



Our Environment

Introduction: North Carolina Central University is committed to promoting and implementing long-term sustainability best practices in its policies, procedures, and actions as a good steward of the taxpayer's money and in support of a better physical and academic environment for our students, faculty, staff, and society.

As the cost of energy continues to increase, the importance of designing new facilities and upgrading older facilities to reduce their operational costs is vital to the University's fiscal well being, and for maintaining future growth as outlined in our Master Plan. Updated design standards are being implemented in all new construction so that we can minimize future costs and improve the working environment at the University.

These policies also provide leadership for our students and staff in promoting environmental awareness and best practices that improve the environment of the University and society as a whole. An important focus of the mission of North Carolina Central University has always been to prepare our students academically and professionally as leaders not only in their chosen professions, but also in advancing social responsibility in an increasing diverse global society. Being environmentally responsible is now a vital aspect of acting in a socially responsible manner. It is our hope that by implementing long-term sustainability best practices, we will help nurture one of our core values.

1. **Existing programs:** North Carolina Central University is implementing several programs that will help control the cost of operating the University and improve the working environment for our staff as part of our long-term sustainability efforts.

- a. **Purchase of fuel efficient vehicles**

As part of the Clean Fuel Advanced Technology Project (CFAT), the University was awarded \$39,940 for the purchase of three (3) Neighborhood Electric Vehicles (NEV). Using these vehicles will help to reduce carbon emissions on campus and promote the use of environmentally friendly vehicles. As funds become available, Facilities Services is committed to replacing most vehicles used on campus with ones that are electrically powered.

b. Wells

In order to reduce the amount of water that the University must purchase, we are installing four (4) wells on campus for watering the campus' landscapes. As the cost of purchasing water from the City of Durham increases, this will help us to reduce costs, and maintain a better campus environment. At one point during the last year, the City of Durham found itself with only a 40 day supply of water, and prohibited the watering of lawns and plants. We want to ensure that we can maintain the campus' significant investment in landscaping should this situation reoccur.

c. Recycling

A recycling program is in place, and it is being expanded throughout all buildings on campus. Its goal is to promote environmental awareness on campus, and is promoting student involvement, good practices, and energy reduction efforts on campus.

d. Improved campus-wide design standards

Facilities Management is working with the design firm of Lord, Acer, & Sargent to improve and better standardize building design standards for all new buildings on campus. Also, as part of the design process for the new School of Nursing building, the engineering staff of Facilities Management and the staff of Facilities Services are updating our building construction standards to improve sustainability (lower maintenance costs) and minimize energy costs.

e. Performance Contracting

NCCU is reviewing a full range of energy services and energy-related capital improvements financed through a guaranteed energy savings contract at no capital cost. Performance Contracts are being evaluated for fuel saving measures, water efficiency measures, load shifting and energy reeducation through installation or retrofit of equipment, and/or modification of operating procedures. The University is in the process of implementing a performance contract for the Mary Townes Science Complex to help reduce the energy consumption of this vital facility.

f. Power and water conservation measures

Water saving devices are being installed in faucets, showers, and toilets throughout campus in order to reduce the cost of water consumption, and promote environmentally friendly practices among the staff and students.

g. New steam infrastructure

A new underground steam infrastructure is currently being installed throughout the University. This will replace an old system that has suffered from corrosion and loss of steam and water. A newer system will reduce our energy and water consumption, and provide for a more reliable delivery of heat and hot water to campus facilities.

2. **New programs:** To build on the University's current efforts at sustainability and improving the environment, the following programs are being implemented or are planned for the near future.

a. Sustainability Officer

This position will be appointed at the administrative level, and will work to support the Sustainability Committee and in coordinating sustainability efforts on campus.

b. Sustainability Committee

A Sustainability Committee will be appointed from different branches of the University to recommend projects and initiatives to the Chancellor.

c. Sub-metering of all facilities

The staff of Facilities Management staff is working with Duke Energy to install a sub-metering system throughout the University to measure electrical energy consumption in each building on campus. By measuring energy consumption at the building level, we can better focus energy conservation and reduction efforts. This system can also be expanded to measure water, gas, and steam consumption. This system will allow us to electronically post the amount of energy consumption per building and track its history. This information will be used to promote energy awareness among the students, faculty, and staff.

d. R&R projects

By using information gained from the sub-metering of energy consumption on campus, we can better focus energy conservation measures as part of our R&R planning process. Also, sustainability best practices will be implemented during all R&R projects to reduce energy consumption and improve sustainability.

e. New construction

New construction at North Carolina Central University as outlined in the University's Master Plan will benefit from the new construction and design standards that are currently being updated by Facilities Management staff in coordination with the design firm of Lord, Acer, & Sargent. A primary focus of these standards will be to promote sustainability by reducing the operating costs associated with energy and maintenance. Also, per the US Green Building Council and recent NC legislation, all new buildings will be designed and built to at least a LEED certification level of silver, and many LEED design features will be incorporated in all renovated buildings.