

GENERAL ASSEMBLY OF NORTH CAROLINA  
SESSION 2007

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SENATE BILL 927

Short Title: Green School Construction Loan Fund/Program.

(Public)

Sponsors: Senator Garrou.

Referred to: Finance.

March 20, 2007

A BILL TO BE ENTITLED

AN ACT TO CREATE THE GREEN SCHOOL CONSTRUCTION REVOLVING  
LOAN FUND TO BE USED FOR NO-INTEREST LOANS TO LOCAL BOARDS  
OF EDUCATION FOR CERTAIN ENERGY-RELATED CONSTRUCTION,  
COMMISSIONING, AND INSTALLATION PROJECTS AND TO ESTABLISH  
THE GREEN SCHOOL CONSTRUCTION PROGRAM, A VOLUNTARY  
PROGRAM FOR THE CONSTRUCTION OR MAJOR RENOVATION OF  
HIGH-PERFORMANCE SCHOOL BUILDINGS.

The General Assembly of North Carolina enacts:

**SECTION 1.** Article 37 of Chapter 115C is amended by adding two new sections to read:

**"§ 115C-521.1. Green School Construction Loan Fund.**

(a) The Green School Construction Loan Fund is created under the control and direction of the Department of Public Instruction. This Loan Fund shall be a nonreverting revolving loan fund consisting of any moneys appropriated to it by the General Assembly, other moneys paid to it as gifts or grants, or any moneys repaid or recovered on behalf of the Loan Fund. The Loan Fund shall be credited with interest on the Loan Fund by the State Treasurer pursuant to G.S. 147-69.2 and G.S. 147-69.3.

(b) The Loan Fund shall be used to provide no-interest loans to local boards of education for any of the following purposes, with priority given to projects that will have the greatest impact on reducing the use of energy and water:

(1) For all or part of the incremental cost of designing, constructing, and certifying a new school facility or a major renovation of an existing school to at least the LEED silver standard under G.S. 115C-521.2, to be calculated by comparing the total cost of the project to the cost of substantially the same project using conventional design and construction.

(2) For all or part of the incremental cost of designing and constructing a new school facility or a major renovation of an existing school in

1 accordance with the North Carolina sustainable school design protocol  
2 standards under G.S. 115C-521.2, to be calculated by comparing the  
3 total cost of the project to the cost of substantially the same project  
4 using conventional design and construction.

5 (3) For all or part of the cost of commissioning a school building for the  
6 purpose of reducing the building's use of energy or water, including  
7 installing an alternative energy system, when the commissioning under  
8 this subdivision is not suitable for a guaranteed energy savings  
9 contract under Part 2 of Article 3B of Chapter 143 of the General  
10 Statutes.

11 (4) For all or part of the cost of installing in a school building one or more  
12 energy conservation measures, as defined in G.S. 143-64.17, when  
13 these energy conservation measures are not suitable for a guaranteed  
14 energy savings contract under Part 2 of Article 3B of Chapter 143 of  
15 the General Statutes.

16 (5) For all or part of the cost of installing in a school building an  
17 alternative energy system to replace a conventional energy system  
18 when the installation of the alternative energy system is not suitable  
19 for a guaranteed energy savings contract under Part 2 of Article 3B of  
20 Chapter 143 of the General Statutes.

21 (b) After consulting with the State Energy Office of the Department of  
22 Administration, the Department of Public Instruction shall adopt rules to administer the  
23 Loan Fund and to establish prioritization for loans, maximum loans, application, and  
24 award criteria and schedules, and to otherwise implement this section.

25 **§ 115C-521.2. Green School Construction Program to construct**  
26 **high-performance school buildings.**

27 (a) The General Assembly finds that high-performance school buildings are  
28 proven to increase student test scores, reduce absenteeism, and cut energy and other  
29 utility costs. It is the intent of the General Assembly to encourage local boards of  
30 education to use recognized standards for the construction of high-performance public  
31 school buildings that provide flexible methods and choices in how to achieve those  
32 standards. It is the intent and an established goal of the Leadership in Energy and  
33 Environmental Design (LEED) program as authored by the United States Green  
34 Building Council to increase demand for building materials and products that are  
35 extracted and manufactured locally, thereby reducing the environmental impacts and to  
36 support the local economy. Accordingly, it is the intent of the General Assembly to  
37 encourage local boards of education to participate in achieving this goal and voluntarily  
38 establish a priority to use North Carolina-based resources, building materials, products,  
39 industries, manufacturers, and other businesses to provide economic development to  
40 North Carolina and to meet the objectives of this section.

41 (b) The Green School Construction Program under this section shall be  
42 administered by the Department of Administration. Any major school facility project  
43 may, as determined by the local board of education, be designed and constructed to at  
44 least the LEED silver standard or in accordance with the North Carolina sustainable

1 school design protocol standards to the extent appropriate LEED silver or North  
2 Carolina sustainable school design protocol standards exist for the type of building or  
3 facility.

4 (c) Any local board of education that uses the high-performance standard under  
5 this section is encouraged to:

6 (1) Monitor and document appropriate operating benefits and savings  
7 resulting from major facility projects designed and constructed under  
8 this section for a minimum of five years following local board  
9 acceptance of the project; and

10 (2) Report annually to the Department of Administration and to the  
11 Superintendent of Public Instruction on a form developed by the  
12 Department of Administration.

13 (d) Any major school facility project designed to meet standards identified for  
14 high-performance school buildings in this section shall include building commissioning  
15 as a critical cost-saving part of the construction process. This process shall include input  
16 from the project design and construction teams, representatives of the local board of  
17 education, and the State Energy Office of the Department of Administration.

18 (e) In order to be able to monitor and document ongoing operating benefits and  
19 savings under subsection (c) of this section, a local board of education is encouraged to  
20 require all utilities going into any school building that is the subject of a major facility  
21 project under this section to be metered.

22 (f) A member of the design or construction teams shall not be held liable for the  
23 failure of a major facility project to meet the high-performance building standard under  
24 this section that is established for the project as long as a good faith attempt was made  
25 to achieve this standard.

26 (g) No later than September 1 of each year, the Department of Administration  
27 shall consolidate the reports required in subsection (c) of this section into one report and  
28 submit this report, along with input from the Department of Public Instruction, to the  
29 Chairs of the Senate and House Appropriations Committees and the Joint Legislative  
30 Commission on Governmental Operations. The Department of Public Instruction and  
31 the Department of Administration may make recommendations regarding the ongoing  
32 implementation of the Green School Construction Program, may include a discussion of  
33 current incentives and disincentives related to implementing this section, and may  
34 comment on the performance of the Program, including any changes that may be needed  
35 to adapt the Program to any new or modified standards for high-performance buildings  
36 that are consistent with the intent of this section.

37 (h) The Department of Administration, in consultation with the Superintendent of  
38 Public Instruction, shall develop and issue guidelines to implement this section. The  
39 guidelines shall define a procedure and method for employing and verifying activities  
40 necessary for certification to at least the LEED silver standard for major school facility  
41 projects. The Department of Administration and the Department of Public Instruction  
42 shall amend their fee schedules for architectural and engineering services to  
43 accommodate the requirements in the design of major school facility projects that are  
44 subject to this section.

1 (i) The Department of Administration and the State Board of Education may  
2 adopt rules needed to implement this section.

3 (j) As used in this Article, the following definitions apply:

4 (1) "High-performance school building" means a school building  
5 designed, constructed, and certified to a standard as identified in this  
6 section.

7 (2) "LEED silver standard" means the U.S. Green Building Council  
8 Leadership in Energy and Environmental Design (LEED) green  
9 building rating standard referred to as the LEED Silver Standard, as  
10 amended.

11 (3) "Major facility project" means a construction project larger than 5,000  
12 gross square feet of occupied or conditioned space as defined in the  
13 North Carolina State Building Code or a building renovation project  
14 when the cost is greater than fifty percent (50%) of the assessed value  
15 and the project is larger than 5,000 gross square feet of occupied or  
16 conditioned space as defined in the North Carolina State Building  
17 Code. "Major facility project" does not include any of the following:  
18 research facilities primarily used for sponsored laboratory  
19 experimentation, laboratory research, or laboratory training in research  
20 methods, or other similar building types as determined by the  
21 Department of Administration.

22 (4) "North Carolina sustainable school design protocol standards" means  
23 the school design protocol and related information developed by the  
24 Department of Public Instruction under G.S. 115C-521."

25 **SECTION 2.** Article 31 of Chapter 115C of the General Statutes is amended  
26 by adding a new section to read:

27 **"§ 115C-426.3. Monitor and report utility consumption by local administrative**  
28 **units.**

29 (a) Each local school administrative unit that participates in the Green School  
30 Construction Program under G.S. 115C-521.2 shall monitor and report utility  
31 consumption for purposes of reporting to the Superintendent of Public Instruction as  
32 provided in G.S. 143-135.38."

33 **SECTION 3.** In recognition that the North Carolina Energy Guidelines for  
34 School Design and Construction that were developed and maintained by the Department  
35 of Public Construction under G.S. 115C-521 are no longer sufficient in regard to a  
36 comprehensive approach to energy efficiency in school design, school construction, and  
37 school operation and maintenance, the State Energy Office within the Department of  
38 Administration shall develop and maintain the North Carolina sustainable school design  
39 protocol standards to be used for the construction of all new school buildings and the  
40 repairing of all old school buildings under the control and direction of, and by contract  
41 with, the board of education. The North Carolina sustainable school design protocol  
42 standards shall be used in lieu of the North Carolina Energy Guidelines for School  
43 Design and Construction. The North Carolina sustainable school design protocol  
44 standards shall be at least as stringent as the sustainable school design protocol

1 standards developed in the State of Washington, as mandated by their legislature. The  
2 North Carolina sustainable school design protocol standards shall include a voluntary  
3 pass/fail rating system to evaluate a school's progress toward sustainability. This rating  
4 system shall be comprised of a number of prerequisites and optional sustainability  
5 measures developed by the State Energy Office. Each board of education participating  
6 in this protocol may choose from among the list of optional measures to chart a path  
7 toward sustainability specific to the site of the school and the goals of the board of  
8 education.

9 **SECTION 4.** G.S. 115C-521 reads as rewritten:

10 **"§ 115C-521. Erection of school buildings.**

11 (a) It shall be the duty of local boards of education to provide classroom facilities  
12 adequate to meet the requirements of G.S. 115C-47(10) and 115C-301. Local boards of  
13 education shall submit their long-range plans for meeting school facility needs to the  
14 State Board of Education by January 1, 1988, and every five years thereafter. In  
15 developing these plans, local boards of education shall consider the costs and feasibility  
16 of renovating old school buildings instead of replacing ~~them~~them and, employing  
17 life-cycle cost analysis as defined in G.S. 143-64.11, shall consider the feasibility and  
18 costs of commissioning the old school buildings that are renovated for the purpose of  
19 reducing energy and water use.

20 (b) It shall be the duty of the boards of education of the several local school  
21 administrative school units of the State to make provisions for the public school term by  
22 providing adequate school buildings equipped with suitable school furniture and  
23 apparatus. The needs and the cost of those buildings, equipment, and apparatus, shall be  
24 presented each year when the school budget is submitted to the respective tax-levying  
25 authorities. The boards of commissioners shall be given a reasonable time to provide the  
26 funds which they, upon investigation, shall find to be necessary for providing their  
27 respective units with buildings suitably equipped, and it shall be the duty of the several  
28 boards of county commissioners to provide funds for the same.

29 Upon determination by a local board of education that the existing permanent school  
30 building does not have sufficient classrooms to house the pupil enrollment anticipated  
31 for the school, the local board of education may acquire and use as temporary  
32 classrooms for the operation of the school, relocatable or mobile classroom units,  
33 whether built on the lot or not, which units and method of use shall meet the approval of  
34 the School Planning Division of the State Board of Education, and which units shall  
35 comply with all applicable requirements of the North Carolina State Building Code and  
36 of the local building and electrical codes applicable to the area in which the school is  
37 located. These units shall also be anchored in a manner required to assure their  
38 structural safety in severe weather. The acquisition and installation of these units shall  
39 be subject in all respects to the provisions of Chapter 143 of the General  
40 ~~Statutes-Statutes, including the provisions of Part 1 of Article 3B of that Chapter,~~  
41 Energy Policy and Life-Cycle Cost Analysis. The provisions of Chapter 87, Article 1, of  
42 the General Statutes, shall not apply to persons, firms or corporations engaged in the  
43 sale or furnishing to local boards of education and the delivery and installation upon

1 school sites of classroom trailers as a single building unit or of relocatable or mobile  
2 classrooms delivered in less than four units or sections.

3 (c) The building of all new school buildings and the repairing of all old school  
4 buildings shall be under the control and direction of, and by contract with, the board of  
5 education for which the building and repairing is done. If a board of education is  
6 considering building a new school building to replace an existing school building, the  
7 board shall not invest any construction money in the new building unless it submits to  
8 the State Superintendent and the State Superintendent submits to the North Carolina  
9 Historical Commission an analysis that compares the costs and feasibility of building  
10 the new building and of renovating the existing building and that clearly indicates the  
11 desirability of building the new building. No board of education shall invest any money  
12 in any new building until it has (i) developed plans based upon a consideration of the  
13 State Board's facilities ~~guidelines, guidelines~~ and consideration of ways to minimize the  
14 new building's use of energy and water, (ii) submitted these plans to the State Board for  
15 its review and comments, and (iii) reviewed the plans based upon a consideration of the  
16 comments it receives from the State Board. No local board of education shall contract  
17 for more money than is made available for the erection of a new ~~building-building;~~  
18 however, any money obtained as no-interest loans under G.S. 115C-521.1 shall be  
19 included as available money. However, this subsection shall not be construed so as to  
20 prevent boards of education from investing any money in buildings that are being  
21 constructed pursuant to a continuing contract of construction as provided for in  
22 G.S. 115C-441(c). All contracts for buildings shall be in writing and all buildings shall  
23 be inspected, received, and approved by the local superintendent and the architect  
24 before full payment is made therefor. Nothing in this subsection shall prohibit boards of  
25 education from repairing and altering buildings with the help of janitors and other  
26 regular employees of the board.

27 In the design and construction of new school buildings and in the renovation of  
28 existing school buildings that are required to be designed by an architect or engineer  
29 under G.S. 133-1.1, the local board of education shall participate in the planning and  
30 review process of the ~~Energy Guidelines for School Design and Construction that are~~  
31 ~~developed and maintained by the Department of Public Instruction~~ North Carolina  
32 sustainable school design protocol standards that are developed and maintained by the  
33 State Energy Office of the Department of Administration, for use by the Department of  
34 Public Instruction and shall adopt ~~local~~ energy-use goals for building design and  
35 operation that take into account local conditions in an effort to reduce the impact of  
36 operation costs on local and State budgets. In the design and construction of new school  
37 facilities and in the repair and renovation of existing school facilities, the local board of  
38 education shall consider the placement and design of windows and other building  
39 features to use the climate of North Carolina for both light and ventilation in case of  
40 ~~power~~ energy shortages. A local board shall also consider the installation of solar  
41 energy systems or other alternative energy systems in the school facilities whenever  
42 practicable. A local board is encouraged to participate in the Green School Construction  
43 Program for the construction or major renovation of high-performance school buildings  
44 under G.S. 115C-521.2.

1 In the case of any school buildings erected, repaired, or equipped with any money  
2 loaned or granted by the State to any local school administrative unit, no board of  
3 education shall invest any money until it has (i) developed plans based upon a  
4 consideration of the State Board's facilities guidelines, (ii) submitted these plans to the  
5 State Board for its review and comments, and (iii) reviewed the plans based upon a  
6 consideration of the comments it receives from the State Board.

7 (d) Local boards of education shall make no contract for the erection of any  
8 school building unless the site upon which it is located is owned in fee simple by the  
9 board: Provided, that the board of education of a local school administrative unit, with  
10 the approval of the board of county commissioners, may appropriate funds to aid in the  
11 establishment of a school facility and the operation thereof in an adjoining local school  
12 administrative unit when a written agreement between the boards of education of the  
13 administrative units involved has been reached and the same recorded in the minutes of  
14 the boards, whereby children from the administrative unit making the appropriations  
15 shall be entitled to attend the school so established.

16 In all cases where title to property has been vested in the trustees of a special charter  
17 district which has been abolished and has not been reorganized, title to the property  
18 shall be vested in the local board of education of the county embracing the former  
19 special charter district.

20 (e) The State Board of Education shall establish within the Department of Public  
21 Instruction a central clearinghouse for access by local boards of education that may  
22 want to use a prototype design in the construction of school facilities. The State Board  
23 shall compile necessary publications and a computer database to distribute information  
24 on prototype designs to local school administrative units. A prototype design of a new  
25 school facility that is designed to at least the LEED silver standard, as defined in  
26 G.S. 115C-521.1, shall be included in this computer database. All architects and  
27 engineers registered in North Carolina may submit plans for inclusion in the computer  
28 database and these plans may be accessed by any person. The original architect of  
29 record or engineer of record shall retain ownership and liability for a prototype design.  
30 The State Board may adopt rules it considers necessary to implement this subsection."

31 **SECTION 5.** There is appropriated from the General Fund to the Green  
32 School Construction Loan Fund, as created in G.S. 115C-521.1, as enacted by Section 1  
33 of this act, the sum of one million dollars (\$1,000,000) for the 2007-2008 fiscal year and  
34 the sum of one million dollars (\$1,000,000) for the 2008-2009 fiscal year to be used for  
35 loans to local boards of education in accordance with G.S. 115C-521.1, as enacted by  
36 Section 1 of this act.

37 **SECTION 6.** G.S. 115C-521.1, as enacted in Section 1 of this act, and  
38 Section 6 of this act become effective July 1, 2007. The remainder of this act becomes  
39 effective January 1, 2008, and applies to contracts for major facility projects that have  
40 not received project approval from the Superintendent of Public Instruction prior to July  
41 1, 2008.