

**GENERAL ASSEMBLY OF NORTH CAROLINA
SESSION 2001**

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SENATE BILL 1077

Short Title: Energy Conservation/Pilot Program.

(Public)

Sponsors: Senators Lee; Carter, Garwood, and Kinnaird.

Referred to: Commerce.

April 5, 2001

A BILL TO BE ENTITLED

1
2 AN ACT REQUIRING STATE AGENCIES TO USE LIFE-CYCLE COST
3 ANALYSIS FOR THE DESIGN, CONSTRUCTION, OPERATION,
4 MAINTENANCE, AND RENOVATION OF STATE FACILITIES AND FOR
5 THE PURCHASE, OPERATION, AND MAINTENANCE OF EQUIPMENT FOR
6 THESE FACILITIES AND IMPLEMENTING A PILOT PROGRAM TO REVIEW
7 THE USE OF THE TRIANGLE J COUNCIL OF GOVERNMENTS' HIGH
8 PERFORMANCE GUIDELINES IN THE RENOVATION OR CONSTRUCTION
9 OF STATE FACILITIES.

10 The General Assembly of North Carolina enacts:

11 **SECTION 1.** G.S. 143-64.10(a) reads as rewritten:

12 "(a) The General Assembly hereby finds:

- 13 (1) That the State ~~should~~shall take a leadership role in aggressively
14 undertaking energy conservation in North Carolina;
- 15 (2) That State facilities have a significant impact on the State's
16 consumption of energy;
- 17 (3) That energy conservation practices adopted for the design,
18 construction, operation, maintenance, and renovation of these facilities
19 and for the purchase, operation, and maintenance of equipment for
20 these facilities will have a beneficial effect on the State's overall
21 supply of energy;
- 22 (4) That the cost of the energy consumed by these facilities and the
23 equipment for these facilities over the life of the facilities ~~must~~shall be
24 considered, in addition to the initial cost;
- 25 (5) That the cost of energy is significant and facility designs ~~must~~shall
26 take into consideration the total life-cycle cost, including the initial
27 construction cost, and the cost, over the economic life of the facility, of

1 the energy consumed, and of operation and maintenance of the facility
2 as it affects energy consumption; and

- 3 (6) That State government ~~should~~shall undertake a program to reduce
4 energy use in State facilities and equipment in those facilities in order
5 to provide its citizens with an example of energy-use efficiency."

6 **SECTION 2.** G.S. 143-64.11(2a) reads as rewritten:

7 "For purposes of this Article:

8 ...

- 9 (2a) "~~Energy Division~~"Energy Office' means the State Energy
10 DivisionOffice of the Department of ~~Commerce~~Administration.

11"

12 **SECTION 3.** G.S. 143-64.12 reads as rewritten:

13 "**§ 143-64.12. Authority and duties of State agencies.**

14 (a) The General Assembly authorizes and directs that State agencies shall carry
15 out the construction and renovation of State facilities, under their jurisdiction in such a
16 manner as to further the policy declared herein, ~~insuring that~~ensuring the use of
17 life-cycle cost analyses and energy-conservation ~~practices are considered and are~~
18 ~~employed whenever feasible and practicable.~~practices.

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

35 The Department of Administration shall develop a comprehensive energy
36 management program for State government. Each State agency shall develop and
37 implement an energy management plan that is consistent with the State's comprehensive
38 energy management program.

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

40 **SECTION 4.** G.S. 143-64.15(c) reads as rewritten:

41 "(c) The General Assembly ~~encourages any~~requires each entity to conduct a
42 life-cycle cost analysis pursuant to this section for the construction of any State-assisted
43 facility or the renovation of any State-assisted facility of 40,000 or more gross square
44 feet."

1 **SECTION 5.** G.S. 143-64.15(f) reads as rewritten:

2 "~~(f) Selection of the optimum system or combination of systems to be~~
3 ~~incorporated into the design of the facility shall take into consideration the life-cycle~~
4 ~~cost analysis over the economic life of the facility.~~Each State agency shall use the life-
5 cycle cost analysis over the economic life of the facility in selecting the optimum
6 system or combination of systems to be incorporated into the design of the facility."

7 **SECTION 6.** Part 1 of Article 3B of Chapter 143 of the General Statutes is
8 amended by adding a new section to read:

9 "**§ 143-64.15A. Certification of life-cycle cost analysis.**

10 Any State agency performing a life-cycle cost analysis for the purpose of
11 constructing or renovating any State facility shall, before selecting a design option,
12 submit the life-cycle cost analysis to the Department of Administration for certification.
13 The Department shall review the material submitted by the State agency and perform
14 any additional analysis, as necessary, to comply with G.S. 143-341(11)."

15 **SECTION 7.(a)** Triangle J Guidelines Pilot Program. – The General
16 Assembly recognizes the State's need to understand how energy conservation measures
17 are utilized in the construction or renovation of State facilities and how these measures
18 benefit the State through cost savings and the protection of our natural resources. The
19 General Assembly promotes the use of the Triangle J Council of Governments' High
20 Performance Guidelines to achieve these goals and encourages any State entity to rate
21 itself in accordance with these guidelines for the design, construction, operation,
22 maintenance, or renovation of any State-assisted or State-owned facility.

23 **SECTION 7.(b)** To accomplish the goals described in Section 7(a) of this
24 act, the Department of Administration shall implement a pilot program to review the use
25 of the Triangle J Guidelines in projects for the renovation or construction of State
26 facilities.

27 The Board of Governors of The University of North Carolina shall select at
28 least four projects to participate in the pilot program, and the State Board of Community
29 Colleges and the State Budget Office shall select at least three projects to participate in
30 the program. One-third of the projects participating in this program shall be projects for
31 the repair or renovation of a State facility, and the remaining projects shall be projects
32 for the construction of State facilities.

33 **SECTION 7.(c)** The Department of Administration shall oversee the pilot
34 program, and each entity involved shall submit all applicable information to the
35 Department as it deems necessary, including compiling and submitting energy usage
36 and cost data. The program shall include a one-year postoccupancy evaluation that shall
37 be included as part of the evaluation of the Triangle J Guidelines for each facility. The
38 entities participating in this program shall explore the concept of a "sustainably
39 designed facility" in assessing the use of the Triangle J Guidelines for these projects.
40 For purposes of this section, "sustainably designed facility" means a building and
41 surrounding environs designed using features that are energy efficient, incorporate
42 reusable and renewable resources, provide natural lighting, are nontoxic, require low
43 maintenance, are congruent with the natural characteristics of the site, and cause

1 minimum adverse impact to the environment as enacted in Section 2(11) of S.L.
2 2000-143.

3 **SECTION 7.(d)** The Department of Administration shall submit an interim
4 report on the implementation of this program to the Senate and House of
5 Representatives Chairs of the Appropriations Committee, Chairs of General
6 Government Appropriations Subcommittee, and the Joint Legislative Commission on
7 Governmental Operations not later than December 15, 2002. The report shall discuss the
8 benefits of using the Triangle J Guidelines and make recommendations regarding the
9 use of the Triangle J Guidelines in the projects participating in the program and other
10 projects. The Department of Administration shall submit a final report to the Senate and
11 House of Representatives Chairs of the Appropriations Committee, Chairs of General
12 Government Appropriations Subcommittee, and the Joint Legislative Commission on
13 Governmental Operations not later than 18 months after completion of the last project
14 participating in this program, if practicable.

15 **SECTION 7.(e)** This act shall not be construed to obligate the General
16 Assembly to appropriate funds to implement the Triangle J Guidelines pilot program.

17 **SECTION 8.** This act becomes effective July 1, 2001.