



CITY OF SAN LEANDRO

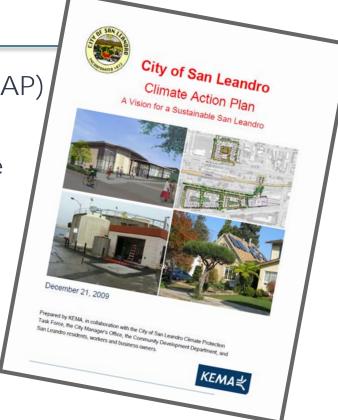
COUNCIL PRESENTATION
APRIL 6TH, 2015

PROCESS TO DATE

* 2009 - City adopts Climate Action Plan (CAP)

★ 2005 CAP database showed municipal operations constituting less than 1% of the City's total emissions

- * Also in 2009, the City received \$732,400 EECBG from Dept. of Energy
 - 14% of street lights converted to LED
 - Major City buildings received building controls retrofit





PROJECT OBJECTIVES



- * To identify potential energy/water savings projects through a City-wide audit
- * Implement a comprehensive package of savings measures and related City infrastructure improvements with zero capital outlay from the City that will pay for themselves over time from cost savings, and continue to reduce costs to the City once paid for

RFP PROCESS



- * RFP sent to seven firms
- * Three firms attended pre-proposal meeting
- * Two firms submitted proposals
- * Staff's recommendation is to enter into NPSA with Climatec for initial City-wide audit



WHO IS CLIMATEC?

- * Founded In 1975
- * Unmatched Local Resources
 - ★ 750+ Employees
 - ★ Local Offices In Irvine, LA, San Diego, Riverside, San Francisco, Pleasanton, Sacramento
- * CA's Largest Energy Management Provider
 - * Extensive Experience With Over 100+ Public Agencies
- * Proven Savings Track Record
 - * Climatec Has **NEVER** Had A Guaranteed Savings Shortfall









WHAT WE DO

- Building Automation
- 2 Enterprise Energy Management
- 3 Energy Services
- 4 Security Solutions
- 5 Life Safety
- 6 Support Services
- 7 Mechanical Systems

CITY ENERGY - PROGRAM GOALS



- Leverage and Maximize Funding
- * Alleviate Unfunded Needs
- ★ <u>Upgrade</u> Existing Systems
- Improve Comfort and Safety
- * Reduce Deferred Maintenance
- * <u>Self-Fund</u> Improvements
- ★ Guaranteed Savings
- * Support San Leandro's Climate Action Plan





POTENTIAL ENERGY/WATER CONSERVATION MEASURES



Building Automation Systems

- * New BAS installations
- * Integrating existing BAS
- * BAS occupancy control
- * BAS energy dashboard

HVAC Systems

- * Central plants
- * Central plant optimization
- * HVAC equipment
- * Variable frequency drives
- Demand control ventilation
- * Piping system retrofits
- Air handling systems retrofits

Renewable Energy

- * Solar photovoltaic
- * Solar thermal
- * Battery storage
- ★ DC MicroGrid zero net energy

Energy Education & Training

- Conservation curriculum
- Dedicated on-site resources
- City-wide energy policyprocedures
- * Energy kiosks
- Community outreach programs

Lighting Systems

- * Street lighting
- Wireless mesh network control
- * Traffic lighting
- Lighting system acquisition and purchase
- LED lighting and retrofitting
- Parking garage lighting retrofits
- Interior & Exterior lighting
- * Day light harvesting
- * Occupancy sensors

Water Management

- * Waterless urinals
- * Momentary sinks
- * Irrigation retrofits
- * Irrigation control
- ★ AMR automatic meter reading
- * AMI advanced meter infrastructure
- * Pumping
 Optimization
- * Wastewater plant optimization
- * Reclaimed water infrastructure

Building Envelope

- Window systems
- * Door systems
- * Roofing systems
- * Wall insulation
- * Weather stripping

Other Systems

- CCTV security system
- Intrusion security system
- Oil recycling programs
- Computer power management



PERFORMANCE CONTRACTING

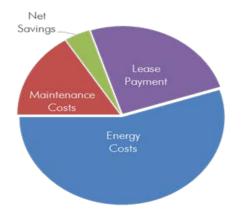


How it Works

Before Improvements



After Improvements
During Finance Period



After Finance Period





THE PROCESS



Preliminary Analysis

- Letter of Authorization
- Preliminary Study

Detailed Analysis

- Letter of Intent
- Detailed Study

Implementation

- Agreement Closure
- Installation, Project
 Management

Guarantee Phase

- Energy Savings Begir
- Measurement & Verification

Climatec partners with the customer to coauthor a comprehensive plan strategically customized to our customers goals – while maximizing energy savings and addressing environmental concerns.



SELF-FUNDED IMPROVEMENTS





<u>Measures</u>

New Equipment & Systems Management Integration







Savings
Energy Usage
Maintenance Costs





NEXT STEPS



* RFP Response

Jan 2015

* Council Briefing - Investigation Begins

Tomorrow

* Energy/Water Audit

April 2015

- ★ Utility Baseline
- ★ Staff Interviews
- ★ Site Surveys

* Preliminary Assessment

Multi-Phase Recommendations

* Council input on Prioritization of Projects

* Council Action on Climatec Project

June 2015

Q3 2015

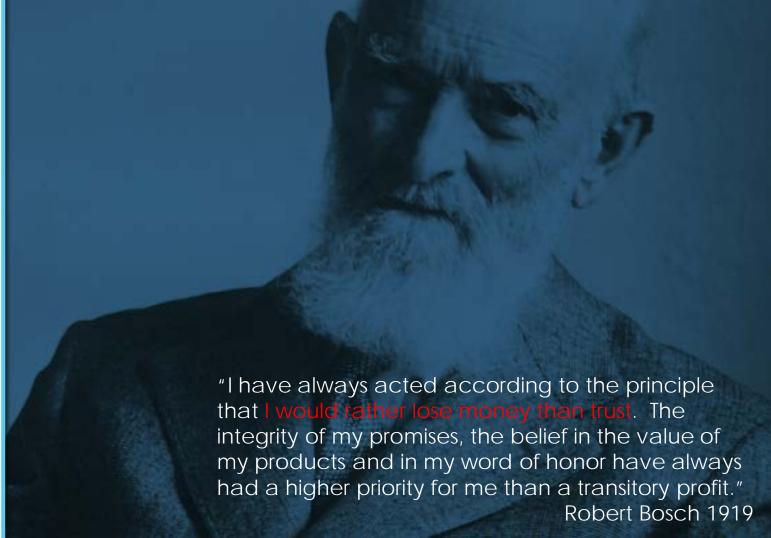


CLIMATEC Acquired By Robert Bosch In North America – Jan, 2015



- Founded By Robert Bosch In 1886 As A "Workshop For Precision And Electrical Engineering"
- Celebrated 125th Anniversary In 2011
- Approximately 290,000 Associates Of Which Approximately 45,600 Are In Research And Development
- → Bosch Files 18 Patents On Average Each Working Day









QUESTIONS?