

South Carolina's Strategic Energy Roadmap: Breaking the Dependence on Oil and Fueling the Future through Economic Development

South Carolina Strategic and Tactical Research on Energy
Independence Commission (STREIC)

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EXECUTIVE SUMMARY

During the 2006 legislative session, the General Assembly established the Strategic and Tactical Research on Energy Independence Commission (STREIC) through a budget proviso, 72.113, for the purpose of considering proposals to enhance the economy of the State, to reduce the adverse consequences of South Carolina's overdependence on petroleum products as fuel for motor vehicles, and to consider the effectiveness of incentives provided in the same 72.113 proviso. Seven distinguished South Carolina citizens representing the agricultural community, ethanol marketers, biodiesel producers, expertise in energy research and the emerging hydrogen economy, the utility industry, and the conservation community were appointed by the Speaker of the House of Representatives, the Speaker Pro Tempore of the Senate, the Chairman of the House Ways and Means Committee, the Chairman of the Senate Finance Committee, and the Governor. The South Carolina Energy Office provided staff support for the commission's work.

During a three-month period from October 2006 to January, 2007 the Commission met four times to assess South Carolina's current transportation fuel consumption and to examine projected trends for the future, consider the development of South Carolina's indigenous energy resources, discuss successful programs and policies in other regions of the United States, and examine current South Carolina policies that provide incentives and opportunities for the development of markets for renewable energy in South Carolina. State law mandated that the STREIC Commission receive information from a broad spectrum of interested, affected, and knowledgeable parties. More than 42 interested parties participated in the meetings and provided input and constructive suggestions for the Commission's consideration. The Commission received input from the South Carolina Biomass Council, the Palmetto State Clean Fuels Coalition, the South Carolina Hydrogen and Fuel Cell Alliance, the South Carolina Petroleum Council, the South Carolina Petroleum Marketers Association, the South Carolina Plug-In Hybrid Coalition, the South Carolina Automobile Association, Santee Cooper, SCANA, Progress Energy and others. The committee considered data contained in a recent report on the potential economic impact of biomass energy prepared by Miley, Gallo and Associates, LLC for the South Carolina Energy Office. The final report of the STREIC Commission was approved on January 20, 2007, and the various recommendations contained in the report all received unanimous support from the Commission.

As required by state law, the final report of the STREIC Commission was forwarded to the General Assembly, the Governor and the Budget and Control Board by January 2007.

Based on the goals of evaluating the 2006 budget provisions and considering other proposals to enhance the economy of the State and to reduce the adverse

consequences of South Carolina's overdependence on petroleum-based fuel for motor vehicles, the Commission made the following specific policy recommendations:

Modifications to Existing Legislation:

The commission recommended the following changes to the 2006 budget proviso 72.113 of Act 397 and recommended that these provisions be made permanent law.

Incentives for Vehicle Buyers

- Provide sales tax rebates in the amount of \$300 for in-state purchases of all Flex-Fuel Vehicles (FFV), capable of operating on E85 motor fuel.
- Provide sales tax rebates in the amount of \$300 for in-state purchases of all hydrogen fuel vehicles.
- Provide sales tax rebates in the amount of \$300 for in-state purchases of hybrid and plug-in hybrid vehicles.
- Provide sales tax rebates up to \$500 for in-state purchase of equipment that results in the conversion of a conventional hybrid electric vehicle to a plug-in hybrid electric vehicle, or any in-state purchase of EPA-certified equipment for conversion of conventional vehicles to operate on LPG (propane), CNG (compressed natural gas), LNG (liquefied natural gas), Hydrogen or E85 (85 percent ethanol and 15 percent gasoline).
- Provide a sales tax rebate up to \$300 for in-state purchase of high fuel economy vehicles with a combined fuel economy rating of 40 miles per gallon or higher rated by the US Environmental Protection Agency.
- Provide an income tax credit up to \$2,000 for in-state purchase of plug-in hybrid vehicles.

Incentives for Retailers

- Provide a 5 cents incentive payment to retailers for each gallon sold consisting of E70 fuel or greater.
- Provide a 25 cents incentive payment to retailers for each gallon of B100 biodiesel sold, with a biodiesel blend of at least 2 percent (B2) or greater, provided that the qualified biodiesel content fuel is subject to the South Carolina motor fuel tax beginning July 1, 2006.
- Provide a 25 cents incentive payment to retailers or wholesalers for each gallon of pure biodiesel (B100) fuel sold as dyed diesel fuel for "off road" uses, so the biodiesel in the blend is at least 2 percent (B2) or greater.

The commission recommended that the following additions and changes be made to Article 25, Chapter 6, Title 12, Sections 3600 and 3610 as last amended by Act 386 of 2006 for the production of ethanol and biodiesel.

Incentives for Producers of Ethanol and Biodiesel

- Provide a 20 cents per gallon tax credit for the production of corn-based ethanol or soy-based biodiesel for sixty months beginning after taxable year 2006 and prior to 2014.
- Provide a 30 cents per gallon tax credit for new production of biodiesel from feedstocks other than soy oil.
- Provide a 30 cents per gallon tax credit for production of ethanol using feedstocks other than corn.
- Provide a tax credit for facilities which produce renewable fuels, including crushing facilities that produce oils for renewable fuels, milling equipment used for the purpose of producing renewable fuels, and biomass handling equipment for the purpose of producing renewable fuels in the amount of 25 percent up to \$1,000,000 for the cost of constructing and equipping a facility.

The Commission recommended the following statewide policies be implemented through state law.

- Establish an energy task force, similar to the 1991 South Carolina Energy Policy Panel, to develop a comprehensive assessment of the energy policies in South Carolina, to create a strategic plan designed to further reduce the state's dependence on imported energy resources, to enhance the state's economy, and to improve the environment.
- Establish a biodiesel testing program within the South Carolina Department of Agriculture to ensure that biodiesel produced in South Carolina meets ASTM standards and to assist small-scale biodiesel producers and registered fuel producers in South Carolina.
- Authorize the South Carolina Department of Agriculture to define and regulate certain renewable fuels standards in the same manner as petroleum fuels.
- Establish a South Carolina Biofuels Marketing Program as part of the marketing program at the Department of Agriculture for a minimum of three years to provide a broad-based public education, marketing, and awareness program for alternative transportation fuel.

- Establish a funding source to support the efforts of the Palmetto State Clean Fuels Coalition to market alternative fuel vehicles and cleaner fuels to local fleets; organize and participate in alternative fuels events, public education and outreach campaigns; conduct project development and grant writing; and promote the development of partnerships with other local and regional groups and interested organizations.
- Amend the Jobs Creation Tax Credit to reduce the required minimum number of new jobs needed for businesses producing biomass energy.
- Provide a new corporate tax credit for cellulosic ethanol research and development in order to increase capital investment and job creation in South Carolina and encourage companies to establish facilities in South Carolina.
- Require all state -owned fueling facilities to have at least B5 in all diesel pumps in order to create a market for biodiesel produced in South Carolina, create cleaner emissions from state-owned diesel vehicles, and decrease dependence on foreign sources of oil.

The Commission endorsed two external proposals:

- The Commission endorsed the goals of H.3146, the South Carolina Hydrogen Infrastructure Development Act, introduced by Speaker Bobby Harrell and others to enhance research and development opportunities in South Carolina for a future hydrogen economy. Funds allocated by the bill could increase South Carolina's competitiveness to attract business and industry investment in hydrogen development technology and research, thereby providing the state with significant economic development opportunities.
- The Commission recommended that South Carolina officially join the 25 X '25 campaign sponsored by a broad national coalition of farm and forestry leaders, organizations, businesses, and governments whose vision is that by 2025, renewable energy from America's farms, forests and ranches will provide 25 percent of the total energy consumed in the United States, while continuing to produce safe, abundant and affordable food, feed and fiber. Future partners will work together to identify steps needed to achieve the goals of 25 X '25 and achieve a secure, prosperous and sustainable U.S. energy future. The Commission recognized that the goals of the 25 X '25 campaign are strictly voluntary in nature.

BACKGROUND

South Carolina lacks traditional sources of energy such as oil and coal. Nevertheless, oil is the life blood of South Carolina's economy, fueling all sectors. Oil sustains the quality of life of South Carolina's citizens who consume over 4.6 billion gallons of petroleum each year with gasoline accounting for 2.7 billion gallons of this petroleum. In fact, South Carolina consumers spent about \$10 billion on petroleum products in 2005. Since South Carolina lacks petroleum reserves or refining capacity, most of the money spent on transportation fuels leaves the state.

From the national perspective, oil imports in 2005 exceeded \$300 billion and accounted for 35 percent of our nation's trade deficit. The U.S. Department of Energy estimates that each \$1 billion in trade deficit costs the United States 27,000 jobs. Beyond the economic impact, 60 percent of the imported oil comes from unstable regions of the world with strong anti-American sentiment. Oil imports, now at 60% percent of total consumption, are estimated to account for more than 70 percent of all oil consumed in the United States by 2020, and will account for nearly 75 percent of the total trade deficit. This ever-growing dependence on foreign oil threatens the economic security of the United States and South Carolina due to potential interruptions in oil supplies. The growing instability near many of the world's oil reserves has required additional military resources to be deployed to keep these energy lifelines open and has dramatically influenced our nation's foreign policies. These are added costs that consumers do not pay at the pump, but rather through tax dollars. Regaining control over the physical and economic security of the United States as well as that of South Carolina will require reducing our dependence on oil and improving energy security.

There are possibilities for adding some new domestic resources, but these are too small to have a major impact on foreign oil imports and would not ensure greater control over oil supply lines, nor would they affect the overall impact of oil on the economy. Oil is a global commodity that is driven by global supply and demand. Domestic oil production is sold on the world market at world market prices, and demand for oil is growing rapidly around the world as Asian economies, led by India and China, rapidly expand. As long as the worldwide demand for oil continues to grow and supplies remain tight, prices will continue to increase. The traditional supply and demand model for oil is complicated even further by the fact that over 75 percent of world reserves are held by national oil companies that are either fully or partially controlled by governments. This allows oil to be used as a political weapon thus making prices even more volatile.

The key to breaking the United States' and South Carolina's dependence on oil, including both domestic and foreign supplies, is through the promotion and development of alternative fuels and fuel efficiency. This will decrease our demand for petroleum, thus resulting in lower prices as predicted in a free-market

model. Moreover, this will reduce the effectiveness of oil as a political weapon, improve energy security, and promote local economic development.

Brazil's development of its ethanol industry is a good example of this model. As an emerging economy, Brazil's was highly vulnerable to the volatile world oil market. Through the implementation of government incentives and mandates, Brazil successfully developed a sustainable ethanol market based on a key agricultural product, sugar. This allowed the country to dramatically reduce its dependence on foreign oil, shield its economy from world oil markets, develop a large new market for its sugar production and promote regional economic development.

Another example of biomass-based economic development closer to home is described in *A Cost-Benefit Metrics Framework on South Carolina Biomass Energy Resources* (2006) prepared for the SC Energy Office by Miley, Gallo & Associates. Biomass energy production of ethanol and biodiesel alone would result in direct new capital investment in South Carolina of approximately \$1.7 billion over a 15 year period. Once operational, these facilities could generate over \$19 billion during a hypothetical twenty year period.

Maintaining and building on South Carolina's competitive advantage in low cost, reliable energy could also be a major tool to spur future economic growth for the state. The evolving worldwide oil scenario has opened up opportunities for South Carolina to play a key role in developing alternative transportation fuels, hybrid technologies and plug-in vehicles as well as promoting efficiency. The state's indigenous energy resources, particularly biomass, can form the basis for a strong, sustainable biofuels industry and clean electrical energy to power the emerging plug-in vehicle technology. Developing biofuels, hydrogen and other indigenous energy resources in South Carolina could have a three-fold positive effect. Economic development opportunities could be enhanced throughout the state, energy security could be improved, and our state's air quality could improve, thereby providing South Carolinians with a healthier environment and a better quality of life. In addition, South Carolina's technical institutions could be instrumental in developing an alternative fuels industry and propelling the state into the forefront of the emerging hydrogen economy. Finally, promoting energy efficiency could lower the economic burden of transportation fuels on industry and the consumer, thus allowing more dollars to circulate back into the state's economy.

To promote the development of alternative fuels, the state should adopt legislation to encourage demand for these products while at the same time enhancing the ability of emerging technologies to supply the growing demand. Without such programs, South Carolina will not be able to compete against other states with similar programs and will lose the opportunity to be a key player in this emerging market.

The South Carolina Energy and Tactical Research on Energy Independence Commission (STREIC) recommendations are designed to promote the development of bio-based and hydrogen fuels and to encourage energy efficiency in the transportation sector, with the added benefits of economic development, reduced fuel costs, and improved quality of life for its citizens. Through these recommendations, the following goals will be met:

- Reduction of South Carolina's dependence on oil;
- Improvement of energy efficiency;
- Promotion of the development of biofuels;
- Development of a sustainable and competitive hydrogen economy;
- Improvement of the environment and citizens' quality of life; and
- Creation of new high paying jobs and enhancement of the state's economy.

Based on the goals of evaluating the 2006 budget provisions and considering other proposals to enhance the economy of the State and to reduce the adverse consequences of South Carolina's overdependence on petroleum based fuel for motor vehicles, the Commission made specific policy recommendations delineated in the following pages.

Recommendations

Modifications to Existing Legislation

Act 397 (2006)

The commission recommends that the following language and changes from portions of Act 397 (2006 Budget Proviso, 72.113) be made into permanent law.

1. (A): Incentives for Vehicle Buyers

(GP: Alternative Fuels and Fuel Efficiency Incentives) (A) Sales tax rebates shall be applied to vehicle purchases as follows.

(1) There shall be a \$300 sales tax rebate for in-state purchases of all Flex-Fuel Vehicles (FFV), capable of operating on E85 motor fuel. The rebate shall be in the form of a payment sent to the buyer upon completion of a form created by the Department of Revenue and made available to the public, dealers, and the Department of Motor Vehicles. Eligible vehicles for each model year are those models identified by the manufacturer as being flexible-fuel vehicles capable of operating on E85 motor fuel. E85 motor fuel is a fuel comprised of eighty-five percent ethanol fuel and fifteen percent gasoline fuel.

(2) There shall be a \$300 sales tax rebate for in-state purchases of all hydrogen fueled ~~cell~~-vehicles. The rebate shall be in the form of a payment sent to the buyer upon completion of a form created by the Department of Revenue and made available to the public, dealers, and the Department of Motor Vehicles. A hydrogen ~~fueled fuel-cell~~ vehicle is any vehicle classified by the United States Department of Energy as a hydrogen ~~fueled fuel-cell~~ vehicle.

(3) There shall be a \$300 sales tax rebate for in-state purchases of ~~hybrid vehicles~~ and plug-in hybrid ~~gasoline-electric~~ vehicles. The rebate shall be in the form of a payment sent to the buyer upon completion of a form created by the Department of Revenue and made available to the public, dealers, and the Department of Motor Vehicles. ~~A hybrid vehicle is defined as a hybrid gasoline-electric vehicle which gets some of its energy from a large on-board battery.~~ A plug-in hybrid ~~gasoline-electric~~ vehicle is a vehicle classified by the United States Department of Energy as a hybrid ~~gasoline-electric~~ vehicle capable of being propelled by both a gasoline-fueled internal combustion engine ~~or a Flex-Fuel engine~~ and an electric motor powered by a battery that can be recharged by being plugged into an external source of electricity.

(4) There shall be a sales tax rebate of up to \$500 for in-state purchase of equipment that results in the conversion of a conventional hybrid ~~gasoline~~-electric vehicle to a plug-in hybrid ~~gasoline~~-electric vehicle, or any in-state purchase of EPA-certified equipment for conversion of conventional vehicles to operate on LPG (propane), CNG (compressed natural gas), LNG (liquefied natural gas), Hydrogen or E85 (85% ethanol and 15% gasoline). The rebate shall be in the form of a payment sent to the buyer upon completion of a form created by the Department of Revenue and made available to the public and dealers.

(5) There shall be an income tax credit of up to \$2,000 for in-state purchase of Plug-In Hybrid vehicles. To qualify, the vehicle must share the benefits of an internal combustion and electric engine with an all electric range of no less than 9 miles. The tax credit may be taken over a period of 5 years for qualifying individuals or businesses. The form shall be created by the Department of Revenue and made available to the public, dealers, and the Department of Motor Vehicles.

(6) There shall be a sales tax rebate of up to \$300 for in-state purchase of high fuel economy vehicles with a combined fuel economy rating of 40 miles per gallon or higher rated by the US Environmental Protection Agency. The rebate shall be in the form of a payment sent to the buyer upon completion of a form created by the Department of Revenue and made available to the public, dealers, and the Department of Motor Vehicles.

2. **(B): Incentives at the pump**

(B) Incentive payments for alternative fuel purchases shall be provided as follows.

(1) There shall be a five cents incentive payment to the retailer for each gallon sold consisting of E85 E70 fuel or greater, provided that the qualified ethanol-based fuel is subject to the South Carolina motor fuel tax and the price of the qualified ethanol-based fuel is at least five cents lower than the price of the lowest priced gasoline fuel being sold at the same retail facility on the date of sale. The payment shall be made to the retailer upon compliance with verification procedures set forth by the Department of Agriculture. This provision shall be made retroactive beginning July 1, 2006 to all retailers in South Carolina offering ethanol in a blend of E70 or greater.

(2) There shall be a ~~five~~ twenty-five cents incentive payment to the retailer for each gallon of pure biodiesel fuel sold consisting of B20 fuel, so the biodiesel in the blend is at least 2 percent (B2 or greater), provided that the qualified biodiesel content fuel is subject to the South Carolina motor fuel tax. ~~and the price of the qualified biodiesel content fuel is at least five cents lower than the price of the lowest priced diesel fuel being sold at the same retail facility on the date of sale.~~ B20 fuel is a fuel that is twenty percent biodiesel fuel and eighty percent petroleum-based diesel fuel. To qualify for

incentive payments, the biodiesel fuel must be a fuel for motor vehicle diesel engines comprised of vegetable oils or animal fats and meeting the specifications of ASTM (American Society of Testing and Materials) D-5764 D 6751. The payment shall be made to the retailer upon compliance with verification procedures set forth by the Department of Agriculture. This provision shall be made retroactive beginning July 1, 2006 to all retailers in South Carolina offering biodiesel in a blend of B2 or greater.

(3) There shall be a five twenty-five cents incentive payment to the retailer or wholesaler for each gallon of pure biodiesel B20 fuel sold as dyed diesel fuel for "off road" uses, so the biodiesel in the blend is at least 2 percent (B2 or greater), provided the price of the B20 dyed fuel is at least five cents lower than the price the lowest non-B20 dyed diesel fuel sold by retailer or wholesaler on the same date. The payment shall be made to the retailer upon compliance with verification procedures set forth by the Department of Agriculture.

3. 72.113 (C): Incentives for Producer – tax credit per gallon of fuel

(C) The following income tax credits shall apply to taxes imposed by Sections 12-6-510 and 12-6-530 of the 1976 Code for tax years beginning after December 31, 2006.

~~(1) There shall be a business or personal income tax credit of twenty cents for each gallon of biodiesel motor fuel produced mostly from soybean oil and sold, up to a maximum of three million gallons per year from each facility, for a maximum of five years for each facility. Credits are available for not more than one facility in each county in any calendar year, with priority given to the first facility in a county that produces biodiesel motor fuel using soybean oil as the feedstock. Credits are available to individuals or businesses producing motor fuel mostly from soybean oil for internal use without regard to the per county limitation. This credit may be carried forward for up to three years. The payment shall be made upon compliance with verification procedures set forth by the Department of Agriculture.~~

~~(2) There shall be a business or personal income tax credit of thirty cents for each gallon of biodiesel motor fuel a majority of which is produced from feedstock other than soybean oil and sold, up to a maximum of three million gallons per year, for a maximum of five years. Credits are available for not more than one facility in each county in any calendar year, with priority given to the first facility in a county that produces biodiesel motor fuel using a feedstock other than soybean oil. Credits are available to individuals or businesses producing biodiesel motor fuel for internal use, a majority of which is derived from feedstock other than soybean oil, without regard to the per county limitation. This credit may be carried forward for up to three years. The payment shall be made upon compliance with verification procedures set forth by the Department of Agriculture.~~

4. (D): Department of Revenue

(D) The Department of Revenue may prescribe form and procedures, issue policy documents, and distribute funds as necessary to ensure the orderly and timely implementation of the provisions herein. The Department of Revenue shall coordinate with the Department of Agriculture as necessary.

II. Act 386 (2006)

The commission recommends that the following additions and changes be made in Act 386.

Tax credit for ethanol or biodiesel production

SECTION 36.A. Article 25, Chapter 6, Title 12 of the 1976 Code is amended by adding:

"Section 12-6-3600. (A) For taxable years beginning after 2006, and before 2014, there is allowed a credit against the tax imposed pursuant to this chapter for any corn-based ethanol or soy-based biodiesel facility which is in production at the rate of at least twenty-five percent of its name plate design capacity for the production of corn-based ethanol or soy-based biodiesel, before denaturing, on or before December 31, 2009. The facility must be placed in use after 2006. The credit equals twenty cents a gallon of corn-based ethanol or soy-based biodiesel produced and is allowed for sixty months beginning with the first month for which the facility is eligible to receive the credit and ending not later than December 31, 2014. The credit only may be claimed if the corn-based ethanol or soy-based biodiesel facility maintains an average production rate of at least twenty-five percent of its name plate design capacity for at least six months after the first month for which it is eligible to receive the credit.

(B) As used in this section:

(1) 'Ethanol facility' means a plant or facility primarily engaged in the production of ethanol or ethyl alcohol derived from grain components, coproducts, or byproducts; renewable and sustainable bio-products used as a substitute for gasoline fuel;

(2) 'Biodiesel facility' means a plant or facility primarily engaged in the production of vegetable or animal based fuels used as a substitute for diesel fuel; and

(3) 'Name plate design capacity' means the original designed capacity of an ethanol or biodiesel facility. Capacity may be specified as bushels of grain ground or gallons of ethanol or biodiesel produced a year.

~~(C) A ethanol or biodiesel facility eligible for a tax credit under subsection (A) of this section also shall receive a credit against the tax imposed pursuant to this chapter the amount of twenty cents a gallon of ethanol or biodiesel produced in excess of the original name plate design capacity which results~~

from expansion of the facility completed after 2006 and before 2009. The tax credit is allowed for sixty months beginning with the first month for which production from the expanded facility is eligible to receive the tax credit and ending not later than 2014.

(C) For taxable years beginning after 2006, and before 2014, there is allowed a credit against the tax imposed pursuant to this chapter for any ethanol facility using a feedstock other than corn or a biodiesel facility using a feedstock other than soy oil, which is in production at the rate of at least twenty-five percent of its name plate design capacity for the production of ethanol or biodiesel, before denaturing, on or before December 31, 2009. The credit equals thirty cents a gallon of non-corn ethanol or non-soy oil biodiesel produced and is allowed for sixty months beginning with the first month for which the facility is eligible to receive the credit and ending not later than December 31, 2014. The credit only may be claimed if the ethanol or biodiesel facility maintains an average production rate of at least twenty-five percent of its name plate design capacity for at least six months after the first month for which it is eligible to receive the credit.

(D)(1) Pursuant to this chapter, beginning January 1, 2014, an ethanol or biodiesel facility must receive a credit against the tax imposed in the amount of seven and one-half cents a gallon of ethanol or biodiesel, before denaturing, for new production for a period not to exceed thirty-six consecutive months.

(2) For purposes of this subsection, 'new production' means production which results from a new facility, a facility which has not received credits before 2014, or the expansion of the capacity of an existing facility by at least two million gallons first placed into service after 2014, as certified by the design engineer of the facility to the Department of Revenue.

(3) For expansion of the capacity of an existing facility, 'new production' means annual production in excess of twelve times the monthly average of the highest three months of ethanol or biodiesel production at an ethanol or biodiesel facility during the twenty-four-month period immediately preceding certification of the facility by the design engineer.

(4) Credits are not allowed pursuant to this subsection for expansion of the capacity of an existing facility until production is in excess of twelve times the three-month average amount determined pursuant to this subsection during any twelve-consecutive month period beginning no sooner than January 1, 2014.

(5) The amount of a credit granted pursuant to this section based on new production must be approved by the Department of Revenue based on the ethanol or biodiesel production records as may be necessary to reasonably determine the level of new production.

(E)(1) The credits described in this section are allowed only for ethanol or biodiesel produced at a plant in this State at which all fermentation,

distillation, and dehydration takes place. Credit is not allowed for ethanol or biodiesel produced or sold for use in the production of distilled spirits.

(2) Not more than twenty-five million gallons of ethanol or biodiesel produced annually at an ethanol or biodiesel facility is eligible for the credits in subsections (A) and (C) of this section, and the credits only may be claimed by a producer for the periods specified in subsections (A) and (C) of this section.

(3) Not more than ten million gallons of ethanol or biodiesel produced during a twelve-consecutive month period at an ethanol or biodiesel facility is eligible for the credit described in subsection (D) of this section, and the credit only may be claimed by a producer for the periods specified in subsection (D) of this section.

(4) Not more than one hundred twenty-five million gallons of ethanol or biodiesel produced at an ethanol or biodiesel facility by the end of the sixty-month period set forth in subsection (A) or (C) of this section is eligible for the credit under the subsection. An ethanol or biodiesel facility which receives a credit for ethanol or biodiesel produced under subsection (A) or (C) of this section may not receive a credit pursuant to subsection (D) of this section until its eligibility to receive a credit under subsection (A) or (C) of this section has been completed.

(F) The Department of Revenue shall prescribe an application form and procedures for claiming credits under this section.

(G) For purposes of ascertaining the correctness of any application for claiming a credit allowed pursuant to this section, the Department of Revenue may examine or cause to have examined, by any agent or representative designated for that purpose, any books, papers, records, or memoranda bearing upon these matters."

B.1. Article 25, Chapter 6, Title 12 of the 1976 Code is amended by adding:
"Section 12-6-3610. (A) As used in this section, renewal fuel means liquid nonpetroleum based fuels that can be placed in motor vehicle fuel tanks and used as a fuel in a highway vehicle. It includes all forms of fuel commonly or commercially known or sold as biodiesel and ethanol.

(B) A taxpayer that constructs and installs and places in service in this State a qualified commercial facility for distribution or dispensing renewable fuel is allowed a credit equal to twenty-five percent of the cost to the taxpayer against the taxpayer's liability for a tax imposed pursuant to this chapter constructing and installing the part of the distribution facility or dispensing facility, including pumps, storage tanks, and related equipment, that is directly and exclusively used for distribution, dispensing, or storing renewable fuel. A facility is qualified if the equipment used to store, distribute, or dispense renewable fuel is labeled for this purpose and clearly identified as associated with renewable fuel. The entire credit may not be taken for the taxable year in

which the facility is placed in service but must be taken in three equal annual installments beginning with the taxable year in which the facility is placed in service. If, in one of the years in which the installment of a credit accrues, the portion of the facility directly and exclusively used for distributing, dispensing, or storing renewable fuel is disposed of or taken out of service, the credit expires and the taxpayer may not take any remaining installment of the credit. The unused portion of an unexpired credit may be carried forward for not more than ten succeeding taxable years.

(C) A taxpayer that constructs and places in service in this State a commercial facility for processing renewable fuel and other facilities which produce renewable fuels such as crushing facilities producing oils for renewable fuels, milling equipment for the purpose of producing renewable fuels, and biomass handling equipment for the purpose of producing renewable fuels, are is allowed a credit equal to twenty-five percent up to \$1,000,000 of the cost to the taxpayer of constructing and equipping the facility. The entire credit may not be taken for the taxable year in which the facility is placed in service but must be taken in seven equal annual installments beginning with the taxable year in which the facility is placed in service. If, in one of the years in which the installment of a credit accrues, the facility with respect to which the credit was claimed is disposed of or taken out of service, the credit expires and the taxpayer may not take any remaining installment of the credit. The unused portion of an unexpired credit may be carried forward for not more than ten succeeding taxable years.

(D) A taxpayer that claims any other credit allowed under this article with respect to the costs of constructing and installing a facility may not take the credit allowed in this section with respect to the same costs."

B.2. Section 12-6-3610 of the 1976 Code, as added by this section, is repealed effective for facilities placed in service after 2011.

B.3. Notwithstanding the general effective date of this act, this section takes effect upon approval of this act by the Governor and applies for facilities placed in service after 2006.

C.1. Section 12-28-110(39) of the 1976 Code is amended to read:

"(39) 'Motor fuel' means gasoline, diesel fuel, renewable fuel, and blended fuel."

C.2. Section 12-28-110 of the 1976 Code is amended by adding at the end:

"(69) 'Biodiesel' means vegetable or animal based fuels used as a substitute for diesel fuel.

(70) 'Renewable fuel' means liquid nonpetroleum based fuels that can be placed in vehicle fuel tanks and used as a fuel in a highway vehicle. It includes all forms of fuel commonly or commercially known or sold as biodiesel and ethanol."

D. Section 12-28-990(A) of the 1976 Code, as last amended by Act 69 of 2003, is further amended to read:

"(A) Each person blending materials on which the user fee has not been paid including blendstocks, additives, and renewable fuels with motor fuels subject to the user fee as to which the user fee has been paid or accrued shall remit the user fee imposed by this chapter."

E. Except where otherwise provided, this section takes effect upon approval by the Governor.

New Legislation

Energy Task Force

South Carolina Energy Task Force: The South Carolina General Assembly should create an energy task force, similar to the 1991 South Carolina Energy Policy Panel, to develop a comprehensive assessment of the state of energy policy in South Carolina, create a strategic roadmap designed to further reduce the state's dependence on external energy resources, enhance the state's economy, and improve the environment.

Appropriations for Alternative Fuel Promotion

A. Establish a biodiesel testing program within the South Carolina Department of Agriculture: The South Carolina General Assembly should appropriate a one-time expenditure of \$250,000 to upgrade biodiesel and ethanol testing equipment within the South Carolina Department of Agriculture fuels laboratory to ensure that biodiesel produced in South Carolina meets ASTM standards, with recurring funds of \$50,000 a year for continued staff support. The expansion of the Department of Agriculture fuels testing lab would assist small scale biodiesel producers. The testing facility would be available for any registered fuel producer with the US Environmental Protection Agency, the SC Department of Health and Environmental Control, and the South Carolina Department of Agriculture that is located in South Carolina.

B. Regulatory Authority: The South Carolina General Assembly should give the Department of Agriculture clear regulatory authority to define and regulate certain renewable fuels standards in the same manner as petroleum fuels.

C. Alternative Transportation Fuels Marketing Program: The South Carolina General Assembly should appropriate \$150,000 annually for a period of three years to the South Carolina Department of Agriculture for a broad-based alternative transportation fuel education and awareness program. This will become part of the Agricultural Departments current marketing program. This fund could be applied to but not limited to: interstate signage for stations selling renewable fuels, billboards, media campaigns, stationary and mobile exhibits, funding for program administration, and other related public education operations.

D. Palmetto State Clean Fuels Coalition: The South Carolina General Assembly should appropriate recurring funding to the Palmetto State Clean Fuels Coalition (PSCFC) in the amount of \$50,000 annually. The funds will be used for staffing, marketing alternative fuel vehicles and cleaner fuels to local fleets, organizing and participating in alternative fuels events, public education and outreach campaigns, project development and grant writing,

promoting legislation and the development of partnerships with other local and regional groups and interested organizations, and representation of South Carolina at national Clean Cities events including regional and national meetings. The success of PSCFC depends on the commitment of coalition stakeholders and the ability of the coalition to fund a coordinator to manage the effort. Funding will permit the continued development of a strong, successful Clean Cities program throughout the state of South Carolina.

Job creation and R&D tax credits for Alternative Fuel Industry

A. *Jobs Creation Tax Credit:* Alter the current jobs creation tax credit to reduce the required minimum number of individuals (currently ten a year) needed to obtain the job creation tax credit for businesses producing biomass energy. The job creation credit should also apply to a sole proprietorship or LLC registered with the State Department of Commerce against a personal income tax.

B. *Corporate Tax Credit for Cellulosic Ethanol Research and Development:* Companies investing in cellulosic ethanol research and development (R&D) should receive a tax credit for 25 percent of R&D expenditures. Reducing R&D costs can increase capital investment and job creation in South Carolina by encouraging companies to establish facilities in South Carolina.

State Requirement to Use Alternative Fuels

State Government Biodiesel requirement: The South Carolina General Assembly should require that all state-owned fueling facilities should have at least B5 in all diesel pumps. Requiring the use of biodiesel in a 5 percent blend will enhance the market for biodiesel produced in South Carolina, create cleaner emissions from state-owned diesel vehicles, and decrease dependence on foreign sources of oil.

Commission Endorsements

Hydrogen Infrastructure Development Fund: The commission supports the goals of H.3146, the South Carolina Hydrogen Infrastructure Development Fund. H.3146 was introduced by Speaker Bobby Harrell and others to enhance research and development opportunities in South Carolina for a future hydrogen economy. Funds allocated by the bill would increase South Carolina's competitiveness to attract business and industry investment in hydrogen development technology and research, thereby providing an economic boon to the state's economy.

25 X '25 Campaign: South Carolina should officially join the 25 X '25 campaign sponsored by a broad national coalition of farm and forestry leaders, organizations, businesses, and government. The 25 X '25 vision: By 2025, renewable energy from America's farms, forests and ranches will provide 25percent of the total energy consumed in the United States, while continuing to produce safe, abundant and affordable food, feed and fiber. Future partners will work together to identify steps needed to achieve the goals of 25 X '25 and achieve a secure, prosperous and sustainable U.S. energy future. The goals of the campaign are voluntary in nature, and should be coordinated and monitored by the South Carolina Energy Office, in cooperation with the South Carolina Department of Agriculture and the South Carolina Forestry Commission.

Appendix A: FISCAL IMPACT FY 2008
SC ENERGY OFFICE BUDGET ANALYSIS

Tax Rebate for Alternative Fuel Vehicle Purchase

Qualification	Sales Tax Rebate	New and Used Cars sold in SC	Estimated Qualifying Cars	Total Cost
E85 Flex-Fuel vehicles	\$300	450,000	13,500	\$4,050,000
Hydrogen Fuel vehicles	\$300	450,000	0	\$0
Hybrid & Plug-In Hybrid vehicles	\$300	450,000	4,500	\$1,350,000
Plug-In Hybrid vehicles	\$2,000	450,000	0	*\$0
EPA-approved conversion kits for Plug-In Hybrid, LPG, CNG, LNG, hydrogen or E85 flex-fuel vehicles.	\$500	450,000	100	\$50,000
High fuel economy vehicles of 40mpg or greater	\$300	450,000	2,250	\$675,000

*income tax credit in addition to the sales tax rebate for Plug-In Hybrid vehicles

Retailer Incentive Payment for Alternative Fuel Sale

Qualification	Incentive Payment	Estimated Total Gallons	Total Cost
Incentive payment per gallon of E85 sold	\$0.05	3,600,000	\$180,000
Incentive payment per gallon of B100 sold	\$0.25	6,000,000	\$1,500,000
Dyed B100 25 cent incentive payment	\$0.25	200,000	\$50,000

Tax Credit for Alternative Fuel Production

Qualification	Additional Tax Credit	Estimated Facilities	Estimated total gallons	Total Cost
Tax credit for each gallon of biodiesel produced from feedstock other than soy	\$0.10	1	6,000,000	\$600,000
Tax credit for each gallon of ethanol produced from feedstock other than corn	\$0.10	0	0	\$0

Renewable fuel crushing, milling, and biomass handling equipment tax credit	25% of cost	1	N/A	\$1,000,000
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Energy Task Force

Qualification				Total Cost
Energy Task Force				\$0

Appropriations for Alternative Fuel Promotion

Qualification	Appropriation			Total Cost
SC Department of Agriculture Fuels Laboratory	\$300,000			\$300,000
SC Department of Agriculture Regulatory Authority	\$0			\$0
SC Biofuel Marketing Program	\$150,000			\$150,000
Palmetto State Clean Fuels Coalition	\$50,000			\$50,000

Job Creation and R&D Tax Credits for Alternative Fuel Industry

Qualification	Tax Credit	Estimated Facilities	Avg. No. of New Jobs	Total Cost
Biofuels jobs creation tax credit	100% of cost	10	5	\$50,000
Corporate tax credit for cellulosic ethanol research and development	25% of cost	2	N/A	\$250,000

State Requirement to Use Alternative Fuels

Qualification				Total Cost
All state-owned diesel fuel pumps must contain at least 5% biodiesel				\$0

STREIC Endorsements

Qualification				Total Cost
H.3146				**\$0
25 X '25				\$0

** H. 3146 will cost \$7,000,000, but STREIC does not include that in its total package cost.

TOTAL PACKAGE COST

\$10,255,000