



# Buchanan Hardwoods

## Aliceville, AL

A LED Lighting project to reduce energy and maintenance costs and improve safety.



BEFORE: Metal Halide Lighting



AFTER: LED Lighting Upgrade

**477,981 kWh Reduction**  
Generating **\$33,000** in  
Annual Savings

**71% Reduction in**  
Lighting Energy Costs

**25% of Project Costs**  
Paid for with Little  
Know Incentives

## Opportunity

Similar to the more than 50+ lumber mills SEMCO has worked with throughout the southeast, the Buchanan Hardwoods plant was in dire need of a lighting upgrade. As the plant has grown over the years, many different types of legacy lighting were utilized throughout the plant, leaving ample opportunity to both improve the quality of light throughout the facility, as well as reduce energy and maintenance costs. With the task at hand, SEMCO's energy audit team set out to develop a project that would bring the plants light levels up to an acceptable standard, reduce energy costs and take advantage of unique grants to pay for the upgrade.

## Solution

Since Buchanan's key to success over the years has been consistent quality, the goal of this project was to first and foremost increase the amount of light in key areas of the plant, such as the inspection zones, sawmill, and surfacing areas. SEMCO was able to design an LED lighting system in these areas to not only reduce energy costs, but also provide more than 3X as much light in these critical areas. To help reduce energy costs, SEMCO utilized high quality LED fixtures manufactured by industry leading companies utilizing best in class LED's.

Lastly, to help pay for the project, SEMCO was able to secure Grant Funding that helped pay for 25% of the LED Lighting Upgrade project for Buchanan. All in all, with more light throughout the plant, a 71% reduction in lighting energy costs, 25% funding from incentives and less than a 2 year simple payback, this project was a huge success for the mill.

***“When SEMCO showed us we could reduce our lighting energy costs by 70%, increase the amount of light in the plant, secure a grant to help pay for the project, all for less than a 2 year simple payback, we couldn't move forward with the LED conversion quick enough. Their team did an excellent job of installing the lighting around our production schedule and we are very happy with the results!”***

Doug Fikes | Plant Manager



## About SEMCO

SEMCO is an energy management company. We help businesses save energy and reduce electricity costs by providing turnkey energy efficiency solutions, renewable energy systems and utility bill consultations.

Whether it's one facility, a region or the entire country, we help customers roll out systemized upgrades that enable them to take advantage of best practices and the latest technologies. We design and develop custom solutions that minimize risk and maximize value, and are optimized for each facility, its uses and users.

In addition, we make energy solutions feasible by helping customers take advantage of all potential financial incentives. On average, the incentives obtained cover 20% - 40% of our solutions costs.

## Additional Services

### Supply Side

- Energy Procurement
- Billing Audits
- Demand Management

### Demand Side

- LED Lighting
- Compressed Air
- Conversion of HPU to Electric
- VFD's & Controls
- Capacitors

### Connect Your Systems (IOT)

- Sub-Meter Buildings
- Monitor Specific Motors and Processes in Real Time
- Measure and Verify Savings (M&V)