



ATMOSPHERES®

Energy Savings at the Plug Load: Stadiums

Stadiums Go Green

The Impact

Commercial buildings aren't the only energy drains. Stadiums and entertainment facilities are draining enormous amounts of energy, even when their fans go home. In fact, they consume millions of kilowatt-hours in energy. A blog published by ElectricChoice.com cites that "it often takes more than 30 million kWh to power a single MLB baseball stadium for a season, or more than 3,000 average American homes use in a year."

While some leagues are developing new stadiums to be energy efficient, others are making improvements. It is these venues in particular that are seeking energy saving solutions that will save them money and reduce their carbon footprint. More than ever, with plug load efficiency and aggressive energy targets, getting to net zero is how stadiums want to quantify their savings.

Property managers of professional stadiums are leaders in sustainability, and many have had long-standing commitments to green initiatives and have been recognized for their best practices with venue sustainability.

In a quick Google Search, one can see the top five, ten, and twenty five stadiums that have made the list indicating that they are "green" or are working towards "going green." BOSS Controls is proud to be working with numerous stadiums to save energy and reduce carbon footprints in major professional sports stadiums including, but not limited to: baseball, football, hockey, and soccer.

Saving Time, Money and Carbon

Prior to any implementation of the BOSS Wi-Fi Smart Plugs, baselines are run to understand the on/off times for each of the electrical devices in the stadiums. We already know that stadiums have sometimes thousands of monitors, and thousands of vending machines, water coolers, and concession stand equipment.

With BOSS, facility managers can remotely control devices (utilizing BOSS Smart Plugs 120V and 220V), use condition-based alert notifications, and simultaneously control and schedule devices in different areas of the buildings. And although BOSS has yet to uncover an available research study, huge operational savings – with manpower hours saved – is a given.

Xcel Energy Center is Reducing Environmental Impact

“We have long been a champion of environmental causes and will continue to seek and implement solutions that reduce energy waste,” said Jim Ibister, VP Facility Administration of Minnesota Sports and Entertainment. “The BOSS Smart Plug deployment emphasizes our commitment to reducing our carbon footprint and defines what it means to be environmentally friendly.”

Channel partner Veterans’ Unisource, based in Minnesota, recently deployed the BOSS Controls Smart Plug Solution at Saint Paul RiverCentre and Xcel Energy Center in St. Paul, Minnesota. Veterans Unisource delivers expedited solutions and improved total cost in a variety of industries and product segments.

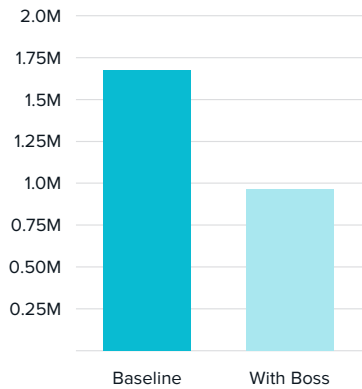
The Xcel Energy Center, home of the Minnesota Wild, is the only NHL arena in the US to be LEED Certified as an Existing Building for Operations and Maintenance. (source: <http://www.xcelenergycenter.com/sustainability>)



Energy Savings Report 1

Projected Payback ROI: 12 Months

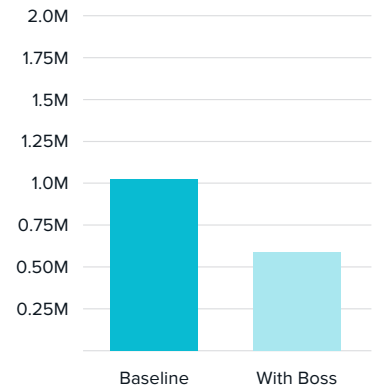
Annual kWh Use - *Projected



Annual Electric Cost(\$) - *Projected



Annual CO2 Output - *Projected



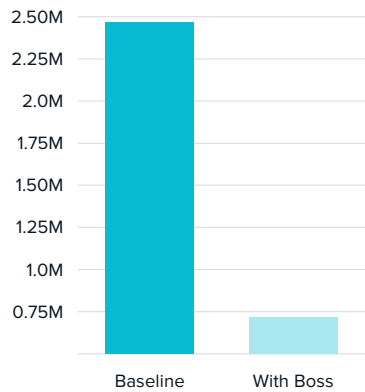
*Data figures are based on a deployment of 750 devices total savings is dependent on cost of electricity and off times.

Above shows Projected Payback Period for Energy-efficient Smart Plug Strategy for stadium size of about 18,500 seats. Data is based on a baseline sampling of devices including, but not limited to: water coolers, vending machines, TV monitors, and concession electrical equipment.

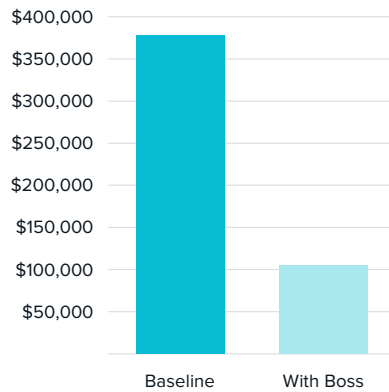
Energy Savings Report 2

Projected Payback ROI: 9 Months

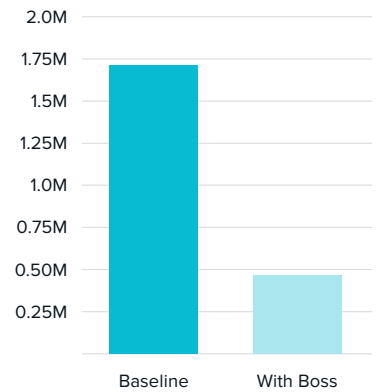
Annual kWh Use - *Projected



Annual Electric Cost(\$) - *Projected



Annual CO2 Output - *Projected



*Data figures are based on a deployment of 2,000 devices total savings is dependent on cost of electricity and off times.

Above shows Projected Payback Period for Energy Efficiency Smart Plug Strategy for stadium size of about 75,000 seats. Data is based on a baseline sampling of devices including, but not limited to: water coolers, vending machines, and concession electrical equipment.

Exert Total Domination.

Water fountains. Vending machines. Refrigerators. Every commercial building has its energy suckers. It's time to take control of yours, on one end-to-end system, at the touch of a finger.

Cloud-Hosted

BOSS Controls begins with the 120V or 220V Smart Plugs. Powered by Atmospheres™, our own cloud software platform, you can now group and control your plug loads from anywhere.

Energy Saving

Control energy usage even when you're not onsite. Vacant apartments, empty meeting rooms, classrooms, and offices are no longer energy vampires.

Fast ROI

Electric rates and climate vary greatly from region to region, so managing the heavier plug loads in your facilities delivers the fastest ROI. Rein in your highest-usage devices, and start seeing payback in just a few months.

Real-Time Monitoring

Built-in measurement and verification — view power usage, and analyze savings on the go with up to a year of stored data, segmented by individual device or device group.

About BOSS Controls

The product suite provides a seamless, fully-integrated, virtual energy management and control system that enables reductions in building plug load energy costs by up to 50 percent plus operational cost savings. Plug load can be up to one-third of a commercial building's total energy consumption.

