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Senate Bills 1126 and 1128 (as reported without amendment) Senate Bill 1129 (Substitute S-1 as reported) Senate Bill 1130 (Substitute S-1 as reported) Senate Bill 1132 (as reported without amendment) Sponsor: Senator Roger Kahn, M.D. (S.B. 1126) Senator Randy Richardville (S.B. 1128) Senator Patricia L. Birkholz (S.B. 1129) Senator Cameron S. Brown (S.B. 1130) Senator Ron Jelinek (S.B. 1132) Committee: Agriculture

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## **RATIONALE**

The rising cost of energy, combined with concerns over the environmental consequences of burning fossil fuels, has prompted increased efforts to develop alternative and renewable fuels such as ethanol, biodiesel, and hydrogen, which can be produced domestically and may reduce greenhouse gas emissions. Much of the recent growth in this industry has taken place in the Midwest, where agricultural products and byproducts can be used as feedstock to produce fuel such as ethanol and biodiesel. Many believe that Michigan, with its strong agricultural sector and its history of automotive innovation, is an ideal location for development of the infrastructure and new technologies to produce renewable fuels on a costcompetitive basis. It has been suggested that the State should take specific actions to encourage renewable fuels producers to locate in Michigan, and to encourage the use of those fuels.

## **CONTENT**

<u>Senate Bill 1126</u> would amend the Michigan Strategic Fund Act to require the Fund to identify, publish, and market an inventory of prime sites for the location of renewable fuel plants. Senate Bill 1128 would create a new act to require the Michigan Department of Agriculture (MDA) to compile and publish information about establishing an alternative fuel production facility in Michigan.

<u>Senate Bill 1129 (S-1)</u> would amend the Michigan Vehicle Code to do the following:

- -- Delete the eight-plate limit on Statesponsored fund-raising plates.
- -- Require the Secretary of State to develop and issue a fund-raising plate recognizing renewable fuel.
- -- Allocate donation money from the plate to a proposed "Renewable Fuels Fund".

Senate Bill 1130 (S-1) would amend the Motor Fuels Quality Act to create the "Renewable Fuels Fund" and require the MDA to administer the Fund for specified purposes, including the promotion of alternative fuel production and use, grants to improve the production of alternative fuels, and the promotion of vehicles powered by renewable fuels. <u>Senate Bill 1132</u> would amend the Renewable Fuels Commission Act to do the following:

- -- Require the Commission to report on the source of alternative fuels sold in the State; where producers of alternative fuel located in the State sell the fuels; and the impact of alternative fuels on the State's economy.
- -- Delay the sunset on the Act from January 1, 2010 to January 1, 2012.

Senate Bill 1129 (S-1) is tie-barred to Senate Bill 1130. The bills are described in detail below.

### Senate Bill 1126

The bill would require the Michigan Strategic Fund to identify, publish, and market an inventory of prime sites for the location of renewable fuel plants with existing industrial facilities having byproducts that renewable fuel plants could use to produce energy in this State.

By January 1, 2009, the Fund would have to make the inventory available to the public on the internet.

Local units of government and their economic development agencies could assist the Fund in its duties under the bill.

## Senate Bill 1128

The bill would require the MDA to review and study all information available within any State agency or department to determine the body of relevant information regarding establishment in Michigan of a the production facility for an alternative fuel. As part of this function, the MDA would have to indicate specifically procedures and processes housed in the Department of (DEQ), Environmental Quality the Department of Labor and Economic Growth (DLEG), and the Michigan Economic Development Corporation (MEDC).

The bill also would require the MDA to compile, in written or electronic format and in a concise and readable form, information about the procedures for preparing and executing applications and approvals necessary to establish an alternative fuel production facility. The Department would have to publish this information and make it available to the public, in written or electronic format, in separate categories for biodiesel fuel, ethanol, and other categories of alternative fuels.

The MDA could identify mechanisms that promoted effective communication and coordination of efforts between this State and local governments, private industry, and institutions of higher education concerning the investigation of, research into, and promotion of alternative fuels. The Department also could review any State regulation that could hinder the use, research, and development of alternative fuels and vehicles that could use them, and recommend changes to the Governor and the Legislature.

Except as otherwise provided by law, and as far as doing so was compatible with other duties, the DEQ, DLEG, and the MEDC would have to give the MDA any assistance it requested for fulfilling its duties under the bill.

The bill would define "alternative fuel" as a fuel composed of biomass or another fuel that does not have petroleum as a base or a blend of a nonpetroleum-based fuel and a petroleum-based fuel. The term would include biodiesel and ethanol.

"Biomass fuel" would mean a fuel made from plant material, vegetation, or agricultural waste.

"Biodiesel" would mean a fuel composed of mono-alkyl esters of long chain fatty acids derived from vegetable oils or animal fats and, in accordance with standards specified by the American Society for Testing and Materials (ASTM), designated B100, and meeting the requirements of D-6751, as approved by the MDA.

"Ethanol" would mean a substance that meets the ASTM standard in effect on the bill's effective date as the D-4806 specification for denatured fuel grade ethanol for blending with gasoline.

## Senate Bill 1129 (S-1)

Section 811e of the Michigan Vehicle Code allows the Secretary of State (SOS), at any one time, to develop up to eight different State-sponsored fund-raising registration plates. An applicant for a fund-raising plate must pay the regular vehicle registration tax in addition to a service fee, as provided in Section 811f. (Under that section, an application for an original fund-raising plate must be accompanied by a \$25 donation, the regular registration tax, and a \$10 service fee. An application for renewal of a fund-raising plate must be accompanied by payment of the regular registration tax and a \$10 donation.)

Section 811e also requires a start-up fee of \$15,000 to be paid for any new fund-raising plate authorized under the section. The fee must be deposited in the Transportation Administrative Collection Fund to be used for the cost of creating, producing, and issuing fund-raising plates. If the fee is not paid within 18 months after the effective date of the public act authorizing a fund-raising plate, the plate may not be developed or issued.

The bill would delete the eight-plate maximum on the number of different Statesponsored fund-raising plates that the SOS may develop at any one time.

The bill would require the SOS to develop under Section 811e, and issue under Section 811f, a fund-raising plate recognizing renewable fuel. The Secretary of State would have to design the plate in conjunction with the MDA.

The SOS would have to transfer the donation money from the sale of renewable fuel fund-raising plates to the State Treasurer, who would have to credit the money to the proposed Renewable Fuels Fund.

## Senate Bill 1130 (S-1)

The bill would create the Alternative Fuels Fund in the State Treasury. The State Treasurer could receive money or other assets from any source for deposit into the Fund. The State Treasurer would have to direct the investment of the Fund and credit to it interest and earnings from investments. Money in the Fund at the close of the fiscal year would remain in it and not lapse to the General Fund.

Beginning not later than February 1, 2009, the State Treasurer would have to disburse money in the Alternative Fuels Fund to the MDA on a quarterly basis. The MDA would have to submit to the Treasurer a summary of expenditures during the preceding year of money received under the bill. The MDA would have to be the administrator of the Fund for auditing purposes.

The MDA would have to administer the Fund to do one or more of the following:

- -- Promote the development and use of alternative fuels.
- -- Award grants to selected recipients to improve the production of alternative fuels in Michigan.
- -- Encourage the development of motor fuel quality standards for alternative fuels under the Motor Fuels Quality Act.
- -- Provide incentives to retailers that sell alternative fuels.
- -- Promote the sale of vehicles that can be powered by alternative fuels.

"Alternative fuels" would include, but not be limited to, biodiesel, biodiesel blend, hydrogen fuel, and E85 fuel. "E85 fuel" would mean that term as defined in Section 78 of the Michigan Strategic Fund Act (i.e., a fuel blend containing between 70% and 85% denatured fuel ethanol and gasoline that is suitable for use in a spark-ignition engine and meets American Society for Testing and Materials D-5798 specifications).

## Senate Bill 1132

The Renewable Fuels Commission Act establishes the Commission within the MDA, and requires the Commission to investigate and make recommendations to the Governor and the Legislature regarding alternative fuels.

The bill also would require the Commission to report on the source of alternative fuels that are sold in the State; where producers of alternative fuels located in the State sell the fuels; and the impact of alternative fuels on the State's economy.

The Act is scheduled to be repealed on January 1, 2010. The bill would delay the repeal to January 1, 2012.

MCL 125.2079 (S.B. 1126) MCL 257.811e et al. (S.B. 1129) Proposed MCL 290.645a (S.B. 1130) MCL 290.583 & 290.586 (S.B. 1132)

# BACKGROUND

#### <u>Ethanol</u>

Ethanol is produced by the fermentation and distillation of starch crops (traditionally corn) that have been converted into simple sugars, and can be blended with gasoline to increase octane and improve emissions quality. New technologies also allow ethanol to be produced from any source of cellulose, which is found in plant cell walls and can be converted into simple sugars. Corn stalks, certain grasses, and wood chips are possible feedstocks for cellulosic ethanol production, although the process is more complicated than producing corn ethanol and the technology is not as fully developed. Ethanol has been used frequently in recent years as a replacement for the additive MTBE, which many states have banned due its propensity to contaminate groundwater. According to the Corn Marketing Program of Michigan, all automobile manufacturers approve the use of gasoline containing 10% ethanol ("E10") in all of their vehicles, and E10 is widely available throughout the State. Some manufacturers offer flexible fuel vehicles (FFVs) that can run on traditional gasoline or ethanol blends of up to 85%. In a 2005 study, the American Coalition for Ethanol (ACE) found that the fuel economy of ethanol was lower than that of gasoline, and decreased as the percentage of ethanol increased. The ACE also found, however, that the cost per mile to operate a vehicle using ethanol was lower than the cost per mile for gasoline.

## **Biodiesel**

Biodiesel can be made from various organic materials such as vegetable oils, animal fats, and recycled restaurant grease. The fuel typically is made from soybean oil, due to the low cost and abundance of soybeans. Blends of up to 20% biodiesel ("B20") can be used in a standard diesel engine. Higher blends, up to B100, may require certain engine modifications. Biodiesel is biodegradable and has been shown to reduce most air pollutants. Additionally, it results in increased lubricity. Biodiesel performance generally is consistent with that of diesel, although cold weather has been shown to cause problems in blends of greater than 20%.

#### <u>Hydrogen</u>

As the most abundant element on the planet, hydrogen has been identified as a potential replacement for fossil fuels. With the use of a device called a fuel cell, hydrogen can power vehicles and small electronic devices, or produce electricity for entire buildings, while generating water vapor as the only emission. Hydrogen does not exist on its own in nature, however; it must be extracted from hydrocarbons or separated from water, which both require heat from the burning of fossil fuels or other sources.

## **ARGUMENTS**

(Please note: The arguments contained in this analysis originate from sources outside the Senate Fiscal Agency. The Senate Fiscal Agency neither supports nor opposes legislation.)

### Supporting Argument

The current boom in alternative fuel research and production presents Michigan with a great opportunity to diversify its economy, capitalizing on the State's unique position as a leader in automotive technology and a producer of agricultural products. These historic strenaths. combined with the State's central location, make it an ideal place for the development and production of the next generation of automotive fuels. Developing this new technology and the accompanying infrastructure presents many challenges, however, and the State should take an active role in nurturing this growing industry.

To help encourage the development of renewable fuels production, distribution, and use, Senate Bill 1130 (S-1) would establish a Renewable Fuels Fund, to be used for the promotion of alternative fuel use and production. The fund-raising license plate proposed under Senate Bill 1129 (S-1) would generate revenue for that Fund and would help raise awareness of Michigan as a center for renewable fuels use and The plate also would give production. Michigan drivers the opportunity to demonstrate their support for renewable fuels.

## Supporting Argument

While corn presently is the most common feedstock for ethanol production, alternative technologies are being developed to convert agricultural byproducts, such as corn stalks or wood chips, into fuel. These byproducts are of little value to agricultural producers, and are readily available in large quantities. Because of their bulk and relatively low value by weight, however, those materials can be expensive to transport. For this reason, selecting a location close to sources of feedstock is a critical aspect of a renewable fuel facility's prospects for Senate Bill 1126 would assist success. businesses in identifying potential locations in Michigan, helping to bring renewable fuels producers into the State and encouraging the growth of a broader renewable fuels industry.

Senate Bill 1128 also would help to encourage the growth of alternative fuel production in the State, by requiring that comprehensive information regarding the establishment of an alternative fuel production facility in Michigan be compiled and made available to the public. The task of obtaining all of the necessary permits and licenses can be complex, and currently there is no centralized guide to the process. The compiled information would give prospective business operators a complete description of the necessarv steps and regulatory requirements, and could be available online or in printed form as a booklet.

In addition, the bill would permit the MDA to recommend changes to any regulations that could be restricting the use or research and development of alternative fuels in the State, to simplify and streamline the process.

#### Supporting Argument

To help inform the State's approach to encouraging the use and production of alternative fuels, Senate Bill 1132 would require the Renewable Fuels Commission to develop a report of the current state of the industry and the impact of renewable fuels on Michigan's economy.

**Response:** While the economic impact of renewable fuels is important, the study also should examine the environmental impact of those fuels. To aid in that process, the Commission should hold public hearings to help achieve a balanced understanding of the opportunities presented by renewable fuels and the best way to develop those opportunities in an environmentally responsible manner.

### **Opposing Argument**

The current limit on the number of fundraising plates was enacted to prevent the proliferation of license plate designs. For law enforcement purposes, it is preferable to minimize the number of different designs, so officers are able to distinguish Michigan plates from out-of-State plates quickly and accurately. In addition to adding another license plate design, Senate Bill 1129 (S-1) would eliminate the limit on fund-raising plates, enhancing the possibility that further plates could be added in the future.

Legislative Analyst: Curtis Walker

# FISCAL IMPACT

### Senate Bill 1126

The bill would have a minimal fiscal impact on the Michigan Strategic Fund. The Agency is already administering a similar program, and will use existing resources to cover any expenses attributable to it.

## Senate Bill 1128

The bill would cost the Department of Agriculture a small amount in administrative expense to study and publish information on establishing a production facility for an alternative fuel.

## Senate Bill 1129 (S-1)

The bill would create a start-up cost to the Department of State. The start-up fee of \$15,000 prescribed in the Code would be paid to the Department from the Alternative Fuel Fund proposed by Senate Bill 1130 (S-1).

The bill would have no fiscal impact on local government.

## Senate Bill 1130 (S-1)

The revenue generated from the fundraising license plate established under Senate Bill 1129 (S-1) would be deposited into the proposed Alternative Fuels Fund. The Fund would be used to promote alternative fuels through grants and incentives.

## Senate Bill 1132

The bill would have no fiscal impact on State or local government.

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