

SUSTAINABILITY
R E P O R T
2015



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S&C's VALUES HELP US BE A GOOD NEIGHBOR

By Kyle Seymour, President and CEO, S&C Electric Company

At S&C Electric Company, our values are Personal Integrity, Respect for People, Commitment to Excellence, and Responsible Stewardship. Each of these is crucial to our sustainability activities related to environmental issues, employee safety, and community involvement.

We have many programs with primary goals to reduce adverse environmental issues resulting from our manufacturing processes. The trend data described in this report clearly demonstrate the continual improvement resulting from those initiatives.

To cite just a few examples, while our production of switching and protection equipment for electric power transmission and distribution has risen over the past 10 years, our use of natural resources—electricity and water—has declined. And our natural gas use in 2015 was the lowest in more than 10 years with the exception of one year (see page 9).

At our main manufacturing facility in Chicago, 100 percent of our electricity comes from renewable sources. To further support reduction in the use of fossil fuels, in 2015 we doubled to eight the number of charging stations deployed in our parking lots to help our team members charge their electricity-powered vehicles.

Improved air quality also is a chief goal in our sustainability efforts. S&C's generation of hazardous air pollutants in 2015 was virtually nonexistent, and we're on target to achieve the same result soon with regard to volatile organic compounds (see page 9). Both are dramatic improvements over where we were 20 years ago. Our introduction of newer products in 2015, including the Vista® SD Underground Distribution

Switchgear, which uses solid dielectric insulation material instead of sulfur hexafluoride (SF₆) gas, is helping to achieve those results and will continue to do so in the years to come.

Our sustainability efforts are also having an impact on where our manufacturing waste winds up. For example, in 2015, 90 percent of the waste at our Chicago facility was diverted from landfills, representing almost a 10 percentage point increase from a year earlier (see page 8). But we're still not satisfied, and we're working with more recycling companies with the goal of eventually reaching 100 percent recycled waste.

Employee safety is a top priority at S&C. Our safety and health ratings routinely are well below like-industry averages. Although 2015 saw slight upticks, we are working to address those through four-step problem solving and other initiatives (see page 10).

S&C Electric Company works to build strong and supportive relationships within the neighborhoods and communities in which its employees live and work, focusing on education, health, community development, and basic human needs (see page 11).

We take great pride in being one of the world's leading suppliers of electrical switching and protection equipment, and we understand the responsibility that comes with being a leader.

We're executing our sustainability plan and concentrating on the details to bolster performance. While our trend data show great progress, we will never be fully satisfied; we will never stop working to improve.

Kyle H Seymour





ENVIRONMENTAL POLICY

Among the corporate principles laid out in S&C Electric Company's Statement of Purpose and Guiding Principles is a determination that "all of S&C's dealings are bound by rock-solid integrity" and a commitment to "maintain a strong and supportive relationship with the communities in which we work." These guiding principles are brought to life every day in a variety of ways, from a refusal to tolerate unethical conduct in any aspect of our business to an expectation that all S&C team members will work in a manner that respects the safety and well-being of those around them.

One of the key manifestations of these guiding principles is a commitment to responsible corporate citizenship with regard to the environment. Toward that end, S&C's commitment is to:



Comply with all accepted environmental practices, including meeting or exceeding applicable legal and other requirements



Minimize waste and prevent pollution while striving for greater use of sustainable sources of energy and materials



Continually improve its Environmental Management System through performance evaluation of procedures and indicators



Take into account environmental aspects to minimize environmental impact when developing new products and services



Communicate this policy internally and externally with interested parties, and with those that work for and on S&C's behalf

S&C is involved in the design, manufacture, and service of electric power switching and protection devices. The Environmental Management System, which is developed in accordance with ISO 14001-2004, encompasses all the activities involved in the operation of its business.



GREEN POWER

Through a partnership with the U.S. Environmental Protection Agency's (EPA) Green Power Partnership **S&C uses nearly 41 million kWhs of green power annually**, enough energy to meet 100% of the company's electricity use.

S&C's Green power means its zero-emissions electricity is generated from such environmentally preferable renewable sources as wind, solar, geothermal, biogas, eligible biomass, and low-impact hydro. The EPA estimates S&C's annual use of 41 million kWhs of green power is **equivalent to the electricity use of nearly 4,000 average American homes** annually.



S&C buys renewable energy certificates from MC Squared Energy Services LLC, Chicago, Illinois, as part of its proactive choice to switch away from traditional sources of electricity generation and to support cleaner, renewable energy alternatives.





PEER CERTIFICATION

S&C's smart grid leadership in 2015 earned the company the distinction of becoming the first Leading Partner for the Performance Excellence in Electricity Renewal (PEER) program. Administered by Green Business Certification Inc., the PEER program supports a comprehensive framework for defining, assessing, and verifying the overall sustainable performance of electricity delivery system design and operations.

The standards enable project teams to assess their current state, develop strategies for improvement, improve the business case, and verify the value of system changes. As an initial Leading Partner, S&C became part of the first class of any future PEER education offerings. Besides providing value input on those offerings, the partnership provides S&C the opportunity to collaborate on training materials and the PEER credential program.

PEER is the driving force behind U.S. Green Building Council's vision to transform power systems. It is the nation's first comprehensive, data-driven approach to evaluating and improving power system performance.

PEER's goal is to have meaningful impacts over four outcomes:

-  **Reliability and resiliency**—Ensure the reliable delivery of electricity and reduce injuries, interruptions, and power quality issues
-  **Energy efficiency and environment**—Assess the environmental impact of electricity generation and transmission, and encourage the adoption of clean and efficient energy
-  **Operational effectiveness**—Leverage value-gap analysis to identify and eliminate waste
-  **Consumer contribution**—Assess customer contribution to grid service, investment, and innovation



CANADA

S&C's manufacturing facility in Toronto used a four-step problem-solving methodology late in 2014 to identify how it was handling wood waste. The exercise led to the 2015 use of separate bins to handle clean scrap wood. Contaminated wood is incinerated to generate electricity. During the course of the year, **25% (21.3 metric tons) of generated wood waste was recycled**, up from 5% (4.9 metric tons) that was recycled in 2014. That difference equates to the size of an Apatosaurus, an extinct dinosaur that lived in North America during the Late Jurassic Period.

Some **98.7% of the facility's generated waste was diverted from landfill**. Moreover, excluding metal recycling, diverted recycled and waste-to-energy nonhazardous waste amounted to 230 metric tons, **saving 266 cubic meters of landfill space**. In terms of energy conservation, one of the facility's manufacturing buildings replaced its 400-Watt metal halide high-intensity discharge lighting with a T8 fluorescent lighting system (see image below). The switch resulted in a **73-kW demand reduction and a 325,200-kWh** drop in energy use.

In addition, the incandescent 150-Watt flood lamps in the facility's Product Demonstration Center were changed to 17-Watt LED floodlights, resulting in an annual **9,700-kWh reduction** in energy use.



EUROPE, MIDDLE EAST, AND AFRICA

S&C's Europe, Middle East, and Africa (EMEA) business unit had a variety of sustainability achievements throughout 2015, including:

- ◆ Sponsoring the Swansea-Siavonga Partnership to bring a combined solar and energy-storage system to two primary schools in Siavonga, Zambia (The schools previously had no power, so this primitive microgrid enabled the schools to provide computer science classes. The system, which involved installing 80-W solar panels and locally sourced lead-acid batteries, generates enough electricity to provide power for small Raspberry Pi computers, which were designed for low power consumption and use in developing countries globally (see image below). Local entrepreneurial groups also use the schools after school hours as business hubs supporting the local economy and offering Siavonga residents a more sustainable future.)
- ◆ Sponsoring a Being SMART event for the Low Carbon Swansea Strategy Group, whose purpose is to provide a mechanism for sharing carbon-reduction good practices in Swansea and the southwest Wales region
- ◆ Having **no lost-time accidents**, a trend the business unit has maintained since 2008



MEXICO, CENTRAL AMERICA, AND CARIBBEAN

S&C's Mexico, Central America, and Caribbean (MCAC) business unit took on a number of projects during 2015 designed to improve the environment, employee safety, and community stewardship. These activities included:

- ◆ Collection of all the documentation and measurements, plus the introduction of training, required to secure ISO 14000 and Occupational Health and Safety Advisory Services certification. The process will help the business unit to define goals for reducing air emissions, CO₂ levels, recycling, and waste disposal
- ◆ Implementation of automated tools to reduce the ergonomic risks on the manufacturing/assembly floor by reducing the handling of hazardous liquids and unnecessary lifting of equipment
- ◆ The addition of tailored pallets for waste barrel containers to reduce the amount of physical strain required to move the barrels (see image below)
- ◆ Local government recognition of the stoppage of minor leaks of fiberglass-tainted water into the local drainage system
- ◆ A **30% increase in Safety and Environmental training** hours compared with a year earlier

Local community activities involved:

- ◆ Collecting and delivering candy and toys to a local orphanage
- ◆ Opening the facility for a day to all team members' children to help educate them about S&C's purpose and activities
- ◆ Collecting and delivering food in conjunction with a local charity



SOUTH AMERICA

S&C's South America business unit undertook a variety of efforts aimed at sustainability.

Among the activities included:

- ◆ Measuring the weight of all common garbage sent to the landfill (In 2015, the average nonorganic monthly weight was **220 pounds (100 kg)**, and the **average monthly organic waste (cafeteria) weight was 1,764 pounds (800 kg)**.)
- ◆ Working with a supplier to collect recyclables to reduce landfill waste (In 2015, the business unit recycled **8,818 pounds (4000 kg) of metal, 6.5 cubic yards (5 cubic meters) of plastic, 13 cubic yards (10 cubic meters) of wood, and 13 cubic yards of cardboard and paper.**)
- ◆ Establishing early warnings for potential dangers employees could face in their activities on the shop floor based on observed, reported, and resolved previous incidents or accidents

Local community/social activities included:

- ◆ Collecting and donating toys for a child institution on Kids Day
- ◆ Collecting and donating Christmas gifts to poor children in conjunction with the local City Post Office (The children wrote letters to Santa Claus with their wish lists that S&C collected and employees used to buy the gifts they requested; the local post office then delivered them from Santa.)





RECYCLING AND WASTE DIVERTED FROM LANDFILL

In 2015, S&C's operation waste diverted from landfill, at 90.1%, for the first time exceeded the **90% threshold**, which represented nearly a 10 percentage point increase from the previous year. This recycling included scrap metal, cardboard, paper, aluminum cans, wood, and other materials.

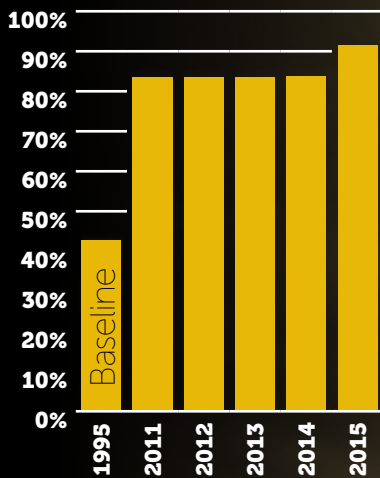
Effective in 2015, all scrap wood was recycled, not just pallets. That resulted in an **additional reduction of 300 tons of wood going to landfills** for the year, a weight equivalent to a large paddlewheel steamship.

S&C in 2015 **recycled more than 1,000 tons of wood**, up 43% from the previous year's total. Other recycling totals were metals, 3,376 tons; cardboard, 219.7 tons; packaging, 93.6 tons; paper, 5,329 pounds; shrink wrap, 5.8 tons; glass, 1.6 tons; and toner cartridges, 1,100 pounds.

Moreover, approximately 22 tons of electronics and batteries were recycled during the year, or about **eight times the weight of a house**. This included **several tons of personal electronics and batteries** brought to S&C by team members to support keeping them out of landfills.

Recycled scrap Cypoxy™ Insulator parts and porcelain totaled 133 tons, about the same weight as a large blue whale.

Waste Diverted from Landfill

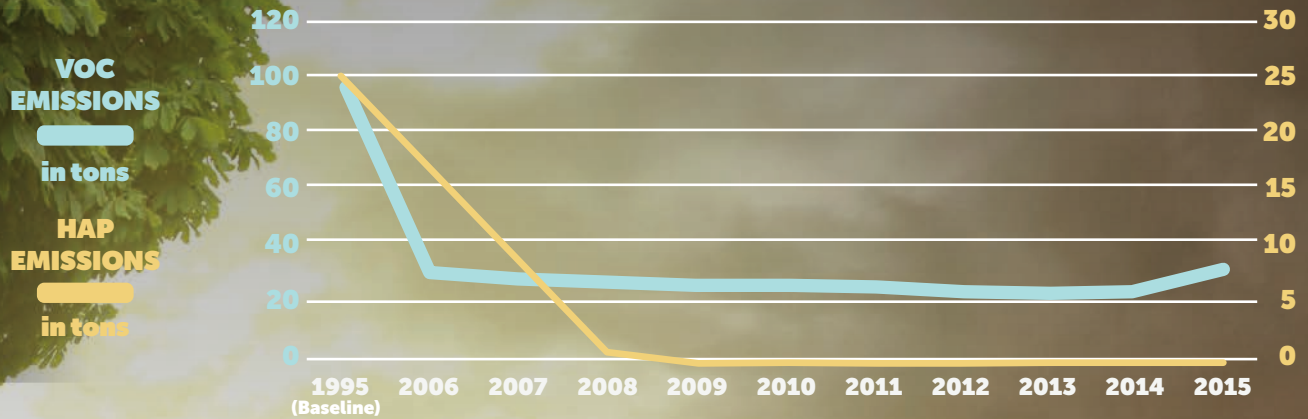


EMISSIONS

S&C's main manufacturing facility in Chicago in 2015 produced 29 tons of volatile organic compounds (VOCs), representing a 32% increase from the previous year's total. Driving the increase was a boost in 2015 production, plus S&C shifted some production to Chicago from its manufacturing plant in Toronto. A shift from using paint kits instead of a batch process also resulted in more frequent color changeovers, which also caused an increase in VOCs. A program to switch to a powder-on-

powder base coat will help to dramatically reduce S&C's VOC emissions once fully implemented.

S&C's production of hazardous air pollutants (HAPs) remains virtually nonexistent. In 2015, S&C produced 0.1 tons of HAPs, the same amount as the previous year and a low total that has been consistent over the past few years. However, the total is a far cry from the 1995 baseline year, when the company's HAP production totaled 25 tons.



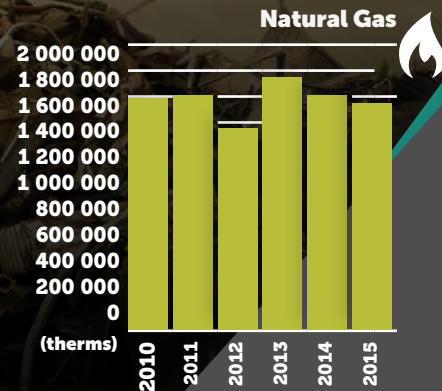
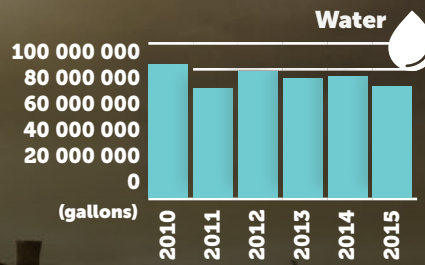
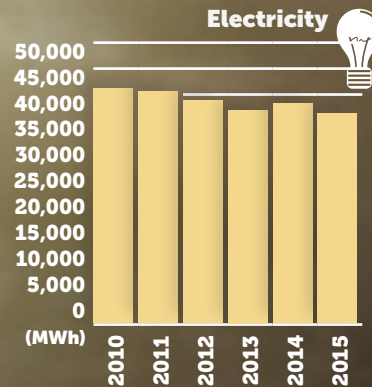
ELECTRICITY, NATURAL GAS, AND WATER USE

S&C invests heavily in energy conservation, and those efforts resulted in reductions in 2015 in all three major natural resources the company uses in the manufacturing process and to maintain operations. S&C saw its lowest use of electricity by kilowatt hour in well more than a decade. Water consumption also was the lowest in decades, while natural gas use also fell to its lowest level in nine of the past 10 years.

Among the main drivers behind the reduction in electricity use is an ongoing effort to replace incandescent and traditional inefficient florescent lighting with more efficient T5 and T8 florescent-lighting fixtures, with a conversion to LED-based lighting technology also in the works. All power used at S&C's main manufacturing facility in Chicago is acquired using renewable-energy credits.

In 2015, S&C acquired offsets totaling 37.5 MWhs, **eliminating approximately 60 million pounds of carbon dioxide emissions**, about the same weight as a handymax bulk carrier ship.

A major focus in 2015 was on water-use reduction through Lean Performance System (LPS) methods and S&C four-step problem-solving events.





TEAM MEMBER SAFETY

DART AND LOST TIME RATES

S&C takes pride in protecting its team members, and its efforts to do so are illustrated in the company continually having Days Away, Restricted, or Transferred (DART) and Lost Time rates well below the average for similar types of manufacturers. Such low rates, however, mean slight increases in occurrences can generate significant year-over-year rate differences.

To address the recent rise in occurrences, S&C in 2015 began to dig deep into the underlying causes of injuries and lost time, seeking out their root causes. Included with the analysis was an emphasis on behavioral-based safety, including putting a greater focus on being proactive by

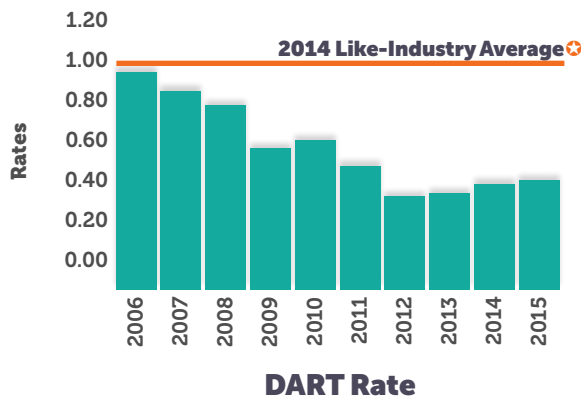
identifying risks before injuries occur as opposed to reacting to injuries after they occur.

As part of that effort, S&C began collecting more safety-related data, including weekly First Aid cases, and it has begun using a four-step problem solving process to build consistency in safety investigations used to identify risk and incident root causes.

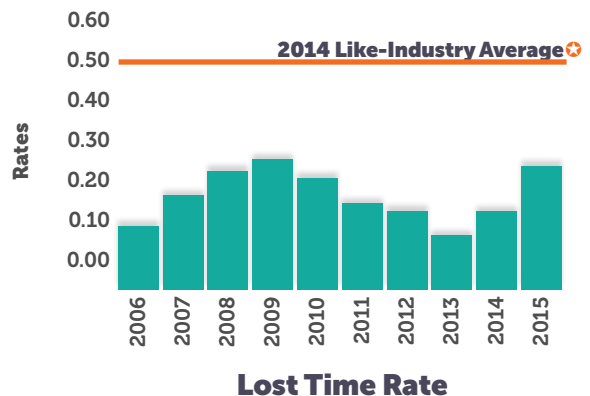
Among the key results is a continued effort to improve ergonomics, such as incorporating solutions to reduce avoidable strain on team members when lifting or moving equipment on the shop floor.



Based on North American Industry Classification System (NAICS) code standards.



Source: OSHA



Source: OSHA



COMMUNITY WORK

S&C has a long tradition of giving back to the community. Each year, the company spends more than \$1 million to support local community organizations and projects.

In 2015, S&C's donations were used to support:

- ◆ STEM (Science, Technology, Engineering, and Math) education
- ◆ Various local organizations, including Misericordia, an organization located across the street from S&C's headquarters in Chicago, Illinois, that is home to more than 600 children and adults with developmental and physical disabilities
- ◆ Science kits for nearby local libraries that members can check out and that libraries also use for after-school programs
- ◆ Summer library reading programs
- ◆ Community health education, as well as cancer and diabetes prevention and treatment
- ◆ Community-development assistance
- ◆ Museum science programs, including one at the Museum of Science and Industry in Chicago that instructs teachers on how to teach science
- ◆ Education programs and events at Chicago's Adler Planetarium that range from research to training teenagers in computer sciences
- ◆ School robotics programs

S&C also supported international disaster relief, including the April 2015 Nepal earthquake, through the American Red Cross.





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S&C ELECTRIC COMPANY

Excellence Through Innovation