

Energy Audit Case Study

What we do

- ✓ Monitoring & Verification (M&V) Metering Services
- ✓ Commissioning
- ✓ ENERGY STAR® Reporting
- ✓ LEED Consulting
- ✓ Energy Audits of Existing Buildings
- ✓ Energy Modeling of New Construction and Existing Building Renovations
- ✓ Ashrae Level I & Level II Audits
- ✓ Verify Energy Performance of Various Systems



Project Details

Contract Type: Preliminary Energy Audit
 Facility Size: 28 buildings,
 Area: 249,000 square feet
 Electric Savings: 789,000 kWh
 Natural Gas Savings: 3,200 therms
 Project Cost: \$277,000
 Annual Cost Savings: \$66,000
 Payback: 4.2 Years
 Location: USA

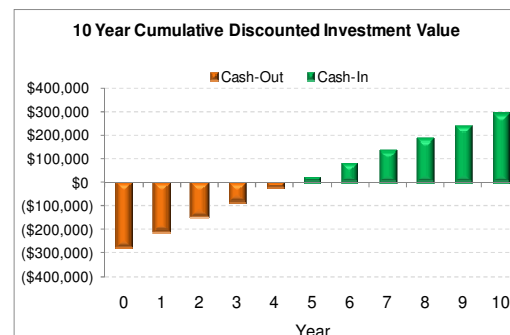
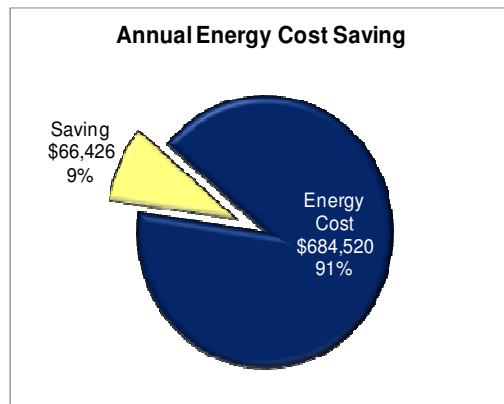
Yonergy performed a Preliminary Energy Audit on 28 facilities located in Alexandria area, which included:

- Utility Bill Analyses for all facilities
- Energy Star benchmarking for 10 of the facilities
- A walkthrough visit of each facility
- Energy Conservation Measures for each facility, and
- Financial analysis

With the Preliminary Audit, Yonergy identified 15 Energy Conservation Measures, including:

Energy Conservation Measures (ECMs)

- Install High Efficiency Lighting
- Install Lighting Occupancy Sensors
- Install Daylight Dimming Control
- Retro Commissioning (RCx)
- Attic/Roof Insulation
- Optimal Start Stop Control
- Replace Roof Top Unit (RTU)
- Motor Replacement with High Efficiency
- Chiller Replacement
- Install Variable Speed Drives
- CO2 Control of Outside Air



- Reduce Your Energy Usage
- Reduce Your Operating Cost
- Increase Your Portfolio Value
- Save The Environment



YONERGY

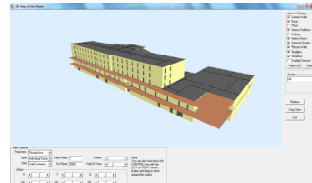
Energy Efficiency Solutions

Energy Modeling Case Study

What we do

- ✓ Monitoring & Verification (M&V) Metering Services
- ✓ Commissioning
- ✓ ENERGY STAR® Reporting
- ✓ LEED Consulting
- ✓ Energy Audits of Existing Buildings
- ✓ Energy Modeling of New Construction and Existing Building Renovations
- ✓ Ashrae Level I & Level II Audits
- ✓ Verify Energy Performance of Various Systems

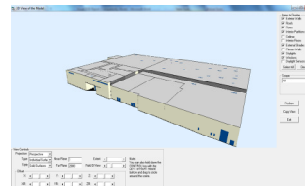
Hotel



Project Details

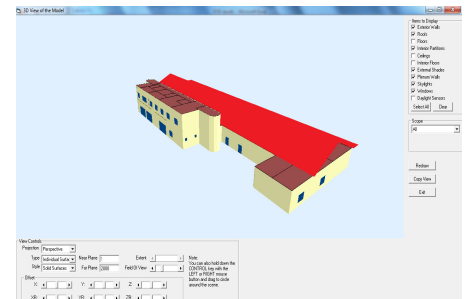
Contract Type: Energy Modeling
 Facility Size: 8 buildings,
 Area: 300,000 square feet
 Electric Savings: 1.1 million kWh
 Natural Gas Savings: 25,000 therms
 Project Cost: \$4.53 million
 Annual Cost Savings: \$317,000
 Payback: 14.3 years
 Location: Italy

Warehouse

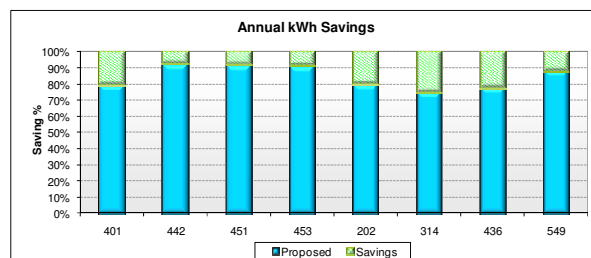


Yonergy performed energy modeling of 8 facilities to calculate energy savings for an ESCO, which included:

- Utility Bill Analyses for all facilities
- Energy Conservation Measures Saving Analysis for each facility
- Load profile of each building
- Results of the DOE-2 model, including baseline and alternative runs
- Tabulated report of energy efficiency upgrade recommendations



The whole building simulation for the baseline and proposed design was performed using VisualDOE 4.0. Visual DOE is a program which simulates hourly energy consumption in a building using DOE-2, a backbone software program developed by the Lawrence Berkeley Laboratories under the Department of Energy.



- Reduce Your Energy Usage
- Reduce Your Operating Cost
- Increase Your Portfolio Value
- Save The Environment