



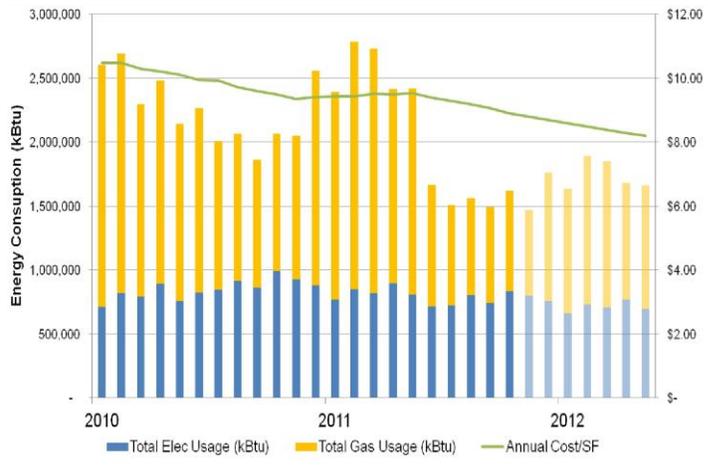
Takeda San Francisco Energy Audit

South San Francisco, California

Takeda San Francisco has a 61,270 SF, two story facility in South San Francisco, CA. The facility was constructed in 2008 as office and laboratory space. There are approximately 14 HVAC units providing conditioned air, ten of which provide single pass air to the laboratories. Takeda reportedly was spending \$42,000-\$48,000 per month on electricity and natural gas. They believed there were opportunities for saving energy and operating costs, particularly with their HVAC systems. Takeda hired Facility Engineering Associates (FEA) as an Energy Conservation Consultant. FEA conducted an energy audit and reported findings with recommendations including energy efficiency measures. The goal was to save 5-10% per year on projects with a payback of 3 years or less.

FEA created a new Building Operations Plan and assisted Takeda in the implementation of the plan with the building automation controls company. FEA worked with the local utility to identify rebates and incentives available to Takeda. The largest contributing change to increased energy efficiency was a schedule change on the air handlers that better reflected the actual operation schedule.

Currently, Takeda is saving approximately \$8,000 per month, exceeding the goal with 17%-19% savings, in reduced energy costs. Takeda continues to improve their operational costs through the implementation of changes recommended by FEA.



PRIMARY CLIENT REFERENCE

Troy Clement
 Facility Manager
 Takeda SF
 285 East Grand Avenue
 South San Francisco, CA 94080

START DATE: September 21, 2010
COMPLETION DATE: March 18, 2011

PROJECT SIZE: 61,270 SQFT
VALUE OF CONTRACT: \$36,890

CLIENT BENEFITS

- ASHRAE Level II Energy Audit
- A Building Operations Plan to guide future actions taken in the operation of the building
- Coordination with the building controls contractor to implement recommendations
- Coordination with the local utility in finding rebates and incentives
- Coordination with building personnel on upgrades to existing equipment to improve operations
- Achieving savings above the original goals outline

SCOPE ITEMS

- Conduct an ASHRAE Level II Energy Audit
- Recommend Energy Efficiency Measures
- Write a Building Operations Plan
- Assist in the implementation of the Building Operations Plan

