



County Of Nevada Energy Efficiency Projects

Facts About Nevada County

- Population - 98,000
- Area – 978 Sq. Miles
- Cities – Nevada City, Grass Valley, Town of Truckee
- County Facilities - 500,000 Sq. Ft.
- Lease Space – 60,000 Sq. Ft.
- County Staff - 836 FTE
- Annual **Balanced** County Budget – \$181,000,000

Energy Study

- CEC commissioned and funded the Energy Study
- Facilities studied were the Administration Building and the Wayne Brown Correctional Facility (WBCF)
- Study covered replacement of existing HVAC package units, lighting, boilers, HVAC controls, and vending machine controls
- Study also considered installation of a central plant to serve the Administration Building and WBCF which proved not to be economically feasible

Administration Building 103,000 sq ft 1988



Administration Building Existing Conditions

- Aging HVAC equipment (22 year)
- Inefficient lighting system
- Inefficient boiler capacity
- Existing HVAC control system in need of update



Wayne Brown Correctional 69,000 sq ft 1991



Wayne Brown Correctional Facility Existing Conditions

- Aging HVAC package equipment
- Inefficient lighting system
- Inefficient domestic hot water boilers
- Antiquated HVAC Controls



Existing Condition Truckee Facilities

- Antiquated lighting systems in all buildings

Nevada County Energy Plan

April 2009 the Board of Supervisors adopted the Nevada County Energy Plan:

- Improve Energy Efficiency
- Reduce Greenhouse Gas
- Address Renewable Energy
- Improve Transportation Efficiency
- Water Conservation

Nevada County Solicited for an Energy Service Company (ESCO)

- Solicited competitive RFQ for ESCO to retrofit County Courthouse boiler and chiller
- This solicitation also included the possibility of Phase 2 projects at the Administration and the Jail facilities

Energy Efficiency Funding

- We had a need
- We had an assessment
- We have an Energy Plan
- We have identified an ESCO

All that we needed was a way to fund the improvements.

The Funding Plan

CEC 3% Energy Loan - \$1,486,867
EECBG - \$373,291
\$1,860,158

Administration Building – 100% Energy Loan
Jail Facility – 48% EECBG and 52% Energy Loan
Truckee Facility – 100% EECBG

CEC 3% Loan Project Time Line (\$1,486,867)

- September 28, 2009 - Loan application submitted
- March 25, 2010 - Loan application approved
- On May 27, 2010 Work started at the Administrative Building

EECBG Time Line (\$373,291)

- November 16, 2009 - EECBG application submitted
- April 21, 2010 - CEC approved our application
- July 7, 2010 – Application signed

Projected Outcome

- Annual Loan payment \$166,700 for 10 years
- Annual savings \$181,734
- Annual GHG reduction 704.6 ton

Insight

- Challenges we faced
 - Application Process
- What would we do differently in the future
 - Maybe not be first
- What we would suggest the State do differently in the future
 - Not so much review
 - Cement the process
 - Reduce frequency of reporting

More Insight

- Did this stimulate the economy and created or retain jobs in California:
 - Local economy
 - National economy
- Achieved lasting and measurable energy benefits:
 - Energy Saving
 - Incentive to do more in the future
- Did the process expended money efficiently, with accountability and minimal administrative burden:
 - Oversight vs. benefit

And More Insight

- Contributed to meeting California's energy and environmental policy goals:
 - As best we can
- Leveraged other federal, state, local, and private financing through partnerships:
 - Looking to the future