F I S C A L I M P A C T R E P O R T

SPONSOR SFL **ORIGINAL DATE** 02/16/11 **LAST UPDATED** 03/10/11 **HB**

SHORT TITLE Hydrogen Fuel Production Tax Credits **SB** 210/SFLS/aSFL

ANALYST Golebiewski

REVENUE (dollars in thousands)

Estimated Revenue			Recurring or Non-Rec	Fund Affected
FY11	FY12	FY13		
	*	*	Recurring	General Fund

(Parenthesis ( ) Indicate Revenue Decreases)
*Please see Fiscal Implications section below.

ESTIMATED ADDITIONAL OPERATING BUDGET IMPACT (dollars in thousands)

	FY11	FY12	FY13	3 Year Total Cost	Recurring or Non-Rec	Fund Affected
Total		$80.0	$80.0	$160.0	Recurring	Taxation and Revenue Department

(Parenthesis ( ) Indicate Expenditure Decreases)

SOURCES OF INFORMATION
LFC Files

Responses Received From
Taxation and Revenue Department (TRD)
Energy, Minerals, and Natural Resources Department (EMNRD)

SUMMARY

Synopsis of SFL Amendment

The SFL amendment removes the credit eligibility of companies that hold a title to qualified hydrogen fuel (or resource) generators that use renewably powered electrolysis. The credit eligibility, then, only applies to companies that hold a title to generators that use renewably powered pyrolysis.

According to the National Renewable Energy Laboratory[1], "Hydrogen can be produced via pyrolysis or gasification of biomass resources such as agricultural residues like peanut shells; consumer wastes including plastics and waste grease; or biomass specifically grown for energy uses. Biomass pyrolysis produces a liquid product (bio-oil) that contains a wide spectrum of components that can be separated into valuable chemicals and fuels, including hydrogen. NREL researchers are currently focusing on hydrogen production by catalytic reforming of biomass pyrolysis products. Specific research areas include reforming of pyrolysis streams and development and testing of fluidizable catalysts."

Synopsis of SFL Substitute

The Senate Floor Substitute for Senate Bill 210 enacts new corporate income tax credits for production of hydrogen from renewable energy sources that first produced hydrogen on or before January 1, 2018. These credits cannot be claimed in addition to the renewable energy production credits. The amount of the credits shall equal the cost of generating the hydrating but shall not exceed $1 per kilogram for the first four million kilograms of hydrogen fuel produced and sold in one year. Any eligible taxpayer will be eligible for the tax credit for five consecutive years. Any portion of the tax credit that remains unused at the end of the taxpayer's taxable year may be carried forward for five years.

TRD is required by Senate Bill 210 to report on the hydrogen fuel production credit and its effects on an annual basis.

FISCAL IMPLICATIONS

TRD:

> The Energy, Minerals and Natural Resources Department is not aware of any commercial or pre-commercial demonstrations of the technology using a renewable energy source that are in progress. If the technology becomes cost-effective, state revenue could be reduced by as much as $4 million per year.

SIGNIFICANT ISSUES

EMNRD:

> It is not clear if the value of the incentive at $1/kg is at the right level to incentivize development of hydrogen from renewable energy technologies. Studies from federal laboratories indicate that commercial pricing in the $1-to-$4 per kg range is desired to compete with conventional gasoline. However, this is based on low electricity production prices from utility-scale renewable power plants where significant transportation costs may be required for final delivery of hydrogen fuel. If the unit pricing is higher, the $1/kg incentive may have limited value to developers.

[1] http://www.nrel.gov/hydrogen/proj_production_delivery.html

ADMINISTRATIVE IMPLICATIONS

TRD:

> High impact. An additional auditor is required at a cost of $80,000 per year. Forms, instructions and systems need to be updated at a low one-time cost.

TECHNICAL ISSUES

The five-year carry-forward period for excess credits is an extended period of time for TRD and the taxpayer to maintain sufficient records.

EMNRD:

> §(E), Page 2 Line 20 should have the phrase "…taxpayer's taxable year may be carried forward for five consecutive years" changed to "…taxpayer's first taxable year may be carried forward for … four additional consecutive years or until the credit is depleted." to make clear that the residual credit amount is not an available credit each year for the following five years but that the taxpayer has a total of 5 years to deplete the total credit.

OTHER SUBSTANTIVE ISSUES

TRD:

> Page 3, lines 6-14, There is no current way to capture the number of jobs created or the number of people employed. Page 2, Subsection D, lines 9-13, It is not clear what expenses would be considered in determining the cost of generating the hydrogen. Application process and approval process needs to be clarified. The Taxation and Revenue Department does not have the technical expertise to approve the credits.

JAG/svb:bym

The Legislative Finance Committee has adopted the following principles to guide responsible and effective tax policy decisions:

1. ***Adequacy:*** *revenue should be adequate to fund government services.*
2. ***Efficiency:*** *tax base should be as broad as possible to minimize rates and the structure should minimize economic distortion and avoid excessive reliance on any single tax.*
3. ***Equity****: taxes should be fairly applied across similarly situated taxpayers and across taxpayers with different income levels.*
4. ***Simplicity****: taxes should be as simple as possible to encourage compliance and minimize administrative and audit costs.*
5. ***Accountability/Transparency:*** *Deductions, credits and exemptions should be easy to monitor and evaluate and be subject to periodic review.*

More information about the LFC tax policy principles will soon be available on the LFC website at www.nmlegis.gov/lcs/lfc