

GENERAL ASSEMBLY OF NORTH CAROLINA  
SESSION 2005

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SENATE BILL 2051  
Agriculture/Environment/Natural Resources Committee Substitute Adopted  
6/28/06

Short Title: Energy Independence Act.

(Public)

Sponsors:

Referred to:

May 26, 2006

A BILL TO BE ENTITLED

AN ACT TO INCREASE ENERGY INDEPENDENCE IN NORTH CAROLINA THROUGH: (1) PROMOTION OF THE CONSERVATION OF ENERGY, WATER, AND OTHER UTILITIES IN PUBLIC FACILITIES; (2) PROMOTION OF THE USE OF ALTERNATIVE FUELS AND ADVANCED TECHNOLOGY VEHICLES IN STATE FLEETS; (3) PROVISION OF ENERGY ASSISTANCE TO LOW-INCOME PERSONS; (4) CREATION OF VARIOUS ENERGY-RELATED TAX INCENTIVES; (5) DEVELOPMENT OF A STRATEGIC PLAN FOR DEVELOPMENT OF A BIOFUELS INDUSTRY IN NORTH CAROLINA; AND (6) APPROPRIATION OF FUNDS.

The General Assembly of North Carolina enacts:

**PART I. ENERGY CONSERVATION IN STATE AND LOCAL GOVERNMENT FACILITIES**

**CLARIFY THAT GUARANTEED ENERGY SAVINGS CONTRACTS INCLUDE CONSERVATION MEASURES FOR WATER AND OTHER UTILITIES, RAISE THE CAP FOR, AND EXTEND THE TERM OF, GUARANTEED ENERGY SAVINGS CONTRACTS**

**SECTION 1.1.** The title of Article 3B of Chapter 143 of the General Statutes reads as rewritten:

"Energy Conservation of Energy, Water, and Other Utilities in Public Government Facilities."

**SECTION 1.2.** G.S. 143-64.17 reads as rewritten:

**"§ 143-64.17. Definitions.**

As used in this Part:

- 1 (1) "Energy conservation measure" means a facility or meter alteration,  
2 training, or services related to the operation of the ~~facility,~~facility or  
3 meter, when the alteration, training, or services provide anticipated  
4 energy ~~savings,~~savings or capture lost revenue. Energy conservation  
5 measure includes any of the following:  
6 a. Insulation of the building structure and systems within the  
7 building.  
8 b. Storm windows or doors, caulking, weatherstripping,  
9 multiglazed windows or doors, heat-absorbing or heat-reflective  
10 glazed or coated window or door systems, additional glazing,  
11 reductions in glass area, or other window or door system  
12 modifications that reduce energy consumption.  
13 c. Automatic energy control systems.  
14 d. Heating, ventilating, or air-conditioning system modifications  
15 or replacements.  
16 e. Replacement or modification of lighting fixtures to increase the  
17 energy efficiency of a lighting system without increasing the  
18 overall illumination of a facility, unless an increase in  
19 illumination is necessary to conform to the applicable State or  
20 local building code or is required by the light system after the  
21 proposed modifications are made.  
22 f. Energy recovery systems.  
23 g. Cogeneration systems that produce steam or forms of energy  
24 such as heat, as well as electricity, for use primarily within a  
25 building or complex of buildings.  
26 ~~h. Other energy conservation measures.~~  
27 i. Faucets with automatic or metered shut-off valves, leak  
28 detection equipment, water meters, water recycling equipment,  
29 and wastewater recovery systems.  
30 j. Other conservation measures that conserve energy, water, or  
31 other utilities.  
32 (2) "Energy savings" means a measured reduction in fuel costs, energy  
33 costs, water costs, stormwater fees, other utility costs, or operating  
34 ~~costs~~costs, including environmental discharge fees, water and sewer  
35 maintenance fees, and increased meter accuracy, created from the  
36 implementation of one or more energy conservation measures when  
37 compared with an established baseline of previous ~~fuel costs, energy~~  
38 ~~costs, or operating costs~~costs, including captured lost revenue  
39 developed by the governmental unit.  
40 (2a) "Governmental unit" means either a local governmental unit or a State  
41 governmental unit.  
42 (3) "Guaranteed energy savings contract" means a contract for the  
43 evaluation, recommendation, or implementation of energy  
44 conservation measures, including the design and installation of

1 equipment or the repair or replacement of existing  
2 ~~equipment, equipment or meters,~~ in which all payments, except  
3 obligations on termination of the contract before its expiration, are to  
4 be made over time, and in which energy savings are guaranteed to  
5 exceed costs.

6 (4) "Local governmental unit" means any board or governing body of a  
7 political subdivision of the State, including any board of a community  
8 college, any school board, or an agency, commission, or authority of a  
9 political subdivision of the State.

10 (5) "Qualified provider" means a person or business experienced in the  
11 design, implementation, and installation of energy conservation  
12 measures.

13 (6) "Request for proposals" means a negotiated procurement initiated by a  
14 governmental unit by way of a published notice that includes the  
15 following:

16 a. The name and address of the governmental unit.

17 b. The name, address, title, and telephone number of a contact  
18 person in the governmental unit.

19 c. Notice indicating that the governmental unit is requesting  
20 qualified providers to propose energy conservation measures  
21 through a guaranteed energy savings contract.

22 d. The date, time, and place where proposals must be received.

23 e. The evaluation criteria for assessing the proposals.

24 f. A statement reserving the right of the governmental unit to  
25 reject any or all the proposals.

26 g. Any other stipulations and clarifications the governmental unit  
27 may require.

28 (7) "State governmental unit" means the State or a department, an agency,  
29 a board, or a commission of the State, including the Board of  
30 Governors of The University of North Carolina and its constituent  
31 institutions."

32 **SECTION 1.3.** G.S. 143-64.17B(a) reads as rewritten:

33 "(a) A governmental unit may enter into a guaranteed energy savings contract  
34 with a qualified provider if all of the following apply:

35 (1) The term of the contract does not exceed ~~12~~20 years from the date of  
36 the installation and acceptance by the governmental unit of the energy  
37 conservation measures provided for under the contract.

38 (2) The governmental unit finds that the energy savings resulting from the  
39 performance of the contract will equal or exceed the total cost of the  
40 contract.

41 (3) The energy conservation measures to be installed under the contract  
42 are for an existing ~~building~~building or utility system."

43 **SECTION 1.4.** The catch line of G.S. 143-64.17G reads as rewritten:

1 "§ 143-64.17G. Report on guaranteed energy savings ~~contracts~~contracts entered  
2 into by local governmental units."

3 SECTION 1.5. The catch line of G.S. 143-64.17H reads as rewritten:

4 "§ 143-64.17H. ~~Guaranteed~~Report on guaranteed energy savings ~~contract~~  
5 ~~reporting requirements~~contracts entered into by State governmental  
6 units."

7 SECTION 1.6. G.S. 142-63 reads as rewritten:

8 "§ 142-63. Authorization of financing contract.

9 Subject to the terms and conditions set forth in this Article, a State governmental  
10 unit that has solicited a guaranteed energy conservation measure pursuant to  
11 G.S. 143-64.17A or G.S. 143-64.17B or the State Treasurer, as designated by the  
12 Council of State, is authorized to execute and deliver, for and on behalf of the State of  
13 North Carolina, a financing contract to finance the costs of the energy conservation  
14 measure. The aggregate principal amount payable by the State under financing contracts  
15 entered pursuant to this Article shall not exceed ~~fifty million dollars (\$50,000,000)~~one  
16 hundred million dollars (\$100,000,000) at any one time."

17 SECTION 1.7. G.S. 142-64(b)(2) reads as rewritten:

18 "(2) The Council of State has approved the execution and delivery of the  
19 financing contract by resolution that sets forth all of the following:

- 20 a. The not-to-exceed term or final maturity of the financing  
21 contract, which shall be no later than ~~12 years from the date the~~  
22 ~~financing contract is entered.~~20 years from the date of  
23 acceptance of the project.
- 24 b. The not-to-exceed interest rate or rates (or the equivalent  
25 thereof), which may be fixed or vary over a period of time, with  
26 respect to the financing contract.
- 27 c. The appropriate officers of the State to execute and deliver the  
28 financing contract and all other documentation relating to it."

29 SECTION 1.8. G.S. 143-64.10 reads as rewritten:

30 "§ 143-64.10. Findings; policy.

31 (a) The General Assembly ~~hereby finds~~finds all of the following:

- 32 (1) That the State shall take a leadership role in aggressively undertaking  
33 ~~energy~~the conservation of energy, water, and other utilities in North  
34 ~~Carolina;~~Carolina.
- 35 (2) That State facilities have a significant impact on the State's  
36 consumption of ~~energy;~~energy, water, and other utilities.
- 37 (3) That ~~energy conservation~~ practices to conserve energy, water, and  
38 other utilities that are adopted for the design, construction, operation,  
39 maintenance, and renovation of these facilities and for the purchase,  
40 operation, and maintenance of equipment for these facilities will have  
41 a beneficial effect on the State's overall supply of ~~energy;~~energy,  
42 water, and other utilities.

- 1 (4) That the cost of the ~~energy~~energy, water, and other utilities consumed  
2 by these facilities and the equipment for these facilities over the life of  
3 the facilities shall be considered, in addition to the initial ~~cost~~cost.
- 4 (5) That the cost of ~~energy~~energy, water, and other utilities is significant  
5 and facility designs shall take into consideration the total life-cycle  
6 cost, including the initial construction cost, and the cost, over the  
7 economic life of the facility, of the ~~energy~~energy, water, and other  
8 utilities consumed, and of operation and maintenance of the facility as  
9 it affects ~~energy consumption~~and the consumption of energy, water,  
10 or other utilities.
- 11 (6) That State government shall undertake a program to reduce ~~energy~~the  
12 use of energy, water, and other utilities in State facilities and  
13 equipment in those facilities in order to provide its citizens with an  
14 example of ~~energy use efficiency~~the efficient use of energy, water,  
15 and other utilities.

16 (b) It is the policy of the State of North Carolina to ensure that ~~energy~~  
17 ~~conservation~~practices to conserve energy, water, and other utilities are employed in the  
18 design, construction, operation, maintenance, and renovation of State facilities and in  
19 the purchase, operation, and maintenance of equipment for State facilities."

20 **SECTION 1.9.** G.S. 143-64.11(2) reads as rewritten:

21 "(2) "Energy-consumption analysis" means the evaluation of all energy-  
22 consuming ~~systems~~systems, including systems that consume water or  
23 other utilities, and components of these systems by demand and type  
24 of ~~energy~~energy or other utility use, including the internal energy load  
25 imposed on a facility by its occupants, equipment and components,  
26 and the external energy load imposed on the facility by climatic  
27 conditions."

28 **SECTION 1.10.** G.S. 143-64.11(2b) reads as rewritten:

29 "(2b) "Energy-consuming system" includes but is not limited to any of the  
30 following equipment or measures:  
31 a. Equipment used to heat, cool, or ventilate the facility;  
32 b. Equipment used to heat water in the facility;  
33 c. Lighting systems;  
34 d. On-site equipment used to generate electricity for the facility;  
35 e. On-site equipment that uses the sun, wind, oil, natural gas,  
36 liquid propane gas, coal, or electricity as a power source; and  
37 f. Energy conservation ~~measures~~measures, as defined in  
38 G.S. 143-64.17, in the facility design and construction that  
39 decrease the ~~energy~~energy, water, or other utility requirements  
40 of the facility."

41 **SECTION 1.11.** G.S. 143-64.11(3) reads as rewritten:

42 "(3) "Facility" means a building or a group of buildings served by a central  
43 ~~energy~~distribution system for energy, water, or other utility or  
44 components of a central ~~energy~~distribution system."

1           **SECTION 1.12.** G.S. 143-64.12 reads as rewritten:

2   "**§ 143-64.12. Authority and duties of State agencies.**

3       (a) The General Assembly authorizes and directs that State agencies shall carry  
4 out the construction and renovation of State facilities, under their jurisdiction in such a  
5 manner as to further the policy declared herein, ensuring the use of life-cycle cost  
6 analyses and ~~energy conservation practices~~practices to conserve energy, water, and  
7 other utilities.

8       (b) The Department of Administration shall develop and implement policies,  
9 procedures, and standards to ensure that State purchasing practices improve ~~energy~~  
10 efficiency regarding energy, water, and other utility use and take the cost of the product  
11 over the economic life of the product into consideration. The Department of  
12 Administration shall adopt and implement Building Energy Design Guidelines. These  
13 guidelines shall include energy-use goals and standards, economic assumptions for  
14 life-cycle cost analysis, and other criteria on building systems and technologies. The  
15 Department of Administration shall modify the design criteria for construction and  
16 renovation of facilities to require that a life-cycle cost analysis be conducted pursuant to  
17 G.S. 143-64.15. The Department of Administration, as part of the Facilities Condition  
18 and Assessment Program, shall identify and recommend energy conservation  
19 maintenance and operating procedures that are designed to reduce energy consumption  
20 within the facility and that require no significant expenditure of funds. State  
21 departments, institutions, or agencies shall implement these recommendations. Where  
22 energy management equipment is proposed for State facilities, the maximum  
23 interchangeability and compatibility of equipment components shall be required.

24       The Department of Administration shall develop a comprehensive ~~energy~~  
25 ~~management program to manage energy, water, and other utility use~~ for State  
26 government. Each State agency shall develop and implement ~~an energy a~~ management  
27 plan that is consistent with the State's comprehensive ~~energy management~~  
28 ~~program~~program to manage energy, water, and other utility use.

29       (c) through (g) Repealed by Session Laws 1993, c. 334, s. 4."

30  
31   **EXPAND THE STATE'S ENERGY POLICY AND LIFE-CYCLE COST**  
32   **ANALYSIS TO INCLUDE THE CONSERVATION OF WATER AND**  
33   **OTHER UTILITIES**

34  
35           **SECTION 1.13.** G.S. 143-64.15 reads as rewritten:

36   "**§ 143-64.15. Life-cycle cost analysis.**

37       (a) A life-cycle cost analysis shall include, but not be limited to, all of the  
38 following elements:

- 39           (1) The coordination, orientation, and positioning of the facility on its  
40 physical ~~site~~site.  
41           (2) The amount and type of fenestration employed in the ~~facility~~facility.  
42           (3) Thermal characteristics of materials and the amount of insulation  
43 incorporated into the facility ~~design~~design.

1 (4) The variable occupancy and operating conditions of the facility,  
2 including illumination ~~levels; and~~ levels.

3 (5) Architectural features ~~which—that affect energy consumption; the~~  
4 consumption of energy, water, and other utilities.

5 (b) The life-cycle cost analysis performed for any State facility shall, in addition  
6 to the requirements set forth in subsection (a) of this section, include, but not be limited  
7 to, all of the following:

8 (1) An energy-consumption analysis of the facility's energy-consuming  
9 systems in accordance with the provisions of subsection (g) of this  
10 ~~section;~~ section.

11 (2) The initial estimated cost of each energy-consuming system being  
12 compared and ~~evaluated;~~ evaluated.

13 (3) The estimated annual operating cost of all utility  
14 ~~requirements;~~ requirements.

15 (4) The estimated annual cost of maintaining each energy-consuming  
16 ~~system; and~~ system.

17 (5) The average estimated replacement cost for each system expressed in  
18 annual terms for the economic life of the facility.

19 (c) ~~The General Assembly requires each~~ Each entity ~~to shall~~ conduct a life-cycle  
20 cost analysis pursuant to this section for the construction or the renovation of any State  
21 facility or State-assisted facility of 20,000 or more gross square feet. For the  
22 replacement of heating, ventilation, and air conditioning equipment in any State facility  
23 or State-assisted facility of 20,000 or more gross square feet, the entity shall conduct a  
24 life-cycle cost analysis of the replacement equipment pursuant to this section when the  
25 replacement is financed under a guaranteed energy savings contract or financed using  
26 repair and renovation funds.

27 (d) The life-cycle cost analysis shall be certified by a registered professional  
28 engineer or bear the seal of a North Carolina registered architect, or both. The engineer  
29 or architect shall be particularly qualified by training and experience for the type of  
30 work involved, but shall not be employed directly or indirectly by a fuel provider, utility  
31 company, or group supported by fuel providers or utility funds. Plans and specifications  
32 for facilities involving public funds shall be designed in conformance with the  
33 provisions of G.S. 133-1.1.

34 (e) In order to protect the integrity of historic buildings, no provision of this  
35 Article shall be interpreted to require the implementation of ~~energy-cost~~ measures to  
36 conserve energy, water, or other utility use that conflict with respect to any property  
37 eligible for, nominated to, or entered on the National Register of Historic Places,  
38 pursuant to the National Historic Preservation Act of 1966, P.L. 89-665; any historic  
39 building located within an historic district as provided in Chapters 160A or 153A of the  
40 General Statutes; any historic building listed, owned, or under the jurisdiction of an  
41 historic properties commission as provided in Chapter 160A or 153A; nor any historic  
42 property owned by the State or assisted by the State.

1 (f) Each State agency shall use the life-cycle cost analysis over the economic life  
2 of the facility in selecting the optimum system or combination of systems to be  
3 incorporated into the design of the facility.

4 (g) The energy-consumption analysis of the operation of energy-consuming  
5 systems utilities in a facility shall include, but not be limited ~~to~~to, all of the following:

6 (1) The comparison of two or more system ~~alternatives~~alternatives.

7 (2) The simulation or engineering evaluation of each system over the  
8 entire range of operation of the facility for a year's operating ~~period~~and period;

9  
10 (3) The engineering evaluation of the ~~energy~~consumption of energy,  
11 water, and other utilities of component equipment in each system  
12 considering the operation of such components at other than full or  
13 rated outputs."  
14

15 **ESTABLISH AN ENERGY AND WATER USE REDUCTION GOAL FOR**  
16 **STATE BUILDINGS AND ANY OTHER BUILDINGS THAT RECEIVE**  
17 **FUNDING IN THE STATE CAPITAL IMPROVEMENT BUDGET**  
18

19 **SECTION 1.14.** Article 8 of Chapter 143 of the General Statutes is amended  
20 by adding a new section to read:

21 **"§ 143-128.5. Energy and water use reduction goal.**

22 (a) For the purposes of this section, a 'major facility project' means any new  
23 building construction, addition, or renovation that: (i) increases the square footage of the  
24 facility size by 20,000 square feet or greater; (ii) costs two hundred fifty thousand  
25 dollars (\$250,000) or more; or (iii) costs fifty percent (50%) or more of the current  
26 facility value.

27 (b) Any State department, agency, or institution and any entity that receives  
28 funding in the State capital improvement appropriations act for a major facility project  
29 at an existing facility shall reduce energy and water use by twenty percent (20%)  
30 through cost-effective measures at the facility. The State Energy Office of the  
31 Department of Administration shall determine the baseline year for the energy and  
32 water use reduction goal. Each agency shall develop and implement a comprehensive  
33 energy and water management program to support this goal. Public school buildings are  
34 encouraged but not required to reduce energy and water use by twenty percent (20%)  
35 through cost-effective measures.

36 (c) Any new facility or addition that receives funding in the State capital  
37 improvement appropriations act shall reduce energy use by a minimum of twenty  
38 percent (20%) benchmarked from the American Society for Heating, Refrigerating, and  
39 Air-Conditioning Engineers (ASHRAE) Standard 90.1-2004 (Energy Standard for  
40 Buildings Except Low-Rise Residential Buildings).

41 (d) Any new facility or addition that receives funding in the State capital  
42 improvement appropriations act that is projected to use 500,000 gallons or more of  
43 potable water on an annual basis shall reduce potable water consumption by twenty  
44 percent (20%) through cost-effective water collection, distribution, and reuse strategies



1 using a benchmark that reflects climatic conditions and water use characteristics of  
2 similar building types. The State Energy Office of the Department of Administration  
3 shall determine the benchmark for the water use reduction goal.

4 (e) The Department of Administration shall review and modify design criteria for  
5 construction and renovation of facilities, set measurement and evaluation standards, and  
6 receive data and reports from State departments, agencies, and institutions."

7 **SECTION 1.15.** G.S. 143-64.12(b) reads as rewritten:

8 "(b) The Department of Administration shall develop and implement policies,  
9 procedures, and standards to ensure that State purchasing practices improve energy  
10 efficiency and take the cost of the product over the economic life of the product into  
11 consideration. The Department of Administration shall adopt and implement Building  
12 Energy Design Guidelines. These guidelines shall include energy-use goals and  
13 standards, economic assumptions for life-cycle cost analysis, and other criteria on  
14 building systems and technologies. The Department of Administration shall modify the  
15 design criteria for construction and renovation of facilities to require that a life-cycle  
16 cost analysis be conducted pursuant to G.S. 143-64.15. The Department of  
17 Administration, as part of the Facilities Condition and Assessment Program, shall  
18 identify and recommend energy conservation maintenance and operating procedures  
19 that are designed to reduce energy consumption within the facility and that require no  
20 significant expenditure of funds. State departments, institutions, or agencies shall  
21 implement these recommendations. Where energy management equipment is proposed  
22 for State facilities, the maximum interchangeability and compatibility of equipment  
23 components shall be required.

24 (b1) The Department of Administration shall develop a comprehensive energy  
25 management program for State ~~government~~government that will achieve a twenty  
26 percent (20%) reduction in annual energy and utility consumption from a baseline year  
27 to be determined by the State Energy Office. Each State agency shall develop and  
28 implement an energy management plan that is consistent with the State's comprehensive  
29 energy management program."

30 **SECTION 1.16.** G.S. 143-128.5(b), as enacted by Section 1.14 of this act,  
31 becomes effective July 1, 2006, and applies to major facility projects that receive  
32 funding in a capital improvement appropriations act on or after that date. State  
33 departments, agencies, or institutions and other entities that are required to meet the  
34 energy and water use reduction goal shall meet the goal no later than July 1, 2015.  
35 G.S. 143-128.5(c) and G.S. 143-128.5(d), as enacted by Section 1.14 of this act, become  
36 effective when this act becomes law and apply to major facility projects that have not  
37 begun the design phase at that time. The State Energy Office of the Department of  
38 Administration shall review and update the benchmark for the utility and energy use  
39 reduction goal at least every four years to reflect modifications in ASHRAE standards  
40 and modernization of efficiency technologies. Section 1.15 and this section become  
41 effective when this act becomes law. Each State agency will implement the energy  
42 management plan in order to achieve the twenty percent (20%) reduction goal  
43 established in Section 1.15 of this act no later than January 1, 2015.  
44

1 **PART II. USE OF ALTERNATIVE FUELS AND ADVANCED TECHNOLOGY**  
2 **VEHICLES IN STATE MOTOR FLEETS**

3  
4 **ESTABLISH GOALS FOR THE USE OF ALTERNATIVE FUELS AND**  
5 **ADVANCED TECHNOLOGY VEHICLES FOR STATE-OWNED**  
6 **VEHICLES**

7  
8 **SECTION 2.1.** Article 3 of Chapter 143 of the General Statutes is amended  
9 by adding a new section to read:

10 **"§ 143-58.6. Alternative fuel use credits program.**

11 (a) Definitions. – As used in this section:

12 (1) 'Alternative fuel' means biodiesel, ethanol, compressed natural gas,  
13 propane, or hydrogen used directly as a transportation fuel.

14 (2) 'Advanced technology vehicle' means:

15 a. A hybrid electric vehicle that derives its transportation energy  
16 from gasoline and electricity.

17 b. A vehicle that has an emissions certification level of Ultra Low  
18 Emission Vehicle (ULEV) or greater, pursuant to the vehicle  
19 exhaust emission standards for passenger cars, light-duty trucks,  
20 and medium-duty vehicles codified in Title 13 of the California  
21 Code of Regulations (13 May 2005 Edition), and that derives its  
22 transportation energy in whole or in part from an alternative  
23 fuel.

24 c. A low-speed electric vehicle that replaces a gasoline-powered  
25 vehicle and that is authorized to be operated on streets and  
26 highways pursuant to G.S. 20-121.

27 (3) 'State Energy Office' means the State Energy Office of the Department  
28 of Administration.

29 (4) 'State fleet' means those motor vehicles that are operated by a State  
30 department, institution, or agency that purchases fuel for these vehicles  
31 under a State purchasing contract.

32 (b) Goal. – The State fleet shall accrue a total of 1,500,000 alternative fuel use  
33 credits during each calendar year 2006 and 2007. The State fleet shall accrue a total of  
34 3,000,000 alternative fuel use credits during each calendar year 2008 and 2009. The  
35 State fleet shall accrue a total of 6,000,000 alternative fuel use credits during the  
36 calendar year 2010 and each calendar year thereafter.

37 (c) Formulas for Calculating Credits. – Alternative fuel use credits are calculated  
38 as follows:

39 (1) Subject to subdivision (2) of this subsection, one alternative fuel credit  
40 accrues for each one gallon of one hundred percent (100%) alternative  
41 fuel utilized by a State fleet vehicle. When alternative fuel is blended  
42 with petroleum-based fuel, the alternative fuel credit accrues for each  
43 one gallon of alternative fuel utilized by a State vehicle at a rate that is

1 based on the percentage of alternative fuel that is utilized by a State  
 2 fleet vehicle.

3 (2) One and one-half alternative fuel credits accrue for each one gallon of  
 4 alternative fuel produced in North Carolina that is utilized by a State  
 5 fleet vehicle.

6 (3) Six thousand alternative fuel credits accrue for each advanced  
 7 technology vehicle that is purchased for a State fleet.

8 (d) Planning. – The State Energy Office, the Division of Motor Fleet  
 9 Management of the Department of Administration, the Department of Transportation,  
 10 and representatives of each State department, institution, and agency that has a State  
 11 fleet shall meet annually to develop a plan for achieving the alternative fuel use credit  
 12 requirements under subsection (b) of this section. These plans consider and incorporate  
 13 the petroleum displacement plans required in G.S. 143-64.18. The State Energy Office  
 14 shall set the dates of these annual meetings.

15 (e) Report. – No later than November 1 of each year, the State Energy Office  
 16 shall submit a status report to the Joint Legislative Commission on Governmental  
 17 Operations summarizing participation in and compliance with the goals and plans  
 18 established by this section by each State department, institution, and agency.

19 (f) Monitoring. – If the Secretary of Administration determines that the prices of  
 20 alternative fuels exceed the cost of gasoline and diesel fuel to a degree that renders the  
 21 program established by this section impracticable and unreasonable, the requirements of  
 22 this section shall be suspended until such time that the Secretary of Administration  
 23 determines that the prices of alternative fuels no longer render the program  
 24 impracticable and unreasonable.

25 (g) Rules. – The Department of Administration may adopt rules necessary to  
 26 implement this section."

27 **SECTION 2.2.** Article 2 of Chapter 136 of the General Statutes is amended  
 28 by adding a new section to read:

29 **"§ 136-28.143. Participation in alternative fuel use credits program.**

30 The Department of Transportation shall participate in the alternative fuel use credits  
 31 program under G.S. 143-58.6. The Department of Transportation may adopt rules to  
 32 implement this section."

33 **SECTION 2.3.** G.S. 143-341(8)i. reads as rewritten:

34 "i. To establish and operate a central motor pool and such  
 35 subsidiary related facilities as the Secretary may deem  
 36 necessary, and to that end:

37 ...

38 2b. To participate in the alternative fuel use credits program  
 39 under G.S. 143-58.6.

40 ..."

41  
 42 **REDUCE AND DISPLACE PETROLEUM PRODUCTS IN STATE-OWNED**  
 43 **VEHICLE FLEETS**

1           **SECTION 2.4.** Article 3B of Chapter 143 of the General Statutes is  
2 amended by adding a new Part to read:

3           "Part 3. Reduction and Displacement of Petroleum Product Dependence.

4           "§ 143-64.18. State Motor Fleet to reduce dependence on petroleum products.

5           (a) All State agencies, universities, and community colleges that have  
6 State-owned vehicle fleets shall develop and implement plans to improve the State's use  
7 of alternative fuels, synthetic lubricants, and efficient vehicles. The plans shall achieve a  
8 twenty percent (20%) reduction or displacement of the current petroleum products  
9 consumed by January 1, 2010. Before implementation of any plan, all affected agencies  
10 shall report their plan to the Department of Administration. The Department of  
11 Administration shall compile a report on the plans submitted and report to the Joint  
12 Legislative Commission on Governmental Operations. Agencies shall implement their  
13 plans by January 1, 2007. Reductions may be met by petroleum or oils displaced  
14 through the use of biodiesel, ethanol, synthetic oils or lubricants, other alternative fuels,  
15 the use of hybrid electric vehicles, other fuel-efficient or low-emission vehicles, or  
16 additional methods as may be approved by the State Energy Office. The plan shall not  
17 impede mission fulfillment of the agency and shall specifically address a long-term  
18 cost-benefit analysis, allowances for changes in vehicle usage, total miles driven, and  
19 exceptions due to technology, budgetary limitations, and emergencies.

20           (b) For the purposes of this section, a State-owned vehicle fleet consists of more  
21 than 10 motor vehicles, as defined by G.S. 20-4.01, that are designed for highway use  
22 and titled to a State department, institution, or agency that purchases fuel for these  
23 vehicles under a State purchasing contract. Specialty vehicles, as defined by  
24 G.S. 20-4.01, that are used for educational purposes and vehicles exempted under U.S.  
25 Executive Order 13149 are subject to ten percent (10%) reductions.

26           (c) Each agency shall submit an annual report no later than September 1 of each  
27 year to the Department of Administration on the efforts undertaken to achieve the  
28 reductions. The Department of Administration shall compile and forward a report to the  
29 Joint Legislative Commission on Governmental Operations no later than November 1 of  
30 each year on the agencies' progress in meeting their plans."

### 31 32 **PART III. PROVIDE ENERGY ASSISTANCE FOR LOW-INCOME PERSONS**

33  
34           **SECTION 3.** Article 3 of Chapter 143B of the General Statutes is amended  
35 by adding a new Part to read:

36           "Part 34A. North Carolina Energy Assistance Act for Low-Income Persons.

37           "§ 143B-216.72A. Legislative findings and purpose.

38           (a) The General Assembly finds that:

- 39           (1) Maintaining the general health, welfare, and prosperity of the people  
40 of this State requires that all citizens receive essential levels of heat  
41 and electric service regardless of their economic circumstances.  
42           (2) Serving the State's most vulnerable citizens, its low-income elderly,  
43 persons with disabilities, families with children, high residential  
44 energy users, and households with a high-energy burden, is a priority.

- 1           (3)    Conserving energy benefits all citizens and the environment.
- 2           (4)    Ensuring proper payment to public utilities and other entities providing  
3           energy services actually rendered is a responsibility of this State.
- 4           (5)    Declining federal low-income energy assistance funding necessitates a  
5           State response to ensure the continuity and further development of  
6           energy assistance and related policies and programs in this State.
- 7           (6)    Current energy assistance policies and programs have benefited North  
8           Carolina citizens and should be continued with the modifications  
9           provided in this Part.

10       (b)    The General Assembly declares that it is the policy of the State that  
11       weatherization, replacement of heating and cooling systems, and other energy-related  
12       assistance programs be utilized to increase the energy efficiency of dwellings owned or  
13       occupied by low-income persons, reduce their total residential expenditures, and  
14       improve their health and safety. The State shall utilize all appropriate and available  
15       means to fund the Weatherization Assistance Program for Low-Income Families and the  
16       Heating/Air Repair and Replacement Program under G.S. 108A-70.30, and any other  
17       energy-related assistance program for low-income persons while, to the extent possible,  
18       identifying and utilizing sources of funding to achieve the objectives of this Part.

19       **"§ 143B-216.72B. Definitions.**

20       The following definitions apply to this Part:

- 21           (1)    Applicant. – A member of the family residing in the dwelling unit, the  
22           owner, or designated agent of the owner of a dwelling unit applying  
23           for program services.
- 24           (2)    Department. – The Department of Health and Human Services.
- 25           (3)    Secretary. – The Secretary of Health and Human Services.
- 26           (4)    Subgrantee. – An entity managing a weatherization project that  
27           receives a federal grant of funds awarded pursuant to 10 C.F.R. § 440  
28           from the State or other entity named in the Notification of Grant  
29           Award and otherwise referred to as the grantee.
- 30           (5)    Weatherization. – The modification of homes and home heating and  
31           cooling systems to improve heating and cooling efficiency by caulking  
32           and weather stripping, as well as insulating ceilings, attics, walls, and  
33           floors.

34       **"§ 143B-216.72C. The Office of Economic Opportunity designated agency; powers**  
35       **and duties.**

36       (a)    The Office of Economic Opportunity of the Department shall administer the  
37       Weatherization Assistance Program for Low-Income Families established by 42 U.S.C.  
38       § 6861, et seq., and 42 U.S.C. § 7101, et seq.; the Heating/Air Repair and Replacement  
39       Program established by the Secretary under G.S. 108A-70.30; and any other  
40       energy-related assistance program for the benefit of low-income persons in existing  
41       housing. The Office of Economic Opportunity shall exercise the following powers and  
42       duties:

- 43           (1)    Establish standards and criteria to carry out the provisions and  
44           purposes of this Part.

- 1           (2)   Develop policy, criteria, and standards for receiving and processing  
2           applications for weatherization assistance.
- 3           (3)   Make decisions and pursue appeals from decisions to accept or deny  
4           applications for weatherization, replacement of heating and cooling  
5           systems, and other energy-related assistance programs or otherwise  
6           participate in the State plan as a subgrantee or contractor.
- 7           (4)   Adopt rules, consistent with the laws of this State, that may be  
8           required by the federal government for grants-in-aid for the  
9           Weatherization Assistance Program for Low-Income Families, the  
10          Heating/Air Repair and Replacement Program, or other energy-related  
11          assistance programs for the benefit of low-income residents in existing  
12          housing. This section shall be liberally construed in order that the State  
13          and its citizens may benefit from such grants-in-aid.
- 14          (5)   Establish procedures for the submission of periodic reports by any  
15          community action agency or other agency or entity authorized to  
16          manage a weatherization project, replacement of heating and cooling  
17          system, or other energy-related assistance project.
- 18          (6)   Implement criteria for periodic review of weatherization, replacement  
19          of heating and cooling systems, or other energy-related programs in  
20          existing housing for low-income households.
- 21          (7)   Solicit, accept, hold, and administer on behalf of the State any grants  
22          or bequests of money, securities, or property for the benefit of  
23          low-income residents in existing housing for use by the Department or  
24          other agencies in the administration of this Part.
- 25          (8)   Create a Policy Advisory Council within the Office of Economic  
26          Opportunity that shall advise the Office of Economic Opportunity with  
27          respect to the development and implementation of a Weatherization  
28          Program for Low-Income Families, the Heating/Air Repair and  
29          Replacement Program, and any other energy-related assistance  
30          program for the benefit of low-income persons in existing housing.
- 31          (b)   The Secretary shall have final decision-making authority with regard to all  
32          functions described in this Part."

#### 33

#### 34 **PART IV. ENERGY TAX INCENTIVES**

#### 35

#### 36 **INCOME TAX CREDIT FOR ENERGY-EFFICIENT HOMES**

#### 37

38           **SECTION 4.1.** Part 1 of Article 4 of Chapter 105 of the General Statutes is  
39 amended by adding a new section to read:

#### 40 **"§ 105-130.48. Construction or improvement of energy-efficient home.**

41           (a)   Definitions. – The following definitions apply in this section:

- 42           (1)   Energy-efficient home. – A one- or two-family home that is a federally  
43           qualified energy-efficient home or a State-certified energy-efficient  
44           home.

1           (2) Federally qualified energy-efficient home. – A residence qualified  
2 under the ENERGY STAR Program administered by the United States  
3 Environmental Protection Agency.

4           (3) State-certified energy-efficient home. – A residence certified under the  
5 NC HealthyBuilt Homes Program administered by the North Carolina  
6 Solar Center, the State Energy Office, and the North Carolina  
7 Department of Administration.

8           (b) Credit. – A taxpayer that builds or manufactures an energy-efficient home or  
9 that improves an existing structure so that it becomes an energy-efficient home is  
10 allowed a credit against the taxes imposed by this Part. In order to claim a credit under  
11 this section, the taxpayer must include with the tax return documentation that the  
12 property with respect to which a credit is claimed is an energy-efficient home. The  
13 amount of the credit is as follows:

14           (1) For a taxpayer that builds or manufactures a new federally qualified  
15 energy-efficient home, the credit is one thousand dollars (\$1,000).

16           (2) For a taxpayer that improves an existing structure so that it becomes a  
17 federally qualified energy-efficient home, the credit is equal to the cost  
18 of improvements not to exceed one thousand dollars (\$1,000).

19           (3) For a taxpayer that builds or manufactures a new State-certified  
20 energy-efficient home, the credit is one thousand five hundred dollars  
21 (\$1,500).

22           (4) For a taxpayer that improves an existing structure so that it becomes a  
23 State-certified energy-efficient home, the credit is equal to the cost of  
24 improvements not to exceed two thousand dollars (\$2,000).

25           (c) Cap. – The credit allowed under this section may not exceed the amount of  
26 tax imposed by this Part for the taxable year reduced by the sum of all credits allowable,  
27 except tax payments made by or on behalf of the taxpayer. Any unused portion of a  
28 credit under this section may be carried forward for the succeeding five years.

29           (d) Sunset. – This section is repealed effective for taxable years beginning on or  
30 after January 1, 2011."

31           **SECTION 4.2.** Part 2 of Article 4 of Chapter 105 of the General Statutes is  
32 amended by adding a new section to read:

33 **"§ 105-151.30. Construction or improvement of energy-efficient home.**

34           (a) Definitions. – The following definitions apply in this section:

35           (1) Energy-efficient home. – A one- or two-family home that is a federally  
36 qualified energy-efficient home or a State-certified energy-efficient  
37 home.

38           (2) Federally qualified energy-efficient home. – A residence qualified  
39 under the ENERGY STAR Program administered by the United States  
40 Environmental Protection Agency.

41           (3) State-certified energy-efficient home. – A residence certified under the  
42 NC HealthyBuilt Homes Program administered by the North Carolina  
43 Solar Center, the State Energy Office, and the North Carolina  
44 Department of Administration.

1       **(b) Credit.** – A taxpayer that builds or manufactures an energy-efficient home or  
2 that improves an existing structure so that it becomes an energy-efficient home is  
3 allowed a credit against the taxes imposed by this Part. In order to claim a credit under  
4 this section, the taxpayer must include with the tax return documentation that the  
5 property with respect to which a credit is claimed is an energy-efficient home. The  
6 amount of the credit is as follows:

7           **(1)** For a taxpayer that builds or manufactures a new federally qualified  
8 energy-efficient home, the credit is one thousand dollars (\$1,000).

9           **(2)** For a taxpayer that improves an existing structure so that it becomes a  
10 federally qualified energy-efficient home, the credit is equal to the cost  
11 of improvements not to exceed one thousand dollars (\$1,000).

12           **(3)** For a taxpayer that builds or manufactures a new State-certified  
13 energy-efficient home, the credit is one thousand five hundred dollars  
14 (\$1,500).

15           **(4)** For a taxpayer that improves an existing structure so that it becomes a  
16 State-certified energy-efficient home, the credit is equal to the cost of  
17 improvements not to exceed two thousand dollars (\$2,000).

18       **(c) Cap.** – The credit allowed under this section may not exceed the amount of  
19 tax imposed by this Part for the taxable year reduced by the sum of all credits allowable,  
20 except tax payments made by or on behalf of the taxpayer. Any unused portion of a  
21 credit under this section may be carried forward for the succeeding five years.

22       **(d) Sunset.** – This section is repealed effective for taxable years beginning on or  
23 after January 1, 2011."

24       **SECTION 4.3.** Part 2 of Article 4 of Chapter 105 of the General Statutes is  
25 amended by adding a new section to read:

26 **"§ 105-151.31. Purchase of energy-efficient home.**

27       **(a) Definitions.** – The following definitions apply in this section:

28           **(1)** Energy-efficient home. – A one- or two-family home that is a federally  
29 qualified energy-efficient home or a State-certified energy-efficient  
30 home.

31           **(2)** Federally qualified energy-efficient home. – A residence qualified  
32 under the ENERGY STAR Program administered by the United States  
33 Environmental Protection Agency.

34           **(3)** State-certified energy-efficient home. – A residence certified under the  
35 NC HealthyBuilt Homes Program administered by the North Carolina  
36 Solar Center, the State Energy Office, and the North Carolina  
37 Department of Administration.

38       **(b) Credit.** – A taxpayer that purchases an energy-efficient home is allowed a  
39 credit against the taxes imposed by this Part in the amount of five hundred dollars  
40 (\$500.00).

41       **(c) Cap.** – The credit allowed under this section may not exceed the amount of  
42 tax imposed by this Part for the taxable year reduced by the sum of all credits allowable,  
43 except tax payments made by or on behalf of the taxpayer. Any unused portion of a  
44 credit under this section may be carried forward for the succeeding five years.



1 (d) No Double Benefit. – A taxpayer that claims a credit under this section may  
2 not also claim a credit under G.S. 105-151.30 with respect to the same property.

3 (e) Sunset. – This section is repealed effective for taxable years beginning on or  
4 after January 1, 2011."

5 **SECTION 4.4.** Section 4.1 through Section 4.3 of this act become effective  
6 for taxable years beginning on or after January 1, 2007, and apply to homes that receive  
7 the qualification or certification on or after that date. This section is effective when it  
8 becomes law.

## 9 10 **BIODIESEL PROVIDERS TAX CREDIT**

11  
12 **SECTION 4.5.(a)** Part 4 of Article 36C of Chapter 105 of the General  
13 Statutes is amended by adding a new section to read:

### 14 **"§ 105-449.103. Credit for biodiesel providers.**

15 (a) Credit. – A biodiesel provider or refiner who imports or produces biodiesel is  
16 allowed a credit against the tax imposed by this Article on that portion of the biodiesel  
17 that is derived in whole from agricultural products or animal fats or wastes from these  
18 products or fats. The credit is equal to the amount of taxes paid under this Article on the  
19 applicable portion. In order to be eligible for the credit allowed by this section, the  
20 taxpayer shall be licensed as required by G.S. 105-446.65 and shall file a return  
21 reporting fuel movement information as required by G.S. 105-449.96.

22 (b) Transfer from General Fund. – The Secretary shall withhold from the net  
23 collections under Article 5 of this Chapter on a monthly basis an amount equal to the  
24 total amount of credits claimed under this section. The Secretary shall allocate the funds  
25 withheld under this subsection in the same manner as under G.S. 105-449.125.

26 (c) Sunset. – The section is repealed January 1, 2011."

27 **SECTION 4.5.(b)** This section becomes effective January 1, 2007.

## 28 29 **ALTERNATIVE FUEL VEHICLE TAX CREDIT**

30  
31 **SECTION 4.6.(a)** Chapter 105 of the General Statutes is amended by adding  
32 a new Article to read:

### 33 "Article 3H.

### 34 "Alternative Fuel Vehicle Tax Credit.

### 35 **"§ 105-129.70. Definitions.**

36 The following definitions apply in this Article:

37 (1) Alternative fuel vehicle. – An original equipment manufactured motor  
38 vehicle that operates on compressed natural gas, propane, or electricity  
39 or a hybrid electric vehicle.

40 (2) Hybrid electric vehicle. – A motor vehicle with a hybrid propulsion  
41 system that operates on both electricity and a petroleum-based motor  
42 fuel.

43 (3) Long-term lease. – Defined in G.S. 105-187.1.

44 (4) Motor vehicle. – Defined in G.S. 105-164.3.

1 **"§ 105-129.71. Credit for purchasing or leasing an alternative fuel vehicle.**

2 A taxpayer that purchases or leases, pursuant to a long-term lease, a new alternative  
3 fuel vehicle is allowed a credit in the amount of two thousand dollars (\$2,000). In order  
4 to be eligible for the credit allowed by this section, the vehicle shall have a gross vehicle  
5 weight of less than 10,000 pounds and shall be registered in this State. A taxpayer may  
6 claim a credit under this section for each qualified purchase or lease. The credit allowed  
7 under this section is allowed only to the first taxpayer to take title to the motor vehicle  
8 other than for resale. A taxpayer may not take the credit allowed in this section for an  
9 alternative fuel vehicle the taxpayer leases from another unless the taxpayer obtains the  
10 lessor's written certification that the lessor will not claim a credit under this Article with  
11 respect to the alternative fuel vehicle.

12 **"§ 105-129.72. Tax credited; limitations.**

13 (a) Tax Credited. – The credit allowed in this Article is allowed against the  
14 franchise tax levied in Article 3 of this Chapter or the income taxes levied in Article 4  
15 of this Chapter. The taxpayer shall elect the tax against which a credit will be claimed  
16 when filing the return on which the credit is first claimed. This election is binding. Any  
17 carryforwards of a credit shall be claimed against the same tax.

18 (b) Limitations. – A credit shall be taken for the taxable year in which the  
19 property is purchased or leased. A credit allowed under this Article may not exceed the  
20 amount of the tax against which it is claimed for the taxable year reduced by the sum of  
21 all credits allowed. Any unused portion of the credit may be carried forward for the  
22 succeeding five years.

23 **"§ 105-129.73. Substantiation.**

24 To claim a credit allowed by this Article, the taxpayer shall provide any information  
25 required by the Secretary of Revenue. The burden of proving eligibility for a credit and  
26 the amount of the credit rests upon the taxpayer, and no credit may be allowed to a  
27 taxpayer that fails to maintain adequate records or to make them available for  
28 inspection.

29 **"§ 105-129.74. Reports.**

30 The Department of Revenue shall report to the Revenue Laws Study Committee and  
31 to the Fiscal Research Division of the General Assembly by May 1 of each year the  
32 following information for the 12-month period ending the preceding December 31:

33 (1) The number of vehicles for which taxpayers claimed the credit allowed  
34 in this Article, by taxpayer type.

35 (2) The total cost to the General Fund of the credits claimed.

36 **"§ 105-129.75. Sunset.**

37 This Article is repealed effective for alternative fuel vehicles purchased or leased on  
38 or after January 1, 2011."

39 **SECTION 4.6.(b)** This section is effective for taxable years beginning on or  
40 after January 1, 2006.

41  
42 **PART V. BIOFUELS INDUSTRY STRATEGIC PLAN**

43

1           **SECTION 5.1.** The College of Agriculture and Life Sciences at North  
2 Carolina State University, the North Carolina Biotechnology Center, and the Rural  
3 Economic Development Center, Inc., shall jointly develop a strategic plan for  
4 developing biofuels as an industry in North Carolina, thereby creating new economic  
5 opportunities for North Carolina farmers and moving our State in the direction of  
6 energy independence. In developing this strategic plan, the College of Agriculture and  
7 Life Sciences at North Carolina State University, the North Carolina Biotechnology  
8 Center, and the Rural Economic Development Center, Inc., shall delineate the  
9 increasing role of biotechnology in the development of biofuels and shall consult with  
10 all of the following:

- 11           (1) The Department of Administration.
- 12           (2) The Department of Agriculture and Consumer Services.
- 13           (3) The Department of Commerce.
- 14           (4) The Department of Environment and Natural Resources.
- 15           (5) The University of North Carolina System.
- 16           (6) The Community College System.
- 17           (7) The North Carolina Solar Center at North Carolina State University.
- 18           (8) North Carolina Farm Bureau Federation.
- 19           (9) North Carolina State Grange.
- 20           (10) North Carolina Agribusiness Council.
- 21           (11) A representative of private industry jointly selected by the College of  
22 Agriculture and Life Sciences at North Carolina State University, the  
23 North Carolina Biotechnology Center, and the Rural Economic  
24 Development Center, Inc.
- 25           (12) Any other entity that the College of Agriculture and Life Sciences at  
26 North Carolina State University, the North Carolina Biotechnology  
27 Center, and the Rural Economic Development Center, Inc., deem  
28 appropriate, particularly entities that are engaged in biotechnology.

29           **SECTION 5.2.** No later than February 1, 2007, the College of Agriculture  
30 and Life Sciences at North Carolina State University, the North Carolina Biotechnology  
31 Center, and the Rural Economic Development Center, Inc., shall submit the strategic  
32 plan, including any legislative proposals, to the 2007 General Assembly.

33           **SECTION 5.3.** The College of Agriculture and Life Sciences at North  
34 Carolina State University, the North Carolina Biotechnology Center, and the Rural  
35 Economic Development Center, Inc., shall use available funds to implement this  
36 section.

## 37 38 **PART VI. APPROPRIATION**

39  
40           **SECTION 6.1.** There is appropriated from the General Fund to the  
41 Department of Administration the sum of five hundred thousand dollars (\$500,000) for  
42 the 2006-2007 fiscal year for the State Energy Office to implement and administer  
43 sections of this act as indicated.

1           **SECTION 6.2.** Section 6.1 of this act becomes effective July 1, 2006. This  
2 section becomes effective when it becomes law.

3

4 **PART VII. EFFECTIVE DATE**

5

6           **SECTION 7.** Except as otherwise provided, this act becomes effective when  
7 it becomes law.