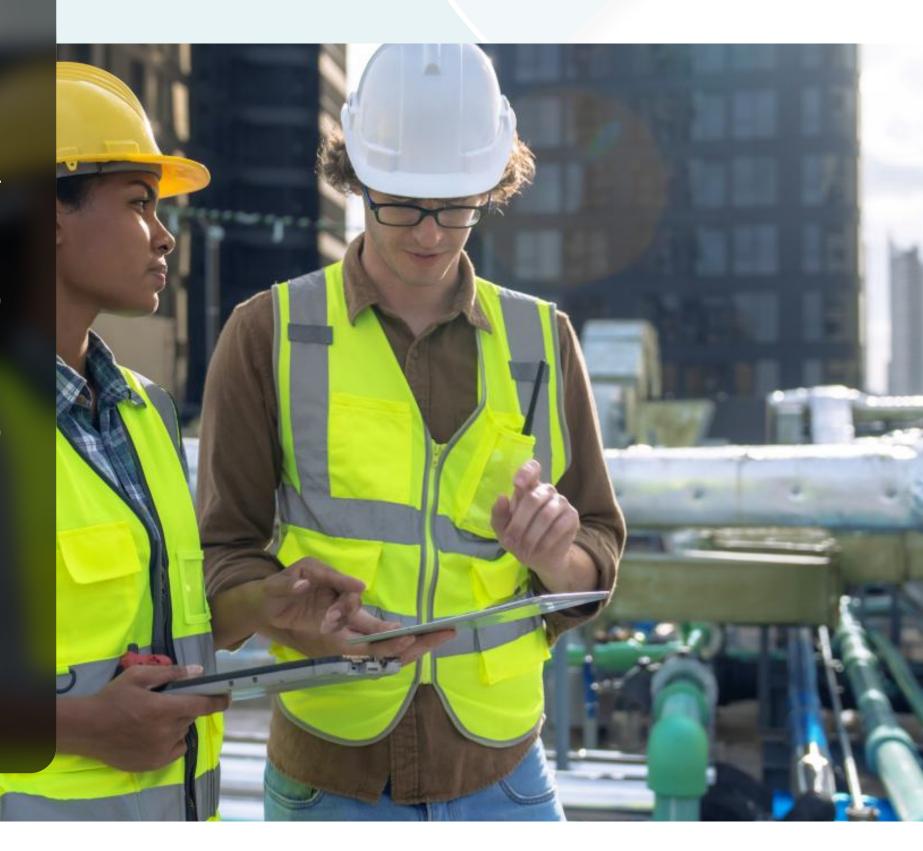
AIRSTAGE Cloud HVAC Contractor **CUSTOMER PROJECT EQUIPMENT** Commercial property owner in Commercial office building AIRSTAGE Cloud Edge Supervisor, Northern California with 2 AIRSTAGE VRF, existing RTUs, energy retrofit million ft² under management wireless smart thermostats

- Single story 60,000 ft² office building
- 20 5 ton all electric RTU HVAC system
- 10 RTUs are end of life and will be replaced with VRF
- Remaining 10 RTUs will remain in service until they reach end of life
- Customer goal is to increase efficiency reduce and energy operating expenses

"...A DOE study found that a **BMS can provide 22%** reduction in energy usage, and industry data shows they can reduce annual HVAC maintenance costs by about 20%."

Problems

- Net zero 2050 Corporate goal
- Tight capital budget
- Need to lower operating expenses
- Electric energy in Northern California is current \$0.47/kWh
- Average energy use intensity for office space is 15.5 kWh/ft²
- 60,000 ft² office building will use about 930,000 kWh/year
- \$437,100 average annual energy bill





Equipment

- 50 T AIRSTAGE VRF
- 10 Schneider 8650 thermostats
- 1 AIRSTAGE Cloud edge supervisor
- AIRSTAGE Cloud account with Site Manager and Service Manager

The AIRSTAGE Cloud BMS made it possible to reduce the building energy consumption by a bit more than 20%. When half the RTUs were replaced by ultra-high efficiency AIRSTAGE VRF there was an additional efficiency gain. The total average energy consumption was reduced by approximately 30%.



"...The AIRSTAGE Cloud BMS made it possible to reduce the building energy consumption by a bit more than 20%"

Results

- AIRSTAGE Cloud and AIRSTAGE VRF combined to reduce the sites energy usage by 30%
- AIRSTAGE Cloud coupled with AIRSTAGE VRF delivered an annual energy cost savings of \$87,420
- The Return on Investment for the end customer under 48 months

