

# Case Study: Office Building

Advanced Energy Dynamics is an engineering firm that reduces electrical consumption while improving motor reliability.



## Goals

- ▶ **REDUCE KWH CONSUMPTION**
- ▶ **LEED Certification**
- ▶ This property management firm needed to reduce electric costs while accruing LEED points. They had completed other energy projects and were out of effective options to achieve their corporate goal of 20% by 2012.

## Results

Project Cost:		\$140,300
Annual Savings:		
kWh	13%	\$62,300
Motor Related (R+M)	28%	\$12,500
Payback (kWh only):		27 Months
Payback (total savings):		23 Months
ROI %:		44%
Increased Property Value:		\$1,000,000

## Additional Results

### OPERATIONAL

- ✓ Lower Running Temperature of Motors by 34%
- ✓ Lower Incident Rate of Motor Failure
- ✓ Increased Tenant Satisfaction with Air Temperature
- ✓ Extended Lifespan of Motors
- ✓ Opportunity for Proactive Maintenance Programming

### ENERGY CONSERVATIONAL

- ✓ True Energy Savings – Reduction of Carbon Footprint
- ✓ “Green” marketability to tenants
- ✓ Applicability to LEED Certification

## Electrical Load Mix

