

**GENERAL ASSEMBLY OF NORTH CAROLINA  
SESSION 2013**

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**SENATE BILL 492**

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

Sponsors: Senators Stein (Primary Sponsor); Clark, Kinnaird, and Woodard.

Referred to: Agriculture/Environment/Natural Resources.

March 28, 2013

A BILL TO BE ENTITLED

AN ACT TO FOSTER WISE STEWARDSHIP OF PUBLIC FUNDS BY ESTABLISHING A SYSTEM OF ENERGY AND WATER USE BENCHMARKING FOR CERTAIN BUILDINGS OWNED OR LEASED BY THE STATE.

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

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

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

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

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

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

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

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

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

Whereas, public policy that promotes healthy, resilient, high-performing building operations and management complements existing policies relating to energy efficiency in 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.