Overlook achieved Designed to Earn the ENERGY STAR certification by meeting EPA criteria for reducing energy and CO2 emissions. This certification was an important goal as it signals to the market that the project is intended to perform in the top 25% of the nation’s most energy-efficient buildings. LS3P is also helping the environment by delivering an energy-efficient design to our client because ENERGY STAR buildings have a proven track record and yield an average of 30 percent annual energy savings and CO2 reductions. Overlook is recognized for potential future financial benefits from reduced energy costs and CO2 emissions over the life of the building. LS3P found the Target Finder/Portfolio Manager tool helped evaluate how various design strategies will affect the energy estimates for the project.

The projected annual energy and CO2 savings of the design is 51.4% as compared to the median building. The project’s estimated total annual energy savings is 14,209,383 kBTU/yr, with an estimated cost savings of $338,752 per year. Energy-saving aspects of the design include high-performance glazing and introducing a lower window to wall ratio that partially wraps around the east, south, and west orientations. The roof comprises highly reflective TPO to mitigate the urban heat island effect. Interiors use LED lighting and additional building system technologies to reduce energy loads. To meet LEED and ENERGY STAR requirements, the building uses VAV ventilation and water-cooled AHUs managed by Tridium control systems. Energy conservation measures include introducing demand control ventilation, water-side economizers, variable speed condenser water pumping, critical zone pressure reset and variable speed cooling tower fans with temperature differences set to 12 degrees. Overlook also engaged in enhanced commissioning and energy optimization measures.

Overlook is located on a previously developed site with many diverse uses and offers direct access to a 100-acre community park. Landscaping is supported by a local pond reducing valuable potable water by 100%. The interiors are designed with quality views, flexible office space potential, low emitting materials and provide tenants with guidelines on how to create sustainable and healthy interior spaces.

*Percent Energy and CO2 Reductions are based on comparison to a median building of similar type.
**OVERLOOK**
Charlotte, North Carolina

Architect: LS3P  
Owner: Northwood Office  
Contractor: Rodgers

**PROJECT DETAILS:**

### General
- 302,500 SF flexible office plan
- Previously developed site
- Diverse uses around site
- High performance envelope & glazing
- Reflective TPO - heat island mitigation
- Tenant guidelines for green design
- Quality views for occupants
- Low emitting materials
- Pursuing LEED certification

### HVAC Demographics
- Water cooled self contained AHU
- VAV system
- 706 total tonnage
- Tridium control system

**Energy Conservation Measures**
- Demand control ventilation
- Water-side economizers
- Variable speed condenser water pumping
- Critical zone pressure reset
- Variable speed cooling tower fans
- 12 degree - cooling tower temperature difference
- Enhanced commissioning & optimized energy performance
- Designed to earn the ENERGY STAR

**PROJECT ENERGY STATISTICS:**

- Source EUI = 140 kBtu/sf/yr
- Site EUI = 50 kBtu/sf/yr
- Percent CO2 reduction = 51.4%
- ENERGY STAR designed rating = 90

**ANNUAL SAVINGS STATISTICS:**

- EUI reduction = 53 kBtu/sf/yr
- Energy savings = 14,209,383 kBtu/yr
- CO2 savings = 1,412 Metric Tons/yr
- Energy cost savings = $338,752/yr