

Arby's Saves Big with Innovative Rooftop Unit Management Approach

In a wave of internal energy efforts starting in 2015, Arby's Restaurant Group Inc. developed a comprehensive portfolio-wide rooftop unit (RTU) assessment approach, prioritizing replacement of the most vulnerable units with high-efficiency RTUs. The success of their efforts was recognized by the U.S. Department of Energy's (DOE) Advanced RTU Campaign with the award for implementing the "most innovative RTU management approach by a participating partner."

By the end of 2015, Arby's installed 238 high-efficiency RTUs, resulting in an estimated savings of 1.4 million kWh, worth \$140,000 annually. The success of the program led to its expansion; in 2016 they installed an additional 250 high-efficiency RTUs.

Keys to Success

Arby's realized they needed a system to manage energy costs, equipment performance, and food safety. They had very little knowledge of their existing RTU inventory, but knew they had an aging fleet of RTUs and faced high replacement costs with low returns on investment when replacing equipment only after failure. In search of a better solution, Arby's worked with their partners to implement an inventory and rating system to rank the performance of all their RTUs, allowing them to prioritize replacement efforts. Arby's partners also assisted in finding applicable utility rebates for RTU measures to partially recover costs of the projects.

Arby's custom RTU Inventory smart phone app. Image courtesy of Arby's Restaurant Inc.

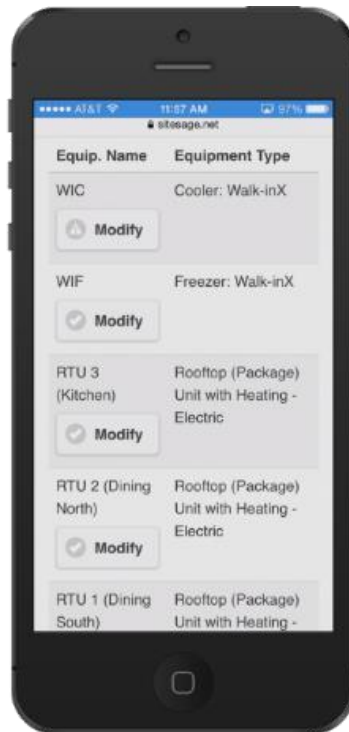


Image courtesy of Arby's Restaurant Inc.

Results of Innovative RTU Management Approach

Stores Surveyed for Inventory	940
High-Efficiency RTUs Installed	488
Energy Savings	2.9 million kWh annually
Energy Cost Savings	\$287,000 annually
Installation Cost (industry avg \$400)	\$285/ton
Equipment Savings (early purchase discounts)	>\$51,000
Equipment Savings (utility rebates)	>\$68,000

Project Methodology

Arby's used a custom smart phone app in partnership with a third party that enabled their technicians to quickly capture data on the condition of their equipment during store-by-store inventory surveys. This information was uploaded into a rating platform, which scored each RTU starting at a perfect score of 100 and deducting points for indicators of inefficiency.

This process helped Arby's identify and quantify the need for RTU replacements and enabled them to work with vendors and installers to optimize the RTUs and installation to get the highest value within its fixed RTU-improvement budget. Arby's collaborated with a single RTU manufacturer and an energy consultant to specify high-efficiency equipment to meet performance needs, reduce energy use, and meet utility rebate efficiency requirements. This proactive approach to RTU replacements enabled Arby's to significantly reduce both the installation and equipment costs typically experienced when replacing RTUs on a reactive basis. As a result, Arby's saved an estimated \$115/ton in installation costs and over \$93,000 in equipment costs from early purchase discounts and utility rebates.



Image courtesy of Arby's Restaurant Inc.

Learn More

Through the [Better Buildings Alliance](#), members across different market sectors work with DOE's exceptional network of research and technical experts to develop and deploy innovative, cost-effective, energy-saving solutions that lead to better technologies, more profitable businesses, and better buildings in which we work, shop, eat, stay, and learn.

Learn more about how to join the Better Buildings Alliance's Advanced RTU Campaign at <http://www.advancedrtu.org/>. The Advanced RTU Campaign is a recognition and guidance program, sponsored in collaboration with ASHRAE, the Retail Industry Leaders Association, the Federal Energy Management Program, and DOE's Buildings Technology Office, designed to encourage building owners and operators to take advantage of savings opportunities from high-efficiency RTUs across the country. Find more resources and guidance on space conditioning in the [Better Buildings Solution Center](#).

Arby's Organizational Profile	
Year Established	1964
Number of Facilities	3,400 (1,000 company-owned)
Employees	74,000
Project Scope	Innovative management approach to RTU efficiency

Arby's joined the Better Buildings Alliance and Better Buildings Challenge in 2015 and has achieved a 24 percent reduction in total energy consumption per transaction. Four years ahead of schedule, this performance exceeded the DOE's Better Buildings Challenge Goal of a 20 percent reduction by 2020 in total energy consumption per transaction.