



GREEN SUPPLIERS NETWORK

Southwire

- Founded in 1950
- Employees: 4,400
- Headquarters: Carrollton, Georgia
- 2008 Sales: \$4.5 billion
- 15 manufacturing facilities and 10 customer service distribution centers

Green Suppliers Network Findings

- Water Savings: 9 million gallons
- Cost savings: \$70,000
- Scrap reduced by 30 percent

About the Green Suppliers Network

Working in collaboration with the U.S. Department of Commerce (DoC), the U.S. Environmental Protection Agency (EPA) established the Green Suppliers Network to help small and medium-sized manufacturers stay competitive and profitable while reducing their impact on the environment.

The Green Suppliers Network review took place in February 2008. Lean and Clean training provided by:

Georgia Tech Enterprise Innovation Institute
Bob Hitch
Bill Ritsch
Tom Sammon

Pollution Prevention Assistance Division of Georgia Department of Natural Resources

P.J. Newcomb

Path Toward Sustainability Leads to Significant Water Savings

In October 2007, Georgia Governor Sonny Perdue asked industries across the state to voluntarily cut water use by 10 percent to mitigate a drought of exceptional proportion.

In response, Southwire—a leading North American manufacturer of residential, commercial, industrial and utility wire and cable products—began searching for opportunities to reduce its water use at the company's Utility Products Plant in Carrollton, Georgia. During this same year, Southwire launched a sustainability campaign and established companywide goals to reduce water use by 15 percent and its overall carbon footprint by 10 percent by the end of 2010.

The Situation:

Pacific Gas and Electric (PG&E) contacted Southwire in late 2007 about participating in a Green Suppliers Network review. As one of PG&E's key suppliers, Southwire welcomed the opportunity to participate in the Green Suppliers Network, which would complement its ongoing efforts to meet companywide sustainability goals. Southwire was already incorporating the fundamentals of lean manufacturing into its daily operations. With the help of the Green Suppliers Network, the review would help the company capitalize on the connection between its lean manufacturing initiative and its path toward environmental sustainability.



Bob Hitch, Bill Ritsch, and Tom Sammon of Georgia Tech Enterprise Innovation Institute, and P.J. Newcomb of the Pollution Prevention Assistance Division of the Georgia Department of Natural Resources, conducted Southwire's review in February 2008. Southwire's review team—consisting of plant managers, engineers, materials managers and production personnel—developed comprehensive current and future state value stream maps of its 600-volt cable line. This line was chosen because most manufacturing processes situated at the facility take part in producing the 600-volt cable. Southwire can transfer improvements to this line to many other similar lines throughout the facility.



The Solution:

Georgia Tech Enterprise Innovation Institute's final report confirmed some of Southwire's initial investigation and helped prioritize the opportunities available to the company. More importantly, the Green Suppliers Network review helped operations managers justify capital investments by estimating the associated cost savings. Jill Morgan, director of operational perfection at Southwire, shared that "having an outside set of eyes look at our processes is one of the benefits of the Green Suppliers Network. They helped us validate our efforts and confirm that we set our priorities appropriately."

Following the review, the facility implemented a water-looping system that recycled process water without affecting the quality of the wire. Southwire added a filtration system that allowed water to be reused several times.

Southwire also added energy efficiency opportunities to the expanding focus of its operational perfection culture. Since the review event, the company has retrofitted its Carrollton facility with high-efficiency light fixtures.

Results:

As a result of implementing process-water recycling, Southwire reduced its publicly-supplied water use at the Carrollton Utility Products Plant by more than 9 million gallons annually, which reduced the facility's demand on Georgia's water resources by more than 90 percent—far exceeding the governor's request and saving more than \$70,000 annually.

Retrofitting the facility with high-efficiency fluorescent light fixtures allowed the facility to cut its electricity use for lighting in half and take steps forward toward meeting the company's carbon footprint goals.

Southwire's Carrollton facility also reduced scrap from its processes by 30 percent, following the Green Suppliers Network review. While some scrap reductions can be attributed to improved order management through better planning, Emory Barber, the Carrollton plant manager, states that there are no low hanging fruit when it comes to reducing scrap rates. He said the facility now tracks scrap rates by the hour, focuses on the details when filling orders, and proactively makes adjustments to production to optimize efficiency and reduce scrap wastes.

Southwire is now well on its way toward meeting its sustainability goals and the company is also striving to achieve a zero-landfill status by 2017.

"The Green Suppliers Network approach complements Southwire's **lean manufacturing culture**. Our participation helped us align our goals and initiatives to **reduce waste**. The success we had in one plant can also be realized at other Southwire facilities resulting in a **greener supply chain** throughout the company."

—Jeff Herrin,
Executive Vice President of Operations

 Recycled/Recyclable – Printed with Vegetable Oil Based Inks on 100% Postconsumer, Process Chlorine Free Recycled Paper