

This policy covers the following:

- New construction and major renovations
- Minor renovations
- Maintenance of existing buildings

Resource Conservation in the Built Environment

Wake Forest University's guiding principle for sustainability in the built environment directs us to construct, renovate, and operate the built environment with high standards of efficiency in energy, water, and materials intensity in a way that minimizes impacts on local ecosystems and supports human wellbeing.

New Construction and Major Renovations

All new construction and major renovations on campus will be designed and built to a minimum of USGBC LEED Silver standards.

Building Renewal

In addition to our goal of designing all new construction to minimum LEED-Silver standards, we are also committed to ongoing resource efficiency improvements in existing buildings. The Facilities & Campus Services division prioritizes buildings and building systems based on a master Facilities Condition Assessment which has been completed at the individual building and system levels. The Maintenance and Utilities department analyzes the data and relates it to use, criticality, future renewal, and energy intensity to determine which systems and/or utilities are viable candidates for capital resources. These dollars, along with available operating funds and occasional utility dollars, are allocated to beneficial energy and sustainability projects.

When possible, buildings are retro-commissioned to ensure that they are performing as designed. Buildings that were designed and built in the 1950's, like most on the Wake Forest campus, were not designed to meet even the basic performance standards required of new construction today. A re-commissioning process, therefore, helps inform the possibilities for improvements and replacements of building systems.

Maintenance of Existing Buildings

Improvements in the operation and maintenance of our buildings are sometimes the most effective use of resources. Sustainable practices in the following areas decrease the environmental footprint of each building, and our campus as a whole, while decreasing operational costs over time and increasing the health and wellbeing of building occupants.

Impacts on the surrounding site:

- Alternative transportation programs including ridesharing and campus shuttles
- Tree Care Plan

Energy consumption:

- Maintenance practices, including installation of energy efficient lighting and lighting controls
- Implementation of set operating hours
- Temperature setbacks during regular unoccupied periods
- Winter Break setback program – to 55 degrees
- Renewal investments where feasible, e.g.:
 - Chemistry Department – demand-based ventilation, heat reclamation, and updated controls
 - Biology Building – air handling unit replacements to renew systems, upgrade controls, and improve efficiency & comfort
- Retro-commissioning - pilot program
- Upgrades to building automation system (BAS) & preventive maintenance (PM) programs
- Electrical sub-metering
- Steam plant controls upgrades

Usage of environmentally preferable materials:

- Improved procurement policies
- Creation of a Waste Reduction & Recycling Manager position
- Certified environmentally preferred cleaning supplies

Indoor environmental quality:

- Facilities & Campus Services works to keep indoor air at the highest quality through comprehensive preventative program and monitoring of key building systems via our BAS Systems. We have created a Building Systems Manager role with staff to support continuous improvement across all the key MEP systems.
- Customers are encouraged to contact facilities concerning any building related complaints. They can do this by contacting our Customer Service Center and entering work orders into our work order system. These work orders are monitored and the appropriate facilities staff are dispatched to assess the situation and make repairs as needed. Our EHS Department would also be contacted to help assist with issues as needed.
- Building mechanical rooms are checked regularly to ensure that air handling systems are performing properly.
- Indoor air quality (IAQ) sampling is performed internally in several higher risk buildings through a real time Aircurity air monitoring system. Other buildings use CO2 sensors and if escalated, issues are further investigated in conjunction with EHS and a 3rd party consultant may be used. Any issues discovered are documented through the WO & EMS systems.
- We meet regularly with our major customers to review any facilities related issues.
- Campus-wide smoke-free policy
- Certified environmentally friendly cleaning supplies and cleaning methodology based on the industry best practices team cleaning model.

Water consumption:

- Water sub-metering program
- Standards for reduced flow fixtures set for new buildings and modernizations
- Cooling tower water management via conductivity meters

Responsible Party

The responsible parties for this plan are the Wake Forest University (WFU) Facilities & Campus Services division offices of Design and Construction and Maintenance and Utilities. WFU is responsible for ensuring that this plan is executed and that any contracted vendors under WFU's control are aware of the procedures outlined in this plan. Further, WFU is responsible for sharing this policy with building representatives and encouraging policy adoption accordingly. WFU is responsible for reviewing this plan for any significant changes on the interval specified in the quality assurance section. If at any time updates are required to this plan, WFU will ensure that the appropriate individuals are informed of the updates.

Quality Assurance/Quality Control Processes

The responsible parties will evaluate construction, renewal, and maintenance outcomes on a quarterly basis to evaluate progress towards the implementation goals. If any procedures or implementation goals are not being met, Facilities & Campus Services will investigate the situation and will work to resolve the issue. The responsible parties will evaluate whether updates are necessary to the policy or the design, construction, and maintenance processes in order to achieve the implementation goals.