

Swain County Schools, NC



Project at a Glance

Project Location:
Bryson City, NC

Project Cost:
\$2,390,006

Average Annual Savings:
\$173,933

Scope of Work:

- 2 New Chillers
- 2 New Boilers w/ Propane Conversion
- 2 New Heat Exchangers w/ DHW Tank & Propane Conversion
- BAS Upgrades & Optimization
- Interior & Exterior LED Lighting
- Water Fixture Re-Commissioning
- Building Envelope Improvements
- Plug Load Controllers

Role of the Responder:
Energy Services Company

Construction Dates:
March 3rd 2020 – March 3rd 2021

Project Term:
18 Years + 12 Months Construction

Project Beginning and End dates:
2020 - 2039

Contact Information:
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Project Description

Swain County Schools administration found themselves saddled with 30 year-old HVAC equipment across much of the district, making it difficult to keep temperatures satisfactory in the classroom. With only 15% of the land in the county being taxable, due to Tribal and Federal owned lands, their current capital funding made it nearly impossible to replace large pieces of mechanical equipment. As the new superintendent, Mark Sale knew his team needed to get creative when it came to locating funding for these improvements quickly.

The largest goal for the district was to upgrade the heavy mechanical equipment at East & West Elementary School. Schneider Electric generated enough savings through a complete fuel oil conversion to propane that Swain County Schools received a new boiler and domestic hot water system at each elementary school. In addition, the school board allowed the district to extend the term of the contract to 18 years in order to capture enough savings to receive a new chiller at each elementary school too.

Like most school districts in NC, the maintenance department was understaffed and constantly running around to fix comfort issues. A new building automation system at East Elementary School will tie in with their existing system to provide the team more insight into the operation of their new equipment. The maintenance staff was also excited about the new LED lighting, which comes with a ten year warranty and eliminates the time-consuming activity of changing out light bulbs for a decade.

Finally, as a part of the investment grade audit, Schneider Electric built an HVAC capital improvement plan for Swain County Schools to begin proactively addressing the leftover HVAC needs with their county commissioners.