Green Jobs Through Energy Efficiency

Betony Jones
Consultant to Sierra Business Council, Sierra Nevada Energy Efficiency Programs
betony.jones@gmail.com 530.587.3581

Sierra Nevada Energy Efficiency Programs

The Big Vision

- Workforce Development
- Comprehensive & Cost-effective Energy Savings
- Local Energy and Climate Policy

Leverage real energy savings to build community support for long-term energy use transformation


Green Job Development - Program Components and Design

**Green Communities**
- Internships and Apprenticeships – hire local underemployed residents

**Sierra Nevada Energy Watch**
- Small Business Direct Install – hire local staff and contractors

**Innovator Pilots**
- Training and Education – train the local workforce

Green Communities

- 6 Counties
- 8 Cities
- 12 Paid Interns (3 Alternates)
- $15/hr
- Range from recent B.S. graduates to retired
- Most were working part-time, laid off, or unemployed
- Community Planning, Sustainability Consultants, Environmental or Atmospheric Scientists


SNEW Service Area

- 14 Counties
- Municipal, Special District, and Non-Profit Customers

Small Business Customers

Sierra Business Council

Staples

RHA

Sierra Nevada Energy Watch Approach...

Challenges:
- Large geographic area, low population density
- Increased time and transportation
- Very small businesses
- Skeptics

Design:
- Implementation Schedule
- Bundle projects together for economy of scale
- Use a geographically dispersed network of local contractors
- “Clean Sweep”
- Calculated incentives to deliver comprehensive savings – no picking and choosing

Balancing Long and Short Term Goals

Long Term Agenda
- Market Transformation
- Maximize resources coming into the region
- Develop Local Economy
- Climate Action Plans

Short Term Goals
- Meet Savings Goals
- Cost Effective program
- Comprehensive Savings
- Employ Local Workforce

Conflicting Priorities

Efficient Implementation
Cost Effective
Affordable for Customers
Wholesale Equipment
Maximize Energy Savings

Comprehensive
Minimize Waste
Living Wage
Customer Service
Local Sourcing
High Quality Equipment
Local Contractors

Elements of our approach

1. All workers are paid living wage (average of prevailing wage in the 5 counties) = $37.50/hr straight pay
2. Build relationships between local contractors and customers for future energy services (i.e. solar)
3. Contractor training for comprehensive measure installation
4. Utilize “nimbleness” of small contractors to add measures and services
5. Purchase equipment wholesale from local vendors (relieves contractors of financial burden)
Elements of our approach (cont’d)

6. Hire program staff from the communities they serve
7. Reduce emissions from employee and contractor travel (1 mi = 1 kWh)
8. Require customer co-pays on all projects (at least 10%)
9. Emphasize Service over Sales
10. Make proper disposal easy for contractors
11. Through energy and climate literacy training, help trades people become spokespeople for clean energy economy

Nine Month Results

In-House 5 County Region
- Peak kW: 286
- kWh: 1,670,000
- Incentives paid: $194,000
- Avg. Incentive: < $0.12/kWh
- Customer co-pays collected: Over $111,000
- Paid to contractors for labor: $233,000
SNEW 5 County Installed Measures

- Incentives Paid by Measure Type
- kWh Savings by Measure Type

Green Economy Results

- Annual $$ Savings for Local Businesses: $255K
- Reduced GHG emissions by almost 400 metric tons
- Over $550K has been invested in the local economy (money saved by businesses or paid to contractor or suppliers)
- Diverted 100% of waste from local landfills
- Reduce emissions from driving by hiring locally (1 mile = 1 kWh)
Conclusions

- LGP In-House Direct Install programs that utilize local contractors have a number of benefits over the standard model
  - Customer buy-in goes up
  - Comprehensiveness goes up
  - Cost-effectiveness goes up
  - Support for climate and energy policy goes up
  - Community capacity for and interest in clean energy goes up
  - Operational GHG emissions go down