

[COMMITTEE PRINT]

ANALYSIS OF ENERGY SUPPLY,
CONSERVATION, AND CONVERSION

HOUSE BILL (H.R. 6860) AND
POSSIBLE ALTERNATIVES

BUSINESS USE TAX, TAX TREATMENT OF
RAILROADS, HOME INSULATION, ETC.

PREPARED FOR THE USE OF THE
COMMITTEE ON FINANCE
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**ANALYSIS OF ENERGY SUPPLY, CONSERVATION, AND
CONVERSION—MISCELLANEOUS**

A. RAILROADS

Present law

Railroad freight cars and locomotives may be amortized on a straight-line basis over 60 months (sec. 184 of the Code). This provision was enacted for a 5-year period in the Tax Reform Act of 1969 and was extended in 1974 for one more year, through December 31, 1975.

House bill

The House bill extends the present law amortization provision for railroad rolling stock through December 31, 1979, makes this rapid amortization available to other forms of railroad equipment, and permits a taxpayer to take both amortization and the investment credit subject to certain limitations.

Qualified railroad equipment.—Five-year amortization is provided for railroad equipment which is tangible property that is (a) an integral part of (1) a communications, signal, 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, or (b) an improvement or betterment of railroad track. Eligible property does not include a building or its structural components.

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. In addition, improvement, or betterment in track account includes capital expenditures for rail ties, ballast, and other track materials and the related labor of first installation that improve the ability of the road to carry traffic. Improvement or betterment, for example, means replacing existing rails with heavier rails so that larger or heavier railroad cars may use the track regularly. (The labor costs for replacements are expensed.)

The adjusted basis of railroad equipment that is being amortized under this provision is not to be increased for capital costs for additions or betterment after the amortization period has begun. Capital costs incurred in connection with a used unit of railroad equipment are to be treated as a separate unit of railroad equipment for purposes of 60-month amortization. The depreciation deduction is to be allowed

only with respect to the portion of the adjusted basis that is not taken into account in applying the amortization deduction.

Rolling stock.—The bill extends from the end of 1975 to the end of 1979 the period during which railroad rolling stock may be obtained and be eligible for 5-year amortization in lieu of depreciation.

Coal cars.—The bill expands somewhat the definition in present law of railroad rolling stock to include railroad cars used predominantly within the United States to haul coal if used by the taxpayer in his trade or business. This amendment 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 amortization under this provision.

Railroad ferries.—The 5-year amortization provision is extended to include railroad ferries. These are defined as vessels used to haul railroad rolling stock between terminals located within the United States. Railroad ferries that carry railroad rolling stock across Lake Michigan between terminals in Wisconsin and Michigan, for example, qualify under this amendment.

Individual lessors.—With respect to qualified railroad equipment and railroad rolling stock, 5-year amortization of the eligible railroad properties is not available to a lessor who is not a corporation. In effect, this limitation does not permit individual lessors or electing small business corporations to use the amortization deduction. The deduction may be taken, however, by a corporation which is a partner in a partnership that is a lessor of either qualified railroad equipment or qualified railroad rolling stock.

Repair allowances.—For purposes of determining the base for calculating repair allowance percentages, it is understood that the Secretary will take into account the investment in equipment under this amortization provision as additional investment in the appropriate asset guideline class.

Effective date.—Rapid amortization for qualified railroad equipment and rolling stock is to be available for equipment placed in service after December 31, 1974, and before January 1, 1980. Taxpayers may elect to begin the amortization period when the eligible equipment is treated as having been placed in service under a method of accounting which prescribes a date when property is placed in service and is consistently followed by the taxpayer. Otherwise, the amortization period is to begin with the month, or taxable year after the month, or taxable year, in which the equipment is placed in service.

The provision relating to qualified railroad equipment applies to that placed in service after December 31, 1974, and before January 1, 1980. The amortization provision presently applying to railroad rolling stock through this year is extended to apply to railroad rolling stock placed in service before January 1, 1980.

The amendments relating to coal cars and railroad ferries apply to equipment whose original use begins after May 7, 1975.

Revenue effect.—It is estimated that the railroad equipment and railroad rolling stock amortization provisions will have a negligible effect on revenues.

Coordination with investment credit.—The denial of the investment credit to railroad rolling stock for which the taxpayer has elected 5-year amortization is repealed. The investment credit will be available to railroad rolling stock and other property for which 5-year amortization has been elected, on condition that the amortization period is treated as the useful life of the property for investment credit purposes. As a result, a railroad car which has a useful life of 11 years under ADR and is eligible for a full investment credit will be eligible instead for $\frac{2}{3}$ of the investment credit when 5-year amortization has been elected for the car. The same application of the investment credit pertains to qualified railroad equipment which becomes eligible for 5-year amortization in this bill.

Administration proposal

The administration endorses the continuation of rapid amortization for railroad rolling stock through 1979 and extension of rapid amortization to qualified railroad equipment through the same period. The administration did not take a position on the extension to coal cars and railroad ferries.

Staff analysis

The rapid amortization provision for rolling stock was enacted in the same statute that repealed the investment credit; amortization was intended to serve as an alternative form of tax incentive for investment in rolling stock certified as being in short supply. Two years later, with enactment of the Revenue Act of 1971, the investment credit was restored, and the ADR system for depreciation was enacted.

ADR and the credit together are more valuable methods for reducing the cost of investment and increasing internal cash flow (through reduced tax liability) than 5-year amortization alone. Consequently, few investors in new railroad rolling stock since 1971 have preferred the amortization alternative to the tax credit plus ADR.

Under the House bill, investors in railroad equipment and rolling stock will be able to use the rapid amortization provision plus two-thirds of the investment credit. This combination generally will produce internal cash flow and tax benefits on a par with the full investment tax credit plus ADR. The preference in each case will depend upon the specific circumstances of the investor. In any event, amortization plus the partial credit do not present the railroad investor with a significantly superior alternative in terms of internal cash flow and tax liability considerations.

Alternative proposals

If the committee wishes to provide an additional tax incentive for investment in railroad equipment and rolling stock, it could consider methods that are simpler. Present law and the House bill put the taxpayer in the position where he must make two calculations before selecting the best alternative. The staff believes that, if an additional incentive is desired, it would be preferable to provide it by making it an addition to existing incentives, rather than an alternative.

In the case of the railroads, an assurance that the present 10-percent investment credit would continue for an additional 5 years, or an additional 2 percentage points of investment credit, would be far simpler.

Five-year amortization and a two-thirds investment credit developed as a combination for additional incentive partly as an historical

accident, as is described above in the staff analysis. It was not presented initially as a form of an extra incentive. This appears to be a good opportunity to restructure the incentive.

B. AIR CONDITIONERS, ETC.

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 part of a building or structure. On the other hand, portable-type and self-contained 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 if used in a trade or business.

House bill

The House bill denies the investment credit to portable-type and self-contained heating and air conditioning units in the same manner as it is denied under present law to units which are attached to and become part of a building or structure. The new denial is effective as to property placed in service after the date of enactment.

Revenue effect of House bill

Adoption of the House provision will result in a revenue gain of less than \$5 million a year.

Staff analysis

Room air conditioners and space heaters tend to be inefficient in terms of energy consumption when compared with central heating or cooling systems. It seems likely that the availability of the investment credit for these units, while not for those attached to realty, was merely the result of the fact that they were classified as personal property (which generally was eligible for the investment credit) and not as real estate (which generally was not eligible for the investment credit). Since these room air conditioners and space heaters consume large amounts of electrical energy there appears to be no justifiable reason for continuing to give them any preferential status with respect to the investment credit.

C. BUSINESS USE OF OIL AND NATURAL GAS

Present law

There is no Federal tax under present law on the use of oil and natural gas as such. A retailers excise tax of three cents per gallon is paid on any liquid sold to noncommercial aviation for use as a fuel.

House bill

The House bill imposes a tax on the use of oil, natural gas, and other petroleum products (except gasoline) as a fuel in a trade or business. Exemptions are provided for uses as fuel (1) in a vehicle, vessel, or aircraft, (2) in an apartment, hotel, motel, or other residential facility, (3) in the mining of minerals, (4) on a farm for farming purposes, (5) by electric generators (through December 31, 1981), (6) by tax-exempt charitable organizations (churches, hospitals, schools, museums, etc., exempt under sec. 501(c)(3) of the Code), but not for the unrelated businesses of those exempt organizations, (7) in certain

processes in the textile (including carpets) and apparel industries; and (8) in certain processes in manufacturing glass products.

The Administrator of the Federal Energy Administration is required to submit recommendations to Congress by June 1, 1976 (seven months before the effective date of the tax), based upon a study designed to identify exemptions that may be necessary. That study is to identify (1) industries or industrial processes where there is no feasible alternative to the use of petroleum or petroleum products, (2) areas where conversion (to nonpetroleum fuels) is not possible because of pollution control laws, and (3) all other factors bearing on exemptions.

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

Calendar year:	Tax per 1,000 cubic feet Cents
1977	4
1978	8
1979	12
1980 or thereafter	18

The excise tax on the business use of crude oil and petroleum products is to be:

Calendar year:	Tax per barrel
1977	\$0.17
1978	.33
1979	.50
1980	.67
1981	.83
1982 or thereafter	1.00

Revenue effect of House bill

The revenue gain from this provision is expected to be about \$400 million in 1977, \$810 million in 1978, \$1,210 million in 1979, and \$1,780 million in 1980.

Administration proposal

Although the administration did not propose a use tax as such, the President's 1975 State of the Union Message included recommendations for a \$2 per barrel excise tax on all domestic crude oil (as well as on imported oil) and an excise tax of 37 cents per thousand cubic feet on natural gas (roughly the equivalent on a BTU basis to the \$2-per-barrel tax proposed for crude oil). These taxes would impose burdens on all users of oil or natural gas as fuel which are twice the ultimate tax provided on business users under the House bill.

Revenue effect of administration proposal

The Federal Energy Administration has estimated that the administration's proposal, based on taxation of domestic production only, would result in a revenue gain of about \$15 billion yearly.

Staff analysis

The more selective approach of a tax on business use of oil would appear to produce greater efficiency with fewer dislocations of particular industries and probably with a lesser impact on consumer costs than the across-the-board approach of the administration proposal.

A separate set of elements in comparing the business-use approach with the administration's approach is the level of the tax and the

timing of the tax. The administration provided for a tax roughly twice as great as the business-use tax provided for under the House bill. In addition, the administration did not provide for a phasing in of the tax. Here, too, consideration must be given to economic impact as well as conservation effects. A phasing in of the tax would generally provide lead time so that industries could plan for rational changes in fuel consumption, as to amounts that are really necessary for proper operations. Rational planning may well provide greater long-run energy savings and certainly would do so with little, if any, of the drastic economic impact that might be felt by immediate imposition of taxes imposing some \$15 billion a year of additional costs on industry and the public.

In considering these approaches, the committee may wish to follow the graduated approach of the House bill, perhaps compromising between the ultimate levels of tax in the House bill and the levels proposed by the administration. This might be accomplished, for example, by continuing to increase the tax on natural gas at the rate of perhaps an additional 4 cents per thousand cubic feet each year until the tax reached 26 cents or 30 cents. In the case of the tax on crude oil and petroleum products, this might be accomplished by increasing the tax approximately 17 cents per barrel for an additional 3 years, until the tax reached \$1.50 per barrel. Alternatively, such increases could be phased in over the same time periods as in the House bill, but at a greater rate of tax increase each year.

The tax on the business use of natural gas as fuel is especially important in view of the shortage of that fuel and the price controls that keep the price to users much lower than the price on an equivalent amount of energy in the form of oil.

The exemption in the Ways and Means Committee bill for uses as a fuel in a vehicle, vessel, or aircraft was intended to take account of the potentially much greater taxes to be imposed on gasoline and special fuels by the bill as reported by the Ways and Means Committee (H. Rept. 94-221, p. 59). The result of retaining this exemption, while striking out the gasoline, etc., taxes, was to reverse (not merely eliminate) the "tilt" toward gasoline. The committee, then, may wish to provide the exemption for vehicles, etc., only if it also provides for increases in the tax on gasoline and special fuels.

As to the question of exemptions in general, if the committee accepts the House proposal that the Federal Energy Administration be required to submit a study of this question by June 1, 1976, the committee may also wish not to list specific exemptions in its bill. That approach would give the Congress an opportunity to consider the results of the FEA study, and, with the benefit of the study and of other facts learned in the meantime, determine exemptions in 1976 on a more objective and organized basis. Furthermore, the Congress could then better assess the merits of exempting certain processes within an industry without necessarily exempting the entire industry.

D. INSULATION—HOMES

Present law

There is no tax benefit provided by present law to taxpayers for insulating a residence or related structures.

House bill

A credit against income tax is provided to an individual for expenses incurred with respect to the insulation of his principal residence (if the residence was in existence on March 17, 1975). The term "principal residence" for this purpose includes a rented dwelling unit (including an apartment), a condominium, or a cooperative unit. The credit equals 30 percent on the first \$500 of insulation expenditures (a maximum credit of \$150). The credit is available with respect to insulation expenditures and installations made after March 17, 1975 (the date the bill was introduced in the House) and before January 1, 1978.

Qualified insulation includes regular insulation, storm (or thermal) windows and doors, or similar items (such as weather-stripping and caulking) designed specifically and primarily to reduce heat gain or loss of a building. The material installed must be first used by the taxpayer claiming the credit, have a useful life (to that taxpayer) of at least three years, and meet those performance standards that may be prescribed in Treasury regulations.

Revenue effect of the House bill

The House bill provision is expected to reduce revenues by \$190 million in 1975, and \$260 million for each of the next two years.

Administration proposal

The Administration proposed a tax credit for 15 percent of the first \$1,000 of insulation expenditures (a maximum credit of \$150). The credit was to be retroactive to January 1, 1975, and would last for three years.

Staff analysis

Although a number of studies have been made of the energy and cost saving potential of insulation, the staff does not know of any study which has reliable data to indicate the type and extent of incentive necessary to induce taxpayers to insulate their homes. In view of this lack of background information, and since it appears that many who are willing to insulate their homes will do so without tax incentives, it would appear desirable to limit to the first \$500 the amount of the expenditures taken into account for purposes of a credit.¹

In addition, it has been estimated that average home insulation costs are recovered in about three years, through the resulting reduction in heating and cooling costs, by those who install their own insulation. This would appear to be an important incentive by itself. Therefore, the primary incentive to purchase insulation resulting from a tax credit might be the attractiveness of the tax saving per se (without regard to its size) combined with the Government recognition of the value of insulating, as symbolized by the tax credit.

Another issue is whether to provide for a credit or deduction, and whether to permit the taxpayer the option of a credit or deduction. The House chose the credit because a tax deduction gives greater relative benefit to higher income taxpayers because of the graduated tax rates; whereas, a tax credit gives the same tax benefit to taxpayers

¹ The cost of insulating the attic of an average home is about \$150. The cost of providing storm doors and windows is about \$350. Installation costs are additional.

with differing income levels. In addition, there are administrative difficulties with providing an optional credit or deduction, as the taxpayer would need to compute his tax benefit both ways.

Alternative proposals

A somewhat different approach is proposed by S. 1112 (Sen. Gravel), which offers the choice of a tax credit or a deduction for improvements and repairs such as insulation, as well as for devices or systems (including solar energy equipment) for heating or cooling that use sources of energy other than oil, gas, coal, or electricity generated by oil, gas or coal. The credit would be for 50 percent of the first \$1,000 in expenditures each year, while the deduction would be for the total amount of expenditures up to a maximum of \$1,000 yearly. In addition to the items specifically described as qualifying in the House bill, S. 1112 also specifically designates caulking and humidifiers as items that qualify for the credit or deduction. This approach differs from the House bill in not requiring a reduction in the basis of the residence (for purposes of computing gain on sale) by the amount of credit allowed.

A similar approach is taken by S. 897 (Sen. Mathias), except that the dollar limits in that bill are 50 percent of the first \$500 (\$250 in the case of a married individual filing separately) if the tax credit is chosen, and 100 percent up to \$2,000 (\$1,000 in the case of a married individual filing separately) if the deduction is chosen.

The Committee may wish to consider modifying the House bill to deal with what is thought to be an administrative problem in enforcing the dollar limitations. Under the House bill, the restriction to 30 percent of the first \$500 would be placed upon each residence used as a principal residence. As a result, a taxpayer first using a residence as his principal residence after the effective date of the provision must determine what insulation expenditures the prior resident was entitled to claim as a credit. As an alternative, the same dollar limitations might be applied to a taxpayer with respect to each principal residence. As a result, a taxpayer who claims the full amount on one principal residence could again claim the credit with respect to a new principal residence, while the new resident in the old residence could claim the full credit without having to learn what amount of insulation expenditures the old resident had been entitled to claim as a credit. Most duplication would be avoided merely because the new resident could hardly be expected to make new insulation expenditures unless the insulation were needed.

The committee may also wish to restrict the credit (or deduction) to insulation installed in principal residences in the United States.

Finally, a problem results from the fact that the House-passed bill allows installation costs as expenditures eligible for the tax credit. Such costs may be unavoidable for some homeowners, particularly elderly homeowners. Nonetheless, the provision does discriminate against those homeowners who save money by doing their own installing. Thus, the committee may wish to allow these homeowners some additional amount of expenditures (in effect for their own labor) which would be eligible for the credit if the total did not exceed the maximum.

E. SOLAR ENERGY EQUIPMENT—HOMES

Present law

There is no Federal tax incentive provided by present law to induce people to install solar energy equipment to heat or cool their homes.

House bill

The House bill provides a credit against income tax liability to an individual for expenses of installing solar energy equipment for a dwelling unit (including a cooperative or condominium apartment) owned by that individual and used by him as his principal residence. The credit is allowable for 25 percent of the first \$8,000 of solar equipment expenditures up to a maximum allowable credit of \$2,000. The credit is to be available for solar equipment expenditures and installations made after March 17, 1975, and before January 1, 1981. The credit is made available both for installations on existing structures and on new residences. The solar energy equipment for which the credit is available must be of a kind which has a useful life of at least three years; which uses solar energy to heat or cool the building or to provide hot water for use within the residence; and the original use of which is made by the taxpayer claiming the credit. The equipment must also meet definitive, or interim, criteria prescribed by the Secretary of Housing and Urban Development under the Solar Heating and Cooling Demonstration Act of 1974.

Revenue effect of House bill

The House provision is expected to reduce revenues by small amounts in the first few years with the losses rising to \$20 million for 1979 and to \$30 million for 1980.

Administration proposal

The administration has made no proposal to provide a tax incentive for solar energy equipment installations. In his recent testimony before this committee, the Secretary of the Treasury affirmed that the administration supports solar energy research and development, but he added that a tax credit for this purpose seems premature now.

Staff analysis

The approach of the House bill has been to provide an inducement to what may be regarded as the "vanguard" of solar energy users. The Ways and Means bill provided for a somewhat more modest credit for residential users—a credit of 40 percent of the first \$1,000 of expenditures and 20 percent of the next \$1,000 of expenditures. Although the maximum credit under the Ways and Means bill was only \$600, compared to the \$2,000 maximum credit in the bill as it passed the House, the Ways and Means bill actually provided greater credits in the case of smaller expenditures. For example, a taxpayer who installed solar energy equipment costing \$1,000 would receive a credit of \$400 under the Ways and Means bill but only \$250 under the bill as amended on the House floor. Although solar energy equipment installations on individual one-family homes typically cost \$5,000 to \$15,000, equipment that can be shared by large numbers of homeowners (including those in cooperative or condominium apartments) often will involve significantly lower per-unit installation costs. In such cases, the more modest

Ways and Means proposal may very likely provide greater tax benefits to the individual homeowner.

If the committee decides to provide a credit or similar incentive for this use of solar energy equipment, it may desire to restrict the tax benefit to installations of solar energy equipment on principal residences in the United States.

Alternative proposals

S. 1379, introduced by Senator Fannin, would provide tax credits for solar energy equipment installed in residences and in commercial structures. If a taxpayer installs solar heating or cooling equipment on his existing residence, he would be entitled to a credit for the cost of the equipment and for installation costs. Where a taxpayer purchases a new residence with solar equipment already installed, the credit is to be determined according to the portion of the purchase price allocable to the solar equipment. In either of these situations, the amount of the credit would be limited as follows: During the period January 1, 1975 through December 31, 1979, the credit could not exceed 25 percent of the qualifying expenses up to a maximum credit of \$2,000; and during the period January 1, 1980, through December 31, 1984, the credit could not exceed 15 percent of the qualifying expenses up to a maximum credit of \$1,200.

Another proposal (introduced by Senator Domenici) which was added on the Senate floor to the Tax Reduction Act of 1975, but deleted in conference, would have provided a credit for solar energy equipment expenditures for new and old residences, and for commercial buildings, of 40 percent of the first \$1,000 of expenditures and 20 percent of any excess up to \$2,000. Unused credits could be carried back to prior years and carried over to future years. This provision would have been effective for taxable years beginning after December 31, 1974, and ending before January 1, 1980.

A somewhat different approach is reflected in S. 1112 (Sen. Gravel), which limits its tax benefits to residences, and which offers taxpayers a choice between a tax credit or a deduction for certain designated improvements and repairs to residences, including a device or system designed to utilize solar energy (or any other source of energy other than oil, gas, coal, or electricity generated by oil, gas, or coal). A credit would be available up to 50 percent of the first \$1,000 in expenditures each year, while the deduction would be for the total amount of expenditures up to a maximum of \$1,000 yearly. This approach also differs from the House bill in that it would not require a reduction in the tax basis of the residence by the amount of credit allowed to a taxpayer by reason of this election. (The smaller the tax basis on a house, the greater will normally be the taxable gain on the sale of the house.)

A similar approach to the choice between a deduction or a credit is taken by S. 897 (Sen. Mathias), except that the dollar limits in S. 897 are 50 percent of the first \$500 (\$250 in the case of a married individual filing separately) if the tax credit is chosen, and 100 percent up to \$2,000 (\$1,000 in the case of a married individual filing separately) if the deduction is chosen.

See the discussion above, under D. Insulation—homes, regarding the use of a credit, a deduction, or a credit-deduction option.

F. RECYCLING

Present law

There is no special tax provision under present law for recycling materials. Companies in the recycling business receive the tax benefits and incentives available to business in general.

House bill

A recycling tax credit was in the bill reported by the Ways and Means Committee but was deleted from the bill by a floor amendment.

As reported by the committee, the bill contained a recycling tax credit aimed at encouraging recycling activity and investment in capital equipment used for recycling. The credit would accrue on the purchase of recyclable postconsumer solid waste materials¹ at the same rate as the credit for investment in personal property, i.e., a 10-percent rate in 1975 and 1976 generally returning to a 7-percent rate thereafter. The accrued credits could be applied against the recycler's tax liability, up to 15 percent of the cost of investment in recycling equipment placed in service, in addition to the 10-percent investment tax credit available generally to all business taxpayers. Credits on purchases of recyclable materials could be accrued through December 31, 1980, and applied to the cost of recycling equipment through December 31, 1983.

The credit on the purchase price would phase out if the price of the recyclable materials exceeded two times the base period price (adjusted for changes in the cost of living since the base period). No credits would be accrued if the purchase price became more than three times the adjusted base period price.² The phase out of the credit was included because higher prices provide sufficient incentive for suppliers, in contrast with periods of low prices when some suppliers may not be able to cover their costs.

When a taxpayer would apply these accrued credits against his tax liability, he could use them up to 15 percent of the purchase price of the equipment, which when added to the regular investment tax credit would provide a 25-percent tax credit. This 15-percent credit would be subject to the limitation relating to total tax liability, but not the limit to 50 percent of tax liability above the first \$25,000 under the regular investment tax credit.

(In addition to the recycling credit, the House bill provides five-year amortization and eligibility for a two-thirds investment credit for equipment that may be used to sort and prepare solid waste for recycling or used for recycling solid waste.

Administration proposal

The administration has not taken an official position on a recycling tax credit. However, the Treasury Department contends that this type

¹ Defined as glass, paper, textiles, nonferrous metals (other than precious metals and other than copper base scrap), and ferrous metals.

² For these purposes, the base period price is the average of the appropriate prices during 1971 through 1973. The Bureau of Labor Statistics would establish the appropriate price index for each recyclable material, and it would adjust the base period price for changes in the cost of living. As the price index for a recyclable material rises above 200 percent of the base period average, the credit earned on purchases would be reduced by an equal percentage. For example, if the index were 250, the credit would be reduced by 50 percent; if the credit were 310, there would be no credit on such purchases.

of tax credit will induce minimum amounts of new recycling and associated energy savings.

The Environmental Protection Agency has stated that a tax credit on the purchase of postconsumer recyclable solid waste materials is desirable. EPA believes that the credit will be reflected in higher priced bids for recyclable materials which in turn will bring forth the required supply. This agency prefers that the definition of postconsumer wastes be limited to municipal (i.e., residential, commercial, office building) solid wastes and that industrial solid wastes (from converting or fabrication processes or scrap from basic manufacturing processes) not be eligible for the recycling tax credit because 90 percent or more of such industrial wastes presently are recycled. Three-quarters of municipal waste is predominantly newspaper, and EPA states that additional plant capacity must be built specifically to recycle paper. Few paper plants can use virgin materials and paper wastes interchangeably or in mixed batches.

Staff analysis

Municipal postconsumer solid wastes are the major waste items from which little organized effort is made to recapture recyclable materials. Paper (76 percent) and glass (19 percent) are the major elements of these wastes in terms of total tonnage; aluminum cans are the chief item in the small proportion which is nonferrous metals. Municipal wastes probably should be the target of any tax incentive that may be enacted because it may stimulate recycling where now there is little or none. There may be some industrial wastes not sufficiently recycled now that might benefit from eligibility for a recycling incentive, but the preponderance of industrial solid waste recyclers can be expected to continue doing what they do already even without a credit. A credit based on the purchase price of materials of necessity is highly variable as prices fluctuate. The credit would be greatest when prices are high, which would occur when the supply was relatively scarce and little tax incentive is needed to stimulate suppliers. (The phaseout in the Ways and Means bill is intended to cut off tax benefits when prices get too high.) The credit is small, of course, when prices are low, but it does provide some margin which recyclers can use to maintain sources of supply. On the other hand, a constant credit per ton of recyclable material would provide greater means to maintain supply sources when prices are low, but a real problem is presented by the fact that the provision would have to specify a separate price incentive for each eligible recyclable material. However, under this type of credit there would not need to be any phaseout or cutoff at higher prices.

A tax credit on the purchase price is an operating subsidy and as such is beneficial when continued for a long period of time. Whether 5 years, as was proposed in the Ways and Means provision, is a sufficient period of time to stimulate investment in recycling equipment, is questionable.

Alternative proposals

If the committee intends to provide an incentive for recycling, it might want to focus on incentives that would increase the physical capacity of the taxpayer to recycle solid wastes. An additional investment credit for machinery and equipment used for recycling in new

or existing plants would increase capacity, stimulate demand for recyclable materials, and increase the after-tax rate of return on investment.

This additional credit could have the characteristics of the one in the Ways and Means bill; that is, it could be an additional 15 percent credit applicable to full tax liability and available for investment in machinery and equipment that increases recycling capacity.

Alternatively, the value of the investment credit in combination with 5-year amortization (sec. 421 of the bill) could be increased by providing that the useful life of the asset for the investment credit is the useful life of the property in the hands of the taxpayer. This would prevent the cutback to two-thirds of the investment credit where 5-year amortization is also elected.

On the other hand, the recycling tax credit could be applied directly on the purchase price of postconsumer recyclable solid waste materials. The definition of postconsumer waste could be broadened to include any recyclable solid wastes sold to a recycling firm not related to the seller. This would not relate to capital expansion.

In addition, under any type of credit, plastics could be treated as an eligible recyclable material. Plastic containers (bottles, cups, and glasses) are competitive with glass containers and cans. The plastic containers can be ground to a powder and, from then on, treated as virgin material in the manufacture of new plastic containers. Also, aluminum-base scrap could be deleted from eligible materials. More than 90 percent of aluminum scrap presently is recycled by an industry composed of about three dozen firms which now have excess recycling capacity. In this case, the tax credit would tend to increase excess capacity and new entries into the business, with the result that prices for aluminum scrap might be bid up, with no measurable increase in the supply of scrap or the production of recycled aluminum.

Revenue effects

As reported by the Ways and Means Committee, the recycling tax credit would have reduced tax liabilities by a total of \$975 million during the period 1976 through 1980: \$30 million in 1976, \$125 million in 1977, \$230 million in 1978, \$290 million in 1979, and \$300 million in 1980.

A direct credit on postconsumer solid waste purchases would reduce tax liabilities by a total of about \$1.3 billion during the period 1976 through 1980: \$325 million in 1976, \$280 million in 1977, \$220 million in 1978, \$205 million in 1979, and \$240 million in 1980.

G. SHARING OF FEDERAL OUTER CONTINENTAL SHELF (OCS) REVENUE WITH ADJACENT STATES

Present law

Under present law, Federal revenues from bonuses, rents, and royalties from Outer Continental Shelf (OCS) leases go exclusively to the Federal Treasury.

House bill

The House bill did not contain any provision in this area.

Administration proposal

The administration did not make any proposal in this area.

Senate proposal

The Senate has recently passed a bill (reported by the Interior Committee) which authorizes up to \$200 million to be paid to State and local governments adjacent to Federal off-shore properties on which drilling is taking place. These funds can be used only for environmental purposes along the coastline to minimize any effects of the drilling.

Staff analysis

To increase domestic supplies of oil and gas by facilitating the development of offshore leases, and reducing the opposition of adjacent States to such development by relieving their concern about the potential adverse financial and environmental impact of offshore drilling, the committee may wish to consider sharing some of these OCS receipts with the adjacent States. Some precedent for this is provided in existing law under which the Federal Government pays 37½ percent of its royalties from on-shore leases to the States adjacent to the Federal property. Such transfers of funds would permit States to take precautions or pay for any required remedial action in case of accidents in the development of offshore leases.

Alternative proposals

The committee may wish to consider providing some portion of these OCS lease bonuses, rents, and royalties to the impacted adjacent States. There are several ways of doing this, such as paying a fixed proportion of the Federal receipts to the various impacted States, or distributing the funds to each State in proportion to its "attributable" share of the total OCS receipts.¹ The committee might also want to consider expanding this sharing concept to apply to other than the impacted adjacent States by, for example, distributing some portion of the remaining OCS receipts as a supplement to the general revenue sharing distribution.

It is difficult to estimate the amount of revenue which might be distributed to the States in the future. The Federal OCS receipts are shown in the budget as \$6.7 billion, \$5.0 billion and \$8.0 billion for fiscal years 1974, 1975, and 1976, respectively.

The unfavorable experience that many companies have had recently in finding oil or gas on the offshore leases for which they bid substantial amounts makes the future prospects for lease bonuses and royalties quite uncertain, so that any estimate of the amount available for distribution to the States is speculative.

H. ENERGY TRUST FUND*Present law*

Under present law, all energy expenditures by the Federal Government are appropriated out of the general fund, although some transportation projects which are energy efficient may be financed out of the Highway Trust Fund. Total Federal expenditures for energy research and development projects in fiscal year 1975 equalled more than \$2.1 billion.

¹ Approaches similar to those adopted in bills introduced in the last Congress by Senator Hathaway (S. 2922) and Congressman O'Neill (H.R. 9132) could be adopted. Both of these bills provide a higher portion of the first several million dollars of OCS receipts and a lesser percentage for additional receipts.

House bill

The House bill establishes an Energy Trust Fund with the funds raised from the import tariff and the tax on business use of petroleum and petroleum products. The revenues from these two sources would provide funds in the following amounts (calculated in millions of dollars on a fiscal year basis):

	1976	Transi- tional quarter ¹	1977	1978	1979	1980
Tariff ²	\$1,824	\$564	\$2,518	\$2,811	\$3,017	\$3,179
Business use tax.....			284	691	1,094	1,615
Total.....	1,824	564	2,802	3,502	4,111	4,794

¹ The transition quarter, July 1, 1976, through Sept. 30, 1976, reflects the change in the fiscal year of the Federal Government under the Congressional Budget and Impoundment Act of 1974. Under this act, the fiscal year 1977 begins on Oct. 1, 1976, and ends on Sept. 30, 1977.

² It is assumed that the rate of duty in general will be adjusted to 10 percent, effective Sept. 1, 1975; the rate of duty on distillate fuel and residual fuel will be 5 percent from Sept. 1, 1975, through Aug. 31, 1977, and 10 percent thereafter.

To the extent provided by subsequent law, the bill also permits proceeds received by the United States Government from oil and gas properties in which the government has an interest (for example, bonus payments and royalties received by the United States from leasing its lands and its rights for offshore drilling) to be included in the trust fund.

The bill prescribes specific limits on the amounts that can be appropriated and accumulated in the trust fund. First, it limits the amount of annual appropriations to the trust fund to \$5 billion in any fiscal year.¹ Second, no more than \$10 billion can be accumulated in the trust fund at any one time. Any excess revenues raised above these limitations are to be transferred to the general fund. Third, any funds left in the trust fund after its expiration date (at the end of fiscal year 1985) are also to be transferred to the general fund.

The bill specifies that trust funds are available to be spent within four general areas of energy programs: (1) basic and applied research programs relating to new energy technology; (2) projects aiding in the development and demonstration of new energy technologies; (3) programs relating to the development of energy resources from U.S.-owned properties; and (4) research projects, or capital expenditures for demonstration projects, relating to local and regional transportation systems. The bill also lists examples of the types of specific programs which could be funded under each of these four areas. However, amounts to be appropriated for any specific programs (whether or not the programs are listed as examples in the legislation) are subject to the normal authorization and appropriations processes of Congress. Thus, the bill in no way attempts to authorize or appropriate any

¹ Unless substantial revenues from U.S. lands are added to the trust fund or additional sources of revenue are added, the trust fund will not reach this \$5 billion ceiling until after 1980.

funds for any specific projects or to take that authority away from the present authorization and appropriation committees:

The bill establishes a trust fund review board, composed of five members appointed by the President with the advice and consent of the Senate, whose function will be to make initial recommendations to the Congress on how trust fund expenditures should be divided up among four areas of possible spending and, in addition, to make an annual review of how effectively the funds in the trust fund were spent in each year. The members of the board would be subject to strict conflict of interest requirements for their appointment and for the period they serve on the board.

Administration proposal

The administration has opposed the establishment of an energy trust fund. However, the administration has proposed a 3¢ per barrel excise tax on oil from off-shore leases, on import oil and on oil transported through pipelines. These revenues would be paid into a special government fund to be used to restore any damage resulting from oil spills and other similar accidents. The proposal would also establish absolute liability for such accidents by private individuals or corporations involved in transporting oil or producing it off-shore. Under the proposal, the government would have the right to sue these private individuals under the absolute liability standard to recover its costs in restoring any damage from these accidents.

Staff analysis

By establishing a trust fund, Congress makes a commitment to devote a substantial amount of Federal revenues in the years ahead to the task of developing new technologies which can lead to alternative sources of energy and to new types of energy-using industrial processes, machines and consumer appliances which will be significantly more energy efficient than those now in use.

The establishment of a trust fund with substantial funds available to provide financial incentives for developing new technologies also can be an alternative to the establishment of new tax incentives. For example, the committee may wish to decide that instead of providing tax incentives, it may be wiser to use trust funds to provide loans or otherwise to encourage the same activities. In this way, Congress can review each year the cost and relative effectiveness of each program which is funded through the trust fund. Also, because the trust fund could have a definite termination date, the amount of expenditures made for incentives can be limited.

On the other hand, trust funds have been objected to on the grounds that they commit funds to a purpose over a long period of time without any assurance that the funds will be needed for this purpose throughout the entire period. Another closely related objection is that the use of trust funds removes the scrutiny of alternative uses of funds which otherwise applies to general budgetary items.

While in the past there have been problems with trust funds, the trust fund in the House bill avoids most of these problems. The fund has a definite termination date at the end of fiscal year 1985. Because no more than \$5 billion can be appropriated to the trust fund for expenditures in any one year, and the fund can accumulate no more than \$10 billion at any one time, there is an assurance that the size of the

trust fund will be kept within reasonable bounds and that the fund will not substantially outlive its useful purposes. Furthermore, since the bill provides that all expenditures out of the trust fund are to be subject to the normal authorization and appropriation processes, no "backdoor spending" is established.

Alternative proposals

If the committee believes that an energy trust fund should be included in its bill, the House passed version, could be modified in a number of ways. First, the committee may wish to consider providing additional sources of revenue for the trust fund. Senator Gravel has introduced a bill (S. 1112) which establishes a trust fund with revenues from a new tax on all energy sources according to each source's Btu content. That bill would impose a tax rate in fiscal year 1976 of 2¢ per 1 million Btu content, which would raise approximately \$3 billion in revenues. If such a tax were added to the revenues allocated to the trust fund in the House bill, the fund would be assured of reaching the \$5 billion ceiling in every year.

If the committee determines not to include such a tax, it may wish to include in the sources of revenue to be appropriated to the trust fund any additional revenues which may be raised by the committee bill. In this way, it could be assured that the trust fund would receive close to the \$5 billion maximum in all years.

In addition, the committee may wish to consider modifying or expanding the various categories for which trust fund expenditures can be made. Senator Gravel's bill permits trust fund expenditures to be used for any research, development or demonstration project within the scope of authority of the Energy Research and Development Administration. A bill introduced by Senator Bentsen (S. 973) takes a different approach and establishes a fund (using tariff revenues) for a new energy development board which could authorize guarantees on loans to private businesses, minimum purchase price commitments, and other similar undertakings to encourage the development and production of synthetic fuels and solar energy equipment.

Both of these approaches could be included by describing areas of possible trust fund expenditures in the bill in general terms and leaving to the Congress the decisions as to the specific types of programs which should be established through the normal authorization and appropriations process. In addition, the committee could list, as in the House-passed bill, a number of possible programs as examples of the types of programs for which trust funds could be used.

One type of program, which was not specifically mentioned in the House-passed bill, but for which it would be appropriate to use trust funds, is aid to programs promoting carpooling among commuters, shoppers, and other individuals. For example, trust funds could be used to provide computer facilities to match individuals interested in carpooling, special parking facilities or special driving lanes for carpoolers, or employer programs encouraging carpooling. These types of programs could be listed as additional examples of programs in the category of local and regional transportation programs, or could be included as a separate category.