

GENERAL ASSEMBLY OF NORTH CAROLINA
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SENATE DRS15170-MH-79 (3/5)

Short Title: Energy/Water Benchmarking for State Buildngs. (Public)

Sponsors: Senator Stein (Primary Sponsor).

Referred to:

1 A BILL TO BE ENTITLED
2 AN ACT TO FOSTER WISE STEWARDSHIP OF PUBLIC FUNDS BY ESTABLISHING A
3 SYSTEM OF ENERGY AND WATER USE BENCHMARKING FOR CERTAIN
4 BUILDINGS OWNED OR LEASED BY THE STATE.

5 Whereas, the General Assembly desires to grow the 21st century economy by
6 removing barriers to smart decision making that will enable investment in, and returns from,
7 better building systems, management, and operations; and

8 Whereas, the General Assembly recognizes the value of measurement and
9 transparency as important tools to enable effective management of resources; and

10 Whereas, in order to have a significant impact on community-wide energy and
11 water use in the coming decades, it is imperative that efficiency savings be achieved in
12 buildings constructed prior to the adoption of current codes; and

13 Whereas, systems for lighting, heating, cooling, ventilation, plumbing, sewage
14 conveyance, irrigation, and other services in public buildings require regular tuning to operate
15 as designed, as well as periodic retrofits to meet modern standards for efficient use of energy
16 and water; and

17 Whereas, by ensuring that the State is informed about the full set of opportunities to
18 cost-effectively improve energy and water use efficiency in public buildings, and how those
19 buildings are performing relative to a national baseline, public building decision makers will
20 have incentive to make decisions in their own interest, to reduce utility costs, and provide wise
21 stewardship of public funds; and

22 Whereas, the evaluation, upgrade, and optimized operation of public buildings will
23 expand opportunities for skilled jobs in construction trades, engineering, operations, sales, and
24 innovative technologies. Investing in energy efficiency will contribute to stable, long-term
25 economic growth, encourage job creation, and enhance stewardship of natural resources; and

26 Whereas, cost-effective energy and water efficiency improvements are proven to
27 lower building operating costs; and

28 Whereas, building energy and water efficiency is a core strategy to avoid the need
29 for additional electric generating capacity and reduces the otherwise increasing strain on
30 precious water resources; and

31 Whereas, the U.S. EPA's ENERGY STAR Portfolio Manager is both widely
32 accepted as the national benchmarking tool of choice for both building energy use and building
33 water use and is also free of charge; and

34 Whereas, public policy that promotes healthy, resilient, high-performing building
35 operations and management complements existing policies relating to energy efficiency in
36 newly constructed State buildings; Now, therefore,



1 The General Assembly of North Carolina enacts:

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

4 "Article 8D.

5 "Energy and Water Use Benchmarking for Public Buildings.

6 **"§ 143-135.45. Definitions.**

7 The following definitions apply in this Article:

- 8 (1) Benchmark. – Together with derivatives of the term, means the input of
9 critical building information observed and recorded from building operations
10 and use into a tool intended for comparative analysis of established baselines
11 for building type, size, use, and location using the following procedures:
12 a. Benchmarking building energy use means to input the total energy
13 consumed for a building during a 12-month period and other
14 benchmarking information as required by the ENERGY STAR
15 Portfolio Manager tool and to display results.
16 b. Benchmarking building water use means to input the total water
17 consumed for a building during a 12-month period and other
18 benchmarking information as required by the ENERGY STAR
19 Portfolio Manager tool and to display results.
20 (2) Benchmarking information. – Information related to a building's energy
21 consumption and a building's water consumption, as generated by ENERGY
22 STAR Portfolio Manager, and descriptive information about the physical
23 building and its operational characteristics. The information shall include at
24 a minimum the following:
25 a. The building address.
26 b. Weather-normalized energy use intensity (EUI).
27 c. Annual carbon emissions.
28 d. Water use per gross square foot.
29 e. The energy performance score, including a comparison of the
30 building's performance in the areas benchmarked to that of similar
31 buildings, where available.
32 (3) Building Benchmarking Plan. – A written strategy to measure
33 building-related information associated with the benchmarking requirements
34 of this Article and establish protocols for informing action when
35 benchmarking results suggest a need for action. A Building Benchmarking
36 Plan must be updated once every five years.
37 (4) Department. – The Department of Administration.
38 (5) Energy. – Electricity, natural gas, steam, heating oil, or other product sold by
39 a utility to a customer of a building, or renewable on-site electricity
40 generation, for purposes of providing heating, cooling, lighting, water
41 heating, or for powering or fueling other end-uses in the building and related
42 facilities.
43 (6) Energy performance score. – A numeric rating on a scale of one to 100 that
44 compares the energy usage of the building to that of similar buildings
45 generated by the ENERGY STAR Portfolio Manager.
46 (7) ENERGY STAR Portfolio Manager. – The tool developed and maintained
47 by the U.S. Environmental Protection Agency to track and assess the relative
48 energy performance and water performance of buildings nationwide.
49 (8) Public building. – Any building of at least 10,000 gross square feet in area
50 that is owned by the State and has been occupied for at least 18 months and

1 that is equipped with meters that measure water, electricity, and any other
2 fuel consumed by the building.

3 (9) Public leased building. – A building of at least 10,000 gross square feet in
4 area where more than 5,000 rentable square feet is leased or rented by the
5 State and occupied for at least 18 months.

6 **"§ 143-135.46. Benchmarking requirement.**

7 (a) Requirements. – All public buildings shall be annually benchmarked for building
8 energy use and building water use for the previous fiscal year by the Department. The
9 Department shall make a request to owners of public leased buildings for annual benchmarking
10 and shall include an annual benchmarking requirement in any lease renewal for a public leased
11 building or in any Request for Proposal issued to potential lessors for leased space that would
12 meet the definition of a public leased building. Benchmarking shall be conducted in accordance
13 with the schedule outlined in this section. Disclosure of benchmarking information shall be in
14 accordance with G.S. 143-135.47.

15 (b) Schedule. – All public buildings shall be benchmarked on an annual basis no later
16 than October 1 in accordance with the rules and procedures promulgated by the Department.
17 The following shall be required by January 1 for the first year in which a public building or
18 covered building is to be benchmarked:

19 (1) All available benchmarking information from the previous year collected
20 and accessible to the building owner.

21 (2) Building Benchmarking Plan.

22 **"§ 143-135.47. Reporting and public disclosure of benchmarking information.**

23 (a) Annual Reporting for Public Buildings. – No later than April 1 after completing
24 annual benchmarking for the prior fiscal year, the Department shall create a plan of action to
25 unlock the cost-savings potential of information gathered from the benchmarking process,
26 recommending improvements to building systems, equipment, materials, policies, and
27 procurement.

28 (b) Disclosure of Benchmarking Information for Public Buildings. – The Department
29 shall publish on its Web site and other means in its discretion the benchmarking information in
30 accordance with rules and procedures established by the Department no later than one month
31 after the date required for benchmarking completion in G.S. 143-135.46. Annual reporting of
32 the information required in subsection (a) of this section shall be made public and available on
33 the Department's Web site at the time of its publication.

34 **"§ 143-135.48. Rule-making authority.**

35 The Department of Administration shall promulgate any rules it deems necessary to carry
36 out the provisions of this Article."

37 **SECTION 2.** This act is effective when it becomes law.