

## Green Jobs Through Energy Efficiency

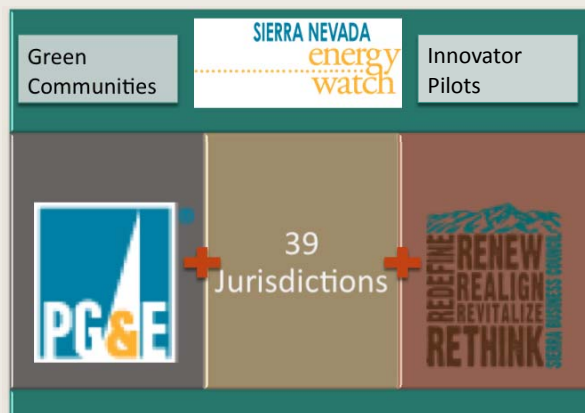
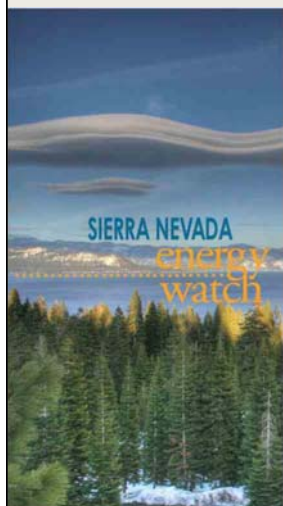


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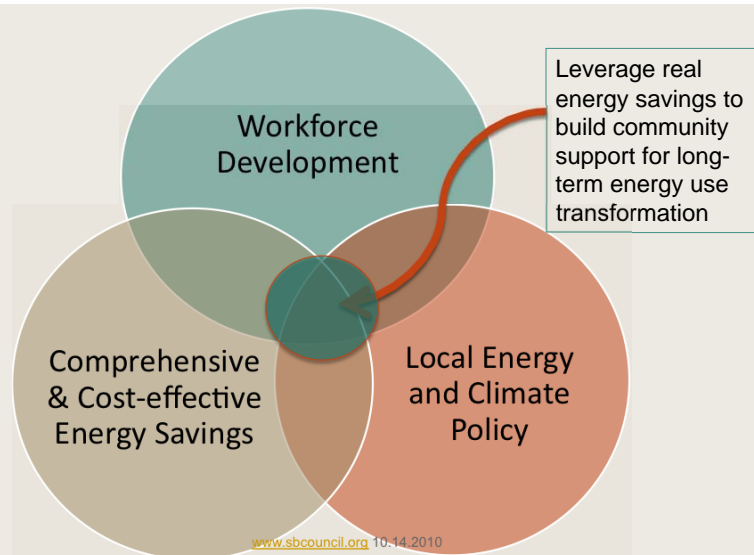
Statewide EE Best Practices Forum – Los Angeles, CA

## Sierra Nevada Energy Efficiency Programs



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## The Big Vision



## 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

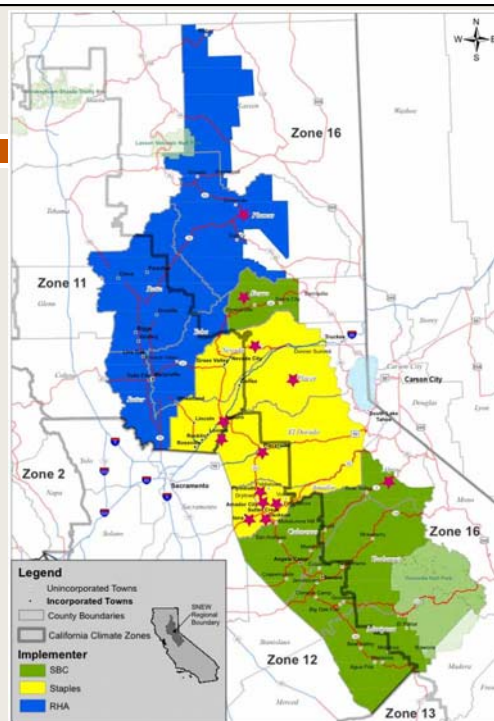
- ☐ Training and Education – train the local workforce

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## 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

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## SNEW Service Area

- 14 Counties

Municipal, Special District, and Non-Profit Customers

Sierra Business Council

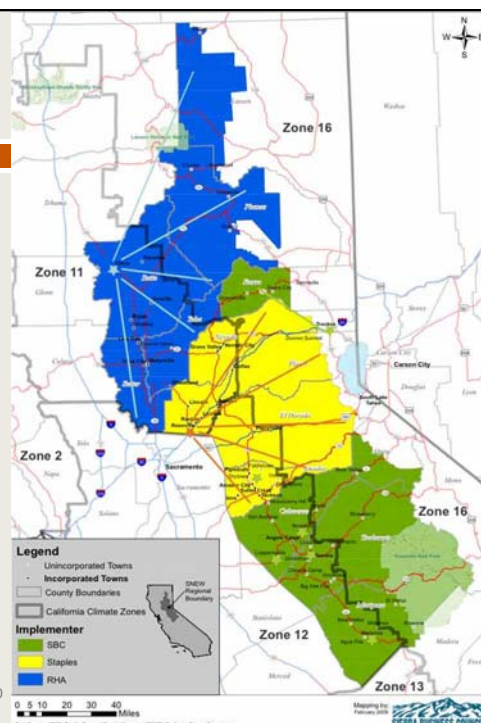
Small Business Customers

Sierra Business Council

Staples

RHA

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## 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

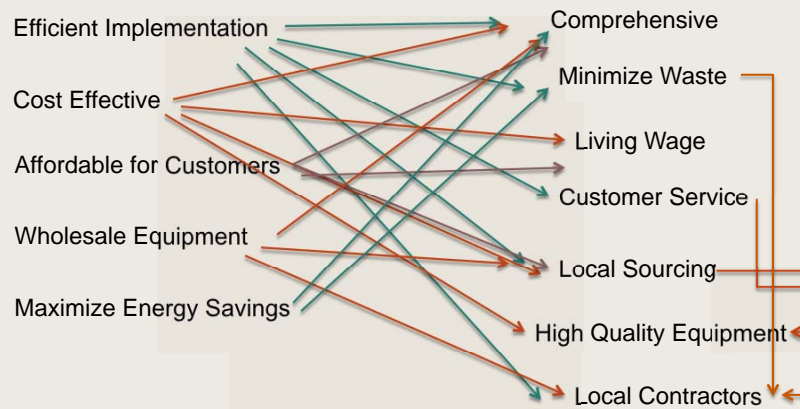
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## Balancing Long and Short Term Goals



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## Conflicting Priorities



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## 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)

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## 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

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## Nine Month Results

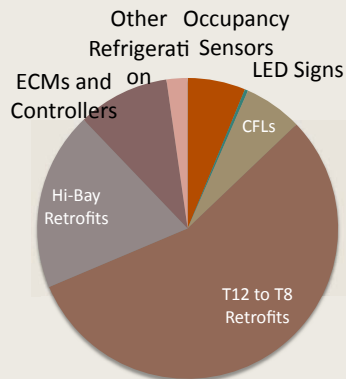
### In-House 5 County Region

- ▣ 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

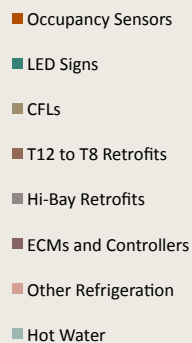
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## SNEW 5 County Installed Measures

Incentives Paid by Measure Type



kWh Savings by Measure Type



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## 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)

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## 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

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