



Envision Charlotte Energy Roundtable

Overview

Determining how to drive energy savings can be challenging given the vast array of technologies, vendors, and approaches that are now available. To help sort through these many options, Envision Charlotte has partnered with UNC Charlotte through a grant from the US Department of Energy. Using DOE-generated processes and tools, the team at UNC Charlotte has developed an advisory service designed to help those in the commercial real estate field to identify both immediate opportunities as well as more capital-intensive projects. The program is also intended to offer educational opportunities to students that will help to develop new and needed skill sets in our region.

Process

Participants in the Energy Roundtable will work with student teams to help them to identify the potential savings opportunities in their buildings. The process will unfold in several steps:

1. **Data Analysis:** Participants will need to provide access to historical energy data (preferably 3 years), Portfolio Manager entries, stacking plans, and information about recent or planned capital improvements. For properties with a building automation system (BAS), UNC Charlotte would also like to receive access to the associated data.
2. **On Site Monitoring:** With the permission of building partners, UNC Charlotte will perform some detailed plug-load monitoring for one to two weeks using simple wireless, plug-in monitors that are installed between a device's plug and its outlet. With permission, the team may also seek to install some sensors in the electrical cabinets for a similar one to two week period.
3. **Energy Audit:** The team at UNCC will perform an approximately half-day energy audit in which students will survey the various systems throughout the building. The team will also interview the building operations team to understand current practices, and will want to see one or two example office spaces.
4. **Reporting:** Once the analysis process is complete, the team at UNC Charlotte will assemble a report that summarizes the following opportunities:
 - **Behavioral Opportunities:** The team will summarize low/no cost opportunities that tenants can take to help reduce consumption and increase awareness. Many of these opportunities will be based on our dedicated monitoring.
 - **Operational Opportunities:** The team will summarize low/no cost opportunities that operators can take to help reduce consumption. Many of these opportunities will be based on our dedicated monitoring and review of available BAS data.
 - **Capital Improvements:** The team will summarize other opportunities that will require deeper capital investment.

