

# SUSTAINABILITY FEATURES ON CENTENNIAL CAMPUS

## ENERGY

- › 69 kW of solar energy plus 13 panels of solar thermal that preheat domestic hot water.
- › Three Energy Star certified buildings—Venture I, II and III—use approximately 35% less energy than a typical building.
- › Cogeneration technology at the Centennial Campus Central Utility Plant enables energy generation on campus. By recovering waste heat and converting it to steam, efficiency increases by 40%.
- › A thermal energy storage tank at the Centennial Campus Central Utility Plant will allow chilled water to be created when electricity is cheapest and stored for use when electricity is most expensive.
- › An underground energy loop allows many Centennial Campus buildings to be powered by the Centennial Campus Central Utility Plant, which provides reliable and efficient supplies of steam and chilled water.
- › Used cooking oil from the Oval Restaurant on Centennial Campus is recycled into biofuel.

## FOOD

- › The Oval Restaurant features produce grown on campus at the Agroecology Education Farm, which uses sustainable agriculture practices.

## BUILDINGS

- › Buildings cleaned by University Housekeeping utilize Green Seal certified products and techniques for optimal indoor air quality.
- › Home to 9 buildings certified for Leadership in Energy and Environmental Design (LEED).

## WELLNESS

- › Miles of greenways, trails, athletic fields and a disc golf course to encourage exercise and wellness.
- › Planned green space and natural areas such as Lake Raleigh.



## **WATER**

- > Engineering Building III, James B. Hunt Jr. Library and Wolf Ridge Student Apartments feature green roofs, which incorporate a vegetative layer in order to reduce energy use, improve stormwater quality and decrease air pollution.
- > A 50,000-gallon cistern underneath Wolf Ridge Student Apartments collects rainwater and condensate from the buildings' HVAC systems.
- > Reuse water (high quality water that has not been treated to safety levels for drinking) is utilized for cooling towers at Centennial Campus Utility Plant, for toilet flushing at James B. Hunt Jr. Library and for some Centennial Campus irrigation.
- > Use of drought-resistant, native plants reduces need for irrigation on Centennial Campus.

## **TRANSPORTATION**

- > Centennial Campus is served by the Wofline campus bus system, which is free and open to the public.
- > LimeBike offers affordable short-term rentals of bikes and scooters.
- > Centennial Campus has 12 electric vehicle charging stations.
- > Zipcar short-term car rental is available on Centennial Campus.
- > Public shower facilities for those who walk, run or bike to work are available in the Engineering Buildings, James B. Hunt Jr. Library, College of Textiles, Carol Johnson Poole Clubhouse and Toxicology Building.

## **LAND USE**

- > Between Lake Raleigh and the James B. Hunt Jr. Library, a 7-hive bee apiary provides a home for 150,000 honey bees that enhance the Centennial Campus ecosystem.
- > The 18-hole Lonnie Poole Golf Course is a certified Audubon International Signature Golf Sanctuary. The 250-acre championship course was designed to protect streams and wetlands, natural buffers and wildlife habitats while also integrating native plants that are pollinator-friendly and more resistant to drought.
- > Several pollinator gardens have been installed to promote health of vital pollinators such as bees, moths and butterflies.
- > The North Creek watershed was restored and revegetated for better stormwater runoff control, watershed protection and improved water quality.
- > NC State is recognized as a Tree Campus USA by the Arbor Day Foundation.

## **WASTE**

- > Indoor and outdoor recycling is available throughout Centennial Campus. Collection bins for compostable items are available in select areas.

## **PROGRAMS**

- > Home to cutting-edge sustainability research in the College of Engineering and College of Textiles.
- > Many Centennial Campus partners are addressing sustainability challenges through their business, services and products.