

“Efficient Government Buildings & Savings Act”

2019 [House Bill 330](#), filed March 11, 2019

Primary Sponsors: **Rep. John Szoka (R-45)**, **Rep. Dean Arp (R-69)**, **Rep. Stephen Ross (R-63)**, **Rep. Chris Humphrey (R-12)**

Legislation Summary

The “Efficient Government Buildings & Savings Act” of 2019 establishes new energy and water savings goals for public buildings that will avoid nearly \$1.1 Billion dollars of North Carolina taxpayer funded energy and water utility bills between 2018 and 2025, resulting in a net savings of roughly \$252 Million (NCDEQ, 2019). Through North Carolina’s current Utility Savings Initiative (USI) program, State agencies and institutions have saved North Carolina taxpayers more than \$1.4 Billion in utility costs since 2003 by improving the energy and water efficiency of state-owned buildings.

A majority of State agencies and institutions have participated in the program to lower their energy usage, improve how their buildings perform and contribute taxpayer savings to the State budget. Additional benefits of this program include improved health and safety for North Carolina citizens living and working in these buildings, improved productivity through more functional buildings and more efficient and less costly operations through reduced maintenance and upkeep. Additional benefits include:

1. Allowing private contractors to continue delivering guaranteed energy savings projects to State agencies and institutions that are unable to perform or finance the projects on their own.
2. Adding low-cost and high-return energy conservation measures to the approved measure list, including air sealing, duct sealing and building energy analytics systems.
3. Encouraging State agencies and institutions to participate in no-cost energy assessments that can lead to guaranteed energy savings for needed retrofits and energy improvement projects.

Financial Impacts

NCDEQ estimates that increasing the energy reduction targets from the current level of 28% BTU per gross square foot to 40% will require \$791,976,393 million in investment and will result in avoided energy costs of \$1,044,192,089, creating a net avoided cost energy savings of \$252,215,696 between 2018 and 2025 (NCDEQ, 2019).

The new goals encourage State agencies and institutions to perform energy and water saving projects for the first time or as additional projects on more than 1,250 state buildings spanning more than 83 Million square feet. Hundreds of public university buildings and nearly 100 buildings in the Division of Prisons are included.

In 2016-17, state agencies and universities collectively reached 30% in Btus per square foot. In 2017-18, the percentage declined slightly to 28%. Additionally, the 2017 State Construction Office Facilities Condition Assessment Program report identified \$2.6 Billion in building and infrastructure deficiencies and deferred maintenance needs. The US General Services Administration estimates that about 40% of its maintenance and capital needs are energy-related, which in comparison could yield roughly \$1 Billion worth of EPSC projects (similar to the costs/benefits found in HB330).

Case Study Summaries

1. North Carolina Museum of Art: \$500,000 per year in energy savings (58% reduction).
2. University of North Carolina at Wilmington: \$873,000 per year in energy savings (42%)
3. North Carolina State University: \$1.6 Million per year in energy savings, resulting in an 11-year payback.
4. Central Piedmont Community College: nearly \$800,000 energy savings exceeded the savings guarantee by 11 percent in year one and 19 percent in year two.
5. Town of Chapel Hill: Two-year total cost avoidance of \$164,007 versus guaranteed cost avoidance of \$143,411 (14% excess).

What is Energy Services Performance Contracting?

Summary from [Schneider Electric](#)

What is performance contracting?

Performance contracting is a funding method of using guaranteed energy savings to implement facility improvements, equipment upgrades and energy efficiency techniques. Municipal and state governments cope with tight budgets and pressure from citizens to keep taxes low. Schools, colleges and universities confront expanding enrollment and demands to improve academics. In each situation, facility managers and owners are often forced to defer maintenance and equipment upgrades in order to control costs. Performance contracting is an alternative project delivery method available to alleviate additional costs and help finance a project.

How does the guarantee work?

Performance contracting is a method of funding in which energy savings from utility expense reductions are used to pay for projects over the course of several years. Utility savings are realized through the implementation of various energy conservation measures (ECMs) that may include: high efficiency lighting retrofit, computer-controlled energy management, and the replacement and redesign of older, inefficient heating ventilating and air conditioning (HVAC) equipment and systems, among others.

With a performance contract, upgrades of interrelated systems are bundled together into one comprehensive project that provides a customized solution based on a customer's needs. This maximizes the savings possible and allows the cost of the improvements to be a manageable expense. A performance guarantee assures that annual savings will be achieved and if the guaranteed level of savings is not realized the energy services company (ESCO) that implements the performance contract must write a check to cover the shortfall. The guarantee accomplishes three things:

1. It reduces the facility owner's risk.
2. It facilitates the procurement of the capital necessary to pay for the project.
3. It gives the ESCO impetus to ensure the system runs as efficiently as possible.