2010 Utility Savings Initiative Annual Report

Citation of Law or Resolution:	GS: 143-64.12
Section Number:	Section J
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Receiving Entities:
The Joint Legislative Commission on Governmental Operations

Submitting Entity:
The North Carolina Energy Office in the Department of Commerce

2010 ANNUAL REPORT FOR THE UTILITY SAVINGS INITIATIVE PROGRAM

INTRODUCTION

§ 143-64.10. Findings; policy…

(6) That State government shall undertake a program to reduce the use of energy, water, and other utilities in State facilities and facilities of the State institutions of higher learning and equipment in those facilities in order to provide its citizens with an example of energy-use, water-use, and utility-use efficiency.

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

(a) The Department of Commerce through the State Energy Office shall 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 State agency and State institution of higher learning shall develop and implement a management plan that is consistent with the State's comprehensive program under this subsection to manage energy, water, and other utility use. The energy consumption per gross square foot for all State buildings in total shall be reduced by twenty percent (20%) by 2010 and thirty percent (30%) by 2015 based on energy consumption for the 2002-2003 fiscal year. Each State agency and State institution of higher learning shall update its management plan annually and include strategies for supporting the energy consumption reduction requirements under this subsection. Each community college shall submit to the State Energy Office an annual written report of utility consumption and costs.

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

(j) The State Energy Office shall submit a report by December 1 of each year to the Joint Legislative Commission on Governmental Operations describing the comprehensive program to manage energy, water, and other utility use for State agencies and State institutions of higher learning required by subsection (a) of this section. The report shall also contain the following:

(1) A comprehensive overview of how State agencies and State institutions of higher learning are managing energy, water, and other utility use and achieving efficiency gains.

(2) Any new measures that could be taken by State agencies and State institutions of higher learning to achieve greater efficiency gains, including any changes in general law that might be needed.

(3) A summary of the State agency and State institutions of higher learning management plans required by subsection (a) of this section and the energy audits required by subsection (b1) of this section.

(4) A list of the State agencies and State institutions of higher learning that did and did not submit management plans required by subsection (a) of this section and a list of the State agencies and State institutions of higher learning that received an energy audit.

(5) Any recommendations on how management plans can be better managed and implemented.

PROGRAM SUMMARY:

Since the Utility Savings Initiative was launched eight years ago. An investment of about $11 million has produced more than $325 million in saved tax dollars in the form of avoided utility costs. Energy consumption is down 12% while the utility costs have increased 38%. Water consumption has decreased 31% while costs have increased 80%. During the last fiscal year, the initiative saved taxpayers more than $55 million in avoided utility costs for public facilities and avoided emitting more than 164,886 metric tons of carbon dioxide into the atmosphere.

The agencies served by the program include state government agencies, University of North Carolina institutions, community colleges, public school systems, county and municipal governments. In the 2009-10 fiscal year energy use per square foot of space has been reduced by 12 percent and is estimated to continue to go down through 2015.

HISTORY OF THE PROGRAM:

The Utility Savings Initiative was created to coordinate state agencies and UNC system institutions in their efforts to mange and reduce energy consumption and cost. The initiative is managed by the North Carolina Energy Office. The services provided by the Energy Office are now available to all state agencies, UNC institutions, community colleges, public school systems, county and municipal governments. The services include: training, provided by both Energy Office staff and professional instructors; energy audits; funding for demonstration projects; and implementation projects.

In September 2001 The General Assembly enacted state law G.S. 143-64 requiring each state agency and university to develop and implement an energy management plan. In February 2002 The Governor's Commission to Promote Government Efficiency and Savings on State Spending was created. Flowing out of the work of the commission, in July 2002, the initiative was launched to fulfill the requirements established in G.S. 143-64. The Energy Office was designated by then Gov. Mike Easley to guide agencies in their efforts and to administer the program. Today a five-person staff assists implementation of the program.

PROGRAM STATUS:

Seventeen state agencies and 21 UNC institutions are required to submit an annual update to their strategic energy plan and their annual consumption and cost spreadsheet. Two state agencies, the Department of Juvenile Justice and Delinquency Prevention and the Department of Transportation, failed to submit their required reports. The Energy Office is currently working with these agencies to bring them into compliance. All UNC institutions submitted their reports. The table below lists participating agencies and institutions.

STATE AGENCIES	Plan	Use	UNC INSTITUTIONS	Plan	Use
JUVENILE JUSTICE & DELINQUENCY PREV.	**NO**	**NO**	UNC GENERAL ADMINISTRATION	yes	yes
AGRICULTURE AND CONSUMER SERVICES	yes	yes	UNC CHAPEL HILL	yes	yes
ADMINISTRATION GENERAL	yes	yes	NC STATE UNIVERSITY	yes	yes
DOT GENERAL	**NO**	**NO**	UNC GREENSBORO	yes	yes
DENR GENERAL	yes	yes	UNC CHARLOTTE	yes	yes
DHHS	yes	yes	UNC ASHEVILLE	yes	yes
CORRECTION GENERAL	yes	yes	UNC WILMINGTON	yes	yes
ABC Commission	yes	yes	EAST CAROLINA UNIVERSITY	yes	yes
CULTURAL RESOURCES GENERAL	yes	yes	NC A & T STATE UNIVERSITY	yes	yes
CRIME CONTROL & PUB. SAFETY GEN.	yes	yes	WESTERN CAROLINA UNIVERSITY	yes	yes
GOVERNOR'S OFFICE GENERAL	yes	yes	APPALACHIAN STATE UNIVERSITY	yes	yes
INFORMATION TECHNOLOGY SERVICES	yes	yes	UNC PEMBROKE	yes	yes
CRIMINAL JUSTICE TRAINING west	yes	yes	WINSTON-SALEM STATE UNIVERSITY	yes	yes
JUSTICE ACADEMY east	yes	yes	ELIZABETH CITY STATE UNIVERSITY	yes	yes
WILDLIFE RESOURCES	yes	yes	FAYETTEVILLE STATE UNIVERSITY	yes	yes
EMPLOYMENT SECURITY COMMISSION	yes	yes	NC CENTRAL UNIVERSITY	yes	yes
STATE PORTS AUTHORITY	yes	yes	NC SCHOOL OF THE ARTS	yes	yes
			UNC HOSPITALS	yes	yes
			NC SCHOOL OF MATH & SCIENCE	yes	yes
			UNC-TV	yes	yes
			ARBORETUM	yes	yes

The following energy, water and green house gas evaluations were performed on the data submitted by the Utility Savings Initiative participants since the start of the program.

	ENERGY EVALUATION					
	costs avoided	savings /gsf	savings/mmbtu	savings/mmbtu %change	btu/sf	btu/sf %change
2002-03		$2.01	$12.950		155,138	
2003-04	$26,676,955	$1.84	$13.615	5%	135,488	-13%
2004-05	$27,017,226	$1.96	$14.313	11%	137,035	-12%
2005-06	$34,952,090	$2.25	$16.539	28%	135,847	-12%
2006-07	$36,611,583	$2.18	$16.172	25%	134,781	-13%
2007-08	$50,167,492	$2.33	$17.776	37%	130,928	-16%
2008-09	$43,576,774	$2.43	$18.033	39%	134,858	-13%
2009-10	$38,599,852	$2.45	$17.933	38%	136,405	-12%
	$257,601,973			30% target	108,597	

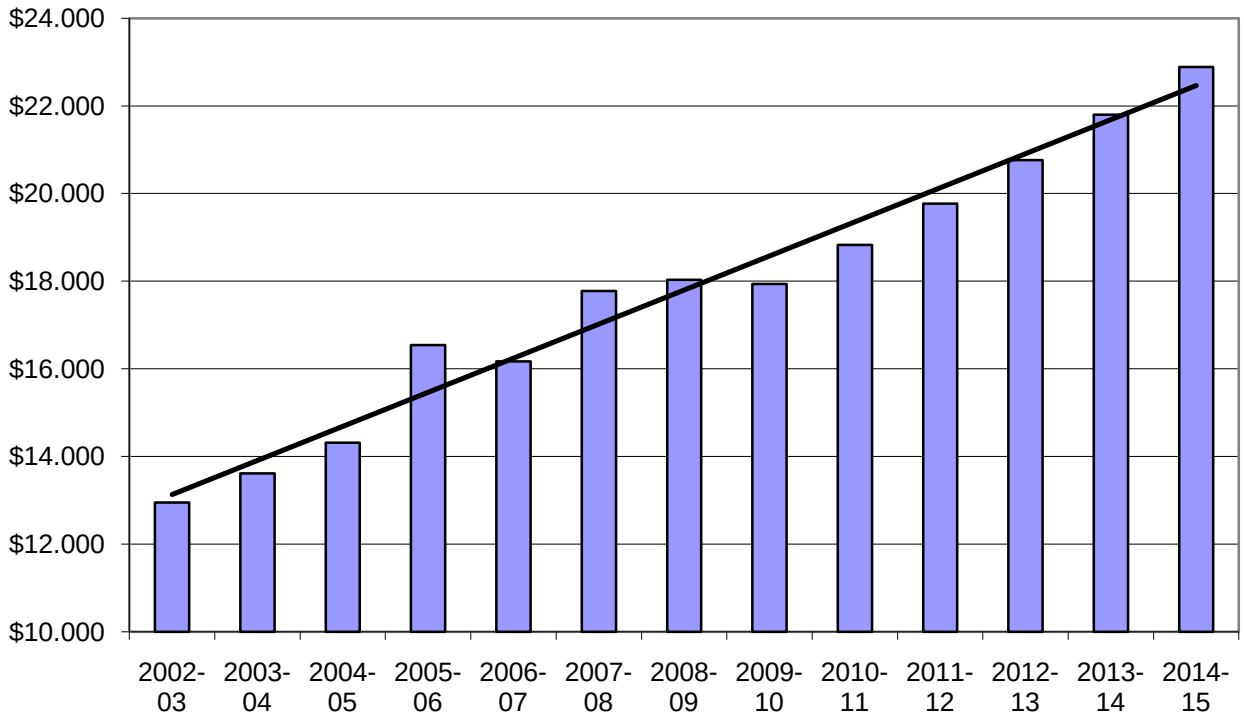
	WATER/SEWER EVALUATION				
	water costs avoided	savings/mgal	savings/mgal %change	gal/sf	gal/sf %change
2002-03		$4.74		54.53	
2003-04	$4,456,842	$5.17	9%	45.88	-16%
2004-05	$3,215,846	$5.08	7%	48.45	-11%
2005-06	$4,914,069	$5.25	11%	45.98	-16%
2006-07	$10,044,016	$6.67	41%	40.98	-25%
2007-08	$12,673,247	$7.08	49%	39.17	-28%
2008-09	$15,498,819	$7.74	63%	37.72	-31%
2009-10	$16,759,983	$8.54	80%	37.45	-31%
	$67,562,824				

$325,164,797 TOTAL COSTS AVOIDED

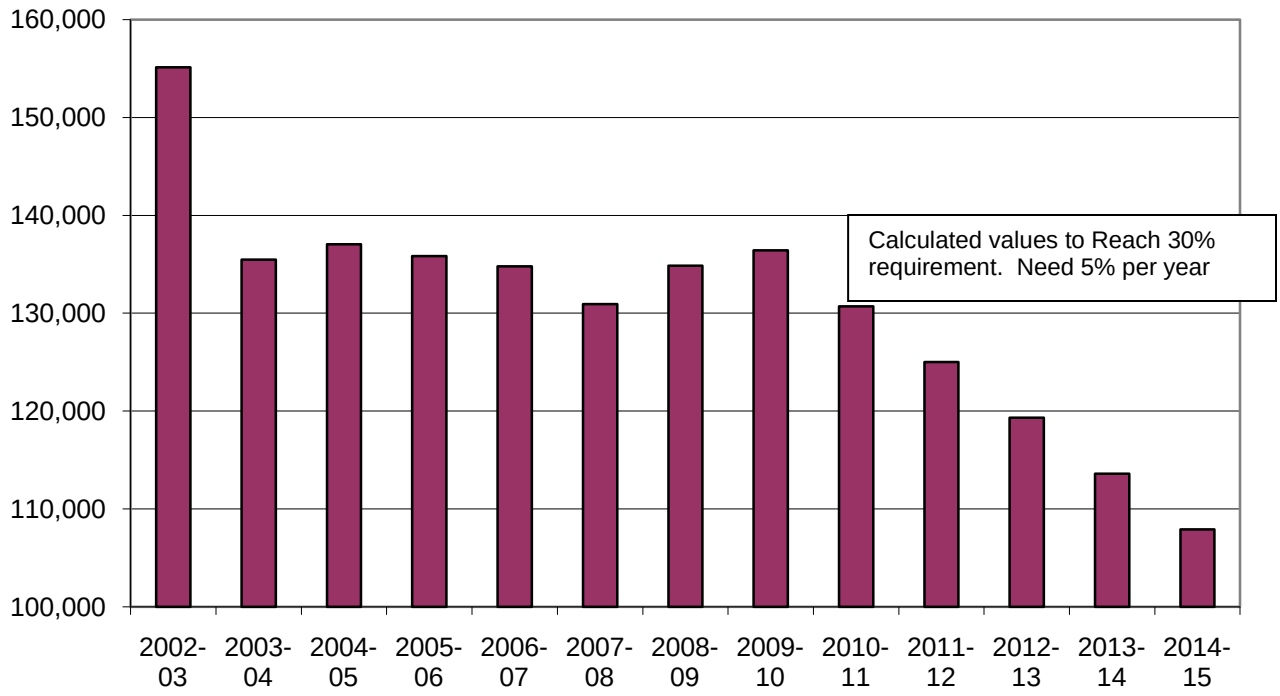
The $325 million was realized from an investment of approximately $11 million

	GREEN HOUSE GAS EVALUATION				
	Metric Tons Avoided	metric tons/ thousand sf	%change	CO2e Metric Tons	% change
2002-03		14.65		1,206,060	
2003-04	149,370	13.15	-10%	1,311,195	9%
2004-05	147,883	13.23	-10%	1,379,397	14%
2005-06	143,985	13.33	-9%	1,460,579	21%
2006-07	169,296	13.12	-10%	1,459,577	21%
2007-08	206,168	12.88	-12%	1,501,294	24%
2008-09	192,160	13.03	-11%	1,553,150	29%
2009-10	164,886	13.21	-10%	1,518,030	26%
	1,173,748	**Total Metric Tons CO2e Avoided**			

1,173,748 metric tons CO2e is equal to the emissions from 210,325 vehicles or 133,495 homes.



If we trend the first eight years of cost data through 2014-15 we can expect costs to rise from $12.95 per million Btu to $22.90 per million Btu a 77% increase due to increasing electric and natural gas prices.



In order to achieve an average Btu per square foot value of 108,597 which represents the required 30% reduction in energy consumption, we will need to see a five percent per year decrease in consumption.

Beginning with the 2007-08 fiscal year, community colleges were required to submit an annual energy consumption and cost report to the Energy Office. For the third straight year there has been 100% participation. While not required to submit strategic energy plans, 14 colleges have elected to submit an updated energy plan for 2010 – 2011. Below is the complete list of community colleges participating in the Utility Savings Initiative.

COMMUNITY COLLEGE	Plan	Use	COMMUNITY COLLEGE	Plan	Use
A-B Tech		yes	Wayne		yes
Caldwell		yes	Western Piedmont		yes
Cape Fear	yes	yes	Wilkes		yes
Catawba Valley		yes	Wilson		yes
Central Carolina		yes	Craven		yes
Central Piedmont		yes	Pamlico		yes
College of the Albemarle		yes	Tri-County		yes
Davidson		yes	Robeson	yes	yes
Durham Tech	yes	yes	South Piedmont		yes
Fayetteville Tech		yes	Bladen	yes	yes
Forsyth Tech		yes	Carteret		yes

Gaston	yes	yes	Cleveland		yes
Guilford Tech	yes	yes	Edgecombe		yes
Southwestern	yes	yes	Halifax	yes	yes
James Sprunt		yes	Haywood		yes
Isothermal		yes	Martin		yes
Lenoir	yes	yes	McDowell Tech		yes
Coastal Carolina		yes	Montgomery		yes
Pitt	yes	yes	Nash		yes
Randolph	yes	yes	Roanoke-Chowan		yes
Richmond		yes	Sampson		yes
Rockingham		yes	Blue Ridge		yes
Rowan-Cabarrus		yes	Johnston		yes
Sandhills		yes	Piedmont	yes	yes
Southeastern	yes	yes	Vance-Granville		yes
Surry		yes	Mayland		yes
Alamance		yes	Stanly		yes
Wake Tech		yes	Mitchell		yes
Beaufort		yes	Brunswick	yes	yes

SECTOR DETAILS:

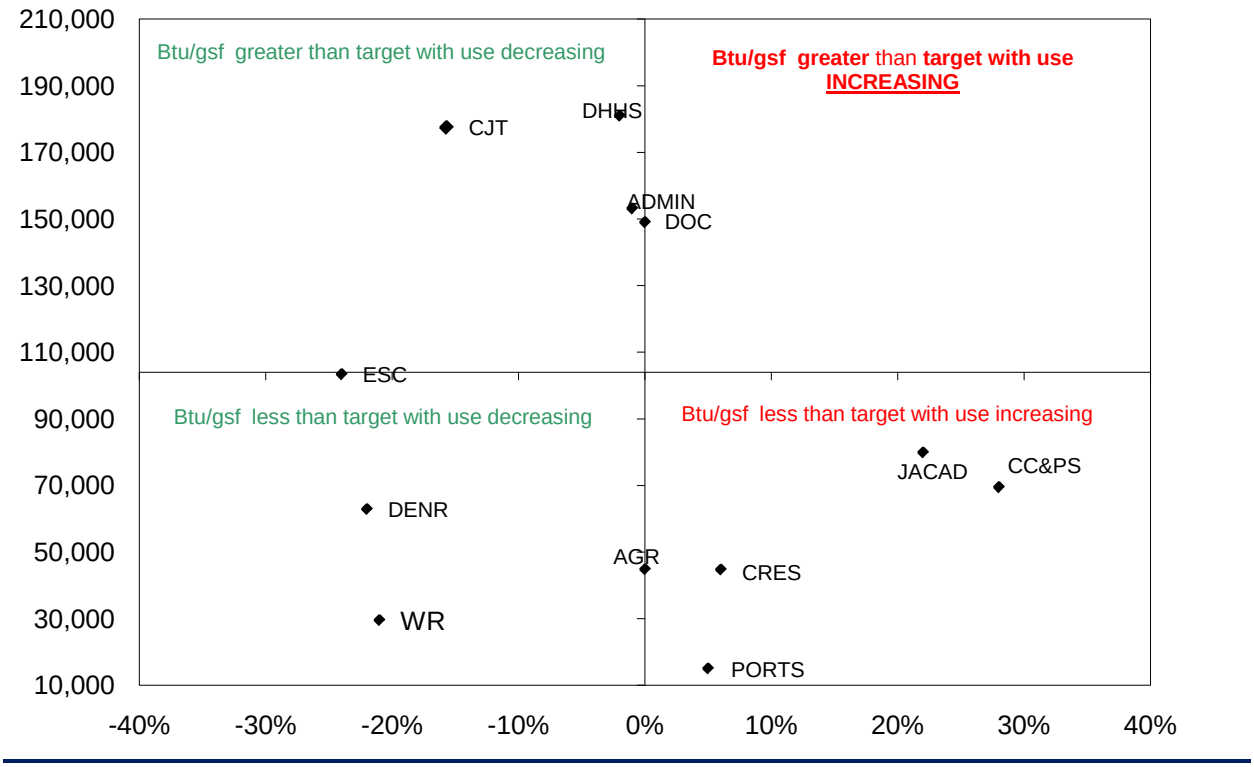
State Agencies

Seventeen state agencies participate in the Utility Savings Initiative program. The Department of Environment and Natural Resources submits a departmental level plan and consumption report. The N.C. Zoo and the three aquariums have also been submitting their consumption reports and plans independently. The Department of Health and Human Services submits consumption reports for the individual facilities as well as a summary report.

American Recovery and Reinvestment Act energy-related funds were made available to state agencies through the N.C. Energy Office. Seven agencies applied for grants and of that number all seven received funding totaling $4.6 million and leveraging an additional $660 thousand.

The state agencies will be concentrating on implementing their ARRA projects and properly documenting energy reductions.

STATE AGENCY Btu/gsf and % REDUCTION



Information Technology Services values do not plot within chart. Their Btu per gsf = 369,310 which is a 35% increase from the baseline year.

Agency Name and Abbreviation

ADMINISTRATION	ADMIN
AGRICULTURE	AGR
CRIME CONTROL & PUBLIC SAFETY	CC&PS
CULTURAL RESOURCES	CRES
DEPARTMENT OF CORRECTION	DOC
TRANSPORTATION	DOT
HEALTH AND HUMAN SERVICES	DHHS

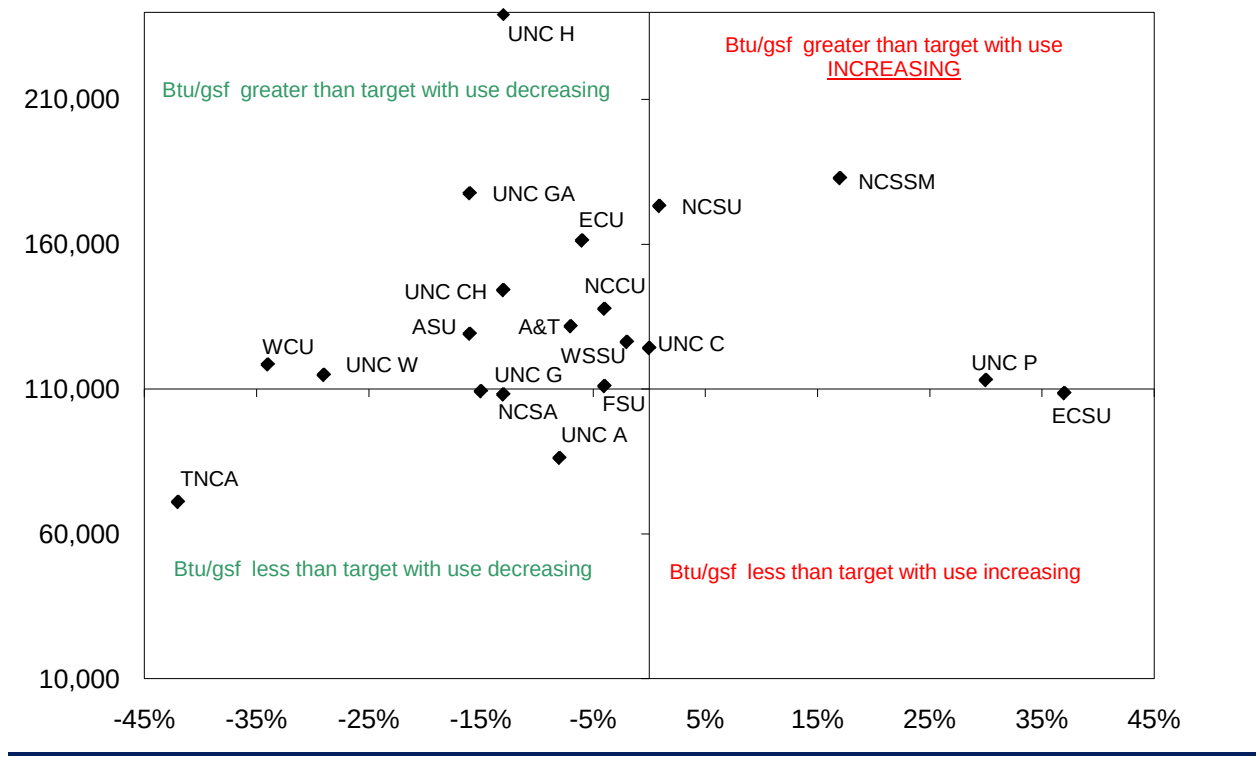
EMPLOYMENT SECURITY COMMISSION	ESC
INFORMATION TECHNOLOGY SERVICES	ITS
JUSTICE ACADEMY west	CJT
JUSTICE ACADEMY east	JACAD
STATE PORTS AUTHORITY	PORTS
DENR	DENR
WILDLIFE RESOURCES	WR

University of North Carolina Institutions

Twenty one University of North Carolina institutions participate in the Utility Savings Initiative program. The 21 institutions include the 16 university campuses, UNC Hospital, UNC General Administration, the School of Science and Mathematics, UNC TV and the N.C. Arboretum.

American Recovery and Reinvestment Act funds were made available to all UNC institutions. Fifteen institutions applied for grants and of that number all fifteen received funding totaling $7.4 million and leveraging an additional $1.8 million.

The UNC institutions will use the coming year to focus on implementing their ARRA projects and properly documenting energy reductions. This is critical for the institutions since the passage of SL2010-196. Nine universities are also working through the process to implement performance contracts.



UNC TV values do not plot within chart. Their Btu per gsf = 528,315 which is a **46% decrease** from the baseline year. This decrease was made possible by their transition to digital broadcasting.

Institution Name and Abbreviation

UNC GENERAL ADMINISTRATION	UNC GA
UNC CHAPEL HILL	UNC CH
NC STATE UNIVERSITY	NCSU
UNC GREENSBORO	UNC G
UNC CHARLOTTE	UNC C
UNC ASHEVILLE	UNC A
UNC WILMINGTON	UNC W
EAST CAROLINA UNIVERSITY	ECU
A & T STATE UNIVERSITY	A&T
WESTERN CAROLINA UNIVERSITY	WCU
APPALACHIAN STATE UNIVERSITY	ASU
UNC PEMBROKE	UNC P
WINSTON-SALEM STATE UNIVERSITY	WSSU
ELIZABETH CITY STATE UNIVERSITY	ECSU
FAYETTEVILLE STATE	FSU
NC CENTRAL UNIVERSITY	NCCU
NC SCHOOL OF THE ARTS	NCSA
UNC HOSPITAL	UNC H
NC SCHOOL OF SCIENCE & MATH	NCSSM
THE NC ARBORETUM	TNCA

Community Colleges

Since the 2007-08 fiscal year community colleges have been required to report their energy consumption and cost to the Energy Office. For all three years there has been 100% participation. Forty one community colleges applied for federal Recovery Act grants and of that number 25 (61%) received funding totaling $4.1 million and leveraging an additional $1.9 million. All 41 colleges submitted energy plans and consumption reports in order to be considered for a grant.

K-12 Public Schools

There are 115 school districts in the state. While the public schools have no statutory requirements under the Utility Savings Initiative program, all Energy Office services are available to assist them with managing utility consumption and costs. Fifty five school districts applied for federal Recovery Act grants and 33 (60%) received funding totaling $4.9 million leveraging $3.2 million. All 55 districts submitted energy plans and consumption reports to be considered for a grant.

County Governments

County governments have no statutory requirements under the Utility Savings Initiative program. All Energy Office services are available to counties to assist them in managing utility consumption and costs. Ten counties received direct federal Recovery Act funding through the Energy Efficiency and Conservation Block Grant program. Of the remaining 90 counties, 52 applied for Recovery Act grants and 28 (54%) received funding totaling $3.8 million leveraging $1.8 million. All 52 counties submitted energy plans and consumption reports to be considered for a grant.

Municipal Governments

As with other county governments, municipal governments have no statutory requirements under the Utility Savings Initiative. All Energy Office services are available to the municipalities to assist them with managing utility consumption and costs. Cities with a population greater than 35,000 received direct federal Recovery Act funding through the Energy Efficiency and Conservation Block Grant program. Twenty two cities qualified for these funds. Of the remaining 530 municipalities, 90 applied for Recovery Act grants and 46 (51%) received funding totaling $5.2 million leveraging $4.0 million. All 90 municipalities submitted energy plans and consumption reports to be considered for a grant.

RECOMMENDATIONS:

The Utility Savings Initiative Strategic Energy Plan lays out strategies and specific tactics to be employed to accomplish our goals over the next year and five years.

Session Law 2010-196 allows UNC institutions to keep the documented energy savings if there is a credit balance in their utility account. This provides a method to reinvest energy savings in future projects and it should be expanded to include all state agencies. In addition, some clarifications would be helpful:

1. How long will the savings be tracked for inclusion in the calculations?
    a. Recommend five years for all but performance contracts
    b. Performance contract savings should be tracked for duration of contract term
2. How long savings may be accrued before spending?
    a. Recommend at least 2 years no more than 5 years
3. Will receipt funded buildings be included in the program?
    a. Recommend they be included

§ 143-64.17. Definitions.

As used in this Part:

(5) "Qualified provider" means a person or business experienced in the design, implementation, and installation of energy conservation measures (AND ADD THE FOLLOWING: who is pre-qualified by the North Carolina Energy Office.)

§ 143-64.17B. Guaranteed energy savings contracts.

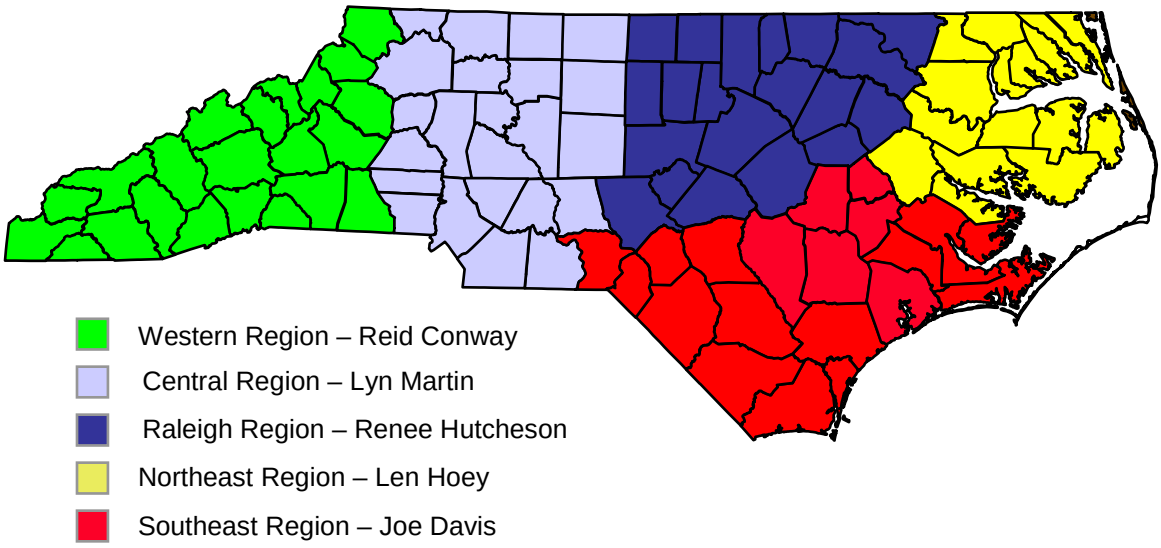
(c) A qualified provider entering into a guaranteed energy savings contract under this Part shall provide security to the governmental unit in the form acceptable to the Office of the State Treasurer and in an amount equal to one hundred percent (100%) of the total cost of the guaranteed energy savings contract to assure the provider's faithful performance. Any bonds required by this subsection shall be subject to the provisions of Article 3 of Chapter 44A of the General Statutes. If the

savings resulting from a guaranteed energy savings contract are not as great as projected under the contract and all required shortfall payments to the governmental unit have not been made, the governmental unit may terminate the contract without incurring any additional obligation to the qualified provider. (ADD THE FOLLOWING: The qualified provider shal pay a fee to the State Energy Office in an amount equal to 1.5% of the amount financed not to exceed $150,000 per contract.)

(g) In the case of a (DELETE AND CHANGE THE FOLLOWING: ~~State governmental unit~~, governmental unit,) a qualified provider shall provide an annual reconciliation statement based upon the results of the measurement and verification review. (ADD THE FOLLOWING: A process of annual third party measurement and verification of the reconciliation report shall be performed. The cost of this process shall be included in the total cost of the contract.) The statement shall disclose any shortfalls or surplus between guaranteed energy and operational savings specified in the guaranteed energy savings contract and actual, not stipulated, energy and operational savings incurred during a given guarantee year. The guarantee year shall consist of a 12-month term commencing from the time that the energy conservation measures become fully operational. A qualified provider shall pay the (DELETE AND CHANGE THE FOLLOWING: ~~State governmental unit~~, governmental unit) any shortfall in the guaranteed energy and operational savings after the total year savings have been determined. A surplus in any one year shall not be carried forward or applied to a shortfall in any other year.

UTILITY SAVINGS INITIATIVE STAFF BIOS:

The Utility Savings Initiative program is organized around providing services with regional staffing as indicated in the map below.



- **Len Hoey** is the Engineering/Architect Manager for the Energy Office and manages the Utility Savings Initiative, a statewide lead-by-example program to reduce energy consumption and costs in public facilities. Since the program's inception in 2002, the state has avoided more than $300 million in costs through efficiency efforts. The USI program now supports all public

sector units including community colleges, K-12 public schools, county and local municipal governments. Len also oversees support for Performance Contracting for the public sector. Len came to the State Energy Office from North Carolina State University's Energy Management Office where he served as the energy conservation coordinator. Prior to his service with the State of North Carolina, Len gained a background in plant engineering in the textile industry and spent 25 years holding numerous technical and senior management positions in industry.

- **Reid Conway** is the Energy Manager for the Western Office located in Asheville, overseeing the Utility Saving Initiative and performance contracting. He is a licensed Commercial HVAC contractor with 25 years experience. Most recently, he was a licensed Code Enforcement Officer for North Carolina, qualified to inspect residential and commercial buildings in all four trades (i.e. Building, Electrical, Plumbing and HVAC). Prior to that he spent almost 20 years working for Cobb Energy, an electric utility, where he performed various duties involving energy audits, surge protection, substation switching and load management. His background also includes energy auditing, mechanical contracting, facility maintenance and electric metering. His Bachelor's Degree is in Business Administration from Mercer University in Atlanta, Ga.

- **Renee Hutcheson** is the Energy Architect for USI and serves the Raleigh region.. Renee is the first architect to be employed by the office. Renee's 23 year career in architecture has focused on energy efficiency, high performance buildings, and green building practices. Prior to her work with the Energy Office, she was a Senior Associate Architect with Small Kane Architects. She is a LEED 2.0 Accredited Professional and has a master's degree in Architecture from Virginia Tech and a master's degree in Education from Marycrest College. She completed her BA degree in Education at the University of Florida. Renee will work out of the Raleigh office.

- **Joe Davis** is the Energy Field Engineer serving the southeastern region. Joe brings more than 20 years of energy experience to the team. He has provided technical assistance to the NC Energy Office and the US Department of Energy through Engineers on Demand, a company that he founded. Prior to setting out on his own, he served as a Senior Specialist with the NCSU Industrial Extension Service for 13 years and was employed as an Engineer with IBM for 17 years. He has a Ph.D in Industrial Engineering from North Carolina State University where he also completed his undergraduate and master's degree work in Mechanical and Industrial Engineering. He'll be based out of Wilmington and will serve the Southeastern portion of the state.

- **Lyn Martin** is the Energy Field Engineer serving the central region. Lyn brings more than 26 years of energy experience to the team. He has extensive experience in all phases of project management; energy procurement; economic analysis and strategic planning; and team building. He will be based out of Triad area and will serve the Central portion of the state.

STRATEGIC ENERGY MANAGEMENT PLAN FOR THE UTILITY SAVINGS INITIATIVE PROGRAM

OVERVIEW:

§ 143-64.10. Findings; policy…

(6) That State government shall undertake a program to reduce the use of energy, water, and other utilities in State facilities and facilities of the State institutions of higher learning and equipment in those facilities in order to provide its citizens with an example of energy-use, water-use, and utility-use efficiency.

The Utility Savings Initiative (USI) was the program created to coordinate and support the activities of the state agencies and UNC system institutions to mange and reduce energy consumption and cost. Our services are now available to all public sectors: state agencies, UNC institutions, community colleges, K-12 public schools, county and municipal governments. Our services include training, provided by both USI staff and professional instructors, energy audits, funding for demonstration projects and limited implementation projects.

The USI program also has responsibility for overseeing Performance Contracting when entered into by state agencies or UNC institutions (see table II for status). Performance Contracting provides an effective means to design, build and fund energy efficiency projects in the public sector. In 2009 **§ 143-64.17G.** was modified such that a local governmental unit that enters into a guaranteed energy savings contract must report the contract and the terms of the contract to the State Energy Office. This change provides consistency in the review process for all governmental units desiring to enter into a performance contract.

PURPOSE:

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

(a) The Department of Commerce through the State Energy Office shall 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 State agency and State institution of higher learning shall develop and implement a management plan that is consistent with the State's comprehensive program under this subsection to manage energy, water, and other utility use. The energy consumption per gross square foot for all State buildings in total shall be reduced by twenty percent (20%) by 2010 and thirty percent (30%) by 2015 based on energy consumption for the 2002-2003 fiscal year. Each State agency and State institution of higher learning shall update its management plan annually and include strategies for supporting the energy consumption reduction requirements under this subsection. Each community college shall submit to the State Energy Office an annual written report of utility consumption and costs.

The statute referenced above clearly defines the purpose of the USI program. The key performance indicators in Table I are used to track the program's performance in reaching the statutory requirements.

KEY PERFORMANCE INDICATORS

	energy evaluation						water/sewer evaluation				
year	energy $ avoided	energy $/gsf	$/mmBtu	$/mmBtu %change	Btu/gsf	Btu/gsf %change	water $ avoided	$/mgal	$/mgal %change	gal/sf	gal/gsf %change
2002-03		$2.01	$12.950		155,138			$4.74		54.53	
2003-04	$26,676,955	$1.84	$13.615	5%	135,488	-13%	$4,456,842	$5.17	9%	45.88	-16%
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2010-11	$0	$0.00	$0.000	0%	0	0%	$0	$0.00	0%	0.00	0%
2011-12	$0	$0.00	$0.000	0%	0	0%	$0	$0.00	0%	0.00	0%
2012-13	$0	$0.00	$0.000	0%	0	0%	$0	$0.00	0%	0.00	0%
2013-14	$0	$0.00	$0.000	0%	0	0%	$0	$0.00	0%	0.00	0%
2014-15	$0	$0.00	$0.000	0%	0	0%	$0	$0.00	0%	0.00	0%
	$257,601,973						$67,562,824				
$325,164,797	TOTAL UTILITY $ AVOIDED				108,597	-30% target					

TABLE I

Legend:
gsf = gross square feet (building size)
Btu = British thermal unit (standard unit of energy)
mmBtu = millions of Btus
mgal = thousands of gallons
energy $ avoided = (year 03 btu/sf – current year btu/sf) * $/mmbtu *gsf

Notes:

- For an approximate investment of $11 million over the eight years the program has been in place we have achieved in excess of $325 million in avoided utility costs.

The table below shows the status of all performance contracts in process and complete.

Agency	Estimated Project $	Actual Project $	Project Status	Vendor
DOA Museum of Art		$4,966,763	Third guarantee year complete	Trane
DOA downtown complex		$21,436,007	Second guarantee year complete	Pepco
UNC Greensboro		$5,808,994	Second guarantee year complete	Trane
Appalachian State University		$5,430,596	Construction 90% complete	Pepco
NC State University		$19,700,703	Construction 45% complete	Schnieder
UNC Wilmington		$4,542,387	Construction 45% complete	Trane
Department of Correction	$14,920,040		ESA being negotiated	Noresco
NC Central University	$6,700,000		IGA complete	Chevron
NC State University (Cogen)	$58,000,000		IGA complete	Ameresco
Western Carolina University	$5,100,000		IGA in process	Con Ed
UNC Asheville	$3,458,505		IGA in process	Ameresco
Elizabeth City State University	$4,666,641		IGA in process	Honeywell
UNC Pembroke	$3,342,630		IGA in process	Siemens
UNC Charlotte	$10,000,000		IGA in process	Ameresco
Winston Salem State University	$2,916,602		IGA in process	Siemens
Depatment of Transportation	$9,766,628		Application approved	
Fayetteville State University	$2,051,454		Application approved	
Sub-Totals	$120,922,500	$61,885,450		
Total potential investment	**$182,807,950**			

ESA = Energy Services Agreement
IGA = Investment Grade Audit

TABLE II

Note: Table II represents only state agency and UNC projects. The USI team is assisting 20 local government units with their performance contracts.

KEY FOCUS AREAS OF THE PLAN:

1) Communication and Training:
    a. A core component of the USI program's success has been our ability to provide relevant training to the participants. This training includes the Energy Management Diploma series, Strategic Energy Plan creation and one day technical classes on specific building systems. The USI team routinely participates as invited speakers at conferences and workshops that target our program participants.

2) Outreach:
    a. Build Partnerships – key partnerships have been forged and must continue to be strengthened with the State Construction Office (SCO), UNC General Administration (UNC GA) and the NC Community College System (NCCCS) office. As we continue to provide additional services into the other local government sectors much stronger relationships must be built with the Department of Public Instruction (DPI), the NC Association of County Commissioners (NCACC) and the NC League of Municipalities (NCLM). The Office has successfully worked with utility providers leveraging their incentives with ARRA funds to provide increased project scope to our USI grant recipients.

    b. Support Participants – periodic site visits will remain the cornerstone of our support to USI participants. Using all of the consumption reports and energy plans submitted with the ARRA grant requests we will help identify resources those entities may access to identify additional projects and implement projects in a cost effective manner.

3) Effectively Allocate Resources – for the next two years the USI team will be actively engaged in overseeing ARRA projects. We will ensure energy savings are properly documented, that work is performed according to the scope of work in the project request and conduct a final inspection of the project at the time of completion. Team members will be available to provide participants technical assistance with audits and project reviews, preparing and delivering presentations to participant stakeholders.

4) Performance Contracting – the team will provide assistance and guidance for USI participants through the entire contract process. Performance contracting is a method of financing, designing and building major projects that have a return on investment in utility costs avoided. It provides a means by which obsolete and inefficient equipment may be replaced using the utility savings to pay for the project.

Focus Area 1: Communication and Training	
Strategy 1.	Respond to requests to participate as speakers in USI related workshops and conferences, conduct energy plan training sessions, actively participate in SEO annual conference by conducting a track specifically for USI participants
Strategy 2.	As resources allow continue to offer EMD classes and one day technical workshops
Strategy 3.	Data review, analysis and reporting of energy consumption and energy plan information submitted by partners and as required by statute
Strategy 4.	Provide USI partners with the skills necessary to identify and implement energy efficiency measures.

2010-2011 Activities	Measurement Expected	Measurement Actual	Investment	Assigned to	Funding Source
Conduct 2 EMD training sessions	75 participants		$133,105	Len Hoey	ARRA
Conduct 3 workshops on creating an energy plan	60 participants		Staff time	Len Hoey / USI team	Appropriated funds (salary)
Develop USI track for annual conference	10-12 sessions		Staff time	Renee Hutcheson / USI team	Appropriated funds (salary)
Create regional USI user groups	4 groups		Staff time	Joe Davis / Reid Conway	Appropriated funds (salary)
Maintain key databases tracking USI performance			Staff time	Len Hoey	Appropriated funds (salary)

Focus Area 2: Outreach	
Strategy 1.	Maintain and strengthen partnerships with SCO, UNC GA and NCCCS
Strategy 2.	Develop effective partnerships with DPI, NCACC and NCLM
Strategy 3.	Build on utility company relationships developed in response to leveraging ARRA funds with utility incentives
Strategy 4.	Provide onsite assistance to the 100 current active participants and the 200 potential participants indentified during the ARRA grant application process

2010-2011 Activities	**Measurement**		**Investment**	**Assigned to**	**Funding Source**
	Expected	**Actual**			
Develop mechanisms with SCO – Facility Condition Assessment Program teams and design groups to meet statutory energy audit requirements	Bi-monthly meetings		Staff time	Len Hoey / Renee Hutcheson	Appropriated funds (salary)
Coordinate assistance to university institutions and community colleges through UNC GA and NCCCS (energy manager on loan program)	Up to 40 managers		Staff time	Len Hoey / Richard Self	ARRA
Establish efficient communications between USI, county and municipal governments	150 potential entities		Staff time	Richard Self	Appropriated (salary) and ARRA funds
Working group has been established for K-12 and community colleges consisting of Advanced Energy, DPI, NCCCS, the utility providers and USI	50 education units		Staff time	Len Hoey	Appropriated (salary) and ARRA funds
Targeted technical assistance provided through site visits, energy assessments and implementation assistance through the effective deployment of the resources available to the program	300 site visits		Staff time	USI team	Appropriated funds (salary)

Focus Area 3: Resource Allocation	
Strategy 1.	Effective deployment and implementation of ARRA funding
Strategy 2.	Provide USI participants with assistance in implementing energy efficiency projects and identifying additional projects
Strategy 3.	Keep informed of grant opportunities that are applicable to USI participants

2010-2011 Activities	Measurement Expected	Measurement Actual	Investment	Assigned to	Funding Source
Provide project management for ARRA grant projects in public sector	154 approved projects		Staff time	USI team	ARRA funds
Perform project evaluations for non-funded ARRA grant applications and determine alternative implementation means	106 identified projects		Staff time	USI team	ARRA
Work with grant administrator to identify potential appropriate grants	TBD		Staff time	Len Hoey / Kathy Walters	Appropriated funds (salary)

Focus Area 4: Performance Contracting	
Strategy 1.	Work with the Energy Services Coalition (ESC) to educate potential participants as to the process, benefits and potential pitfalls of PC
Strategy 2.	Review and edit primary PC documents for use in the specific sectors that are eligible to participate
Strategy 3.	Provide technical assistance to participants as needed to ensure all statutory requirements are met and the process moves efficiently
Strategy 4.	Re-certify ESCOs that wish to remain a part of the program, certify additional companies that wish to provide services.

2010-2011 Activities	Measurement Expected	Actual	Investment	Assigned to	Funding Source
Remain active in ESC activities	12 meetings		Staff time	Len Hoey / Richard Self	Appropriated funds (salary)
Train new USI team members on the PC process and technical requirements	4 team members		Staff time	Len Hoey / Richard Self	Appropriated funds (salary)
Review and edit PC documents	3 docs		Staff time	Len Hoey / Richard Self / Carolyn Bachl	Appropriated (salary) and ARRA funds
Provide technical assistance to PC projects	20 projects in process		Staff time	USI team	Appropriated funds (salary)
Review necessary documents for certification and re-certification of ESCOs	14 pre-certified		Staff time	Evaluation team	Appropriated funds (salary)