South Dakota Legislative Research Council

Issue Memorandum 94-2

ETHANOL POLICY IN SOUTH DAKOTA

The use of ethyl alcohol, ethanol, as an alternative fuel or as a supplementary fuel blended with gasoline has been the subject of national interest for many years, particularly after the oil embargo of the early 1970s. Because ethanol is a renewable fuel produced from organic sources, the large-scale use of ethanol as a motor vehicle fuel could lessen our dependence on imported oil and provide significant environmental benefits in certain circumstances. In addition, agricultural producers, especially corn growers, see ethanol as a new market for corn and other grains, which could provide important benefits for this state's agricultural economy. South Dakota state government has made numerous efforts over the years to promote the development of the ethanol industry, including legislative efforts dating back to the late 1970s.

Ethanol Production and Production Incentives in South Dakota

At the beginning of the 1990s, twenty states provided some form of incentive for ethanol production and use, usually a fuel tax reduction for gasoline blended with ethanol or a direct payment to ethanol producers. South Dakota, beginning with legislation in 1979, has made such assistance available to the ethanol industry, although ethanol production in the state did not materialize until the late 1980s.

Currently, South Dakota offers two primary types of ethanol production and consumption incentives: a two-cent per gallon fuel tax reduction for ethanol blended motor fuel (SDCL 10-47A-39), and a direct payment to ethanol producers of twenty cents per gallon of ethanol produced in South Dakota (SDCL 10-47A-54.1). Tables 1 and 2 summarize ethanol production and production incentive payments provided in South Dakota.

Table 1 -
ETHANOL PRODUCTION AND PRODUCTION INCENTIVE PAYMENTS IN SOUTH DAKOTA

Fiscal Year	Gallons	Payments
1989	566,325	$ 169,898
1990	985,198	205,130
1991	1,108,174	221,635
1992	2,278,726	455,745
1993	5,070,624	1,014,125
1994 est.	6,013,481	1,202,696
Total	16,022,528	$3,269,229

Note: Per gallon payments during FY 1989 and a portion of FY 1990 were $.30 per gallon. Subsequent payments were $.20 per gallon. Payments were suspended for a period of time during FY 1991-92. Totals are rounded.

Source: S.D. Department of Revenue

Table 2 -
ETHANOL PRODUCTION INCENTIVE PAYMENTS TO INDIVIDUAL PRODUCERS

Fiscal Year	Broin Enterprises	Vironment	Heartland Grain Fuels
1989	$169,898	---	---
1990	205,130	---	---
1991	221,635	---	---
1992	443,077	$12,668	---
1993	631,166	9,608	$373,351
1994 est.	456,972	---	745,724
Total Payments	$2,127,878	$22,276	$1,119,075
Total Gallons	10,315,771	111,380	5,595,377

Source: S.D. Department of Revenue

In South Dakota, the market share for ten percent ethanol blend motor fuels has risen over the last few years. According to data provided by the American Coalition for Ethanol and the Nebraska Gasohol Committee, the annual market share for ethanol blends in South Dakota during 1987 to 1990 was approximately 15%, while the market share for the nation was 6% to 7%. However, the market share for ethanol blends in South Dakota during the period 1991 to 1993 increased to approximately 40%. Iowa and Nebraska have also shown high ethanol use. Ethanol consumption in the future will depend in part on decisions made at the federal level with respect to Implementation of the Clean Air Act.

Ethanol Development and South Dakota's Agricultural Economy

Agricultural interests in South Dakota, especially corn producers, have placed a great deal of emphasis in recent years on ethanol promotion. Ethanol can be produced from renewable organic sources, primarily corn, grain, wood, and organic waste.

Corn producers hope that ethanol will provide significant new markets for South Dakota corn and that additional ethanol production facilities will be located in South Dakota, which could reduce transportation costs for ethanol production and provide more jobs in South Dakota. Also, byproducts of the ethanol production process, such as distillers grain, which shows promise as livestock feed, and other new corn-based products, could stimulate this state's agricultural economy.

Experimentation is proceeding on vehicles that use much higher percentages of ethanol in their fuel mix, such as "E-85" vehicles, which are fueled by an 85% ethanol blend. Federal law mandates that state and federal vehicle fleets convert to alternative fuel vehicles on a phased-in basis beginning in 1996 for state fleets. E-85 qualifies for these purposes, although compressed natural gas, methanol, and electricity will also be used as alternative fuels in many locations. South Dakota's central state vehicle fleet currently has eleven E-85 vehicles, with several others in use in other state institutions. Use of ethanol as an alternative fuel of this type would further improve markets for South Dakota corn.

Ethanol and the Environment

On the environmental side, the use of ethanol in motor fuel provides significant environmental benefits, although it may also involve some environmental problems in certain circumstances. The use of ethanol from renewable sources reduces the world's consumption of limited, nonrenewable petroleum resources. Also, ethanol blends contain more oxygen than conventional gasoline, which is helpful with regard to the ozone and in reducing carbon monoxide emissions and other air toxins in most situations.

There has been controversy regarding the role of ethanol in implementing the 1990 Clean Air Act. Although ethanol is extremely clean-burning, it also has a high evaporation rate, which may allow more petroleum vapors in the air. Also, use of ethanol during the high ozone season, usually the summer months, could result in higher ozone levels in certain cities. The Clean Air Act required the use of oxygenated fuel in fifty-three cities, nine of which have ozone problems and cannot use ethanol during the summer months. The other forty-four have carbon monoxide problems and generally can use ethanol.

The oil industry supports the use of MTBE (methyl tertiary butyl ether) as an oxygenate, which can be used in both ozone and carbon monoxide areas. However, MTBE is produced from wood alcohol and petroleum byproducts, not from renewable sources. The ethanol industry supports the use of ETBE (ethyl tertiary butyl ether), an ethanol derivative, which has a lower evaporation rate than ethanol and is acceptable during the high-ozone season. At one point, the Environmental Protection Agency removed a special waiver for ethanol, which would have left ethanol ineligible for use in oxygenated fuel. In December, 1993, EPA proposed compromise regulations stipulating that 30% of the oxygenates used to produce reformulated gasoline in the targeted cities must be derived from renewable fuels, such as ethanol or ETBE. This proposed rule is still under consideration, and the issue has not been resolved, although it is crucial to the future of the ethanol industry.

Previous Ethanol Legislation and Policy in South Dakota

Although ethanol promotion has enjoyed widespread public and legislative support in South Dakota, there has been some opposition to possible over subsidization of the ethanol industry and disagreement about appropriate amount and source of ethanol development assistance. Critics have argued that the ethanol industry must eventually stand on its own and that a fuel tax break for ethanol blend fuel reduces revenues entering South Dakota's highway fund, which are needed for highway construction and maintenance. Ethanol has been a perennial issue before the South Dakota Legislature and the subject of litigation before the South Dakota Supreme Court.

Ethanol legislation in South Dakota began in 1979, when HB 1064 reduced the motor fuel tax on ethanol blend fuel to six cents per gallon while raising the tax on gasoline to nine cents per gallon, providing a three-cent fuel tax break at the pump for ethanol. In 1980 the rates were changed in HB 1118 to twelve cents per gallon for gasoline and eight cents per gallon for ethanol blends; in 1984 rates were raised to nine cents for ethanol and thirteen cents for gasoline (SB 87); and in 1985 the rate for ethanol blend was raised to ten cents per gallon, leaving a tax break at the pump for ethanol of three cents per gallon.

Although there has been ethanol legislation in all but one year since 1979, the next major change in ethanol policy occurred in 1986 with the passage of SB 124. This bill established a production incentive payment of thirty cents per gallon for ethanol produced in South Dakota, with payment totals limited to $250,000 in FY1986, $1.5 million in FY 1987, and $2.5 million in FY 1988 and FY 1989. SB 124 again increased the ethanol fuel tax to eleven cents per gallon, reducing the tax break to two cents per gallon.

It was intended that the additional revenues generated by the reduction in the ethanol fuel tax

break were to be used to fund the production

In 1991, HB 1171 established the repealer date for incentive payments. However, Article XI, Section 8 of the South Dakota Constitution requires that all taxes on motor fuels that are used to operate vehicles on public highways must be used for highway maintenance, construction and supervision. To avoid this constitutional problem, SB 124 also included two appropriations: a general fund appropriation of $250,000 to directly cover the first year's production incentive payments, and an appropriation from the highway fund (which is funded by fuel taxes) of $250,000 to the Highway Patrol. The Highway Patrol appropriation would offset the general fund appropriation and would have the effect of funding the ethanol production incentive payments from the ethanol tax break reduction. However, no ethanol was produced and no production incentive payments were made; SB 124 specified that the appropriations would revert to their respective funds within one year if not used.

In 1988 (HB 1230), fuel taxes were raised to eighteen cents per gallon for gasoline and sixteen cents per gallon for ethanol blends, with the ethanol tax break remaining at two cents per gallon. Also in 1988, SB 349 appropriated $100,000 from the general fund for ethanol production incentive payments with an offsetting $100,000 appropriation to the Highway Patrol from the highway fund.

In 1989, HB 1352 made similar offsetting $100,000 appropriations, but HB 1352 also limited ethanol production incentive payments to a total of $450,000 in any fiscal year. Also in 1989, HB 1144 appropriated an additional $250,000 from the general fund for ethanol production incentive payments, reduced the payment amount from thirty cents to twenty cents per gallon, and removed the production incentive program's July 1, 1990, repeal date, which had been in effect since 1986.

the program as July 1, 2003, specified that no single payment to a producer could exceed $1.0 million per year or an average of $1.0 million over the last three years, limited a producer to no more than ten years of payments, and appropriated $2.5 million from the general fund for production incentive payments.

Litigation

Although the ethanol fuel tax reduction and production incentive payment programs were in place, corn producers and ethanol producers were interested in a more permanent and stable funding mechanism for the ethanol production incentive payment program, rather than relying on annual legislative appropriations of varied amounts. In 1992, HB 1009 attempted to solve this problem by repealing the existing payments program and replacing it with a motor fuel tax credit system. Under this program, ethanol producers would have received a transferable twenty-cent fuel tax credit for each gallon of ethanol produced up to a total of $1.0 million per producer per year, or $5.0 million per year for all producers.

Opponents of the ethanol tax credit program argued that the fuel tax credits would directly reduce fuel tax revenues and divert them for nonhighway purposes in violation of the state constitution. In November, 1992, the South Dakota Supreme Court ruled that HB 1009 was unconstitutional (Associated General Contractors v. Schreiner, 492 NW 2d 916 (SD 1992)). This decision invalidated the provisions of HB 1009 and returned the ethanol production incentive program to the structure used in 1991.

1993 Legislation

In 1993, HB 1353, the "Omnibus Construction and Funding Act" addressed the ethanol funding question, along with numerous other state programs and construction projects. HB 1353 established the state capital construction fund, which would receive revenues from on-line lotto sales, state cement plant revenues, and other sources. (SDCL 5-27-1 to 5-27-7, inclusive). HB 1353 directed that during FY 1994, $250,000 per month would be transferred from the capital construction fund to the ethanol fuel fund, with $167,000 per month to be transferred beginning July 1, 1994. These figures were amended in 1994 (SB 260) to $208,667 per month in FY 1995 and $250,333 per month beginning in FY 1996. (SDCL 5-27-4).

SDCL 10-47A-54.1 outlines the current ethanol production incentive payment program in South Dakota. A qualified ethanol producer may receive a payment of twenty cents per gallon of ethanol produced in South Dakota, up to a total of $1.0 million per producer per year, for no more than ten years. Total payments to all producers in a year may not exceed $5.5 million.

Summary

The legislation summarized above is only a portion of the ethanol legislation enacted since 1979; the ethanol issue has generated a great deal of attention and controversy during the last decade. South Dakota currently has an ethanol development program that includes a fuel tax break for ethanol blends purchased at the pump and a twenty-cent per gallon incentive payment to ethanol producers, coupled with an ongoing funding mechanism that is not dependent on annual legislative appropriations, a major goal of the ethanol industry and the agricultural community. Critics of the program continue to question its advisability, size, and scope. The future of ethanol development, however, at least in the short run, probably rests on decisions to be made at the federal level by EPA regarding the use of ethanol in implementing the Clean Air Act.

This issue memorandum was written by Tom Magadanz, Principal Research Analyst for the Legislative Research Council. It is designed to supply background information on the subject and is not a policy statement made by the Legislative Research Council.