Enlighted

AT&T

Case Study



AT&T utilizes Enlighted's Advanced Sensors to produce millions of dollars in energy savings –every year.

Being socially responsible is business as usual for AT&T, and they weave it into virtually everything they do. CEO and Chairman Randall Stephenson have signed off on an ambitious policy to reduce the company's carbon footprint 20% by 2020. In accordance with the policy, energy usage information is provided to the Citizenship and Sustainability Steering Committee, which ultimately reports to the Board. The policy states: "As a global communications leader, effective energy management is critical to the competitiveness of AT&T's business and the reliability of service to its customers."

AT&T energy scorecard

The AT&T Energy Scorecard program was designed to introduce metrics and accountability into the energy management of each of its properties. The overall goal for this program is to optimize energy use and performance.

The program focuses primarily on lowering kilowatt-hour consumption and closely evaluates past, present and future energy efficiency programs that have been or will be put in place for each of the properties. Efficiency projects are monitored against the corporate goals, and the projects are graded based on their level of compliance.

In 2013 the AT&T energy team decided to optimize the energy performance across 1,000 of their largest energy-consuming sites and 500 of their retail sites. This opportunity allowed the energy team to investigate the possibility of using advanced technology to lower energy consumption in an intelligent way.

The team believed that evaluating products that leveraged the IoT (Internet of things) was the place to begin. They had been following the machine-to-machine (M2M) and IoT markets as a forward-thinking data and telecommunications company, and the team felt confident that a solution would make itself available based on the maturity of the space.

Enlighted

Enter Enlighted

After a thoughtful evaluation of several smart lighting sensor technology companies, the AT&T energy team decided that Enlighted provided the best product and service solution to fit their needs. Specifically, the team resonated with Enlighted's key differentiators:

- The Brilliant Sensor-Provides the ability to easily tune the sensor to alternate tasks being performed. The sensors adjust automatically to ambient light and indoor ambient temperature as they change. Digital Dual Technology (dDT[®]) distinguishes between humans versus other heat-emitting objects (like printers and faxes) better than any competitor on the market.
- 4G Architecture-Allows the sensor to control a single workspace or area, providing increased accuracy and intelligence (increased energy savings). The sensor is Title 24-compliant out-of-the-box. Data collected is stored within each device to support deep data collection and prevent data loss. Data-collection focus will expand from energy efficiency to overall facilities management.
- Quiet/Quick Network-Each advanced sensor communicates with the Energy Manager through a unique combination of wireless and Ethernet technologies to efficiently generate a holistic picture of energy use. Utilizing AT&T's (802.15.4) Network Backhaul, Enlighted smartly passes an unlimited amount of data securely and without performance limitations.



Enlighted's Global Energy Optimization (GEO) Program

The size and scope of the Enlighted retrofit project for AT&T's initial Energy Scorecard plan was sizeable. To help AT&T make the decision to move ahead with the project, Enlighted recommended its GEO service as a way to manage and maintain the entire implementation. The GEO program also allowed AT&T to recognize immediate energy savings from the project while paying for the installation through energy savings over time.

Enlighted's GEO program provided AT&T with the energy-saving improvements of an advanced lighting control system coupled with new energy-saving LEDs, installed at no initial cost.

AT&T pays:

- To Enlighted-A predetermined low rate (in cents per kWh) for the saved electricity during the designated GEO term. The Enlighted sensor network measures the kWh.
- To the utility company-The new, significantly lower monthly energy usage rate.

AT&T saves:

- The difference between the pre-retrofit lighting utility bill minus the Enlighted + utility company payments as described above.
- Further inflation (rate hikes) in energy-rate costs passed on by the utility company.
- 100% of the energy savings once the GEO term is met.

The benefit to AT&T is that it began recognizing an immediate savings in its lighting expenses. At the conclusion of the GEO term, AT&T will realize 100% of the energy savings. Further, the immediate energy cost savings AT&T recognized was guaranteed by Enlighted before the retrofit project ever began, making the decision to proceed a zero risk.

The solution

Enlighted recommended proceeding initially with an aggressive schedule of retrofitting a select set of AT&T properties by replacing all florescent light fixtures with new energy-saving LED lighting. Additionally, each LED light fixture would be controlled by its own Enlighted advanced sensor. Integrating one advanced sensor to each LED provided AT&T with the most granular level of control for the overall system, which in turn provided the highest level of energy efficiency. Enlighted's advanced sensor system is also able to expand to other areas of facilities control, such as HVAC and building security in the future-without upgrading the sensor. The retrofit focused initially on 240 properties, or 20 million square feet of AT&T's facilities. Enlighted's goal for the overall project is to retrofit all 120 million square feet of AT&T's real estate.

AT&T realizes phenomenal energy and cost savings results-and there is more to come

AT&T estimates that the initial 20-million square foot retrofit project is saving the company around \$8 million a year in lighting-energy expense. Once the rollout is complete across the entire portfolio, Enlighted's system could reduce AT&T's energy consumption by 195 gigawatt-hours, which could net the firm \$200 million in savings during a span of 10 years.

AT&T was so impressed with the financial results of the relationship with Enlighted, they awarded the company its coveted AT&T Supplier Sustainability award in the category of Energy Efficiency for 2014.

AT&T's supplier sustainability award goes to Enlighted Inc.

AT&T's Supplier Sustainability Awards celebrate the efforts of suppliers who are setting new standards in sustainability with social responsibility as a top priority. In its fourth year, this program recognizes a number of suppliers who have really taken to heart AT&T's call to action for sustainable operations.

The 2014 awards recognize vendors with outstanding contributions in four categories: process improvement, energy efficiency, environmental and packaging. These areas are vital to how we bring products and services to our customers in a sustainable way. In the category of Energy Efficiency, the award went to Enlighted Inc. Since 2014, Enlighted helped AT&T use significantly less energy by installing their smart lighting solutions at AT&T facilities-from offices to garages and call centers. Enlighted worked hand-in-hand with AT&T to create a way to install smart lighting that significantly reduces AT&T's annual cost structure.

About John Schinter



John Schinter has been Assistant Vice President of Energy and Smart Buildings at AT&T, Inc. since April 2014. He served as the first Director of Energy at AT&T, Inc. since 2009. Under John's leadership, AT&T implemented approximately 14,300 energy efficiency projects, producing annualized savings of more than \$151 million from 2010-2012. He oversees AT&T's company-wide energy management efforts across all energyconsuming business units, drives comprehensive programs to reduce energy consumption, and direct AT&T's energy purchasing strategies.

As Assistant Vice President of Energy and Smart Buildings, Mr. Schinter's focus now includes the deployment of new M2M (machine-tomachine) and big data solutions to optimize facility equipment operational performance and reliability. His decision to partner with Enlighted to retrofit 20 million square feet of AT&T's facilities with new LED lighting controlled by Enlighted smart lighting sensors is saving AT&T about \$8 million a year in lighting energy savings.

Enlighted

Building Robotics, Inc., a Siemens Company

Turn Everyday Spaces into Extraordinary Places

Wherever space, people and work meet, Enlighted empowers organizations with the technology to transform real estate spaces into regenerative places that fuel positive impact for people, portfolio, and our planet.

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