CORPORATE GOAL IS A CATALYST FOR CUSTOM EFFICIENCY STRATEGIES FOR OFFICE, RETAIL AND DATA ASSETS

SOLUTION OVERVIEW
Sprint is a communications company that serves more than 50 million customers worldwide. Sprint’s energy-consuming portfolio includes a variety of asset types, including commercial office buildings, retail space, data centers and a nationwide data network. The network is responsible for the vast majority of the company’s energy use.

In 2008 Sprint’s CEO, Dan Hesse established corporate sustainability goals, including an absolute electric usage reduction goal of 15 percent from the 2007 baseline, with the reductions to be completed by 2017. This goal increased to 20 percent when Sprint joined the Better Buildings Challenge in 2013. Mr. Hesse then tasked each business unit with reducing its individual energy usage by 20 percent in order to contribute toward the overall corporate goal. This galvanized the business units to develop individual energy saving strategies, to standardize reporting practices across the company, and share best practices.

ORGANIZATION TYPE
Communications

BARRIER
Lack of corporate energy goal or enterprise energy reporting and management effort

SOLUTION
- Create a cross-functional energy management team and set standards for tracking and reporting progress toward energy goals
- Develop a specific energy reduction strategy for each Sprint asset class, e.g. network, retail stores, commercial office buildings, et cetera
- Link progress to energy goals with employee performance management goals and vendor Key Performance Indicators (KPIs)

OUTCOME
Sprint meets its corporate energy reduction goal ahead of schedule and adds more than $60 million in avoided energy costs to the bottom line


For more information, visit https://betterbuildingssolutioncenter.energy.gov
POLICIES
Sprint Real Estate bases energy usage on non-normalized gross consumption, benchmarked through programs such as Utility Insight, supported with services from Ecova, and employed across the various asset classes. For quarterly reporting such as asset savings and variance, weather normalized data is compared to baseline data. Energy usage reports are provided to asset directors and the Corporate Social Responsibility (CSR) team as part of a Global Reporting Initiative.

Other corporate directives use national and industry programs such as ENERGY STAR® Portfolio Manager, USGBC LEED®, and ASHRAE 90.1 to define methodology. Examples include the use of Portfolio Manager scores to identify low performing facilities which may receive energy audits and energy conservation measures, or which may be assessed for planned equipment replacements. LEED attributes are used in all new retail store construction and ASHRAE 90.1 minimum energy standards (version 2012 or better) are the basis for all equipment design.

Tools:
- Global Reporting Initiative

PROCESS
The CSR team brought together a cross-functional energy management team to lead the energy reduction effort at Sprint. The team consisted of representatives from Office, Retail, Network, and IT business units. Representatives’ skillsets included finance, engineering, business, legal, and facility management. Energy management meetings encouraged sharing of energy saving strategies applicable across business units, which prior to the portfolio-wide energy reduction goals, had operated independently of one another. Sprint also accessed reports to analyze usage and prioritize energy efficiency efforts with established bill tracking system.

An Energy Reduction Strategy For Each Asset Class

To reach the 20 percent portfolio-wide goal, each business unit developed customized energy reduction plans for their asset types. The foundational strategies for reaching the 20 percent goal across all asset types were to eliminate redundancy and right-size buildings and equipment.

Commercial Office Buildings — Sprint operates approximately 8 million square feet of commercial office space housing its corporate headquarters, offices and labs. Commercial buildings account for approximately 6 percent of Sprint’s energy use. The Sprint Real Estate team created a five year Energy Plan, which is reviewed and revised regularly. As a part of the Energy Plan, Sprint undertook existing building retrofits in numerous facilities to increase building efficiency. In some buildings
equipment right-sizing analysis and comprehensive lighting retrofits allowed reduced cooling loads so HVAC equipment could be replaced with smaller, more efficient systems at end-of-life. Initiatives are also in place to optimize new technologies in lighting controls and intelligent building controls. The commercial office business unit alone has reduced energy use across this asset class by 33 percent.

**Retail Stores** — Sprint operates more than 1100 retail stores across the country, including stand-alone buildings and stores within malls and shopping centers. Retail stores account for approximately 3 percent of Sprint’s total energy usage. The primary energy reduction strategies within the retail business unit were the implementation of an asset-wide energy management system and LED retrofits. An ongoing retail initiative evaluates end of life roof top units and replaces them with high efficiency equipment that ties into the central energy management controls, (see Sprint’s involvement in the Advanced RTU Campaign). In some cases, the commercial office and retail teams were able to share strategies applicable to both asset types. For example, it is standard Sprint practice to evaluate LEDs for lighting retrofits across all asset classes due to the success of the retail initiative.

Network — The Sprint network consists of switch sites and cell towers throughout the United States. Recent acquisitions created redundancy within the network. Sprint’s highest energy savings came from streamlining the network, and from the installation of new, more efficient network equipment. Sprint’s Core Switch/Regional Data Center Site and the Network Vision Plan Showcase Project, and an associated white paper, detail “Network Vision”, the comprehensive plan to dramatically increase energy efficiency across Sprint’s data network.

**Data Centers** — Sprint currently manages a portfolio of six core data centers with a combined total of 240,000 square feet and 26.2 megawatts of power demand. The Sprint efficiency plan includes a data center consolidation effort. Sprint does not replace equipment solely on end-of-life timing, as close attention to equipment maintenance at times allows Sprint to run equipment significantly past its expected life, or to replace only key parts, such as motors. Conversely, the Sprint team stays abreast of new equipment advances with efficiencies that make early replacement of aging equipment the best option. These choices provide the framework for right-sizing Sprint’s data center infrastructure.

**Tying Energy Efficiency to Job Performance**

Sprint Network, IT, Retail, and Commercial teams added progress toward energy efficiency goals to the job descriptions and performance management goals for manager-level employees. Sprint also incorporated energy efficiency into key performance indicators (KPIs) for vendors – namely the facility managers in their commercial office buildings. Tying energy performance to performance reviews and contract renewal decisions helps to ensure that energy efficiency is viewed as a high priority.

**Tools:**

- Core Switch/Regional Data Center Site and the Network Vision Plan Showcase Project

MEASURING SUCCESS
The CSR team at Sprint is responsible for tracking energy usage and reporting progress against the energy reduction goal for all business units. Sprint measures progress in absolute energy use reduction over its 2007 baseline. The CSR team developed standard energy reporting procedures and processes to be used by all business units. The CSR team has also developed a standard process for third party verification of energy data reporting. The verified results are reported to Executives and posted publicly as shared information.

OUTCOMES
As of year-end 2013, Sprint reduced absolute energy usage in each of its asset classes as follows:

- commercial office — 33 percent
- retail — 24 percent
- data centers — 7 percent
- network — 22 percent

Sprint saved over $60 million dollars in avoided energy costs during this time. Sprint expects to reach its 10-year 20 percent absolute energy and renewable energy goals by 2017. The company has a number of additional energy reduction initiatives currently in progress.