## GENERAL ASSEMBLY OF NORTH CAROLINA SESSION 2019

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## HOUSE BILL 330 PROPOSED COMMITTEE SUBSTITUTE H330-PCS10265-TQ-2

Short Title: Efficient Government Buildings & Savings Act.

(Public)

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Sponsors:

Referred to:

## March 12, 2019

A BILL TO BE ENTITLED

- AN ACT TO SAVE NORTH CAROLINA TAXPAYER DOLLARS BY REQUIRING
  REDUCTIONS IN ENERGY AND WATER CONSUMPTION IN PUBLIC BUILDINGS
  BY 2025.
- 5 The General Assembly of North Carolina enacts:

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

"§ 143-64.12. Authority and duties of the Department; State agencies and State institutions of higher learning.

9 The Department of Environmental Quality through the State Energy Office shall (a) 10 develop a comprehensive program to manage energy, water, and other utility use for State agencies and State institutions of higher learning and shall update this program annually. Each 11 State agency and State institution of higher learning shall develop and implement a management 12 plan that is consistent with the State's comprehensive program under this subsection to manage 13 14 energy, water, and other utility use, and that addresses any findings or recommendations resulting from the energy audit required by subsection (b1) of this section. use. The energy consumption 15 per gross square foot for all State buildings in total shall be reduced by twenty percent (20%) by 16 17 2010 and 2010, thirty percent (30%) by 2015 2015, and forty percent (40%) by 2025 based on energy consumption for the 2002-2003 fiscal year. Each State agency and State institution of 18 higher learning shall update its management plan biennially and include strategies for supporting 19 20 the energy consumption reduction requirements under this subsection. Each community college 21 shall submit to the State Energy Office a biennial an annual written report of utility consumption 22 and costs. Management plans submitted biennially by State institutions of higher learning shall 23 include all of the following:

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25 The Department of Administration, as part of the Facilities Condition and Assessment (b1) Program, shall identify and recommend energy conservation maintenance and operating 26 27 procedures that are designed to reduce energy consumption within the facility of a State agency or a State institution of higher learning and that require no significant expenditure of funds. Every 28 29 State agency or State institution of higher learning shall implement these recommendations. 30 Where energy management equipment is proposed for any facility of a State agency or of a State institution of higher learning, the maximum interchangeability and compatibility of equipment 31 32 components shall be required. As part of the Facilities Condition and Assessment Program under 33 this section, the Department of Administration, in consultation with the State Energy Office, shall 34 develop an energy audit and a procedure for conducting energy audits. Every five years the 35 Department shall conduct an energy audit for each State agency or State institution of higher



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| 1  | learning, and the energ  | y audits conducted shall serve as a preliminary energy survey. The State       |  |  |
| 2  | Energy Office shall be responsible for system level detailed surveys.                                |  |  |  |
| 3  | (b2) The Department of Administration shall submit a report of the energy audit required             |  |  |  |
| 4  | by subsection (b1) of  | this section to the affected State agency or State institution of higher       |  |  |
| 5  | learning and to the State Energy Office. The State Energy Office shall review each audit and, in     |  |  |  |
| 6  | consultation with the affected State agency or State institution of higher learning, incorporate the |  |  |  |
| 7  | audit findings and recommendations into the management plan required by subsection (a) of this       |  |  |  |
| 8  | section.   |  |  |  |
| 9  | "  |  |  |  |
| 10 | SECTION 1.1. Article 3B of Chapter 143 of the General Statutes is amended by                         |  |  |  |
| 11 | adding a new section to read:  |  |  |  |
| 12 | " <u>§ 143-64.12A. Responsible lights out.</u>   |  |  |  |
| 13 | All State agencies and institutions of higher learning shall ensure that lighting in unoccupied      |  |  |  |
| 14 | interior spaces and upward-directed flood lighting is turned off on the premises of all buildings    |  |  |  |
| 15 | owned or leased by the State agency or institution of higher learning from midnight until 6:00       |  |  |  |
| 16 | A.M., unless required for safety, emergency, or insurance purposes. The building manager or          |  |  |  |
| 17 |  | ach premises owned or leased by a State agency or institution of higher        |  |  |
| 18 |  | riate designee, shall be responsible for ensuring compliance with this         |  |  |
| 19 | section."  |  |  |  |
| 20 | SECTION  | <b>2.</b> G.S. 143-64.17 reads as rewritten:                                   |  |  |
| 21 | "§ 143-64.17. Definiti   | ons.   |  |  |
| 22 | As used in this Part   |  |  |  |
| 23 | (1) "Ene   | ergy conservation measure" means a facility or meter alteration, training,     |  |  |
| 24 |  | rvices related to the operation of the facility or meter, when the alteration, |  |  |
| 25 | training, or services provide anticipated energy savings savings, generate                           |  |  |  |
| 26 | revenue, or capture lost revenue. Energy conservation measure includes any                           |  |  |  |
| 27 | of th  | e following:   |  |  |
| 28 | a.   | Insulation of the building structure and systems within the                    |  |  |
| 29 |  | building.building, including proper building envelope and duct sealing         |  |  |
| 30 |  | of all applicable areas in the building.                                       |  |  |
| 31 | b.   | Storm windows or doors, caulking, weatherstripping, multiglazed                |  |  |
| 32 |  | windows or doors, heat-absorbing or heat-reflective glazed or coated           |  |  |
| 33 |  | window or door systems, additional glazing, reductions in glass area,          |  |  |
| 34 |  | or other window or door system modifications that reduce energy                |  |  |
| 35 |  | consumption.   |  |  |
| 36 | с.   | Automatic energy control systems.  |  |  |
| 37 | d.   | Heating, ventilating, or air-conditioning system modifications or              |  |  |
| 38 |  | replacements.  |  |  |
| 39 | e.   | Replacement or modification of lighting fixtures to increase the energy        |  |  |
| 40 |  | efficiency of a lighting system without increasing the overall                 |  |  |
| 41 |  | illumination of a facility, unless an increase in illumination is              |  |  |
| 42 |  | necessary to conform to the applicable State or local building code or         |  |  |
| 43 |  | is required by the light system after the proposed modifications are           |  |  |
| 44 |  | made.  |  |  |
| 45 | f.   | Energy recovery systems.   |  |  |
| 46 | g.   | Cogeneration systems that produce steam or forms of energy such as             |  |  |
| 47 |  | heat, as well as electricity, for use primarily within a building or           |  |  |
| 48 |  | complex of buildings.  |  |  |
| 49 | h.   | Repealed by Session Laws 2006-190, s. 2, effective August 3, 2006,             |  |  |
| 50 |  | and applicable to contracts entered into or renewed on or after that           |  |  |
| 51 |  | date.  |  |  |

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| 2      | i.   | Faucets with automatic or metered shut-or<br>equipment, water meters, water recycling ea<br>recovery systems. |                            |  |  |
| ↓<br>5 | j.   | Other energy conservation measures that c other utilities.  | onserve energy, water, or  |  |  |
| 5      | <u>k.</u>  | Building analytics systems that allow for ac  | lyanced software utilizing |  |  |
| 7      | <u>K.</u>  | statistical modeling and machine learning   |                            |  |  |
| 3      |  | unsupervised, to establish data-driven be   |                            |  |  |
| )      |  | energy performance, and find additional energy  | -                          |  |  |
| )      | (2) "Ener  | rgy savings" means a measured reduction in  | ••••••                     |  |  |
|        |  | costs, stormwater fees, other utility costs, or   |                            |  |  |
|        |  | onmental discharge fees, water and sewer  |                            |  |  |
|        |  | ased meter accuracy, created from the imple   |                            |  |  |
|        |  | y conservation measures when compared with  |                            |  |  |
|        | -  | ous costs, including captured lost revenues   |                            |  |  |
|        | -  | oped by the governmental unit.  | /                          |  |  |
|        |  |   |                            |  |  |
|        | SECTION 3  | <b>6.</b> G.S. 143-135.37 reads as rewritten:   |                            |  |  |
|        | "§ 143-135.37. Energy and water use standards for public major facility construction and   |   |                            |  |  |
| )      | renovation projects; verification and reporting of energy and water use.   |   |                            |  |  |
|        |  |   |                            |  |  |
| r      | (b) Energy-Effic   | eiency Standard. – For every major facility   | construction project of a  |  |  |
|        | public agency, the building shall be designed and constructed so that the calculated energy  |   |                            |  |  |
|        | consumption is at least thirty percent (30%) forty percent (40%) less than the energy consumption  |   |                            |  |  |
|        | for the same building as calculated using the energy-efficiency standard in ASHRAE 90.1-2004.  |   |                            |  |  |
| )      | For every major facility renovation project of a public agency, the renovated building shall be  |   |                            |  |  |
|        | designed and constructed so that the calculated energy consumption is at least twenty percent  |   |                            |  |  |
| )      | (20%) thirty percent (30%) less than the energy consumption for the same renovated building as   |   |                            |  |  |
|        | calculated using the energy-efficiency standard in ASHRAE 90.1-2004. For the purposes of this  |   |                            |  |  |
|        | subsection, any exception or special standard for a specific type of building found in ASHRAE  |   |                            |  |  |
|        | 90.1-2004 is included in the ASHRAE 90.1-2004 standard.  |   |                            |  |  |
|        | (c) Indoor Potable Water Use Standard. – For every major facility construction or  |   |                            |  |  |
|        | renovation project of a public agency, the water system shall be designed and constructed so that  |   |                            |  |  |
|        | the calculated indoor potable water use is at least twenty percent (20%) thirty percent (30%) less   |   |                            |  |  |
|        | than the indoor potable water use for the same building as calculated using the fixture  |   |                            |  |  |
|        | performance requirements related to plumbing under the 2006 North Carolina State Building  |   |                            |  |  |
|        | Code.  |   |                            |  |  |
|        | "<br>Section   | (a) Each State agency and State institution a   | fhisher learning shall up  |  |  |
|        |  | <b>I.(a)</b> Each State agency and State institution of 20, conduct a proliminary prosticality and conduct a  |                            |  |  |
|        |  | 20, conduct a preliminary practicality and eco  |                            |  |  |
|        |  | conservation measures for all buildings great   | -                          |  |  |
|        | in size and that have been in use for more than 10 years. Energy conservation measures are deemed to be economically feasible if the resulting energy savings will cover the cost of |   |                            |  |  |
|        | implementing the measures within 10 years. Each State agency and State institution of higher   |   |                            |  |  |
|        | learning shall submit its findings to the State Energy Office. If the agency or institution of higher  |   |                            |  |  |
|        | learning determines that it is not practical or economically feasible to implement energy  |   |                            |  |  |
|        | conservation measures, the agency or institution of higher learning shall include findings of fact   |   |                            |  |  |
|        | supporting that determination in the findings it submits to the State Energy Office. If the State  |   |                            |  |  |
|        | agency or State institution of higher learning determines that it is practical and economically  |   |                            |  |  |
|        | feasible to implement energy conservation measures, the agency or institution of higher learning   |   |                            |  |  |
|        | -  | conservation measures may be achieved by issu   | • •                        |  |  |
|        | shun do 50. The chergy (   | to a conservation measures may be achieved by 1550  | and a request for proposal |  |  |

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for a guaranteed energy savings contract for all covered buildings owned by the agency or institution of higher learning. If the agency or institution of higher learning issues a request for proposal for a guaranteed energy savings contract for one or more buildings, the agency or institution of higher learning shall issue the request for proposal no later than April 1, 2021. The agency or institution of higher learning shall follow the process provided in Part 2 of Article 3B of Chapter 143 of the General Statutes. The definitions provided in G.S. 143-64.17 shall apply for purposes of this section.

8 SECTION 4.(b) No later than October 1, 2025, each State agency and State 9 institution of higher learning shall repeat the process set forth in subsection (a) of this section for 10 all buildings greater than 10,000 square feet in size and that have been in use for more than 10 11 years. If the agency or institution of higher learning issues a request for proposal for a guaranteed 12 energy savings contract for one or more buildings, the agency or institution of higher learning 13 shall issue the request for proposal no later than April 1, 2026.

14 SECTION 4.(c) This section shall not apply to any building for which a practicality 15 and economic feasibility analysis of implementing energy conservation measures has been 16 conducted within three years prior to the effective date of this section.

17 SECTION 4.(d) This section is effective when it becomes law. This section shall 18 not be interpreted to prohibit any State agency or State institution of higher learning from issuing 19 any request for proposal for a guaranteed energy savings contract.

SECTION 5. Except as otherwise provided, this act is effective when it becomes law. Section 3 of this act applies to every major facility construction project and every major facility renovation project of a public agency, as those terms are defined in G.S. 143-135.36, that has not entered the schematic design phase prior to the effective date of this act.