



Legislative Fiscal Bureau

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Joint Committee on Finance

Paper #325

Ethanol and Biodiesel Fuel Pump Tax Credit (General Fund Taxes -- Individual and Corporate Income Taxes)

Bill Agency

[LFB 2007-09 Budget Summary: Page 167, #18]

CURRENT LAW

Costs related to the operation of a business are deductible as business expenses if the expenses are ordinary and necessary and connected to the trade and business of the taxpayer. Business expenses are deductible in computing the taxable income of all taxpayers including sole proprietors, corporations, limited liability companies (LLCs), partnerships, estates and trusts, and employees. Generally, the cost of retail service station property is depreciated.

The deduction for depreciation allows taxpayers to recover, over a period of years, the cost of capital assets used in a trade or business or for the production of income. The deduction is an allowance for the wear and tear, deterioration, or obsolescence of the property. To be depreciable, the property must have a determinable life of more than one year, and it must decline in value through use or the passage of time. Only property used in a trade or business or held for the production of income is eligible for a depreciation deduction. The amount to be recovered by depreciation is the cost or other appropriate basis of the property. The life over which the depreciable basis of property is recovered depends upon the type of asset that is depreciated and the system of depreciation that is used.

Because state depreciation provisions are referenced to the federal Internal Revenue Code (IRC) in effect on December 31, 2000, tangible depreciable property currently placed in service is generally subject to the Modified Accelerated Cost Recovery System (MACRS). Under MACRS, the cost of property is recovered by using accelerated methods of cost recovery and statutory recovery periods and conventions. The deduction is computed by first determining the

MACRS basis of the property. Each item of eligible property is then assigned to a specific class and each class establishes a recovery period over which the cost of the property is recouped using the applicable depreciation method and convention. Depreciation tables may be used by multiplying the basis of the assets by the applicable percentage for the applicable year of the recovery period. Alternatively, the deduction can be calculated using the appropriate method, recovery period, and convention.

Under MACRS, personal property used in marketing petroleum and petroleum products, including gasoline storage tanks and pumps, is classified as five-year property, and the cost of such property is recovered over five years using the 200% declining balance method of determining annual deductions. Service station buildings and petroleum marketing land improvements are classified as 15-year property, and the cost of the property is recovered over 15 years using the 150% declining balance method of computing annual deductions. The 15-year asset class includes service station buildings and depreciable land improvements, whether the property is real or personal, that is used in the marketing of petroleum and petroleum products, but not including such facilities that are related to petroleum and natural gas trunk pipelines.

The IRS has issued specific guidelines for depreciating gas station convenience store buildings and truck stop structures. If 50% or more of the gross revenues generated by the convenience store are derived from gasoline sales, or 50% or more of the building's floor space is devoted to the petroleum marketing activity, or the building is no more than 1,400 square feet, then the convenience store is treated as 15-year property. Otherwise, the convenience store is treated as nonresidential real property and depreciated over 39 years (if placed in service after May 12, 1993).

In certain cases, taxpayers can claim a current year deduction for a certain amount of capital expenditures that would otherwise be depreciated. Under Section 179 of the IRC, a taxpayer may elect to treat all or a portion of the cost of qualifying property, up to a limit, as an expense rather than as a capital expenditure. Such an expense or cost is deductible in the year in which the property is placed in service. The amount claimed as a deduction is referred to as a Section 179 expense allowance. Qualifying property is generally:

- a. Tangible personal property.
- b. Other tangible property (except buildings and their structural components) used as: (1) an integral part of manufacturing, production, or extraction, or of furnishing transportation, communications, electricity, gas, water, or sewage disposal services; (2) a research facility used in connection with any of these activities; or (3) a facility used in connection with such activities for the bulk storage of tangible commodities.
- c. Single purpose agricultural property (livestock or horticultural structures).
- d. Storage facilities (except buildings and their structural components) used in connection with distributing petroleum or any primary product of petroleum.

State taxpayers are subject to Section 179 IRC provisions that were in effect for tax years through 2002. As a result, under current Wisconsin law, a taxpayer may elect to deduct up to \$25,000 of the cost of qualifying property in the year it is placed in service rather than taking depreciation deductions over a specified recovery period. In general, qualifying property is depreciable tangible personal property that is purchased for the active conduct of a trade or business. The maximum deductible amount of \$25,000 is reduced (but not below zero) by the amount by which the qualifying property placed in service during the taxable year exceeds \$200,000. In addition, the amount eligible to be expended for a taxable year may not exceed the taxable income of the taxpayer that is derived from the active conduct of a trade or a business for that year.

GOVERNOR

Create an ethanol and biodiesel fuel pump tax credit under the state individual income and corporate income and franchise taxes for amounts paid to install or retrofit pumps located in Wisconsin that dispense motor fuel consisting of at least 85% ethanol, or at least 20% biodiesel fuel. The tax credit could be claimed for tax years beginning after December 31, 2007, and before January 1, 2018. Reduce state income and franchise tax revenues by an estimated \$1,000,000 in 2008-09.

DISCUSSION POINTS

1. The proposed tax credit would equal 25% of amounts paid for installing or retrofitting fuel pumps that dispense motor fuel containing 85% ethanol (E85) or 20% biodiesel fuel (B20). The tax credit could be claimed for tax years beginning after December 31, 2007, and before January 1, 2018. The maximum tax credit for a tax year could not exceed \$5,000 for each installed or retrofitted pump used as the basis for the credit. Unused credit amounts could be carried forward up to 15 years to offset future tax liabilities.

Partnerships, LLCs, and tax-option corporations could not claim the credit, but eligibility for, and the amount of the tax credit would be based on eligible expenditures for installation and retrofitting. A partnership, LLC, or tax-option corporation would be required to compute the amount of credit each of its partners, members, or shareholders could claim and to provide that information to them. Partners, members, and shareholders would claim the credit in proportion to their ownership interests.

"Motor vehicle fuel" would mean gasoline or diesel fuel. "Biodiesel fuel" would be defined under current law provisions as a fuel that is comprised of monoalkyl esters of long chain fatty acids derived from vegetable oils or animal fats.

DOR would administer the ethanol and biodiesel fuel pump tax credit and be authorized to take any action, conduct any proceeding, and act as authorized under income and franchise tax

provisions relating to timely claims, assessments, refunds, appeals, collection, interest, and penalties.

2. The ethanol and biodiesel fuel pump tax credit was included with a number of proposals made by the Governor designed as state policies for addressing oil dependency, climate change, and economic development. Each of the Governors in the surrounding states of Michigan, Illinois, Iowa, and Minnesota have proposed major energy policy initiatives in the last six months. The proposals reflect a growing concern about energy issues. More specifically, concerns about climate change, oil security, and economic growth have led to a renewed interest in developing alternative energy sources.

Climate Change. Scientific findings have increasingly indicated that the earth is moving closer to several tipping points that could make it impossible to avoid irreparable damage to the earth's habitability for humans. In 1995, the United Nations Intergovernmental Panel on Climate Change (IPCC), after years of study, issued a report asserting that the balance of evidence suggested that human activity was increasing the planet's temperature and it would be a serious problem. Much scientific research continued after the report, including IPCC reports that were issued in 2001 and 2007, and the findings essentially corroborate the 1995 report. The 1995 consensus report's scientific findings were the basis for the Kyoto Protocol to reduce greenhouse emissions which was proposed in 1997, and took effect in 2005.

The 2007 IPCC report indicated that: (a) the amount of carbon in the air is accelerating; (b) nonhuman causes, as explanations for some of the warming, are relatively negligible; and (c) heavy rainfalls are becoming more common, cold days and frost have become less common, and hot days and heat waves have become more frequent. The report projects the effects of sea-level increases in creating refugees, increases in temperature and humidity on malaria-carrying mosquitoes, and of heat waves on crop losses. The study recommends an immediate and sharp reduction in greenhouse gas emissions.

Oil Security. Since the 2001 recession, oil prices have trended steadily upward. Prices have risen from about \$25 a barrel in early 2002 to about \$65 a barrel currently. The U.S. Department of Energy (DOE) projects that prices will average over \$66 a barrel this summer. Political instability in the Middle East, increasing demand for oil from developing countries, particularly China and India, and strike-related slowdowns in Venezuela have reduced production. This has reduced worldwide spare productive capacity. Between mid-2002 and March, 2003, spare capacity dropped from over six million barrels a day to below two million a day. At the same time, the country's dependence on foreign oil has increased. In 1985 the United States imported 27.8% of the oil it consumed. Currently, the U.S. imports about 67%. There are widespread concerns among policy-makers at all levels of government about the economic and national security implications of the country's dependence on foreign oil.

In October, 2006, the Council on Foreign Relations issued a study, National Security Consequences of U. S. Oil Dependency, that indicated that America's dependence on imported energy increases its strategic vulnerability and constrains its ability to pursue foreign policy and

national security objectives. The study recommended that the U.S. should begin the transition to an economy that relies less on petroleum. Five major reasons were identified as why dependence on energy traded in world markets is a matter of concern: (a) control over enormous oil revenues gives exporting countries flexibility to adopt policies opposed to U.S. interests and values; (b) oil dependence causes political realignments that constrain the ability of the U.S. to form partnerships and achieve common objectives; (c) high prices and seemingly scarce supplies create fears that the current system of open markets is unable to secure supply, leading to oil and gas deals that include political alignments; (d) revenues from oil and gas exports can undermine local governance, and lead to corruption and mismanagement; and (e) a significant interruption in oil supply will have adverse political and economic consequences for the United States and other importing countries. Included among a wide ranging number of recommendations is increased investment in new energy technologies.

Economic Concerns. U.S. economic performance may be constrained by persistently higher world oil prices. Petroleum products are important inputs for other goods produced by U.S. firms, and oil prices significantly impact business distribution costs and other transportation expenses. Because petroleum products are so widely used and because the U.S. imports approximately two-thirds of its oil from other countries, high oil prices are viewed as having a net negative impact on the domestic economy.

3. Generally, ethanol is created by leaching simple sugars from plant matter and fermenting them into alcohol, just like the process for making "corn liquor." Since conventional ethanol relies on simple sugars, it works best when derived from crops that concentrate starches in their seeds. As a result, corn is a better feedstock than grains like wheat, but not as good as sugarcane. Because only a small portion of each plant is used to produce ethanol, a significant amount of biomass goes unused in the process. The primary feedstock for ethanol in the U.S. is corn, which accounts for about 95% of the ethanol produced in the country.

Ethanol is typically blended with gasoline for use as a transportation fuel. The most common blend is 10% ethanol, or E10, which can be used by all types of engines and vehicles that require gasoline. Ethanol can be used in higher concentrations up to 85%, or E85, in "flexible-fuel" vehicles that have slight engine modifications. Ethanol can be blended at low concentrations as a fuel oxygenate and is being used in gasoline as a replacement for methyl tertiary butyl ether (MTBE), an emission reducing additive, which was found to be carcinogenic and a source of groundwater pollution. U.S. ethanol production doubled between 2000 and 2005, reaching 3.9 billion gallons in 2005. Production is estimated to have increased to 4.8 billion gallons for 2006, the largest annual increase in production. According to the Department of Energy, one out of every eight gallons of gasoline sold in the U.S. contains ethanol.

4. E85 is a blend of 85% ethanol and 15% gasoline. In certain areas, higher percentages of gasoline will be added to E85 during the winter to ensure that vehicles are able to start at very cold temperatures. E85 cannot be used in a conventional gasoline-only engine. Vehicles must be specially designed to run on it. In the U.S., the only vehicles currently available that can operate with E85 are known as flexible fuel vehicles (FFVs), because they can operate on E85, gasoline, or

any blend of the two. E85 can be purchased at certain service stations from specially marked pumps. In 2004, (the latest year with aggregate information available) approximately 34 million gallons of E85 were sold nationally, compared with an average of about 200 billion gallons of gasoline and diesel fuel. Currently, there are about 1,000 service stations in the U.S. that sell E85.

Substituting ethanol for gasoline through blends such as E85 is one means of reducing the dependency of the U.S. economy on imported oil. According to the federal Environmental Protection Agency (EPA), E85 reduces emissions of carbon monoxide (CO) and benzene, a known carcinogen. When made from corn, E85 decreases greenhouse gas (GHG) emissions on a life cycle basis (including the energy required to grow and process corn into ethanol) by 15% to 20% when compared to gasoline. E85 made from cellulose can reduce emissions by about 70%. EPA has concluded that ethanol generates more energy than the fossil fuel energy used to produce it. (There are some studies that question the net energy balance of ethanol production. Pimental has found that more energy was used in producing ethanol, than the energy from it [2003, 2005]. Also, a recent study [Jacobson, 2007] found that switching from gasoline to ethanol for vehicle transportation would raise ozone levels everywhere in the country except the southeast.) E85 also increases certain emissions, such as acetaldehyde.

5. As the name implies, a flexible fuel vehicle can run on more than one type of fuel. FFVs can be fueled with unleaded gasoline, E85, or any combination of the two. However, at least 15% gasoline must be in the fuel, to ensure the vehicle starts in cold weather. Like conventional gasoline powered vehicles, FFVs have a single fuel tank, fuel system, and engine. They differ from conventional vehicles in that they are equipped with modified components, such as insulated wiring and updated piston rings and fuel injectors, that are designed specifically to be compatible with ethanol's chemical properties. FFVs are available in a wide range of models including sedans, pickup trucks, and minivans. In general, FFVs are priced similar to and have similar maintenance costs as regular cars and trucks. There are about 5 million FFVs currently in use in the U.S., and major automobile companies have made a commitment to increase production.

FFVs operating on E85 generally perform just as well as when fueled with gasoline. Sensors in the FFV system automatically prompt adjustments for fuel composition, so emissions and standard performance areas such as power and acceleration are not significantly affected by E85. However, according to EPA, there is a difference between E85 and gasoline in fuel economy. Since ethanol contains less energy than gasoline, E85 reduces fuel economy by 20% to 30%. As a result, an FFV will travel fewer miles on a tank of E85 than on a tank of gas.

Noting a substantial difference in the actual and potential amounts of E85 that could be purchased by FFV drivers in the state, the Minnesota Department of Commerce conducted an analysis to determine the factors that influence E85 use. The Department used a cross-sectional time series analysis with seven years of service station monthly pricing and sales data. The analysis confirmed that the relative price differential between E85 and regular gasoline was a primary determinant of E85 sales. The greatest increase in E85 sales came in response to an increase in regular gasoline prices, while a decrease in E85 prices increased sales, but only 60% as much as an equal increase in the price of gas. Other factors that increased E85 sales included

advertised availability, location in urban areas, location in areas with high median income, and the number of FFVs in the area. Gas stations with on-site signs advertising E85 availability sold more E85 than stations without signs. Also, E85 sales volumes were higher for stations located in urban population centers, and with higher median household incomes. Finally, for every additional FFV registered in an E85 station zip code, monthly sales increased slightly.

6. Biodiesel is diesel fuel produced from soybean, palm, or oil-seed plants, such as canola or mustard, and also from waste animal and vegetable fats. The most common sources for biodiesel production in the U. S. are soybean oil and yellow grease (primarily recycled cooking oil from restaurants), with soybeans being the predominant feedstock. Biodiesel can be produced by several processes. Vegetable oils or fats can be converted to fatty acids, which are in turn converted to esters (organic fuel compounds). Oils or fats can also be converted directly into esters, using an acid or base to accelerate the transesterification process. The most common method of producing biodiesel is to react animal fat or vegetable oil with methanol in the presence of sodium hydroxide. This reaction produces methyl esters and glycerine. Biodiesel in its pure form is known as "net biodiesel" or B100. However, biodiesel can be blended with ordinary diesel fuel at any concentration, most often as B5 (5% biodiesel and 95% diesel fuel) and B20 (20% biodiesel and 80% diesel). Between 1999 and 2005, biodiesel production in the U.S. increased from 500,000 gallons to 75 million gallons.

7. Blends of up to 20% biodiesel (mixed with petroleum diesel fuels) can be used in nearly all diesel equipment, and are compatible with most storage and distribution equipment. Low level blends of B20 or less generally do not require engine modifications. Biodiesel typically does not cause maintenance problems, although the initial use can release deposits from previous diesel fuel accumulated on tank walls and pipes causing fuel filter clogs. Vehicles have similar horsepower and torque as conventional diesel when operating on biodiesel. EPA indicates that biodiesel has slightly less fuel economy, with vehicles powered by biodiesel getting 2% to 8% less mileage than vehicles using regular diesel fuel. Biodiesel vehicles can also have problems starting in very cold temperatures. Biodiesel is available in various blends (B5, B20, B100) at approximately 600 service stations nationally.

EPA indicates that use of biodiesel reduces emissions of carbon monoxide, particulate matter, and sulfates. The amount of reductions increases as the amount of biodiesel that is blended into regular diesel fuel increases. In addition, on a lifecycle basis, B20 reduces greenhouse gas emissions a minimum of 10%. A 2002 EPA summary analysis suggested that vehicles using biodiesel may emit slightly more nitrogen oxide (about 2% more for B20) than regular diesel fuel. Subsequent studies have shown mixed results, and EPA indicates it plans further study of the issue.

8. According to the Wisconsin Office of Energy Independence, there were 60 E85 refueling facilities in the state as of April, 2007, most of which were service stations. An additional 14 are scheduled to begin operating in the next six months. In 2005, there were 27 E85 refueling facilities in the state. Statewide consumption of E85 fuel was an estimated 2.7 million gallons in 2006 compared to 800,000 gallons in 2005. There were 128,600 FFVs in Wisconsin in 2006,

compared to 109,800 in 2005 (17% increase). Assuming normal driving patterns (14,000 miles, 20 miles/gallon), FFVs could have consumed over 90 million gallons of E85 in 2006. In January, 2007, there were five ethanol production plants in the state with total production capacity of 252 million gallons. Three additional plants are being constructed with 220 million gallons of production capacity.

The National Biodiesel Board lists 16 retail fueling sites for biodiesel in Wisconsin. In 2006, approximately 159,300 vehicles in the state were powered by diesel fuel. Again, assuming normal driving patterns, the potential market for biodiesel sales would be over 111.5 million gallons. At the end of January, 2007, three biodiesel production facilities were operating in the state, with a total production capacity of five million gallons of biodiesel. Another facility with a production capacity of 20 million gallons was under construction.

9. In theory, a business will make an investment if the return on that investment increases the profitability of the business. As a result, if investment in E85 and biodiesel fueling systems generates additional profits, retailers can be expected to purchase E85 and biodiesel systems through the normal functioning of capital markets. As noted, the number of sites where E85 is sold more than doubled between 2005 and 2006, while the number of FFVs sold increased 17% during that period. The number of biodiesel retail locations is also increasing. It appears that there is a market for these alternative fuels developing in the state. Moreover, based on current facilities under construction, the production capacity in the state for both ethanol and biodiesel will increase over 100% when the facilities are complete. Since transportation costs are an element in the purchase price of ethanol and biodiesel, state retailers should have access to ethanol and biodiesel at competitive prices.

In competitive markets, prices transmit accurate signals of the benefits and costs of goods that are produced and consumed. However, there are reasons why prices might fail to reflect actual benefits and costs and these are typically referred to as market failures or distortions. When market prices do not reflect the social benefits of a particular investment, then a private firm will invest less than is optimal for society. In these cases, the failure of prices to accurately reflect social costs and benefits means that something other than a free-market outcome would be optimal. The EPA reported that transportation activities accounted for 33% of carbon dioxide emissions from fossil fuel combustion in 2005, and virtually all of the energy consumed in this sector came from petroleum products. In the U.S., 18% of total manmade carbon dioxide emissions are from the operation of light duty cars and trucks. At the same time, the U.S. passenger fleet accounts for 10% of world oil consumption. The U.S. consumes 20 million barrels of oil a day, of which eight million is burned by passenger vehicles. Sixty-seven percent of the country's oil is imported. The proposed fuel pump tax credit is designed to provide an incentive to offer alternative fuels to customers. To the extent the use of E85 and biodiesel by consumers reduces greenhouse gas emissions and consumption of regular oil and diesel fuel, the tax credit could be viewed as an appropriate component of state energy policy. In addition, by creating demand for alternative fuels, the credit could contribute to development of the state's ethanol and biodiesel industries.

10. Wisconsin has over 4,100 retail gasoline outlets of three predominant types: (a) refiner-owned and operated stations; (b) branded, independent retailer outlets, which lease the retail outlet or brand name from the brand-owned company (such as Exxon), or are in some part independently owned and operated; and (c) unbranded, independent outlets, that are owned and operated by an independent business owner with no connection to an oil refiner. Branded, independent outlets represent the largest percentage of retail outlets in the state. Unbranded, independent retailers are the next most common type of service stations, while major oil company and refiner owned and operated gasoline retailers are relatively few in number.

Refiner and major oil company owned service stations receive fuel directly from the company. Branded, independent stations usually contract with the brand company for fuel supplies that guarantee a specified percentage of the retailer's volume. Contracts generally require ongoing delivery of the fuel to the retailer at a specified price, delivery and other charges, and a quantity. Other supplies are purchased in a single sale or "spot" transaction. Spot transactions refer to the one-time sale of a quantity of fuel at a convenient transfer point. Unbranded, independent retailers generally purchase unbranded fuel on the spot market through jobbers, or at the terminal. Some larger independents also contract for fuel with one or more refiners.

11. Biodiesel is typically blended by distributors (jobbers) who then market the blended product as B5, B10, or B20 to retailers. Retailers, whether branded or independent, purchase biodiesel in spot transactions from distributors. Because of the federal tax credit (\$1.00 per gallon for biodiesel from virgin oils from agricultural products and animal fats; 50¢ per gallon for biodiesel from recycled oils), the cost of biodiesel and regular diesel are usually comparable. Biodiesel can be distributed from regular diesel fueling equipment. However, in order to dispense blends above B-10, modifications such as new hoses and seals are usually required. One option would be to modify existing diesel pumps to dispense biodiesel through an additional hose. According to industry representatives, the cost of such modifications are usually under \$1,000, not counting lost sales when the pump is being modified. However, most retailers try to install a new dispenser costing up to \$10,000. Constructing a new system, with tank and dispenser, would cost \$30,000 or more. Retailers report demand for biodiesel in blends of up to B10. Demand for B20 is much more limited, due to the difficulty of starting B20 powered vehicles in cold weather. The U.S. Department of Energy, Clean Cities Alternative Fuel Report indicated that the average sales price for B20 biodiesel in the Midwest was \$2.47 a gallon in March, 2007, compared to \$2.54 a gallon for regular diesel fuel.

E85 is not sold as a branded fuel. Retailers generally buy E85 from ethanol brokers, representing ethanol refiners, or other suppliers, such as oil companies. Larger retailers may purchase ethanol and blend E85 themselves or pay blenders to produce it. The method of purchasing E85 varies from contracts with brokers and other suppliers, to spot purchases. Contracts typically provide for purchase of E85 at a price that is less (usually 20% or more) than conventional 87 octane gasoline. The federal government provides an income tax credit of 51¢ per gallon to all ethanol blenders. Many retailers dispense E85 by converting the premium gas pump to E85. Required modifications can cost up to \$10,000. If a new system, including storage tank, is required,

costs can range from \$30,000 up to \$100,000. Since about 60% of service stations are single store operations, most retailers do not have substantial retained earnings available and would likely borrow funds to make significant capital investments. According to the DOE report, the average sales price for E85 in the Midwest in March, 2007, was \$2.05 per gallon, compared to \$2.30 per gallon for regular gasoline. Biofuel industry experts indicate that E85 must sell at 30¢ to 50¢ per gallon less than regular gasoline to be competitive.

12. In May, 2006, an E85 dispenser manufacturer approached Underwriters Laboratories (UL) with the first request to certify an E85 dispenser. At that time, no safety standards or testing protocols for E85 dispensing systems were in place in North America. Though some individual components (for example, hoses and fittings) had previously been tested, a complete system (completely assembled E85 dispenser) had never been tested by UL or any other nationally recognized standards development organization (SDO). UL recently identified the need to establish safety requirements for E85 dispensers prior to certification, so material compatibility issues could be addressed. A decision to suspend authorization for individual components followed, so new requirements could be applied consistently across all related products.

Normally, individual manufacturers, industry groups, or insurance underwriters approach an SDO or testing agency in advance of new product introductions, and work through a consensus committee to develop rigorous safety standards and testing procedures that will be used to evaluate their products. The group of manufacturers and industry partners interested in introducing the products in the market usually pay the cost for the standards development and subsequent testing.

The federal Department of Energy has worked with UL to help accelerate the process and assist in evaluating the safety performance of the E85 equipment. The testing will be completed and certification for the equipment will be issued when the equipment performs as required. DOE indicates that the anticipated timeline for certification is less than the normal two to three year testing period. At present, UL has not listed dispensing related equipment for use with E85 fuel blends. Current dispensing equipment listings are limited to those used for conventional fuels and ethanol blends up to 15%.

Most states allow equivalent dispenser designs to be submitted for approval. Each state has its own process and discretion for granting variances or waivers to approve designs not UL certified. To date, 10 states, including Wisconsin, have granted variances or waivers, or have produced a written stance on E85 UL certification requirements. Wisconsin provides an interim allowance until a national standard is developed.

13. Effective for qualified property placed in service after 2005, taxpayers may claim a federal tax credit against income tax liability for the installation of alternative fueling stations. (The credit replaces a deduction for clean-fuel refueling property that could be claimed in previous years.) The tax credit is equal to the smaller of: (a) 30% of the property's cost, or (b) \$30,000 for each property of a character that is subject to depreciation [business/investment use property], or \$1,000 for each property of a character not subject to an allowance for depreciation [personal use

property].

Qualified alternative fuel vehicle refueling property is any property (other than a building or its structural components) used to do either of the following:

a. Store or dispense clean-burning fuel into the fuel tank of a motor vehicle propelled by the fuel, but only if the storage or dispensing is at the point where the fuel is delivered into that tank; or

b. Recharge motor vehicles propelled by electricity, but only if the property is located at the point where the vehicles are recharged.

Clean-burning fuel includes:

a. Any fuel at least 85% of the volume of which consists of one or more of ethanol, natural gas, compressed natural gas, liquefied natural gas, liquefied petroleum gas, or hydrogen; or

b. Any mixture of biodiesel or renewable diesel and diesel fuel, determined without regard to any use of kerosene, and containing at least 20% biodiesel, or renewable diesel.

14. The Attachment provides a summary of state alternative fuel tax credit and grant programs offered by states. The information was compiled by CleanFuel USA, which is a private company that specializes in producing equipment, such as fuel dispensers and engine systems, for vehicle alternative fuel use. The attachment shows that 13 states provide financial assistance to retail gasoline outlets for installing alternative fuel dispensing equipment. Six of the states provide tax credits, while the remainder provide grants or rebates.

15. The administration estimated that the tax credit would reduce state individual income and corporate income and franchise tax revenues by \$1 million in 2008-09. However, based on information provided by individuals in the retail gasoline industry and its representatives, concerning the level of investment by retail businesses in alternative fuel distribution and storage equipment, it is estimated the fiscal effect would be less than that included in the bill. Specifically, the biofuel pump tax credit would reduce state income and franchise tax revenues by an estimated \$500,000 in 2008-09. This would be \$500,000 less than the amount included in the bill. In addition, estimated tax payments would be adjusted for tax year 2008, beginning in January, 2008, reducing state income and franchise tax revenues by an estimated \$225,000 in 2007-08.

16. A technical modification is necessary to clarify that the credit would be claimed after the alternative minimum tax in the order of computation.

ALTERNATIVES TO BILL

1. Adopt the Governor's recommendation to create an ethanol and biodiesel fuel pump

tax credit under the state individual income and corporate income and franchise taxes equal to 25% of amounts paid to install or retrofit pumps located in Wisconsin that dispense motor fuel consisting of at least 85% ethanol, or at least 20% biodiesel. Provide the credit for tax years beginning after December 31, 2007, and before January 1, 2018. Reestimate the fiscal effect to be a decrease in state individual income and corporate income and franchise taxes of \$225,000 in 2007-08, and \$500,000 in 2008-09. Include the technical modification relating to the alternative minimum tax.

ALT 1	Change to Bill Revenue	Change to Base Revenue
GPR	\$275,000	-\$725,000

2. Delete provision.

ALT 2	Change to Bill Revenue	Change to Base Revenue
GPR	\$1,000,000	\$0

Prepared by: Ron Shanovich
Attachment

ATTACHMENT

Summary of Tax Credit and Infrastructure Grant Programs

COLORADO

Alternative Fuel Refueling Infrastructure Tax Credit

For tax years beginning prior to January 1, 2011, the Colorado Department of Revenue offers an income tax credit for the actual cost of construction, reconstruction, or acquisition of an alternative fuel refueling facility that is directly attributable to the storage, compression, charging, or dispensing of alternative fuels to motor vehicles. The credit value is as follows:

Tax Year	Tax Credit
2009-2011	20%
2006-2009	35%
1998-2006	50%

For an alternative fuel refueling facility that will be generally accessible for use by the public, in addition to the person claiming the credit, the percentages specified above will be multiplied by 1.25. For an alternative fuel refueling facility that dispenses an alternative fuel derived from a renewable energy source, the credit percentages specified above will be multiplied by 1.25 and requires certification that at least 70% of the alternative fuel dispensed annually is derived from a renewable energy source for a period of 10 years. The credit has a maximum value of \$400,000 in any consecutive five-year period for each refueling facility. (Reference Colorado Revised Statutes 39-22-516)

Point of Contact

Tax Information Call Center
Colorado Department of Revenue
Phone (303) 238-7378
<http://www.revenue.state.co.us/main/home.asp>

ILLINOIS

Through a grant from the Illinois Clean Energy Community Foundation (ICECF), Illinois is helping to build an infrastructure of E-85 refueling stations throughout the state. E-85 is currently the main alternative to petroleum gasoline and is composed of 85 percent ethanol fuel and 15 percent petroleum gasoline.

The Illinois E-85 Infrastructure Development Program provides up to 50 percent of the cost (up to a maximum \$3,000) for the conversion of an existing station to allow for E-85 operation, or up to 30 percent of the cost (up to a maximum \$30,000) for construction of a new E-85 refueling facility or major modification to an existing facility.

An important objective of this program is a shift from the nation's dependence on foreign oil to energy self-sufficiency. A concern for the state is the record high gasoline prices brought on by the imported oil that many working families cannot afford to pay. DCEO supports the continued use and expansion of E-85 as an environmentally friendly and cheaper alternative to imported oil as a means to help Illinois consumers.

Additionally, this program creates many permanent jobs in Illinois and helps to support Illinois farmers by facilitating the sale of their corn - by increasing demand for ethanol fuel.

There are currently more than 130 E-85 fueling stations in Illinois, many of which have received grants under the Illinois E-85 Infrastructure Development Program. DCEO continues to seek additional funding to continue its efforts to build upon Illinois' expanding E-85 fueling infrastructure.

For more information on this program contact: Dave Loos: 217/785-3969

IOWA

Ethanol Infrastructure Cost-Share Program

A state cost-share program is being developed to provide financial incentives for the installation or conversion of E85 refueling infrastructure and infrastructure required to establish terminal facilities that store biodiesel for distribution to service stations. The program will also provide for the addition of at least 30 new or converted E85 retail outlets and four new or converted terminal facilities that store ethanol. The program will provide for a maximum of \$325,000 annually for the fiscal period beginning July 1, 2005, and ending June 30, 2008. (Reference Iowa Code 11-103.16(8A))

The Renewable Fuel Infrastructure Program has two primary components. One component is Retail Motor Fuel Sites whose goal is to improve motor fuel sites by installing, replacing or converting motor fuel storage and dispensing infrastructure. The other component is Biodiesel Terminal Facilities which provide incentives to terminal facilities that store and dispense biodiesel or biodiesel blended fuel.

An eligible applicant must be an owner or operator of a retail motor fuel site or of a biodiesel terminal and submit an application in the required form and content to the Iowa Department of Economic Development.

For retail motor fuel sites financial incentives are on a cost share basis in the form of a grant. The maximum award shall not exceed 50% of the actual cost of making the improvement or \$30,000, whichever is less. The board may approve multiple awards at a single site as long as the awards do not exceed 50% of the actual costs of the improvements or \$30,000, whichever is less.

For biodiesel terminal facilities financial incentives are on a cost share basis in the form of a grant. The maximum award shall not exceed 50% of the actual cost of making the improvement or \$50,000, whichever is less. The board may approve multiple awards at a single site as long as the awards do not exceed 50% of the actual costs of the improvements or \$50,000, whichever is less.

Projects need to be completed within six months of the award date. If not completed, the Board may approve an extension upon receipt of a proper request otherwise the funds will revert back to the Renewable Fuels Infrastructure Program.

For both motor fuel and biodiesel terminal programs applications may be submitted at any time to:

Renewable Fuel Infrastructure Board
Department of Economic Development
200 East Grand Avenue
Des Moines, IA 50309

INDIANA

Biofuels Grant Program

The Office of Energy and Defense Development (OED) and the Indiana State Department of Agriculture (ISDA) administers the Biofuels Grant Program to help fuel retailers increase the use of biofuels across the state. School districts, local government fleets, other large fleet operators, and refueling facility operators are eligible to apply for funding through the Biofuels Grant Program. Projects eligible for grants include the installation of E85 (85% ethanol blended fuel) or B20 (20% soybean oil blended diesel fuel) refueling infrastructure. Eligible projects must apply commercially available technologies; grants will not be awarded to fund research projects. Grant amounts are available up to a maximum of \$25,000 for E85 or B20 infrastructure. If both E85 and B20 infrastructure are installed, a maximum grant of \$50,000 will be considered. Matching funds of 50% are required, and only costs incurred after approval notification are eligible for funding. Applications for this grant program must be reviewed and approved by the OED and the ISDA.

Point of Contact

Cary Aubrey
Biofuels Program Administrator
Indiana State Department of Agriculture
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KANSAS

Alternative Fuel Refueling Infrastructure Tax Credit

The state offers an income tax credit for refueling stations placed in service after January 1, 2005; the tax credit may not exceed \$160,000. This tax credit should be deducted from the taxpayer's income tax liability for the taxable year in which the expenditures are made. In the event the credit is more than the taxpayer's tax liability for that year, the remaining credit may be carried over for up to three years after the year in which the expenditures were made. (Reference Kansas Statutes 79-32,201)

LOUISIANA

Alternative Fuel Vehicle (AFV) and Refueling Infrastructure Tax Credit

The state offers an income tax credit worth 20% of the cost of converting a vehicle to operate on an alternative fuel, 20% of the incremental cost of purchasing an Original Equipment Manufacturer (OEM) AFV or hybrid electric vehicle (HEV), and 20% of the cost of constructing an alternative fuel refueling station. For the purchase of an OEM AFV or HEV, the tax credit cannot exceed the lesser of 2% of the total cost of the vehicle or \$1,500. Only those vehicles registered in Louisiana can receive the tax credit. (Reference Revised Statutes 47:38 and 47:287.757)

MAINE

Alternative Fuel Refueling Infrastructure Tax Credit

A tax credit is available for the construction or installation of, or improvements to, any refueling or charging station for the purposes of providing clean fuels to the general public for use in motor vehicles. The qualifying percentage is 25% for expenditures made from January 1, 2002 to December 31, 2008. (Reference Legislative Document 1968, 2006 and Maine Revised Statutes Title 36, Section 5219-P)

NEW JERSEY

Alternative Fuel Infrastructure Rebate

The Local Government Alternative Fuel Infrastructure Program currently has funding available to reimburse eligible local governments, state colleges and universities, school districts, and governmental authorities for 50% of the cost of purchasing and installing refueling infrastructure for alternative fuels. Up to \$50,000 is available per applicant. Eligible fuels include natural gas, propane, electricity, ethanol (E85) and hydrogen.

MICHIGAN

Biofuels incentive grant available: NextEnergy has been awarded funding for an E85/B20 infrastructure incentive grant from the State of Michigan Department of Labor and Economic Growth - Energy Office. A total of \$150,000 is available in incentive funds on a reimbursement basis. Incentives of up to \$12,000 per facility are available for new E85 systems and \$4,000 for B20 fuel delivery systems. Incentives for converting existing fuel delivery systems to E85 or B20 are limited to \$3,000 per facility. Funds can be used for design, engineering, and equipment but not for the construction costs of the installation. Funds for conversion projects can be used for purchasing necessary materials and equipment compatible with E85 or B20 and cleaning of tanks and dispensing equipment. The proposed station must be in Michigan and be greater than 5 miles from an existing biofuel pump that dispenses the same biofuel being proposed to be considered for an incentive. No more than 15 percent of funds available can be awarded to one county or one business owner. Installation of biofuel must be completed, permitted, and available for public use by August 31, 2007. Applications must be submitted by no later than December 15, 2006. Applications to receive incentive funds and detailed exclusions can be obtained by contacting Dan Radomski at danr@nextenergy.org.

NEW MEXICO

Alternative Fuel Vehicle (AFV) and Refueling Infrastructure Grants

The Energy Conservation and Management Division of Energy, Minerals, and Natural Resources Department (EMNRD) provides grants on a competitive basis to eligible applicants to support alternative fuel activities including the purchase AFVs, infrastructure development, alternative fuel training or related activities in New Mexico. Eligible applicants must submit proposals within specified dates as determined by EMNRD. If a proposal is selected for funding, the applicant will be required to enter into a professional-service agreement or governmental-service agreement with EMNRD. Funds are available on an annual basis; this program is supported through federal funding.

In addition, the Advanced Energy Technologies Economic Development Act has been established to provide funding to stimulate the market for, and promote the statewide utilization of, advanced energy technologies; it also provides for a targeted program that advances the creation of a hydrogen and fuel cell industry cluster. The Clean Energy Grants Program provides state grants for projects utilizing clean energy technologies and providing clean energy education, technical assistance, and training programs. Qualifying entities are municipalities and county governments, state agencies, state universities, public schools, post-secondary educational institutions, and Indian nations, tribes and pueblos. No single entity is eligible to receive more than \$100,000. (Reference [New Mexico Statutes 71-7-1 to 71-7-7](#))

Point of Contact

Colin Messer

Program Manager

Energy, Mineral, and Natural Resources Department, Energy Conservation and Management Division

Phone (505) 476-3314
Fax (505) 476-3322
colinj.messer@state.nm.us

NEW YORK

Alternative Fuel, Alternative Fuel Vehicle (AFV) and Refueling Infrastructure Funding

The New York State Clean Cities Challenge, administered by the New York State Energy Research and Development Authority (NYSERDA), awards funds to members of New York's Clean Cities Coalitions that acquire AFVs and/or refueling infrastructure. Funds are awarded on a competitive basis, and can be used to cost-share up to 75% of the proposed project, including the incremental cost of purchasing AFVs, the cost of installing refueling and recharging equipment, and the incremental costs associated with bulk alternative fuel purchases.

Point of Contact

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<http://www.nyserda.org/programs/transportation/afv.asp>

Alternative Fuel Refueling Infrastructure Tax Credit

A state tax credit is available for the installation of clean fuel vehicle refueling infrastructure located in the state. The tax credit is equal to 50% of the cost of the infrastructure. This includes infrastructure for storing or dispensing a clean-burning fuel into the fuel tank of a motor vehicle powered by that fuel, as well as infrastructure used for recharging electric vehicles. This credit does not apply after December 31, 2010. (Reference Senate Bill 5565-A, 2005, and New York Tax Law Section 187-b)

NORTH CAROLINA

Alternative Fuel Refueling Infrastructure Tax Credit

A tax credit is available for qualified refueling facilities that dispense biodiesel, 100% ethanol or ethanol/gasoline blends consisting of at least 70% ethanol. The credit is equal to 15% of the cost to the taxpayer of construction and installation portion of the dispensing facility, including pumps, storage tanks, and related equipment, that is directly and exclusively used for dispensing or storing the fuel. The credit must be taken in three equal annual installments beginning with the taxable year in which the facility is placed in service. Facilities must be placed in service before January 1, 2011. (Reference North Carolina General Statutes 105 129.16D)

OHIO

The Ohio Department of Development's (ODOD) Energy Office recently issued a request for proposals (RFP) under its new Alternative Fuel Transportation (AFT) grant program. The program will provide about \$900,000 in mainly small grants to encourage retailers to develop new E85 and B20 biodiesel pumps. ODOD also intends to provide a few larger grants to support new storage and blending facilities for either biodiesel or ethanol. ODOD and a variety of groups hailed the new grant program as a positive step toward increasing availability of E85 and B20 to Ohio motorists and fleets.

Details of the grant program are available on the ODOD web site at <http://www.odod.state.oh.us/cdd/oeo/transportation.htm>. Among the highlights:

1. Retailers interested in installing new E85 and/or B20 pumps may request up to \$20,000 per fuel per location to help cover equipment and labor cost, plus an additional \$2,000 for marketing-related costs.
2. Retailers wanting to convert existing equipment to dispense E85 or B20 may request up to \$5,000 plus the \$2,000 for marketing.
3. Fuel marketers also may request up to \$180,000 in grant funds per location for a biofuels storage and blending facility – either new or additional equipment for existing facilities. ODOD hopes that these types of facilities make it easier and less expensive to get blended biofuels to end users and/or retail facilities.

Applicants have until December 15 to submit questions about the RFP, then until January 31, 2007 to submit their proposals. ODOD anticipates announcing grant award winners by February 23. Winners would be permitted to begin work on projects following execution of a grant agreement with the state. [More...](#)

TENNESSEE

Alternative Fuel Refueling Infrastructure Grants

The Tennessee Department of Transportation (TDOT) is authorized to undertake public-private partnerships with transportation fuel providers, including, but not limited to farmer co-ops, to install a network of refueling facilities. Refueling facilities include storage tanks and fuel pumps dedicated to dispensing biofuels, including but not limited to ethanol (E85) and biodiesel (B20). TDOT is also authorized to establish a grant program to provide financial assistance to help pay the capital costs of purchasing, preparing, and installing fuel storage tanks and fuel pumps for biofuels at private sector fuel stations. (Reference [Tennessee Code 54-1-136](#))