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Energy Tax Credits

Energy Facts

Michigan State University Extension Service

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# ENERGY FACTS

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## \$ Energy Tax Credits \$

*Both the Federal Government and the State of Michigan are supporting investments in energy property by offering tax incentives to individuals. This bulletin explains the two programs and the relationship between them.*

### Michigan Energy Incentives



All Michigan homeowners are eligible under Public Act 605<sup>1</sup> for a refundable income tax credit for a percentage of the costs incurred in the installation of solar, wind or water energy conversion devices. If the amount of the credit exceeds taxes owed, the balance is returned to the homeowner in the form of a cash rebate.

Under the law, an eligible alternative energy system is "a mechanism or series of mechanisms designed primarily to collect, convert, transfer or store for future use solar, wind or water energy for the purpose of heating, cooling or electric supply." It excludes "those parts of heating, cooling or electric supply system that would be required regardless of the energy source being utilized." Wood stoves do qualify if they serve as a backup to the eligible system.

The Michigan state solar tax credit program applies to both new construction and retrofits. Energy

conservation measures applied in conjunction with a solar, wind or water energy conversion device to increase efficiency are also eligible. Thermal window coverings installed in an attached greenhouse to reduce heat loss are an example. However, measures to improve the building envelope itself, such as attic insulation or storm windows, are not eligible.

Swimming pool heaters are not eligible unless 25 percent or more of the system's heating capacity is used in the home. Finance charges on loans for installation of solar, wind or water conversion devices are not an eligible part of the calculations, nor is sales tax. Sales taxes are rebated for eligible devices by the Michigan Department of Treasury.

Owner-built systems as well as premanufactured systems can qualify but only the cost of the materials and not the value of the owner's personal labor is eligible. Heat pumps which are an integral part of any eligible system do qualify. Furthermore ground water heat pumps are specifically included as eligible systems.

Structures which qualify are single-family residences and multiple-family residences owned by Michigan taxpayers. The percentages allowed on the cost of materials and installation for multiple-family residences are greater than those for single-family residences (see below).

<sup>1</sup>P.A. 605 of 1978, amended by P.A. 41 of 1979.

# How Much is the Credit?

The amount of the credit allowed for the cost of purchase and installation of a solar, wind or water energy conversion device in the taxpayer's domicile, or in a single-family dwelling owned by the taxpayer and rented or leased as domicile is:

- (a) For the 1979 tax year, 25% of the first \$2,000 of cost and 15% of the next \$8,000 of cost.
- (b) For the 1980 tax year, 25% of the first \$2,000 of cost and 15% of the next \$8,000 of cost.
- (c) For the 1981 tax year, 20% of the first \$2,000 of cost and 10% of the next \$8,000 of cost.
- (d) For the 1982 tax year, 15% of the first \$2,000 of cost and 5% of the next \$8,000 of cost.
- (e) For the 1983 tax year, 10% of the first \$2,000 of cost and 5% of the next \$8,000 of cost.

The amount of the credit allowed for the purchase and installation of eligible alternative energy systems in a multi-family residence owned by the taxpayer is:

- (a) For the 1979 tax year, 25% of the first \$2,000 of cost and 15% of the next \$13,000 of cost.
- (b) For the 1980 tax year, 25% of the first \$2,000 of cost and 15% of the next \$13,000 of cost.
- (c) For the 1981 tax year, 20% of the first \$2,000 of cost and 10% of the next \$13,000 of cost.
- (d) For the 1982 tax year, 15% of the first \$2,000 of cost and 5% of the next \$13,000 of cost.
- (e) For the 1983 tax year, 10% of the first \$2,000 of cost and 5% of the next \$13,000 of cost.

A taxpayer who owns and resides in a condominium in Michigan and who installs a solar, wind or water energy conversion device for the condominium is eligible for the credit\* in proportion to the number of households served by the device. (It is possible that his program will be extended beyond 1983. You may want to contact your State Senator or Representative.)

*\*Plans are underway to slow the decrease in the credit and extend it several years.*

## Certification

Certification of devices and systems is carried out by the Michigan Energy Administration. The homeowner applies for the certificate (Form MI 1040-CR-7) which is issued by the energy administration and attaches it to his/her state income tax returns. If an application is submitted to the energy administration by February 1, of a given year, a certificate or a claim rejection (accompanied by reasons for the rejection) will be issued by April 1. This is not a deadline though, and application may be made at any time following installation.

## Precertification

Precertification of devices is also being done by the Energy Administration. If eligible, a precertification number is issued to the manufacturer pursuant to application. A list of precertified equipment is available from the Energy Administration. Builders of new solar homes can obtain precertificates from the Energy Administration and pass these along to home buyers. Home-built equipment must qualify on an individual basis. Precertification of homes or

devices in no way constitutes endorsement by the state. Precertification means only that the legal definitions for solar, wind or water devices have been satisfied.

## Local Restrictions

Before installing any solar, wind or water system on or in your home, you should first check local building codes and restrictions. Such restrictions as side yard set-back requirements could prohibit the installation of a solar collector which protrudes from your structure and reduces the distance between the property line and the new addition below the minimum required. Windmills could violate height restrictions in some areas. Remember that building permits are required for most new construction.

## Other Incentives

Property tax exemption is available on solar, wind or water property. This exemption is in effect for the life of the structure. A certificate of eligibility for ex-

emption is issued by the Michigan State Tax Commission. You then file this certificate of exemption with your township or city assessor. This certificate can also be used to obtain a refund on sales tax paid on supplies for solar, wind or water systems, as well as a refund of any use tax that was paid.

Information on systems and certification of systems is available from the Energy Administration of Michigan. For documents write to:

Energy Administration - STC  
Michigan Department of Commerce  
P.O. Box 30228  
Lansing, MI 48909

Certificate applications for property tax exemption<sup>2</sup> and sales and use tax refunds are available from:

Michigan State Tax Commission  
Department of Treasury  
Lansing, MI 48922  
(517) 373-0500

### Before Construction

Before beginning construction of solar property, a resident should obtain a copy of the solar, wind or water income tax credit rules and guidelines from the MEA (also referred to as the EA of M [Energy Administration of Michigan]). This will help the resident plan his installation to assure eligibility. It is also important to keep records and receipts of all expenditures related to any energy system. If possible, these records should separate expenditures for materials and labor. The applicant will need figures for total costs for tax credits and a portion of total cost for property tax exemption (wood burners may be eligible for the tax credit but not for property tax exemption) and materials costs only for sales tax and use tax refunds.

### Method of Refund

The certificate (Form 1040-CR-7) issued by the Energy Administration is then attached to the resident's state income tax return. This amount minus one's tax liability, if any, is then rebated to the homeowner.

<sup>2</sup>The law for property tax exemption predates the solar tax credit legislation; therefore, application does not depend on same.

# Federal Energy Incentives



The federal government is offering both renewable energy source property credit and conservation credits.

Total credits of up to \$4,000 for renewable energy source property and \$300 for energy conservation costs are available for expenditures made for certain energy property which reduces the use of fossil fuels or uses new sources of energy such as solar, wind or geothermal.

The residential energy credit is available for an individual's principle residence. The credit is available to renters (if they make the expenditure) and owners; as well as tenant stockholders in cooperative housing corporations, and condominium owners.

### How Much Is The Credit?

The percentage for the renewable source credit is 40% of the first \$10,000 spent, for a maximum credit of \$4,000. The percentage for conservation credit is 15% of the first \$2,000 spent, for a maximum of \$300.

### Renewable Energy Source Property Credit

Pursuant to the Crude Oil Windfall Profit Tax Act of 1980, expenditures made after 1979 qualify for the 40% credit. Expenditures made after April 1977 and before December 31, 1979 qualify for 30% of the first \$2,000, plus 20% of the next \$8,000.

### Items Which Qualify

In general, solar, wind or geothermal energy property which reduces the need for fossil fuels qualify. Solar energy property includes equipment which changes sunlight into heat or electricity such as solar water collector panels, rockbed storage and heat exchangers. Geothermal energy property includes mechanisms which use geothermal deposits<sup>3</sup> to heat or cool the home. Wind energy property produces any type of energy for residential use. Both the material and cost of labor for original installation are eligible for the credit. The renewable energy property must be new and be expected to last 5 or

<sup>3</sup>To qualify, geothermal deposits must register 50° celsius or 122° Fahrenheit at the well head.

more years. Although both "passive" and "active" systems qualify, materials and components that serve a significant structural function or are structural components, such as extras thick walls, windows, skylights, greenhouses and roof overhangs do not qualify. However, solar collectors which are part of a roof do qualify.

### Energy Conservation Credit

A credit of 15% of the first \$2,000 spent on energy saving property is allowed. This credit applies to your principle residence only. And, should you buy a new principle residence, a new \$2,000 limit applies. In order to qualify for the conservation tax credit, your principle residence must have been substantially completed before April 20, 1977.

### What Are Energy Conservation Items?

Qualifying items include: insulation, storm or thermal windows or doors, caulking or weatherstripping, clock thermostats, furnace modification and meters that display cost of energy use. Items which do not qualify for the conservation credit include: heat pumps, fluorescent lights, wood burning stoves, replacement boilers and furnaces and hydrogen-fueled equipment.

The energy conservation items installed must be new, not transferred from another building or elsewhere in the home. The item must be expected to last at least 3 years.

## Figuring Your Credits

Table 1 is an example for 1981 of the maximum tax credits available from both the federal government and the state of Michigan. This is for renewable

energy property credit and federal conservation credit.

**Table 1 — Credit on Renewable Energy Property**

An expenditure of \$10,000 (the maximum) was made for renewable energy property on a single principle residence (i.e., a windmill was installed). Also, an expenditure of \$2,000 was made to insulate, weatherstrip and caulk the same principle residence.

*Michigan Credit 1981 (See chart on page 2 for yearly rate schedule).*

20% of 1st \$2,000	= \$ 400	
10% of next \$8,000	= \$ 800	
	<u>\$1,200</u>	Total Renewable Source Property

*Federal Credit*

40% of 1st \$10,000 = \$4,000 Total Renewable Source Property  
 15% of 1st \$2,000 = \$300 Conservation Property

Total Michigan Credit	\$1,200
Total Federal Credit	<u>\$4,300</u>
	\$5,500

Initial Expenditure	\$10,000
Less Tax Credits and Refund	<u>\$ 5,500</u>
Total Real Cost	\$ 4,500

A final note of caution pertains to the relationship between federal subsidized energy financing programs and the federal tax incentive programs. If you take advantage of federal reduced interest or guarantee bank loans to finance an energy improvement

on your home, you cannot take advantage of the federal tax incentive program. A resident should calculate carefully which program is more financially beneficial to him/her.