

2022 Guaranteed Energy Savings Contracts Annual Report

A Report to the
Joint Legislative Oversight Committee on
Agriculture and Natural and Economic Resources;
Fiscal Research Division; and
Local Government Commission

Pursuant to §143-64.17H



December 1, 2022

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Preface:

This report contains the Department of Environmental Quality’s annual status update to the Joint Legislative Oversight Committee on Agriculture and Natural and Economic Resources; Fiscal Research Division; and Local Government Commission for guaranteed energy savings contracts pursuant to G.S. §143-64.17H. As required, this report contains information pertaining to Guaranteed Energy Savings Contracts that are executed for state-owned buildings. The contracts evaluate, recommend, or implement energy conservation measures that result in guaranteed monetary savings exceeding the costs of designing, installing, repairing, or replacing equipment.

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List of Acronyms

Acronym	Definition
DEQ	Department of Environmental Quality
DOA	Department of Administration
DNCR	Department of Natural and Cultural Resources
DPS	Department of Public Safety
ECM	Energy Conservation Measure
EO80	Executive Order Number 80
ePX	eProject eXpress
ESA	Energy Service Agreement
ESC	NC Chapter of the Energy Services Coalition
ESCO	Energy Services Company
G.S.	North Carolina General Statute
GESPC	Guaranteed Energy Savings Performance Contract
IAQ	Indoor Air Quality
IGA	Investment Grade Audit
LED	Light Emitting Diode
LGC	Local Government Commission
M&V	Measurement and Verification
NC	North Carolina
NCAC	North Carolina Administrative Code
OSBM	Office of State Budget and Management
RFP	Request for Proposal
SCO	State Construction Office
SEO	State Energy Office
UNC	University of North Carolina
USI	Utility Savings Initiative

Definitions

Qualified Provider means a person or business experienced in the design, implementation, and installation of energy conservation measures who has been prequalified by the State Energy Office according to the prequalification criteria established under the Department of Administration rules contained in North Carolina Administrative Code (NCAC), Title 01, Subchapter 41B, *Guaranteed Energy Savings Contracts*.

Qualified Reviewer means an architect or engineer who is (i) licensed in this state and (ii) experienced in the design, implementation, and installation of energy efficiency measures.

I. Executive Summary

Since 2002, General Statute (G.S.) §143-64 allows state agencies and universities to utilize a Guaranteed Energy Savings Performance Contract (GESPC) process to implement and finance major facility upgrades that reduce utility consumption and costs. Under the law, energy savings resulting from the performance of the contract must equal or exceed the total cost of the contract. Additionally, contracts are limited to a term of 20 years or less from the date of the installation and acceptance by the state governmental unit (i.e., state agencies or the University of North Carolina (UNC) System). This legislative authority has resulted in 23 total GESPCs executed between state agencies and private energy service providers since 2002. Between FY2019 and FY2021, three projects reached contract completion and are expected to have met and exceeded the targeted guaranteed savings. The remaining 20 projects are ongoing and expected to provide approximately \$414 million in avoided utility expenditures over the term of their contracts.¹ During the first quarter of FY2021-22, GESPCs were initiated with the Department of Natural and Cultural Resources (DNCR) and the Department of Public Safety (DPS) that are actively in the project development phase.

The Covid-19 pandemic initially slowed education and outreach initiatives that are performed by Energy Service Companies (ESCOs) and the SEO as site visits and interactions with facility staff were limited. Despite these challenges, the SEO continued to work with state agencies to identify new potential water and energy savings projects and initiate new GESPCs in the response to Governor Cooper's Executive Order No. 80 (EO80) energy reduction goals for state-owned buildings. Additionally, the SEO continues to provide education about the GESPC process and promotes implementation of GESPCs for improving energy efficiency within state-owned buildings by providing technical assistance, training, and guidance throughout the process. The SEO anticipates that GESPC activity will continue for all governmental units through assistance from and partnership with both state and local government organizations and service providers.

One segment for further future development are GESPCs for North Carolina's public schools (K–12). Typically, schools are the largest utility consumers within local governments, and often have infrastructure upgrade needs for lighting, HVAC, water conservation, load management, and building envelope improvements that exceed the funding available. Particularly for schools located in economically distressed counties,² GESPCs can significantly reduce the energy burden to the district while supporting local contractors, jobs, and businesses. SEO aims to support local government in implementing GESPCs in learning environments to effectively obtain the highest public benefits possible.

The Bipartisan Infrastructure Law and Inflation Reduction Act will provide new and incremental funding that could be used to accelerate the energy efficiency of State and Local government buildings. Recognizing that GESPCs can allow the state to leverage this funding and provide the greatest savings to taxpayers, the SEO conducted a GESPC program review in anticipation. This review included an evaluation and analysis of historical records including contract documents, financing agreements, annual measure and verification (M&V) reports, and annual summaries of

¹ Totals exclude NC A&T State University since no contract or report was filed with DEQ.

² The North Carolina Department of Commerce provides annual county rankings (Tier 1, 2, or 3) based on economic prosperity: <https://www.nccommerce.com/grants-incentives/county-distress-rankings-tiers>

guaranteed savings reported by State governmental units, among other documents. While certain documents are still being obtained for review, there are clear opportunities to improve policies and practices to increase program transparency, accuracy, and accountability. Updated policies and procedures will be implemented with the results to be reported in the next biennial update.

II. Purpose & Background

In 2002, North Carolina (NC) codified G.S. §143-64.17 allowed for all local and state governmental units, including state agencies and universities, to utilize the GESPC process to implement and to finance major facility upgrades that save energy and reduce utility expenditures. A GESPC is a design-build procurement process where the single point of responsibility is held by an ESCO. ESCOs are prequalified by the SEO under the Department of Administration (DOA) rules contained in North Carolina Administrative Code (NCAC), Title 01, Subchapter 41B, *Guaranteed Energy Savings Contracts*. Based on these rules, an ESCO, in collaboration with the governmental unit, works to design and to propose a package of energy conservation measures (ECMs), installs the selected ECMs, provides M&V of the annual savings for the duration of the contract, and contractually guarantees the dollar savings of the energy savings. Utility budget savings resulting from the implementation of the guaranteed ECMs provide repayment of the multi-year loans executed by governmental units to finance the energy upgrades.

State governmental units conduct open solicitations for proposals and establish the final contract terms with ESCOs. Once the contracted ECM projects have been implemented, ESCOs are further required to provide annual reconciliation statements based on M&V of actual energy savings. These reconciliation statements must be submitted annually within 60 days of the annual project acceptance anniversary. State governmental units are then required to engage a qualified third-party reviewer to verify and report the ESCO calculations prior to sending a summary to the SEO along with the respective third-party review documents. The annual report is based on the annual savings guaranteed in the Energy Service Agreement (ESA) between the state governmental unit and the ESCO prior to construction and is verified in the post-implementation summary reports.

SEO staff provide technical assistance and guidance to governmental units throughout the GESPC process. In addition, the SEO conducts reviews during the contract development, approval process, and construction phases of each project. These reviews include recommendations to the Council of State, the Department of State Treasurer, and the Office of State Budget and Management (OSBM) for GESPCs being considered by agencies and universities. For GESPC projects undertaken by local governmental units, these reviews include recommendations to local school boards and county commissioners, and then to the Local Government Commission (LGC) who is the final approving authority for all local government GESPCs. SEO staff continue to provide support and technical assistance for all local and state governmental units and ESCOs throughout the terms of each agreement. This guidance is designed to streamline the GESPC process to identify and resolve issues prior to the approving authorities receiving a proposed project.

A. Roles and Responsibilities of Key Entities

Table 1 provides a detailed breakdown of responsibilities that entities involved with GESPC are required to perform throughout the process with reference to the corresponding legislation or rule. Appendices B, C, and D provide text corresponding to the general statutes and DOA regulations cited in Table 1.

Table 1. Roles and Responsibilities for Key Entities

Entity	Responsibility	Reference
SEO	Review Request for Proposal (RFP), proposal, cost benefit analysis and other documents prior to award.	G.S. §143- 64.17A(d1)
	Report annually on GESPCs by state governmental units, including expected savings evaluation, to the Local Government Commission, the Joint Legislative Oversight Committee on Agriculture and Natural and Economic Resources, and Fiscal Research Division.	G.S. §143-64.17H
	Provide template for RFP solicitation documents.	01 NCAC 41B .0302
	Conduct precertification of providers for three-year intervals.	01 NCAC 41B .0400
SEO, DOA	May provide recommendations to Council of State on contracts under consideration.	G.S. §143-64.17F(c)
DOA, with SEO, State Treasurer	Adopt rules in consultation with SEO, with approval from State Treasurer.	G.S. §143-64.17F(b)
DOA State Construction Office (SCO)	Provide inspection and compliance certification if requested by state government units and community colleges.	G.S. §143-64.17K
Local Governmental Unit and LGC	Report biennially on GESPC by local government to the Joint Legislative Commission on Government Operations, and evaluate savings realized with assistance from SCO and SEO.	G.S. §143-64.17G
State Treasurer	Approve local government GESPC financing contracts, including community colleges, K–12 schools, cities, and counties.	G.S. §142, Article 8, State Energy Conservation Finance Act
	Approve security instrument from Qualified Providers.	G.S. §143-64.17B(c)
	Approve financing option.	01 NCAC 41B .0701
	Monitor \$500 million cap on aggregate outstanding amount.	G.S. §142-63
	Approve changes to Rules.	G.S. §143-64.17F(b)

Entity	Responsibility	Reference
OSBM	Approve and certify funds for state contracts.	G.S. §142-64; 01 NCAC 41B .0511 and .0701
Council of State, with OSBM, State Treasurer	Approve GESPC financing contracts for state government agencies and universities.	G.S. §142, Article 8, State Energy Conservation Finance Act
Governmental Unit (local, state agency, university)	Local governmental unit notifies the LGC at least 15 days in advance of issuing an RFP.	G.S. §143-64.17A(a1)
	Issue RFP, evaluate proposals, select Qualified Provider, retain Qualified Reviewer, advertise, award RFP and award, and approve contract terms and conditions.	G.S. §143-64.17A(a)
	Post advertisements for RFP and subsequent award.	G.S. §143-64.17A(a)
	Conduct vendor conferences and site visits.	01 NCAC 41B .0307
	Report contract terms to LGC and SEO.	G.S. §143-64.17G
	Report either (i) the contract and the terms of the contract or (ii) the implementation of the measure to the SEO within 30 days of the date the contract is entered into or the measure is implemented. In addition, within 60 days after each annual anniversary date of a GESPC, the state governmental unit must report the status of the contract to the SEO, including any details required by the SEO.	G.S. §143-64.17H
Qualified Provider/ESCO	Provide cost savings analysis compared to project costs for term to the state governmental unit.	G.S. §143-64.17A(d1)
	Provide security to State Treasurer.	G.S. §143-64.17B(c)
	Provide IGA when feasible including life cycle cost analysis.	G.S. §143-64.17B(f)
	Determine guaranteed savings using acceptable M&V methodology and provide annual reconciliation statements including actual, not stipulated, energy and operational savings during guarantee year.	G.S. §143-64.17B(g)
Qualified Reviewer/ Third Party Reviewer	Evaluate proposals, provide letter with qualitative and quantitative evaluation.	G.S. §143-64.17A(b)
	Provide analysis of energy conservation measures (ECMs) prior to and post implementation.	G.S. §143-64.17M; 01 NCAC 41B .0507;
UNC Board of Governors	Authorize GESPCs for constituent institutions, and ECMs without GESPC at NC State University and UNC Chapel Hill.	G.S. §143-64.17L

III. Annual Reporting Requirements

A. G.S. §143-64.17G, *Report on guaranteed energy savings contracts entered into by local governmental units.*

A local governmental unit that enters into a guaranteed energy savings contract must report the contract and the terms of the contract to the Local Government Commission and the State Energy Office of the Department of Environmental Quality. The Commission shall compile the information and report it biennially to the Joint Commission on Governmental Operations. In compiling the information, the Local Government Commission shall include information on the energy savings expected to be realized from a contract and, with the assistance of the Office of State Construction and the State Energy Office, shall evaluate whether expected savings have in fact been realized.

This provision requires the LGC to report on GESPCs entered into by local governmental units. Therefore, minimal information regarding local government GESPCs is included in this report.

B. G.S. §143-64.17H, *Report on guaranteed energy savings contracts entered into by State governmental units.*

A State governmental unit that enters into a guaranteed energy savings contract or implements an energy conservation measure pursuant to G.S. 143-64.17L must report either (i) the contract and the terms of the contract or (ii) the implementation of the measure to the State Energy Office of the Department of Environmental Quality within 30 days of the date the contract is entered into or the measure is implemented. In addition, within 60 days after each annual anniversary date of a guaranteed energy savings contract, the State governmental unit must report the status of the contract to the State Energy Office, including any details required by the State Energy Office. The State Energy Office shall compile the information for each fiscal year and report it to the Joint Legislative Commission on Governmental Operations and to the Local Government Commission annually by December 1. In compiling the information, the State Energy Office shall include information on the energy savings expected to be realized from a contract or implementation and shall evaluate whether expected savings have in fact been realized.

This provision requires the SEO to report on all GESPCs entered by state governmental units. This report shall include the energy savings expected to be realized (Total Guaranteed Energy Savings) along with an evaluation whether the savings have in fact been realized (Above Guaranteed Savings to Date). Currently, a total of 20 active GESPCs exist for state governmental units. One of these contracts and the associated annual project update was not received by DEQ; therefore, the respective GESPC is not included in this report.¹ For the remaining contracts, approximately \$190 million in energy savings has been realized to date from a total expected (i.e., guaranteed) savings of \$414 million through the life of the contracts. The SEO can confirm 60% of the actual savings to date based on validation performed by third party qualified reviewers. The remaining unconfirmed and unofficial savings are due to factors such as submitting updates: (1) without a third-party validation; (2) containing stipulated savings; or (3) that are preliminary draft values.

Table 2 (*on page 12*) shows the number of completed projects and the actual savings achieved through the contract term. Table 3 (*on page 13*) provides a list of state governmental units' contract terms, reporting status, and energy savings achieved from the corresponding GESPCs.

During FY2020-21, the DOA's Downtown Complex along with UNC Greensboro completed their respective contract terms and achieved \$1.68 million dollars above guaranteed savings. By adding these savings to the DOA's Museum of Art project completed in FY2019-20, this brings the total of exceeded guaranteed savings to almost \$2 million dollars for these three completed projects (Table 3).Error! Bookmark not defined. Collectively as shown in Table 3, active state projects have achieved over \$23 million dollars in above guaranteed savings which further proves the effectiveness and success of performance contracting.¹

Table 2. GESPC Summary of Terms and Reporting Status of Current Projects

Contract #	State-Owned Unit	Project Term Status (year)	M&V Report Received	Third-party Verified	Total Guaranteed Savings for Contract Term	Total Guarantee to Date	Total Savings to Date	Above Guaranteed Savings to Date	ESCO
1	Appalachian State University 1	11 of 12	Yes	No	\$9,050,908	\$8,156,995	\$8,565,582	\$408,587	Constellation
2	Appalachian State University 2	6 of 13	Yes	No	\$23,606,098	\$10,403,699	\$11,842,973	\$1,439,274	Constellation
3	Department of Public Safety	5 of 14	Yes	Under review	\$21,180,286	\$7,242,569	\$8,184,595	\$942,026	Noresco
4	Department of Transportation 1	5 of 15	Yes	No	\$8,897,860	\$2,984,203	\$3,257,349	\$273,146	Trane US Inc.
5	Department of Transportation 2	2 of 15	Yes	No	\$51,295,813	\$6,450,232	\$7,531,934	\$1,081,702	Trane US Inc.
6	Elizabeth City State University ^a	9 of 17	Yes	No	\$9,137,823	\$4,260,510	\$4,708,392	\$447,882	Honeywell
7	Fayetteville State University	6 of 17	Yes	No	\$16,167,881	\$5,660,766	\$6,517,075	\$856,309	Trane US Inc.
8	NC Ag and Tech State University ^a	6 of 17	No	No	No Update Received.				Noresco
9	NC Central University ^a	8 of 15	No	No	\$10,103,507	\$4,981,706	\$4,827,149	Under Review	Engie
10	NC School of Science and Math ^a	1 of 15	Yes	No	\$3,919,020	\$229,406	\$137,086	-\$92,320	Trane US Inc.
11	NC State University 1	9 of 19	Yes	Yes	\$35,633,779	\$15,218,291	\$17,634,721	\$2,416,430	Schneider
12	NC State University 2 (Cogen)	9 of 17	Yes	Yes	\$103,005,060	\$47,785,234	\$60,977,628	\$13,192,394	Ameresco
13	NC State University 3 Phytotron	7 of 15	Yes	Yes	\$9,012,635	\$3,936,249	\$4,027,539	\$91,290	Performed Under NCGS 143-64.17L
14	NC State University 4 (Cogen) Centennial CCUP	3 of 18	No	Yes	\$36,399,402	\$5,108,054	\$5,677,907	\$554,515	Performed Under NCGS 143-64.17L
15	UNC Charlotte ^a	8 of 15	Yes	Yes	\$10,841,395	\$5,656,890	\$6,410,467	\$753,577	Ameresco
16	UNC Pembroke	8 of 17	Yes	Yes	\$7,491,431	\$3,235,391	\$3,450,816	\$215,425	Siemens
17	UNC Systems Office	6 of 7	Yes	No	\$29,203,973	\$24,775,581	\$24,768,757	-\$6,824	Johnson Controls
18	UNC Wilmington 1	10 of 20	Yes	Yes	\$8,694,471	\$3,771,543	\$3,820,122	\$48,579	Trane US Inc.
19	UNC Wilmington 2	4 of 16	Yes	Yes	\$9,533,977	\$2,438,250	\$2,827,964	\$389,714	Ameresco
20	Winston-Salem State University	6 of 15	Yes	No	\$11,512,771	\$4,194,276	\$5,129,434	\$935,158	Siemens
Total					\$414,688,090	\$166,489,845	\$190,297,490	\$23,946,864	

^aNo contract on file at DEQ

Table 3. GESPC Summary of Terms and Reporting Status of Completed Projects^a

Completed Projects					
State-Owned Unit	Project Completed (year)	Total Guaranteed Savings	Total Savings During Contract Term	Total Above Guarantee Savings During Contract Term	ESCO
DOA Museum of Art	FY20	\$6,498,888	\$6,779,096	\$280,208	Trane
DOA Downtown Complex	FY21	\$30,646,888	\$31,824,818	\$1,177,930	Pepco/Constellation
UNC Greensboro	FY21	\$7,200,000	\$7,646,320	\$446,320	Trane
Total		\$44,345,776	\$46,250,234	\$1,904,458	

^aContracts and M&V documents not on file at DEQ; additional validation is required.

IV. Program Effectiveness Update

EO80 set a goal to reduce energy consumption in all state-owned buildings by at least 40 percent from fiscal year 2002-2003 levels by 2025. A comprehensive energy conservation program, the Utility Savings Initiative (USI), was established to achieve this goal. Accordingly, state governmental units are increasingly evaluating GESPCs as a financing option to fund the replacement of inefficient equipment, reduce energy costs, and to reach the EO80 utility savings goals. While governmental units directly implement building improvements when funding is available, they continue to face a long list of deferred maintenance items that need to be addressed. As there are limited funds reserved for the repair and renovation of state-owned buildings, agencies are forced to choose between energy efficiency, deferred maintenance, and life safety projects. Therefore, performance contracting provides a unique mechanism to finance energy efficiency improvements without depleting the funds required for essential building repair and renovation.

The SEO continues to have discussions with third party reviewers and pre-qualified ESCOs on how to improve the NC GESPC process. For example, prior to 2017, the SEO routinely changed GESPC language which inadvertently caused the ESCOs and governmental units to lack consistency in the contracting process. These changes addressed issues regarding the placement of risk between the Owner and the ESCO. As a result, the SEO established standardized template contract documents in 2018 for all GESPC projects. The SEO's choice to standardize GESPC template documents has received positive feedback from both the ESCOs and governmental units. When government units and ESCOs adopt the SEO's template documents, the process to review and approve the GESPC is more transparent and streamlined.

As required every three years by 01 NCAC 41B, Section .0400, *Precertification of Providers*, the SEO completed the ESCO approval process of recertifying all the Qualified Providers on the North Carolina list during FY2021-22. During the pandemic, the SEO observed that several new ESCOs applied to be on the SEO's precertification list. FY2020-21's ESCO recertification application included a group of questions directed towards the ESCOs that have not attended a pre-bid meeting or responded to an RFP. This questionnaire probed ESCOs to communicate reasons they did not actively work to promote performance contracting in this state or identify potential energy savings measures for state governmental units previously. As hoped, this drove internal ESCO discussions and stimulated pursuance of more energy saving opportunities in NC. Notably, there are still several ESCOs that have chosen to not become Qualified Providers in NC, thus, obtaining ESCO feedback is essential to increase participation. The SEO continues to look for ways to increase ESCO involvement in projects for disadvantaged communities (i.e. within Tier 1 and Tier 2 counties²) that support energy efficiency, provide equitable access to clean energy technologies, and improve resilience to natural hazards. The goal of the SEO is to increase ESCO involvement in NC and to improve the efficacy and success of the GESPC process.

Collectively, 23 GESPCs have achieved over \$25 million above guaranteed savings since the program's implementation in 2002.^{Error! Bookmark not defined.}¹ Of those, three projects that were completed in FY2020 and FY2021 collectively reached \$1.9 million above guaranteed savings,^{Error! Bookmark not defined.} the remaining projects in progress have exceeded \$23.7 million above guaranteed savings between FY2008 to the present.¹ During FY2021-22, state agencies were the most active market for GESPCs as a result of the goal in EO80 to reduce energy consumption and costs by 40% of FY2002-03 levels by 2025. Data from the SEO's 2022 utility consumption and cost report show that energy usage is at a 32% reduction from baseline values

(FY2002-03). These data show there is still a need to improve the energy efficiency of NC state-owned buildings and highlights the opportunities for GESPCs to finance energy efficiency improvement projects for state-owned infrastructure.

Currently, DPS and DNCR are actively in the project development phase for implementing large-scale projects for some of their most inefficient buildings. The DNCR project includes the North Carolina Zoo, all three aquariums and five museums. The DPS project is for six 1000-cell correctional facilities. Using a GESPC allows state agencies to obtain large-scale improvements in record time, with a single vendor and a guaranteed energy savings that is validated by a third-party (as required by statute). In addition, GESPCs allow multiple energy upgrades to be completed simultaneously, maximizing savings as quickly as possible. While many state-owned buildings may prefer financing projects as funding is available, GESPCs allow the flexibility for state-owned infrastructure to leverage “time and use” of existing capital from the General Fund for other priorities.

The SEO continues to work with the NC ESC, LGC, ESCO’s, third-party reviewers, and others to improve and streamline the GESPC process. The SEO’s timely review and on-site technical assistance is key to ensuring an efficient GESPC process. The SEO promotes GESPCs and their importance to governmental units by providing guidance, technical assistance, and performing site inspections. Our research shows that GESPCs compare favorably to other financing methods and should continue to be one of the primary financial options for major capital energy improvements for governmental units.

The SEO desires to improve the data collection system for GESPCs to report the most accurate and up-to-date data. While the SEO is not a signatory entity for GESPCs, the office requests access to contract documents, construction schedules, financing agreements, and Measurement and Verification reports for quality assurance of these data. Due to years of running a successful and nationally recognized GESPC program, the Department of Energy (DOE) and Lawrence Berkley National Lab (LBNL) requested the SEO’s assistance with the creation of eProject eXpress (ePX). ePX is a secure, web-based data management platform that allows state and local governmental units and Energy Service Companies (ESCOs) to preserve, track and report information for their portfolio of energy projects that use performance contracting. The ePX tool will allow for efficient tracking of greenhouse gas emissions reductions and the number of jobs created by each project across the state. This tool is designed to streamline and standardize a pathway for energy performance contracting project data collection and reporting. With widespread utilization of the tool, data collection would likely shift to the ESCOs and governmental units, while the SEO will have one central database to review relevant GESPC documentation. For the SEO’s help with the creation of ePX, DOE funded the input and uploading of 89 historical local and state government GESPCs into the database.³ The SEO continues to review, comment, and edit this tool and aims to have all past projects uploaded in 2022. NC is one of the first states to require the use of ePX for all performance contracts moving forward and has included such language in its template documents.

Meetings with participating government entities and ESCOs have made it clear to all parties involved in GESPCs that a strong partnership and consistent communication needs to be maintained throughout the duration of the project. The partnership throughout the term of a long

³ This value excludes one public housing performance contract.

contract between the ESCO and the governmental unit may lose consistency and collaborative efforts after the construction period. Therefore, the SEO works with both parties to make sure communication channels are active and productive, acting as a bridge to reduce the educational barriers regarding the complex GESPC process. As such, on-site technical assistance includes an extensive review and training of the contracting documents to assist governmental units with understanding its risks and responsibilities. The SEO's involvement from project identification through construction and into the guaranteed period provides continuity and promotes communication with both the ESCO and the governmental unit.

Additionally, the SEO engages in outreach and educational efforts to promote GESPCs as an efficient and effective means of financing major capital improvements for energy efficiency measures. The office delivers training and education to GESPC participants within governmental units and has designed a free online training on GESPCs in North Carolina. The training is modeled off "GESPC-University" (GESPC-U), a 25-module lesson plan designed by the National Energy Services Coalition (ESC) and United States Department of Energy (DOE) that provides in-depth information on all aspects of performance contracting, from concept to construction and beyond. Until GESPC-U was created, there was not single source of information available for learning more about performance contracting. With permission from ESC, the SEO personalized the GESPC-U training to contain NC statutes, guidelines, or rules.⁴ Each lesson in the training is accompanied by a quiz to help reinforce the material learned and provides SEO staff the ability to provide additional feedback. Trainees that successfully complete all 25 lessons and quizzes are granted a Certificate of Completion.

V. Local Governmental GESPC Update

K–12 schools are often the largest utility consumer within many counties in the state. Utilities and maintenance for the K–12 schools are funded from the county budget; therefore, use of GESPCs to make needed capital improvements reduces the burden on county taxpayers. In fact, Lexington City Schools recently obtained the 2022 North Carolina Cleantech Innovation Award for implementation of a \$3.78 million GESPC.⁵ This example highlights the large impact that energy efficiency upgrades in K–12 schools can have on energy usage and spending and encourages the application of GESPCs to improve learning environments. However, the influx of stimulus funds in response to the COVID-19 pandemic (i.e., Elementary and Secondary School Emergency Relief (ESSER); and American Rescue Plan Act (ARPA) funds) allowed many school systems to address indoor air quality (IAQ) or energy efficiency measures without partaking in the GESPC process. Schools require optimal levels of humidity, oxygen, air circulation, lighting, and ventilation to sustain a healthy learning environment. The non-monetary benefits for completing energy efficiency projects in schools that crosscut with needs of the learning environment are often overlooked. The replacement of mechanical equipment and the addition of building automation helps to improve the IAQ and energy efficiency of the school. With enhanced IAQ, students and staff have healthier air which can enhance classroom productivity and assist with achieving higher test scores.⁶ During the COVID-19 pandemic, projects that addressed IAQ and the air change requirements within buildings were essential.

⁴ *GESPC-U training materials available at [Guaranteed Energy Savings Performance Contracts | NC DEQ](#)*

⁵ <http://spr.ly/6047MFFWL>

⁶ <https://www.epa.gov/iaq-schools>

Funding from the bipartisan Infrastructure Investments and Jobs Act (IIJA), Energy Efficiency and Conservation Block Grant (EECBG), could be used to supplement local government GESPCs to create opportunities for additional infrastructure investments in energy conservation measures. Overall, the funding could assist underserved public schools in Tier 1 and Tier 2 counties² to: (1) reduce energy consumption and costs; (2) improve the learning environments of schools; (3) create equitable opportunities for a just transition to clean energy; and (4) stimulate the economy by hiring local contractors and businesses to complete the energy efficiency upgrades. The SEO aims to work with local governmental units to provide additional guidance and technical assistance on how to layer, blend, braid, and bundle stimulus funds as part of a GESPC to maximize these funds and energy savings impacts.