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REPORT  
No. 94-1181

## ENERGY CONSERVATION AND PRODUCTION REVENUE ACT OF 1976

—————  
AUGUST 27, 1976—Ordered to be printed  
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Mr. LONG, from the Committee on Finance,  
submitted the following

### REPORT

[To accompany H.R. 6860]

The Committee on Finance, to which was referred the bill (H.R. 6860) having considered the same, reports favorably thereon with an amendment and with an amendment to the title, and recommends that the bill as amended do pass.

#### I. SUMMARY OF THE BILL

The Finance Committee amendment to H.R. 6860 substitutes several tax provisions that are designed to encourage greater conservation and efficiency in our use of energy and to stimulate the development of forms of energy that are alternatives to natural gas and oil. In addition, the committee added a provision for an increase in the gasoline tax of one-half a cent ( $\frac{1}{2}\text{¢}$ ) per gallon for a 3-year period. The resulting increase in the gasoline tax will increase revenues sufficiently to offset the revenue losses from the tax incentive provisions.

The bill provides incentives in the form of a refundable credit to homeowners who install new or improved insulation in an existing principal residence. The home insulation credit also covers energy conserving improvements in an existing heating system. Refundable credits also are provided for residences which install solar or geothermal energy equipment, heat pumps which replace or supplement existing electric resistance space heating, and wind-related residential energy equipment.

Businesses which install new or improved insulation in business property will become eligible for the 10-percent investment tax credit.

A special 20-percent investment tax credit also is made available to businesses for investment in solar or geothermal energy equipment and for wind-related energy equipment to produce electricity or heat water.

To encourage investment in certain kinds of energy equipment that enables use of fuels which are alternatives or supplements to the current use of oil and natural gas or that may be used to produce synthetic or natural fuels which will be used instead of oil and natural gas and will broaden the range of fuels usable for the production of energy, the committee has provided a special investment credit of 12 percent. The types of energy equipment eligible are: (1) Waste conversion equipment which includes equipment to use waste as a fuel, process waste into a fuel, process waste into, sort and prepare waste for recycling equipment; (2) organic fuel conversion equipment which includes equipment used to convert organic material directly into energy forms; (3) railroad equipment which includes rolling stock, classification yards, communications systems and certain freight handling equipment; (4) deep mining coal equipment; (5) coal liquefaction and gasification processing equipment; and (6) shale oil conversion equipment. In addition, TVA would be allowed to reduce its annual repayment of Federal Government appropriated funds by an amount equal to a 12-percent investment tax credit on its investment in these items of energy equipment.

In addition, the bill clarifies the deductibility of geothermal energy development costs, denies the investment tax credit for portable air conditioners and heaters, repeals the excise taxes on buses, bus parts, rerefined lubricating oil, exempts special motor fuels in certain non-highway use from the retailers excise tax, and provides for the certain duty-free exchanges of crude oil. The bill also instructs the Treasury Department and the Environmental Protection Agency to report on the proper role of the government in encouraging recycling of solid waste materials.

## II. REASONS FOR THE BILL

The Committee on Finance held public hearings and executive sessions in June and July, 1975, on the House-passed version of H.R. 6860. The executive sessions to mark up the bill were recessed in August 1975 coincidentally with the August recess of the Congress with the intention that the sessions would be resumed after the recess.

At the end of the recess, however, it was evident that it would be difficult to develop an energy tax program before the administration and Congress reached agreement on oil-price policy and on the broad dimensions of energy policy in general. Agreement in both areas was not achieved until early 1976 when the Finance Committee was preparing for tax reform hearings. By that time, there was not sufficient time to review what had been decided in 1975 and to renew consideration of unresolved matters and also meet the time schedule on the urgent tax reform bill (H.R. 10612).

Instead, the committee decided to reexamine its decisions on energy matters at the appropriate point in the executive sessions on tax reform and add to the tax reform bill those provisions which were pertinent

to tax reform and still important for Federal energy policies. The provisions meeting those criteria were placed in title XX of the tax reform bill.

The Senate conferees on the tax reform bill were informed by the House conferees that they retained an interest in H.R. 6860 and hoped that the bill could be enacted. They did not believe that the tax reform bill was the proper bill for discussing the energy provisions because the House-passed version of H.R. 10612 did not include any energy provisions. As a result, the provisions of the House-passed energy bill were not in the conference on the tax reform bill. The Senate conferees recognized the persuasiveness of the arguments by the House conferees, and consequently, the Committee on Finance has reactivated H.R. 6860 and reported it with the provisions of title XX of the Tax Reform Act of 1976, H.R. 10612, intact. In addition, the committee added a provision for an additional gasoline tax of one-half of one cent per gallon of gasoline through December 31, 1979.

### III. SUMMARY OF HOUSE VERSION OF H.R. 6860

For the information of the Senate, the provisions of the House-passed version of H.R. 6860 are summarized immediately below, with the counterparts of the provisions in the committee bill summarized first.

Descriptions of the committee's bill follows in IV. General Explanation.

#### *Provisions in the Senate committee bill and the House bill*

*Residential insulation credit.*—An income tax credit that would equal 30 percent of the first \$500 of insulation expenditures (a maximum credit of \$150). An income tax credit would be provided to an individual for expenses incurred with respect to the insulation of that person's principal residence (if the residence was in existence on March 17, 1975). The term principal residence would include a rented dwelling unit. The credit would be available with respect to insulation expenditures made after March 17, 1975, and before January 1, 1978. Qualified insulation would include regular insulation, storm (or thermal) windows and doors, or similar items (such as weatherstripping and caulking) designed specifically and primarily to reduce heat loss or gain of a building, if such items have a useful life of at least 3 years and meet performance standards prescribed by Treasury Department regulations (in consultation with the Federal Energy Administration and the Department of Housing and Urban Development).

*Residential solar energy equipment.*—An income tax credit is provided that would equal 25 percent of the first \$8,000 of expenditures, for a maximum credit of \$2,000. The credit would be provided to an individual for expenses incurred with respect to the installation of solar energy equipment in, on, or connected to that person's principal residence. The credit would be available in the case of an existing or newly constructed principal residence. In order to qualify, the original use of the equipment must commence with the taxpayer, and the equipment must use solar energy to heat or cool the building or to provide hot water for use within the residence. The equipment would be re-

quired to meet interim or definitive performance criteria prescribed by the Secretary of Housing and Urban Development. The credit would be available with respect to expenditures made after March 17, 1975, and before January 1, 1981.

*Investment credit for business insulation and solar energy equipment.*—The investment credit of present law would be extended to insulation installed after March 17, 1975, and before January 1, 1978, in a structure which was in existence on March 17, 1975, and which was used on that date in a trade or business. The investment credit would also be extended to solar energy equipment installed after March 17, 1975, and before January 1, 1981.

*Amortization of energy use property.*—Five-year amortization (rather than regular depreciation) would be provided for certain equipment that would conserve oil and gas, including equipment that would use waste as fuel, sort solid waste, solid waste recycling equipment, solar energy equipment where the investment credit is not claimed, shale oil conversion equipment, coal processing equipment, coal slurry pipelines, and deep mining coal equipment. In general, the 5-year amortization provisions would apply after March 17, 1975, and before January 1, 1981.

*Amortization of railroad equipment.*—Five-year amortization would be available for certain railroad equipment including property used as an integral part of (1) a communications, signal, or traffic control system, (2) a rolling stock classification yard, (3) a facility for loading and unloading trailers and containers on and from railroad flatcars, or (4) an improvement or betterment in track account. The 5-year amortization provisions would apply to railroad equipment placed in service after December 31, 1974, and before January 1, 1980.

*Extension of period for amortization of railroad rolling stock.*—The 5-year amortization provision that applies under present law with respect to railroad rolling stock, such as locomotives and freight cars, would be extended until January 1, 1980. In addition, the provision would be expanded to include railroad ferry vessels and certain coal cars.

These 5-year amortization provisions would not be available to non-corporate lessors.

*Denial of investment credit for portable air conditioners and heaters.*—Self-contained, portable air conditioning units and space heaters (as distinguished from central air conditioning and heating systems) no longer would be considered qualifying property for the investment credit.

*Repeal of excise tax on intercity buses.*—The present 10-percent manufacturers' excise tax on buses would be repealed in the case of intercity buses. (Urban transportation buses are exempt under present law.) This provision would apply with respect to buses sold on or after the date of enactment of the act.

*Rerefined lubricating oil.*—The present 6-cents-a-gallon excise tax on lubricating oil would be repealed with respect to new oil sold for use in mixing with used oil to produce a rerefined oil mixture in which 45 percent or more of the mixture consists of used lubricating oil that has been cleaned, renovated, or refined. If more than 55 percent of the final mixture is new oil, only the 55 percent would be exempt. This provision would apply with respect to sales after March 17, 1975.

*House provisions not in the committee bill*

## TITLE I—IMPORT TREATMENT OF OIL

*Imposition of quotas*

Mandatory quotas would be imposed on petroleum and petroleum products imported into the United States according to the following schedule:

Calendar year:	Maximum average daily number of barrels	In millions
1975	-----	6.0
1976	-----	6.0
1977	-----	6.5
1978	-----	6.0
1979	-----	6.0
1980 and thereafter	-----	6.5

The President would be granted the authority to increase or decrease the quota schedule by as much as 1 million barrels a day for each year 1975-77, by 1½ million barrels a day in 1978 and 1979 and by 2 million barrels a day in 1980 and thereafter based upon variations in domestic consumption caused by economic factors or the weather, or by delays in obtaining domestic production or in achieving conservation goals, or by reason of other similar factors. Imports of distillate heating oil and residual oil would not be restricted below the level of 2 million barrels a day in the years 1975, 1976, and 1977. Of this amount, not more than 400,000 barrels a day could represent imports of distillate heating oil. In addition, the quotas would not apply to (1) oil imports for any strategic oil reserves which may be provided by law and (2) petrochemical feed stocks.

The President would be required to establish quotas lower than the levels shown in the schedule to the extent necessary to insure that savings in consumption of oil will be fully reflected in equivalent reductions in oil imports. The President would also be required to divide the quotas among petroleum and petroleum products where such division is necessary to avoid substantial adverse impact on the economic and health needs of geographical areas and industries.

The President would be required to review the quota restrictions at least quarterly and would be required to proclaim the aggregate quantities of petroleum and petroleum products that may be imported into the United States during such calendar quarter. The Secretary of the Treasury would act under the custom laws to insure that the quantities of oil imported into the United States do not exceed the quantities specified in the quota.

*Import licensing system*

The President would be required to establish an import licensing system before December 31, 1975, to distribute entitlements to petroleum and petroleum products that are imported into the United States. The entitlements would be distributed on the basis of public auctions in which bidding is by sealed bids. In general, such entitlements would be fully marketable.

Separate entitlements would be established for small refiners and independent marketers. Such separate entitlements would be distributed on the basis of public auctions in which bidding is by sealed bids.

In general, such entitlements would not be marketable. However, they could be sold to the Deputy Administrator for Petroleum Import Licensing.

The Administrator of the Federal Energy Administration would establish procedures for the administration of the import licensing system through the promulgation of regulations. The regulations would include provisions with respect to the frequency of auctions; bidding in small lots; maximum limits on the number of units acquired by related persons; a time limit in which entitlement rights may be exercised; rejecting bids where there is evidence of collusion or where such bids are substantially below the market price established for resale of entitlements; dealing with identical high bids; and barring acquisition or use of entitlements by persons convicted of felonies relating to oil imports, oil allocations, or price controls on oil. The regulations would also insure that the small refiners are bona fide refiners and that the independent marketers are bona fide marketers.

The President would be authorized to require persons who import oil into the United States to report the country of origin from which the oil or product originated.

#### *Rates of duty on oil*

Effective 60 days after the date of enactment, the present system of duties and license fees with respect to imported oil would be replaced by ad valorem duties. The rate of duty with respect to petroleum would be 2 percent (approximately 21 cents) and the duty on petroleum products would be 5 percent (approximately 60 cents). The President would be granted the authority to adjust the rates of duty upward to 10 percent (approximately \$1.20 under current prices) or \$1 a barrel (if higher) and to adjust the rates of duty downward to not less than 2 percent of the price. However, for the 2-year period beginning on the date of enactment, the President could not increase the 5-percent duty on distillate fuel oil or residual fuel oil which is imported for use as a fuel (other than for the propulsion of motor vehicles). Any adjustment by the President to increase (but not an adjustment to decrease) a rate of duty would not take effect until 60 days after he transmits to Congress the proposed adjustment in the rate of duty and the reasons for the adjustment.

The President's authority to adjust imports of petroleum and petroleum products under section 232(b) of the Trade Expansion Act of 1962 would be ended, except during any period in which Congress declares war, U.S. forces are introduced into hostilities pursuant to statutory authorization, a national emergency is created by an attack upon the United States or U.S. Armed Forces are introduced into hostilities under circumstances which require a report by the President to the Congress under the War Powers Resolution. Adjustments under this exception would not apply after the 60th day after the closing date of hostilities.

Effective 60 days after the day of enactment, no adjustment action taken under section 232(b) of the Trade Expansion Act of 1962 before the date of enactment of this act would have any force or effect with respect to petroleum or any petroleum products.

In addition, the power to eliminate import duties through trade agreements with foreign nations and to allow duty-free imports from developing countries, which had been granted to the President by the Trade Act of 1974, would be removed with respect to imports of petroleum and petroleum products.

#### *Annual reports*

On or before March 15, 1976, and on or before March 15 of each year thereafter, the President would be required to transmit a report to Congress on the operation of the act. The report would include information with respect to the economies in the domestic consumption of oil which have occurred, the increase in the production of oil which has taken place, the factors taken into account in modifying the quotas, and any other information which may be appropriate in assessing the operation of the act's provisions.

#### *Office of Petroleum Import Licensing*

The Office of Petroleum Import Licensing would be established within the Federal Energy Administration. The Office would be headed by a Deputy Administrator who would administer the import licensing system.

### TITLE II—OTHER ENERGY CONSERVATION PROGRAMS

#### *Automobile fuel efficiency standards*

Automobile fuel efficiency standards would, in effect, be established as follows:

	<i>Fuel mileage standard</i>	<i>Miles per gallon</i>
Model year:		
1978	-----	18
1979	-----	19
1980	-----	20
1985	-----	28

The Secretary of Transportation would establish standards for the years 1981-84. The 1985 standard could be lowered by the Secretary subject to congressional veto.

In the case of a domestic manufacturer whose fleet consists of a mix of domestically produced and imported automobiles, the standards would be applied separately for domestic production and for imports. For purposes of the schedule, an automobile would be considered to be domestic if 75 percent or more of the production cost of the complete automobile is attributable to value added in the United States or Canada.

The bill would impose a \$50 civil penalty for each mile per gallon by which a company's sales-weighted fleet average gas mileage is below the standard. This penalty would not be deductible for Federal income tax purposes. The Secretary of Transportation would also establish separate standards for light-duty trucks, multipurpose passenger vehicles, and vehicles manufactured by companies who manufacture fewer than 10,000 vehicles per year. The civil penalty rules described above would also apply to vehicles failing to meet these

standards. The Secretary of Transportation could reduce the fuel efficiency standards to reflect any more stringent automobile emissions standards that may be imposed in the future. Any manufacturer that exceeds the mileage standards by more than 0.5 mpg for any one model year may carry back or carry over the excess for one year (thereby reducing the mileage standard for the year to which the excess is carried).

*Repeal of excise tax on radial tires*

The excise tax on radial tires and the excise tax on tread rubber used to retread or recap radial tires would be repealed with respect to sales of radial tires and tread rubber after March 17, 1975.

*Electric highway vehicles*

An income tax credit would be provided to an individual for expenses incurred with respect to the purchase of an electric-powered motor vehicle for personal use on highways. The credit would equal 25 percent up to a maximum expenditure of \$3,000 (for a maximum credit of \$750). The credit would be available with respect to expenditures after June 3, 1975, and before January 1, 1979.

TITLE III—ENERGY CONSERVATION AND CONVERSION TRUST FUND

The Energy Conservation and Conversion Trust Fund would be created and would be funded by the net revenues obtained from any duty imposed by the President under title I of the bill on the importation of oil, the excise tax on the business use of oil and gas as a fuel (described under title V below) and (to the extent provided by any future law) any amounts received by the United States from oil and gas properties in which the United States has an interest. However, duties imposed under title I on imports into Puerto Rico would be paid over to the Puerto Rican treasury.

The revenues transferred to the trust fund could not exceed \$5 billion in any one year, through the fiscal year ending September 30, 1983. In the fiscal year ending September 30, 1984, no more than \$2½ billion could be placed in the trust fund. (Any excess would be transferred to the general fund.) The unobligated balance in the trust fund through the fiscal year ending September 30, 1984, could not exceed \$10 billion; in fiscal year 1985, this balance could not exceed \$5 billion. The trust fund would terminate on October 1, 1985.

A five-member review board for the trust fund would be appointed by the President subject to confirmation by the Senate. The review board members would serve 5-year staggered terms. To prevent conflicts of interest, no individual could serve as a member of the review board if during the 5 years before appointment that person had an investment in excess of \$2,500 or income in excess of \$10,000 from certain energy, utility, or transportation industries.

The funds in the trust fund would be available for the following four purposes, subject to the regular authorization and appropriation processes: (1) basic and applied research programs related to new energy technologies, (2) development and demonstration of new



energy technologies, (3) programs relating to the development of energy resources from properties in which the United States has an interest, and (4) research projects or capital expenditures for demonstration projects relating to local and regional transportation systems. The Trust Fund Review Board, not later than 270 days after date of enactment, would recommend to Congress how it believes the funds should be divided among the four expenditure categories.

TITLE IV—ENCOURAGING BUSINESS CONVERSION FOR GREATER ENERGY  
SAVING

*Excise tax on business use of oil and natural gas*

Excise taxes would be imposed on the business use of oil and natural gas as a fuel in a trade or business. Exemptions would be provided for the use of oil or natural gas as a fuel (1) in a vehicle, vessel, or aircraft, (2) in an apartment, hotel, motel, or other residential facility, (3) for the extraction of a mineral to the extent such extraction constitutes mining, (4) on a farm for farming purposes, (5) by electric power facilities, including industries that generate their own electric power (through December 31, 1981), (6) by organizations (churches, hospitals, schools, museums, etc.) which are tax-exempt under section 501(c)(3) of the Internal Revenue Code (but not for unrelated businesses of those exempt organizations), (7) in processes relating to textiles, including carpets and apparel products and (8) in processes relating to glass manufactured products. By June 1, 1976, the Administrator of the Federal Energy Administration is to make a report to Congress with respect to uses which should be exempt from this tax.

The excise tax on the business use of natural gas would be:

Calendar year:	<i>Tax per 1,000 cubic feet (in cents)</i>
1977 -----	4
1978 -----	8
1979 -----	12
1980 or thereafter -----	18

The excise tax on the business use of crude oil and other petroleum products would be:

Calendar year:	<i>Tax per barrel</i>
1977 -----	\$0. 17
1978 -----	0. 33
1979 -----	0. 50
1980 -----	0. 67
1981 -----	0. 83
1982 or thereafter -----	1. 00

*Investment credit for generating facilities powered by petroleum*

The investment credit would not be available in the case of any electrical generating property fueled by petroleum or petroleum products, including natural gas, which is placed in service after April 17, 1975. This latter provision would not apply in the case of certain binding contracts in effect on April 17, 1975, and in the case of certain lease-back transactions.

#### IV. GENERAL EXPLANATION OF SENATE AMENDMENT

##### 1. RESIDENTIAL INSULATION AND OTHER ENERGY CONSERVING ALTERATION CREDIT (SEC. 2 OF THE BILL AND NEW SEC. 44A OF THE CODE)

###### *Present law*

Under present law, no special credit or deduction is allowed for expenditures for insulation of or the installation of more efficient or insulated heating systems in a taxpayer's own residence.<sup>1</sup>

###### *Reasons for change*

A substantial portion of our domestic energy consumption is used to heat or cool residences. Currently, about 20 percent of our domestic consumption, or about 6 percent of total world demand, is used in the United States for residential purposes.

Because of the substantial energy savings that may be effected by proper insulation of homes and by the installation of more efficient and properly insulated home heating systems, and to reduce the potential problems in the event of any future energy shortages (such as the 1973-74 shortage as the result of the oil embargo) the committee's amendment includes a refundable tax credit to give homeowners and tenants an incentive to conserve energy by immediate installations of insulation to reduce heat loss in the winter and to reduce heat gain in the summer and by installing more efficient home heating systems or insulation of furnaces, boilers, ducts, and pipes. It is estimated that this tax credit will save between 50,000 and 100,000 barrels of oil per day by 1979.

###### *Explanation of provision*

The committee's amendment provides a temporary program (through 1978) of credits against income tax for a portion of the expenditures incurred in that period for purchasing and installing insulation on homes, for purchasing and installing components that are improvements in the efficiency of home heating systems, and the purchase and installation of insulation on furnaces, boilers, ducts, and pipes. However, no credit is allowed for installation of an entirely new heating system or for equipment permitting use of alternative fuels. Under the amendment, a refundable credit against income tax is allowed for 30 percent of the first \$750 (for a maximum credit of \$225) spent on insulating a residence or its heating system and making heating systems more efficient in a residence<sup>2</sup> used by the individual paying for the insulation or equipment. The credit being provided here is intended only as a temporary program in the sense that your committee wants to review it to see whether, in its view, the credit should be further extended. For that reason the amendment makes the credit available only for installations of insulation material and devices to make home heating units more efficient before January 1, 1979, and only where payments were made (or, in the case of an accrual basis taxpayer, incurred) for the material or equipment before that

<sup>1</sup> However, if the expenditures are undertaken in connection with the sale of the residence, then it has been held that those expenditures might be deductible under section 212 of the Code as being incurred in connection with the production of income. Also, if the insulation is of such a magnitude as to be an improvement in the house, then the expenditures may constitute additions to the taxpayer's basis in the house.

<sup>2</sup> Condominium and cooperative housing units may be treated as separate residences

date. Also, the amendment makes the credit available only for insulation of or additions of equipment to structures in use or habitable as residences on May 25, 1976, and only for insulation material or equipment installed and paid for on or after July 1, 1976. The credit is for both the expenditures for additional equipment and the insulation material itself and the expenditures for their installation.

The credit may be claimed only for insulation or equipment payments made during the year (or other tax period) for which the tax return is filed. To the extent that (during the period for which the credit is in effect) the taxpayer, in any prior year, has paid for insulation or equipment on that residence for which the credit was allowed—the \$750 limit on the expenditures for which the credit is given must be reduced by the amount of the earlier payments.<sup>3</sup>

If an individual has already claimed the maximum credit under the limitation for insulation or equipment installed on one residence and thereafter changes his residence, the limitation begins to run again from zero; that is, he may claim 30 percent of the first \$750 spent on insulating his new residence. Since the credit is only for insulation of or the addition of more efficient home heating equipment to a residence, it is not available to a builder who does not plan to use the structure as his residence.

The insulation for which the credit may be claimed includes storm or thermal windows, storm doors, and similar items (such as weatherstripping, caulking, etc.). However, the insulation qualifies only if it is specifically and primarily designed to reduce the heat loss in a home heating system or heat loss or gain on a building, is material first used by the taxpayer claiming the credit has a useful life (to that taxpayer) of at least 3 years, and meets those performance standards that may be prescribed in Treasury regulations. The Secretary of the Treasury is to consult with the Administrator of the Federal Energy Administration and the Secretary of Housing and Urban Development in developing those standards. (In conjunction with this last criterion, it is understood that the National Bureau of Standards, which is already engaged in performance studies regarding insulation materials, will be consulted for its expertise on technical questions concerning the properties of materials.)

In addition, the credit is to be allowed only for the original installation of insulation in a dwelling unit. As a result, expenditures for such purposes as reinstallation in the fall of storm windows which had been taken down in the spring are not to qualify for the credit. Insulation or equipment removed from one structure and placed on the taxpayer's residence also will not qualify for the credit because of this requirement.

The Treasury Department is to prescribe methods by which taxpayers are to provide verification of their expenditures for qualified insulation or equipment. No credit is to be allowed for expenditures that are not verified in the prescribed manner.<sup>4</sup>

<sup>3</sup> Note that expenditures before July 1, 1976, and installations before that date are not to qualify for the credit. Consequently, such pre-July 1, 1976, expenditures and installations are to be ignored in determining whether and to what extent the \$750 limit is to be reduced under this provision.

<sup>4</sup> This provision is not to detract from the general authority of the Internal Revenue Service to require verification of the correctness of claimed deductions, credits, etc.: the effect of this provision is to preclude the use of the so-called "Cohan rule" where the Treasury regulations specifically prescribe one or more appropriate manners of verification.

Qualifying insulation materials must be specifically and primarily designed for insulation use. Except with reference to storm or thermal windows or doors, the items that qualify for the credit are intended to be primarily and specifically insulating materials and not materials that are primarily structural or decorative in purpose. For example, drapes and wood paneling would not qualify although they may have been designed in part to have an insulating effect. Whether or not other materials such as attic fans, insulated siding, etc., qualify is left to administrative determination, which should take into account the extent of the energy saving, the extent of their use of conventional energy sources, and whether they otherwise meet the standards of this provision. In addition, since the credit is only for insulation installed in existing houses, and not for newly built homes or reconstructions, the replacement of an existing wall with a new wall having greater insulating qualities is not to qualify for the credit. Nevertheless, the replacement of an existing window or door by a storm or thermal door or window, or thermal window, could qualify although these items might otherwise be considered structural in nature.

The credit is available for materials that either reduce heat gain or reduce heat loss, as well as for materials that possess both these qualities. For example, polyester film installed on windows that has a cooling quality and which fulfills the requirements of the bill common to all qualifying materials would be eligible for the credit although it may possess no quality of reducing heat loss. However, the credit would not be available for polyethylene film (usually taped over a window) which does not normally have a useful life of at least 3 years.

In the case of insulation which is attached to parts of a home heating system, the insulation qualifies if it is specifically and primarily designed to reduce the heat loss of the heating system to the outside of the house. Eligible material includes the insulative wrapping of boilers, ducting, and pipe, but does not include materials that are primarily structural or decorative in purpose. The qualifying material must be first used by the taxpayer claiming the credit, have a useful life (to that taxpayer) of at least 3 years, and meet those performance standards that may be prescribed in Treasury Regulations. The Secretary of the Treasury is to consult with the Secretary of Housing and Urban Development in developing those performance standards.

In the case of energy-conserving components which qualify for the credit, the credit is allowed only for the original installation of such equipment which has a useful life of at least 3 years. The types of equipment which are eligible in this category are retention head burners, or comparable new burners, which operate at a reduced firing rate or a firing rate which achieves a reduction in the amount of fuel consumed as a result of increased combustion efficiency. Also included as equipment qualifying for the credit are devices which electronically or mechanically provide prompt and effective ignition in such a way as to replace heating burner pilots. The Secretary of the Treasury is to consult with the Administrator of the Federal Energy Administration and the Secretary of Housing and Urban Development in developing those performance standards which may be prescribed in Treasury regulations.

If joint occupants of a dwelling unit install qualifying insulation or equipment in that dwelling unit during a calendar year, the total credit is subject to the regular limit for one person (30 percent of the first \$750 of expenditures) and is apportioned among those who made the expenditures in accordance with the proportion which each paid bears to the total payment during the calendar year.

In the case of qualifying expenditures by a cooperative housing corporation, each of the corporation's stockholders who is entitled to occupy a dwelling unit owned by the corporation, and who in fact occupies the dwelling unit as his residence, is treated as having paid for that portion of the corporation's qualifying expenditures that is the same as his proportionate share of the corporation's total outstanding stock.

The expenditures made by a residence's owner that qualify for the credit in some instances may constitute capital expenditures that under present law increase his tax basis in the residence. In order to avoid a double tax benefit (allowance of a credit and also a reduced gain on sale), the committee amendment requires that any increase in basis on account of a qualified insulation or equipment expenditure be reduced by the amount of the expenditure that is allowed as a credit. For example, assume that the taxpayer makes \$800 of qualified expenditures which would normally increase his basis in the home. The maximum credit allowable in this case is \$225 (30 percent of the \$750 limit). Consequently, the taxpayer's basis in his home would be increased by \$575 (the \$800 of expenditures minus the \$225 of credit).

Under the committee amendment, the home insulation and more efficient home heating system credit is a refundable credit (that is, a taxpayer whose tax liability is less than the amount of the credit would receive a refund of the difference, while the amount of his credit that equals the amount of his tax liability would be available to eliminate that liability).

The House bill (H.R. 6860) would provide a similar credit, except that: (1) the maximum expenditures taken into account would be \$500, (2) the \$500 would be reduced by prior owners' and renters' insulation expenditures for the residence, (3) the credit would not be refundable, but instead could be used only to reduce or eliminate income tax liability, (4) the credit would be available for the period March 15, 1975, through December 31, 1977, (5) the credit would be only for principal residences, (6) all allowable expenditures (not only those claimed and allowed) would count toward the maximum expenditure limit, and (7) only home insulation would be eligible for the credit (not including devices for home heating systems.)

#### *Effective date*

This credit is to be available only if both expenditures (or accruals) for insulation or equipment and the installation of that insulation or equipment is made on or after July 1, 1976, and before January 1, 1979, on a structure existing in May 25, 1976. However, expenditures on binding contracts entered into before January 1, 1979, may also qualify.

Before the insulation and home heating equipment credit program expires at the end of 1978, the committee intends to again examine the usefulness of this tax incentive approach and the availability of other approaches to secure the necessary energy savings.

*Revenue effect*

This provision will reduce budget receipts by \$256 million in fiscal year 1977 and \$415 million in fiscal year 1978.

2. RESIDENTIAL SOLAR OR GEOTHERMAL ENERGY EQUIPMENT CREDIT  
(SEC. 3 OF THE BILL AND NEW SEC. 44B OF THE CODE)

*Present law*

Under present law, no special tax credit or deduction is allowed for solar energy equipment or for geothermal energy equipment installed on a residence.<sup>5</sup>

*Reasons for change*

As indicated above in the discussion on a tax credit for installing more efficient heating system equipment and home insulation, residential energy is a major portion of the total national energy consumption. In view of the general energy conservation needs of the country in the years ahead, the committee believes that it is appropriate to encourage residential installations of solar or geothermal energy equipment.

The solar and geothermal equipment and insulation industries represent a major area of possible future fossil fuel conservation and should, over a period of time, substantially aid in meeting the problem of decreasing fossil fuels. At the same time, it must be acknowledged that the solar and geothermal equipment industries are still fledgling industries. In view of this, the committee believes that there is a need to encourage these industries through tax incentives. The committee believes that tax credits provided by its amendment will help achieve this without significant revenue loss for the next several years.

As a result, the committee decided to provide a credit for a limited number of years with the intent to review the need for the credit toward the end of that period when more facts will be available as to the extent of the possible expansion in the use of these types of equipment.

*Explanation of provision*

The committee amendment provides a refundable income tax credit for solar and geothermal energy equipment installed in, on, or in connection with a residence. The credit is 40 percent of the first \$1,000 of qualified expenditures, plus 25 percent of the next \$6,400 (maximum credit of \$2,000). To qualify, both the equipment and its installation must be paid for by the individual (or individuals) who is using the edifice as a residence. Thus, an owner or tenant might qualify, but a developer or builder adding the solar energy equipment to a new house he does not intend to use as his residence would not qualify for this credit, although he might qualify for the investment tax credit extended under this amendment to solar energy equipment installed for commercial or industrial purposes.

<sup>5</sup> However, if the expenditures are undertaken in connection with the sale of the residence, then those expenditures might be deductible under section 212 of the Code as incurred in connection with the production of income. Also, if installations constitute improvements to a residence, the expenditures may qualify as additions to the taxpayer's basis in the residence for purposes of determining gain.

For purposes of the dollar limitations on the amount of expenditures that may be taken into account in determining the credit, expenditures for solar equipment and installation and expenditures for geothermal equipment and installation are to be aggregated with the qualified expenditures for heat pumps and wind-related energy equipment. In other words, a taxpayer who had already made purchases of \$7,400 for solar equipment allowed during the credit period could not make qualifying expenditures for geothermal equipment for the benefit of the same residence.

This tax credit is to be provided only for installations and expenditures made, or, in the case of an accrual basis taxpayer, incurred, through 1980. Before that time, the committee will review the credit to see whether it is desirable to continue it for any further period of time. Also, both the installation and the expenditure must occur after June 30, 1976. The credit is for both the expenditures for the equipment itself and the expenditures for its installation.

Unlike the case of the credit for installation of insulation or heating equipment on an existing residence, solar and geothermal energy installation expenditures on both existing residences and newly-constructed residences<sup>7</sup> qualify for the credit.

The credit may be claimed only for qualified payments made during the year or other tax period for which the tax return is filed. To the extent that (during the period for which the credit is in effect) the taxpayer during any prior year paid for solar energy installations on that residence which qualified for the credit, the dollar limitations on the solar or geothermal energy expenditures for which the credit is given must be reduced by the amount of the earlier qualified payments.<sup>8</sup>

If an individual who has already claimed the maximum credit under the dollar limitations for solar or geothermal energy equipment installed on one residence, or who has partially used his limitations, thereafter changes his residence, the limitations begin again to run from zero, and he may claim 40 percent of the first \$1,000 paid, and 25 percent of the subsequent qualifying expenditures for equipment installed on his new residence.

The equipment for which the credit may be claimed is that which uses solar or geothermal energy to heat or cool a building or to provide hot water for it and, in the case of solar equipment, which meets the definitive performance criteria prescribed by the Secretary of Housing and Urban Development under the Solar Heating and Cooling Demonstration Act of 1974. In the case of geothermal equipment, it 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)).

It is usually necessary, at least at this stage of the solar energy equipment industry's technical advancement, to use heating or cooling units employing conventional energy sources as "back-ups" to solar energy equipment for use or supplemental use when very little sun-

<sup>7</sup> Condominium and cooperative units may be treated as separate residences.

<sup>8</sup> Note that expenditures before July 1, 1976, and installations before that date are not to qualify for the credit. Consequently, such pre-July 1, 1976, expenditures and installations are to be ignored in determining whether and to what extent the expenditure limit is reached under this provision.

light has been available for an extended period of time. However, the credit of this provision is not to extend to expenditures for these back-up units.

If joint owners install qualifying solar or geothermal energy equipment on their common residence, the credit is to be apportioned among those who paid for the installations in accordance with the proportion which each paid bears to the total payment during the calendar year.

In the case of qualifying expenditures by a cooperative housing corporation, each of the corporation's stockholders who is entitled to occupy a dwelling unit owned by the corporation, and who in fact occupies the dwelling unit as his residence, is treated as the resident in that unit and as having paid for that portion of the corporation's qualifying expenditures that is the same as his proportionate share of the corporation's total outstanding stock. Similarly, in the case of duplex, triplex, etc., houses, the expenditure for solar or geothermal energy may be shared between the respective residents.

Expenditures made by a resident that qualify for the credit would normally constitute capital expenditures that increase the tax basis of the residence. In order to avoid a double tax benefit (allowance of a credit and also a reduced gain on sale) the committee amendment requires that any increase in basis on account of a qualified solar or geothermal energy expenditure be reduced by the amount of the expenditure that is allowed as a credit. For example, assume that the taxpayer makes \$2,500 of qualified expenditures which would normally increase his basis in the home. The maximum credit allowable in this case is \$775 (40 percent of the first \$1,000 plus 25 percent of the next \$1,500). Consequently, the taxpayer's basis in his home would be increased by \$1,725 (the \$2,500 of expenditures minus the \$775 of credit).

The solar and geothermal energy credits are refundable credits. As a result, a taxpayer whose tax liability is less than the amount of the credit would receive a refund of the difference, while the amount of his credit that equals the amount of his tax liability would be available to eliminate that liability.

The House-passed bill provided a similar credit except that: (1) the credit would be 25 percent of the first \$8,000 (a maximum credit of \$2,000); (2) the credit would not be refundable; (3) expenditures for geothermal energy equipment and its installation would not be eligible for the credit; (4) the credit would be available only to owners of the principal residences in question; (5) the qualifying expenditures of prior owners of the principal residence in question would be taken into account in determining whether the dollar limitations (25 percent of the first \$8,000 under the House bill) had not been exceeded; (6) all allowable expenditures (not only those claimed and allowed) would count toward the maximum expenditure limit; and (7) it contained no binding contract rule.

#### *Effective date*

The committee amendment would make the credit available in cases in which both the expenditure and the installation of the qualifying equipment occurred on or after July 1, 1976, and before January 1, 1981. Before the credit period expires as of December 31, 1980,



the committee intends to reexamine the usefulness of this credit approach and the availability of other approaches to secure the necessary energy savings.

### *Revenue effect*

It is estimated that the credits for solar and geothermal energy equipment and its installation will result in a negligible revenue loss through the fiscal year 1978 and a loss of \$31 million in fiscal year 1981.

### 3. RESIDENTIAL HEAT PUMP CREDIT (SEC. 3 OF THE BILL AND NEW SEC. 44B OF THE CODE)

#### *Present law*

Under present law, no special tax credit or deduction is allowed for installing a heat pump in a residence.<sup>10</sup>

#### *Reasons for change*

The heat pump's facility of transferring heat from outside air to indoor premises can reduce the resident's electricity bill by 30 to 50 percent, according to some estimates. This effect results from the lesser amount of electrical energy needed to power the heat pump as compared with the electricity required by traditional electric heating equipment.

Because of this saving in electrical energy consumed where heat pumps are used, the committee believes it is desirable to encourage the use of heat pumps. Therefore, the committee amendment includes a credit designed to make installations of heat pumps more attractive. As is the case with the other energy-related credits provided by the committee amendment, it is believed that the expanded use of heat pumps will alleviate future energy crises and result in the conservation of fossil fuels.<sup>11</sup>

Since the use of heat pumps is in a more advanced technological stage than is the use of solar and geothermal equipment, the committee is making the credit for installation of heat pumps available for a shorter period of time than is the case of the credits for solar and geothermal energy equipment also provided by this committee amendment.

Because heat pumps are believed to be more efficient than electric resistance heating but not generally more efficient than fossil fuel heating systems, the credit is available only for heat pumps which replace or supplement existing electrical resistance space-heating.

#### *Explanation of provision*

The committee amendment provides a refundable income tax credit for the installation of heat pumps in, on, or in connection with any residential use by the taxpayer. The amount of the credit is half of the percentage amount of the credit provided in the committee amendment for solar and geothermal energy equipment. The amount of the

<sup>10</sup> However, if the expenditures are undertaken in connection with the sale of the residence, then those expenditures might be deductible under section 212 of the Code as incurred in connection with the production of income. Also, if installations constitute improvements to a residence, the expenditures may qualify as additions to the taxpayer's basis in the residence for purposes of determining gain.

<sup>11</sup> Of course, to the extent the generators supplying electricity to heat pumps use non-fossil fuels in converting energy to electricity, an even greater conservation of fossil fuels will result.

credit for installation of a heat pump is, therefore, 20 percent of the first \$1,000 of qualified expenditures, plus 12½ percent of the next \$6,400 (maximum credit of \$1,000). To qualify, the expenses must be paid by the individual (or individuals) who is using the structure as a residence. Thus, an owner or tenant may qualify, but a developer or builder adding the heat pump equipment to a new house he does not intend to use as his residence would not qualify for this credit. Expenditures that are taken into account in determining the credit for solar and geothermal and wind-related energy equipment are aggregated with the expenses for a heat pump in determining the amount of the credit and in applying the limitations. In other words, a taxpayer who has made purchases of \$7,400 within the applicable period, which were allowed for purposes of the credit for solar and/or geothermal energy equipment, could not utilize the credit available for expenditures for heat pump equipment for the benefit of the same residence.<sup>13</sup>

The credit is for both the expenditures for the equipment itself and the expenditures for its installation. Expenditures for presently existing structures, but not for houses built during the credit period, will qualify for the credit. The credit is available only for heat pumps which replace or supplement existing electrical resistance space-heating.

The credit may be claimed only for qualified payments during the year or other tax period for which the tax return is filed.<sup>14</sup>

If any individual who has already claimed the maximum credit under the dollar limitations for solar, geothermal, or heat pump equipment installed on one residence, or who has partially used his limitation, thereafter installs a heat pump on another residence, the limitations begin again to run from zero, and he may claim 20 percent of the first \$1,000 paid, and 12½ percent of the subsequent \$6,400 of qualifying expenditures.

The equipment for which the credit may be claimed is that necessary to permit a heat pump to function in a home. This would include any special ducting required. "Function" in this sense refers to the capacity of a heat pump to heat or cool a building, to provide hot water for it, or to perform any of the other uses normal to the heat pump under the circumstances.

It is usually necessary, at least at this stage of the heat pump industry's technical advancement, to use heating or cooling units employing conventional energy sources 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.

If joint owners install a heat pump for their common residence, the credit is to be apportioned among those paid for the installations in accordance with the proportion which each paid bears to the total payment during the calendar year.

In the case of qualifying expenditures by a cooperative housing corporation, each of the corporation's stockholders who is entitled to occupy a dwelling unit owned by the corporation, and who in fact occupies the dwelling unit as his residence, is treated as the resident

<sup>13</sup> Condominium and cooperative units are treated as separate residences.

<sup>14</sup> Pre-July 1, 1976, expenditures and installations are to be ignored in determining whether and to what extent the expenditures limit is reached under this provision.

in that unit and as having paid for that portion of the corporation's qualifying expenditures that is the same as his proportionate share of the corporation's outstanding stock. Similarly, in the case of duplex, triplex, etc., houses, the expenditures for a heat pump may be shared by the respective residents.

Expenditures made by a resident that qualify for the credit would normally constitute capital expenditures that increase the tax basis of the residence. In order to avoid a double tax benefit (allowance of a credit and also a reduced gain on sale of the residence), the committee amendment requires that any increase in basis on account of a qualified heat pump expenditure be reduced by the amount of the expenditure that is allowed as a credit. For example, assume that the taxpayer makes \$2,500 of qualified expenditures which would normally increase his basis in the home. The maximum credit allowable in this case is \$372.50 (20 percent of the first \$1,000 plus 12½ percent of the next \$1,500). Consequently, the taxpayer's basis in his residence would be increased by \$2,127.50 (the \$2,500 of expenditures minus the \$372.50 credit).

The heat pump credit is a refundable credit. As a result, a taxpayer whose tax liability is less than the amount of the credit would receive a refund of the difference, while the amount of his credit that equals the amount of his tax liability would be available to eliminate that liability.

The House-passed bill did not provide a tax credit, or any tax incentive, for installation of a heat pump.

#### *Effective date*

This credit is to be available only for expenditures made (or, in the case of an accrual basis taxpayer, incurred) for qualifying equipment and installations which occur after June 30, 1976, and before January 1, 1979, except in the case of binding contract entered into before that date. The installations themselves must also be made during that same period. In addition, if the expenditure is to qualify, the heat pump must be installed on a dwelling unit located in the United States which is occupied or habitable on May 25, 1976. Upon expiration of the credit period, the committee intends to reexamine the usefulness of this credit approach and the availability of other approaches to secure the necessary energy savings.

#### *Revenue effect*

It is estimated that the credit for heat pumps and their installation will reduce revenues by \$3 million in fiscal 1977, \$5 million in fiscal 1978, and \$6 million in fiscal 1979.

#### 4. CREDIT FOR WIND-RELATED RESIDENTIAL ENERGY EQUIPMENT (SEC. 3 OF THE BILL AND SEC. 44B OF THE CODE)

##### *Present law*

Under present law, no special tax credit or deduction is allowed for wind-related energy equipment (such as a traditional windmill) installed with respect to a residence.

##### *Reasons for change*

The committee believes a tax credit is needed for wind-related energy equipment for much the same reasons tax credits are needed (and

provided in the committee's reported bill) for solar and geothermal energy equipment. It is not possible at this time to foresee which of these new industries will be most successful at replacing fossil fuels in providing residential energy sources. The committee believes it appropriate, therefore, to grant wind-related energy equipment the same tax treatment as is provided for solar and geothermal equipment.

#### *Explanation of provision*

The committee amendment provides a refundable income tax credit for wind-related energy equipment installed on or adjacent to a residence. Like the solar and geothermal equipment credits, the credit for wind-related energy equipment is 40 percent of the first \$1,000 of qualified expenditures, plus 25 percent of the next \$6,400 (a maximum credit of \$2,000). To qualify, both the equipment and its installation must be paid for by the individual (or individuals) using the edifice as a residence. Thus, the owner or a tenant may qualify, but a builder or developer adding the wind-related equipment to a house he does not intend to use as his residence would not qualify for this credit (although he might qualify for the investment credit given under this amendment for wind-related energy equipment installed for commercial or industrial purposes).

For purposes of the dollar limitations on the amount of expenditures that may be taken into account in determining the credit, expenditures for solar, heat pump, and geothermal equipment and installation must be aggregated with expenditures for wind-related equipment and installation. For example, a taxpayer who has already made purchases of \$7,400 for solar equipment allowed during the credit period could not make use of the tax credit for expenditures on wind-related equipment for the same residence.

This tax credit is to be allowed only for installations and expenditures made, or, in the case of an accrual basis taxpayer, incurred, through 1980. Before that time, the committee will review the credit to see whether it should be continued after 1980. Also, both the installation and the expenditure must occur after June 30, 1976. The credit is for both the expenditures for wind-related equipment itself and also for expenditures for its installation.

Unlike the case of the credit for installation of insulation on an existing residence, wind-related energy equipment expenditures for installations on both existing and newly-constructed residences<sup>15</sup> qualify for the credit.

The credit may be allowed only for qualified payments made during the year or other tax period for which the tax return is filed. To the extent that (during the period for which the credit is in effect) the taxpayer during any prior year paid for installations of energy equipment for which a special credit provided by this bill was allowed, the dollar limitations on the solar, geothermal, heat pump or wind-related energy expenditures for which the credit is given must be reduced by the amount of the earlier qualified payments.<sup>16</sup>

If an individual who has already been allowed the maximum credit under the dollar limitations for solar, geothermal, heat pump, or wind-

<sup>15</sup> Condominium and cooperative units may be treated as separate residences.

<sup>16</sup> Note that expenditures before July 1, 1976, and installations before that date are not to qualify for the credit. Consequently, such pre-July 1, 1976, expenditures and installations are to be ignored in determining whether and to what extent the expenditure limit is reached under this provision.

related energy equipment installed on one residence (or who has partially used his limitations) thereafter changes his residence, the limitations begin again to run from zero, and he may claim 40 percent of the first \$1,000 paid, and 25 percent of the subsequent qualifying expenditures (or half those amounts, in the case of qualified heat pump expenditures) for equipment installed on his new residence.

The wind-related energy equipment for which the credit may be claimed is that which uses wind-related energy to generate electricity to heat or cool a residence (or residences) or to provide hot water for use inside it, and (1) which meets such standards or criteria for performance as the Secretary of Housing and Urban Development may prescribe, (2) the original use of which commences with the taxpayer, and (3) which has a useful life of at least three years.

At least some of the wind-related equipment for which this credit is provided is expected to be used as an additional source of energy for a residence which also contains a conventional energy source, such as an oil or gas furnace. In this case, the credit, of course, only is available for the additional equipment necessary to permit the wind-related energy to function.

If joint owners install qualified wind-related energy equipment on a common residence, the credit is to be apportioned among those who paid for the equipment and its installation in accordance with the ratio which each owner's payment bears to the total payment during the calendar year. Similarly, if one piece of wind-related equipment provides energy for more than one residence, the residents who benefit from the wind-related energy source are to share the credit according to the ratios of the payment which they bore.

In the case of qualifying expenditures by a cooperative housing corporation, each of the corporation's shareholders who is entitled to occupy a dwelling unit owned by the corporation, and who in fact occupies the dwelling unit as his residence, is treated as the resident in that unit and as having paid for the portion of the corporation's qualifying expenditures that is the same as his proportionate share of the corporation's total outstanding stock. Similarly, in the case of duplex, triplex, etc., houses, the expenditure for wind-related energy may be shared among the respective residents.

Expenditures made by a resident that qualify for the credit would normally constitute capital expenditures that increase the tax basis of the residence. In order to avoid a double tax benefit (allowance of a credit and also a reduced gain on sale), the committee amendment requires that any increase in basis on account of a qualified wind-related energy expenditure be reduced by the amount of the expenditure that is allowed as a credit. For example, assume that the taxpayer makes \$2,500 of qualified expenditures of the sort which would normally increase his basis in his home. The maximum credit allowable in this case is \$775 (40 percent of the first \$1,000, plus 25 percent of the remaining \$1,500). Consequently, the taxpayer's basis in his home would be increased by \$1,725 (the \$2,500 of expenditures minus the \$775 of tax credit).

The wind-related energy equipment credit is a refundable credit. As a result, a taxpayer whose tax liability is less than the amount of the credit would receive a refund of the difference, while the amount of

his credit that equals the amount of his tax liability would be available to eliminate that liability.

The House bill contains no comparable provision.

#### *Effective date*

The committee amendment makes the credit available in cases in which both the expenditure and the installation of the qualifying equipment occurred on or after July 1, 1976, and before January 1, 1981. Before the credit period expires after December 31, 1980, the committee intends to reexamine the usefulness of this credit approach and the availability of other approaches to secure the necessary energy savings.

#### *Revenue effect*

It is estimated that this provision will result in a decrease in budget receipts of less than \$5 million annually.

#### b. BUSINESS INSULATION CREDIT (SEC. 4 OF THE BILL AND SEC. 46A OF THE CODE)

#### *Present law*

Under present law, property eligible for the investment tax credit does not generally include buildings or their structural components (sec. 48(a)(1)(B)). Structural components which are excluded from the credit include such parts of a building as walls, ceilings, paneling for walls, electrical systems and plumbing systems. Similarly, other parts of a building which relate to the operation of the building as a whole or are of an inherently permanent nature are considered structural components and do not qualify for the investment credit.<sup>17</sup>

#### *Reasons for change*

The committee believes an important factor in reducing consumption of our energy resources is to encourage measures which result in the more efficient use of these resources. Studies have shown that the efficiency of heating and cooling systems in buildings is significantly increased (and energy consumption is reduced) where adequate insulation is used. As in the case of residences, the committee has concluded that the installation of insulation in business properties is an appropriate energy-saving measure which should be encouraged and has made the 10-percent investment credit available for insulation and certain other energy-saving building components installed in business properties.

#### *Explanation of provision*

This provision expands the types of property eligible for the investment credit to include insulation and other energy-saving components which are installed in existing buildings and structures used in a trade or business or for the production of income. The credit is available for both the costs of the insulation material and its installation. Except for a change in its effective period, this committee amendment is the same as the provision in the House bill (H.R. 6860).

In order to qualify for the investment credit under this provision, insulation must be installed after December 31, 1976, and before Janu-

<sup>17</sup> Rev. Rul. 75-78, 1975-10 I.R.B. 7; Rev. Rul. 70-103, 1970-1 Cum. Bull. 6.

ary 1, 1979. Similarly, the taxpayer's costs for the insulation must have been paid or have been properly accruable under the taxpayer's method of accounting after December 31, 1976, and before January 1, 1979. In addition, the insulation must be installed in a building or other structure which was, on January 1, 1977, being used for business purposes or for the production of income. However, it is not necessary that the business use of the building (in which the insulation is installed) occur in the hands of the taxpayer claiming the credit for this purpose. For example, a taxpayer may claim the credit on his costs for insulation installed in a building he acquires after December 31, 1976; where the building was used for business purposes both on that date and on the date of the installation by the taxpayer.

In the case of leased buildings, the credit is available to either the owner or the tenant who installs insulation in the building, regardless of any lease terms or provisions of local law under which title to property attached to a leased building passes to the owner of the building. However, it is available only to the one of these parties upon whom lies the ultimate burden for the cost of the insulation. For example, if the tenant installs insulation in a leased business structure at his own expense and without any direct or indirect remuneration by the owner, the tenant is entitled to the investment credit for the costs of the insulation. However, if the tenant recovers these costs from the owner, either directly or through a reduction in rental payments, the owner is entitled to the investment credit. In this latter situation, the owner is considered to have paid or incurred his costs when repayment is made to the tenant either directly or through a reduction in the rental payments.

Insulation does not qualify for the investment credit where it is installed as part of a reconstruction of the building. For these purposes, the term "reconstruction" is intended to mean a major reconditioning or renovation of the building.

The investment credit is also made available for insulation installed in business properties which are used predominantly to furnish lodging. As a result, the credit under the provision is available for insulation installed in hotels or motels used to provide accommodations for transients as well as for insulation installed in rental properties, such as apartments, which are leased for periods in excess of 30 days.

The insulation for which the credit may be claimed includes storm or thermal windows, storm doors, and similar items (such as weatherstripping or caulking, etc.). In addition, the committee amendment includes clock thermostats as an item eligible for the credit. However, the insulation qualifies only if it is specifically and primarily designed to reduce the heat loss or gain on a building, is material first used by the taxpayer claiming the credit, has a useful life (in the hands of the taxpayer) of at least three years, and meets performance standards to be set by the Secretary of the Treasury or his delegate after consultation with the Administrator of the Federal Energy Administration and the Secretary of Housing and Urban Development. (In conjunction with this last criteria, it is understood that the National Bureau of Standards, which is already engaged on performance studies regarding insulation materials, will be consulted for its expertise on technical questions concerning the properties of materials.)

In addition, the credit is to be allowed only for the original installation of insulation in a business building or structure. As a result, the replacement of, for example, a storm window with another storm window of substantially similar insulating quality does not qualify for the credit. Insulation removed from one business structure and placed on another business structure also will not qualify for the credit because of this requirement.

The Secretary of the Treasury or his delegate is to prescribe methods by which expenditures for qualified insulation are to be verified by taxpayers.

Qualifying insulation materials must be specifically and primarily designed for insulation use. Except with reference to storm windows or doors and thermal windows, the items that qualify for the credit are intended to be primarily and specifically insulating materials, and not materials that are generally considered to be structural or decorative in purpose. For example, draperies and wood paneling would not qualify although they may have been designed to have an insulating effect. Whether or not other materials, such as ventilating fans and clock thermostats, etc., qualify is left to administrative determination which should take into account the extent of the energy saving, the extent of their use of conventional energy sources and whether they otherwise meet the standards of this provision. In addition, since the credit is only for insulation installed on existing buildings, and not for new or reconstructed buildings, substantial structural improvements or replacements, such as the replacement of an existing wall with a new wall having greater insulating qualities, would not qualify for the credit. Nevertheless, since the committee expressly named storm windows or doors and thermal windows as qualifying for the credit, the replacement of an existing window or door by a storm door or window, or thermal window, could qualify although these items might be considered structural in nature.

The credit is available for materials that either reduce heat gain or reduce heat loss, as well as for materials that possess both these qualities. For example, polyester film installed on windows that has a cooling quality and which fulfills the requirements of the bill common to all qualifying materials would be eligible for the credit although it may possess no quality of reducing heat loss. On the other hand, polyethylene film would normally not qualify because it does not usually have a useful life of at least three years.

#### *Effective date*

The changes made by this provision of the committee amendment are to apply to installations of insulating components in qualifying buildings after December 31, 1976, and before January 1, 1979, where the costs of these components are also paid or accruable during this period.

#### *Revenue effect*

It is estimated that this provision will reduce business tax liabilities by \$11 million for fiscal 1977, \$26 million for fiscal 1978, and by \$15 million for fiscal 1979.



6. BUSINESS SOLAR AND GEOTHERMAL EQUIPMENT CREDIT (SEC. 4 OF THE BILL AND NEW SEC. 46A OF THE CODE)

*Present law*

Under present law, property which is attached to or becomes a structural component of a building does not generally qualify for the investment credit. To the extent solar or geothermal energy equipment constitutes a structural component of a building, therefore, it does not qualify for the investment credit.

*Reasons for change*

As indicated previously, the committee believes that it is important to encourage the development of new sources of energy. Primary sources of new energy are expected to be those obtained from the capture of heat or wind energy directly from the sun or the earth. The amendment made by the committee already takes this into account in providing solar and geothermal equipment credits for use of these sources of energy in a residence. It is probably still more important, however, to also encourage the use of these new forms of energy by industrial and commercial users, which account for approximately 55 percent of the nations energy consumption.

As indicated in connection with the residential credit, both the solar and geothermal industries provide an important way of conserving fossil fuel and mitigating fossil fuel energy shortages. Since these industries are in their first stages of development, the committee believes a tax credit is needed to encourage interest in the use of these forms of energy at a more rapid pace than could otherwise be expected.

*Explanation of provision*

The committee amendment extends the investment credit to solar or geothermal energy equipment installed for use in a trade or business or as part of a facility held for the production of income. The amount of the credit is to be 20 percent of the qualified solar or geothermal energy equipment installation investment beginning January 1, 1977, through 1979. At that time the credit is reduced to 10 percent for this type investment through 1981. Both the 20-percent and the 10-percent credits apply to the costs for the solar or geothermal energy equipment itself and also to costs of installation.

The credit is to be applicable whether or not the equipment would otherwise fail to qualify because it is a structural component of a building. Furthermore, it is to be applicable even if the equipment is property used for lodging that would otherwise fail to qualify for the investment credit (under sec. 48(a)(3) of the Code).

In the case of leased buildings, the credit is available to either the owner or the tenant who installs solar or geothermal energy equipment in conjunction with the building, regardless of any lease terms or provisions of local law under which title to property attached to a leased building passes to the owner of the building. However, it is available only to the one of these parties upon whom lies the ultimate burden for the cost of the equipment. For example, if the tenant installs equipment in a leased business structure at his own expense and without any direct or indirect remuneration by the owner, the tenant is entitled to

the investment credit for the costs of the equipment. However, if the tenant recovers these costs from the owner, either directly or through a reduction in rental payments, the owner is entitled to the investment credit. In this latter situation, the owner is considered to have paid or incurred his costs when repayment is made to the tenant either directly or through a reduction in the rental payments.

The investment credit is also made available for solar or geothermal energy equipment installed in business properties which are used predominantly to furnish lodging. As a result, the credit under this provision is available for solar or geothermal energy equipment installed in rental properties, such as apartments, which are leased for periods in excess of 30 days, as well as for equipment installed in hotels or motels used to provide accommodations for transients.

The solar or geothermal energy equipment for which the credit may be claimed is that which uses solar or geothermal energy to heat or cool a building or to provide hot water for it. In addition, in the case of solar energy equipment, it must meet the definition performance criteria prescribed by the Secretary of Housing and Urban Development under the Solar Heating and Cooling Demonstration Act of 1974. Geothermal equipment is property which is necessary to distribute or use geothermal steam and associated geothermal resources as defined in section 2(c) of the Geothermal Steam Act of 1970 (30 U.S.C. 1001 (c)). Furthermore, in both cases, the original use of the equipment must originate with the taxpayer.

This investment tax credit covers equipment such as heat exchangers and special ducting. Geothermal energy is not to be restricted to any particular type of fluid or gas extracted from a geothermal resource.

It is usually necessary, at least at this stage of the industry's technical advancement, to use heating or cooling units employing conventional energy sources as "back-ups" to solar energy equipment for use or supplemental use when very little sunlight has been available for an extended period of time. The credit in this provision is not to extend to expenditures for these back-up units.

The House bill provides a similar credit for solar energy except that: (1) the credit would be available only for equipment purchased and installed after March 17, 1975, and before January 1, 1981; (2) the credit would be at the then current investment credit rate.

#### *Effective date*

To qualify for the 20-percent credit, the solar or geothermal energy equipment must be installed after December 31, 1976, and before January 1, 1980.

#### *Revenue effect*

The revenue loss under this provision is expected to be negligible.

### 7. INVESTMENT CREDIT FOR WIND-RELATED ENERGY EQUIPMENT USED IN THE PRODUCTION OF ELECTRICITY (SEC. 4 OF THE BILL AND SEC. 46A OF THE CODE)

#### *Present law*

Under present law, a 10-percent investment credit is permitted for the capital costs of several types of business machinery, equipment, and facilities used in a trade or business or held for the production of

income. As a facility used as an integral part of the production of electrical energy, wind-related energy equipment used to generate electricity may be entitled to the investment credit of present law (sec. 48(a)(1)(B)(i)), unless it is a structural component of a building.

#### *Reasons for change*

The committee believes it is important to encourage the development of new methods of generating electricity that do not involve the consumption of fossil fuels. Through the use of a special investment credit for this purpose, the committee hopes to help preserve an adequate supply of electrical energy for our industrial and business needs, while simultaneously conserving fossil fuel and mitigating fossil fuel energy shortages. Since the use of windmills in the generation of electricity is in a new stage of development, in which new and more efficient ways of producing electricity through the use of windmills are being discovered, the committee believes a tax credit is needed to encourage this new development to continue at a more rapid pace than could otherwise be expected.

#### *Explanation of provision*

The committee amendment extends the investment credit (at an increased rate for a limited period of time) to wind-related energy equipment (such as windmills) installed for use in the trade or business of producing electricity or to generate electricity for use in a trade or business. The amount of the credit is to be 20 percent of the qualified wind-related energy equipment installation investment after December 31, 1976, and before January 1, 1980. The 20-percent credit applies to the costs of the wind-related energy equipment itself, as well as the costs of its installation.

The credit is to be applicable whether or not the wind-related energy equipment would otherwise fail to qualify for the general investment credit because it is a structural component of a building.

In the case of wind-related energy property under construction on May 25, 1976, this special investment credit is to apply only to that portion of the basis of the property which is attributable (in accordance with Treasury regulations) to construction, reconstruction, or erection after that date.

This credit is not to apply to any equipment acquired by the taxpayer with amounts paid him as a grant by the Federal Government, or by any of its agencies or instrumentalities, unless the grant was made in the form of a loan or a loan guarantee.

The House bill contains no comparable provision.

#### *Effective date*

To qualify for the 20-percent credit, the wind-related energy equipment must be acquired, constructed, reconstructed, or erected by the taxpayer after December 31, 1976, and placed in service before January 1, 1980.

#### *Revenue effect*

It is estimated that this provision will result in a decrease in budget receipts of less than \$5 million annually.

8. 12-PERCENT INVESTMENT TAX CREDIT AND OTHER CHANGES RELATING TO ENERGY CONSERVATION AND PRODUCTION PROPERTY (SEC. 4 OF THE BILL AND SEC. 46A OF THE CODE)

*Present law*

Under present law, a 10-percent investment credit is permitted for the capital costs of several different types of special-purpose business machinery, equipment and facilities. However, in general, no investment credit is allowed for a building and its structural components (sec. 48(a)(1)(B)).

*Reasons for change*

The committee concluded that our energy goals can better be met and our supply of available energy can be increased by providing an investment credit for certain types of energy-related investment, and by increasing the investment credit for other types of energy-saving equipment to which the investment credit of existing law is already extended.

Energy saving can be achieved through the increased use of insulation; however, the present investment credit is not normally available for purchases of insulation because insulation has been considered a structural component of a building. It is the intent of the committee to stimulate energy conservation in commercial, industrial and residential activity by extending the investment credit to insulation, as well as to other energy-related investment such as solar or geothermal and structural components. (The investment credit provisions relating to insulation and solar, wind-related, and geothermal property are discussed above.)

The commercial production of oil from shale rock and the gasification or liquefaction of coal are areas where our energy resources will be substantially enhanced when commercially viable production can begin. For the same reasons, investment in equipment to permit the use of waste as a fuel and to process waste into fuel, and equipment to recycle and to sort and prepare solid waste for recycling should be encouraged.

Equipment that is used to convert organic material into energy, or into methanol or any other synthetic fuel, should also be promoted. Deep-mining coal equipment produces coal, of which we have a continuing abundance, that might be used as fuel in replacement of our dwindling domestic supply of oil and natural gas fuels. Similarly, because of their importance as an energy-efficient method of transportation and because of their importance in the movement of coal, the committee believes the modernization of railroad facilities is also to be encouraged.

The committee's amendment reflects agreement with the objective in the House-passed bill in providing tax incentives to various types of property to expand the nation's supply of energy sources.

The House energy tax bill would permit 5-year amortization (in lieu of regular depreciation) for the capital cost of the equipment to be encouraged. This equipment related to waste-burning and recycling equipment, solar energy equipment, oil shale, coal gasification and liquefaction facilities, solar energy equipment, equipment used in

deep-mining coal, and certain railroad equipment and rolling stock. Taxpayers, however, who would elect a 5-year rapid writeoff under the House bill would have been entitled to an investment credit of only two-thirds of the cost of the property. In many (if not most) cases, taxpayers would receive greater tax benefits by depreciating the property under the double-declining balance method over the property's guideline or ADR life and thereby also retaining a full investment credit. The committee did not consider this rapid amortization to be sufficient additional incentive to bring about the desired increase in energy conservation investments.

#### *Explanation of provisions*

The committee amendment replaces the amortization provisions in the House energy tax bill (H.R. 6860) with an increase in the investment credit to 12 percent for certain kinds of energy property.<sup>18</sup>

The committee amendment extends a 12-percent investment credit for a period of 4 years to machinery or equipment necessary to permit waste (or a combination of waste and other fuels) to be used as a fuel. This use as a fuel includes both waste burning and the manufacture of synthetic fuels from solid waste. The increased credit is to be available only for so much of the property as is necessary to facilitate the use of waste as a fuel or the addition of waste to fuels and is also available to equipment used to recycle solid waste or to prepare solid waste material for recycling. In order to encourage the conversion of organic materials, the committee amendment also provides a 12-percent credit for a period of 4 years for equipment used in the conversion of organic material into methanol or any other synthetic fuel which can be substituted for, or blended with conventional fuels. This credit covers equipment which uses organic material which is not waste but which has been grown for conversion to a fuel. In addition, a 12-percent investment credit is provided for a period of 10 years to oil shale equipment as well as for coal liquefaction and gasification equipment and equipment to remove pollutants from coal. Further, the committee amendment makes available a 12-percent investment credit for a period of 4 years to machinery, equipment and structural components of underground coal mines.

The investment credit described above is to be available for any one or more of these types of energy conservation and production equipment. In the case of the above credits, an additional 2-percent credit is to be available for taxpayers who establish or maintain an employee stock ownership plan (ESOP) to which the employer contributes stock equal to 2 percent of the qualified investment in these energy properties. Each category of energy conservation and production equipment eligible for the 12-percent credit is further described below.

#### *Waste conversion equipment*

This type of equipment is defined as any depreciable machinery or equipment which is necessary to permit the use of waste as a fuel in a facility burning a combination of waste and oil as its principal fuel, which is used to process waste into a fuel, or which is used to sort and

<sup>18</sup> See also separate discussion above relating to credits for business insulation and solar, wind-related, and geothermal property.

prepare solid waste for recycling or for use in recycling solid waste. Thus, the provision is intended to apply both to use of waste as a fuel and to the recycling of solid waste.

Under present technology, waste (primarily solid waste) that is properly sorted, classified, and shredded can be injected into a furnace to be used as a fuel in combination with oil or some other fuel in electrical generating facilities and sometimes in heating systems. In an efficient system, solid waste can replace as much as 20 percent of the oil which otherwise would be required as a fuel. In other situations wastes may be burned as fuel instead of oil after oil has been used initially to start the process. These uses of waste as a fuel not only provide an environmental sound method of disposing of the waste, but also can be used to reduce our reliance on oil as a fuel.

In the case of waste used as a fuel, the credit is limited to the additional machinery or equipment which is required to be added to an existing facility or to be placed in a new facility if waste is to be burned as a fuel. Thus, equipment that relates to the unloading and storage of waste fuel at the burning site, systems for feeding the shredded waste from the storage area to the furnace, and refuse firing ports to inject the waste fuel into the furnace are all eligible for the credit. In addition, machinery or equipment used to process waste into a fuel is to be eligible for the credit, regardless of whether the waste is to be used as the sole fuel or in combination with oil or other conventional fuels. In most operations, this would include equipment that takes solid waste which may be used as a fuel, sorts it from other wastes and puts it into whatever state, form, or shape is necessary for it to be used as a fuel. This process may involve, for example, compressing into logs or bricks, or baling.

The credit also is available for machinery and equipment that sorts and prepares solid waste material for recycling or that recycles solid waste. In the former case, there are machines that take municipal solid waste and separate, shred, and sort it into various classes of waste, such as paper, textiles, glass, ferrous metals, and nonferrous metals. Equipment to recycle solid waste paper, for example, includes equipment that reduces old newspapers, paperboard boxes and writing papers to a fibrous pulp and reconstitutes the pulp into paperboard. Recycling equipment also could be used to melt scrap metal and glass which would be refabricated (with or without virgin materials) into new metal and glass products.

#### *Organic fuel conversion equipment*

The bill allows a 12-percent credit for 4 years for organic fuel conversion equipment, which is defined to mean any depreciable machinery or equipment used in converting organic material (other than waste material) into energy or into methanol or any other synthetic fuel which can be substituted for, or blended with, any petroleum product for use as a fuel.

#### *Railroad facilities*

This provision makes available a 12-percent investment credit for railroad rolling stock and depreciable, tangible property that is an integral part of (1) a communications, signed or traffic control system, (2) a rolling stock classification yard, or (3) a facility for loading and unloading trailers and containers on and from railroad cars.

For the purposes of this provision, equipment that is an integral part of communications, signal and traffic control systems may include signals and interlockers and components of electronics communications systems which may be radio, radar and microwave systems. In rolling stock classification yards, eligible equipment means the equipment for the routing of railroad rolling stock which includes lighting, computers, signals and other electronic devices necessary for operation and control of a classification yard, and facilities for the movement of cars and locomotives. Facilities for loading or unloading trailers and containers means structures, fixtures, machinery and appurtenances that comprise terminals for this loading and unloading.

Rolling stock includes locomotives and all types of freight cars used by a domestic railroad on a full-time basis or on a part-time basis when shared with a Canadian or Mexican railroad common carrier on a per diem basis. The term rolling stock also includes railroad cars used predominantly within the United States to haul coal if used by the taxpayer in his trade or business. This provision will permit a taxpayer to purchase, for example, gondolas or hoppers to carry coal from a coal mine to the site of his business. The taxpayer could be a public utility that burns coal as the fuel used in generating electricity or another business which burns coal in relation to a manufacturing process. Taxpayers who are in the business of purchasing coal for resale to others, however, are not eligible for the 12 percent credit.

The railroad equipment covered by this provision (except for coal cars) is equipment used by a common carrier engaged in railroad transportation and subject to the jurisdiction of the Interstate Commerce Commission. The equipment must be used full-time by a domestic railroad common carrier or part-time when its only other use is by a Canadian or Mexican railroad common carrier on a per diem basis. Qualified railroad equipment also may be used and owned by a carline company, and by a switching or terminal company at least 95 percent of whose stock is owned by one or more domestic railroad common carriers.

#### *Deep mining coal equipment*

Efforts to increase the uses of coal and increase coal mining capacity mean that industry must increase its capital investment in order to increase coal output and to do so at a faster rate than in the past. Present mining techniques also require newer and more sophisticated equipment. For example, the "longwall" method of mining uses an expensive shearing machine which cuts into the seam and creates a continuous stream of coal to be carried away on a conveyor belt. New techniques and machines are also being developed for detecting the presence and nature of underground coal from the surface and for removing sulfur from coal, the result of which will be to increase the demand and the supply of coal. Although coal is mined both on the surface and underground, the costs (and the geological difficulties and safety risks) are greater in trying to reach our enormous deep sources of coal. In many cases, this type of coal has higher energy and better bituminous quality (and lower transportation costs) than strip-mined coal.

The committee amendment allows a 12-percent investment credit for deep mining coal equipment for a 4-year period in recognition of the long period required for planning and bringing a new deep mine

to full production. This provision covers depreciable equipment needed to reach underground deposits of coal in slope mines, shaft mines, or drift mines and to extract the coal and bring it to the surface.<sup>19</sup>

It applies to whatever specific method is used in the underground mine (i.e., continuous and conventional mining and to the longwall and shortwall methods) and to the machines and equipment used in the process of actual mining, including conveyor belts, loading machines, and cars used to bring coal and miners out of the mine.<sup>20</sup>

The credit also applies to machinery and equipment used in newly opened mines, in new shafts or tunnels in existing mines and to reopened shafts or tunnels.

This additional 2-percent credit does not include property used in surface mining. The credit is not to be available for equipment used on the surface in removing earth and rock layers and removing coal lying close to the surface. This exclusion applies to contour and area mining and to auger mountaintop, open pit and similar types of strip mining. Also, the extra credit is not intended to be available for conveyor belts or similar means of transporting coal from the mouth of the mine to a preparation plant, or for other activities at the surface involving cleaning, concentrating processing, or loading coal for shipment from the mine site, nor is the extra credit to be available for reclamation equipment used at the surface. The extra credit is intended to be available, however, for machines used at the surface to locate underground supplies of coal or to analyze its content before actual extraction begins. The extra credit is also to be available for equipment used to prevent underground drainage or other defects in the mine or, where necessary or desirable, to seal it.

#### *Coal liquefaction and gasification processing equipment*

Commercially usable quantities of synthetic gas, crude oil, and other liquid fuels can be processed from solid coal. Low-sulfur gas, for example, can be obtained from coal either as pipeline quality gas (so-called SNG) or as a low BTU gas which has valuable uses to generate power. Synthetic crude oil usable as a fuel for firing generators or for heating purposes can also be processed from coal. Ash, sulfur and other pollutants can be removed from coal before burning through closed-system processes which produce solvent-refined coal. The committee believes that it is desirable to encourage such processes for using coal as a clean-burning fuel.

Although chemical processes to obtain clean fuels from coal have existed for over forty years, the technology required for commercial production has not yet been perfected. Nor have related water and plant construction problems yet been solved. However, Government-assisted or sponsored pilot projects, and private joint ventures, are presently in operation to find answers to these various problems.

<sup>19</sup> As used in the committee amendment, the shaft, drift, and slope techniques have the meaning generally assigned by the industry. A shaft mine is generally one in which a hole is excavated straight down to the coal seam, from which miners make horizontal entry through tunnels spreading out from the shaft. A drift mine develops coal beds in hillsides through an entrance horizontal to the coal seam and through which the miners make tunnels. A slope mine involves a slanted tunnel to reach coal beds in hilly areas where the seam is near the surface but too far underground for surface mining. The amendment also covers equipment used in an underground mine which has more than one of these types of openings. The term coal includes all types of coal as commonly known, including lignite, anthracite, and bituminous coal.

<sup>20</sup> Coal mining safety equipment also is to be applied to the credit provided by the committee amendment.



In order to aid in the conversion of coal into gas or oil, the committee amendment permits a 12 percent investment credit for the capital cost of depreciable machinery or equipment fused for processing coal into a liquid or gas. This provision covers the range of liquids and gases which can be derived from coal (as well as usable byproducts), including low-BTU gas, high-BTU gas, synthetic crude oils and chemical feedstocks. In addition to gasifiers, reactors, and other equipment directly involved in processing the coal, eligible machinery and equipment includes the facilities for coal preparation and crushing; for upgrading coal oil to synthetic crude oil; for recovering solvent and sulfur; for preparing and disposing of water; and for product storage. Equipment used to drill wells, or to fracture coal in a mine and to pipe process gas to the surface, as part of underground gasification is also included. The credit is also to be available for equipment used in the solvent refining process to remove sulfur, ash or other pollutants in order to produce a clean solid fuel from coal.

The provision also permits machinery and equipment used in demonstration and pilot plants and in other testing activities (as well as machinery and equipment used in commercial production) to receive the extra credit if the equipment is the type that, if used in a trade or business, would be depreciable.

The credit is not to be available, of course, if the item of cost incurred by the taxpayers is deducted in a taxable year (See Regulations section 1.48-1(b)(3)). Also, the credit is not to be available with regard to any monies granted to the taxpayer by the Federal Government. The credit may be claimed, however, with respect to funds borrowed from the Federal Government or borrowed under a Federal guarantee of the loan. In addition, the credit also does not extend to the refining of synthetic crude oil or to the outside structure or shell of a processing plant.

#### *Shale oil conversion equipment*

The extraction of fuels from shale rock offers a long-term prospect of making shale oil an important domestic source of energy to supplement conventional oil and gas production. Oil shale is a sedimentary rock, much of which is underground, from which crude oil and gas can be extracted by the application of heat. The characteristics of these shale fuels match conventional natural gas or oil in many respects and make them usable in place of natural fuels for many purposes. The United States has large estimated reserves of shale rock, particularly in Colorado, Utah, and Wyoming, but there is yet no commercial production of oil or gas from this source. At the present time several companies are engaged, individually and through joint ventures, in test projects which are necessary before commercial production can occur. These activities include measuring the net energy gains involved in shale oil recovery, collecting baseline data on air, water, and disposal problems, and perfecting the processes for extracting oil from the rock. Several different techniques for removing oil from shale are in the experimental stage, but no one method has as yet proven to be commercially sound. (Some techniques involve conventional underground excavation and processing in above-ground plants; others involve surface mining in open pits; still others involve fracturing the rock in underground caverns and then heating it in place in order to remove the oil (the so-called *in situ* method).)

The committee believes that commercial production of shale oil should be encouraged as an additional energy source. In order to provide a further incentive to reach this goal, the bill permits a 12-percent investment credit for capital expenditures paid or incurred during a 10-year period for machinery or equipment which, if incurred in a trade or business, is or would be depreciable and which is necessary to reach, extract and convert shale rock into raw shale oil. The provision does not cover expenditures for refining crude shale oil after it has been extracted from the rock. However, it is intended to cover machinery and equipment used to obtain water needed for the extraction process, to dispose of spent shale after the oil has been extracted, to dispose of run-off waters from wastes produced in the extraction, and to remove impurities from oil and gas produced from the shale. This provision also permits machinery and equipment used in demonstration and pilot plants for shale oil extraction to receive the 12-percent credit, provided that the taxpayer's cost is not expensed rather than recovered through a method of depreciation, and provided that the cost as to which the credit is applied does not include grants received from the Federal Government.

*Other provisions*

*Regulations.*—The committee amendment specifically authorizes the Secretary of the Treasury to prescribe by regulation the further rules needed to carry out the purposes of this provision.

*Employee stock ownership plans.*—In addition to the investment credit rate made available by the committee amendment for the types of energy property described above, a corporate taxpayer may claim an additional 2-percent investment credit if the taxpayer establishes or maintains an employee stock ownership plan, to which the taxpayer contributes an amount equal to the 2 additional percentage points. The base on which the additional 2 percentage points is to be computed is the aggregate qualified investment of the taxpayer (as determined under the rules of present law in section 46(c) and (d) of the Code) in one or more of the energy properties covered by this provision. The requirements for the type of employee stock ownership plan which must be established or maintained under this optional extra credit are described in section 301(d) of the Tax Reduction Act of 1975 (P.L. 94-12, 89 Stat. 26).<sup>21</sup> The taxpayer's election to use the additional 2-percent credit must be made in the form and at the time that the Secretary specifies by regulation.

*Tennessee Valley Authority.*—The Tennessee Valley Authority (TVA) makes annual payments to the Federal Government as a return on the investment in power facilities that was made by appropriation of Federal funds. TVA also competes with private electric utilities in providing electric energy. TVA and its competitors have made investments in the same kinds of facilities that are used to provide and transport fuel to generating stations and distribute electric energy to consumers. The competitors are eligible for the investment credit which reduces the investors' cost of capital and may be reflected in their price

<sup>21</sup> As amended by the committee amendment relating to ESOPs, described above under *Capital Formation*.

for electric energy. In order to equalize the competitive positions of all the electric companies in the area where TVA operates, the committee amendment makes the TVA eligible, in effect, for the special 12-percent credit provided by a new section 46A of the Code with respect to investments in such energy-conserving equipment as organic fuel conversion equipment, coal processing equipment, coal pipeline equipment, and shale oil conversion equipment.

Under this amendment, credits earned by TVA for purchases of the equipment described above may be deducted from the payments it makes to the Federal Government as return on the appropriation investment in power facilities and the annual repayment sum. Credits earned in any fiscal year that are in excess of the sum of payments and repayments for that fiscal year may be carried over to the following fiscal year under existing rules for carryover of investment credits. If the excess credit is not used in the following fiscal year, it will no longer be available to reduce the payments to the Federal Government.

#### *Effective date*

The 12-percent investment credit for waste conversion equipment, organic fuel conversion equipment, coal processing equipment, deep mining coal equipment and shale oil conversion equipment applies to property acquired after December 31, 1976, and placed in service by December 31, 1979.

The Tennessee Valley Authority provision applies to payments made to the Federal Government for the fiscal year beginning on October 1, 1976, and thereafter.

In the case of each qualifying type of energy property, the acquisition requirement will be satisfied if the construction, reconstruction, or erection of the property (whether or not by the taxpayer) begins after the applicable effective date. If a taxpayer has not placed property in service by the last date permitted under the above rules for doing so, rules similar to the rules in present law relating to termination of the investment credit between 1969 and 1971 (sec. 49) are to be prescribed by the Service for determining the credit amount that will be allowed. Finally, if a taxpayer claims an investment credit under this provision but uses the property before the end of its useful life in a way other than that for which the credit was allowed, the taxpayer is to be treated as having made a disposition of the property on the date on which the other purpose or use substantially began. (As such, the disposition rules of sec. 47 will be applied under regulations to be issued by the Service.)

#### *Revenue effect*

The increase in the investment credit for qualified waste-burning equipment will reduce budget receipts by \$2 million in fiscal year 1977 and \$5 million a year thereafter. The higher investment credit for oil shale production equipment will reduce budget receipts by \$4 million in fiscal year 1977 and \$13 million in fiscal year 1978. The higher investment credit for deep-mining coal equipment will reduce budget receipts by \$11 million in fiscal year 1977 and \$27 million in fiscal year 1978. The other provisions will have effects on budget receipts of less than \$5 million.

9. DEDUCTIONS FOR PRODUCTION AND INTANGIBLE DRILLING COSTS OF GEOTHERMAL STEAM AND ASSOCIATED RESOURCES (SEC. 5 OF THE BILL AND NEW SEC. 191 OF THE CODE)

*Present law*

Present law is unsettled as to whether a depletion deduction or the intangible drilling cost deduction is allowable for the production of geothermal steam and associated geothermal resources. These questions were answered affirmatively for the taxpayers in the case of *Reich v. Commissioner*, 454 F.2d 1157, 29 A.F.T.R. 2d 72-512 (C.A. 9, 1972).<sup>22</sup> However, the Internal Revenue Service is apparently not following that decision in cases arising outside of the Ninth Circuit.

The Tax Reduction Act of 1975 (94th Congress), generally eliminated the depletion allowance for oil and gas, except for a continued allowance for small producers. However, the depletion allowance for geothermal resources was not to be affected by that Act. According to the Conference Report (H.R. Rep. No. 94-120, p. 67) :

For geothermal steam, present law is unaffected, so that if steam is ultimately held by the courts to be a gas entitled to a 22-percent rate of depletion, this treatment will be continued.

As a result, the 22-percent depletion deduction allowable to gas wells immediately prior to the 1975 Tax Reduction Act is still available for geothermal energy if courts should decide, as did the *Reich* court, that a geothermal well is a gas well, and that the other requirements for depletion are met.

Under current law it is also possible that to the extent the costs of geothermal energy development (including intangible drilling and development costs) result in new processes or technology, they would be considered as research and experimental expenditures subject to the election to be currently deductible or to be amortized over a 60-month period commencing when the taxpayer begins to receive benefits from the expenditure. The Internal Revenue Service has ruled in Revenue Ruling 74-67, 1974-1 C.B. 63, that certain costs of developing a method for hydraulic mining of hard minerals, including a portion of the costs of drilling wells, are deductible as research and experimental expenditures. However, under present law the costs of ascertaining the existence, location, extent, or quality of any deposit of oil, gas, or other mineral are not deductible as research and experimental expenditures.

*Reasons for change*

The Project Independence goal for electrical generation through geothermal resources is 20,000 megawatts of electrical generating capacity by 1985. This amount—five percent of current national electrical capacity—represents the equivalent of almost 300 million barrels per year of low sulfur crude oil. It has been estimated that achieving

<sup>22</sup> In the *Reich* case, the Tax Court had 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 plaintiffs were entitled to the then 27½ 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 615(b)(7) of the code does not exclude steam from the depletion allowance.

the 1985 goal includes the costs of drilling at least 800 exploratory wells and 6,000 developmental wells at a minimum cost of \$50,000 per well, or a total of \$3.4 billion in 1975 dollars in drilling costs alone. Depreciable investment in hook-up facilities will add another \$2 billion. Moreover, some 2,000 replacement wells will be required, with the attendant depreciable investment, bringing the total investment requirement to about \$10 billion.

Nevertheless, only 38 geothermal wells were drilled in the United States through July, 1975. It is projected that there will be another 12 in 1976, making a total of 50 wells. It is anticipated that next year there will be approximately 75 geothermal wells drilled. That will be a total of 125 wells, as compared with the estimated need of 800 exploratory and 6,000 developmental wells needed if the Project Independence goal is to be met.

It appears to the committee, therefore, that the Project Independence goal can be met only by legislation granting to geothermal production intangible drilling expensing and the depletion allowance, or an equivalent deduction. It appears that this explicit tax incentive will produce the considerable necessary investment.

#### *Explanation of provision*

The committee amendment extends current expensing of intangible drilling costs and an additional deduction for 22 percent of the gross income from the property<sup>23</sup> to the production of geothermal steam and associated geothermal resources. This deduction is not to exceed 50 percent of the taxpayer's taxable income from the geothermal steam and associated geothermal resources property for the taxable year, computed without regard to this 22 percent deduction. The normal depletion deduction (section 611), however, is not allowed if a deduction under this provision is allowable. Thus, there cannot be any double deduction in the nature of depletion allowances regardless of whether the Internal Revenue Service or the necessary courts should determine ultimately that geothermal production is entitled to the depletion allowance.

It is intended that the term "22 percent of the gross income" is intended to mean the fair market value of the geothermal steam and associated geothermal resources at the wellhead. Thus, the gross income for which the percentage deduction is granted is not to include expenses of selling the steam or other geothermal resource such as costs of bringing the steam to the consumer.

The committee decided to provide a new deduction for this fledgling industry, rather than to clarify the existing sections of the code pertaining to depletion. This is done to avoid some of the technical questions which traditionally surround the depletion allowance. For example, this approach permits the steam or other geothermal resource to be entitled to the new deduction whether or not the steam or other geothermal resource from the property in question is exhaustible in nature.

The term "geothermal steam or associated geothermal resource" is the term used in the Geothermal Steam Act of 1970. In accordance with a number of the definitional provisions of that Act, the commit-

<sup>23</sup> "Property" is to have the meaning given it in section 614 of the code, which is to say that it means, in general, each separate interest owned by the taxpayer in each mineral deposit in each separate tract or parcel of land.

tee intends the term "associated geothermal resource" to include 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) and the other resources included in that Act. However, the tax benefits conferred by this amendment are not to extend to such minerals as are sometimes produced in the course of geothermal production, such as sodium, calcium, and trona. Furthermore, the term "geothermal steam and geothermal resources property" is to mean property from which the taxpayer extracts any product included in geothermal steam and associated geothermal resources, as defined by the Geothermal Steam Act of 1970.

The amendment specifically provides that in order to be eligible for this deduction, the taxpayer must be the holder of an "economic interest" in the geothermal energy property. The committee believes this is necessary to insure that the party who is taking the deduction did not acquire a mere economic advantage in the property in order to qualify for the deduction. The term "economic interest" as used in this amendment should be given the same meaning as the term has for purposes of computing depletion in the case of oil or gas wells.

Although the deduction provided for in this amendment is termed a "business deduction", it is to be allowable to the holders of passive interests in a geothermal energy property, such as holders of a landowner's retained royalty, an overriding royalty, or a net profits interest. It is not to be limited to holders of an operating interest, such as a working interest in the property.

The deductions of section 617 of the code for expenses paid or incurred for mining exploration before the beginning of the development stage of the mine are not to be allowed to geothermal production which enjoys the benefits of the current expensing of intangible drilling costs and the 22-percent deduction provided by this provision.

The 22-percent deduction provided in the committee amendment is to constitute an item of tax preference (under section 57(a)(8) of the Code) for purposes of the minimum tax on tax preferences. Thus, the excess of the deduction over the adjusted basis of the property at the end of the taxable year (determined without regard to this deduction) is an item of tax preference.

In the case of leases, the new 22-percent deduction is to be apportioned between the lessor and the lessee. In the case of property owned for life by one person, with the remainder owned by another, the entire deduction is to be allowed to the life tenant. In the case of property held in trust, the deduction is to be apportioned between the income beneficiaries and the trustee in accordance with the trust provisions, or, if there are none, on the basis of the trust income allocations. In the case of an estate, the deduction is to be apportioned between the estate and the heirs, legatees, and devisees on the basis of the income of the estate allocable to each.

#### *Effective date*

The amendments made by this provision are to apply to taxable years beginning after December 31, 1976.

### *Revenue effect*

It is estimated that current expensing of intangible drilling costs of geothermal properties and the deduction for 22 percent of gross income from geothermal properties will reduce receipts by \$7 million for fiscal 1977, \$15 million for fiscal 1978, and \$21 million for fiscal 1981.

#### 10. DENIAL OF INVESTMENT CREDIT FOR CERTAIN AIR CONDITIONING AND HEATING UNITS (SEC. 6 OF THE BILL AND SEC. 48 OF THE CODE)

##### *Present law*

Under present law, central air conditioning or heating units are not eligible for the investment credit to the extent these units are attached to and become a part of a building or structure.<sup>24</sup> However, self-contained and portable-type heating and air conditioning units which are not permanently attached to a building, such as room air conditioners and space heaters, do generally qualify for the investment credit.<sup>25</sup>

##### *Reasons for change*

The committee has noted that portable heating and cooling equipment which is presently eligible for the investment credit tends to be less efficient in terms of energy consumption when compared to central heating or cooling systems. The committee also considers that the availability of the investment credit (particularly in light of the increase in the credit to 10 percent) encourages the acquisition of these less efficient air conditioning and heating units.

##### *Explanation of provision*

In order to eliminate the investment credit as a factor considered by a business purchaser of heating and cooling equipment, this section provides that portable air conditioning and heating units will no longer be considered to be qualifying property for purposes of the investment credit.

This elimination of the credit is intended to apply only in situations where air conditioning or heating units are acquired and placed into service for the predominant purpose of human comfort. For example, an air conditioning unit placed into service predominantly to cool a room which houses computers or other equipment requiring certain atmospheric conditions to function properly remains eligible for the investment credit (if it otherwise is qualifying property) even though the equipment serves a secondary purpose or function of providing more comfortable working conditions for persons working in the room. This provision is also not intended to apply to equipment, such as fans, which perform general heating or cooling functions by circulating the air. However, fans which are an integral part of heating or cooling units, such as the fans in room air conditioners or space heaters, are considered parts of these units and will therefore not be eligible for the investment credit.

##### *Effective date*

This provision will apply to air conditioning or heating units, either new or used, placed in service by the taxpayer after December 31, 1976.

<sup>24</sup> Reg. § 1.48-1(e).

<sup>25</sup> Rev. Rul. 75-77, 1975-10 I.R.B. 6.

*Revenue effect*

The effect of this provision is estimated to be a revenue gain of less than \$5 million per year.

## 11. STUDY OF RECYCLING INCENTIVES (SEC. 7 OF THE BILL)

*Present law*

There is no provision in present law providing for any tax incentives to encourage salvage and reclaiming of materials as a means to conserve natural resources, reduce energy consumption, and reduce environmental litter. In sections 611 and 613 of the Code, a schedule of percentage depletion rates is provided for various metals and minerals to encourage their discovery, development and mining so that the metals and minerals may be made available for industrial use. Percentage depletion also is provided to the owners of these materials because they are irreplaceable assets. Capital gains treatment is available on timber income and on royalties from coal and iron ore.

*Explanation of provision*

The Secretary of the Treasury, in cooperation with the Administrator of the Environmental Protection Agency, is directed to conduct a study and investigation of all matters relating to the proper role of the Government in encouraging the recycling of solid waste materials. The study should include an examination of the feasibility and revenue effects of providing incentives and disincentives for recycling through the Internal Revenue Code. The study should also include an examination of the various types of solid wastes produced in the domestic economy, those materials which are now or could be recycled, the available technology and capacity for recycling those materials, the cost-competitiveness (with virgin production) of recycling for various materials, and potential governmental actions (both economic and noneconomic) which might increase the amount of recycling in the U.S. The Secretary is to report his findings, together with his recommendations for legislation, to the President and the Congress as soon as this study is completed, but no later than 18 months after the enactment of this bill.

12. REPEAL OF MANUFACTURERS EXCISE TAX ON BUSES AND BUS PARTS  
(SEC. 8 OF THE BILL AND SEC. 4061 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)).<sup>26</sup> 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)).<sup>27</sup> The tax also does not apply to school buses for "exclusive" use in transporting students and employees

<sup>26</sup> This tax is scheduled to drop to 5 percent on and after October 1, 1979.

<sup>27</sup> This exemption applies to privately-owned local transit buses, since "public" transit buses are exempted under the State-local government exemption provision (sec. 4221(a)(4)).



of schools operated by State or local governments or by nonprofit educational organizations (sec. 4221(e)(5)).<sup>28</sup>

In addition, there is an 8-percent manufacturers excise tax on parts and accessories (other than tires and inner tubes, which are taxed separately under sec. 4701) of the type used on buses (sec. 4061(b)).<sup>29</sup>

#### *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. 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 conserves energy as compared to private auto transportation (upon which there is no manufacturers excise tax on the purchase). Further, since timely use of bus replacement parts and accessories contribute to efficiency of operation and vehicle safety, the committee believes that the 8-percent tax also should be repealed for bus parts.

#### *Explanation of provision*

The committee's amendment repeals the excise tax on all buses as well as the related tax on bus parts and accessories. The House bill provided for a repeal of the 10-percent excise tax on intercity-type buses only; that is, buses which would be used "predominantly by the purchaser in public passenger transportation service."

The committee's amendment extends the repeal to all buses in order to remove any tax discrimination among types of buses, as well as to reduce the administrative problems regarding the present distinction between buses used "predominantly" in local transit service in urban areas and transit buses not so used as well as between buses used "exclusively" for school transportation and those that are not.

The repeal of the excise tax on bus parts applies only to parts designed and ordinarily used for buses, as contrasted to parts for trucks.

#### *Effective date*

The repeal of the 10-percent excise tax on buses and the 8-percent excise tax on bus parts is effective for sales by the manufacturer, producer, or importer on or after the date of enactment. An article is not to be considered as sold before the date of enactment unless 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 amendment provides that no tax is due on partial payments on or after the date of enactment if the lessor or vendor establishes that the amount of the payments payable after that date has been reduced by

<sup>28</sup> This applies to persons purchasing school buses for contract operation to transport school students or employees, as school buses sold directly to State-local governments or to nonprofit educational organizations for their exclusive use are exempted already (sec. 4221(a)(4) and (5)).

<sup>29</sup> This tax is also scheduled to be reduced to 5 percent on October 1, 1979.

the amount of tax that would otherwise have been due with each partial payment 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.

#### *Revenue effect*

It is estimated that this provision will reduce receipts by \$19 million for fiscal year 1977, \$20 million for fiscal year 1978, and \$12 million for fiscal year 1981.

### 13. EXCISE TAX ON REREFINED LUBRICATING OIL (SEC. 9 OF THE BILL AND SEC. 4093 OF THE CODE)

#### *Present law*

Present law imposes a 6-cent-per-gallon manufacturers excise tax on the sale of lubricating oil (other than cutting oils) in the United States (sec. 4091). Sales to a manufacturer or producer of lubricating oils for resale are exempt (sec. 4093). The cleaning, renovating, or refining of old oil is itself not considered to be manufacturing (Treas. Regs. § 48.4091-2(b)(2)(ii)), and as a result the sale of rerefined oil by the rerefiner does not result in a tax.

A refund or credit of the tax is authorized in the case of lubricating oil used otherwise than in a highway motor vehicle. The refund or credit is not allowed, however, for cutting oils, previously used oil, or other oil which was exempt from the excise tax. Present law (sec. 4218(a)) also provides that if a person uses an article that he has manufactured, produced, or imported, he is generally liable for the manufacturers tax in the same manner as if he had sold the article, unless he uses the article in the manufacture of products that are themselves subject to the manufacturers excise tax. As a result, a manufacturer of lubricating oil may be liable for the manufacturers excise tax of 6 cents per gallon if he himself uses the oil, rather than sells it.

The Internal Revenue Service has ruled (Rev. Rul. 68-108, 1968-1 C.B. 561) that if a person uses new lubricating oil off the highway (e.g., in railroad lubricating activities), then he is entitled to a full refund of the manufacturers tax. Indeed, the railroad may purchase it tax-free pursuant to a registration system. However, if a person mixes waste or rerefined oil with new lubricating oil, then the new lubricating oil portion of the mixture is taxable. Also, the railroad or other ultimate user of the mixture for nonhighway purposes is not permitted to obtain a refund of the tax paid on the new portion of the oil mixture that is so used.

#### *Reasons for change*

The tax laws as interpreted by the Internal Revenue Service at present provide a disincentive to the use of waste or rerefined oil. In order to remove this tax incentive to the use of waste or rerefined oil, the committee believes that an exemption from the tax for new oil mixed with waste or rerefined oil should be provided under certain circumstances.

*Explanation of provision*

The committee amendment exempts from the 6-cents-per-gallon excise tax new oil used in combination with old oil for new oil constituting up to 55 percent of the mixture. This same provision, however, was contained in the House bill.

More specifically, new oil is exempt from tax when mixed with waste or rerefined oil if the resulting mixture contains up to 55 percent new oil, then all of this new oil in the mixture is to be tax-exempt. If the mixture contains more than 55 percent new oil, the rerefiner is still to be exempt from tax on so much of the new oil as does not exceed 55 percent of the mixture. However, in order to insure that this provision operates in a manner which requires the use of a significant amount of waste or rerefined lubricating oil, the tax exemption for the new oil is available only if 25 percent or more of the mixture consists of waste or rerefined oil.

In determining the percentages of new and previously used oil in the blend, the amount of any additives in the rerefined oil is not to be taken into account. In other words, the base 100 percent of the blend on which the portions of previously used oil and new oil are to be calculated for the purpose of determining the exemption is to be the total amount of the blended product, less any additives.

The exemption of new oil in the mixture is achieved by classifying sales to rerefiners as sales to a producer of lubricating oil for resale by him. As a result, these sales will be tax-exempt, since sales to producers are exempt under present law (sec. 4093). However, if a sale is made to a rerefiner, part or all of the new oil included in the blend may be taxable if the blend consists of more than 55 percent virgin oil. In this case the rerefiner is liable for the resulting tax because he is treated as the manufacturer of the blend.

This provision is not intended to affect the present power of the Commissioner of Internal Revenue to issue certificates of exemption (from the sec. 4091 tax) for sales of oil suitable for lubricating purposes, but which are sold directly by the manufacturer to a purchaser for nonlubricating use by him or for resale for nonlubricating use.

*Effective date*

The exemption for certain new oil applies to lubricating oil sold after June 30, 1976.

*Revenue effect*

It is estimated that this provision will reduce receipts by about \$3 million a year. These revenues would otherwise go into the Highway Trust Fund (through September 30, 1979).

**14. EXEMPTION FROM THE RETAILERS EXCISE TAX ON SPECIAL MOTOR FUELS FOR CERTAIN NONHIGHWAY USE (SEC. 10 OF THE BILL AND SEC. 6427 (C) OF THE CODE)**

*Present law*

Present law imposes a retailers excise tax of 4 cents a gallon upon diesel fuel and certain other special motor fuels<sup>30</sup> where the fuel is

<sup>30</sup> The special motor fuels are benzol, benzene, naphtha, liquefied petroleum gas, casing head and natural gasoline or any other liquid (other than kerosene, gas oil, fuel oil, or any product taxable as gasoline under section 4081 or as diesel fuel under section 4041(a)). This tax is scheduled to be reduced to 1½ cents a gallon on October 1, 1979.

sold or used for highway-related vehicle use. In the case of diesel fuel, no tax is imposed upon the use of diesel in a nonhighway motor vehicle nor in a motorboat, as the tax is imposed only if sold for or used by a "diesel-powered highway vehicle" (sec. 4041(a)). However, for the other special motor fuels, there is a tax of 2 cents a gallon for use by a nonhighway motor vehicle or motorboat (sec. 4041(b)).<sup>31</sup>

#### *Reasons for change*

It appeared inequitable to the committee to continue taxing certain special motor fuels used in nonhighway motor vehicles while not taxing diesel fuel used in such nonhighway vehicles. Moreover, the committee believes that such nonhighway use of special motor fuels should not have to bear the user charge, and therefore the committee decided to remove the tax discrimination between nonhighway use of diesel and other special motor fuels.

#### *Explanation of provision*

The committee amendment provides for an exemption from the 2 cents-a-gallon retailers excise tax on special motor fuels sold or used for a nonhighway motor vehicle (other than for motorboat or noncommercial aviation use). This is in order to remove the tax distinction between, for example, liquefied petroleum gas (propane) used in an industrial lift truck (which is subject to a tax of 2 cents a gallon) and diesel fuel used in a diesel-powered lift truck (which is not subject to any fuel tax). The exemption is accomplished by providing for a refund or credit (sec. 6427) for tax paid for such nonhighway use of special motor fuels.

The House bill contains no comparable provision.

#### *Effective date*

This amendment is effective for the use of certain special fuels for nonhighway motor vehicles as described above after June 30, 1976.

#### *Revenue effect*

It is estimated that this amendment will involve a small revenue loss.

15. DUTY-FREE EXCHANGE OF CRUDE OIL (SEC. 11 OF THE BILL AND PART 10 OF SCHEDULE 4 OF THE TARIFF SCHEDULES OF THE UNITED STATES, 19 U.S.C. 1202, NEW ITEM 475.12 AND NEW HEADNOTE)

#### *Present law*

Under present law, all petroleum and petroleum products imported into the United States are subject to import duties, which vary according to grade of the petroleum or type of product.<sup>32</sup>

Canada has announced a policy of gradually reducing its crude oil exports to the United States to zero by the early 1980's, subject to annual reevaluation. United States refiners in several Northern Tier

<sup>31</sup> This 2 cents-a-gallon reduction in the retailers excise tax on special motor fuel does not apply to such fuel for noncommercial aviation use, as there is a separate retailers tax of 7 cents a gallon through June 30, 1980 (sec. 4041(e)).

<sup>32</sup> Between May 11, 1973, and February 1, 1975, a program of import license fees was in effect and regular import duties were suspended. The import license fees were imposed by Presidential Proclamation and administered by the Federal Energy Administration. On August 11, 1975, the Court of Appeals for the District of Columbia held in *Commonwealth of Massachusetts v. Simon* that the import license fees imposed by Presidents Nixon and Ford on imported petroleum and petroleum products were illegal. This decision, also referred to as the *Aigonquin* case, was recently reversed by the U.S. Supreme Court.

States including Michigan, Minnesota, Montana, North Dakota and Wisconsin, currently rely heavily on crude oil imported from the Northwestern Canadian Provinces. Under Canadian law, all natural resources including petroleum are owned by the provincial governments.

#### *Reasons for change*

As a result of the Canadian policy to reduce petroleum exports to the United States, a number of refiners in the Northern Tier States face a cutoff of their crude oil supply because no other oil transportation network is available. Such a cutoff could adversely affect consumers in those States.

Because of the source and structure of both the United States' and Canada's oil distribution systems, it would be more efficient and economical for both countries to make such sales and purchases from each other rather than to switch to exclusively national oil sources and distribution systems.

Negotiations were completed in June, 1975, between the United States and Canada to permit commercial exchange agreements between United States and Canadian refiners. At that time, the Federal Energy Administration announced that as a result of talks between U.S. and Canadian officials, both governments had agreed to aid in removing governmental obstacles that might prevent the negotiation of company-to-company exchanges of crude oil. In making this announcement, the FEA Administrator stated that oil exchanges between United States and Canadian refiners could contribute to reducing supply and transportation costs, helping consumers in both countries.

Under such agreements, Canadian crude oil would continue to be exported to Northern Tier refiners in excess of amounts which would otherwise be exported under the Canadian phaseout schedule. In return, United States refiners would deliver crude oil to the Canadian companies. Such arrangements would make unnecessary the construction of new and expensive pipelines to serve refiners in the Northern Tier States which are heavily dependent on Canadian crude oil.

Under such arrangements, imposing duties on crude oil imported from Canada would artificially inflate the price of petroleum products to United States consumers in the Northern Tier States. The committee believes that duties on Canadian oil imported pursuant to swap arrangements would interfere with mutually beneficial joint ventures and exchanges, and might seriously injure the Northern Tier States.

In the event that United States and Canadian companies agree to engage in oil swaps, the committee believes that the amount of U.S. imports of oil from Canada which should be exempt from duties should be of the same kind and quality and equal to the amount of Canadian imports of oil from United States refiners.

#### *Explanation of provision*

The committee amendment provides for the duty-free treatment of oil imported from Canada under company-to-company oil swap arrangements made pursuant to agreement between the governments of the United States and Canada. The House bill contains no similar provision.

Under the committee amendment, the United States tariff schedules are modified to exempt oil imported from Canada into the United States from the import duties set forth in Schedule 4, part 10 of such schedules, if the oil is imported as part of an oil swap arrangement. The types of petroleum eligible for such swaps are crude petroleum, including reconstituted crude petroleum, and crude shale oil. The quantity of imported Canadian oil exempted from U.S. duties must be equivalent in amount, kind and quantity to the oil which is imported by Canada from United States refiners during the 30-day period preceding the date of entry of the Canadian oil into the United States.

The amount of Canadian oil entering the United States duty-free cannot be offset against any merchandise except the oil exported by United States refiners to Canada. In order for the Canadian oil to qualify for duty-free entry, the oil exported by United States refiners under the swaps must be either domestic United States oil or oil from foreign sources on which United States refiners have already paid the United States import duties.

#### *Effective date*

The committee amendment shall apply to taxable years beginning after December 31, 1976.

#### *Revenue effect*

This provision is not expected to have any effect on tax receipts.

### 16. EXCISE TAX ON GASOLINE (SEC. 12 OF THE BILL AND SEC. 4084 OF THE CODE)

#### *Present law*

Under present law, a manufacturers excise tax is imposed on gasoline at the rate of 4 cents per gallon. This tax is scheduled to drop to 1½ cents per gallon on or after October 1, 1979. The net revenues from the tax goes into the Highway Trust Fund (scheduled to expire after September 30, 1979), except for amounts attributable to the taxes paid by noncommercial aviation, which go into the Airport and Airway Trust Fund.

#### *Reason for change*

The provisions in sections 1 through 13 of the bill basically are designed to encourage some type of economic activity which will reduce the consumption of energy, encourage more efficient methods of accomplishing energy-using objectives, or encourage development or expansion of new or alternative sources of fuel to generate energy. These provisions generally reduce tax receipts, a development that may produce a larger budgetary deficit through fiscal year 1981 and might play a role in inducing a renewal of price increases. The committee believes that the objectives which are the purpose of the foregoing tax incentive provisions are vital to the future economic growth

of the country, but the probability of revenue loss remains a matter of serious concern.

In reexamining the House-passed energy tax bill, the attention of the committee was brought to a provision that had been approved by the Ways and Means Committee. This provision increased the tax on gasoline in order to encourage conservation in the use of gasoline for automobiles.

The committee decided that it would be possible to meet the incentive, conservation and budgetary concerns by making a modest (one-half cent per gallon), temporary increase in the gasoline tax. Although the tax is small, the higher cost of a delivered gallon of gasoline will heighten the awareness of drivers that wasteful driving patterns and behavior are expensive. Since the purpose of the tax is to encourage gasoline conservation and to offset revenue losses from the incentive provisions, the receipts from this gasoline tax will go into the general fund of the Treasury Department.

#### *Explanation of provision*

A tax of an additional one-half cent per gallon of gasoline is added to the manufacturers excise tax on gasoline. The tax is imposed on gasoline held by the producer or importer with respect to gasoline sold after December 31, 1976, and before January 1, 1980.

A new paragraph relating to this provision is added to the section on floor stocks taxes. The paragraph provides that on gasoline subject to tax under the new section 4084 which on January 1, 1977, is held by a dealer for sale, there is hereby imposed a floor stocks tax at the rate of one-half cent per gallon. This tax does not apply to gasoline in retail stocks held where it is intended for sale at retail. The tax also does not apply to gasoline held for sale by a producer or importer of gasoline.

The receipts from this tax, unlike other gasoline tax receipts, is to go to the general fund of the Treasury Department. The tax is not earmarked for the Highway Trust Fund.

#### *Effective date*

The committee amendment applies to sales of gasoline by the producer or importer of gasoline that are made after December 31, 1976, and before January 1, 1980.

#### *Revenue effect*

This provision is expected to increase revenues by \$371 million in fiscal year 1977, \$534 million in fiscal year 1978, \$552 million in fiscal year 1979 and \$161 million in fiscal year 1980.

### V. COSTS OF CARRYING OUT THE BILL AND VOTE OF THE COMMITTEE IN REPORTING H.R. 6860, AS AMENDED

#### *Revenue cost*

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 the committee amendment to H.R. 6860. The

committee estimates that the changes in fiscal year budget receipts made by this bill are as follows:

	In millions		
	Revenue loss	Revenue gain	Net change
Fiscal year:			
1977			
1978	-\$311	\$371	\$60
1979	-505	534	29
1980	-441	552	111
1981	-76	161	85
1982	-67		-67

The revenue loss is incurred mainly in sections 1 through 11, and the revenue gain comes from the gasoline tax in section 12 and repeal of the investment credit on portable air conditioners and heaters in section 8.

#### *Tax expenditures*

With respect to the effects of the bill on tax expenditures during the next five fiscal years, the following statement has been received from the Director of the Congressional Budget Office:

"In accordance with sections 308 and 403 of the Congressional Budget Act of 1974, the Director of the Congressional Budget Office has examined the committee's revenue estimates for all provisions raising or reducing revenues by \$50 million or more in any one of the first 5 years after enactment and agree with the methodology used and the dollar estimates resulting therefrom. As to provisions which affect revenues by less than \$50 million, no estimate or comparison of the estimates has been made by the Director of the Congressional Budget Office."

#### *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. 10612, as amended by the committee, was ordered reported by a voice vote.

### VI. 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).