

Local Government Energy Efficiency

Best Practices

GREEN JOBS

Sierra Nevada Energy Watch

Five Counties

Population: 125,000

SUMMARY

Sierra Business Council (SBC) has been a leader in demonstrating that environmental quality, social fairness, and economic prosperity go hand-in-hand.

Through several energy efficiency and workforce development partnerships, SBC has shown that community-based energy efficiency programs can stimulate job creation and capacity building of the local workforce in rural, hard-to-reach areas.

The Sierra Nevada Energy Watch (SNEW) partnership serves 14 counties of the Sierra Nevada region. In five of the counties, SNEW hired staff and local contractors to run an energy efficiency implementation program for small businesses, local governments, special districts and non-profits. The SNEW program specifically focuses on geographic areas that were previously under-served by existing energy efficiency implementation programs.

Sierra Business Council has shown that when there is a commitment to local job creation, energy efficiency can be an economic engine for communities with high unemployment. Paying living wages, providing training opportunities, and establishing policies that accommodate local contractors' constraints are hallmarks of the program's success.

Local Green Jobs



PROGRAM HIGHLIGHTS

- SNEW staff conducts all the marketing, outreach, and follow up to ensure consistency in program offerings and effectiveness.
- The SNEW program hires contractors exclusively from the communities it serves and pays prevailing wage. This is done to maximize financial resources circulating within the region.
- Paying prevailing wage translates to higher customer co-pays. This has resulted in greater investment in, and commitment to, energy efficiency, leading to market transformation.
- SBC purchases equipment wholesale and passes the savings on to the customer. This ensures high quality equipment is installed, and avoids the risk of crediting two programs with the energy savings (where contractors purchase equipment from upstream programs and both take credit).
- To avoid used equipment from ending up in the landfill or overwhelming the region's transfer stations, contractors deliver used equipment to a central site, where a recycling company properly disposes it.



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LESSONS LEARNED

- When starting a new program, it can be challenging to overcome the trust gap. Hiring local staff helps to gain the trust of the community quickly.
- Using local contractors for retrofits facilitates relationship building between customers and contractors.
- Working with local independent contractors to conduct installations requires providing them with training and capacity building. This helps them complete quality work and expands their clean energy services. Outside firms already established in the energy efficiency realm may be easier to work with initially, but harder to influence.
- A network of local contractors can stay in their own communities to complete an installation. This avoids excess greenhouse gas emissions from outside contractors driving to the region to complete the work.

THE REST OF THE STORY

The Sierra Nevada Energy Watch partnership between the Sierra Business Council and PG&E serves 14 counties of the Sierra Nevada region. SNEW runs an energy efficiency implementation program for small businesses, local governments, special districts and non-profits in five counties, hiring staff and contractors from the local area. This program, which started in 2010, focuses on local job development, training, and quality control.

The SNEW program focuses on hiring from the communities it serves. The counties served by SNEW have unemployment rates ranging from 10 to 16%. Paying prevailing wage creates high-road jobs for contractors. The SNEW program maximizes the financial resources returning to and re-circulating in these counties. Paying prevailing wage requires the program to look for cost savings elsewhere to stay affordable for customers and maintain overall cost-effectiveness.

By using local contractors for retrofits, SNEW facilitates building relationships between customers and contractors. When the customer has a maintenance issue or service request, they know whom to call. Local contractors with a history and reputation in an area can be very effective spokespeople for clean energy.

Working with local independent contractors to conduct installations requires providing training and capacity building to help them complete quality work and expand their clean energy services. Often, outside firms already established in the energy efficiency realm

are easier to work with initially, but harder to get to adapt to the SNEW way of doing business.

Hiring local staff that grew up in these communities not only helps with understanding the local culture, but they also know and are known by local business owners. In starting a new program, it can be challenging to overcome the trust gap. Hiring local staff helps quickly to gain the trust of the community.

By having a network of local contractors, no one has to drive far to complete an installation. This avoids excess GHG emissions from outside contractors driving to the region to complete the work. The emissions saved from reducing electricity usage by 1 kWh are offset by car travel of 1/2 to 1 mile. Since SNEW serves mostly small businesses, with an average project size of 8,000 kWh, bringing in contractors from the Bay Area or Central Valley would decrease the climate benefits of energy efficiency projects by 3-5%.

When contractors provide equipment for projects, they can mark it up for a profit; however, the upfront capital cost of providing equipment places a financial burden on small contractors. To alleviate this burden, SNEW purchases equipment wholesale and passes the savings on to the customer. This ensures high quality equipment is installed, and avoids the risk of contractors installing equipment that has already received an upstream incentive.

Because SNEW pays higher labor rates, customers have higher co-pays, which results in greater investment in, and commitment to, energy efficiency, and leads to

[> more...](#)

Local Green Jobs

... continued from page 2 >

market transformation. All customers pay at least 10% of their project cost. The program provides refrigeration measures as well as retrofits for high bay fixtures and 8-foot linear fixtures with magnetic ballasts. SNEW has used less than 6% of its incentive dollars for screw-in compact fluorescent lightbulbs.

SBC staff conducts all the marketing, outreach, and follow-up to ensure consistency in program offerings and effectiveness. SBC matches contractors with customers based on customer location and needs. SBC staff assist with scheduling installations, check in during installations, and follow up with post-installation inspections to confirm that all the prescribed work was completed. This has given the program control over reputation and branding.

To avoid used equipment from ending up in landfills or overwhelming the region's transfer stations, the contractors bring used equipment to a central site, where a recycling company picks it up and disposes of it properly. This reduces costs and the burden on contractors to “do the right thing” in a region that has limited capacity to manage electrical waste.

In addition to SNEW, SBC is working with PG&E on a program to develop a hands-on training program for entry- and mid-level workers to improve energy, climate, and environmental literacy and to expand their sustainability services. Since electricians, carpenters, and plumbers gain customer access for routine maintenance issues, they are well suited to identify efficiency opportunities for customers who might not be thinking “green.”

Additionally, SBC is working in coordination with PG&E to address the limited capacity of local governments to perform GHG inventories and develop climate action plans. SBC has recruited community interns to help local jurisdictions complete GHG inventories. Because the Sierra Nevada is not home to any university, but is home to many under-employed college graduates, interns are recruited from the general, non-student population. Providing employment and training to keep people with these skills in the

GREEN ECONOMY BENEFITS

The SNEW program has the challenge of being a large geographic area with low population density, resulting in increased time and transportation costs to serve very small businesses. Nevertheless, it is providing benefits to the local green economy.

As of October 2010, in the 5 counties served by the local contractor program:

- * Local businesses are saving \$255,000 annually
- * Greenhouse gas emissions have been reduced by 400 metric tons, through improved efficiency and reduced contractor vehicle miles traveled
- * Over \$550,000 has been invested in the local economy
- * 100% of the contractor waste has been captured and recycled

Other benefits include:

- * Increased customer buy-in, leading to market transformation
- * More comprehensive retrofits, not just relying on compact fluorescent lights
- * Cost-effectiveness is higher
- * Local capacity building for the energy efficiency and renewable energy labor force
- * Support for climate and energy policy has increased

region will help other jurisdictions and businesses meet new climate regulations or recommendations.

Note: Due to the early stages of this pilot project, the cost-effectiveness is currently being evaluated. Continued assessments will be made to insure the program is most effective while meeting the needs of hard-to-reach customers.

LEARN MORE

Sierra Nevada Energy Watch is a collaboration between Pacific Gas and Electric Company (PG&E) and Sierra Business Council dedicated to providing innovative energy efficiency solutions for local governments and businesses in Sierra Nevada communities within PG&E territory.

www.sbcouncil.org/energywatch

Local Government BEST PRACTICES

SIMILAR PROGRAMS

■ **Sonoma County's Energy Independence Program** has reduced the impact of the housing crash in California by keeping skilled building trades workers in the county employed.

<http://sonomacountyenergy.org/>

■ **CDTech**, the Los Angeles Trade-Technical College and the Community Development Center initiative, is working to restore the economy in low-income areas of South Los Angeles. The program trains local residents to green local buildings and homes - including the development of green housing, green jobs, workforce training and business development.

<http://californiagreenstimulus.org/las-cdtech-911-program-answers-community-call/>

■ **Rising Sun Energy Center's** mission is to create a society that uses energy and water responsibly and equitably by:

- * Providing green workforce development training & employment that creates green career pathways for youth and adults
- * Offering low- to no-cost residential retrofits & services that lower energy & water usage
- * Educating communities about sustainable behaviors and technologies

www.risingsunenergy.org/

SNEW has used less than 6% of its incentive dollars for screw-in CFLs.

For more information about this case study:
Patrick Stoner, Statewide Local Government Energy Efficiency Best Practices Coordinator, pstoner@lgc.org

Funded by California utility ratepayers and administered by California's investor owned utilities under the auspices of the California Public Utilities Commission.

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ADDITIONAL RESOURCES

■ **The US Department of Energy's** Energy Education and Workforce Development web page provides information and links to resources connecting energy efficiency, renewable energy and green jobs.

www1.eere.energy.gov/education/

■ **ICLEI–Local Governments for Sustainability** (www.californiaseec.org) offers a suite of resources to aid local governments in implementing energy efficiency measures and reduce greenhouse gas emissions.

■ **The Institute for Local Government's California Climate Action Network** (www.ca-ilg.org/ClimateChange) provides resources, information, and recognition to help local agencies reduce greenhouse gas emissions and save energy.

■ **The Local Government Commission** (www.lgc.org) provides many free resources to assist local governments in reducing greenhouse gas emissions and energy use including newsletters and publications, fact sheets, model projects, and articles.