



## WISCONSIN LEGISLATIVE COUNCIL INFORMATION MEMORANDUM

### Tax Exemptions and Credits Related to Renewable Energy Resources

A variety of state programs and policies have been established for the purpose of promoting the development and use of renewable sources of energy. These include programs to provide financial and technical support to the manufacturers, installers, and end users of renewable energy systems or equipment. They also include state policies that, among other things, require the use of renewable energy sources by state facilities and by the electric utilities in the state. Collectively, these programs and policies target virtually all parts of Wisconsin society, including state and local governments, schools and universities, and residential, commercial, and industrial energy users.\*

One particular category of policies to promote renewable energy is tax exemptions and credits. These include tax exemptions and credits targeted very specifically at promoting renewable energy, but also include exemptions and credits that, although established for other policy reasons, have the effect of supporting or promoting renewable energy resources.

This Information Memorandum summarizes the tax exemptions and credits in Wisconsin that are related to renewable energy resources.

#### **DEFINITION OF “RENEWABLE ENERGY”**

Many types of energy are considered to be “renewable.” A good list of these is found in the definition of the term as it is used in the statute governing the statewide energy efficiency and renewable resource program, commonly known as the Focus on Energy Program:

196.374 (1) (j) “Renewable resource” means a resource that derives energy from any source other than coal, petroleum products, nuclear power or, except as used in a fuel cell, natural gas. “Renewable resource” includes resources deriving energy from any of the following:

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\* For an overview of these policies, see Chapter S of the Legislative Council's Wisconsin Legislator Briefing Book, 2011-12, available at this address:  
[http://legis.wisconsin.gov/lc/publications/briefingbook/10chS\\_utils\\_energy.pdf](http://legis.wisconsin.gov/lc/publications/briefingbook/10chS_utils_energy.pdf).

1. Solar energy.
2. Wind power.
3. Water power.
4. Biomass.
5. Geothermal technology.
6. Tidal or wave action.
7. Fuel cell technology that uses, as determined by the commission, a renewable fuel.

Of these categories, biomass is perhaps the most diverse. The word itself refers to the matter produced by living organisms, that is, plants and both the bodies of animals and the wastes produced by animals. As an energy resource, biomass includes both these materials themselves and products made from them. Thus, a list of biomass energy resources would include wood, grasses, pellets made from crop residues or waste materials from forest products industries, as well as ethanol, methane, or other liquid or gaseous fuels made by the fermentation, pyrolysis, or other treatment of plant or animal material.

## **TAX EXEMPTIONS AND CREDITS**

A variety of tax incentives applicable to renewable energy production have been enacted in Wisconsin. Some of them apply to manufacturing, broadly, and so apply to certain aspects of manufacturing related to renewable forms of energy. Others apply to specific renewable energy technologies. None of the incentives, though, apply uniformly to all types of renewable energy.

This Information Memorandum focuses on tax exemptions and credits that are designed as incentives for the development and use of renewable energy resources. With the exception of certain exemptions related to manufacturing machinery, equipment, and inputs, it does not address exemptions and credits of broader application.

### ***PROPERTY TAX EXEMPTIONS***

#### ***Solar and Wind Energy Systems***

Solar and wind energy systems are exempt from the property tax. [s. 70.111 (18), Stats.] The exemption applies to systems that convert solar or wind energy into a usable form and then transfer or store that energy. It does not apply to equipment or components that would be present as part of a conventional energy system. It also does not apply to solar energy systems that operate without mechanical means, i.e., passive solar systems or building designs.

#### ***Manufacturing Machinery and Specific Processing Equipment***

The so-called “Manufacturing and Equipment” exemption, or “M & E” exemption, exempts from the property tax certain types of machinery and equipment used in manufacturing, but

not buildings or structures in which the exempt machinery or equipment is located. [s. 70.11 (27), Stats.] A taxpayer is eligible for this exemption only if its principal business is the manufacturing of a product for sale, as determined by the Department of Revenue.

For example, a company whose business is the manufacture of ethanol or fuel pellets from biomass for sale as fuel is eligible to claim this exemption. Similarly, a paper manufacturer that manufactures a fuel product from its own waste materials for sale is eligible to claim this exemption for the equipment used to manufacture that fuel product to the same extent that it is eligible to claim the exemption for its paper manufacturing equipment. However, if that paper manufacturer made the fuel product exclusively for its own use, rather than for sale, that equipment would not be eligible for the exemption.

Also, a farmer who installs a biodigester to manufacture methane from farm wastes is not eligible to claim the exemption for the biodigester, because the farmer is not principally a manufacturer. If the farmer formed a separate corporate entity, individually or in cooperation with neighboring farmers, specifically for the purpose of manufacturing methane from the wastes generated on the participating farms, that entity could, potentially, be eligible to claim the exemption.

### ***SALES TAX EXEMPTIONS***

Two sales tax exemptions relate directly to renewable energy resources. In addition, several sales tax exemptions relate to manufacturing equipment or inputs, which, under various circumstances, could be applied to the development or use of renewable energy resources.

#### ***Biomass Fuels***

Two categories of biomass fuels are exempt from the sales tax:

- Biomass that is used for fuel sold for residential use. [s. 77.54 (30) (a) 1m., Stats.]
- Any residue that results from the harvesting of timber or the production of wood products, including wood pellets manufactured primarily from wood or wood residue, that is used as fuel in a business activity. [s. 77.54 (30) (a) 4., Stats.]

#### ***Wind, Solar, and Biogas Products and Energy***

The following are exempt from the sale tax:

- A product that generates energy (at least 200 watts of electricity or 600 British thermal units per day of heat) from wind, sunlight, or the anaerobic digestion of animal manure or other agricultural wastes. This exemption does not apply to an uninterrupted power source that is designed primarily for computers. [s. 77.54 (56) (a), Stats.]
- Electricity or energy produced by such equipment. [s. 77.54 (56) (b), Stats.]

#### ***Waste Reduction or Recycling Machinery or Equipment***

Machinery and equipment is exempt from the sales tax if it is “exclusively and directly used for waste reduction or recycling activities which reduce the amount of solid waste generated, reuse

solid waste, recycle solid waste, compost solid waste or recover energy from solid waste. The exemption applies even though an economically useful end product results from the use of the machinery and equipment.” [s. 77.54 (26m), Stats.] Machinery or equipment used for energy recovery from solid waste that is biomass, such as agricultural waste or wood products waste, would benefit from this exemption. This could include machinery used to produce biomass fuel pellets or to burn those pellets to recover energy. It could also apply to machinery and equipment for ethanol production if the feedstock for the production process is a waste, such as whey or cellulosic waste (wood, corn stover, etc.).

### ***Manufacturing Machinery and Specific Processing Equipment***

Similar to the property tax exemption, there is an exemption from the sales tax for certain types of machinery and equipment used in manufacturing. [s. 77.54 (6) (a), Stats.] Unlike the property tax exemption, though, this exemption can be claimed by any person purchasing the equipment, regardless of whether the person’s principal activity is manufacturing. Thus, while a farmer may not be able to claim the M & E property tax exemption for a manure digester, the farmer may be able to claim the parallel sales tax exemption when purchasing such equipment.

### ***Manufacturing Inputs***

Materials used as inputs in a manufacturing process are also exempt from the sales tax. [s. 77.54 (2), Stats.] In the renewable energy context, this would apply, for example, to corn purchased for ethanol production.

## ***INCOME TAX CREDITS***

Income tax credits are amounts deducted from a taxpayer’s tax bill (as opposed to deductions, which are amounts deducted from the taxpayer’s taxable income). In general, the taxpayer may deduct the amount of the credit up to the taxpayer’s total tax bill. If a credit is refundable, any amount of the credit that exceeds the total tax bill is paid by the state to the taxpayer. If a credit is nonrefundable, the taxpayer is not paid any amount of the credit that exceeds the total tax bill. However, for some nonrefundable credits, the taxpayer may carry over any unused amount of credit to apply against a future year’s tax bill.

There are numerous income tax credits applicable to businesses, generally, which may apply to a renewable energy-related business. This section does not discuss these general credits, but describes three credits directly related to renewable energy resources.

### ***Woody Biomass Harvesting and Processing Credit***

The woody biomass harvesting and processing credit is a refundable credit equal to 10% of the amount paid for the purchase of equipment used primarily to harvest or process woody biomass for use as fuel or as a component of fuel, subject to the following limitations:

- The credit is available only for taxable years beginning after 2009 and before 2016.
- A taxpayer that claims a similar credit on its federal tax returns may not claim this credit.

- The aggregate amount of credits claimed by an individual taxpayer may not exceed \$100,000 over the period that this credit is available.
- The aggregate amount of credits claimed by all taxpayers may not exceed \$900,000 over the period that this credit is available.

[s. 71.07 (3rm), Stats., *et al.*]

### ***Biodiesel Fuel Production Credit***

The biodiesel fuel production credit is a nonrefundable credit up to \$.10 per gallon of biodiesel fuel produced by the claimant, subject to the following limitations:

- The credit is available only for taxable years beginning after 2011 and before 2015.
- To be eligible, a taxpayer must produce at least 2.5 million gallons of biodiesel fuel in the taxable year for which the taxpayer claims the credit.
- A taxpayer may not claim a credit greater than \$1 million in a taxable year.

[s. 71.07 (3h), Stats., *et al.*]

### ***Ethanol and Biodiesel Fuel Pump Credit***

The ethanol and biodiesel fuel pump credit is a nonrefundable credit up to 25% of the cost of installing or retrofitting fuel pumps to dispense ethanol or biodiesel fuel blended with gasoline, subject to the following limitations:

- The credit is available only for taxable years beginning after 2007 and before 2018.
- A taxpayer may not claim credits more than \$5,000 for each service station in this state at which it installs or retrofits pumps.

[s. 71.07 (5j), Stats., *et al.*]

This memorandum is not a policy statement of the Joint Legislative Council or its staff.

This memorandum was prepared by David L. Lovell, Senior Analyst, on January 13, 2012.