

CASE STUDY

# Rooftop Units



## CASE STUDY

# Rooftop case study for a large national furniture retailer



An independent Energy management firm was tasked with achieving energy savings for their client, a large national furniture retailer. The goals of this project included:

- Determine if there are alternate controls systems that provide similar or better value to the clients existing control system.
- Determine if HVAC maintenance savings can be realized by gathering data on the performance of the units and the corresponding HVAC maintenance service activities at the site.
- Provide a software platform where additional data can be collected to validate additional energy savings through a cloud based platform.
- Solutions that may realize benefits for the client (such as de-stratification of fans, demand control ventilation , remote access to control system etc.).
- Full control of the lighting and thermostats - including remote schedule of setting/adjustments and in store control of space temperatures.

## Background

SensorSuite was chosen as the control system of choice. SensorSuite's system was installed in late December 2018 and had been in operation for a full year in 2019. A full year of energy monitoring was engaged by the energy management consultant to prove the energy savings that were projected for this project along with identifying maintenance service issues.

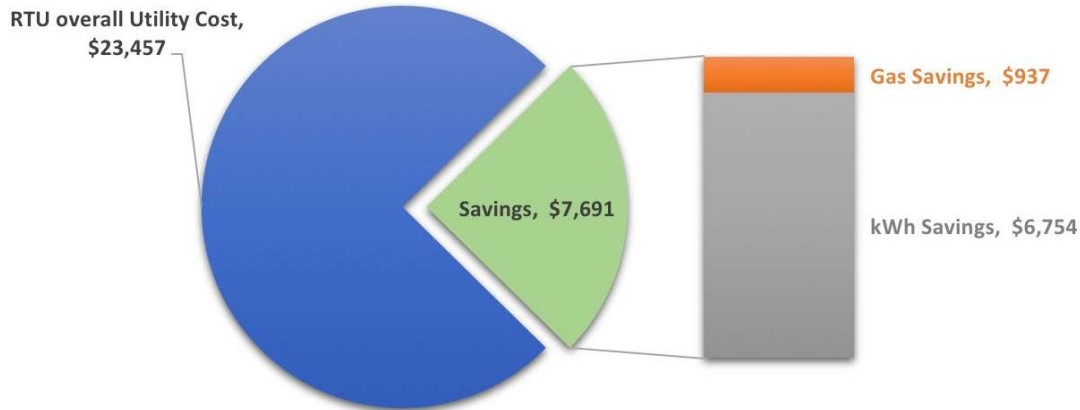


# Results

SensorSuite began control of 9 Roof Top Units on Jan 1, 2019 and reduced 39,729 kWh within the first year ending on Jan 13, 2020.

Based on the “Predicted kWh” compared to “Actual kWh”, it resulted in 42% reduction in electricity consumption and 9% reduction in natural gas usage for the RTUs. After the first year of RTU control, an overall savings of 30% was achieved which resulted in cost savings of \$7,691. A number of maintenance service issues were also identified through Sensorsuite’s energy management dashboard and corrected by the clients representative the independent Energy management firm with support from SensorSuite energy performance team.

## RTU PERFORMANCE



FOR MORE INFORMATION [www.sensorsuite.com](http://www.sensorsuite.com) | [sales@sensorsuite.com](mailto:sales@sensorsuite.com) | 1.855.773.6767

## Project Summary

### PROJECT COST

\$28,040 (+HST)

### INTERNAL GRANT

\$8,500

### NET COST

\$19,540

### PROJECT SCOPE

9RTUs

### SAVINGS PERIOD

Jan 2019-Jan 2020

### COST SAVINGS

\$7,691 (\$0.17/kWh & \$0.26/m3)

### PROJECTED PAYBACK

2.5 years