active solar system" is based on the use of mechanically forced energy transfer, such as the use of fans to circulate solar generated energy. "Passive solar systems" are based on the use of conductive, convective, or radiant energy transfer, such as the use of portions of a residential structure which serve as solar furnaces so as to add heat to the residence. However, expenditures for materials and components which will serve a significant structural function in the dwelling (e.g., extra-thick walls) would not be eligible for the credit.

The credit for wind energy property applies to wind energy equipment (and parts solely related to the functioning of such equipment) which, when installed in connection with a dwelling, uses wind energy to produce energy (in any form) for personal residential purposes. Generally, wind energy equipment involves a windmill which uses wind to generate electricity and other mechanical forms of energy.

The credit for geothermal energy property applies to geothermal equipment (and parts solely related to the functioning of such equip-

It is contemplated that the date habitation of the dwelling unit by the tax-payer begins would constitute in most cases the date such unit would be treated as being used as the taxpayer's principal residence.

ment \*) which uses geothermal energy to heat or cool a building or to provide hot water for it. The geothermal equipment must be equipment which is necessary to distribute or use geothermal steam and associated geothermal resources (as defined in sec. 2(c) of the Geothermal Steam Act of 1970—30 U.S.C. 1001(c)). Generally, geothermal energy is derived from geothermal deposits from geothermal reservoirs consisting of natural heat stored in rocks or in an aqueous liquid or vapor (whether or not under pressure). This includes hot brine, dry heat (that may be produced with the use of such a substance as freon) and hot water (such as that which may be used directly to heat a building equipped with a heating unit employing hot water heating).

Renewable energy source property need only be installed in connection with a dwelling, rather than in or on it. Thus, a "collector" (which absorbs sunlight) forming part of a solar energy system need not be installed on the roof or any structure of a house in order to qualify for the credit. Furthermore, qualifying property could include a windmill, solar collector or geothermal well and distribution system jointly owned by a number of families living in sep-

arate residential structures.

Renewable energy source property does not include conventional heating or cooling systems which serve to supplement ("backup") the renewable energy source equipment in heating or cooling the residence. Renewable energy source property also does not include expenditures for a swimming pool used as an energy storage medium or any

other energy storage medium which serves a dual purpose.

In the case of renewable energy source property, the original use of the property must commence with the taxpayer. This property must also be reasonably expected to remain in operation for at least five years and meet performance and quality standards prescribed by the Secretary of the Treasury (after consultation with the Secretary of Energy. Secretary of Housing and Urban Development and appropriate other agencies, such as the National Bureau of Standards). Performance standards would include standards relating to safety in both the installation and operation of the renewable energy source property. However, the performance and quality standards will not apply to property purchased prior to the promulgation of such standards. The committee is concerned with the potential for consumer fraud in the absence of definitive standards which are to apply to the property qualifying for the credit. Thus, it is the committee's desire that the regulations establishing these standards be promulgated by the Secretary without unnecessary delay.

Pursuant to his authority under the Code (sec. 7805), the Secretary may promulgate regulations (in addition to those relating to performance and quality standards) which specify the solar, wind, and geothermal energy equipment qualifying for the credit. The Secretary is authorized to promulgate regulations which would add to the list of qualifying property those devices which rely on renewable energy sources and which would result in an overall energy savings. The Secretary is directed to prescribe guidelines setting out the criteria which an equipment item must meet if it is to be added to the list of

<sup>&</sup>lt;sup>6</sup> Thus, expenditures for pipes serving both geothermal and nongeothermal functions would not be eligible for the credit.

qualifying equipment. The Secretary is also directed to establish procedures under which a manufacturer might apply to have a product

added to the qualifying expenditure list.

Purchasers of newly constructed or reconstructed homes in connection with which renewable energy source equipment has been installed are eligible for the credit with respect to expenditures for both the equipment itself and for the labor costs attributable to the onsite preparation, assembly, and installation of such equipment. These costs are to include direct labor costs and indirect labor costs (such as the cost of construction supervisory personnel properly allocable to the onsite preparation, assembly, and installation of the equipment). The Secretary may require the taxpayer to supply a certification by the builder or contractor as to cost of the equipment and the labor costs attributable to the onsite preparation, assembly, and installation of such equipment.

In determining whether an item for which the credit is claimed is eligible, and in determining whether a particular item meets performance and quality standards, onsite inspections which are not already authorized and used by a governmental agency in the assessment and collection of income taxes are prohibited, except with the written con-

sent of the resident claiming the credit.

## Expenditures by joint occupants

If two or more individuals install qualifying renewable energy source property in connection with a dwelling used jointly by them as their principal residence, the amount of the credit for any calendar year is to be determined by treating all of the joint occupants as one taxpayer. Thus, a total of \$10,000 of qualifying expenditures may be made for that residence, rather than \$10,000 by each of the residents. The amount of the credit allowed to each occupant is to be apportioned according to the same ratio as the amount of qualifying expenditures made by that occupant bears to the total amount of qualifying expenditures made by all the occupants.

The fact that a joint occupant may be unable to claim his credit because his allowable credit does not equal the \$10 minimum credit amount is to have no effect upon the computation of the amount of the

allowable credit for the other joint occupants.

The maximum expenditure amount (\$10,000) is to be reduced by the aggregate of prior years' expenditures on the residence by any of the joint occupants, which expenditures were taken into account in computing the credits for such years. This aggregate amount of prior years' expenditures is not broken down and is not applied in the current year to take account in any way of the specific expenditures of occupants in prior years. For example, assume A and B have together made prior year qualifying expenditures of \$8,000 (A, \$6,000 and B, \$2,000) on their principal and jointly occupied residence. In the current year, each makes qualifying expenditures of \$1,500, for a total of \$3,000. Of the \$2,000 of expenditures qualifying for the credits (\$10,-000 - \$8,000, \$1,000 will be allocated to A (\\$1,500/\\$3,000 \times \\$2.000) and \$1,000 will be allocated to B  $(1,500/\$3,000 \times \$2,000)$ . The fact that A had previously computed his credit in prior years with respect to \$6,000 out of the total \$8,000 of expenditures would not be relevant to the apportionment of expenditures for the current year.

## Effect on tax basis of residence

In order to avoid a double tax benefit (allowance of a credit and also a reduced gain on a subsequent sale of the residence), the bill requires that any increase in basis on account of a qualified renewable energy source expenditure be reduced by the amount of the credit which is allowed with respect to the expenditure. The amount of allowed credit would include that part of the credit which was refunded to the taxpayer. For example assume a taxpayer made \$1,500 of qualified expenditures which would normally increase the tax basis in his home by that amount. Assuming that the taxpayer was allowed the maximum credit allowable in this case, \$450 (of which \$200 was refunded to him), the taxpayer's basis in his residence would be increased by only \$1,050 (the \$1,500 of expenditures minus the \$450 allowed credit).

Of course, the owner of a residence would not be entitled to an increase in tax basis with respect to qualifying expenditures of a lessee who uses the residence as his principal residence.

#### Effective date

The amendments made by this provision are to apply to taxable years ending on or after April 20, 1977, for expenditures made on or after that date and before January 1, 1986.

#### Revenue effect

These provisions are estimated to reduce receipts by \$27 million for fiscal year 1978, \$58 million for fiscal year 1979, and \$186 million for fiscal year 1985.

## Energy savings estimate for residential credits

It is estimated that as a result of the committee provisions for residential renewable energy source tax credits, oil imports will be reduced by 25,000 barrels per day in 1985.

#### **B. TRANSPORTATION TAX PROVISIONS**

1. Extension to 1985 of Existing Rate of Tax on Gasoline and Motor Fuels (sec. 1021 (a) and (c) of the bill and secs. 4041, 4081, 6412 and 6421 of the Code)

#### Present law

Under present law, a retailers excise tax of 4 cents a gallon is imposed on diesel and other special motor fuels sold for use (or used) in a high-way vehicle (sec. 4041). Also, a manufacturers excise tax of 4 cents a gallon is imposed on gasoline sold by the producer or importer (sec. 4081). These taxes are scheduled to be reduced to 1½ cents a gallon on October 1, 1979 (as the Highway Trust Fund—to which the revenues now go—is scheduled to expire as of September 30, 1979).

## Reasons for change

The committee believes that, because of the need to conserve energy and reduce gasoline or assumption, it would be inappropriate to reduce the price of gasoline on October 1, 1979, by allowing the Federal excise tax on gasoline and other motor fuels to be reduced from 4 cents a gallon to 1½ cents a gallon. Thus, the committee decided to extend the present 4-cents-a-gallon tax rate for six years (until October 1, 1985) as a signal to motorists of the extent of the congressional concern for energy conservation.

## Explanation of provision

The bill extends the current 4-cents-a-gallon excise tax on gasoline and other motor fuels for six years, or from September 30, 1979, to September 30, 1985 (after which time, the rate will be 1½ cents a gallon). The bill, however, does not extend the Highway Trust Fund, which is currently scheduled to expire as of September 30, 1979. The committee's bill does not address the question of the specific use of such motor fuel tax revenues after September 30, 1979, except that, until the use is otherwise specified in subsequent legislation, the revenues will go into the general fund of the Treasury.

The committee is aware that other congressional committees will be considering surface transportation authorization legislation during this Congress, and that recommendations will be made regarding the

<sup>&</sup>lt;sup>1</sup> The other special motor fuels are benzol, benzene, naphtha, liquified petroleum gas, casinghead and natural gasoline, or any other liquid (other than kerosene, gas oil, fuel oil, gasoline or diesel fuel). (See also discussion below, in section 3, of application of the tax on other special motor fuels in the case of nonhighway use, such as motorboat use.)

<sup>&#</sup>x27;Gasoline used for nonhighway purposes or by local transit systems is currently eligible for a refund or credit equal to 2 cents a gallon (sec. 6421). (See also changes made by this bill in the gasoline tax paid by motorboat users, by users for off-highway nonbusiness purposes, and by local transit systems, as well as the tax on other motor fuels used by school buses and local or intercity buses.)

Highway Trust Fund and the present trust fund taxes. The committee also will be giving consideration to these matters later in this Congress, and will decide at that time on the future use of the gasoline and other motor fuels tax revenues.

#### Effective date

The bill extends the present 4-cents-a-gallon excise taxes on gasoline and other motor fuels from September 30, 1979, through September 30, 1985.

#### Revenue effect

It is estimated that this provision will increase budget receipts by \$3.3 billion in fiscal 1980, \$3.4 billion in 1981, and \$3.8 billion in fiscal 1985.

## Energy savings estimate

This provision will result in a savings of oil consumption of about 28,000 barrels per day in 1980 and about 26,000 barrels per day in 1985.

# 2. Exemption From Excise Tax or Reduction of Rate for Certain Blended Gasoline (sec. 1021(b) of the bill and secs. 4041 and 4081 of the Code)

#### Present law

Under present law, motor fuel which is a blend of gasoline and methanol (wood alcohol) or gasoline and ethanol (grain alcohol) would ordinarily be subject to a 4-cent-per-gallon tax if used in a highway vehicle. This is the same rate of tax as would apply to ordinary gasoline used in highway vehicles.

## Reasons for change

The committee considers it important to encourage the development of energy sources other than petroleum products. In particular, it is important to develop products which can reduce the use of

petroleum products in automobile transportation.

Both methanol and ethanol can be mixed with gasoline in combinations of up to 15 percent methanol or ethanol to make a fuel which can be used by existing automobiles. Neither methanol nor ethanol are currently produced in sufficient quantities or at sufficiently low costs for gasoline-methanol or gasoline-ethanol combinations to be competitive with ordinary gasoline as an automobile fuel. Methanol, which can be made from coal, wood, or urban waste (as well as from natural gas), and ethanol, which can be made from grain or sugar cane, are currently more expensive to produce than ordinary gasoline, and large scale production of either would require very substantial capital investment.

Thus, the committee believes it is appropriate to encourage their production by providing gasahol, that is, gasoline-methanol and gasoline-ethanol blends, with a more favorable treatment under the Federal fuels excise tax than gasoline and petroleum-based fuels. The technology for the production of ethanol from agricultural products and for the production of methanol from forestry products seems to require greater subsidies than for the production of methanol from coal or from urban waste.

Consequently, the committee decided to exempt from Federal excise taxes on motor fuels gasahol blends containing at least 10 percent ethanol or methanol derived from agricultural or forestry products. It also decided to reduce the tax to 3 cents per gallon for gasahol blends of which at least 10 percent of the fuel by volume is methanol produced from nonagricultural and nonforestry products.

## Explanation of provision

## In general

The bill exempts from the Federal excise taxes on motor fuel gasoline-alcohol blends if such blends contain at least 10 percent ethanol or methanol (or a combination of ethanol and methanol) by volume and if such ethanol or methanol is produced from agricultural or forestry products.

If a gasoline-alcohol blend contains at least 10 percent ethanol or methanol (or a combination of ethanol and methanol) by volume and the ethanol or methanol is not produced from agricultural and forestry products or from natural gas or petroleum, the blend would be subject to Federal motor fuels excise taxes of 3 cents per gallon (rather than 4 cents per gallon).

In the case of ethanol which contains less than 5 percent by volume of a denaturant other than gasoline, the volume of the ethanol is to be

treated as including the volume of the denaturant.

## Relationship to taxes on alcohol

The committee intends that alcohol used in the production of gasahol not be subject to the Federal excise taxes on distilled spirits. However, no changes were made in these taxes because present law provides that the ethanol 1 potentially subject to tax can be withdrawn from the bonded premises tax-free if it is first denatured by adding 1 gallon of gasoline or 5 gallons of wood alcohol (methanol) for each 100 gallons of alcohol. The requirement in existing law that denaturing occur before the ethanol is removed from the bonded premises is intended to guard against the diversion of the ethanol to uses which would be subject to tax.

Chapter 51 of the Internal Revenue Code sets forth a detailed regulatory scheme for distillery plants and persons involved in the production of alcohol. This regulatory scheme applies to the production of alcohol for industrial uses, as well as production for human consumption. The regulatory scheme requires the registration of a distillery and an investigation of the background of the individuals operating the distillery prior to its commencement of business. This scheme also requires approval of even the most minute details of plant construction and provides for continuing supervision by employees of

the Bureau of Alcohol, Tobacco and Firearms.

The committee intends that producers of gasahol should be encouraged to begin commercial production of gasahol as soon as possible subject to the minimum amount of regulation needed to insure against violation of the alcohol taxes.

Consequently, the bill provides specific instructions to the Secretary of the Treasury to expedite, to the maximum extend possible, the applications of persons desiring to produce ethanol for use in gasahol. (and to the House Committee on Ways and Means) within 6 months after the date of enactment suggesting legislative amendments which could reduce the amount of regulation to which gasahol producers would be subject without undermining the basic goal of regulation of producers of alcohol—preventing the use of untaxed alcohol for human

<sup>&</sup>lt;sup>1</sup> Ethanol, but not methanol, is generally subject to a tax of \$10.50 on each proof gallon when it is withdrawn from the distillery (or other bonded premises) unless certain exceptions, which are generally intended to insure that the alcohol is exported or is not used for human consumption, apply (secs. 5001, 5002, and 5214).

<sup>\*</sup>Section 5214(a)(1)(C) of the Code provides that alcohol can be withdrawn from bonded premises free of tax for use as fuel after it has been denatured in an appropriate manner. The regulations state that approved manners of denaturing alcohol include adding 1 gallon of gasoline per 100 gallons of alcohol (27 CFR § 212.38 (1976)) or adding 5 gallons of wood alcohol per 100 gallons of alcohol (27 CFR § 212.16 (1976)).

consumption. It is intended that this report be based on a thorough investigation by the Bureau of Alcohol, Tobacco, and Firearms in conjunction with appropriate Treasury Department officials.

#### Effective date

These provisions apply to sales or use after January 1, 1978, and before October 1, 1985.

#### Revenue effect

It is estimated that this provision will reduce budget receipts by less than \$5 million per fiscal year through 1983, by \$9 million in 1984, and by \$12 million in 1985.

## Energy savings estimate

This provision is estimated to result in negligible energy savings.

3. Removal of Refund or Credit for Excise Taxes on Motor Fuels and Lubricating Oil for Nonbusiness, Off-Highway Use (secs. 1022 and 1023 of the bill, secs. 39, 4041(b), 6421, and 6424 of the Code, and sec. 201(b) of the Land and Water Conservation Fund Act of 1965)

#### Present law

Under present law, a 4-cents-a-gallon manufacturers excise tax is levied on the sale of gasoline by the producer or importer (sec. 4081). However, when the fuel is used in other than a highway vehicle which is registered, or is required to be registered, for highway use, the ultimate purchaser may obtain a refund of 2 cents a gallon on his purchase (sec. 6421) or credit against his income tax (sec. 39). Use of gasoline in a motorboat thus qualifies under present law for a credit or refund of 2 cents a gallon. This credit or refund is also available for nonbusiness off-highway use by such vehicles and equipment as minibikes, snowmobiles, power lawn mowers, chain saws and other yard equipment.

The 4-cents-a-gallon retailers excise tax on special motor fuels (sec. 4041(b)) <sup>1</sup> applies only to fuels sold for use (or used) in a motor vehicle or motorboat. However, the rate of tax is only 2 cents a gallon if the purchaser is to use them in other than a highway vehicle which is registered, or required to be registered, for highway use. If special motor fuels are sold at the 4-cent rate, and used in a manner qualifying for the 2-cent rate, the purchaser is entitled to a 2-cent-a-gallon payment on such use (sec. 6427); the payment is by a refund or income tax credit in the same manner as the gasoline tax payment.

Diesel fuel also is taxed at 4 cents a gallon, but the tax does not affect motorboats or other nonhighway vehicles, as the fuel is taxed only when sold for use, or used, in a diesel-powered highway vehicle

 $(\sec. 4041(a)).^2$ 

Under present law, a manufacturer's excise tax of 6 cents a gallon is imposed on lubricating oil (other than cutting oils) (sec. 4091). However, if lubricating oil which is subject to tax is used otherwise than in a highway motor vehicle, the ultimate purchaser is eligible for a refund or income tax credit of the full 6 cents per gallon (secs. 39 and 6424).

The net proceeds from the fuel taxes collected from fuel used in motorboats are transferred to the Land and Water Conservation Fund 3 (after first having been appropriated to the Highway Trust

Fund).

Diesel fuel is taxed at a rate of 2 cents a gallon if it is sold for use or used as a fuel in a diesel powered highway vehicle (1) which is not registered or required to be registered for highway use, or (2) which is owned by the United

States and is not used on the highway.

<sup>&</sup>lt;sup>1</sup> The fuels are benzol, benzene, naphtha, liquefied petroleum gas, casinghead and natural gasoline, and any other liquid fuel (other than kerosene, gas oil, fuel oil, gasoline, or diesel fuel).

<sup>\*</sup>Moneys from the Land and Water Conservation Fund are used by the Federal Government for acquisition of recreation land (e.g., National Parks or other recreation areas) and for matching grants (on a 50/50 basis) to States for acquisition and/or development of recreation lands (e.g., State or local parks or other recreation areas). (16 U.S.C. 4601-5 and following.)

## Reasons for change

The committee considers it to be in the interest of the national energy conservation policy to treat motorboat fuel use the same as highway fuel use. Thus, the committee believes it appropriate at this time to remove the present 2-cents-a-gallon refund or credit for motorboat use of gasoline and other special motor fuels.

Furthermore, the committee does not believe it to be in the interest of national energy conservation to allow a credit or refund of 2 cents a gallon for gasoline or of the entire 6-cents a gallon tax on lubricating oil where the gasoline or oil is used for nonbusiness, off-highway

uses.

In addition, elimination of these excise tax refunds or credits for nonbusiness off-highway use of gasoline, other motor fuels and lubricating oil would simplify the filling out of the income tax return for nonbusiness taxpayers by eliminating one line from consideration, and it would result in loss of the credit for only about 840,000 returns on

which it is currently claimed.

Moreover, since the user tax contribution from motorboats is increased by this provision, the committee concluded that the revenues from the 2-cents-a-gallon increase in the fuels tax on motorboat use should be transferred to the Land and Water Conservation Fund (as are the revenues from the present 2-cents-a-gallon tax) to be available for, among other things, the provision of increased funding of water recreational facilities used by motorboats.

## Explanation of provision

The bill removes the current 2-cents-a-gallon reduction in the taxes on gasoline and special motor fuels (other than diesel fuel) for fuel used in a motorboat. Therefore, the taxes on motor fuels used in a motorboat (other than diesel fuel, which remains exempt from tax) would be 4 cents a gallon, the same as for motor fuels used in a highway vehicle.

The bill also removes the 2-cents-a-gallon credit or refund of the excise tax on gasoline used for nonbusiness, off-highway use. (Under present law, the excise tax on special motor fuels is not applicable to nonbusiness, off-highway use of fuel unless it is used in a motorboat or in certain motor vehicles which are not operated on the highway.)

In addition, the bill also removes the refund or credit of the 6-cents-a-gallon tax on lubricating oil which is used for nonbusiness, off-

highway purposes.

The additional 2-cents-a-gallon fuels taxes on motorboat use will be transferred into the Land and Water Conservation Fund, to be available for expenditure for purposes under that fund.

#### Effective date

These provisions are effective on and after January 1, 1978.

#### Revenue effect

It is estimated that this provision will increase budget receipts by \$4 million per year beginning with fiscal year 1979. Almost all of these amounts would be transferred to the Land and Water Conservation Fund.

## Energy savings estimate

This provision is estimated to result in negligible energy savings.

# 4. Repeal of Excise Tax on Buses and Bus Parts (secs. 1024 and 1025 of the bill and secs. 4061, 4063, 4221 and 6416(b)(2) of the Code)

#### Present law

Under present law, a 10-percent manufacturers excise tax is imposed on the sale of buses having a gross vehicle weight of more than 10,000 pounds (sec. 4061(a)). However, present law provides for an exemption from this tax for "local transit buses"; that is, those "which are to be used predominantly by the purchaser in mass transportation service in urban areas" (sec. 4063(a)(6)). The tax also does not apply to school buses sold to any person for "exclusive" use in transporting students and employees of schools operated by State or local governments or by tax-exempt educational organizations (sec. 4221(e)(5)).

Present law also contains an 8-percent manufacturers excise tax on parts and accessories (other than tires and inner tubes, which are taxed separately under sec. 4071) of the type used on buses and trucks (sec. 4061(b)). There are no exemptions from this tax for parts and accessories sold for use on local transit buses or privately-owned school

buses.

The revenues from the excise taxes on buses and bus parts go into the Highway Trust Fund (through September 30, 1979).

## Reasons for change

The committee considers it desirable to encourage the use of bus transportation because it is a more energy-efficient mode of transportation than use of private automobiles. In addition, the committee believes that the tax distinction between local transit buses and intercity buses (scheduled and charter) should be removed, as both types of bus transportation conserve energy as compared with private auto transportation (upon which there is no manufacturers excise tax for the purchase of either the passenger automobile or the related parts and accessories). Consequently, the committee decided that the excise taxes on buses and bus parts and accessories should be repealed.

## Explanation of provision

The committee's bill repeals the 10-percent excise tax on all buses as well as the 8-percent tax on bus parts and accessories.

This exemption applies to privately-owned local transit buses, since "public" transit buses are exempted under the provision exempting State and local gov-

ernments from manufacturers excise taxes (sec. 4221(a)(4)).

<sup>&</sup>lt;sup>1</sup>This tax is scheduled to be reduced to 5 percent for sales on or after October 1. 1979.

<sup>\*</sup>This exemption applies to persons purchasing school buses for contract operation to transport school students or employees; school buses sold directly to State and local governments and to tax-exempt educational organizations for their exclusive use are already exempted under the general manufacturers excise tax exemption provisions for State and local governments (sec. 4221(a)(4)) and for tax-exempt educational organizations (sec. 4221(a)(5)).

## Tan on buses

With respect to the 10-percent excise tax on buses, floor stocks refunds are provided in the case of tax-paid buses in dealers' inventories as of the day after the date of enactment. Also, consumer refunds are provided in the case of sales made on or after April 20, 1977, and on or before the date of enactment. The floor stocks refunds and consumer refunds are essentially similar to those generally provided on past occasions for repealed excise taxes, such as in the Revenue Act of 1971 (when the manufacturers excise tax was repealed for automobiles and light-duty trucks).

Floor stocks refunds.—Floor stocks refunds of the 10-percent tax paid by a manufacturer, producer, or importer are provided for buses held in dealers' inventories as of the day after the date of enactment of this Act if the bus has not been used and is intended for sale. The amount of tax is to be credited or refunded (without interest) to the manufacturer, producer, or importer, if certain conditions are met.

The claim for the credit or refund must be filed with the Secretary of the Treasury before the first day of the 10th calendar month beginning after the day after the date of enactment based upon a request from a dealer submitted to the manufacturer, producer, or importer before the first day of the 7th calendar month beginning after the day after the date of enactment. Further, reimbursement of the tax amount must be made to the dealer by the manufacturer, producer, or importer on or before the first day of the 10th month, or written consent must be obtained from the dealer regarding allowance of the credit or refund. No credit or refunds is to be allowed to a manufacturer, producer, or importer without such evidence of the dealer's inventory for which the credit or refund is claimed as may be required under Treasury regulations.

Consumer refunds.—The bill also provides for consumer refunds of the 10-percent tax for bus purchases made on or after April 20, 1977, and on or before the date of enactment. The amount of the tax is to be credited or refunded (without interest) to the manufacturer, producer, or importer: (1) if the taxpayer has evidence of the sale to the ultimate purchaser and of the reimbursement of the tax to the purchaser (as may be required by Treasury regulations); (2) if the claim for the credit or refund is filed before the first day of the 10th calendar month beginning after the day after the date of enactment based upon information supplied before the first day of the 7th calendar month beginning after the day after enactment by the person who sold the bus; and (3) if reimbursement of the tax has been made to the ultimate purchaser on or before the first day of such 10th calendar

month.

Other provisions.—Any tax paid by reason of section 4218(a) (relating to use by the manufacturer or importer considered a sale) is to be treated as an overpayment of the tax if the tax is imposed on or after April 20, 1977. The term "dealer" includes a wholesaler, jobber, distributor, or retailer. A bus is considered as "held by a dealer" if the title has passed to the dealer (whether or not delivery has been made), and if, for purposes of consumption, the title (or possession) has not at any time been transferred to any person other than a dealer.

## Tax on bus parts

The bill also repeals the 8-percent manufacturers excise tax on bus parts and accessories. Under regulations prescribed by the Secretary of the Treasury, the parts and accessories tax imposed by section 4061(b) is not to apply to any part or accessory which is "sold for use" by the purchaser on or in connection with a bus. It is contemplated that such parts and accessories would be sold tax-free by the manufacturer, producer, or importer for use on or in connection with a bus only if appropriate evidence of exemption is furnished by the purchaser. If the sale of the parts and accessories is made other than by the manufacturer, producer, or importer, the bill provides for a refund of the 8-percent tax where the part or accessory is "sold for use" by the purchaser on or in connection with a bus. Thus, parts and accessories that may be interchangeable between trucks and buses will continue to be subject to the parts tax if they are not "sold for use" with respect to buses.

There is no provision for floor stocks refunds or consumer refunds with respect to the repeal of the excise tax on bus parts and accessories, because the relatively small amount of tax per unit would not appear to cause a delay in consumer purchases, and because there would be considerable administrative burden in providing and processing such

refunds.

#### Effective date

#### Tax on buses

The repeal of the 10-percent excise tax on buses is effective for sales by the manufacturer, producer, or importer on or after April 20, 1977. An article is to be considered as sold before April 20, 1977, if possession or right to possession passes to the purchaser before that time.

In the case of partial payments of tax in connection with leases, certain types of installment sales, conditional sales, or certain types of chattel mortgage arrangements, present law (sec. 4216(c)) provides that the manufacturers excise tax is to be paid upon each partial payment and is to be based on the tax rate in effect on the date each partial payment is due. To avoid windfall benefits to a manufacturer where the lease, installment sale, etc., took into account the 10-percent tax, the bill provides that no tax is due on partial payments made on or after April 20, 1977, if the lessor or vendor establishes that the amount of the payments payable on or after that date has been reduced by the amount of tax that would otherwise have been due with each partial payment on or after that date. If the lessor or seller does not establish that the payments have been so reduced, the tax reduction provided by the bill is not to apply to the article on which those partial payments are being made. In other words, for the tax reduction to be available in partial payment cases, the benefit of the repeal must be passed on to the lessee or purchaser.

## Tax on bus parts

The repeal of the 8-percent excise tax on bus parts and accessories is effective for sales by the manufacturer, producer, or importer on or after the first day of the first calendar month beginning more than 10 days after the date of enactment.

## Revenue effect

## Tax on buses

It is estimated that the repeal of the 10-percent excise tax on buses will reduce budget receipts by \$13 million for fiscal 1978 (which includes the floor stocks and consumer refunds) and \$9 million per year thereafter.

These amounts would otherwise go into the Highway Trust Fund (through September 80, 1979).

Tax on bus parts

The repeal of the 8-percent excise tax on bus parts and accessories is estimated to reduce budget receipts by \$3 million for fiscal year 1978 and each year thereafter.

These amounts would otherwise go into the Highway Trust Fund

(through September 30, 1979).

## Energy savings estimate

These provisions are estimated to result in negligible energy savings.

5. Removal of Excise Tax on Certain Items Used on or in Connection with Intercity, Local, or School Buses (sec. 1026 of the bill and secs. 4071, 4092, 4221(e), 6416(b), 6421(b)(1), 6424 and 6427 of the Code)

#### Present law

Presently, privately owned and operated buses use products that are subject to the manufacturers excise taxes on tires, tubes and tread rubber, 'gasoline,' and lubricating oil,' as well as the retailers excise tax on diesel fuel and other special motor fuels.' Complete exemption is provided from these excise taxes for State and local governments (secs. 4041(g)(2) and 4221(a)(4)) and for tax-exempt educational organization (secs. 4041(g)(4) and 4221(a)(5)). A partial exemption (2-cents-a-gallon refund or credit) is available from the tax on gasoline and other motor fuels for use by a privately owned local transit system for the portion of its total fare revenue represented by "commuter fare revenue" (secs. 6421(b) and (d)(2) and 6427(b)).

The revenues from these taxes paid with respect to highway use now go into the Highway Trust Fund (through September 30, 1979).

## Reasons for change

Since bus transportation is more energy-efficient than private automobile transportation, the committee believes it desirable to encourage greater use of bus transportation. In addition, the committee considers it appropriate to make the excise tax treatment of private transit and school bus operations consistent with governmental and tax-exempt educational bus operations. Therefore, the committee decided to extend the present exemptions from the taxes on tires, tubes and tread rubber, gasoline and other motor fuels, and lubricating oil to privately owned intercity and local bus operations and private school bus operations not presently exempt from these taxes.

<sup>&</sup>lt;sup>1</sup> A tax of 10 cents a pound on highway tires and inner tubes and of 5 cents a pound on tread rubber for highway use (sec. 4071). (The taxes on highway tires and inner tubes are scheduled to be reduced to 5 cents a pound and 9 cents a pound, respectively, on October 1, 1979, while the tax on tread rubber expires on that date.)

A tax of 4 cents a gallon (sec. 4081).
A tax of 6 cents a gallon (sec. 4091).
A tax of 4 cents a gallon (sec. 4041).

The partial exemption is available only if at least 60 percent of the total passenger fare revenue derived during a calendar quarter from "scheduled common carrier public passenger land transportation service along regular routes" is from "commuter fare revenue." Commuter fare revenue is defined (sec. 6421 (d)(2)) as fares derived from transportation of persons and attributable to (1) amounts paid which do not exceed 60 cents, (2) amounts paid for commuting or season tickets for single trips of less than 30 miles, or (3) amounts paid for commuting tickets for one month or less.

## Explanation of provisions

The bill removes the excise taxes on highway tires, inner tubes and tread rubber, gasoline and other motor fuels, and lubricating oil for

private intercity, local and school bus operations.

In the case of the excise taxes on highway tires, inner tubes and tread rubber, the bill provides an exemption for sales by a manufacturer, producer, or importer of such items "sold for use" by the purchaser on or in connection with an intercity, local, or school bus. It is contemplated that such tires, tubes and tread rubber would be sold tax-free only if appropriate evidence of exemption is furnished by the purchaser. Where the sale of such items is made other than by the manufacturer, producer, or importer, the bill provides for a refund (or credit) of the tax when the item is "sold for use" by the purchaser on or in connection with an intercity, local, or school bus.

An "intercity or local bus" means any bus which is used predominantly in furnishing (for compensation) passenger land transportation available to the general public if either (1) the transportation is scheduled and along regular routes, or (2) the passenger seating capacity of the bus is at least 20 adults (not including the driver). Thus, under the first alternative portion of this definition, a bus which is used predominantly (that is, more than 50 percent) in providing (for compensation) scheduled transportation along regular routes (such as is provided by local transit systems or an intercity bus operation providing regularly scheduled service along regular routes) will qualify for the exemption from the taxes on tires, tubes, and tread rubber, regardless of the size of the bus involved. For nonscheduled (i.e., charter) operations (covered by the second alternative portion of the definition), the exemption is available only if the bus has a passenger seating capacity of at least 20 adults (not including the driver) and the transportation is available to the general public. The purpose of the "at least 20 passenger" requirement is to insure that, in situations where regularly scheduled service is not being furnished, vans and similar vehicles used for vanpooling or taxi service are not eligible for the exemption from these taxes (and the fuels taxes).

Charter service is to be considered "available to the general public" if the taxpayer offers this service to more than a limited number of persons or organizations. For example, if a bus operator normally provides charter operations through travel agencies, but his buses are available for chartering by the general public, the buses predominantly used in providing such service would be considered "intercity or local buses." However, if the bus operator is engaged in providing charter services to only one person, group, or organization, or a limited number of persons, with respect to a particular bus, such a bus would not qualify as an "intercity or local bus." The purpose of this limitation is to provide these exemptions only for buses which are used in a passenger transportation business available to the general public (for compensation) and not to buses used primarily as part of a nontransportation

The type of use which would qualify as "use in passenger land transportation available to the general public" includes not only mileage traveled with passengers (which otherwise meets the use qualification), but also use which is incident to such passenger transportation (such as "deadheading").

business or for the personal use of the operator, one family, one group, or organization, or contract use with a limited number of persons.

A "school bus" means any bus with respect to which "substantially all" (that is, at least 85 percent) of the use involves transporting students and employees of schools. If, in connection with the transportation of students or employees of schools, a bus is driven without passengers to or from a point to or from which students or employees of schools are transported (that is, so-called "deadheading"), this use shall be considered as a use which involves transporting students or employees of schools. A school is any educational organization which normally maintains a regular faculty and curriculum and normally has a regularly enrolled body of students in attendance at the place where the educational activities are regularly conducted. Thus, the exemption from these taxes applies to use by both tax-exempt and taxable schools. Also, it applies to a private contractor who operates a bus for tax-exempt or taxable schools.

The bill provides for the refund or credit of the taxes paid with respect to lubricating oil used in an intercity, local, or school bus. If the bus meets the "predominant use" or "substantially all the use" test, the tax on all the lubricating oil used in the bus is to be credited or

refunded.

In addition, the bill provides for the refund or credit of the taxes paid on gasoline and other motor fuels but only to the extent these fuels are used in a bus engaged in furnishing (for compensation) passenger land transportation available to the general public or in school bus transportation operations. The allocation of fuel to these nontaxable uses may be determined on a mileage basis (for the same or comparable vehicles) or on an actual fuel use basis. Use in "passenger land transportation available to the general public" means the same type of use that would qualify in meeting the predominant use test for intercity or local buses, and use in school bus transportation operations means the same type of use that would qualify in meeting the "substantially all the use" test for school buses.

#### Effective date

These provisions are effective on the first day of the first calendar month which begins more than 10 days after the date of enactment of this Act.

#### Revenue effect

These provisions are estimated to reduce budget receipts by \$13 million for fiscal year 1978 and each year thereafter. These revenues would otherwise go into the Highway Trust Fund (through September 30, 1979).

## Energy savings estimate

It is estimated that the energy savings as a result of these provisions will be negligible.

## 6. Tax credit for vans used in van pooling (sec. 1027(a) of the bill and new sec. (46(c)(6) of the Code)

#### Present law

Under present law, an employer who purchases a van to transport individuals to and from work may claim the regular investment credit with respect to the purchase of the van. Since vans designed for transportation of passengers normally are treated as having a useful life of about 4 years, the investment credit with respect to such vans is 31/3 percent of the purchase price in the case of a van used exclusively for business purposes.

#### Reasons for change

A small but increasing number of employers have begun purchasing vans (or buses) to provide transportation for their employees to and from work. This "van pooling" is an energy efficient means of transportation in comparison to commutation to work by private automobile. Frequently, the employer can defray at least the operating expenses

of the van by charging the employees for these expenses.

The purchase of a passenger van which would seat at least nine individuals is relatively expensive. These vans normally cost about \$8,000 at the current time. The committee concluded that it was desirable to provide a greater incentive for the purchase of such vans for van pooling purposes than is provided under current law. Accordingly, the committee amendment provides a 20 percent credit for the purchase of a van by an employer to be used for van pooling purposes if the useful life of the van is at least 3 years.

## Explanation of provision

The bill provides that, if an employer purchases a new van with a useful life of at least 3 years and a seating capacity of nine persons (including the driver) and substantially all the use of the van is for transporting his employees to and from work, the employer is entitled to the full 10 percent investment credit and the special 10 percent business energy investment credit.

To qualify for this treatment, substantially all the use of the van must be for the transporting of the taxpayer's employees to and from their places of employment, and the number of employees transported on a regular basis must be at least equal to one-half of the maximum number of persons (including the driver) that the van is designed to carry. This van pooling use may be on a for profit or nonprofit

¹The investment credit is available only for property with respect to which a deduction for depreciation is allowable on the property. Consequently, if the van is used in part for business purposes and in part for personal use, the investment credit would be available only with respect to the proportionate part of the basis of the van which corresponds to the portion of the usage for business purposes.

basis in which the costs of such arrangements are primarily paid for by the individuals utilizing such arrangement or by the employer of such individuals.

If, prior to the expiration of 36 months from the time the van is placed in service, it ceases to be used for van pooling purposes, both the regular investment credit and the business energy investment credit shall be recaptured.

Use of a van for purposes other than van pooling shall not result in a recapture of the credit-if substantially all (that is, at least 85 percent) of the use of the van on a mileage basis for at least 36 months

after purchase is for van pooling.

#### Effective date

This provision applies to vans purchased after December 31, 1977 and before January 1, 1986.

#### Revenue effect

It is estimated that this provision will result in a decrease in budget receipts of less than \$1 million annually.

#### Energy savings estimate

This provision will result in a negligible energy savings.

# 7. Exclusion from income of certain employer-furnished transportation (sec. 1027(b) of the bill and new sec. 124 of the Code)

#### Present law

Under present law, it is provided that, in the absence of provisions to the contrary, "gross income means all income from whatever source derived" (sec. 61). However, many specific statutory exceptions have been provided and there is considerable uncertainty about the taxation of certain noncash benefits furnished to employees.

## Reasons for change

An increasing number of employers are providing their employees with transportation to and from work by van. The providing of such transportation either at no charge or below cost could be viewed as an item of gross income to the employee in an amount equal to the difference between the fair market value of the transportation and the amount charged the employee.

The furnishing of transportation to and from work by van or bus in "van pooling" results in the saving of energy, and the committee believes it desirable to encourage this activity by providing a clear rule that the value of such transportation in excess of its cost to the em-

ployee will not constitute income to the employee.

## Explanation of provision

The bill provides that, in the case of a taxpayer who is an employee, gross income does not include the value in excess of the employee's cost of transportation to or from work furnished by an employer if such transportation is in a commuter van. The term "commuter van" means a vehicle capable of carrying 9 or more adult passengers (including the driver) and substantially all the use of which is for the purpose of transporting employees to and from their places of business. Also, for a vehicle to qualify as a commuter van, the number of employees transported on a regular basis must be at least equal to one-half of the maximum number of persons (including the driver) that the vehicle is designed to carry.

The definition of "employee" is very broad. In the case of a partnership, a partner who has earned income (within the meaning of section 401(c)(2)) from the partnership is treated as an employee and the partnership is treated as the employer. Similarly, an individual who owns the entire interest in a sole proprietorship shall be treated as an employee if the individual has earned income (within the meaning of section 401(c)(2)) and he shall also be treated as his

own employer.

The exclusion does not apply to the value of transportation furnished under an arrangement which discriminates in favor of employees who are officers, shareholders, self-employed individuals, or highly compensated. This broad anti-discrimination provision

(patterned on the anti-discrimination rules of section 401(c)(4)) is intended to encourage employers to make the benefits of van pooling available to all employees on the same basis and to discourage the use of van pooling as a fringe benefit to limited classes such as officers, shareholders, and highly compensated individuals. However, in determining whether the classification is discriminatory, the employer may exclude from the calculations those employees who are members of a collective bargaining unit if there is evidence that benefits of the van pooling arrangement were the subject of good faith bargaining between representatives of that group and the employer.

No inference is intended as to whether gross income includes the value of transportation to and from work in other situations, such as where the transportation is furnished by car or limousine. It is anticipated that this issue may be examined when the committee

reviews the taxation of fringe benefits.

Furthermore, no change in existing law is intended as to whether (or the extent to which) deductions are available to the employer for furnishing such transportation.

#### Effective date

This provision applies to transportation furnished after the January 1, 1978 and before January 1, 1986. However, no inference is intended as to transportation furnished during other periods.

## Revenue effect

It is estimated that this provision will result in a decrease in budget receipts of less than \$1 million annually.

#### Energy saving estimate

This provision is estimated to result in negligible energy savings.

## 8 Tax Credit for Electric Motor Vehicles (sec. 1028 of the bill and new sec. 44D of the Code)

#### Present law

Under present law, there is no special income tax credit available with respect to the purchase of an electric motor vehicle, and there also is no other special tax incentive to aid in the development of electric motor vehicles.

## Reasons for change

The committee believes that the development of electric motor vehicles should be encouraged as part of the overall program to reduce the use of petroleum. Presently, electric motor vehicles are characterized by very limited range and speed, in large part, because of the weight and storage capacity of their batteries. To assist in developing a larger market which would contribute to an improvement in the present level of performance of electric motor vehicles, the committee concluded that a tax credit for the purchase of these vehicles would be appropriate. Greater use of electric motor vehicles (principally as a second car for local trips) should reduce petroleum consumption as well as noise and air pollution. Since the batteries of these vehicles will generally be recharged during nonpeak load periods for local utilities companies, there may be some energy savings compared to the use of petroleum, without requiring any additional capital investment. In addition, since most electricity is now generated by the use of coal, there will be a substitution of the use of coal for petroleum to the extent that this part of the automobile sector is increased.

## Explanation of provision

The bill provides a nonrefundable tax credit for individuals for 100 percent of the cost of a qualified electric motor vehicle, up to a maximum credit of \$300.2 This credit is available only if the individual acquires the qualified electric motor vehicle exclusively for his personal use or the personal use of a member of his family.3 A qualified electric motor vehicle is a 4-wheeled vehicle manufactured primarily for use on public roads and powered by an electric motor which obtains

In the case of joint acquisition by 2 or more individuals, the total credit available is not to exceed \$300, and is to be allocated among the purchasers in

proportion to their respective shares of the cost.

<sup>&</sup>lt;sup>1</sup> A purchaser of an electric motor vehicle who uses the vehicle in his trade or business would, of course, be able to claim the investment credit and depreciation in the same manner as for other tangible personal property.

<sup>\*</sup>Since the investment credit and accelerated depreciation are available for electric motor vehicles purchased for business purposes, the committee believes that no additional incentive is appropriate for vehicles purchased for business purposes.

If an individual is eligible to claim the investment credit with respect to any portion of the cost of an electric motor vehicle (because the vehicle is used in part for business purposes), the individual cannot claim any portion of the new credit for qualified electric motor vehicles.

current from rechargeable storage batteries or other portable sources of electric current. The original use of the vehicle must begin with the taxpayer or his family, i.e., the credit is not available for used electric cars or cars converted to electricity.

#### Effective date

The credit applies to qualified electric motor vehicles acquired on or after April 20, 1977, and before January 1, 1986.

#### Revenue effect

This provision is estimated to reduce budget receipts by less than \$500,000 in year 1978 and by \$10 million in fiscal year 1985.

## Energy savings estimate

The energy savings under this provision are estimated to be negligible.

# 9. Intercity Bus Credit (sec. 1029 of the bill and new sec. 44E of the Code)

#### Present law

Present law provides no special tax incentives for taxpayers providing regularly scheduled intercity bus service.1

#### Reasons for change

The intercity bus network plays a vital role in the nation's total intercity passenger transportation process. Of the means of public transportation, the bus provides by far the most comprehensive service. Intercity bus service is available at approximately 16,000 locations as compared to only 670 serviced by air transportation and 500 by passenger trains. In many rural areas, intercity bus service is the only form of public intercity transportation accessible. The intercity bus lines in this country serve approximately 96 percent of communities with 2,500 to 5,000 residents and all those with over 5,000 residents. In addition, intercity bus transportation is utilized by low income groups and senior citizens to a much larger extent than other modes of intercity transportation. These groups in particular are adversely affected by increased energy costs.

Furthermore, intercity buses are the most fuel efficient form of intercity travel based on passenger miles per gallon of fuel consumed. Consequently, diversion of intercity travel from automobiles to buses

can result in energy savings.2

The net operating revenues of the intercity bus companies have been substantially reduced in recent years and they have been unable to make desired purchases of new equipment and upgrade terminals to attract new customers. From 1972 to 1976, operating revenues of the largest 81 intercity bus operators increased by 28.5 percent over 1972 levels, but expenses over the same period increased 38.1 percent. Thus, net operating revenue (the difference between gross operating revenue and operating expenses) was cut in half. The increased expenses are in large part attributable to increases in the costs of energy and equipment.

In particular, if persons can be encouraged to utilize excess capacity on intercity buses rather than driving their automobiles, all the fuel that would have

been expended by their intercity automobile trips can be saved.

<sup>&</sup>lt;sup>1</sup>Of course, these taxpayers are eligible for such generally available investment incentives as the investment credit and accelerated depreciation.

In the bus industry, profitability is conventionally measured by the operating ratio—that is, the percent that operating expenses are of operating revenues. Prior to 1973, the intercity bus industry consistently had an operating ratio in the range of 85 to 90 percent. This left an operating profit margin of approximately 10 to 15 percent of revenues. However, the operating ratio reached 95.5 percent in 1976, leaving a margin between revenues and expenses of only 4.5 percent.

Consequently, the committee feels that the intercity bus industry should be given financial assistance in the form of tax incentives to enable it to improve its services, particularly on regularly scheduled routes. In particular, the committee feels that it is appropriate to assist the intercity bus companies by the use of a refundable tax credit which is based upon the number of passenger miles traveled along regularly scheduled routes by the taxpayer and the relative fuel efficiency of the taxpayer's operations. It also believes that a substantial portion of this credit should be required to be invested in terminals and equipment and that a substantial portion of the credit should be utilized to reduce fares, particularly in situations where buses are operating at less than full capacity. By attracting more people to utilize intercity bus transportation, the fare reductions would serve to increase bus efficiency on a passenger mile per gallon basis and might well divert some people from the use of their automobiles.

## Explanation of provisions

## In general

The bill provides a refundable tax credit for intercity bus operators based on the operator's bus passenger miles and the per passenger mile fuel efficiency of the taxpayer's intercity buses in comparison to the per passenger mile fuel efficiency of automobiles. It is designed so that a bus operator is required to use the credit (estimated to be \$200 million for the industry) for fare reductions and investment in equipment and terminals (50 percent of the credit will be earmarked for fare reductions and the remaining 50 percent will be earmarked for investment in terminals and equipment).

## Eligibility

This credit is available only to a common carrier which furnishes regularly scheduled intercity ground transportation by motor bus. Thus, it would not apply to a taxpayer which only has charter operations. In the case of a taxpayer with regularly scheduled operations and charter operations, the credit is computed by taking into account only the passenger miles furnished along regularly scheduled routes.

## Computation of credit

The credit is computed by multiplying a rate of 20 percent times a base. The base is the product of:

(1) the taxpayer's intercity bus passenger miles on regularly scheduled routes for the taxable year, as reported to the Interstate Commerce Commission ("ICC") or a State regulatory agency (or agencies), if the taxpayer is not subject to ICC regulation,

(2) an amount which reflects the difference between the fuel cost of an intercity auto passenger mile and the fuel cost of an intercity bus passenger mile for the taxpayer, and

(3) a fuel efficiency ratio (3.8), which is the ratio of passenger miles per gallon of intercity buses for 1976 to the passenger miles per gallon of intercity automobiles for 1976.

<sup>&</sup>lt;sup>4</sup> Essentially, the credit is based only upon regularly scheduled operations because charter operations are normally characterized by operation at or near full bus capacity, whereas regularly scheduled operations are typically operated at substantially less than full capacity.

The passenger mile cost differential (the second factor in the base) between intercity automobile traffic and intercity bus traffic is the difference between two fractions. The numerator of the first fraction is the price per gallon of gasoline during the calendar year ending within or with the taxable year of the taxpayer, and the denominator is the average intercity passenger miles per gallon of an automobile for the most recently ended calendar year for which this information is available at the end of the taxable year. The numerator of the second fraction is the average cost of diesel fuel (the primary fuel used by intercity buses) for the calendar year ending within or with the taxpayer's taxable year, and the denominator is the company's passenger miles per gallon for the taxable year.

The fuel efficiency factor (the third factor in the base) is a constant which is the same for the entire industry. The constant (3.8) is the industry's intercity bus passenger miles per gallon for 1976 (125) divided by the average intercity automobile passenger miles per gallon (33).

Thus, the formula for computation of the credit is as follows:

Credit = Intercity bus passenger miles X

Limitation based on operating expenses

Although the credit is refundable, it may not exceed an amount equal to the excess of:

(1) 17.65 percent of the taxpayer's total bus operating expenses (including those relating to regular route, charter and package

express operations) over

(2) 50 percent of the taxpayer's net operating income (if any) from these bus operations, as reported to the ICC or a State regulatory agency (or agencies), if the taxpayer is not subject to ICC regulation.

## Anti-flowthrough provision

The credit will not be allowed to a taxpayer if any portion of it is taken into account for ratemaking purposes by any Federal or State regulatory agency. The purpose of this provision is to provide additional funds to the intercity bus companies, and the committee has specified that these funds are to be used for specific purposes (one-half for fare reductions and one-half for certain types of investments). Consequently, taking this credit into account for rate making purposes, and thus flowing it through to customers other than in the manner prescribed in this provision, would defeat the basic purposes of the provision.

## Recapture provisions

Requirement of use of 50 percent of credit for fare reductions.— The credit will be recaptured to the extent that 50 percent of the credit for a taxable year is not used for fare reduction during the taxable year or the following taxable year.

For purposes of this recapture provision, "fare reductions" are to be computed by multiplying the number of passengers who, during

the credit year, travelled on each route at a reduced fare by the amount that the fare for such route has been reduced. The base from which fares are to be computed for the purpose of determining whether a fare reduction has been made is the lowest fare actually being charged on a given route on August 1, 1977, not the highest fare for which prior approval had been given by the ICC (or, if no ICC approval is required, by a State regulatory body). The purpose for use of actual fares as a base is to give credit only for actual fare reductions, rather than credit for all amounts below a maximum approved rate.

If a fare reduction is offset in part or whole by a subsequent increase in fares, which was approved by the ICC (or, if no ICC approval is required, by a State regulatory body), the "fare reduction" per passenger would be the difference between (1) the base rate (in effect on August 1, 1977) plus the amount of the approved increase and (2) the

fare actually charged.

In determining whether the recapture provision with respect to fare reductions has been satisfied, the taxpayer may use the fare reductions for the taxable year the credit is claimed (provided they have not been used for satisfaction of a prior year's credit) plus the fare reductions for the subsequent year. Thus, for example, if in 1978 a taxpayer is entitled to, and claims on his return a credit of \$10 million. there would be a requirement that fare reductions of \$5 million would have to be made. With respect to this requirement, the taxpayer would compute on his 1979 return the amount of fare reductions for 1978 (for example, \$3 million) and then would look to 1979 fare reductions. If the 1979 fare reductions totalled only \$1 million, there would be \$1 million of the credit which would be recaptured (\$5 million minus \$3 million plus \$1 million). This recapture of the credit would be reflected on the taxpayer's 1979 return. With respect to the taxpayer's credit for 1979 attributable to fare reductions, the taxpayer on his 1980 tax return would refer to its 1980 fare reductions to determine whether a portion of the credit was recapturable, since all of the 1979 fare reductions had been utilized in satisfying a portion of the 1978 credit.

Although there is a requirement that the amount of the credit be used for fare reductions on regularly scheduled routes, there is no restriction on what types of individuals must be granted the fare reduction. It is anticipated, however, that the bus companies will use these fare reductions for long-haul trips, off-peak hours, or other routes where there is excess capacity and where they feel that reduced fares are likely to stimulate the most increased ridership.

Investment in terminals and equipment.—A second recapture rule provides that, in general, recapture of the credit will occur to the extent that the taxpayer's qualifying investments in terminals and equipment in the taxable year and the three succeeding taxable years is less than 50 percent of the credit for the taxable year. Qualifying investments in terminals and equipment are (1) 100 percent of amounts expended for new terminals or improvements of terminals and (2) 40 percent

Of course, the fact that an investment in terminals or equipment is used to satisfy the investment requirements of this provision will not reduce the basis of the terminal or equipment for purposes of depreciation or the investment credit and will not limit the availability of the investment credit.

not qualify.

Qualifying investments in terminals or equipment must be for property the original use of which begins with the taxpayer or for the rehabilitation of existing property. For purposes of this provision, expenditures for the rehabilitation of existing property are limited to amounts chargeable to a capital account and incurred for property or additions or improvements to property (or related facilities) with a useful life of 5 years or more, in connection with the rehabilitation of an existing building for use as a terminal or of existing equipment. An investment in land for terminals may be a qualifying investment in the year the land is actually used for a terminal.

The amounts of qualifying investments normally would be counted toward satisfying the investment requirement attributable to the credit for the taxable year. However, if the taxpayer elects, the amounts of qualifying investments in a taxable year shall be applied first to the credit allowed with respect to the third preceding taxable year, then to the credit allowed with respect to the second preceding taxable year,

and so forth.

Recapture for dispositions of qualifying investments.—In general, if a taxpayer disposes of property within 60 months after the date on which the property or improvement is placed in service and all or a portion of the adjusted basis of the property or improvement was taken into account as a qualifying investment, the tax liability of the taxpayer for the taxable year in which the disposition occurs will be increased by an amount equal to the amount allowed as a qualifying investment with respect to the property. However, if the property (or improvement) is substantially or completely destroyed as a result of a casualty (described in section 165), or is compulsory or involuntarily converted (within the meaning of section 1033), no recapture of the qualifying investment will occur.

## Advance refunds of one-half of credit

The committee wishes to encourage the bus companies to begin fare reductions as soon as possible. Since revenues would be reduced substantially during the year in which a fare reduction is implemented, the companies would experience cash flow problems if they had to wait until the end of the year to obtain the refundable credit. Even if the credit were reflected in their quarterly deposit of estimated taxes, they would be faced with a one quarter lag. Consequently, the committee bill provides that the bus company may obtain quarterly advances of the portion of its credit which is to be earmarked for fare reductions. Under this provision, a qualifying bus company may obtain quarterly advances equal to one-eighth of the credit which it estimates would be payable with respect to the taxable year.

To obtain this credit, the company must file, no earlier than 15 days before the start of each quarter of its taxable year and no later than 15 days after the start of each quarter, an application for credit. On this claim, the company will show, on the basis of the best estimates available as of the filing date, computations establishing the estimated

credit to which the company believes it will be entitled as of the end of the year. The Internal Revenue Service will be allowed 30 days from the date it receives the claim to make payment of one-eighth of the estimated total credit. If payment is not made within this time, interest will accrue on the unpaid balance at the general rate of interest for the underpayment of tax (see sec. 6621). No advance refunds will be issued pursuant to this provision unless the taxpayer states, under penalty of perjury, that a fare reduction program has begun during or prior to the quarter or will begin during such quarter.

If the amounts paid pursuant to this advance refund procedure with respect to a taxable year exceed 62.5 percent of the credit to which the company is entitled, any excess over such amount will be considered an underpayment of estimated tax and penalties will be applicable to this amount in the same manner as with respect to estimated

tax.

As is the case with other credits, the portion of the credit which is not advanced to the company (generally, that part of the credit for the purchase of buses and construction of terminals) shall be reflected in the company's quarterly deposit of estimated taxes. However, since the portion of the credit which is refunded in advance is not to be counted as a credit reducing the tax liability for purposes of the corporation's estimated tax, a technical amendment is made to section 6655(e)(1)(B) to provide that the portion of such credit paid in advance is not treated as a reduction of tax for purposes of estimated taxes.

On the taxpayer's return for the taxable year, the entire amount of the credit is shown as such and any advance refund is treated as either reducing the amount of a refund to which the taxpayer is entitled on the return or increasing the balance of tax due, as the case may be.

## Limitation on losses attributable to bus operations

If a taxpayer who is eligible to claim the intercity bus credit sustains a loss attributable to his bus operations for the taxable year, the loss is to be reduced by an amount equal to the lesser of the loss or the amount of the intercity bus credit allowed to the taxpayer. In determining the amount (if any) of the loss which the taxpayer has sustained, amounts of income and deduction shall be computed in the same manner as they are for Federal income tax purposes (rather than for purposes of reports to regulatory agencies). The purpose of this limitation is to prevent the offset of other income with a loss to the extent the loss has been reimbursed by the intercity bus credit.

#### Effective date

These provisions are to be effective for taxable years beginning after December 31, 1977, and before January 1, 1983.

#### Revenue effect

It is estimated this provision will reduce budget receipts by \$120 million in fiscal year 1978, by \$200 million per year in fiscal years 1979 through 1982, and by \$80 million in fiscal year 1983.

## Energy savings estimate

Since the bus industry over the past 10 years has been experiencing a decline in passenger miles traveled, a continuation of this trend could result in a substantial waste of energy by passenger diversion to less

energy-efficient automobiles. However, due to the structure of the credit, an accurate energy savings estimate cannot be made. One-half of the credit is intended for use in upgrading terminals and equipment and an estimate of the response to these improvements in the form of increased ridership cannot be made because noneconomic factors are involved. The committee believes that the current location and condition of many bus terminals has contributed to the decline in riderahip the industry is experiencing. A purpose of the credit is to stop the present trend of disinvestment in bus equipment and facilities and the consequent curtailment of bus service. By renovating old terminals, building new terminals and relocating terminals presently situated in undesirable locations, bus traffic could become more attractive and the current decline in ridership could be reversed. If this reversal of the trend could present a shift to intercity automobile travel, additional energy savings would occur. The other one-half of the credit would significantly lower fares on routes now running at less than peak capacity and would result in a further increase in ridership with little increase in overall fuel consumption by buses. If the current decline in bus ridership could be avoided and a three percent shift from bus to automobile travel could be prevented, it is estimated that a savings of 25,000 barrels per day would result.

# C. CHANGES IN BUSINESS INVESTMENT CREDIT TO ENCOURAGE CONSERVATION OF, OR CONVERSION FROM, OIL AND GAS OR TO ENCOURAGE NEW ENERGY TECHNOLOGY

(Secs. 1031, 1032, and 1033 of the bill and new secs. 44F and 46A  $_{
m 0f}$  the Code

#### Present law

#### Investment tax oredit

Under present law, an investment tax credit of 10 percent (which reverts to 7 percent after 1980) is allowed generally for tangible personal property which is placed in service in a trade or business. (The credit can be as high as 11½ percent for corporations with qualified employee stock ownership plans.) However, structural components of buildings, including insulation, storm windows and doors, solar energy equipment, etc., generally do not qualify for the credit. Otherwise eligible property placed in service in hotels and other businesses which cater to transients is eligible for the investment credit, but property placed in service in hotels and apartments which have predominantly permanent residents does not qualify for the credit.

The investment credit is also allowed for tangible property (other than buildings or their structural components) which is used in manufacturing, production, extraction, or as an integral part of furnishing transportation, communications, or electrical, gas, or other utility services, even though such tangible property may otherwise be con-

sidered real (and not personal) property under local law.

The extent to which the investment credit is available depends upon the estimated useful life used to depreciate or amortize the property for tax purposes. The determination of the useful life is made at the time the property is placed in service. No investment credit is allowed if the property has an estimated useful life of less than 3 years. Where the useful life is greater than 3 years but less than 5 years, the investment credit is allowed on one-third of the taxpayer's cost for the property; if the useful life of the property is greater than 5 years but less than 7 years, the credit is allowed on two-thirds of the cost, and the credit is allowed on the entire cost where the property has a useful life of 7 years or more. If the property on which the investment credit was claimed is later sold or otherwise ceases to be qualified property for the taxpayer before the end of its estimated useful life, the credit may be partially or entirely recaptured to reflect the taxpayer's reduced holding period.

Generally, the amount of the investment credit a taxpayer may apply against his income tax liability in any one year cannot exceed the first \$25,000 of tax liability plus 50 percent of the tax liability in excess of \$25,000. Special limitations have been provided for public

utility property, under which the 50 percent limit was increased to 100 percent for 1975 and 1976, and is 90 percent for 1977, after which it declines by 10 percentage points in each succeeding year until it returns to the generally applicable 50-percent limit in 1981. Similar increases in the tax liability limitation are available (under the Tax Reform Act of 1976) to railroads and airlines, which are allowed to apply their investment credits against 100 percent of their tax liability for 1977 and 1978, and the limitation is reduced by 10 percentage points in each subsequent year until it returns to 50 percent in 1988.

Investment tax credits are not refundable. However, credits which are not applied against tax liability in the year they are earned may be carried back for 3 taxable years and carried forward for 7 years. In applying credits against tax liability for a particular tax year, the first-in first-out method is generally required, under which the credits carned in prior tax years are applied first, then the credits earned

in the current year or later years are used.

# Industrial development bonds

Under present law, the interest income derived from obligations of a State or local government generally is exempt from Federal income tax. This rule does not extend to industrial development bonds whose proceeds are used by a taxpaying enterprise in its trade or business, except for those situations where the proceeds of the bonds are used by a taxpaying enterprise for specified exempt purposes. Exceptions have been provided where the proceeds are used to acquire or construct solid waste disposal facilities, and air or water pollution control facilities.

# Reasons for change

The committee believes that the urgency of the energy problem requires a powerful measure designed specifically to reduce the consumption of oil and natural gas by industrial, utility, and institutional users. The committee believes that it has made available tax incentives to stimulate a rapid transition from heavy reliance on oil and gas. The alternative energy property tax credit would pay for 40 percent of the cost of equipment which uses sources of energy other than oil and gas and of associated pollution control, handling and preparation equipment. The credit would be available to businesses, state and local governments, and certain tax-exempt organizations. In conjunction with the existing investment credit and income tax depreciation deductions for the full cost of the property, the effective price of this equipment to businesses is lowered to about one-third of its nominal purchase price. The refundable feature of the credit will allow all businesses, irrespective of their income tax liability, to receive the full incentive effect. Because the committee believes that utilities' new facilities will not use oil or pas even in the absence of a tax credit, utilities would receive the credit only to the extent that they phase down or replace an existing oil- or gas-fired boiler.

The property eligible for the credit includes equipment which uses the following sources of energy: coal, biomass, hydroelectric, nuclear, geothermal, solar, wind, ocean thermal and tidal. By focusing this large incentive on users of energy, the committee believes that it can achieve a substantial reduction in business use of oil and natural gas

and thus, in U.S. oil imports.

The committee also believes that it is essential to reduce the use of oil and gas in existing facilities and to provide an incentive to use energy-efficient processes. Thus it has provided an extra 10-percent refundable credit, which would also be available to certain tax-exempt organizations and governmental units, for certain items which result in the conservation of energy. In addition, a nonrefundable 10 percent credit is allowed for equipment used in cogeneration, solid waste recycling, the recovery of oil and gas from oil shale and geopressurized water deposits, and also for commuter vans and energy-saving equipment added to existing trucks.

1. Additional Credit for Investment in Certain Energy-Related Depreciable Property (secs. 1031 and 1033 of the bill and new sec. 44F of the Code)

# Explanation of provisions

#### A. GENERAL PROVISION

This provision provides a 40-percent credit for certain conversion property, called alternative energy property, and a 10 percent credit is provided for certain conservation property, called specially defined energy property, during the period after April 19, 1977, and before January 1, 1986, for property acquired and placed in service during this period. If eligible property is constructed by the taxpayer, the credit will be available for construction completed after April 19, 1977, and only to the extent of costs incurred before January 1, 1986. If the taxpayer makes progress expenditures and elects to claim this credit for the progress expenditures, the credit is available only to the extent of progress expenditures made during this period. Property purchased by the taxpayer must be both acquired and placed in service during this period. The original use of the property must commence with the taxpayer, and the property must be an integral part of, or used in connection with, a building or other structure located in the United States.

The credit is refundable, so that the amount which the taxpayer is allowed is not limited by tax liability. Organizations described in Code section 501(c)(3) and electric utilities described in section 501(c)(12), which are exempt from Federal income tax, as well as State and local governments, are eligible to receive the credit. Any excess of the credit above tax liability may be claimed as as a refund.

#### B. RULES OF APPLICATION

For this credit the committee's bill provides rules generally similar to the regular investment credit provisions. (Eligibility for the special energy credit under this provision, however, does not affect the eligibility of the property for the regular investment credit under present law.) As a result, the rules for applying the regular investment credit, such as, the rules referring to leased property, will also generally apply to the alternative energy property investment credit. In the following areas, however, there are special rules for this additional credit:

(as defined in section 7701(a) (33)) whose principal activity is the sale of electricity, a credit shall be allowed for a boiler only to the extent that a boiler, which was in existence on April 20, 1977, and used oil or natural gas as its primary fuel on that date, is phased down. A boiler shall be treated as phased down only where the boiler was used more than 2,000 hours in 1976 and will not be used more than 2,000 hours in any year following the year in which the new boiler is placed in service. The Secretary shall issue regulations necessary to prevent the avoidance of this restriction, for example, by phasing up another old boiler at the same time.

The determination of the extent to which an oil or gas boiler is phased down shall be on the basis of its capacity in terms of megawatts. For example, if a new boiler with a capacity of 80 megawatts is placed in service and a boiler with a capacity of 20 megawatts is phased down, 25 percent of the investment with regard to the new boiler shall be taken into account in computing the credit. Where an oil or gas boiler is converted into a boiler using an alternate substance, the phase down rule shall be considered satisfied, but the modified boiler shall not be treated as an eligible old boiler in the event it is subse-

quently phased down.

The bill allows utilities to treat qualified progress expenditures as qualifying investment for any calendar year where the utility certifies to the Secretary or his delegate that the eventual phase down of the old boiler will occur in the year following the year in which the new boiler is placed in service, provided the new boiler is to be placed in service within 3 years after the end of the first year for which the certification is effective. In addition, the taxpayer must agree to a reasonable extension of the period of limitations for assessing any additional tax which may be due in the event the phasedown does not in fact occur in accordance with the certification. In addition, where this provision is used, the credit for the year the equipment is placed in service shall be adjusted in accordance with the usual rules under section 46(c)(4).

Where the phased-down boiler was used more than 2,000 hours, the new boiler is to be treated as having been disposed of in the year in which that excess use occurs and the normal disposition rules applicable to this credit will apply. Where a utility runs a boiler solely to keep it in operating condition, it is not to be considered as having used the boiler for purposes of applying this provision.

The recapture provision for utilities will not apply in circumstances where the utility is prevented from using the replacement boiler by an act of God, a strike which prevents delivery of coal to the replacement facility, or damage by storm, fire or flood, etc., to the replacement facility. Therefore, the Secretary will prescribe regulations suspending applicability of the recapture provision during periods when the utility is unable to comply with the phase-down requirement because of such circumstances.

In addition, where a facility was in existence or under construction on April 20, 1977 and on that date (1) it was contemplated that the facility would include one or more boilers which would use oil or gas as its primary fuel or (2) the facility did include one or more such

boilers, and after April 20, 1977, the construction of such boiler or boilers is modified to use a primary fuel other than oil or gas, any boiler so modified will be eligible to be treated as alternative energy property.

These rules also apply in the case of any boiler leased to a regulated public utility, whether or not the lessor has elected to allow the utility

to receive the credit.

Lodging limitation.—The lodging limitation of the regular investment credit (sec. 48(a)(3)) does not apply to additional credits for alternative energy property and specially defined energy property. As a result, the credit is available both for qualified property installed in connection with a lodging facility which provides accommodations to transients (for which the regular investment credit may be claimed for qualifying property under present law) and for property installed in connection with facilities (such as apartment houses) which predominantly provide long-term accommodations (for which the regular investment credit is generally not available under present law).

Structural component limitation.—The credit is to be available without regard to whether the equipment is a structural component of a building. Thus, for example, solar, geothermal and wind energy equipment could qualify for the credit even if integrally attached to a structure. Buildings, however, would be eligible for this credit only to the

same extent they are eligible for regular investment credit.

Recapture.—If any qualifying property ceases to be used as alternative energy property and specially defined energy property before the end of one-half its useful life (as determined for purposes of depreciation under section 167 (or which would be so determined in the case of an exempt organization or governmental unit if it were taxable)) then it will be considered to be disposed of, and the entire credit will be

recaptured.

Industrial development bonds.—Except for bioconversion property, equipment which is partially or entirely financed by industrial development bonds, whose interest is exempt from Federal income tax, receives a 20-percent, rather than 40-percent, credit. Bioconversion property, which would receive the 40-percent credit even if such bonds were a financing vehicle, is defined in Code section 103 (b)(4)(1) (added by section 1041 of this bill) as equipment for the conversion of agricultural and municipal wastes and other organic matter into either energy or into synethic gaseous, liquid or solid fuels.

Federal grants.—No credit is available for any equipment to the extent that such equipment is financed by any grant of Federal funds.

#### C. ALTERNATIVE ENERGY PROPERTY

Generally, the 40 percent refundable credit is allowed for investments in new property which either directly (for example, coal-fired boilers) or indirectly (for example, certain pollution control equipment) relate to the installation by industrial firms and electric utilities of equipment or facilities that will make possible shifts from oil and natural gas to other fuels. Alternative energy property is defined as specific types of equipment whose fuel or feedstock is an alternate substance, that is, a substance other than crude oil, shale oil, refined petroleum products, natural gas, geopressurized methane, and natural gas liquids. Examples include coal and agricultural or municipal wastes. Equipment will not qualify for the credit unless it meets quality and performance standards which are in effect at the time the equipment is placed in service. Such standards would be set by the Secretary, in consultation with the Secretary of Energy and other appropriate agencies. Alternative energy property specifically includes the following types of property:

(1) Boilers.—A boiler which uses an alternate substance as its primary fuel (i.e., more than 50 percent) is the first type of alternative energy property. Equipment used to modify an existing boiler so that the primary fuel would be an alternate substance would also qualify

as alternative energy property.

(2) Burners.—A burner for a combustor (other than a boiler) can also be treated as alternative energy property, if the primary fuel for the burner will be an alternate substance or a combination of such substances. The eligible investment includes equipment which is located on-site at the burner and which is necessary to bring the alternate substance to the burner. Among the burners within this category are burners for a lime kiln or cement kiln which use an alternate substance as a fuel.

(3) Nuclear and hydroelectric equipment.—Certain equipment used to produce power from nuclear and hydroelectric sources is eligible for the credit. In the case of nuclear power, the fuel, turbines and equipment beyond the turbine stage is not eligible; thus the eligible equipment is limited to the nuclear stream supply system. In the case of hydroelectric power, penstocks, turbines, generators, and other equipment up to, but not including, the electrical transmission stage are included in the category of eligible equipment. Dams are not to be

considered eligible equipment.

(4) Production of synthetic fuel.—Equipment used to convert an alternate substance into a synthetic solid, liquid or gaseous fuel is included in the definition of alternative energy property. This includes coal gasification and liquefaction and the production of synthetic fuel from biomass. Only the equipment necessary to manufacture a marketable fuel would be eligible for the credit. Not included, however, is equipment which simply mixes an alternative substance with a liquid, for example, equipment which mixes coal and water to produce a slurry. Equipment used to produce coke or coke gas is also excluded.

(5) Mixtures of oil or natural gas and an alternate substance.— Alternative energy property includes equipment designed to modify equipment placed in service on or before April 20, 1977, which burns oil or natural gas, or uses oil or natural gas as a feedstock, so that this equipment uses coal, waste (such as biomass) or other alternative substances as a fuel or feedstock. This credit will be available where the use of an alternate fuel or feedstock is at least 25 percent of the total fuel or feedstock as a result of the modification. Quality investment in this category would include the costs of replacing or modifying existing combustors and burners to enable the facility to use this fuel mixture.

(6) Coal used as feedstock.—Alternative energy property includes equipment which uses coal or lignite as a feedstock to produce chemicals. Only the equipment necessary to manufacture a marketable product would be eligible for the credit. Equipment used to produce coke or

coke gas is excluded.

(7) Pollution control equipment.—The alternative energy property credit is also available for pollution control equipment, such as scrubbers and electrostatic precipitators, which Federal, State or local governmental regulations require to be installed on or in connection with a boiler, a burner, equipment used in the production of synthetic fuel, equipment which uses coal as a feedstock, or equipment which uses a mixture of an alternate substance and gas or oil, which itself qualifies as alternative energy property. The credit, however, does not apply to any equipment which is installed on or in connection with property which, as of April 20, 1977, was using coal, and was required to be installed by Federal, State, or local governmental regulations in

effect on April 20, 1977.

(8) Handling and preparation equipment.—Equipment used for the unloading, transfer, storage, reclaiming from storage, and preparation (including washing, crushing, drying, and weighing) at the point of use of a fuel or feedstock other than oil, gas, and their products qualifies as alternative energy property, if the fuel is to be used in certain specific types of alternative energy property, i.e., a boiler, a burner. equipment used in the production of energy from nuclear sources equipment used in the production of synthetic fuel, equipment which uses coal as a feedstock, equipment which uses a mixture of an alternate substance and gas or oil, or pollution control equipment which itself qualifies for the credit. Eligible preparation equipment also includes equipment for shredding, chopping, pulverizing, or screening agricultural or forestry byproducts at the point of use in eligible equipment. No equipment for the transportation of fuel to the site of its use is covered by this provision. Thus, for example, coal slurry pipelines and railroad cars would not qualify for the additional tax credit.

(9) Ocean and tidal equipment.—Alternative energy property includes equipment necessary to convert ocean thermal energy and tidal

power into useful forms of energy.

(10) Solar and wind equipment.—Equipment which uses solar or wind energy to provide heat, cooling, electricity, or hot water in con-

nection with a building or structure is eligible for the credit.

Generally, a solar energy equipment system involves the transformation of sunlight into heat or electricity through the use of such devices as solar cells or other collectors, storage systems for electricity and for hot air or hot water (including rock beds), heat exchangers to utilize captured and stored energy, and related equipment, such as fans and thermostats. The credit for wind equipment similarly applies to the windmill or other devices to harness outdoor moving air to provide electricity and other forms of energy and includes storage and transfer systems to distribute this energy.

(11) Geothermal equipment.—Equipment used to produce, distribute, or use energy derived from a geothermal deposit would be considered alternative energy property. When geothermal energy is used to generate electricity, eligible equipment does not include any equip-

ment used to transmit electricity or any equipment beyond the electrical transmission stage, but turbines and generators would be included. A geothermal deposit is a reservoir consisting of natural heat which is stored in rocks or in an aqueous liquid or vapor, whether or not under pressure.

(12) Plans and designs.—Alternative energy property includes the costs of plans and designs for any equipment in the above categories.

#### D. SPECIALLY DEFINED ENERGY PROPERTY

This category of property qualifies for the refundable credit equal to 10 percent of the taxpayer's investment in new property. Organizations which are exempt from Federal income tax under Code section 501(c)(3) and electric utilities exempt under 501(c)(12), as well as State and local governments, are eligible to claim and receive payments

equal to 10 percent of their basis in qualifying property.

Qualifying property includes specific items of equipment (described below) added to an existing operation in an existing agricultural, industrial, utility, or commercial facility. An existing building or facility is one for which 50 percent of the basis is attributable to construction. reconstruction or erection before April 20, 1977, or, in the case or a nuclear power plan, a construction permit was issued and construction began before April 20, 1977. An existing operation is one carried on in an existing facility as of April 20, 1977.

Equipment will not qualify for the credit unless it meets quality and performance standards which are in effect at the time the equipment is placed in service. Such standards would be set by the Secretary, in consultation with the Secretary of Energy and other appropriate

agenci**es.** 

The following specified items of equipment are included in specially

defined energy property:

(1) recuperators, which are configurations of equipment which consist in part of fixed heat transfer surfaces between two gas flows and which are used to recover energy, usually in the form of waste heat, from combustion exhaust gases in order to preheat incoming combustion air;

(2) heat wheels, which are items of equipment consisting, in part, of regenerators which rotate through two gas flows and which are used to recover energy, usually in the form of waste

heat, from exhaust gases to preheat incoming gases;

(3) regenerators, which are devices used to recover energy by efficiently storing heat while exposed to high temperature gases and then releasing heat when exposed to low temperature gases;

(4) heat exchangers, which are equipment consisting in part. of fixed heat transfer surfaces separating two fluids which are used to recover energy, usually in the form of waste heat, from high temperature fluids of industrial proceses for transfer to low temperature fluids;

(5) waste heat boilers, which are boilers that use waste heat. usually in the form of combustion exhaust gases, as a primary

energy source;

(6) heat pipes, which are devices that consist, in part, of scaled heat transfer chambers containing a working fluid which is alter-

natively vaporized and condensed as it travels from one end of the chamber to the other and are used to recover energy, usually in the form of waste heat, from high temperature fluids to heat low temperature fluids;

(7) automatic energy control systems, which are equipment used to control energy usage for environmental space conditioning or for manufacturing processes in ways which automatically mini-

mize such energy usage;

(8) turbulators, which are small baffles placed in the upper passes of the firetubes of boilers to increase the rate of transfer

of heat from combustion gases to the firetube surface;

(9) preheaters, which are equipment that consists, in part, of a fixed heat transfer surface separating two fluids and are used to recover energy, usually in the form of waste heat from either combustion exhaust gases or steam, to preheat incoming combustion air or boiler feedwater;

(10) combustible gas recovery systems, which are equipment used to recover unburned fuel from combustion exhaust gases;

and

(11) economisers, which are configurations of equipment used to recover energy from combustion exhaust gases to preheat boiler

feedwater; and

(12) Industrial heat pumps, which are devices, utilized in industrial or manufacturing processes, that use the compression and expansion of a gas in a system to extract heat from a gas or liquid and transfer it to another gas or liquid at a higher temperature. This does not include heat pumps used for the purposes of heating or cooling building space.

In addition to these types of property, the Secretary is authorized to specify other similar items of energy conservation equipment eligible for this credit, including modifications which are made to existing industrial processes (such as modifications to smelters or alumina electrolytic cells) the principal purpose of which is the reduction in

the amount of energy consumed or heat wasted.

# E. EXTENSION OF CREDIT TO CERTAIN EXEMPT ORGANIZATIONS AND TO STATE AND LOCAL GOVERNMENTS

The alternative energy property and specially defined energy property credits are available as payments to certain tax-exempt organizations and to governments of States and of any of their political subdivisions. The eligible tax-exempt organizations include those described in section 501(c)(3) of the Code. These include nonprofit religious, charitable, scientific, and educational institutions. In addition, electric utilities described in section 501(c)(12) are also eligible for the credit. The amount of the payment shall be determined as if the organization were engaged in a trade or business and were subject to the income tax.

#### Effective date

The alternative energy property credit will be effective for qualifying property placed in service after April 19, 1977, to the extent of expenditures incurred after that date and before January 1, 1986.

# Revenue effect

The decline in budget revenues from the additional credit for alternative energy property is estimated at \$731 million in fiscal year 1978, \$1.046 billion in 1979, \$1.525 billion in 1980, \$2.371 billion in 1981. \$3.596 billion in 1982 and \$5.230 billion in 1985.

For specially defined energy property, the estimated revenue loss in fiscal years 1978 through 1982, respectively, is \$303 million, \$295 million, \$312 million, \$328 million, and \$347 million. The revenue loss

estimated in fiscal year 1985 is \$407 million.

The revenue loss attributed to the additional credits for industrial heat pumps is estimated at \$40 million in fiscal year 1978, \$39 million in 1979, \$45 million in 1980, \$52 million in 1981, \$60 million in 1982 and sol million in 1985.

The Treasury Department agrees with these estimates under the assumption of no extraordinary increase in the prices of qualifying property. While difficult to forecast, investment tax credits of this magnitude could allow equipment manufacturers to increase prices and therefore increase the cost of this proposal.

# 2. Business Energy Property Credit (sec. 1032(a) of the bill and new sec. 46A of the Code)

#### Explanation of provisions

In order to increase energy conservation by industrial and commercial sectors of the economy, the bill provides a special investment tax credit that is in addition to the regular investment tax credit, for

a limited period of time.

The business energy credit is available at a rate of 10 percent for certain types of property, called energy property, during the period after April 19, 1977, and before January 1, 1986. If eligible property is constructed by the taxpayer, the business energy credit will be available only for construction completed after April 19, 1977, and only to the extent of costs incurred during this period. Similarly, if the taxpayer makes progress expenditures and elects to claim this credit for the progress expenditures, the credit is available only to the extent of progress expenditures made during this period. Property purchased by the taxpayer must be both acquired and placed in service during this period.

# Rules of general application

The committee's bill adds this business energy credit to the present law investment tax credit provisions. (Eligibility for the special energy credit under this provision, however, does not affect the eligibility of the property for the regular investment credit under present law.) The rules for applying the regular investment credit will also generally apply to the business energy investment credit. For example, business energy credits will be absorbed using the first in-first out (FIFO) rules which apply to the regular investment credit. Business energy credits may also be carried back for three years and carried forward for seven years, as is the case with the regular investment credit.

Several changes to the regular investment credit rules are made, however, for purposes of applying the business energy investment credit. First, the structural component limitation found in the regular investment credit provisions is not applicable in the case of energy property. This will enable such property to qualify for the special additional credit even though this property would otherwise be treated as a structural component of a building and ineligible for the regular investment credit. Buildings qualify only to the same extent as they do under the regular investment credit.

A second change to the generally applicable investment tax credit rules involves the elimination of the lodging limitation (sec. 48(a)(3)) for purposes of the business energy credit. As a result, the business energy credit is available both for energy property installed in connection with a lodging facility which provides accommodations to transients (for which the regular investment credit may be claimed

for qualifying property under present law) and for energy property installed in connection with facilities (such as apartment houses) which predominantly provide long-term accommodations (for which the regular investment credit is generally not available under present

law).

The entire basis of eligible property will qualify for the business energy credit, rather than the rules under present investment credit provisions which allow only part of the taxpayer's basis to be considered qualifying property where the useful life of the property is between 3 and 6 years. If any qualifying property is disposed of by the taxpayer or otherwise ceases to be used as energy property before the end of one-half of its useful life (as determined for purposes of depreciation under section 167) the entire credit will be recaptured.

A special rule is also provided for energy property that is partially or entirely financed by industrial development bonds, whose interest is exempt from Federal income tax under present law. In this situation, the business energy credit will be 5 percent, instead of the 10

percent rate which is generally available.

For the purposes of the business energy credits, the term industrial includes agricultural to reflect the committee's intent that energy property used in connection with an agricultural operation or process also will qualify for the business energy property credit.

Energy property defined

In order to qualify as business energy property eligible for this special investment credit, the property must be either cogeneration equipment, recycling equipment, shale oil equipment, geopressurized methane gas equipment, and certain transportation equipment. These types

of equipment are explained in detail below.

Except in the case of transportation equipment, to qualify as energy property, the property must be an integral part of, or used in connection with, a building or other structure located in the United States. Where the taxpayer is constructing the energy property, construction, reconstruction or erection must be completed after April 19, 1977. Similarly, property purchased by the taxpayer must be acquired after April 19, 1977, and its original use must be by the taxpayer and must begin after April 19, 1977. (As already noted, the credit is available only to the extent of costs incurred after this date and before January 1, 1986.

For purposes of determining the eligibility of cogeneration equipment for the energy investment credit, it is generally required that this property or equipment be used in connection with an existing

facility.

Except in the case of nuclear facilities, a building or facility will be considered to be in existence, if it has been substantially completed before April 20, 1977; that is, at least 50 percent of the taxpayer's basis in the building or facility must be attributable to construction, reconstruction, or erection which occurred before April 20, 1977. In the case of nuclear powerplants, the facility will be considered an existing building or facility if a construction permit was issued and construction had actually begun by April 19, 1977.

Except for shale oil and geopressurized methane gas equipment, this credit will be available only if the equipment meets performance and quality standards (relating to energy savings) prescribed by the Secretary (after consultation with the Secretary of Energy) which are in effect at the time the property is acquired or construction is begun.

# Cogeneration equipment

To qualify as energy property, cogeneration equipment must be installed in connection with an existing facility and must result in an expansion in the facility's cogenerating capacity (including the start of cogenerating activity). Under the bill, cogeneration equipment means property which produces steam, heat, or some other form of useful energy (other than electricity), for industrial, agricultural, commercial, or space heating purposes, and which also produces electricity.

In this context, cogeneration equipment includes the addition of equipment to produce or distribute steam, heat, or other energy from an existing electric generating facility and also the electrical generating equipment which is added to an existing industrial or commercial facility which presently produces steam or another form of energy

other than electricity.

It is intended that cogeneration equipment include steam and heat distribution systems that are added to an existing electric generating facility. In addition, it covers a supplemental boiler and an electrical generating turbine which are added to an existing industrial or commercial boiler or other heat-producing source, where these additions are necessary in order to enable the facility to cogenerate. Where it is necessary to replace an existing boiler in order to enable an existing industrial or commercial facility to cogenerate, this replacement boiler will be covered only to the extent of additional capacity which is related to a cogenerating function.

Where a taxpayer has operational cogenerating capacity in place on April 20, 1977, the credit will be available only to the extent that additional or replacement cogeneration equipment increases the cogenerating capacity of the facility. For this purpose, the eligible investment is determined from either the incremental capacity (in terms of megawatts) to produce electricity or the incremental capacity to produce steam (in terms of pounds per hour) or other forms of heat.

Recycling

The second category of property which qualifies for the energy investment credit is equipment used to recycle solid waste. The credit here is limited to solid waste recycling equipment because equipment to recover and recycle waste heat and gases is included under the spe-

cially defined energy property category.

Equipment covered under this category must be used exclusively for one of two purposes, either to sort, prepare, and recycle solid waste to recover usable raw materials or a fuel, or to burn solid waste as a fuel to create heat, steam or other useful forms of energy. This would include, for example, equipment which separates recyclable solid waste from a mixture of waste materials. Equipment which functions predominantly to prepare solid waste materials would also be covered.

For example, processes which apply a thermal, mechanical or chemical treatment to waste to condition or prime the materials so they will respond properly to the recycling process are included. Equipment in the actual recycling function to recover usable recyclable materials is also included up to the point where a material has been created which can be used to the same extent as materials from one or other virgin substances to begin fabrication of an end product. This point, for example, would be the ingot stage in metal recycling, fibers in textiles, and newsprint or paperboard in the paper industry. In the case of reeycling equipment used to create a fuel or burn solid waste as a fuel, equipment will be covered to the point where the fuel, steam or heat has been created. As a result, combustors and boilers and similar equipment will be covered, but steam and heat distribution systems between a combustor or boiler and the point of use will not be qualifying property.

It is intended that eligible property in this category will include both equipment to recycle post-consumer waste materials (for example, municipal waste and cans and bottles that have been used by the consumer and recovered) and also industrial fabricating waste materials such as trimmings from a metal stamping process. It is also intended that on-site loading and transportation equipment which is integrally related to the actual recycling equipment should also be eligible for the credit. This would include, for example, equipment to load solid waste into a sorting or preparation machine and also a conveyor belt system which transports the solid waste materials from separation equipment to another machine in the recycling process. Transportation equipment, such as trucks, which transfer solid wastes between geographically separated sites, e.g., between collection points and re-

cycling plants, will not be recycling equipment.

It should be emphasized that equipment will be eligible as recycling property only if it is used to process predominantly solid waste materials; the credit is not available where the equipment is used to process more than a nominal amount of virgin materials. For these purposes, a nominal amount is interpreted to mean not more than 10 percent virgin materials. If more than 10 percent virgin materials are used in a recycling facility during the course of any taxable year, the property will cease to be qualifying energy property. If this event occurs during the first one-half of the useful life of the equipment, this

special tax credit will be recaptured in its entirety.

The credit for recycling equipment is available where used in connection with either a new or existing facility and industrial or commercial process. However, in order to prevent windfall benefits to taxpayers who are already engaged in recycling and who wish to replace their existing equipment in order to obtain this special investment credit, the committee intends that the credit be available only to the extent that the equipment results in an increase in the taxpayer's recycling capacity.

# Oil shale equipment

This category of eligible property covers equipment which is used to extract oil from oil shale rock. In general such equipment would qualify if used after the mining stage for oil shale and up through the retorting process. Eligible equipment would include that involved in either surface, or in situ, processing, including, in the case of in situ processing, equipment used to create the underground cavity. On-site water supply and treatment equipment and handling equipment for spent shale would similarly be eligible property.

# Geopressurized methane gas equipment

This type of equipment will be used to treat a saline water and dissolved gas combination that is extracted from a geopressurized aquifer, in order to recover the dissolved methane gas. The eligible property is the equipment that is required to separate the methane gas from the saline water and to remove other impurities from the gas up to the point where the gas may be introduced into a pipeline system.

# Transportation equipment

This category of equipment includes two types of property. First, this property includes commuter vans, defined in section 1027 of the bill, which are vehicles capable of carrying nine or more passengers, including the driver, which are owned by an employer and for substantially all the use of which is to transport employees to and from the employer's place of business. In addition, equipment which is added to existing trucks, which are engaged primarily in the commercial transportation of property, in order to conserve fuel is treated as energy property. Existing is defined, for this purpose, to mean placed in service before April 20, 1977. In addition, the Secretary is authorized to prescribe performance and quality standards for this qualifying property.

#### Effective date

These provisions are effective for qualifying property placed in service after April 19, 1977, to the extent of expenditures after that date.

#### Revenue effect

The revenue loss from the additional credit for cogeneration and recycling equipment is estimated at \$60 million in fiscal year 1978, \$72 million in 1979, \$107 million in 1980, \$149 million in 1981 and \$197 million in 1982. In fiscal year 1985, the revenue loss is estimated at \$379 million.

The estimated revenue loss from the extra credits for transportation equipment are \$25 million, \$20 million and \$10 million in fiscal years 1978, 1979, and 1980, respectively.

# 3. Investment Tax Credit for Busines Insulation Property (sec. 1032(b) of the bill and new sec. 48(a)(10) of the Code)

Business insulation property which is a structural component of a building would be eligible for the regular investment tax credit, if placed in service during the period from April 20, 1977 through December 31, 1985. The provision applies to business insulation property that presently is not eligible for the investment tax credit. The criteria that are employed ordinarily to determine whether property is eligible for the credit would apply to this property; for example, the property must have a useful life of at least 3 years, and partial credits are

allowed for useful lives of 8 through 6 years.

Business insulation property is defined as property which is specifically and primarily designed to reduce the heat loss of gain of an existing commercial or industrial building or facility in or on which the insulation property is installed. In addition, such insulation must be new property, have a useful life of at least three years, and meet performance and quality standards prescribed in regulations by the Secretary of the Treasury after consultation with the Secretary of Energy. This regulatory authority is to be applied prospectively only, and thus, these standards will not apply to insulation property purchased prior to the promulgation of such standards.

Qualifying property includes not only insulation, but a variety of other items designed to reduce heat loss or gain, including double glazing, heat-absorbing or heat-reflective glazed windows and doors and heat-absorbing and heat-reflective window and door materials.

storm doors and windows, and weatherstripping.

To be qualified, business insulation property must be added on or in a building or facility which was in existence and placed in service before April 20, 1977. Expenditures for such insulation are to be treated as made when the installation of the insulation is completed. Accordingly, the time of payment of accrual of such expenditures is not to be taken into account in determining whether such expenditures qualify for the credit.

#### Effective date

This provision is effective for qualifying property placed in service after April 19, 1977, to the extent of expenditures after that date and before January 1, 1986.

#### Revenue effect

The decline in revenues as a result of the investment credit for business insulation property is estimated at \$103 million in fiscal year 1978, \$101 million in 1979, \$107 million in 1980, \$113 million in 1981, \$119 million in 1982 and \$141 million in 1985.

# Energy savings estimate

It is estimated that as a result of the additional investment credits to encourage conservation of, or conversion from, oil and gas or to encourage new energy technology, oil imports will be reduced in 1985 by 1,508,000 barrels per day.

# D. TAX INCENTIVES FOR ALTERNATIVE, ENERGY SOURCES

1. Industrial Development Bonds for Coal Gasification and Liquefaction Facilities and for Bioconversion Facilities (sec. 1041 of the bill and sec. 103 of the Code)

#### Present law

Under present law, interest earned on obligations of a State or local government generally is exempt from Federal income tax. This rule does not extend to industrial development bonds, the proceeds of which are used by a taxpaying enterprise in its trade or business, except where the proceeds of the bonds are used for specified exempt purposes, and except for certain small issues.

# Coal gasification and liquefaction facilities

Although the use of facilities for the local furnishing of gas is one specified exempt purpose for industrial development bonds (sec. 103 (b) (4) (E)), many bond issues for coal gasification facilities cannot qualify for the exemption under current Treasury Department regulations (§ 1.108–8(f) (2) (iii) (d)), which interpret the term "local furnishing" to mean, in general, furnishing gas to no more than two contiguous counties (or political equivalents). This bars exempt status for bonds issued for facilities serving a larger area.

In addition, the statute does not designate the provision of liquid

fuel produced from coal liquefaction as an exempt purpose.

# Bioconversion facilities

Present law (sec. 103(b)(4)(E)) also provides an exemption for interest earned on industrial development bonds whose proceeds are to be used to provide waste disposal facilities. However, Treasury regulations (§ 1.103-6(f)(2)(ii)(c)) provide that a waste disposal facility qualifies under this provision only if at least 65 percent of the total materials introduced into the facility's recycling process are valueless. (Certain bioconversion facilities also may not qualify as exempt purposes because of the two-contiguous-county regulation described above.) Generally, no exemption is provided under present law for interest income from industrial development bonds for bioconversion facilities for the conversion of organic matter into energy or into synthetic fuels.

# Reasons for change

The statutory and regulatory limitations on the qualification of certain coal gasification and liquefaction facilities and certain bioconversion facilities as exempt activities under the tax provisions for industrial development bonds have hampered the development of these facilities. Because facilities for coal gasification and liquefaction and facilities for bioconversion may produce significant amounts of energy,

the Committee decided to amend the industrial development bond provisions to permit these facilities to qualify as exempt activities.

# Explanation of provisions

Coal gasification and liquefaction facilities

The committee bill extends the exemption from taxation for interest earned on certain industrial development bonds to interest carned on bonds issued to provide facilities for the production of a synthetic gaseous or liquid fuel by coal gasification and liquefaction processes, respectively. Under the bill, the new exemption is not restricted to facilities for furnishing the products of coal gasification and liquefaction to two contiguous counties. This restriction, however, remains effective for natural gas facilities.

The facilities which may qualify for the exemption include:

(1) facilities which directly perform the coal gasification or

liquefaction process;

(2) facilities for the on-site transportation, handling, storage, or treatment of coal and other raw materials, supplies, or materials in the process preparatory to the coal gasification or liquefaction process;

(3) facilities for the on-site economic recovery, recycling, handling, storage, treatment, or utilization of byproduct materials or energy generated by the coal gasification or liquefaction process;

(4) facilities for the on-site handling or transportation, or the increasing of the British thermal unit (Btu) content per unit of volume, of synthetic gaseous or liquid fuels produced by the coal gasification or liquefaction process; and

(5) other on-site facilities to the extent that such facilities are functionally related, and subordinate to, any of the above de-

scribed facilities.

For purposes of this provision, the term "synthetic gaseous or liquid fuel" is defined to mean any gaseous or liquid product of a coal gasification or liquefaction process which can be used as a substitute for natural gas or oil regardless of its chemical composition or British thermal unit content.

# Rioconversion facilities

The committee bill provides a new statutory exemption from Federal income taxation for interest earned on industrial development bonds which are issued to provide bioconversion facilities for the conversion of municipal and agricultural (including forestry) wastes and sion of municipal and agricultural (including forestry) wastes and other organic matter into energy or into synthetic gaseous, liquid, or solid fuels. Facilities which qualify under this provision are not subject to the rule (described above) that at least 65 percent of the materials introduced into the conversion processes must be worthless. For purposes of this provision, bioconversion facilities include machinery for handling, storing, processing (including equipment for sorting, shredding, and pulverizing wastes and agricultural byproducts), and treating the organic materials used in the particular bioconversion facility. In addition, because the new category of exempt bioconversion activity is not limited to the local furnishing of energy or fuels, the two-contiguous-county rule does not apply.

#### Effective date

These provisions apply with respect to obligations issued after December 31, 1977.

#### Revenue effect

These amendments are expected to reduce revenues by a negligible amount in fiscal 1978, by \$3 million in fiscal 1979, and by \$77 million in fiscal 1985.

# 2. Geothermal Tax Provisions (secs. 1042 and 1043 of the bill and secs. 57, 263, 465, 613, 614 and 1254 of the Code)

#### Present law

# Percentage depletion

Under present law, it is unsettled whether the production of geothermal steam and associated geothermal resources qualifies for either a percentage depletion deduction or the intangible drilling cost deduction. In Reich v. Commissioner, 454 F. 2d 1157 (9th Cir. 1972), aff'g, 52 T.C. 700 (1969), the Ninth Circuit held that the production of geothermal steam entitled the taxpayers to both deductions to the extent that such deductions were available for gas wells.1 Nevertheless, the Internal Revenue Service apparently is not following the Reich decision in cases arising outside of the Ninth Circuit.

Except in the case of certain small producers, the Tax Reduction Act of 1975 generally eliminated the depletion allowance for oil and gas. That Act, however, did not affect the issue of whether geothermal resources qualify for percentage depletion. As a result, the 22-percent depletion deduction allowable to gas wells immediately prior to the Tax Reduction Act of 1975 still is available for geothermal energy if courts decide, as did the Reich court, that certain geothermal wells are gas wells and that the other requirements for depletion are met

(sec. 613A(b)(1)(C)).

# Intangible drilling costs

Deduction.—Even if the Reich decision is not followed, under present law, expenditures incurred in connection with the exploratory phase of geothermal energy which result in dry holes are deductible at the time when the well (or leasehold) is abandoned. Moreover, to the extent that these costs result in new processes or technology, it is possible under present law that these costs would be considered research and experimental expenditures subject to the election to be deducted currently or to be amortized over a 60-month period. For example, in Revenue Ruling 74-67, 1974-1 C.B. 63, the Internal Revenue Service held that certain costs of developing a method for the hydraulic mining of hard minerals, including a portion of the cost of drilling wells, were deductible as research and experimental expenditures. However, under present law, the costs of determining the exist-

In the Reich case, the Tax Court held that the product of the taxpayers' geothermal steam wells was a gas, and that the taxpayers as a result were entitled to expense currently their intangible drilling costs (sec. 263(c) of the Code). The court held further that the taxpayers were entitled to the then 271/2 percent depletion deduction allowance for their product because (1) their product was steam, not inexhaustible earth heat, (2) the particular geothermal wells in question were exhaustible, (3) steam is a gas. and (4) the exclusion from the right to depletion of "water" in section 613(b)(7) of the Code does not exclude steam from the depletion allowance.

ence, location, extent, or quality of any oil, gas, or other mineral deposit are not deductible as research and experimental expenditures, and

must be capitalized.

Application of minimum tax.—To the extent that geothermal wells are determined to be gas wells, as they were by the Reich court, the minimum tax, the recapture provisions and the at risk rules which the Tax Reform Act of 1976 applied to oil and gas wells would apply to geothermal wells. Under the Tax Reform Act of 1976, the deduction for intangible drilling costs on oil and gas wells is treated as a tax preference item for purposes of the minimum tax to the extent that it exceeds the amortization which would have been allowed on the basis of a 10-year life or cost depletion. In the Tax Reduction and Simplification Act of 1977, the Congress provided that for taxable years beginning only in 1977 intangible drilling and development costs (over the amount which would have been allowable under either 10-year amortization or cost depletion) in excess of oil and gas production income would constitute a tax preference item. However, this rule would not apply for future years unless there is further Congressional action. These rules would apply to the extent that a geothermal deposit was determined to be a gas well.

Recapture.—The Tax Reform Act of 1976 also provided for the recapture of certain intangible drilling and development costs upon the disposition of oil and gas properties. The amount subject to recapture is the amount deducted for intangible drilling and development costs reduced by the amount which would have been deductible had those intangible costs been capitalized and deducted through cost depletion. The amount recaptured is to be treated as ordinary income; it cannot exceed the gain realized or the difference between the fair market value of the property transferred over the basis in the property. The recapture rule generally applies regardless of any other Code provision which otherwise would provide for nonrecognition and the rule

applies on a property-by-property basis.

#### At risk limitation

In addition, the Tax Reform Act of 1976 provided that the amount of any loss (otherwise allowable for the year) which may be deducted in connection with exploring for, or exploiting, oil and gas resources cannot exceed the aggregate amount with respect to which the tax-payer is at risk with respect to the property at the close of the taxable year (i.e., generally the amount of an otherwise allowable loss for the year cannot exceed the taxpayer's basis reduced by any nonrecourse borrowing to which the property is subject). The at risk limitation applies to all taxpayers except corporations which are not subchapter S corporations or personal holding companies.

# Reasons for change

To encourage the exploration for, and the drilling and development of, geothermal wells and to accord geothermal resources uniform tax treatment, the Committee decided to provide for all geothermal resources incentives similar to those provided for oil and gas.

# Explanation of provisions

Percentage depletion

The committee bill provides an allowance for percentage depletion for all geothermal deposits regardless of whether or not the geothermal resource would qualify for depletion under present law and regardless of whether or not the resource in fact is renewable, so long as the deposit is located within the U.S. or its possessions. The percentage is 22 percent for production in the years 1978 through 1980, 20 percent for the year 1981, 18 percent for the year 1982, 16 percent for the year 1988, and 15 percent for the years 1984 and thereafter. For purposes of these rules, a geothermal deposit means a geothermal reservoir of natural heat which is stored in rocks or in an aqueous liquid or vapor (whether or not under pressure). (H.R. 8444, the House-passed energy bill, provides a 10-percent depletion allowance.) Under the committee bill, the amount of the allowance is not limited to the taxpayer's adjusted cost basis in that property. (The House-passed bill provided such a limitation.)

Generally, the percentage depletion allowed with respect to geothermal deposits is to be governed by the same rules which apply to percentage depletion for other minerals under section 613. (Of course, if cost depletion is greater than percentage depletion with respect to a particular property containing geothermal deposits, the depletion al-

lowance will be computed under the cost depletion method.)

The percentages allowed under the committee bill are the same percentages allowed for independent oil and gas producers under section 613A of the Code. However, in order to encourage this relatively undeveloped resource, the committee bill exempts geothermal deposits from the limitations and the restrictions in section 613A. Therefore, percentage depletion for geothermal deposits is available to all producers, including major producers who are not eligible for percentage depletion with respect to their oil and gas production. Also, percentage depletion is allowable for all of the taxpayer's geothermal deposits. (It is not limited to a certain number of barrels per day, or the Btu equivalent in the form of geothermal energy.) Further, the 65 percent of taxable income limitation, imposed on percentage depletion in the case of oil and natural gas, does not apply to percentage depletion for geothermal deposits. However, the usual rules (under sec. 613) for determining the taxpayer's gross income from the property are to apply, including those for allocating the income among resources where different resources are recovered.

Intangible drilling costs

Deduction.—The committee bill provides taxpayers with the option to deduct currently, rather than to capitalize, intangible drilling and development costs related to the exploration for, and the development of, geothermal deposits located in the U.S. or its possessions. Geothermal deposits are defined by the bill to mean geothermal reservoirs consisting of natural heat which is stored in rocks or in an aqueous liquid or vapor (whether or not under pressure). The election to

capitalize or to deduct intangible drilling costs must be made prior to the expiration of the time for filing claims for credit or refund of any overpayment of tax imposed with regard to the taxpayer's first taxable year to which the provision is effective and for which intangible drilling costs are paid or incurred. Prior to the expiration of this period, but not thereafter, the election may be changed or revoked. A taxpayer having properties containing geothermal deposits and other properties containing oil and natural gas (or geopressurized methane) may make different elections for properties containing different kinds of natural resources, but must make one election for all properties containing the same type of resource (in accordance with regulations to

be prescribed by the Secretary).

Application of minimum tax.—The committee bill also provides that the excess of the intangible drilling and development costs over the amount of those costs which would have been amortizable on the basis of a 10-year life or under cost depletion and which further exceed the taxpayer's income from the production of geothermal resources constitutes a tax preference item for purposes of the minimum tax on individuals. To ascertain the amount of the intangible drilling and development costs over the amount amortizable, which is subject to the minimum tax, the taxpayer's income from oil and gas properties and geopressurized methane gas properties is to be determined separately from the calculation of income from geothermal properties. Moreover, the committee bill also provides that the excess of the allowable depletion deduction, with respect to each geothermal property, over the adjusted basis of that property at the end of the taxable year, is to be treated as an item of tax preference subject to the minimum tax.

Recapture.—The committee bill also provides that gain on the disposition of geothermal properties will be subject to recapture (i.e., treated as ordinary income rather than capital gain) to the extent that the amount of the intangible drilling cost deductions exceed the amount which would have been allowable had the costs been capitalized and deducted through cost depletion.

#### At risk limitation

The committee bill provides that the amount of any loss (otherwise allowable for the year) which may be deducted in connection with exploring for, or exploiting, geothermal deposits cannot exceed the aggregate amount with respect to which the taxpayer is at risk at the close of the taxable year, as determined under existing law (sec. 465). For purposes of the at risk rules, developing geothermal deposits is to be treated as a separate activity (distinguished, for example, from oil or gas activities, or the development of geopressurized methane). The at risk limitation applies to all taxpayers other than corporations which are not subchapter S corporations or personal holding companies.

# Effective date

The provisions relating to the deduction for intangible drilling costs, to the minimum tax, to recapture, and to the at risk rules apply with respect to wells commenced on or after April 20, 1977, in taxable years ending on or after that date.

The provision relating to the provision for a 22-percent depletion allowance applies to taxable years ending after December 31, 1977.

#### Revenue effect

The revenue loss from permitting the expensing of intangible drilling costs for geothermal discovery and development is estimated to be \$5 million in fiscal 1978, \$12 million in fiscal 1979, and \$36 million by fiscal 1985.

The revenue loss attributable to the provision of a percentage depletion allowance at a 22-percent rate for all geothermal resources is estimated to be negligible for fiscal years 1978–1980, and \$14 million for fiscal 1985.

### Energy savings estimate

It is estimated that the additional energy that would be made available due to the provision for the expensing of intangible drilling cost for geothermal discovery and development the 22-percentage depletion allowance, and the additional investment tax credit available in section 1031 of the bill would reduce oil imports in 1985 by 50,000 barrels per day.

# 3. Geopressurized Methane Gas (secs. 1042 and 1043 of the bill and secs. 44G, 57, 263, 465, 613, 614, 617 and 1254 of the Code)

#### Present law

Geopressurized methane gas essentially is natural gas dissolved in water, and contained in a geopressurized aquifer, up to and including 1,000 standard cubic feet per barrel of fluid for approximately the first 100 million cubic feet of production.

# Percentage depletion

Current law is unsettled as to the appropriate depletion rate for geopressurized methane gas. As a gas, it could be argued that an independent producer of geopressurized methane is entitled to claim the depletion rate set forth in sec. 613A(c)(5). Alternatively, as a geothermal resource, geopressurized methane could be entitled to a 22-percent depletion rate for all years without the independent producer requirements (under sec. 613A(b)(1)(c)) if it was determined to be a geothermal deposit which was a gas well. In addition, it could be argued that geopressurized methane gas is encompassed within the provision for miscellaneous minerals (sec. 613(b)(7)) and, therefore, entitled to a 14-percent depletion rate.

While it is difficult to determine precisely which depletion rate applies to geopressurized methane, generally, except in the case of certain independent producers, the Tax Reduction Act of 1975 eliminated the depletion allowance for oil and gas. However, percentage depletion was retained for the independent producer \* for average daily produc-

tion up to a specified level.

The exemption for oil was 2,000 barrels a day in 1975 and is being reduced 200 barrels per day a year for 5 years from 1976 through 1980 when the permanent exemption will be 1,000 barrels a day. For 1977,

It is estimated that this quantity should be reached in approximately the first three months of geopressurized methane production. After the first 100 million cubic feet of production, the amount of methane per barrel of water may increase above 1,000 standard cubic feet due to separation of the methane and water in formation

<sup>&</sup>lt;sup>1</sup>A geopressurized aquifer is a sandstone formation filled with saline water and dissolved gas, including methane, at a static formation pressure in excess of .6 psi per foot of depth. These features generally distinguish geopressurized methane gas from natural gas which is produced along with some water.

water in formation.

\* Under the Tax

<sup>&</sup>quot;Under the Tax Reduction Act of 1975, the percentage depletion deduction generally was restricted to independent producers and was eliminated for major oil companies, by denying the deduction to an "integrated" operation, that is to a taxpayer (1) who sells oil or natural gas or their products through a retail outlet which he or a related person owns, or (2) who sells oil or natural gas or their products to any person who is contractually obligated to the taxpayer to market or distribute the latter's oil or gas, etc., under the taxpayer's trademark or trade name, etc., or who leases a retail outlet from or is controlled by the taxpayer. The retailer restriction does not apply to cases where gross receipts for sales of oil, gas, etc., from all retail outlets do not exceed \$5 million annually. (Code section 613A.) In addition a taxpayer is considered a refiner of crude oil if the taxpayer's refinery run exceeds 50,000 barrels on any day.

Gas wells are allowed percentage depletion for an equivalent average daily production level, but if the taxpayer elects percentage depletion for natural gas, he must reduce his maximum allowable exemption for oil by the Btu-equivalent of the exempt gas. In addition, the depletion rate for the independent producer will remain at 22 percent through 1980, after which it will be phased down to a permanent level of 15 percent beginning in 1984. The excess of the allowable depletion deduction, with respect to each property, over the adjusted basis of that property at the end of the taxable year, is treated as an item of tax preference subject to the minimum tax. The depletion deduction resulting from the independent producer exemption may not exceed 65 percent of the taxpayer's net income from all sources (computed without regard to the depletion deduction, net operating loss carrybacks and capital loss carrybacks).

Exploratory costs

Under present law, expenditures incurred in connection with the exploration phase of geopressurized methane which results in dry holes are deductible at the time when the well (or leasehold) is abandoned. Moreover, to the extent that these expenditures result in new processes or technology, it is possible under present law that these costs would be considered to be research and experimental expenditures subject to the election to be deducted currently or to be amortized over a 60-month period. For example, in Revenue Ruling 74-67, 1974-1 C.B. 68, the Internal Revenue Service held that certain costs of developing a method for the hydraulic mining of hard minerals, including a portion of the cost of drilling wells, were deductible as research and experimental expenditures. However, under present law the costs of determining the existence, location, extent, or quality of any oil, gas, or other mineral deposit (generally referred to as geological and geophysical expenses, or "G&G") are not deductible as research and experimental expenditures, and must be capitalized.

# Intangible drilling costs

Application of the minimum tax.—Under present law, the operator of an oil or gas well may elect to deduct intangible drilling and development costs as an expense rather than capitalize the costs and recover them through depletion and depreciation deductions. Generally, intangible drilling and development costs are defined as those expenditures made by the owner of the operating interest or wages, fuel, repairs, hauling, supplies, etc., incurred in preparing a drill site, drilling and cleaning a well, and constructing assets which are necessary in drilling the well and preparing it for production (such as derricks, pipelines, and tanks). Under the Tax Reform Act of 1976, the deduction for intangible drilling costs in excess of the deduction which would have been allowed with respect to those costs for that year through either 10-year amortization or cost depletion is treated as a tax preference item for purposes of the minimum tax for individuals.

In the Tax Reduction and Simplification Act of 1977, the Congress provided that for taxable years beginning only in 1977 intangible drilling and development costs (over the amount which would have

been allowable under either 10-year amortization or cost depletion) in excess of oil and gas production income would constitute a tax preference item. However, this rule would not apply for future years unless there is further Congressional action. These rules would apply to the extent that a geopressurized methane deposit was determined to be a gas well.

Recapture.—The Tax Reform Act of 1976 also provided for the recapture of certain intangible drilling and development costs upon the disposition of oil and gas properties. The amount subject to recapture is the amount deducted for intangible drilling and development costs reduced by the amount which would have been deductible had those intangible costs been capitalized and deducted through cost depletion. The amount recaptured is to be treated as ordinary income; it cannot exceed the gain realized or the difference between the fair market value of the property transferred over the basis in the property. The recapture rule generally applies regardless of any other provision of the Code which otherwise would provide for nonrecognition and applies on a property-by-property basis.

#### At risk limitations

In addition, the Tax Reform Act of 1976 provided that the amount of any loss (otherwise allowable for the year) which may be deducted in connection with exploring for, or exploiting, oil and gas resources, cannot exceed the aggregate amount with respect to which the tax-payer is at risk with respect to the property at the close of the taxable year (i.e., generally the amount of an otherwise allowable loss for the year cannot exceed the taxpayer's basis reduced by any nonrecourse borrowing to which the property is subject). The at risk limitation applies to all taxpayers except corporations which are not subchapter S corporations or personal holding companies.

# Reasons for change

To encourage the exploration for, and the drilling and development of, geopressurized methane gas, the Committee decided both to clarify the treatment of this resource, and to provide various incentives, similar to those provided for other resources, for its production.

# Explanation of provisions

# Definition

The committee bill requires the Secretary of the Treasury, after consultation with the Secretary of Energy, to issue an appropriate definition of geopressurized methane gas. This provision is necessary so that the geopressurized methane gas can be distinguished from more conventional gaseous substances, for example, natural gas contained in water, or natural gas which contains some fluids. Generally, the committee bill applies the rules which are applicable to oil and gas to geopressurized methane gas.

# Percentage depletion

The committee bill provides a 10-percent allowance for percentage depletion for geopressurized methane gas located in the U.S. or its possessions, without regard to the application of section 613A. This allowance would apply only to the gas at the wellhead produced from

a geopressurized methane gas well, and would not extend to the brine which is produced from the well along with the gas. No depletion allowance is to be allowed with respect to geopressurized brine which is produced from the well together with the gas, and which thereafter is reintroduced into the ground. (However, under appropriate circumstances the brine may qualify for the depletion allowance applicable for geothermal resources generally.) In other respects, the computation of percentage depletion is to be comparable to the computation (under sec. 613) with respect to natural gas sold under fixed contracts and regulated natural gas (which are exempted from the limitations of sec. 613A). Thus, gross income is determined in accordance with the rules for oil and gas wells, and the production of geopressurized methane gas is not considered to be mining. Furthermore, the excess of the allowable depletion deduction, with respect to each geopressurized methane gas property, over the adjusted basis of that property at the end of the taxable year, is to be treated as an item of tax preference subject to the minimum tax. Moreover, the allowance for depletion may not exceed 50 percent of the taxable income from each property, computed without the allowance for depletion. Where more than one resource is produced from the same well, the usual allocation rules are to apply.

# Geological and geophysical costs

The committee bill would provide taxpayers with the option to deduct currently, rather than requiring the capitalization of, geological and geophysical (G&G) costs incurred only in the exploration for geopressurized methane located in the U.S. or its possessions. These costs are subject to recapture through the deduction for depletion in the taxable year in which the property becomes productive, or if the taxpayer receives or accrues a bonus or royalty with respect to the property. Generally, G&G costs also are subject to recapture upon disposition of the property. These rules are similar to those applicable to mine exploratory expenses. These costs generally would include such items as aerial photography, geological mapping, airborne magnetometer surveys, gravity meter surveys, and seismograph surveys. G&G costs, however, do not include any exploratory or developmental drilling expenses, nor do they include any expenditures for the acquisition or improvement of depreciable property. The election to deduct G&G costs is to be made in accordance with regulations and substantiation requirements prescribed by the Secretary.

Due to the difficulty of, and expenses involved in, locating commercially exploitable quantities of geopressurized methane gas, the Committee decided to provide an incentive for the production of this energy source which is inapplicable in the case of any other resource. Under present law, G&G costs are capitalized and become part of the

taxpayer's basis.

The Committee recognizes, however, that because G&G costs will be deductible currently only when they are incurred in exploring for geopressurized methane gas that various timing and identification problems are likely to arise, especially since G&G equipment and methodologies generally are interchangeable between resources. Nevertheless, there are several factors which might be used to indicate

whether a taxpayer incurred G&G costs exploring for geopressurized methane gas. For example, if a taxpayer has secured a permit from the appropriate state agency to drill for geopressurized methane gas at the time when the G&G costs were incurred with regard to the drilling site, this would be a strong indication that the costs actually were incurred in exploring for geopressurized methane gas. Conversely, an oil or natural gas drilling permit would tend to indicate that the G&G costs should be capitalized. Where a taxpayer has not secured a drilling permit for geopressurized methane gas at the time when the costs are incurred, but subsequently obtains such a permit for the property, this would tend to support a claim for current deductibility of G&G costs, unless the taxpayer also secured drilling permits for other minerals. Similarly, if the taxpayer had a mineral interest in the property which did not include geopressurized methane gas, this would tend to indicate that the G&G costs should be capitalized.

The Committee anticipates that the Secretary of the Treasury will promulgate regulations which will contain other factors which might

be used to distinguish deductible from capitalized G&G costs.

# Intangible drilling costs

Deduction.—The committee bill provides taxpayers with the option to deduct currently rather than to capitalize intangible drilling and development costs related to the exploration for, and the development of, geopressurized methane gas located in the U.S. or its possessions. Geopressurized methane gas is to be defined by the Secre-

tary of the Treasury.

The election to capitalize or to deduct intangible drilling costs must be made prior to the expiration of the time for filing claims for credit or refund of any overpayment of tax imposed with regard to the taxpayer's first taxable year to which the amendment is effective and for which intangible drilling costs are paid or incurred. Prior to the expiration of this period, but not thereafter, the election may be changed or revoked. A taxpayer having properties containing geopressurized methane gas and other properties containing oil and natural gas, or geothermal deposits may make different elections for properties containing different kinds of natural resources, but must make one election for all properties as to the same type of resource.

Application of the minimum tax.—The committee bill also provides that the excess of the intangible drilling and development costs over the amount of those costs which would have been amortizable on the basis of a 10-year life or cost depletion and which further exceed the taxpayer's income from the production of geopressurized methane gas constitutes a tax preference item for purposes of the minimum tax on individuals. To determine the amount of the intangible drilling and development costs over the amount amortizable, which is subject to the minimum tax, the taxpayer's income from oil, gas, and geothermal properties is to be determined separately from the calculation of income from geopressurized methane gas properties.

In addition, the minimum tax is to apply to the excess of the allowable depletion deduction, with respect to each geopressurized methane gas property, over the adjusted basis of that property at the end of the taxable year.

Recapture.—The committee bill also provides that gain on the disposition of geopressurized methane gas properties will be subject to recapture (i.e., treated as ordinary income rather than capital gain) to the extent that the amount of the intangible drilling cost deductions exceed the amount which would have been allowable had the costs been capitalized and deducted through cost depletion.

#### At risk limitation

The committee bill provides further that the amount of any loss (otherwise allowable for the year) which may be deducted in connection with exploring for, or exploiting, geopressurized methane gas properties cannot exceed the aggregate amount with respect to which the taxpayer is at risk at the close of the taxable year, as determined under existing law (sec. 465). For purposes of the at risk rules, developing geopressurized methane gas is to be treated as a separate activity (distinguished, for example, from oil and gas activities, or the development of geothermal deposits). The at risk limitation applies to all taxpayers other than corporations which are not subchapter S corporations or personal holding companies.

#### Effective date

The provisions relating to the deduction for intangible drilling costs, to the minimum tax, to recapture, and to the at risk rules apply with respect to wells commenced on or after April 20, 1977, in taxable years ending on or after that date.

The section relating to the provision for a 10-percent depletion allowance applies to taxable years ending after December 31, 1977.

The provision relating to the deduction for G&G costs applies to taxable years ending after December 31, 1977.

#### Revenue effect

The provision of a 10-percent depletion allowance for geopressurized methane will have no revenue effect for fiscal years 1978 and 1979, but will result in revenue losses of approximately \$14 million in fiscal year 1985.

The revenue loss attributable to the option to deduct intangible drilling costs will be approximately \$9 million in fiscal year 1978, \$16 million in fiscal year 1979, and \$23 million in fiscal year 1985.

# 4. Credit for Production of Oil and Gas from Nonconventional Sources (sec. 1044 of the bill and sec. 44G of the Code)

#### Present law

Present law contains no special provisions for oil or gas production from nonconventional sources. However, oil shale is entitled to a 15 percent depletion allowance applied to the value of the shale oil after retorting (heating) but before the hydrogenation process (sec. 613) (b) (2) (B) of the Code). Taxpayers engaged in oil shale production are entitled to all applicable business tax incentives, including the investment credit under the provisions' general rules.

The proper depletion rate for geopressurized methane gas is unsettled under current law. Natural gas produced from tight rock formations is entitled to percentage depletion at a rate of 22 percent under section 613A. Taxpavers engaged in the business of producing such gas are subject to all the rules generally applicable to income from conventional gas wells, and would be entitled to the same business tax in-

centives allowed to gas producers under present law.

#### Reasons for change

#### Oil shale

Oil shale is a major but underdeveloped fossil energy resource in the United States. Total U.S. oil shale resources have been estimated to contain 2,400 billion barrels of oil. Oil shales 2 are underground sedimentary layers of finely grained rock which is rich in organic matter. The oil which can be extracted from this shale requires only minimal additional refining in order to make it equivalent to conventional crude petroleum. However, the cost of producing shale oil exceeds the cost of producing conventional oil by drilling. The Committee believes that commercial production of shale oil should be encouraged and that tax incentives rewarding actual production would best motivate the development of this resource.

# Geopressurized methane gas

Geopressurized methane gas is located in extensive deep (1 to 4 miles) zones of pressurized water with widely varying salinity in which the pressure exceeds the corresponding pressure of the water at that depth. The geopressured fluids of the Gulf Coast have a very large energy potential particularly with respect to geopressurized methane gas. Other geopressured sections of the Gulf Coast and other

<sup>2</sup> Shale is a rock that is formed by the consolidation of clay, mud, or silt, has a finely stratified or laminated structure, and is composed of minerals essentially

unaltered since deposition.

<sup>1</sup> However, shale used or sold for use in the manufacture of sewer pipe or brick and shale used or sold for use as sintered or burned lightweight aggregates is entitled to a seven and one-half percent rate of depletion under section 613(b) (5). Shale which is not used for the purposes specified in section 613(b) (5) or which does not constitute oil shale is entitled to a five percent rate of depletion under section 613(b) (6) (A).

regions of the country probably have at least three times more potential energy than the evaluated part, but the recoverable fraction may be considerably less because of lower average porosity and permeability which make it harder for the methane to be extracted. Much of the geopressured resource was considered by the U.S. Geological Survey to be recoverable at one to two times 1975 prices.

Tight rock formations

Significant deposits of natural gas are located in tight rock formations such as the Devonian shales in the Appalachians, coal seam methane deposits, and Western tight rock formations. The low permeability of these rock formations makes extraction of the gas from the rock more difficult and expensive than the extraction of gas by ordinary drilling methods from conventional gas deposits.

The Committee believes providing a tax incentive for the production of oil and gas from nonconventional sources, such as oil shale, geopressurized methane gas and tight rock formations would encourage

the development of these energy resources.

# Explanation of provisions

Shale oil

The committee bill allows a taxpeyer a \$8 credit against his tax liability for each barrel of shale oil which is produced from the taxpayer's property during the taxable year. Shale oil is the liquid oil obtained from the oil shale after the retorting (heating) process, but before hydrogenation, refining, or any other process subsequent to retorting.

Geopressurised methane gas and tight rock formation gas

The bill allows a taxpayer a 50-cent credit against his tax liability for a taxable year for each thousand cubic feet of gas produced during the txable year from all tight rock formation property in which the taxpayer has an interest and which is attributable to the taxpayer. The same credit applies for each thousand cubic feet of geopressurized methane gas, which is produced during the taxable year from all geopressurized methane gas property (within the meaning of section 465(c)(2)(F)) in which the taxpayer has an economic interest but only to the extent that such production is attributable to the taxpayer.

Who is entitled to the credit

Under the bill, a taxpayer is entitled to the credit for non-conventional oil or gas production, if and to the extent that he has an ownership interest in the oil shale or the gas property. The bill establishes a ratio for determining the production attributable to a taxpayer for oil or gas produced from any property during a taxable year. The production attributable to a taxpayer for a taxable year is to be equal to an amount bearing the same ratio to the total production from the property during the year as the amount of the taxpayer's gross income from the property for the taxable year (under section 613(a)) on account of such production bears to the aggregate gross income from the property for the year (within the meaning of section 613(a)) of all parties having an interest in such property. By placing in the denominator of the fraction established by this ratio the aggregate gross income of all parties, including, for example the "gross income"

of Federal, State or local governments from the property, the full 100 percent of the production from the property is taken into account.

The production credits allowed by this bill apply only with respect to oil and gas produced from a property located in, or offshore of, the United States (within the meaning of paragraph (1) of section 688) or in, or offshore of, a possession of the United States.

**Definitions** 

After consultation with the Secretary of Energy, the Secretary of Treasury is to establish by regulation standard scientific definitions of shale oil, geopressurized methane gas and tight rock formations.

The terms "oil shale property" and "tight rock formation property" means any property with respect to which the taxpayer is claiming a production credit allowed by the bill. The bill applies the present law definition in section 614 of the Code to the term "property" for purposes of the production credits, so that generally the term means each separate interest owned by the taxpayer in each oil shale deposit or tight rock formation gas deposit in each separate tract or parcel of land. (Geopressurized methane gas wells are included within the section 614 definition of property under another section of the committee bill.)

The term "barrel" is defined to mean 42 United States gallons. Credits for fractions of a barrel or fractions of a thousand cubic feet

are to be determined on a proportional basis.

Application with other credits

The credit for production of oil and gas from nonconventional sources may be claimed only after a taxpayer's income tax liability has been reduced by the sum of all the nonrefundable tax credits allowed under sections 32 through 45 of the Code, but before any reduction in liability on account of the refundable tax credits: section 31 (relating to the credit for certain uses of gasoline, special fuels, and lubricating oil); section 43 (relating to the earned income credit); section 44C (relating to the home insulation credit); section 44E (relating to the intercity bus credit); and section 44F (relating to the energy investment credit).

# Effective date

The production credits to apply to taxable years beginning after December 31, 1977.

#### Revenue effect

The credit for shale oil production will reduce revenues about \$4 million in fiscal 1978, \$19 million in fiscal 1979, and \$327 million in fiscal 1985. The credit for geopressurized methane gas production will have no impact on revenues in fiscal years 1978 and 1979; it will reduce revenues by \$52 million in fiscal 1985. The credit for tight rock formation gas production will not affect revenues in fiscal years 1978 and 1979; it will reduce revenues by \$194 million in fiscal 1985.

Energy savings estimate

By 1985, this amendment is expected to result in shale oil production 200,000 barrels per day, geopressurized methane and tight rock gas production which will reduce oil imports by 45,000 barrels of oil per day in 1985.

# 5. Percentage Depletion for Peat (sec. 1042 of the bill and sec. 613(b) of the Code.)

#### Present law

Under present law, taxpayers may claim a five-percent depletion deduction for natural deposits of peat. Peat is a dark brown or black residuum produced by the partial decomposition and disintegration of mosses, sedges, trees, and other plants which grow in marshes and similar wet places. Moss which has not yet disintegrated into peat is not entitled to percentage depletion.

# Reasons for change

The Committee believes that a program encouraging conversion to fuels other than oil and gas, particularly coal, should provide incentives for the use of all safe major fuel sources indigenous to the United States. The Committee decided that increasing the depletion rate for peat which is used as fuel or fuel source, to the same percentage allowed coal and lignite would promote the production and use of peat, the nation's second most abundant fuel.

# Explanation of provision

The bill increases the percentage depletion rate for peat from deposits in the United States which is used directly as a fuel or otherwise to produce energy from five percent to 10 percent. Peat which is used for other purposes, primarily agricultural, remains entitled to depletion at the present five percent rate.

#### Effective date

The increase in percentage depletion for peat used directly or indirectly for fuel is to apply to taxable years ending after December 31, 1977.

#### Revenue effect

This provision is expected to reduce revenues by less than \$1 million annually.

# Energy saving estimate

This provision is expected to have a negligible impact on energy savings.

<sup>&</sup>lt;sup>1</sup> Section 613(b) (6) (A) of the Code.

<sup>&</sup>lt;sup>2</sup> Rev. Rul. 57-336, 1957-2 C.B. 325.

<sup>&</sup>lt;sup>1</sup> Section 613(b) (7) (A) of the Code.

E. ADDITIONAL INCENTIVES FOR THE PRODUCTION AND CONSERVATION OF ENERGY, FOR CONVERSION TO ALTERNATIVE ENERGY SOURCES, AND FOR DEALING WITH ENERGY-RELATED PROBLEMS; ENERGY TRUST FUND

# (Sec. 1054 of the Bill)

The House energy bill (title II of H.R. 8444) contains several new taxes designed to reduce demand for oil and gas, including a wellhead tax on crude oil, a tax on business use of oil and natural gas and a tax on fuel-efficient automobiles. The Committee voted not to adopt any of these taxes. The Committee believes that the nation's energy program should achieve a balance between encouraging energy conservation and encouraging additional energy production, rather than sim-

ply emphasizing conservation.

The Committee believes that, if new taxes are to be imposed by this legislation, they should be accompanied by incentives for energy production, which is not the case in the House bill, and more effective incentives for energy conservation and for conversion from conventional oil and gas to alternative sources of energy. Also, they should be accompanied by measures to deal with any adverse and undesirable consequences, such as inequities, which may result from the energy situation. Thus, the committee bill includes a provision which is intended to give the conferees flexibility to make the appropriate amendments should the House conferees insist on the enactment of some of the House-passed taxes, amendments which might not otherwise be within the scope of the conference.

#### Additional taxes and tax incentives

The committee bill states that no taxes imposed by this bill shall go into effect unless they are accompanied by tax and other incentive for increased energy production, energy conservation, and conversion from conventional oil and gas to alternative sources of energy. Also, they may be accompanied by measures to ameliorate any adverse effects, such as inequities, resulting from the energy crisis and from en-

ergy legislation.

The Committee intends that the concept of tax incentives for increased energy production, conservation or conversion be interpreted broadly. Tax and other incentives for greater production would include, for example, modifications of the crude oil equalization tax in the House bill to transfer a portion of the revenue raised by the tax to oil producers. This could be done in several different ways: (1) shifting the tax from purchasers of crude oil to oil producers and royalty holders, allowing the ceiling price of regulated crude oil to rise by the amount of the tax and exempting a portion of each producer's oil pro-

duction from the tax; (2) providing a refundable tax credit to oil producers and royalty holders equal to part or all of the crude oil equalization tax on a portion of their oil; or (3) should the existing oil price controls to expire before October 1, 1981, which could occur anytime after April 30, 1979, at the President's discretion, by modifying the House bill's crude oil equalization tax, which applies only to controlled oil, so that it applies to a portion of the deregulated oil.

Other production incentives would include exemptions from the crude oil equalization tax for small refiners or modifications of the crude oil entitlements program to aid small refiners. This could include treating as separate entities refineries which are owned or controlled by a small refiner and which serve different marketing areas.

The Committee intends that the concept of modification of the House-passed taxes to mitigate adverse effects of the energy crisis should also be interpreted very broadly. Such changes could include exemptions from the energy taxes (including credits against the taxes and refunds of the taxes), modifications of exemptions or rebates contained in the House bill (such as the heating oil rebate), provisions to relieve the burden on natural gas users whose gas supplies are curtailed, and excess profits or windfall profits taxes on industries whose profits rise unduly as a result of the energy situation.

#### Energy trust fund

The committee bill also establishes an Energy Production, Conservation, and Conversion Trust Fund, and appropriates to the Trust Fund the net revenues from any new taxes added by the bill as enacted (not including revenues from the extension of any existing taxes). The Trust Fund is to consist of two accounts—the Energy Financing Program Account and the Energy-Efficient Transit Account—which are to be separately managed and administered as if each such account constitutes a separate trust fund. Amounts in each account shall be available, as provided by appropriations acts, for the purposes specified in the bill.

In the case of the Energy Financing Program Account, amounts may be used solely for purposes of providing financial assistance (including, but not limited to, loan guarantees, price guarantees, and loans) to business concerns for projects involving energy development, production, transportation, transmission, distribution, or conservation, but only if such projects could not receive sufficient funding upon commercially reasonable terms or conditions from other sources to make such project commercially feasible. To avoid duplication of effort, financial assistance would not be available for any project which would be eligible to receive grants or other aid from the Department of Energy. In the case of the Energy-Efficient Transit Account, amounts may be used solely for purposes of energy-efficient transit, including (but not limited to) research and demonstration projects and grants to States for energy-efficient transit purposes or for regional transportation programs.

## F. LIMITATION OF PRESIDENT'S AUTHORITY TO ADJUST OIL IMPORTS

#### (Sec. 1055 of the Bill)

#### Present law

The Trade Expansion Act of 1962. delegates to the President discretionary authority to adjust imports to the extent which he deems necessary so that they will not threaten to impair the national security (sec. 232(b)). Adjustments to limit imports may take the form of either quantitative restrictions, called quotas, or monetary exactions, usually called tariffs, duties, or import license fees.

In determining whether any imports threaten to impair the national security, the Trade Expansion Act of 1962 specifically requires the President, without excluding other relevant factors, to consider:

(1) domestic production needed for projected national defense requirements;

(2) the capacity of domestic industries to meet projected na-

tional defense requirements;

(8) existing and anticipated availabilities of the human resources, products, raw materials, and other supplies and service-essential to the national defense;

(4) the requirements of growth of industries, supplies and services essential to the national defense, including the investment, exploration, and development necessary to assure such growth; and

(5) the importation of goods in terms of their quantities, availabilities, character, and use as those affect industries essential to the national defense and the capacity of the United States to meet

national security requirements.

In administering actions taken under this authority, the President must also recognize the close relation of the U.S. economic welfare to national security, and must consider the impact of foreign competition on the economic welfare of individual domestic industries. In addition, any substantial unemployment, decrease in government revenues, loss of skills or investment, or other serious effects resulting from the displacement of any domestic products by excessive imports are to be considered, without excluding other factors, in determining whether such weakening of the United States' internal economy may impair the national security.

Currently, specific import license fees of 21 cents and 63 cents are imposed on each barrel of imported crude petroleum or petroleum

<sup>1</sup> Public Law 87-794 (as amended).

In Federal Energy Administration v. Algonquin SNG, Inc., 426 U.S. 548 (1976), the Supreme Court upheld as proper under section 232(b) of the Trade Expansion Act of 1962 Presidential action changing the adjustment of oil imports through quotas to adjustment through the imposition of monetary exactions called import license fees.

products, respectively. Statutory import duties of 5 or 10 cents per barrel, depending on the gravity of the oil, are also imposed. However,

these duties reduce the amount of the import license fees.

The Trade Act of 1974 delegates to the President discretionary authority to modify duties on imports under certain circumstances. Title I of the Act authorizes the President to increase or impose U.S. import duties pursuant to trade agreements with foreign countries if he determines that such duties are unduly burdening U.S. foreign trade and interfering with the development of mutually beneficial trade agreements between the United States and foreign countries.

Title V of the Trade Act of 1974 authorizes the President to allow duty free imports of eligible articles, including imports of petroleum and petroleum products, from designated developing countries. In determining whether to grant such treatment, the President must consider the effect of such action in furthering the economic development of the developing country; the extent of any comparable action by other major developed countries; and the impact of such action on U.S. producers of products which are like, or which are directly competitive with, the imported products.

Reasons for change

The Committee believes that the Congress bears the ultimate responsibility for the regulation of foreign imports. Although the Committee recognizes that sudden or severe situations, such as war, require delegation of authority over import adjustments to the President in order that any necessary changes in quotas or duties be made swiftly, the Congress should itself determine any adjustments of imports critical to the national economy, particularly imports of petroleum or petroleum products. In recognition of Congress' reponsibility and in order to avoid any unilateral presidential action with regard to imports which might be designed to affect domestic oil prices, the Committee decided to modify the broad delegation of import authority granted to the President under the Trade Expansion Act of 1962 by limiting his authority over crude oil imports to times of war or actual hostilities. The Committee also limited the President's authority under the Trade Act of 1974.

However, the Committee also recognizes that the need for a strong domestic refining industry occasionally might require swift adjustments of imports of foreign refined petroleum products. The Committee decided to grant the President special authority to adjust imports of refined petroleum products if such products threaten to im-

pair the national security.

The Committee believes it necessary to maintain a competitive domestic refining industry. It is concerned that a crude oil tax together with the cost of environmental and safety requirements could have a serious adverse impact on this industry. Furthermore, the Committee recognizes that the U.S. refining industry must rely heavily on imported crude petroleum, unless domestic supplies increase significantly, if they are to operate at capacity. The industry could be severely injured if import duties on crude oil were increased significantly and suddenly, for example, by the President under the discretionary authority delegated to him under the Trade Expansion Act of 1962. Because the scope of that presidential authority has not been clearly de-

fined and because the Committee considers maintenance of the domestic refining industry important to the national security, the Committee decided expressly to require the President to recognize the relationship between this industry and the national security in making any import adjustments.

#### Explanation of provision

The committee bill nullifies any presidential adjustment of imports of petroleum and petroleum products under authority granted him

under the Trade Expansion Act of 1962 (sec. 232(b)).

An exception to the restrictions on presidential discretion is made for military or defense emergencies involving actual hostilities. The President will continue to have the full discretion which he has under present law to adjust imports of petroleum and petroleum products during a period in which the Congress declares war, the United States Armed Forces are introduced into hostilities pursuant to statutory authorization, a national emergency is created by attack upon the United States, or the United States Armed Forces are introduced into hostilities under circumstances which require a report by the President under the War Powers Resolution (sec. 4(a)). Any adjustment which the President makes affecting import duties under these circumstances will automatically end on the sixtieth day after the cessation of hostilities.

A second exception to the restrictions on presidential authority pertains to adjustments of imports of refined petroleum products. The committee bill provides that upon a request for an investigation of the effects of imported refined petroleum products on the national security by any interested party or the head of a Federal department or agency, or on his own initiative, the Secretary of the Treasury must report his findings and recommendations to the President within 6 months from the date of the request or the beginning of the investiga-

tion.

If the Secretary finds in his investigation that imports of refined petroleum products threaten to impair the national security, he must relate this determination to the President. The President then shall decide whether any action is needed. The bill authorizes the President to take such action as he deems necessary, including the imposition or adjustment of tariffs, fees, or quotas on imported refined petroleum products for as long as he believes required so that such imports do not threaten the national security.

In deciding whether imports of refined petroleum products should be adjusted, the bill requires the President to consider all the relevant factors which he must take into account under the statute in exercising his present law authority over imports under the Trade Expansion

Act of 1962.

In adjusting imports of foreign refined petroleum products, the amendment specifically requires the Secretary of the Treasury and the President to recognize the close relation between national security and a modern domestic refining industry which is competitive with foreign refineries. They also must consider the economic welfare and capital investment needs of the industry. The impact of excessive imports of refined petroleum products, such as substantial unemployment, decrease in government revenues, loss of skills or investment, or other

adverse effects must be weighed, without at the same time disregarding any other relevant factors which must be considered under this provision in making any adjustment, such as the possible effects of any proposed action on the economy, on regional needs, or on consumers.

The provision further restricts the authority to adjust import duties, including duties on petroleum and petroleum products, granted the President by the Trade Act of 1974. The provision bars any increase in or imposition of U.S. import duties on petroleum or petroleum products as part of any trade agreement between the United States and a foreign country. The provision also provides that the President may not designate either petroleum or refined petroleum products imported from a developing country as eligible articles for preferential duty-free import treatment.

#### Effective date

The limitations on the President's authority to adjust imports of petroleum or petroleum products are effective after October 14, 1977.

#### G. OTHER PROVISIONS

## 1. Intangible Drilling Costs of Oil and Gas Wells (sec. 1051 of the bill and sec. 57 of the Code)

#### Present law

Under present law, the operator of an oil or gas well may elect to deduct intangible drilling and development costs as an expense rather than capitalize the costs and recover them through depletion and depreciation deductions. Generally, intangible drilling and development costs are defined as those expenditures made by the owner of the operating interest for wages, fuel, repairs, hauling, supplies, etc., incurred in preparing a drill site, drilling and cleaning a well, and constructing assets which are necessary in drilling the well and preparing it for production (such as derricks, pipelines, and tanks). Under the Tax Reform Act of 1976, the deduction for intangible drilling costs in excess of the deduction which would have been allowed with respect to those costs for that year through either 10-year amortization or cost depletion is treated as a tax preference item for purposes of the minimum tax for individuals.

In the Tax Reduction and Simplification Act of 1977, the Congress provided that for taxable years beginning only in 1977 intangible drilling and development costs (over the amount which would have been allowable under either 10-year amortization or cost depletion) in excess of oil and gas production income would constitute a tax preference item. However, this rule would not apply for future years

unless there is further Congressional action.

#### Reasons for change

The classification of certain intangible drilling expenses as a tax preference item under the minimum tax in order to curtail the use of oil and gas tax shelters resulted in a disincentive for increased exploration by individuals in the business of exploring for oil and gas and developing oil and gas properties. This disincentive has a significant impact, particularly on independent producers, who do most of the exploratory drilling for new oil in the United States.

The Committee believes that by applying the preference only where intangible drilling costs exceed oil and gas production income the preference will not constitute a major disincentive to those individuals in the oil and gas business, but will continue to limit the ability of outside investors to reduce the income tax paid on their wage and sal-

ary income through the use of tax shelters.

#### Explanation of provision

The committee bill extends for all future years the minimum tax provision on intangible drilling costs of individuals currently applicable for 1977. As a result, intangible drilling cost deductions for oil or gas wells would be included in the minimum tax base of indi-

viduals only to the extent that intangible drilling and development costs, over the amount of those costs amortizable on the basis of a 10-year life or under cost depletion, exceed the taxpayer's income from oil and gas properties. Income from oil and gas properties is to be determined first with reference to the rules for determining gross income from oil and gas properties for purposes of percentage depletion (sec. 613(a)) of the Code, without regard to the limitations under sec. 613A). Net income from oil and gas properties is gross income from oil and gas properties reduced by the amount of deductions properly attributable to that gross income (and deductions attributable to oil and gas properties with no gross income), except that no reduction is to be made for those intangible drilling costs subject to the minimum tax (i.e., those incurred on successful wells).

#### Effective date

These provisions are to be effective upon enactment and apply to taxable years ending after December 31, 1977.

#### Revenue effect

The provision limiting the minimum tax on intangible drilling costs for oil and gas to the amount in excess of net related income is estimated to reduce budget receipts by \$32 million in fiscal 1979, \$37 million in fiscal 1980, and \$74 million in 1985.

#### Energy savings estimate

There is no estimate of the increase in the supply of oil, gas, or geothermal energy which would result from the enactment of this provision.

## 2. Rerefined Lubricating Oil (sec. 1052 of the bill and sec. 4093 of the Code)

#### Present law

Present law imposes a manufactures excise tax of 6-cents-per-gallon on lubricating oil (other than cutting oils) sold in the United States by the manufacturer or producer (sec. 4091). Also, a manufacturer of lubricating oil is liable for the tax if he uses the oil himself rather than selling it (unless the oil is used in manufacturing a product which is subject to a manufacturers excise tax). The net revenues from the tax (after refunds or credits for nonhighway use) go into the Highway Trust Fund (through September 30, 1979).

Cleaning, renovating, or refining used oil is not considered to be manufacturing, so the sale of recycled or rerefined oil by a refiner is not subject to the excise tax. However, where new lubricating oil is mixed with waste or rerefined oil, this does constitute manufacturing and the excise tax is imposed on the portion of the mixture which

consists of new lubricating oil.

Although present law taxes most sales of lubricating oil, present law also allows a tax refund or credit where lubricating oil is used for any purpose other than lubricating a highway motor vehicle. No refund is available where the oil, including rerefined oil, was exempt from tax in the first place. However, present law also denies the exemption where part of the oil was exempt from tax. As a result, when new oil and rerefined oil are blended, a tax is imposed on the new oil portion of the blend, but no refund or tax credit is available. Thus the tax laws provide a disincentive to the use of new or recycled oil.

In nontax areas, Congress has recently acted to encourage the use of recycled oil. Under section 383 of the Energy Policy and Conservation Act (Public Law 94-163), various Federal agencies are instructed to encourage the recycling of used oil, and to promote the use of the oil so processed or rerefined. The purpose of this mandate is to reduce the consumption of new oil by using recycled oil where appropriate, and to reduce environmental hazards and wasteful practices associated with the disposition of used oil. Recycled oil is to be tested to determine the uses for which it is substantially equivalent in performance to new oil; existing Federal rules pertaining to the labeling of recycled oil are to be changed so that recycled oil which is substantially equivalent to new oil will not be labeled to connote that it is less than equivalent to new oil for a particular purpose. In addition, the Act instructs Federal officials to revise procurement practices to encourage the procurement of recycled oil for military and nonmilitary uses wherever such recycled oil is available at prices competitive with new oil produced for the same use.

#### Reasons for change

To encourage the conservation and use of previously used oil, as well as to promote the disposition of spent additives in an environmentally acceptable manner, the committee bill removes the excise tax disincentive to the use of rerefined oil.

#### Explanation of provision

The bill exempts the sale of lubricating oil from the 6-cents-per-gallon manufacturer's excise tax where the lubricating oil is sold for use in mixing with previously used or waste lubricating oil which has been cleaned, renovated, or rerefined. For the exemption to apply, the blend of old and new oil must consist of 25 percent or more of waste or rerefined oil. All of the new oil in a mixture is to be exempt from the excise tax if the blend contains 55 percent or less new oil. If the mixture contains more than 55 percent new oil, the excise tax exemption applies only with regard to the portion of the new oil that does not exceed 55 percent of the mixture.

#### Effective date

This provision is effective for sales on or after the first day of the first calendar month beginning more than 10 days after the enactment of this Act.

#### Revenue effect

The exemption from the 6-cents-per-gallon excise tax for lubricating oil mixed with waste or rerefined oil will reduce revenues by about \$3 million per year. These revenues would otherwise go into the Highway Trust Fund (through September 30, 1979).

#### Energy savings estimate

It is estimated that this provision will result in negligible energy savings.

## 3. Annual Report on Energy and Revenue Effects of the Bill (sec. 1053 of the bill)

To assist the Congress in assessing the need for future legislation and developing subsequent programs, the Committee decided that an evaluation of the revenue impact and energy saving effectiveness of the

provisions of this bill is necessary.

The provision requires the President to submit an annual report to the Congress every August after 1977. The report is to provide estimates of the amount of revenue increases or decreases resulting from each of the provisions of this bill and an evaluation of the extent to which each of the provisions has resulted in increased energy conservation and production.

The provision also requires that the President provide such other information as he determines is relevant for an evaluation of the provisions of the bill. The Committee expects the President to include in his report the petroleum (or natural gas) savings resulting from each provision and the extent to which shifts from petroleum and natural gas to other materials has occurred as a result of each provision.

## 4 Reconciliation of Revenue Effect of Bill with Budget Resolution (secs. 1056 and 1057 of the bill)

The Second Concurrent Resolution on the Budget for Fiscal Year 1978 includes a revenue floor of \$397 billion. The resolution states that this is consistent with total tax reductions for fiscal year 1978 of \$1.1 billion.

The committee wants the energy bill which ultimately emerges from the House-Senate conference to be consistent with the Second Concurrent Resolution on the Budget for Fiscal Year 1978. Because it is not clear to what extent the final version of the bill will contain the large tax increases passed by the House, the committee could not be sure how large a package of tax incentives would be consistent with the budget resolution and precisely what the effective dates of those inventives would have to be.

To ensure that the energy bill is consistent with the second budget resolution, the committee included a provision requiring the Secretary of the Treasury to adjust the effective dates of the tax reductions in the bill in such a way that budget receipts for fiscal year 1978 are not lower than \$397 billion—the revenue floor in the second concurrent budget resolution. Any such postponement of an effective date must be to a date no later than October 1, 1978.

Also, the committee bill includes a provision expressing the sense of the Senate that, to the extent practicable, the net tax reduction from this bill for fiscal year 1978 be no greater than \$972 million, which is the revenue loss from the House energy bill (title II of H.R. 8444).

## VL COSTS OF CARRYING OUT THE BILL AND VOTE OF THE COMMITTEE IN REPORTING H.R. 5263, AS AMENDED

#### **Budget Effect**

In compliance with section 252(a) of the Legislative Reorganization Act of 1970, the following statement is made relative to the costs incurred in carrying out H.R. 5263, as amended by the committee. The committee estimates that the budget effect of this bill for fiscal years 1978–1985 is as shown in the following tabulation.

The Treasury Department agrees with this statement. Part IV.A of this report contains a more detailed statement of the budget effect

of the bill as reported.

#### Vote of the Committee

In compliance with section 133 of the Legislative Reorganization Act of 1946, the following statement is made relative to the vote by the committee on the motion to report the bill. H.R. 5263, as amended by the committee, was ordered favorably reported by the following rollcall vote: In favor (13): Messrs. Long. Talmadge, Ribicoff, Nelson, Gravel, Bentsen, Hathaway, Matsunaga, Moynihan, Curtis, Hansen, Packwood, and Danforth; opposed (5): Byrd (Va.), Haskell. Dole, Roth, and Laxalt.

### Summary of Estimated Budget Effects of the Energy Production and Conservation Tax Incentive Act as Reported by the Committee, Fiscal Years 1978-85

[In millions of dollars]

Part of Bill	1978	1979	1980	1981	1982	1983	1984	1985	Total, 1978–85
Pt. I.—Residential energy credit Pt. II.—Transportation Pt. III.—Changes in business in-	-473 -149	-674 -221	-828 3, 078	-881 3, 178		-1, 019 3, 476	-1, 107 3, 640	-1, 178 3, 729	<sup>1</sup> -7,099 20, 000
vestment credit to encourage conservation of, or conversion from oil and gas or to encourage new energy technology	-1, 269	-1, 592	-2, 132	-3, 046	<b>-4</b> , 359	-5, 492	-6, 130	-6,317	-30, 337
Pt. IV.—Tax incentives relating to alternative fuel sources Pt. V.—Miscellaneous provisions	-18 -3	-50 -35	<b>-40</b>	-45	-315 -51	-59	-68	<b>—77</b>	$ \begin{array}{r} -2,447 \\ -378 \end{array} $
_	3-972	<b>-2</b> , 572	-44	-1,003	<b>-2, 395</b>	-3, 527	<b>-4, 22</b> 8	<b>-4,580</b>	4-20, 261

<sup>&</sup>lt;sup>1</sup> In addition, this provision is estimated to decrease budget receipts by \$1,002 million in fiscal year 1986.

4 This total includes the full revenue loss for fiscal 1978 of \$1,912 million as indicated in footnote 3.

<sup>&</sup>lt;sup>2</sup> Treasury Department agrees with these estimates under the assumption of no extraordinary increase in the prices of qualifying property. While difficult to forecast, investment tax credits of this magnitude could allow equipment manufacturers to increase prices and therefore increase the cost of this provision.

<sup>&</sup>lt;sup>3</sup> Sections 1056 and 1057 of the Committee bill provide that revenue losses in fiscal year 1978 are to be limited to \$972 million. (The total revenue loss of the individual parts of the Committee bill for fiscal 1978 would total \$1,912 million.)

## VII. REGULATORY IMPACT OF THE BILL AND OTHER MATTERS TO BE DISCUSSED UNDER SENATE RULES

#### Regulatory Impact

Pursuant to rule XXIX of the Standing Rules of the Senate, as amended by S. Res. 4 (February 4, 1977), the committee makes the following statement concerning the regulatory impact that might be incurred in carrying out the provisions of this bill.

A. Numbers of individuals and businesses who would be regulated.—The bill does not regulate individuals or businesses but generally provides tax incentives to a large, indeterminate number of

individuals, businesses, and nonprofit organizations.

B. Economic impact of regulation on individuals, consumers and businesses affected.—The tax incentive provisions in the bill will reduce the cost of certain energy-related activities and thereby increase the amount of such activity undertaken by individuals and businesses. Generally, this will encourage the conservation of oil and gas and encourage their increased production and the development of alternative energy sources. These shifts from heavy reliance on oil and gas should reduce our dependence on imported oil and hence reduce our balance of trade deficit.

C. Impact on personal privacy.—The bill has no significant impact

on the personal privacy of taxpayers.

D. Determination of the amount of paperwork.—The bill will require additional tax computations and in some cases an additional tax form for individuals and businesses who elect any of its tax incentive provisions. Nonprofit organizations which elect refundable tax incentives will be required to file a form to obtain the refunds. Most of this paper work will require only the assembly of information that is already in the taxpayer's records. The cost of submitting such information and the time needed to assemble it will vary among taxpayers depending on the particular tax incentive elected and the number of eligible expenditures made by the taxpayer. The repeal of certain excise taxes will eliminate the need to file the associated forms or make periodic deposits of such taxes.

## Consultation with Congressional Budget Office on Budget Estimates

In accordance with section 403 of the Budget Act, the committee advises that the Director of the Congressional Budget Office has examined the committee's budget estimates (as shown in part IVA of this report) and agrees with the methodology used to arrive at the full year budget effects. Since the dates in fiscal year 1978 on which the tax reductions become effective are uncertain, the revenue losses in that year are also uncertain. As to other fiscal years, the Director agrees with estimated budget effects subject to the qualifications stated in the revenue tables.

#### New Budget Authority

In compliance with section 308(a) (1) of the Budget Act, and after consultation with the Director of the Congressional Budget Office, the committee states that refundable credits are treated as reductions of revenue under Senate budgetary conventions. Consistent with this convention, the bill does not provide any new budget authority.

#### Allocations of Budget Authority

The decisions of the committee that have been made for H.R. 5263 do not create new budget authority, and therefore no allocations were made.

It is believed that the tax incentives made available in this bill will provide \$78 million in fiscal year 1978 in the equivalent of refundable tax credits to State and local governments as a result of their efforts to conserve energy.

#### Tax Expenditures

In compliance with section 308(a)(2) of the Budget Act with respect to tax expenditures, and after consultation with the Director of the Congresisonal Budget Office, the committee states that the bill would provide new and increased tax expenditures. However, the bill would direct the Secretary of the Treasury to adjust the effective dates of the tax reductions in a way that budget receipts for fiscal year 1978 will not be lower than \$397 billion. Consequently, the effective dates are uncertain, and thus, it is uncertain how these provisions would affect the levels of tax expenditures for fiscal year 1978. The effect the bill would have on tax expenditures in fiscal year 1978 without this directive is shown in the tabulation below, along with the estimated effects in fiscal years 1979–1985.

## Estimates of Tax Expenditures in the Bill, as Reported, Fiscal Years, 1978-85

[In millions of dellars]

Part of bill and item	1978*	1979	1980	1961	1982	1983	1984	1985	1978–85 total
I. Residential energy credits:					***************************************				
Insulation and other energy-saving components	446	616	761	<b>805</b> ·	844	898	953	992	¹6, 315
Renewable energy resource equip- ment	27	58	67	76	95	121	154	186	² 78 <b>4</b>
Subtotal, pt. I	473	674	828	881	939	1, 019	1, 107	1, 178	*7, 099
II. Transportation:									
Vanpooling incentives	( <b>5</b> )	( <del>*</del> )	·( <b>5</b> )	( <sup>8</sup> )	(*) 2	( <sup>5</sup> )	(*) 7	(6)	(6)
Credit for electric motor vehicles Intercity bus credit	(*) 1 <b>2</b> 0	200	200	200	<b>2</b> 200	<b>4</b> 80	7	10	<sup>7</sup> 25 1, 000
Subtotal, pt. II	120	200	201	201	202	84	7	10	1, 025

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III. Investment credits to encourage energy conservation, conversion,									
and new energy technology:  Alternative credit for investment in certain energy related depreciable property	994	1, 297	1, 784	2, 636	3, 868	4, 896	5, 435	5, 533	26, 443
Additional percentage for investment credit with respect to certain energy	195	212	250	295	356	443	<b>523</b>	589	2, 863
Refundable credit to tax exempt orga- nizations and State and local gov- ernments	80	83	98	115	135	153	172	195	1, 031
Subtotal, pt. III	1, 269	1, 592	2, 132	3, 046	4, 359	5, 492	6, 130	6, 317	30, 337
IV. Tax incentives for alternative fuel sources:									
Industrial development bonds for coal gasification and liquefaction and bioconversion facilities		_ 3	6	14	26	42	58	77	226
Percentage depletion for peat, geother-	. (5)	(5)	1	5	8	12	15	20	62
Option to deduct intangible drilling costs for geothermal and geopressurized methane	_ 14	28	31	35	41	45	51	59	304
50-cents credit per mcf for geopressur- ized methane gas and gas from non-			_ 36	72					815
conventional sources\$3 credit per barrel of shale oil	4	19			126	176	240	327	
Subtotal, pt. IV	18	47	115	190	279	376	485	632	2, 142

## Estimates of Tax Expenditures in the Bill, as Reported, Fiscal Years, 1978-85—Continued

### [In mil ions of dollars]

								1978-50
978*	1979	1980	1981	1982	1983	1984	1985	1978-85 tetal
	32	37	42	48	56	65	74	354
_880		3,313	4,360	5,827	7,027	7,794	8,211	40,957
		32 ,880 2,545	32 37 ,880 2,545 3,313	32 37 42 ,880 2,545 3,313 4,360	32 37 42 48 ,880 2,545 3,313 4,360 5,827	32 37 42 48 56 ,880 2,545 3,313 4,360 5,827 7,027	32 37 42 48 56 65 ,880 2,545 3,313 4,360 5,827 7,027 7,794	32 37 42 48 56 65 74 32 37 42 48 56 85 74

In addition, this provision is estimated to involve tax expenditures of \$778 million for fiscal year 1986.

<sup>2</sup> In addition, this provision is estimated to involve tax expendi-

tures of \$224 million for fiscal year 1986.

In addition, pt. I would involve additional tax expenditures of

\$1,002 million for fiscal 1986. Vanpooling incentives include the credit for purchase of commuter vans by employers for transporting employees and the exclusion from income for the value of employer-furnished transportation to employees.

Less than \$1 million.

Less than \$5 million.

7 In addition, this credit involves an estimated tax expenditure

of \$13 million for fiscal 1986. \* Treasury agrees with these estimates under the assumption of no extraordinary increase in the prices of qualifying property. While difficult to forecast, investment tax credits of this magnitude could allow equipment manufacturers to increase prices and therefore increase the cost of this provision.

\* The total revenue loss from the bill for fiscal year 1978 is limited to no more than \$972 million by secs. 1056 and 1057 of the bill. Thus, the amounts shown for fiscal 1978 are subject to possible

reduction.

#### VIII. CHANGES IN EXISTING LAW

In the opinion of the committee, it is necessary in order to expedite the business of the Senate, to dispense with the requirements of subsection 4 of rule XXIX of the Standing Rules of the Senate (relating to the showing of changes in existing law made by the bill, as reported).

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#### IX. ADDITIONAL VIEWS OF HON. ABRAHAM RIBICOFF

It was with considerable reluctance that I voted to report this bill to the Senate. I did so only to afford the full Senate an opportunity to consider this final portion of the President's energy program. Regardless of the many defects in this bill, it is essential that the Senate not abdicate its responsibility to work with the House and the President in

developing a final, workable energy program.

The President's energy tax program has been all but dismantled by the Finance Committee. The bill being reported is a shell which bears little resemblance to the President's original tax recommendations. Nevertheless, this bill, by the use of generous tax credits, is expected to result in savings of an estimated 2.2 million barrels of oil (or the equivalent amount of gas) per day by 1985. The principal cost of the Finance Committee bill is a substantial drain on the Federal Treasury; it also results in serious inequities in the burden each region of the

country bears as part of our national energy program.

It is important that balance be restored to the tax portion of the energy program either during Senate consideration or in the House-Senate conference. One way of establishing that balance would be to approve some or all of the taxes initially proposed by President Carter to encourage conservation—particularly the gas guzzler tax, the industrial and utility users tax, and the crude oil equalization tax. I supported each of these taxes in the Finance Committee knowing full well how unpopular they are. These taxes are needed to finance tax credits which encourage conversion to alternative fuels, to underwrite the development of other energy sources and credits for home heating oil. Revenues are also required to underwrite the development of energy-efficient public transportation. In addition, these taxes will encourage energy conservation by realizing that the era of cheap energy is over.

In 1973, before the OPEC oil embargo, the United States imported approximately 35 percent of its oil. This year imports represent 48 percent of the oil consumed in this country. Six years ago we spent \$3.7 billion for imported oil. Today the bill for foreign oil is expected to be \$45 billion. It is estimated that this figure will rise to \$550 billion by the middle of the next decade if no energy program is enacted. Thus, affirmative steps must be taken to conserve energy—even at the cost of personal inconvenience, higher prices, and some individual and

corporate sacrifices.

While I commend the President for proposing a bold energy program, it is flawed. The more serious weaknesses in the administration's energy tax program are its failure to encourage the production of additional energy, to accelerate research, development and demonstration of alternative energy sources, and to meet the needs of mass transportation.

Important energy savings can result from conservation programs. But conservation is not enough. We must look for alternative fuel

sources if we are to lessen our dependence on fossil fuels and insure

that we will have future energy resources.

The development of alternative sources of energy is a vast undertaking. It will cost some trillion dollars over the next decade. Serious long-term work on alternative energy sources demands greater governmental encouragement. If we are to fully develop the petential of geothermal energy, coal gasification and liquifaction, nuclear fusion, oil shale, ocean currents, wind power, solar energy, and hydroelectric power, we must invest the necessary capital.

More than one-fourth of all energy consumed in this country is used by the transportation sector. Over one-half of that source of energy consumption is represented by private automobiles. An important and viable means of reducing consumption in this area is to place greater reliance on public transportation. It is estimated that, on an average daily basis, public transit consumes only 38 percent of the

energy per passenger mile that urban automobiles consume.

If alternative energy sources are to be fully explored and efficiently used, and if we are to encourage the development of energy-efficient public transportation, a substantial financial commitment must be

made.

The revenues to be derived from taxes imposed to encourage energy conservation represent an appropriate source of capital for research, development, and demonstration of new energy technologies, increased production of existing and new energy sources, and efficient public transportation. I am gratified, therefore, that the Finance Committee adopted my proposal to create a trust fund to channel any such tax revenues to these important uses.

The energy development and transportation trust fund will finance energy production, energy conservation, and energy-efficient forms of transportation. The trust fund could provide loans, loan guarantees, or price guarantees for private energy production or conservation projects. It would also aid programs designed to decrease the energy consumption of overall transportation systems and to encourage de-

velopment of the most energy-efficient forms of transit.

The trust fund would have separately funded and separately administered subaccounts for energy development and transportation respectively. The trust fund would not duplicate the activities conducted by the Energy Research and Development Administration (now the Department of Energy); it would not finance projects which can be wholly financed by the private sector; and it would not be authorized to directly own, build, or operate any energy development or production projects. The trust fund would strictly be a financing mechanism and the programs it funds would be subject to the normal authorization and appropriations processes and the congressional budget system. Regional activities in energy development would be encouraged and supported. Similarly, the transportation subaccount of the trust fund would, in consultation and cooperation with the Department of Transportation, encourage regional activities to promote energy-efficient transit. To the extent practicable, a portion of the trust fund could be allocated for block grants to the States for transportation purposes.

While the trust fund is to be independent, the Secretaries of Energy and Transportation, who should share in the decisions, should be consulted on a regular basis. Quarterly reports to the Congress should be required on all of its activities. It should be subject to periodic audits

by the General Accounting Office.

The energy development and transportation trust fund is a unique concept which offers great potential for effectively using funds generated by taxes imposed to encourage energy conservation to help our Nation meet its energy needs. It will fill a serious gap in the President's energy program and will provide a mechanism to decrease our dependence on imported petroleum and fossil fuels. Further, the trust fund will stimulate additional conservation in the transportation sector.

The Senate should not seek to resolve only short-term energy problems. We must provide energy resources for the future and reduce our dependence on those forms of energy which are in limited supply or for which we are dependent on imports which are hurtful to our national security. The trust fund which the Finance Committee has endorsed will help provide the resources and direction to meet this task.

ABE RIBICOFF.

## X. SUPPLEMENTAL VIEWS OF HON. WILLIAM D. HATHAWAY

I have voted to report the Energy Production and Conservation Tax Incentive Act with some hesitation. I believe that this country is facing an energy crisis. It is an impending crisis of conversion from our existing dependence on oil and natural gas to alternative energy sources; from foreign to domestic sources. I believe that we must move toward renewable sources such as hydroelectric, solar, geothermal and tidal energy. This bill does move in that direction through various tax credits for development of these sources. It does contain many incentives for conservation and conversion. The goals are meritorious although the tax credits and subsidies are an expensive and inefficient method of moving in that direction.

This bill imposes some restraints on the President's authority to impose tariffs and fees on imported petroleum and petroleum products. Clearly this is an area for Congressional initiative and not Presidential dictate. I support such limitations. These provisions are neces-

sary to prevent regional disparities and hardships.

My greatest concern in this bill relates to its uncertainty to the method of its development and the probable outcome. I am reluctant to delegate to the conferees of one Senate committee, the right and power to develop tax legislation of the probable impact of this bill, without full Senate consideration of the issues involved. The area of energy policy and tax legislation is crucial to the nation. The situation requires affirmative Congressional action. The method in this bill as developed may be the only alternative.

WILLIAM D. HATHAWAY.

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# XI. SUPPLEMENTAL VIEWS OF HON. CARL T. CURTIS, CLIFFORD P. HANSEN, PAUL LAXALT, AND JOHN C. DANFORTH

The President's National Energy Plan is unacceptable. It is unacceptable because the thrust of the plan is not in the direction of solving the so-called "energy crisis" but is apparently designed for the redistribution of income through a massive tax program. The President's plan will not solve the energy problem but it will have severe economic repercussions on American industry and the American family. That this plan is a massive tax program is beyond doubt. The Crude Oil Equalization Tax if adopted, would have alone imposed a tax that would total more than 2½ times the amount of tax imposed in the Tax Reform Act of 1976. The President's Plan, as originally proposed, would have imposed taxes amounting to nearly 10 times the tax imposed by the Tax Reform Act of 1976. The huge tax revenues may force consumers to pay higher prices and may discourage consumption but such taxes will never produce a single barrel of replacement oil or a cubic foot of natural gas.

The President's plan is unacceptable not only because it is misdirected but also because it will not accomplish the goals the President established. Organizations such as the General Accounting Office, the Congressional Budget Office, the Office of Technology Assessment, and the Congressional Research Service have all concluded that the Administration's plan will fall short of the proposed energy goals,

even if fully implemented.

Recent revisions of the GAO study indicated that the President's Program will fall even further short of the President's own goals. In July, the GAO estimate was that imports of oil in 1985 would increase from the current level of about 9 million barrels per day to approximately 10.3 million barrels a day. In October, the GAO again revised its estimates to show that imports, under the President's Program, will probably be 12 or 13 million barrels daily by 1985. This latest estimate is double the President's goal of 6 million barrels daily by 1985.

An alarming aspect of the present and prospective increase in imports is that they are coming and will come from Arab OPEC sources particularly Saudi Arabia, the only country able to substantially increase production. Another Arab embargo would be a national disaster. In 1973-74 when the embargo was imposed, about 20 percent of U.S. oil imports were from Arab sources. This year, approximately 40 percent of the imported oil was from Arab countries. If domestic production is not increased, the United States will have to rely on OPEC countries for nearly 70 percent of its imported oil.

Given the energy production and coal conversion lead times involved, and the peaking of OPEC oil production capacity in the 1980's, the United States will face mortal risks to our economic prosperity and

our national security unless an all-out national energy production effort is launched in 1977.

The National Energy Plan contains three new taxes which were eliminated by the Committee on Finance.

#### Crude Oil Equalization Tax (COET)

The COET lies at the heart of the National Energy Plan. The tax is designed to force the consumer to pay the replacement cost of oil but insure that the producer does not retain any of the increased revenue. The large amounts of tax revenue are captured by the Government for apparent use in programs other than energy that the Administration believes to be socially desirable. The result of this tax. as proposed, is to discourage capital formation in the only ventures that can solve the energy supply problem.

At the beginning of this decade the U.S. energy demand was increasing at the rate of 4 percent per year. Even assuming that higher prices and conservation will reduce this rate of demand to under 3 percent a year, the result will be an increase of almost 50 percent in total demand by the year 1990. Continued economic growth requires more energy. Recognizing the demand for energy, the issue becomes one of supply and the cost of increasing that supply to meet the

anticipated demand.

The cost of replacing present energy sources will increase several fold over the next decade because of inflation and the practical problems of exploring in the more remote areas. The Alaskan pipeline required an investment of over seven billion dollars. The cost of a new refinery has tripled in the last ten years and inflation will only escalate the costs in the years to come. Testimony before the Ways and Means Committee earlier this year estimated that the total capital expenditures for oil and gas will be at least 20 to 30 billion dollars per year over the next decade. To attract such massive capital to the development of new supplies the return on that capital investment must be competitive with other investments and there must be a reasonable expectation that the return on capital will continue.

The President's plan would continue price controls on all tiers of oil and impose a massive tax on top of the already controlled oil. The very existence of price controls creates an atmosphere of uncertainty which can only slow the development of new supplies. Furthermore, artificial prices inevitably breed distortions and inequities which lead

to further regulation and complexity.

The COET, as proposed by the Administration, is designed to raise the price of oil but to prevent the producer from benefitting from the price rise. There is disagreement among economists as to how much of the COET will be passed on to the consumer. A study by the Rand Corporation indicated that market forces will prevent the industry from passing through any of the tax and thus, if the tax is completely absorbed by the industry, it would virtually eliminate all profits. If the tax is not passed through, the price to the consumer would not rise and thus the stated purpose of the tax would not be achieved and in fact, be totally counter-productive. The Administration disagrees with this forecast but does concede that one-third of the tax will have to be absorbed by the industry. Assuming that figure is accurate, and

many believe it will be substantially more, that one-third figure translates into a loss of \$2.5 billion in profits or a full one-third reduction in total profits for the industry. This reduction in profits will not attract new investment to the industry at a time when the industry vitally needs new capital to find the supplies of new energy needed to meet increased demands.

#### User Tax

One of the Administration's stated objectives in the Energy Plan was the conversion of industrial use of oil and gas to coal. In attempting to achieve that goal two options were available—either the tax credit for conversion or the penalty for non-conversion. It was a choice

between the carrot and the stick.

The President chose to emphasize the penalty tax. Despite Secretary Blumenthal's testimony before the Ways and Means Committee carlier this year, that "the oil and gas consumption taxes will apply only to those users for whom it is economically feasible to convert," such is not the case. The tax is imposed regardless of the technological feasibilities of conversion or the gain or loss of energy efficiency resulting from conversion. Additionally, the tax is to be applied regardless of economic feasibility. The energy user's tax is, in effect, a tax which says, if you cannot convert to coal, then we will tax you in order to stimulate you to do so. An industrial plant caught in such a dilemma has the unenviable choice of either prematurely retiring a boiler with perhaps many useful years of service remaining or paying the tax and passing that tax on to the consumer. However, if the industrial product is already selling at the market price, the industry will not be able to pass the tax through to the consumer, thus losing the very capital needed to convert the oil burner or to replace it.

The Administration's plan has failed to grasp the economic impact of such a tax on capital formation. It is evident that the user tax was hastily conceived and its ramifications not fully considered. While the goal of conversion to other fuels may be laudable, the plan does not reflect the practical considerations of construction lag time and the difficulties of financing the replacement of huge expensive boiler

systems.

#### Gas Guzzlers

The Administration's so-called "gas guzzler" tax is an example of a proposal which would alter the lifestyle of the American family, raise the unemployment rate and superimpose new standards of fuel economy before the "old" standards, announced in 1975, even take effect. Moreover, the net result is little or no energy savings. It is a penalty

without a purpose.

The gas guzzler tax was never expected to make any significant contribution to energy conservation but will reduce auto sales and add to unemployment in the industry. The International Trade Commission reported to the Finance Committee that the gas guzzler tax alone would cause the domestic industry's volume to decrease by 140,000 units a year. This would directly lead to a reduction of approximately 50,000 jobs. Because the manufacture of automobiles affects so many related industries, the ripple effect on the economy, employment, and inflation could be significant.

The same ITC study also noted that any reduction in the volume of new automobile sales "could tend to discourage conversion from older, less efficient, and more polluting full size automobiles." Contrary to the accepted notion that this tax is aimed at luxury cars, the gas guzzler tax falls most heavily on the standard family car. The family which needs a full size car or station wagon will either be forced to pay a penalty tax, if indeed the industry continues to manufacture them, or be forced to buy an auto in which he cannot transport his entire family. Sacrifices of this type might be called for if indeed the tax was justified. It is not.

#### Economic Impact

The Administration's heavy reliance on taxation and the economic disruption those taxes will cause, is probably the most serious fault of the plan. The specific economic impact of the Administration's plan has been forecasted by Data Resources, Inc., Wharton Econometric Forecasting Association, Inc., Chase Econometrics, Inc., the Congressional Budget Office and the Administration. The predictions from the three private forecasters and the Congressional Budget Office are all in virutal agreement. Only the Administration's forecast differs substantially in its conclusions.

The forecasters predict that the Administration plan would lower the real GNP by 0.5 to 0.7 percent by 1980. This would increase the unemployment rate by 0.2 percent or by about 200,000 workers. Another forecast, by the National Chamber Forecasting Center Model predicts that under the Administration's plan, there would be up to 1.1 million fewer jobs available in 1981. Even under the bill as passed by the House, the result would be 1 million fewer jobs being created by

1981.

The impact of the energy taxes falls directly on the middle class American family. A table produced by the Office of Tax Analysis, in the office of the Secretary of the Treasury, clearly shows that in 1985, even after rebates, nearly 6.8 billion dollars will be taken from the pockets of individuals earning between \$10,000 and \$30,000 per year. This represents over 75 percent of the total tax drain in that 1 year.

Forecasts prepared by the National Chamber Forecasting Model, graphically demonstrates the economic impact of the Administration's plan in the areas of consumer prices, employment and family income.

#### Alternative to Taxation

We are in basic agreement that the price mechanism is the most effective and efficient means by which this country can reduce the consumption of oil, bring forth new domestic supplies, and in time, energy from alternative sources.

The Energy Policy Conservation Act (EPCA) was approved in December 1975 with the stated purpose of increasing the supply of domestic crude oil through price and production incentives. It has

failed in this objective.

<sup>&</sup>lt;sup>1</sup> See table 1.
<sup>2</sup> See table 2.

<sup>\*</sup> See table 3. \* See table 4.

See graphs 1, 2 and 3.

The system established two price ceilings—one for old (or lower tier) oil, one for new (or upper tier) oil. The average upper tier ceiling price is about twice the average lower tier ceiling price. The overall average of the ceiling prices had to be no more than \$7.66 per barrel in February 1976. The allowable ceilings can be adjusted for inflation and to encourage production. In practice, the implementation of crude oil has led to a series of price freezes and rollbacks. Prices for certain crude oil production have actually decreased in real terms since February 1975.

We have observed that EPCA has reduced incentives to increase production from existing properties. In addition, it has reduced the incentive to search for and develop new domestic oil resources. This

is in direct conflict with the President's stated energy goals.

Elimination of the two-tier system of pricing domestic oil would do much to alleviate our energy problems. First, it would do away with the need for a costly, inefficient and unnecessary allocation program. Second, a higher price for "old" oil will provide the incentive to produce more oil through costly secondary and tertiary recovery methods which could potentially double this Nation's recoverable petroleum reserves. Third, it is unquestionably true that a free market is the most effective regulator of consumption, so that the removal of

price controls would help achieve energy conservation.

The first benefit of domestic crude decontrol will be the elimination of economic distortions caused by the present two-tiered pricing system. This system inevitably causes cost disparities among refiners and marketers of petroleum products. Moreover, the existing complicated structure of price controls at all levels of distribution, necessitated by the cost disparities resulting from the two-tiered system, tends to be self-defeating over the long run. It reduces normal incentives for increased production and cost control and eliminated industry's ability to engage in long range planning. As the effectiveness of price controls wane, regulations of greater complexity and reach become necessary to maintain the controlled-price structure. Tightening of controls tend to further stifle initiative and contributes to greater economic distortion.

Second, a study by the Interstate Oil Compact Commission (IOCC) indicated that the lifting of price controls on oil produced through secondary and tertiary procedures would increase daily production by 350,000 barrels and U.S. reserves by 10 billion barrels between 1975 and 1980. The study prepared at the request of the FEA, is based on data representing over 4,300 enhanced projects and 125,000 producing wells. The 900 operators represented in the study are from 28 states and produce over 98 percent of all U.S. enhanced recovery oil. The report states that the sizable daily production increases would be due to an extended economic life for enhanced projects and increased capital investments. The report concludes that this increased production would reduce oil imports by nearly \$8.5 billion over a six year period, thereby improving the balance of trade. A stronger economy and more jobs will result.

Decontrol of crude oil will also make the development of the Outer Continental Shelf (OCS) a more realistic enterprise. Preliminary geophysical evidence suggests that we could eventually find billions of

barrels of oil and trillions of cubic feet of natural gas off our Atlantic Seaboard. Gulf of Mexico wells already provide a significant portion of domestic production. When foreign oil could be bought for less than \$4.00 per barrel—and was politically safe to depend on—Atlantic offshore oil was not economically attractive. With oil at a world price of more than \$14, offshore oil has become an attractive investment. Nevertheless, continued Federal price controls on "old" domestic crude oil will serve to discourage capital investment and risk taking, thereby discourage further exploration and development.

Third, the removal of the price control system would constitute a

major step toward conservation.

Under the two-tiered price system, the price of a high percentage of domestic oil is held at less than half the world price. The impact the escalation of world market prices has had on demand overseas has been considerably cushioned in the United States. Thus, this removal of price controls on domestic crude oil is an essential and integral part of the program to reduce energy consumption.

#### Summary

It is obvious that the principal failing of the National Energy Plan is the total absence of incentive for increased production of domestic oil and natural gas. It is our view that given the proper incentives through sound pricing the oil and gas industry will significantly narrow the short-fall estimated between supply and demand. We agree that the price of controlled crude oil must be increased. But we disagree that the rise in the price should be designed only to discourage consumption rather than to both discourage consumption and encourage production. Further, whatever the rise in the price of controlled oil, a major portion should be returned to the producer. In this manner, the price rise would have a double effect; it would increase the price of the product to the consumer and thus discourage consumption, and it would play an important role in providing additional incentive, through the pricing mechanism to increase the productive capacity of oil in this country.

CARL T. CURTIS.
CLIFFORD P. HANSEN.
PAUL LAXALT.
JOHN C. DANFORTH.

Table 1.—Effects of Administration Proposal on Selected Economic Variables, 1978-80-

	1978	1979	1980
Real GNP (percent difference in level):			
Data Resources, Inc. (DRI) 1	-0.1	-0.4	-0.7
Wharton Econometric Forecasting			
Assoc., Inc. (Wharton) 2	0	<b>3</b>	5
Chase Econometrics, Inc. (Chase) 3	0	<b> 3</b>	5
Administration 4	0	0	0
Congressional Budget Office (CBO) 5_	2	<b>—. 5</b>	<b>7</b>
Unemployment rate (difference in rate):			
DRI	0	+.1	+.2
Wharton	0	+.1	+.2
Chase	0	+.1	+.2
Administration	0	<b>0</b> .	+.2
CBO	0	+.2	+.2
Consumer Price Index (difference in rate			
of increase):			
DRIWharton	+.5	+1.1	+1.4
	+.4	+.8	+.4
Chase	+.3	+.7	+.8
Administration	+.3	<b>+</b> .6	+.2
CBO	+.5	+.6	+.5

<sup>&</sup>lt;sup>1</sup> Testimony of Dr. Otto Eckstein before the Joint Economic Committee' May 20, 1977, and private communications to staff.

<sup>2</sup> Forecast of Apr. 21, 1977.

<sup>3</sup> Forecast of Apr. 27, 1977.

<sup>&#</sup>x27; Communication to staff.

<sup>&#</sup>x27;Congressional Budget Office, "President Carter's Energy Proposals: A Perspective, May 31, 1977."

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Table 2.—Impact of the Administration's Energy Conservation Plan on the U.S. Economy (Change in Levels of Economic Activity)

	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990
Real GNP (percent)	<b>-0.</b> 1·	<b>-0.</b> 8	<b>—1.</b> 3	-1.9	-2.2	-2.6	-3.0	-3.0	-3.0	<b>-2</b> . 8	<b>-2</b> . 6	-2.4	<b>-2.2</b>
Billions of 1977 dol-	<b>-\$2</b>	<b>\$16</b>	<b>\$2</b> 8	-\$42	<b>-\$</b> 51	-\$62	-\$74	<b>-\$77</b>	-\$79	<b>-\$7</b> 6	<b>-\$</b> 73	<b>-\$</b> 69	<b>-\$6</b> 5
Real disposable income (percent)								<b>-4</b> . 3					-4.2
Billions of 1977 dol-		-\$7	<b>-\$</b> 12	-\$20	-\$25	-\$29	<b>-\$</b> 33	<b>-\$4</b> 0	<b>-\$4</b> 6	-\$47	<b>-\$50</b>	<b>-\$5</b> 0	-\$49
Average loss per fam- ily in 1977 dollars	17	<b>233</b>	<b>—366</b>	-532	683	<b>-850-</b>	-1, 0 <b>5</b> 0-	-1, 287-	-1, 317-	-1, 433-	-1, <b>467</b> ·	-1, 415-	-1, 351

Source: National Chamber Forecasting Center Models and Computations, Federal Energy Administration and U.S. Bureau of Mines data, "The National Energy Plan," DRI and Chase Econometrics modelling and data.

Table 3.—Impact of the House of Representatives' Energy Bill on the U.S. Economy

-	1978	1979	198	0 198	1 198	2 198	3 1984	1985	1986	1987	1988	1989	1990
Real GNP (percent)  Billions of 1977 dollars  Real disposable income (percent)  Billions of 1977 dollars	— ምሬ _በ 1	_0.5	5—0.	8-1.	3-1.	5-1.	6-1.8 8-\$45 8-2.0 1-\$63	-\$51 $-2.3$	-2.0 -\$53 -2.6 -\$79	-\$52 $-2.6$	-\$51 -2.6	-\$49 -2.5	<b>\$44</b> 2. 4
Average loss per family in 1977 dollars								<u> −778</u>					
Lost jobs (thousands)	0							)—1, 000					<del></del>

Source: National Chamber Forecasting Center Models and Computations, Federal Energy Administration and U.S. Bureau of Mines data, "The National Energy Plan," DRI and Chase Econometrics modelling and data.

Table 4.—Calendar Year 1985

Less than \$5	\$479	\$2, 280	12. 1	-\$3,000	31. 0	-\$786	-164. 1
	23, 076	2, 872	15. 2	-2,288	23. 1	584	2. 5
	50, 493	3, 807	20. 1	-1,772	17. 0	2,035	4. 0
\$15 to \$20	64, 095	3,414	18. 1	-1,204 $-1,054$ $-369$ $-118$ $-23$	12. 2	2, 210	3. 4
\$20 to \$30	92, 167	3,586	19. 0		10. 7	2, 532	2. 7
\$30 to \$50	62, 070	1,675	8. 9		3. 7	1, 306	2. 1
\$50 to \$100	46, 205	884	4. 7		1. 2	766	1. 7
\$100 or more	38, 079	374	2. 0		. 2	351	. 9
	376, 669	18, 893	100. 0	<b>-9,894</b>	100. 0	8, 999	2. 4
Less than \$15	74, 047	8, 960	47. 4	-7, 126	72. 0	1,834	2. 5
	156, 265	7, 000	37. 1	-2, 259	22. 8	4,741	3. 0
	146, 354	2, 934	15. 5	-510	5. 2	2,424	1. 7

<sup>&</sup>lt;sup>1</sup> Includes tax changes resulting from Public Law 75-30. Current year tax liability calculated assuming a 12-percent annual growth rate.

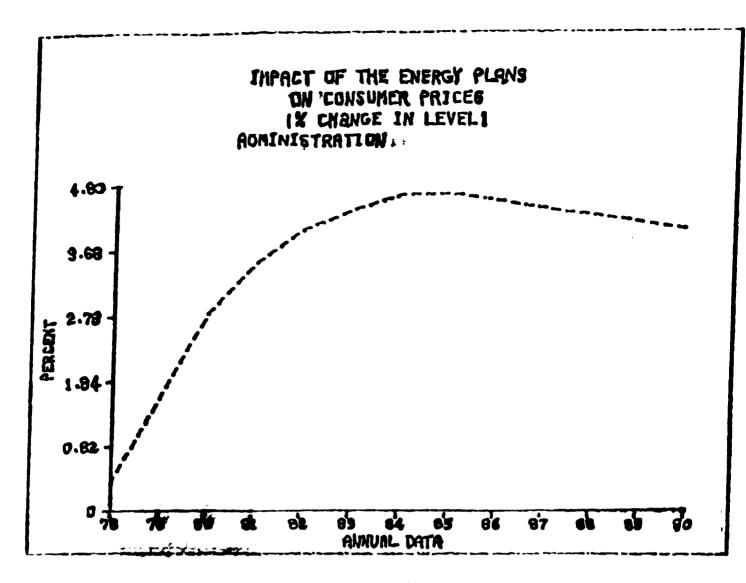
<sup>2</sup> Energy taxes distributed to all individuals according to estimated

Note.—Figures may not add to totals due to rounding. Distributions are based on those for 1976.

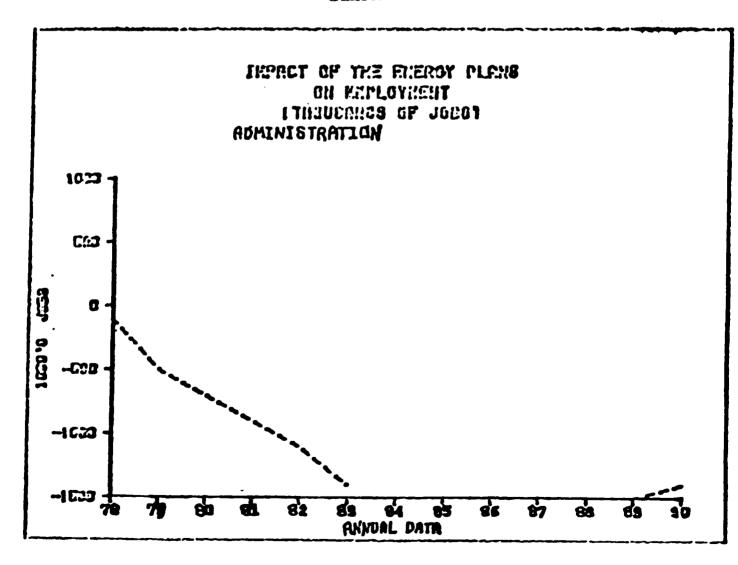
Source: Office of the Secretary of the Treasury, Office of Tax Analysis, June 2, 1977.

personal consumption and gasoline expenditures.

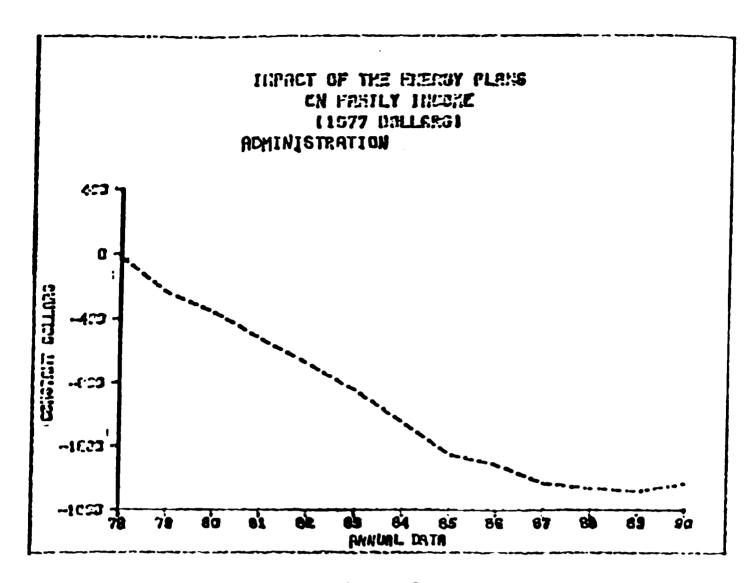
Rebates and payments to nontaxpayers under the crude oil equalization tax. At 1978 levels of income this rebate would equal \$15; 1979 levels, \$30; at 1980 and 1985 levels, \$45.



GRAPH 1



GRAPH 2



GRAPH 3

Source: National Chamber Forecasting Center Models and Computations, Federal Energy Administration and U.S. Bureau of Mines data, "The National Energy Plan," DRI and Chase Econometrics modeling and data.

### XII. DISSENTING VIEWS OF HON. ROBERT DOLE

With the fanfare that accompanied the President's energy message on April 20, most Members of the Senate, were prepared to receive a piece of legislation that would help solve our energy problems. What we received was a program that addresses only half the energy prob-

lem and, in my opinion, not very effectively.

The bills the President sent to the Congress dealt only with reducing demand for oil and gas as a way of reducing our needs for imports. The Administration completely ignored the fact that domestically produced oil can substitute for imports, barrel for barrel. Moreover new supplies of domestically produced gas can keep us from a future dependence on imported gas.

How can a program be called comprehensive, which does not even address the problem of accelerating the production of oil and gas in this country? Especially when we are now importing about 50 percent of our oil and we are rapidly drifting towards a dependence on im-

ported gas.

#### Continued Government Control

Even in its attempt to reduce demand for energy, the administration's program is misguided. Rather than changing the present policies of Government interference that have caused much of our problem, the President's approach would further extend the power of the Federal Government. Through a program of extended regulations and massive taxes, there is no doubt that the President could squeeze our economic growth and in the process cause a slow down of our increased consumption of energy.

It is difficult to understand why the administration has chosen to ignore the need for new supplies, and take this misguided approach to reducing demand. From his public statements, the President seems to understand the energy problem. He has said that the near term problem is our overdependence on imports and the attendant problems with the balance of payments. In the early 1980's there is a distinct possibility of another OPEC price hike, and the import problem will be exacerbated. Yet his solution to this problem is entirely inadequate.

There must be changes in our habits before we solve the energy problem and it appears this is already in progress. We have heard about new light bulbs and new motors. Energy management systems have gone from the industrial market to the residential market to make our homes run more efficiently. Homes are being equipped with heat pumps as standard equipment in areas where only electric heat is available—because it makes economic sense. Cars are getting smaller—because Americans are not oblivious to the fact that the price of gasoline

#### **Enermous Cost**

There is no doubt that there will be a large cost involved before we solve our energy problem. But we are readily committing ourselves to those costs. Rising fuel prices are making it attractive to retire old equipment earlier and to buy new, more efficient equipment. The utilities industry, alone, projects capital requirements of \$250 billion to \$300 billion for construction over the next ten years, and they are experimenting with a variety of load management techniques to keep their use of oil and gas to an absolute minimum. The only areas where society is not responding to the energy problem is where Government regulations have given people a distorted view of the energy situation. We are importing more oil than ever because Government has successfully driven the oil companies into other areas besides drilling for new oil.

Oil companies are not popular, but consider for a moment the distorted environment in which they are trying to carry out business. Government regulations are such that a fresh supply of new oil would actually depress the price of oil that is presently flowing. We have arranged the rules so that under the present oil pricing scheme oil companies are actually working against their interests if they pursue a massive exploration and development program. Even worse, companies cannot be certain how much their newly discovered oil would affect their other prices for old oil because the regulators in Washington keep changing the rules. Since February 1976, prices for various types of oil have been rolled back twice, and frozen four times. Since an oil well takes 4 to 5 years to get into production, can we really expect American industry to make decisions to bring on new production in an environment of orchestrated uncertainty.

#### Lack of Production

Our energy demands far exceed our present production, yet we have the reserves and we know it. The reserves are there—in the ground. During the hearings, a number of witnesses, including the U.S. Geological Service, testified as to the enormous amount of oil and gas reserves in this country. Yet we have no comprehensive program to develop and produce them. Consequently, each year imports continue to rise.

I further consider it to be a distortion when a company can produce gas in Texas or Oklahoma and sell it to American consumers for \$1.45, or it can choose to go south of the border, produce gas in Mexico and sell it to those same American consumers for \$3. It just does not make

sense.

None of these distortions are dealt with in the administration's program. Eliminating these distortions is, in fact, the key to solving the

energy problem.

H.R. 8444, as passed by the House is a massive tax bill, only thinly disguised as an energy bill. It would result in heavy taxes on families needing large cars, artificially higher prices for all users of electricity, and the crude oil equalization tax, an incredible scheme for collecting and redistributing \$120 billion.

The major difference between the House bill and the administration's was that in the House bill most of the tax dollars were not recycled back into the economy. The money would remain in the Treasury for some

undefined purpose, some time in the future.

Being presented with a bill that imposed all kinds of direct and indirect taxes, and did little to solve our energy problem, the finance committee started rejecting the parts of the bill that were thought to be ill conceived. The committee norrowly accepted a series of tax credits for residential conservation and then proceeded to reject, one by one, the gas guzzler tax, the elimination of the gas tax deduction, the crude oil equalization tax, and the business users tax.

#### Oil Import Fees

There has been enormous pressure on the committee to report a bill. Several weeks ago, the administration commented that if the tax program was not passed, large oil import fees would be administratively

imposed.

The committee reacted to this threat by nullifying any presidential adjustment of imports of petroleum under authority granted him under the Trade Expansion Act of 1962. Except in times of war or actual hostilities, the committee believes that the Congress must bear the ultimate responsibility for the regulation of foreign imports. The amendment, which I proposed, was one of the few positive steps taken by the committee.

#### Gas Guzzler

There were sound reasons for rejecting the "gaz guzzler" tax. First, under the energy policy and conservation act, there is an existing mechanism to force our domestic automobile industry to manufacture more efficient cars between now and 1985. Second, the gas guzzler tax would have been completely unfair to large families who need large cars. The tax is inherently unfair. It discriminates in favor of those who could pay and would deny large cars to those who could not afford the increased cost. Third, I am not convinced that this measure would have saved any energy. Artificially higher prices on lew large cars, station wagons for instance, could induce people to hold on to their present cars. The evidence show that the tax would mean a loss of thousands of jobs for Americans.

#### **Equalization Tax**

The crude oil equalization tax, if enacted, will be the largest peace time tax imposed in the history of this country. Neither during the hearings nor during the executive sessions was there a kind word for the crude oil equalization tax. The equalization tax has been opposed by such diverse groups as the AFL-CIO, the Chamber of Commerce and the Consumer Federation of America. I noted during executive session that under the House version, it would cost us about three times more to save a barrel of oil, than it would cost to buy one. Thus, the tax could in no way be considered to be cost effective. One of my colleagues put it more succinctly, describing the tax as a bad idea who's time had not yet come.

The crude oil equalization tax would artificially raise the price consumers pay for oil produced in this country by taxing oil up to the world level. When a refiner bought a barrel of old oil from a domestic well, he would pay \$5.60 to the producer, \$7.70 to the Government as a tax, and then he would proceed to refine his \$13.30 barrel of oil.

In the same way new oil, presently sold for \$11.20 would also be taxed

to \$13.30.

With domestic production presently at 7.9 mmb/d, revenues from this tax would quickly accumulate. Estimates are that the Government would make \$15 to \$18 billion per year on the program with no commitment after the first year as to how the money would be spent. It would seem that the tax is out of place in an energy program.

#### Users Tax

The business users tax was obviously such a poor idea that it was striken from the bill with very little debate. The business users tax would have raised the price of the fuel used by utilities and by large industries. Under the House bill, the tax would be rebated if industry installed alternative energy equipment. Thus, there would be no net incentive for installing new equipment, only a drain on a company's capital while a decision is being made. When the process is complete, companies that make sound investments would break even. Companies that resist making an unsound investment would continue to pay this onerous tax.

The utilities would have the easiest time with the business users tax. It is futile to attempt to artificially raise the price of the fuel used by utilities when under the fuel adjustment clause, the increased price of fuel can be passed diriectly through to consumers. In effect, utilities would not be hurt by the tax but would pass the increased cost to consumers. Testimony before the committee showed that in some instances, consumers would pay as much as \$200 per year in increased utility bills.

After striking the major parts of the House bill, the committee attempted to reconstruct a bill that would take a different approach, but would still result in significant energy savings. The approach embodied in the present bill is one of tax credits for new sources of alternative energy supply and incentives for energy conservation. In

my opinion, it is only a little better than the House bill.

#### Finance Committee Bill

The bill reported by the finance committee, provides for tax credits for insulating homes, installing solar energy, storm doors, and a host of other items. It provides tax credits for businesses to purchase equipment that burns alternate fuels. It extends the existing business tax credit to nonprofit and Government institutions. It subsidizes shale oil at \$3.00/BBL, and synthetic gas at \$0.50/mcf. The list is almost endless.

The energy tax credit bill of 1977 will not accomplish its purpose. The concepts voted by this committee were hastily drawn by the staff over one weekend. We cannot even be certain of the costs involved or

of the amount of energy that will be saved.

The bill reported by the committee is better than that passed by the House. Its approach is to allow people to save money by becoming a part of a movement to save energy. It avoids heavy taxes that force people to consume less.

The bill reported by the committee is still not the right program

however, and I would hope that the Senate sees fit to reject it.

#### Oil Consumption

The last several weeks of hearings have brought out some important facts about our patterns of oil consumption. Testimony has shown that demand for oil is inelastic. If the price of oil is increased, the demand for it will not significantly decrease. This is why the crude oil equalization tax was so outlandish. To affect demand only by 1 percent, the Government would have to accrue an embarrassingly large amount of money.

The committee bill also suffers from a lack of sensitivity about the inelasticity of demand for oil. The committee bill, provides enormous tax credits to encourage people to conserve energy. The tax credits on shale oil and synthetic gas are simply the negative of the crude oil equalization tax. The expanded business tax credits is the negative of the business users tax, or simply the rebate segment of the users tax.

The committee has conceived a program that will cost \$40 billion.

There is no provision to raise money to pay for the credits.

Whether by taxes or rebates, it takes an enormous amount of money to affect energy demand. Once this is accepted, it is apparent that a tax program is the wrong approach to reducing demand. It is just too expensive to accomplish an energy policy through this mechanism. In the terms previously stated, it is not cost effective.

#### Conference Outlook

One final point needs to be made regarding our ability to pay for this \$40 billion program. If this plan prevails before the full Senate, it will be natural to seek a revenue-gathering device to fund the credits. The House already has one ready and waiting. It is called the crude oil equalization tax.

Several of my colleagues on this committee, including myself, have spent the better part of the last month arguing that this tax is not in the country's interest. The committee has not voted the equalization tax back into existence. However, the approval of \$40 billion in tax expenditures is an open invitation to reinstate the crude oil equalization tax in conference.

#### Summary

In summary, if we look to the facts it is evident that taxes are not the answer to our energy problem. This bill showed a misdirected approach when first presented to the committee and it was justifiably rejected. The committee substitute is little if any improvement over the House bill because it depends on expenditures that we know will be unacceptable to the conference committee. In reporting this bill we have opened the door for consideration of all the tax measures previously rejected.

ROBERT J. DOLE.