## **Department of Legislative Services**

Maryland General Assembly 2007 Session

#### FISCAL AND POLICY NOTE

House Bill 544 Ways and Means (Delegates Ross and Kaiser)

# Income Tax - Credit for Cellulosic Ethanol Technology Research and Development

This bill creates a State income tax credit for cellulosic ethanol technology research and development conducted in the State. The amount of the tax credit is equal to 10% of the eligible expenses incurred and cannot exceed the tax liability for that year. Any unused amount can be carried forward 15 tax years. The maximum amount available in each year is limited to \$3 million. Taxpayers that claim the credit are required to add back the amount of credit claimed when calculating Maryland adjusted gross income. The bill provides for an application and certification process, and requires the Department of Business and Economic Development (DBED) and the Comptroller's Office to adopt implementing regulations. The credit is available for research and development expenses incurred before January 1, 2017.

The bill takes effect July 1, 2007 and applies to tax year 2007 and beyond.

### **Fiscal Summary**

**State Effect:** General fund revenues could decrease by \$2.1 million annually beginning in FY 2009. Transportation Trust Fund (TTF) revenues could decrease by \$669,600 annually beginning in FY 2009. Estimated revenue losses reflect maximum amount of credits being awarded, application process established by the bill, and required add-back provision. General fund expenditure increase of \$34,000 in FY 2008 due to one-time tax form changes and computer expenses.

(\$ in millions)	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012
GF Revenue	\$0	(\$2.12)	(\$2.12)	(\$2.12)	(\$2.12)
SF Revenue	0	(.67)	(.67)	(.67)	(.67)
GF Expenditure	.03	0	0	0	0
Net Effect	(\$.03)	(\$2.79)	(\$2.79)	(\$2.79)	(\$2.79)

Note:() = decrease; GF = general funds; FF = federal funds; SF = special funds; - = indeterminate effect

**Local Effect:** Local highway user revenues would decrease by \$200,900 annually beginning in FY 2009. Expenditures would not be affected.

**Small Business Effect:** Minimal.

#### **Analysis**

**Current Law:** No State income tax credit exists specifically for businesses that incur hydrogen fuel cell research and development, but these businesses can qualify for the State research and development tax credit.

**Background:** Ethanol, also known as ethyl alcohol or grain alcohol, can be used either as an alternative fuel or as an octane-boosting, pollution-reducing additive to gasoline. The U.S. ethanol industry produced more than 3.4 billion gallons in 2004, up from 2.8 billion gallons in 2003 and 2.1 billion gallons in 2002. Because of the increased demand on ethanol as a gasoline additive, efforts to increase supplies are necessary in order to meet the increase in demand. As of the start of 2005, 81 ethanol plants in 20 states have the capacity to produce nearly 4.4 billion gallons annually and an additional 16 plants are under construction to add another 750 million gallons of capacity.

While the overwhelming majority of ethanol production has been from corn and other starches and sugars, it can also be produced from cellulose. Cellulose is the main component of plant cell walls and is the most common organic compound on earth. It is more difficult to break down cellulose to convert it into usable sugars for ethanol production. Yet, making ethanol from cellulose dramatically expands the types and amount of available material for ethanol production. This includes grasses, fast-growing trees, rice straw, corn stalks, wood chips and many materials now regarded as wastes. Ongoing research has attempted to make this technology a commercially feasible option.

**State Revenues:** Tax credits could be claimed beginning in tax year 2007. The bill provides that a business claiming the credit must file an amended return after receiving certification from DBED. It is assumed that businesses claiming the credit do not adjust estimated payments. As a result, general fund revenues could decrease by \$2.1 million annually beginning in fiscal 2009 and TTF revenues could decrease by \$669,600. This estimate assumes that the maximum amount of credits will be awarded in each year. Almost all the credits under the existing State research and development tax credit have been claimed against the corporate income tax. It is estimated that the proposed tax credit would have a similar percentage claimed against the corporate income tax.

**State Expenditures:** The Comptroller's Office reports that it would incur a one-time expenditure increase in fiscal 2008 of \$34,000 to add the tax credit to the personal income tax form. This includes data processing changes to the SMART income tax return processing and imaging systems, and systems testing.

#### **Additional Information**

Prior Introductions: None.

**Cross File:** None.

Information Source(s): Department of Business and Economic Development,

Comptroller's Office, Department of Legislative Services

**Fiscal Note History:** First Reader - February 22, 2007

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