# DESCRIPTION OF MISCELLANEOUS ENERGY TAX BILLS

(S. 307, S. 448, S. 498, and S. 725)

SCHEDULED FOR A HEARING

BEFORE THE

SUBCOMMITTEE ON ENERGY AND AGRICULTURAL TAXATION

OF THE

COMMITTEE ON FINANCE ON JUNE 8, 1981

PREPARED FOR THE USE OF THE

COMMITTEE ON FINANCE

BY THE STAFF OF THE

JOINT COMMITTEE ON TAXATION



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#### INTRODUCTION

The bills described in this pamphlet have been scheduled for a public hearing on June 8, 1981, by the Subcommittee on Energy and

Agricultural Taxation of the Senate Finance Committee.

There are four bills scheduled for the hearing: S. 307 (relating to windfall profit tax exemptions for oil production of certain residential child care agencies); S. 448 (relating to fuels tax exemption procedure for intercity, local or school buses); S. 498 (relating to credits for passive solar residential construction); and S. 725 (relating to the energy credit definition of shale oil equipment).

The first part of this pamphlet contains a summary of the bills. This part is followed by a more detailed description of each bill, including present law, issues involved, an explanation of the provisions of each

bill, their effective dates, and estimated revenue effects.

#### I. SUMMARY

1. S. 307—Senators Baker, Cochran, Boren, Bentsen, Long, Tower, Wallop, Symms, et al.

# Windfall Profit Tax Exemption for Oil Production of Residential Child Care Agencies

Under present law, oil production attributable to "qualified charitable interests" of specified charitable educational organizations and medical facilities is exempt from the windfall profit tax (Code sec. 4994(b)). Oil production attributable to an interest held by an organization for the residential placement, care, or treatment of delinquent, dependent, neglected, or handicapped children generally would not qualify for this exemption.

The bill would exempt from the windfall profit tax oil production attributable to certain interests held by residential child care agencies. The bill would be effective for calendar quarters beginning after

December 31, 1980.

# 2. S. 448—Senator Matsunaga

# Fuels Tax Exemption Procedure for Intercity, Local or School Buses

Present law allows exemptions from the gasoline, diesel, and special fuels excise taxes for gasoline, diesel, and special fuels used in certain intercity, local, and school buses. These exemptions are implemented by allowing either an income tax credit, or a direct payment, equal to the fuels taxes paid.

The bill would allow tax-free sales of otherwise taxable gasoline, diesel, and special fuels for use in certain intercity, local, and school buses so long as specified advance registration procedures were satis-

fied. The bill would be effective on January 1, 1982.

# 3. S. 498—Senators Hart, Percy, Bradley, Baucus, Moynihan, Packwood, et al.

# Builder's Tax Credit for Passive Solar Residential Construction

Present law allows a residential energy tax credit equal to 40 percent of the first \$10,000 of a taxpayer's expenditures for certain solar, geothermal, and wind equipment. This credit is not available to builders of homes held for sale, or with respect to expenditures for certain passive solar features.

The bill would allow builders a tax credit with respect to certain new residential units that use specified passive solar construction techniques. The bill would be effective for taxable years ending after Sepember 30, 1981, and would allow a credit with respect to units completed after that date and before January 1, 1987.

# 4. S. 725—Senators Wallop, Armstrong, Matsunaga, Symms, et al.

# Energy Credit Definition of Shale Oil Equipment

In addition to the generally applicable 10-percent investment tax credit, the Energy Tax Act of 1978 provided a 10-percent energy investment credit for shale oil equipment (Code sec. 48(1)(7). The latter credit applies to equipment for producing or extracting shale oil from shale rock, but generally does not apply to equipment for use in upgrading the extracted liquid.

The bill would expand the definition of shale oil equipment eligible for the energy investment tax credit to include equipment used to upgrade shale oil. The bill would apply to periods after December 31,

1980.

#### II. DESCRIPTION OF BILLS

1. S. 307—Senators Baker, Cochran, Boren, Bentsen, Long, Tower, Wallop, Symms, et al.

# Windfall Profit Tax Exemption for Oil Production of Residential Child Care Agencies

Present law

Under present law. oil production attributable to certain interests ("qualified charitable interests") of specified charitable educational organizations and medical facilities is exempt from the crude oil windfall profit tax (Code sec. 4994(b)). For this purpose, the term "qualified charitable interest" means an economic interest in crude oil which meets specified statutory requirements. These requirements generally can be satisfied, in part, with respect to interests either held directly by an organization, or interests held indirectly for the benefit of an organization. In the former case, such an interest must be held directly by a charitable educational organization or medical facility (as described in Code sec. 170(b) (1) (A) (ii), (iii), or (iv) and sec. 170(c) (2)). In instances where the interest is not held directly by such a qualifying organization, an interest may be held only by a church (as described in Code secs. 170(b)(1)(A)(i) and 170(c)(2)) only if it is held for the benefit of an otherwise qualifying educational organization or medical facility. However, oil production attributable to an economic interest held by a church for the benefit of an otherwise qualifying educational organization or medical facility is exempt only if all the proceeds from the interest were dedicated to the educational or medical charity on January 21, 1980, and at all times thereafter before the last day of the calendar quarter. In all instances, an exemption is available only with respect to oil attributable to otherwise qualifying interests which were held by the organization on January 21, 1980, and at all times thereafter before the last day of the calendar quarter.

For purposes of the exemption, a medical facility is defined as an organization the principal purpose or function of which is the providing of medical or hospital care or medical education or, if in conjunction with a hospital, medical research (see Code sec. 170(b)(1)(A)(iii)). For purposes of the exemption, an educational institution is an educational organization that normally maintains a regular faculty and curriculum and normally has a regularly enrolled body of pupils or students in attendance at the place where its educational activities are regularly carried on (see Code sec. 170(b)(1)(A)(ii)). An organization that normally receives a substantial part of its support from the United States or any State or political subdivision thereof or from direct or indirect contributions from the general public, and that is organized and operated exclusively to receive, hold, invest, and administer property and to make expenditures to or for the benefit of a

public college or university is also considered to be an educational

institution (see Code sec. 170(b)(1)(A)(iv)).

An organization for the residential placement, care, or treatment of delinquent, dependent, neglected, or handicapped children generally would not qualify as an educational organization or medical facility for purposes of this exemption.

Except to the extent that oil production is attributable to a royalty or an overriding royalty (Code sec. 512(b)(2)), income from a qualified charitable interest is subject to the unrelated business income

tax (Code secs. 511-513).

#### Issue

The bill raises several issues relating to an exemption from the windfall profit tax for oil production attributable to certain charitable organizations. The initial issue presented by the bill is whether the current exemption for qualified charitable interests should be expanded and, if so, whether it should be expanded to include oil production attributable to interests held directly by entities which are residential child care agencies or held by other organizations described in Code sec. 170(c) (2) (relating to certain charitable entities) for the benefit of a residential child care agency.

Another issue presented by the bill is whether an expansion of the present law exemption should apply, in instances where the oil interest is held by another, only if all the proceeds from the interest were dedicated on January 21, 1980, and at all times thereafter before the last day of the calendar quarter, to a qualifying residential child care

agency.

# Explanation of the bill

The bill would exempt from the windfall profit tax oil production attributable to an economic interest held by either a "residential child care agency" or a charitable corporation, trust, community chest, fund, or foundation (described in Code sec. 170(c)(2)) for the benefit of a "residential child care agency." For purposes of this exemption, the term "residential child care agency." would mean a charitable corporation, trust, community chest, fund, or foundation (described in Code sec. 170(c)(2)) which is organized and operated primarily for the residential placement, care, or treatment of delinquent, dependent, neglected, or handicapped children.

The exemption would apply only to production attributable to an interest which was held on January 21, 1980, by a residential child care agency or by a qualifying organization for the benefit of such an agency. The bill would not require a dedication of the proceeds from an interest to the benefit of a residential child care agency when the

interest is held by another organization.

### Effective date

The provisions of the bill would be effective for calendar quarters beginning after December 31, 1980.

#### Revenue effect

An estimate on this bill is not available currently.

# 2. S. 448—Senator Matsunaga

# Fuels Tax Exemption Procedure for Intercity, Local or School Buses

#### Present law

Present law imposes an excise tax of 4 cents per gallon on gasoline sold by any producer or importer (Code sec. 4081(a)). For purposes of this tax, the term "producer" includes refiners, compounders, blenders, or wholesale distributors, and dealers who sell gasoline exclusively to other gasoline producers (Code sec. 4082(a)). Gasoline sold for certain specified purposes is exempt from the excise tax. One such exempt purpose is for use in an intercity, local, or school bus (Code sec. 6421(b)).

Present law also imposes an excise tax of 4 cents per gallon on diesel fuel used in a diesel-powered highway vehicle <sup>2</sup> (Code sec. 4041(a)). A tax at the same rate is imposed on special motor fuels <sup>3</sup> used as fuel in a motor vehicle or motorboat (Code sec. 4041(b)). As in the case of the tax on gasoline, exemptions are provided for diesel fuel and special motor fuels used for certain specified purposes, including use

in an intercity, local, or school bus (Code sec. 6427(b)).

For purposes of these taxes, intercity and local buses are defined as buses offering transportation to the public along regularly scheduled routes or buses with a seating capacity of at least 20 adults (other than the driver). School buses are defined as such when they are engaged in transportation of employees and students of organizations maintaining a regular faculty and curriculum and having a regularly enrolled student body at the place where its educational activities are

carried on (Code secs. 4221(d)(7) and 6427(b)).

Under present law, exemption from the gasoline tax generally can be claimed at the time of sale if the sale is for an exempt purpose, and the parties to the sale have registered in accordance with Treasury regulations (Code sec. 4222(a)). Likewise, in some cases under present law (e.g., for use on an aircraft), the exemption from the diesel fuel and special motor fuels taxes may be claimed at the time the sale occurs if the parties to the sale have registered, in accordance with Treasury regulations, as eligible for exempt sales (Code sec. 4041(i)). There also are provisions in present law that permit tax-free sales pursuant to

<sup>2</sup> A lower 2 cent per gallon tax is imposed on diesel fuel used in a diesel-powered highway vehicle not required under State law to be registered for highway use

or in such a vehicle owned by the U.S. and not used on the highway.

 $<sup>^1</sup>$  Beginning on October 1, 1984, the gasoline excise tax rate is scheduled to be reduced to  $1\frac{1}{2}$  cents per gallon (Code sec. 4081(b)).

<sup>&</sup>lt;sup>3</sup> Special motor fuels are defined as "benzol, benzene, naphtha, liquefied petroleum gas, casinghead and natural gasoline, or any other liquid (other than kerosene, gas oil, or any product taxable [under another Code section as gasoline or as diesel fuel])" (Code sec. 4041(b)). Beginning on October 1, 1984, the diesel fuel and special motor fuels excise tax rates are scheduled to be reduced to 1½ cents per gallon (Code sec. 4041(e)).

similar registrations for exemption from other excise taxes, including sales of tires, inner tubes, parts, and accessories used on intercity, local,

and school buses (Code secs. 4221(e)(5) and 4222(a)).

In the case of uses for which exempt sales are permitted, if an excise tax is paid nevertheless, present law permits the taxpayer to recover that tax by means of an income tax credit or a direct payment in the amount of tax imposed (see, e.g., Code secs. 39, 6416, and 6421). There are thus two means by which the exemption from tax may be accomplished in these cases.

Under present law, however, gasoline, diesel fuel, and special motor fuels may not be sold tax-free pursuant to a registration procedure when the fuels are used in an intercity, local, or school bus. Therefore, the income tax credit and direct payment procedures are the available

means of implementing the tax exemption in these cases.

#### Issue

The issue presented by the bill is whether gasoline, diesel fuel, and special motor fuels for use in an intercity, local, or school bus should be permitted to be sold free of tax rather than being sold tax-paid with the taxpayer subsequently claiming an income tax credit or direct payment for the amount of tax imposed.

# Explanation of the bill

The bill would permit sales of gasoline, diesel fuel, and special motor fuels for use in an intercity, local or school bus to be made on a tax-free basis if the parties to the sale were registered with the Treasury Department. The bill would adopt the present law definitions of intercity bus, local bus, and school bus.

### Effective date

The provisions of the bill would be effective on January 1, 1982.

#### Revenue effect

It is estimated that the bill would reduce fiscal year 1982 receipts by \$9 million.

# 3. S. 498—Senators Hart, Percy, Bradley, Baucus, Moynihan, Packwood, et al.

# Builder's Tax Credit for Passive Solar Residential Construction

#### Present law

Residential energy tax credit

Present law allows a residential energy tax credit equal to 40 percent of so much of the taxpayer's "qualified renewable energy source expenditures" as do not exceed \$10,000 (Code sec. 44C(b)(2)). For this purpose, the term "renewable energy source expenditure" means expenditures made by the taxpayer on or after April 20, 1977, for "renewable energy source property" installed in connection with the taxpayer's principal residence. Renewable energy source expenditures include labor costs properly allocable to the onsite preparation, assembly, or original installation of renewable energy source property, as well as certain expenditures for an onsite well drilled for any geothermal deposit. Renewable energy source expenditures do not include any expenditures properly allocable to a swimming pool used as a storage medium or to any other energy storage medium which has a primary function other than energy storage. Thus, while renewable energy source expenditures include costs for both active and passive solar systems, Treasury regulations specify that expenditures for dual function components of a passive solar system are not eligible for the credit (Treas. Regs. 1.44C-2(f)(3)). However, expenditures for a solar panel installed as a roof do not fail to qualify for the credit solely because the panel constitutes a structural component of the dwelling.

The term "renewable energy source property" means property which, when installed in connection with a dwelling in the U.S., transmits or uses (1) solar energy, energy derived from geothermal deposits, or any other form of renewable energy specified in Treasury regulations, for heating or cooling the dwelling or for providing hot water or electricity for use within the dwelling, or (2) wind energy for non-business residential purposes. In addition, the original use of "renewable energy source property" must begin with the taxpayer. The property reasonably must be expected to remain in operation for at least 5 years, and it must meet specified performance and quality standards.

In the case of a newly constructed or reconstructed dwelling, renewable energy source expenditures are treated as made when the original use of the constructed or reconstructed dwelling begins. In addition, in the case of newly constructed residences, the original purchaser may claim the credit, when original use of the residence begins, for separately stated renewable energy source expenditures.

Property is not eligible for the credit to the extent it is financed with funds provided under a government program a principal purpose

of which is to provide subsidized financing for projects designed to conserve or produce energy (Code sec. 44C(c)(10)(A)).

Solar Bank

Title V of the Energy Security Act of 1980 (Pub. L. 96-294) established the Solar Energy and Energy Conservation Bank (the "Bank") as part of the Department of Housing and Urban Development. The purpose of the Bank, which is to remain in existence until October 1987, is to encourage energy conservation, to promote the use of solar energy, and to contribute to the reduction of U.S. dependence on foreign energy sources. The Bank is authorized to provide funds to lending institutions, utilities, and local governments to subsidize loans and grants for the installation of energy conservation and solar energy improvements in single family and multifamily residences, and agricultural and commercial buildings.

Initially, \$1 billion was authorized to fund the Bank's activities through fiscal year 1984. The fiscal year 1981 appropriation provided \$121 million, and the Carter Administration proposed to appropriate \$125 million for fiscal year 1982. The Reagan Administration proposed rescinding the 1981 appropriation and withdrew the request for \$125 million for 1982. The Administration has stated its intention to rely on rising energy prices to encourage all households to reduce energy consumption and make conservation investments. Regulations will not

be issued, and no loan subsidies will be disbursed.

In its reconciliation instructions for fiscal year 1981, the Senate Budget Committee recommended rescission of the \$121 million appropriation for 1981; the House Budget Committee's instructions would rescind all but \$20 million.

The Senate Appropriations Committee has acted to rescind the entire \$1 billion. The House Appropriations Committee has acted to transfer \$875 million to the Strategic Petroleum Reserve.

# Background on passive solar construction

A passive solar energy system is one in which the energy present in sunlight is used to heat a building by naturally capturing that energy in the structure of the building and distributing it as heat by means of radiation, conduction or convection. Separate collectors, storage systems, or mechanical devices are not necessarily required, nor is it necessary to introduce energy inputs from outside the immediate environment.

Passive systems generally can be classified as direct gain, indirect gain, or isolated gain systems. The most common of these types of systems are described below. The choice between different systems may depend on topography, esthetics, and heating and cooling needs.

In a direct gain passive solar energy system, sunlight enters and directly heats the living area. If the living space is constructed of materials that absorb and store this heat (e.g., masonry floors and walls) or if a storage mass is introduced to the living area, the collected heat is stored and liberated to maintain the living area's temperature when the sun is not present. These systems can be used in most environments.

In a system that uses indirect gain, the thermal storage mass is positioned between the sun and the living space. Sunlight warms the

mass which then gradually releases the heat to the living space. The storage masses used in such systems typically are either storage walls or roof ponds. In both cases the storage mass must be enclosed, at least in the absence of sunlight, so that the mass does not lose its heat to the outdoors. These systems are attractive in retrofitting existing masonry structures, in using attached greenhouse applications or in locations where summer cooling is an important consideration.

Isolated gain systems are those in which the collector and storage mass are located apart from the living space. Heat is carried to the living space as needed. These systems are attractive particularly where

constant heat is not required.

#### Issues

The primary issue presented by the bill is whether a tax credit should be provided to builders of new residential units that utilize passive solar construction techniques. Additional issues include the definition of a passive solar system, whether the amount of any credit should depend on energy saving potential or on incremental costs, whether a credit should be available as to reconstructed residential units, and whether rules are needed to prevent both a builder and a resident from claiming a credit with respect to expenditures for the same items. Another issue presented by the bill is whether a credit should be available only as to residential construction which satisfies specified requirements relating to minimum daily exposure to the sun, and whether such exposure should be guaranteed by covenant or zoning law.

# Explanation of the bill

The bill would allow a tax credit to builders of new residential units that use passive solar construction techniques. The amount of the credit would depend on the estimated energy savings accomplished by use of the passive solar technique, but could not exceed \$2,000 per residential unit. A qualified residential unit would be a unit designed for residential use and located in the United States. Units would have to be part of a building containing four or fewer units, and completed after September 30, 1981, and before January 1, 1987. All units would have to be ready for occupancy before the later date.

To qualify for the credit, a new unit must contain a "passive solar energy system." Such a system contains five recognizable elements. The first element is a "solar collection area." This is defined as an expanse of transparent or translucent material located on the south side of the structure (within 30 degrees) and which may be moved to allow the sun to warm the absorber (see below) directly. This defintion is intended to include windows and skylights; however, the requirement that these items be movable could disqualify various methods of pas-

sive solar construction.

The second element of a passive solar system is an "absorber." An absorber is a hard surface exposed to the sun which absorbs solar radiation and transmits the resulting heat to a "storage mass" (see below). Typical examples of absorbers would include the surfaces of slate floors, stone walls, and enclosed thermal ponds. Since a hard surface is required, open surface or PVC enclosed thermal roof ponds, swimming pool surfaces, and carpeted areas would not qualify as absorbers.

The third required element of a passive solar system is a "storage mass." A "storage mass" is defined as a dense, heavy material that receives and holds heat from the absorber and later releases it to the interior of the structure. Such a mass must be of sufficient volume, depth and thermal capacity to store and deliver adequate amounts of solar heat for the structure. The bill also would require proper location of the storage mass and that it have an area of directly irradiated material equal to or greater than the solar collection area. Examples of dense, heavy materials which, if properly applied, could have sufficient thermal capacity, include water, eutectic salts in aqueous solutions, stone, and masonry. The requirement that the storage mass be irradiated adequately may be related more directly to the absorber than to the mass. The bill would not restrict the volume of the thermal mass, and thus could apply to an inefficient or ineffective mass (due to oversizing).

The fourth requirement of a passive system is the presence of a "heat distribution method." Such methods would include the direct release of heat into the structure's habitable areas and the movement of heat from the mass by convection through airflow paths or ducts. Fans or pumps of 1 horsepower or less could be used in distributing heat. (Most whole

house and attic fans, for example, are less than 1/3 horsepower.)

The final required element of a passive solar energy system is a "heat regulation device." Such devices are (1) shading or venting mechanisms to control the amount of heat admitted through the collection area, and (2) nighttime insulation (or its equivalent) to control the heat loss from the building. Examples of shading devices would include deciduous trees, overhanging rooflines and shutters. Examples of nighttime insulation (or the equivalent) would include shutters, thermal windows, and insulating curtains.

Although adequate insulation generally is considered to be an essential element of passive solar design, it is not directly required by the bill. However, the amount of the credit would depend on the effective-

ness of the home's insulation.

If a particular home qualifies for the credit, the builder would calculate the credit as follows. First, the heating load of the house would be determined by multiplying the floor area of the house by one of eight insulation factors determined using a table prescribed by the Treasury. These insulation factors would be based on the level of insulation in floors, walls, and ceilings and on the number of panes of glass in each window (i.e., single, double or triple glazing). The factors would range in eight steps from an uninsulated house to a house having the maximum feasible insulation. The heating load so calculated would not depend on the volume of the house. For example, two houses with the same square footage and insulation would have equal heating loads even if one had 7-foot ceilings and the other had 12-foot ceilings.

Once the heating load is known, the builder would calculate the passive capacity of the house by dividing the heating load by the passive solar collection area. In determining the passive capacity of the home, the builder would not need to consider glazed areas that do not admit direct sunlight or the thermal capacity of the storage mass.

The third step in calculating the credit would be to use the passive capacity and location of the home to locate the appropriate credit

on a solar construction credit table prescribed by the Treasury. The solar construction table would be based on the estimated annual energy savings of the home when compared to a nonsolar house of similar location and heating load. The credit would be at the rate of \$60 per million Btu's saved annually up to a maximum of \$2,000 per unit. The table would be developed in consultation with the Department of Energy and the Department of Housing and Urban Affairs.

If two or more builders own interests in a qualified residential unit, the credit would be apportioned among them in proportion to their respective ownership interests.

# Effective date

The provisions of the bill would be effective for taxable years ending after September 30, 1981, and would allow a credit with respect to units completed after that date and before January 1, 1987.

#### Revenue effect

It is estimated that the bill would reduce budget receipts by \$7 million in fiscal year 1982, \$24 million in 1983, \$44 million in 1984, \$70 million in 1985, \$107 million in 1986 and \$117 million in 1987.

# Prior Congressional consideration

During consideration of the Crude Oil Windfall Profit Tax Act of 1980, a similar provision was adopted in a Senate floor amendment. The amendment was not agreed to in conference.

# 4. S. 725—Senators Wallop, Armstrong, Matsunaga, Symms, et al.

# Definition of Shale Oil Equipment for the Energy Investment Credit

Background

Oil shale is a sedimentary rock which contains various amounts of a solid organic material called kerogen. When heated to about 900 degrees Fahrenheit, oil shale generally yields hydrocarbons and a variety of solid by-products. The hydrocarbons, or shale oil, can be processed into liquid and gaseous petroleum products, including middle distillate fuels and gasoline. Shale oil generally is considered to be a synthetic fuel.

High grade oil shales, i.e., those shale rocks containing at least 25 gallons of oil equivalent per ton, are located in Colorado, Utah, and Wyoming. Leaner oil shales are located in ten eastern and middle west-

ern States.

Oil shale can be processed into liquid hydrocarbons by any of a variety of above- or below-ground methods. Above-ground processes generally are preceded by conventional surface or deep mining techniques, and involve crushing and retorting, i.e., heating, the oil shale rock. Below-ground processing generally involves underground, or in situ, retorting, and ordinarily does not require extensive pre-retort mining. However, below-ground processing involves underground fracturing (by explosives, microwaves, or other combustion) and retorting. The liquid hydrocarbons produced then are brought to

the surface by conventional drilling.

When extracted or produced from the oil shale, shale oil is a viscous, and frequently impure, liquid. As such, it is similar to heavy crude oil and liquid hydrocarbons produced from tar sands. Due, in part, to viscosity and impurity, these fuels may require hydrocracking or hydrogenation. Hydrogenation (a post-retort process) generally is considered to be a component of refining, and involves the reaction (or cracking) of a pressurized liquid fuel with hydrogen, while in the presence of a catalyst. Hydrogenation processes and equipment typically are used in (1) refining heavy crude oil, (2) producing isobutane (as a refining by-product) for use in balancing feed in a refinery's alkylation plant, (3) producing a range of products with a more desirable average gravity than the liquid input, and (4) upgrading viscous hydrocarbons into pipeline quality liquids.

# Present law incentives

Tax credits

Equipment for producing, extracting, processing, transporting, and refining shale oil generally qualifies for the 10-percent investment tax credit (Code sec. 48(a)(1)). In addition, the Energy Tax Act of 1978 provided a 10-percent energy investment tax credit for

certain "shale oil equipment" (Code sec. 48(1)(7)). For this purpose, the term "shale oil equipment" means equipment for producing or extracting shale oil from oil-bearing shale rock. The term, however, specifically excludes equipment for hydrogenation, refining, and other processes subsequent to retorting. The term "shale oil equipment" includes qualifying equipment without regard to whether it is used in an above-ground or in situ process. In the latter instance, shale oil equipment includes equipment used to create the underground cavity. In either case, equipment for supplying water and for treating and handling spent oil shale rock is included in the definition of shale oil

equipment.

The energy investment credit generally is available for property placed in service and expenditures incurred through December 31, 1982. In addition, the energy investment credit for shale oil equipment is available after 1982 and before 1991 where the following specified affirmative commitments are undertaken with respect to qualified property that involves long-term projects of two years or more: (1) complete all engineering studies for the project, and apply for all Federal, State, and local environmental and construction permits necessary for commencement of construction, prior to 1983 and (2) binding contracts have been made prior to 1986 to acquire or construct at least 50 percent of all equipment that is especially designed for the project (Code sec. 46(a)(2)(C)(iii)).

Depletion

Under present law, a deduction for percentage depletion is allowed for 15 percent of the gross income from the extraction of oil shale. For this purpose, gross income includes any increment in value through the retorting stage, but does not include any increment in value attributable to hydrogenation, refining, or any other process subsequent to retorting (Code secs. 613 (b)(2)(B) and (c)(4)(H)).

# Production tax credit

Shale oil producers are allowed an income tax credit for the production of shale oil (Code sec. 44D(c)(1)(A)). The credit is equal to \$3 a barrel, and phases out as the annual average wellhead price of uncontrolled domestic oil rises from \$23.50 to \$29.50 a barrel. Both the credit and the phaseout range are adjusted for post-1979 inflation. Due to the application of the oil-based phaseout, the credit was not available with respect to production in 1980.

Federal synthetic fuels assistance

Title I of the Energy Security Act (Pub. L. 96–294) authorized the United States Synthetic Fuels Corporation (SFC) to award "financial assistance" to qualified concerns. For this purpose, the term "financial assistance" means loans, loan guarantees, price guarantees, purchase agreements, joint ventures, certain cost-sharing grants, and certain synthetic fuel project acquisitions and lease backs. A synthetic fuel project is a facility which uses an integrated process or processes for the purpose of commercial production of synthetic fuel, and includes shale projects. The SFC is slated to assume DOE's alternative fuel funds as of the earlier of June 30 or whenever the SFC is declared by the President to be fully operational.

DOE funds have been made available for a variety of purposes relating to the production of shale oil. DOE contract funds have been awarded for feasibility studies relating to shale oil upgrading and refining. For example, the Gary Energy Corp. has received such a contract award for its crude oil refinery site at Fruita, Colorado.

#### State laws

Some States also provide tax incentives for producers to acquire equipment for converting oil shale into a gaseous or liquid fuel. For example, Indiana allows producers, through 1989, to take deductions with respect to tangible shale oil conversion property. The deduction is based on the property's assessed value, and generally equals 95 percent of that value. The Indiana provision was intended to benefit the two shale oil projects currently planned for that State by the

Phillips Petroleum Co. and Southern Indiana Shale Oil Co.

Similarly, the Colorado severance tax provides an incentive for the production of shale oil by allowing a reduction in the value of oil shale for certain costs. For this purpose, the value of shale oil is determined by reducing the first sales price by all costs for equipment, machinery, fragmenting, crushing, conveying, beneficiating, pyrolysis, retorting, refining, transporting, and royalty payments. The severance tax also exempts the greater of the first 15,000 tons per day of oil shale production or 10,000 barrels per day of shale oil. A severance tax credit of 25 percent of the tax is allowed with respect to shale oil produced from *in situ* methods. In addition, the severance tax generally provides a credit for up to 5 years of taxes for certain local government tax contributions.

### Issue

An issue presented by the bill is whether the definition of shale oil equipment which is eligible for the additional energy investment tax credit should be clarified as to property for mining oil shale. Another issue is whether the definition should be extended to include property used for hydrogenation (or a similar process subsequent to retorting). A subsidiary issue involved is whether an extension of the definition of shale oil equipment should be limited to hydrogenation equipment used exclusively to process shale oil prior to its removal from the production site, introduction into a pipeline, or refining.

# Explanation of the bill

The bill would extend the definition of shale oil equipment for purposes of the energy investment tax credit to include equipment used in hydrogenation or similar processes subsequent to retorting. However, the bill would not expand the definition of shale oil equipment to equipment used to refine shale oil.

# Effective date

The provisions of the bill would apply to periods after December 31, 1980.

#### Revenue effect

It is estimated that the bill would reduce fiscal year budget receipts by less than \$5 million in 1981, \$10 million in 1982, \$32 million in 1983, \$52 million in 1984, \$74 million in 1985, and \$91 million in 1986.

Prior Congressional consideration

During the 94th Congress, Title XX of the Tax Reform Act of 1976, as reported by the Senate Finance Committee and passed by the Senate (S. Rept. No. 94–938, 94th Cong., 2d Sess. 568–569 (1976)), and H.R. 6860, as reported by the Senate Finance Committee, would have allowed an increased investment credit of 12 percent for shale oil conversion equipment. The credit would have applied to equipment for purifying kerogen. Title XX was not included in the Tax Reform Act of 1976.

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