

NYSERDA Biofuel Station Program (Program Opportunity Notice 1093)

Frequently Asked Questions

Q. What are biofuels?

A. Biofuels are fuels with ASTM International designations that are made from agriculture products but are not vegetable oils. There are two major types of biofuels, biodiesel and ethanol. Biodiesel is typically used in blends with diesel up to 20% biodiesel and 80% diesel. Ethanol can be used as a motor fuel in flex-fuel vehicles in blends up to 85% ethanol and 15% gasoline called E85. Not all cars are flex-fuel compatible. To see if your vehicle is flex-fuel compatible go to www.e85fuel.com

Biodiesel

Biodiesel is a domestic, renewable fuel comprised of mono-alkyl esters of long chain fatty acids derived from vegetable oils or animal fats, designated B100, which meets the specifications of ASTM D 6751 as updated and revised. Biodiesel can be used in any concentration with petroleum based diesel fuel, but typically no higher than 20%, in existing diesel engines with little or no modification. Biodiesel is produced by a chemical process which removes glycerin from the oil. Blended biodiesel is a blend of biodiesel fuel meeting ASTM D 6751 with petroleum-based diesel fuel, designated BXX, where XX represents the volume percentage of biodiesel fuel in the blend. Download the Handling and Use Guidelines for Biodiesel at the National Renewable Energy Laboratory website. <http://www.nrel.gov/vehiclesandfuels/npbf/pdfs/40555.pdf>

Additional information about Biodiesel including how and where to purchase the fuel can be found on the National Biodiesel Board website. <http://www.nbb.org/>

E85 Ethanol

E85 is a blend of typically 85% denatured ethanol [ethyl alcohol (C₂H₅OH) containing 5% hydrocarbon denaturant] and 15% hydrocarbon by volume. The hydrocarbons must meet all applicable State and Federal requirements. Total hydrocarbon volume must range from 15% to 30% of the total volume of the E85 based on information provided in the Handbook for Handling, Storing, and Dispensing E85 dated April 2005, which can be found at www.e85fuel.com/pdf/e85_technical_booklet.pdf and [ASTM d5798](http://www.e85fuel.com/pdf/ASTM_d5798.pdf). Such specifications are available upon request, and located on the NEVC website at www.e85fuel.com

Q. Is there a market for these biofuels?

A. Yes. There are over 200,000 flex-fuel vehicles on the road in New York that can run on E85. The major car manufacturers such as GM, Ford and Daimler-Chrysler sell more flex-fuel vehicles every year and have made commitments to sell half their vehicles as flex-fuel by 2012. This is over 4.5 million new flex-fuel cars every year. Some of these car manufacturers such as GM also have extensive promotional programs to assist in advertising local E85 stations through their dealerships in the area. E85 is typically sold at a discount of at least 20% less than the cost of 87 octane gasoline and can be a big draw to get customers into a station. Sales at the first public E85 stations to open in New York have been above expectations to date. Any diesel vehicle can run on biodiesel blends typically at ratios up to 20% biodiesel. The public's interest in these biofuels is very high due to their potential to reduce emissions including global warming carbon dioxide; increase the nations energy security; and put energy dollars back into the state economy and the pockets of U.S. farmers instead of oil producing foreign governments that can be unfriendly to the United States.

These fuels are also either totally exempt from NYS taxes as in the case of E85, or partially exempt from New

York State taxes, as in the case of biodiesel blended at a 20% ratio. Read the following memo from New York State Tax and Finance details these exemptions. http://www.tax.state.ny.us/pdf/memos/sales/m06_10s.pdf

Q. How much will it cost to convert or upgrade my station to be able to sell biofuels?

A. For biodiesel blends there is little or no need to change out existing diesel equipment. Biodiesel blends are essentially a “drop in” replacement for diesel and can be used in your existing diesel infrastructure. If the station wants to sell both diesel and a biodiesel blend a new tank and dispenser may have to be installed. The new tank and dispenser are the same equipment as a regular diesel tank and dispenser. Depending upon the station it could cost from \$50,000 to \$100,000 for new equipment. The handling and use guide for biodiesel is an excellent source of information about station upgrades. It can be found at <http://www.nrel.gov/vehiclesandfuels/npcf/pdfs/40555.pdf>

For E85 the station would need to decide whether they wanted to retrofit existing equipment or install a new tank and dispenser. If they use an existing tank that is compatible with E85 they would only have to clean the tank thoroughly and install some new E85 compatible parts in their existing dispenser or buy a new dispenser. These costs can range from \$5,000 up to \$40,000. If the station wishes to install new tanks and dispensers these costs could run from \$50,000 to \$100,000 depending upon the station. The handling and use guide is an excellent source of information about station upgrades. It can be found at www.e85fuel.com/pdf/e85_technical_booklet.pdf

Q. Is there financial assistance to help my station install the necessary equipment?

A. Yes. There are three funding sources the station can potentially access to help fund the station upgrades.

1) They can apply to NYSERDA Program Opportunity Notice PON 1093 the NYS Biofuel Station Initiative. http://www.nyserda.org/includes/funding_content_pop.asp?i=PON_1093 This program can reimburse a station 50% of the eligible costs capped at \$50,000 for the installation of E85 or blended biodiesel tanks, dispensers and associated equipment. Contact Patrick Bolton with NYSERDA for details. 518-862-1090 ext 3322 or ppb@nyserda.org

2) There are New York State income tax credits of 50% with no cap for the installation of biofuel refueling equipment at retail refueling stations. These credits and the stations eligibility for them should be confirmed with your tax professional or the New York State Department of Tax and Finance. The equipment must meet the requirements laid out in federal Internal Revenue Code 30C. For information on this tax credit for Corporations call 1-888-698-2908. For personal income tax call 1-800-225-5829.

http://www.tax.state.ny.us/pdf/2006/inc/it253i_2006.pdf

3) There is a federal income tax credit of 30% with a cap of \$30,000 per station for the installation of biofuel refueling equipment at retail refueling stations. These credits and the stations eligibility for them should be confirmed with your tax professional or the United States Internal Revenue Service. The equipment must meet the requirements laid out in federal Internal Revenue Code 30C. <http://www.irs.gov/pub/irs-pdf/f8911.pdf>

These incentives from NYSERDA and the tax credits can be taken in addition to each other as part of your biofuel station project.