

Action Plan  
For  
California Local Energy Programs

Written by  
The Local Government Commission

Funded by  
The Hewlett Foundation

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Local Government Commission  
1414 K Street, Suite 600  
Sacramento, CA 95814  
(916) 448-1198  
[www.lgc.org](http://www.lgc.org)

# Action Plan for California Local Energy Programs

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*Executive Summary*

In 2000 and 2001 California was experiencing its second energy crisis in two decades. The Local Government Commission (LGC), in conjunction with the League of California Cities (League), California State Association of Counties (CSAC), Regional Council of Rural Counties (RCRC), and California Special Districts Association (CSDA), are looking to develop ways to help California local governments institutionalize their responses to the crisis in order to maintain their conservation efforts and to increase the amount of renewable energy generated in their communities.

The major state government entities dealing with energy, the California Energy Commission (CEC), California Public Utilities Commission (CPUC), and the California Power and Conservation Financing Authority (CPA), strongly support local government as a delivery system for energy and environmental programs. State government and its agencies need local entities with the capacity to carry out the programs — they need trusted and viable entities to be ‘translators’ for facilitating the quick and efficient implementation of state programs.

Toward that end, LGC convened a series of working group sessions as a first step. The working groups were designed to help develop a sustainable and transferable local government energy program structure, and connect interested and capable local government program administrators with their state-level counterparts.

The working groups identified four barriers to advancing united state and local government energy goals and programs:

- Conflicting State energy policies and programs.
- Lack of communication between and among local and state government agencies and decision-makers on energy issues of common interest.
- Need for education for local elected officials and staff regarding energy policy, programs, and technologies.
- Lack of local government resources to develop and sustain local energy programs.

The groups also identified a series of steps to take to overcome these barriers, some of which have already started since this project ended.

*Conflicting State Energy Policies and Programs*

- Coordinate the efforts of the major State agencies dealing with energy. (**Note:** the CEC, CPUC and the CPA are jointly developing an Energy Action Plan.)

## Improve Communication

### *Between State and Local Governments*

- Local governments should participate in the CPUC process to the extent possible.
- Local governments should develop outreach opportunities with the CPA.
- The CEC and CPUC should designate a staff position or positions for local government coordination.
- A legislation/public hearing website/email listserv for local government issues should be developed to allow everyone better access to this type of information.
- Local governments should create a list of local government point people who can work with the state.

### *Between Local Governments*

- Develop a local government energy network. (**Note:** the local energy professionals network meetings have continued.)
- Create a statewide association of regional energy offices.

### *With Other Organizations*

- Local governments should work with US DOE to tap into its resources to help advance these next steps.
- Invite tribal representatives to participate in these networking workshops.
- Local governments should collaborate with other groups that are working on similar issues.

## Local Government Education on Energy Policies, Programs and Technologies

- Convene more networking meetings like this. (**Note:** this is happening.)
- Hold other workshops for local governments, such as one with political strategists to discuss the politics of local energy opportunities.
- Develop a white paper on these meetings. (**Note:** there was already a commitment to write this document.)
- Develop briefing papers on the 10 most important questions for local governments to ask before taking action on various energy subjects.

- Develop a local government energy website that could save local government staff a lot of time in searching for information. (**Note:** LGC is starting to provide some of these resources.)
- Hold more workshops on what the CEC and CPUC are doing.
- Improve access to local energy data statistics to improve strategic planning.
- Provide written descriptions for different models of local government energy structures along with supporting materials, including their strategic plans.
- Expand funding for UC Extension Service to focus on local energy education.

*Develop Resources to Sustain Local Energy Programs*

- Build an effective network of local government energy professionals.
- Develop funding strategies for local energy programs
  - Document ways in which local governments can save money from energy programs.
  - Research Community Choice (AB117) opportunities.
  - Research public-private partnership opportunities.
  - Tap into the Rebuild America program, and other programs offered by US DOE.
  - Pursue regional energy departments for locals who can't afford their own.
  - Identify non-monetary barriers that hinder the implementation of good ideas.
- Promote the use of renewable energy in California.
  - Incorporate distributed generation technologies in public facilities and operations.
  - Pursue a state law requiring life cycle energy calculations on new buildings.
  - Support improvements in the state's processes and infrastructure so that local energy projects can better access state and federal funding and affect state decision-making.
  - Work to reduce demand and standby charges imposed by IOUs that inhibit distributed renewable project development at local governments.
  - Collect best practices, model policies and programs in one place to facilitate their adoption by other local governments. (**Note:** LGC has started to do this.)

## *Introduction*

In 2000 and 2001 California was experiencing its second energy crisis in two decades. During the earlier crisis, local governments across California rallied to both conserve energy and to generate clean renewable energy. With the passing of that crisis, most local governments let the programs they developed expire, with a few notable exceptions.

The Local Government Commission (LGC), in conjunction with the League of California Cities (League), California State Association of Counties (CSAC), Regional Council of Rural Counties (RCRC), and California Special Districts Association (CSDA), are looking to develop a way to help California local governments institutionalize the responses they are making today to keep their conservation efforts ongoing and to increase the amount of renewable energy generated in their communities.

The major state government entities dealing with energy, the California Energy Commission (CEC), California Public Utilities Commission (CPUC), and the California Power and Conservation Financing Authority (CPA), strongly support local government as a delivery system for energy and environmental programs. State government and its agencies need local entities with the capacity to carry out the programs — they need trusted and viable entities to be ‘translators’ for facilitating the quick and efficient implementation of state programs.

Toward that end, LGC convened a series of working group sessions as a first step. The working groups were designed to help develop a sustainable and transferable local government energy program structure, and connect interested and capable local government program administrators with their state-level counterparts.

While this project focused on developing a structure to deal with utility energy programs, the lessons learned are transferable to other program areas where state and local government are working on mutual goals.

The primary strategies the working groups identified to increase energy conservation and renewable energy systems in the state include providing policy and financial support for both state and local government energy programs, and focusing on improving communication within and between all levels of government.

Much has happened since the final Hewlett Foundation funded meeting in September 2002:

- Project meetings generated interest on the part of local government energy professionals to continue meeting on a quarterly basis; two meetings have already occurred, and a third meeting is scheduled for May 2003.
- The LGC received funding from the CPUC to assist communities in Humboldt and Ventura Counties to create sustainable energy offices to provide information and programs to the residents, businesses and institutions in their areas.

- The community aggregation bill and renewable portfolio standard bill, both mentioned as important elements for the State's energy goals, were signed by Governor Davis.
- Net metering for small, distributed generation systems was extended.
- The CEC, CPUC and the CPA are working together to develop a state Energy Action Plan.
- California's current state and local government budget shortfalls may make it harder to find funds to invest in local and state energy programs.
- As a result of these workshops, local governments looking to advance their renewable energy plans were connected with photovoltaic (PV) suppliers, financing entities and state agency personnel who can help them.

In addition to the Hewlett Foundation, the Energy Foundation and HKH Foundation provided financial support for this effort. Others, including the Sacramento Municipal Utility District and the Los Angeles Department of Water and Power, contributed to the success of the series.

### ***Project Description***

LGC convened four working group sessions involving representatives from local government, state agencies and the energy industry. The working group sessions were as follows:

- The first two meetings brought together local and state government and suppliers of distributed generation technologies and services to identify how these entities can best work together for mutual benefit. Local governments are looking for the means to generate their own power within their communities. They are looking at smaller, cleaner, distributed generation capabilities such as solar PVs, wind turbines, micro-turbines and fuel cells. Distributed renewable generation also is seen as a way to contribute to the integrity and reliability of the electricity supply by providing diversity of supply and decentralizing production.
- The purpose of the third meeting was to identify a sustainable, institutional structure or structures for delivering comprehensive local government energy programs by bringing together local officials with experience in energy programs, local governments just getting started with energy program development, commissioners from the CEC and the CPUC, and some of the most creative thinkers working in the energy arena.
- The final meeting brought together the state agencies and local governments with energy programs to determine how they might best coordinate their efforts. At the start of this grant period, there were more financial resources available to entities in California to help develop generation and conservation capacities than ever before, hundreds of programs totaling over \$2.8 billion. However, the dissemination or marketing of these resources was scattered throughout a

multitude of agencies and departments, as well as privately owned utilities. Fewer of these funds are now available.

### ***Project Goal***

The project goal was to develop an action plan to establish and support local government entities in the implementation of local energy programs that complement State of California goals of reducing per capita energy consumption, increasing the amount of renewable energy generated, and strengthening the energy efficiency and renewable energy industry.

One of the barriers to advancing united state and local government energy goals and programs identified at these meetings was the ‘vacuum’ of leadership at both levels of government. The issues that result from this vacuum include:

- Conflicting State energy policies and programs.
- Lack of communication between and among local and state government agencies and decision-makers on energy issues of common interest.
- Need for education of local officials and staff regarding energy policy, programs, and technologies.
- Lack of local government resources to develop and sustain local energy programs.

This document will address these issues and provide a plan to move forward. These issues are not mutually exclusive. If communication between state agencies improved, there would be fewer conflicting policies and programs. If local governments had more resources to focus on energy program staff, they would be better educated and be able to spend time interacting with their State counterparts.

### ***Project Findings***

#### ***Barrier #1: Conflicting State Energy Policies and Programs***

The fourth working group focused on state and local government goals and strategies for conservation and renewable energy programs. Local government participants noted the lack of an overriding goal or policy at the state level that would guide the activities of state agencies. For example, state policies both support and retard renewable energy development.

In support of renewable energy, the CEC, and CPUC through investor-owned utilities (IOU), provide buy-down incentives for new renewable energy systems. Without these buy-downs which have covered up to 50% of a system’s cost, new renewable generation in California would not have grown as fast as it has.

But, the CPUC has considered charging distributed renewable energy generators such as home rooftop PV systems 'exit fees' for the California Department of Water Resources (DWR) power purchases they are not consuming. Such a charge will make the economics of PV nearly impossible to pencil out. And the legislature considered letting net metering, which allows small, distributed generators of electricity to sell excess generation back to the grid, expire. This again would discourage new generation, as it reduces the economics. Both actions would reduce the amount of new PV, which generates excess electricity, precisely at the time the grid needs it, on hot summer afternoons. Both issues have since been resolved in favor of renewable generation.

In another example of conflicting programs, the CPA has one billion dollars of its bonding authority designated for energy efficiency and new renewable energy facilities. The CPA renewable funds are designed to stimulate large-scale renewable generation.

However, the power contracts signed by the DWR during the energy crisis in 2001 contain no renewable generation. With an abundance of natural gas fired power plants in operation or scheduled to come on line to fulfill the DWR contracts, it will be very difficult for new renewable generators to find a market for their electricity. Also, there are few California local governments that are ready to invest the \$2 million minimum loan amounts from CPA on renewable projects. (**Note:** the CEC offers loans to public entities that are smaller than the CPA minimum, and the CPA program has been suspended due to lack of interest.)

These conflicting messages create a level of uncertainty in the state that serves to stagnate rather than stimulate new energy programs or generation.

In spite of the conflict within state agencies relative to energy policy, the working group participants agreed on energy goals they felt should be common to local and state government:

- Cleaner, affordable and reliable supplies of energy.
- Stronger state and local economies through lower energy costs; generation that keeps funds, jobs and taxes within California; and jobs and businesses that manufacture, service and support energy efficiency and renewable energy sources.

### Overcoming Barriers

Suggestions for correcting the conflict in State policies and programs focused on integrated planning and an increase in resources for state energy programs.

Working group attendees thought the State should promote an integrated, broad-based strategic energy planning effort and networking among local and state agencies and stakeholders. That effort would create and link state strategies that support local energy

programs. Some of this work has already started with the CEC, CPUC and CPA effort to develop a Energy Action Plan for California which is described below.

The working group thought that integrated planning, between state agencies and with local governments, was a worthwhile activity. Not only would it coordinate State policies and programs, but it would also start to address the communication issue. Integrated planning requires dialog between groups, setting up the framework to continue interaction past the planning process.

Another suggestion was to strengthen the institutional infrastructure at the State level by increasing the resources and staffing of the CEC, CPUC and other energy-related agencies. The group advocated for agency staff to serve as local government liaisons to the two commissions. Such a staff person, familiar with all of the activities and programs at the CEC or rulemakings at the CPUC, could provide regular updates to local governments statewide, and serve as the point of contact for locals. This would improve communication between the levels of government, increase local understanding of state policies and programs, and prompt local government comment at regulatory hearings. The US DOE representative strongly supported this idea.

As the State develops and implements this strategic planning process to unite the various institutions impacting energy use in the state, it should encourage new ideas, experimentation, and a "climate of opportunity." Participants thought this is the time to start looking at issues in new and creative ways.

With restructuring, the State has moved away from the way energy services have been provided for scores of years. And while recent years have not reflected positively on California's experiment with deregulation, there are no plans to return to the previous regulated system. We have an opportunity to consider new approaches, new options. But the time is now. The CPUC and legislature will be creating new rules to correct the recent problems. Working together State agencies and local governments can help to shape those rules.

### Next Steps

#### *State of California Energy Plan*

The conflict in State energy policies and programs is about to change. The CEC, CPUC and the CPA are jointly developing an Energy Action Plan. The participation of two CEC commissioners and one CPUC commissioner at these working group meetings may have influenced this action. The goal in the draft Plan circulating in March 2003 is to:

Ensure that adequate, reliable, and reasonably-priced electrical power and natural gas supplies, including prudent reserves, are achieved and provided through policies, strategies, and actions that are cost-effective and environmentally sound for California's consumers and taxpayers.

In the draft plan the agencies intend to meet this goal by:

- Meeting California's energy growth needs while optimizing energy conservation and resource efficiency and reducing per capita electricity demand.
- Ensuring reliable, affordable, and high quality power supply for all who need it in all regions of the State by building sufficient new generation, including accelerating the State's goal for renewable resource generation.
- Upgrading and expanding the electricity transmission and distribution infrastructure and reducing the time needed before facilities are brought on line.
- Promoting customer and utility owned generation.
- Ensuring a reliable supply of reasonably priced natural gas.

These three principle energy agencies of the State are committing to active and continued cooperation by pledging to:

- Discuss critical energy issues jointly through open meeting and informal communication.
- Share information and analyses to minimize duplication, maximize common understanding, and ensure a broad basis for decision-making.
- Bring joint policy recommendations to the Governor and Legislature.

They also are committed to partner with governmental and other groups in western North America to pursue commonly held energy goals. The hierarchy of energy resources for the group starts with conservation and energy efficiency, including a plan to increase local government programs. Renewable energy and distributed generation are next in importance. Clean, fossil-fueled, central generation is third on their list.

### ***Barrier #2: Lack of Communication at All Levels***

The working groups identified several areas where improving communication between state agencies, between state and local governments, and between local governments would advance the goals of reducing per capita energy consumption, increasing the amount of renewable energy generated, and strengthening the energy efficiency and renewable energy industry.

#### *Intra-State Communication*

Already mentioned are the conflicting programs of state agencies relative to renewable energy. As is often the case, programs to address one environmental issue may have adverse impacts on a different issue. For example, several years ago, efforts in California to improve air quality called for using MTBE as a gasoline additive. The result has been cleaner air and groundwater polluted with a highly persistent substance, MTBE, leaking from underground gas tanks.

Episodes such as these have prompted multi-agency cooperation on the State's problems. Such was the case with the recent energy crisis where weekly meetings included the

CEC, CPUC, Governor's Office of Planning and Research, Office of Ratepayer Advocates, State and Consumer Services Agency, and representatives from local government. A new spirit of cooperation between the CEC, CPUC and CPA is emerging, as discussed above.

### *Communication between State and Local Government*

For the last five years the LGC has been meeting regularly with local governments and with state agency personnel on issues related to California's energy restructuring. Rarely have all three groups been present together. Notable exceptions are the conferences and workshops the LGC and a few others have convened. While LGC represents the interests of its member local governments and provides updates to them, there is no substitute for direct and personal contact.

LGC has heard from many local governments that the State does not understand their needs. We have also heard that rarely does the State hear from local governments. One CPUC commissioner commented that there are many rulings that come before the CPUC that affect local government in all arenas, not just energy, but seldom do they receive any comments from them. When only side of a story is presented at a public meeting by a utility or phone company or railroad, it is difficult for the Commission to make a decision that opposes that side.

Local government budgets, which continue to shrink, do not allow them to dedicate staff solely to energy issues. Even the local governments that do have energy staff cannot afford to send them to CPUC meetings in San Francisco or CEC meetings in Sacramento on a regular basis. If they exist, local energy staff focus on implementing energy projects and educating decision-makers.

The working groups established through this project were seen by the local government attendees as a valuable opportunity to meet and share with their peers and with the state government attendees. The LGC has been working to continue these meetings on a quarterly basis, and alternate them between the northern and southern parts of the state. We have found, however, that few Northern California representatives can attend meetings in the south, and vice versa. The issues of time and travel budgets remain deterrents.

Project working groups also included a representative from the US Department of Energy's Seattle Regional Office. Many attendees were amazed to hear of the multitude of programs offered by DOE. Again a lack of staff resources on both sides can be blamed.

Local government attendees specifically requested updates on state legislation, state or local standards, and technology advances that can affect the feasibility of energy projects. Things such as changes to net metering, utility inter-tie issues, exit fees, and financing/rebates were of interest.

### Overcoming Barriers

Some suggestions for improving communication have already been mentioned, such as integrated planning efforts and State agency staff designated to interact with local governments. Others wanted to develop and support avenues for local government interaction. And the US DOE representative expressed his personal and agency-wide commitment to developing partnerships with state and local government to move forward in addressing issues of common concern.

As mentioned earlier, project working group meetings were highly received by local government attendees. Some local energy staff have been doing this work since the early 1980s. They remember a time when they and their peers informally met and shared ideas and concerns, and the value those meeting had for them. A new group of energy professionals is evolving, some from the earlier group with extensive knowledge and experience, and some from communities just starting to think about energy issues. This group has continued to meet on a quarterly basis since the working groups convened under this grant ended. By word of mouth the number of invitees to this networking activity continues to climb.

In addition to face-to-face encounters, the group also expressed an interest in developing an email list serve, or web-based chat room, and a web site to house all kinds of energy information of interest to local governments in California. So far, discussion and action items have been circulated using the email addresses from the network meeting invitations. LGC has explored creating a chat room for the group, but needs more funding to create it. LGC has also started collecting on its web site ([www.lgc.org](http://www.lgc.org)) information such as the model ordinances and requests for proposals that the group sought.

In addition to attending project working group meetings and one of the subsequent networking meetings, the US DOE representative has also met a couple of times recently with LGC and a CEC commissioner. At each of these meetings, the desire to create local or regional partnerships was reiterated. US DOE has multiple programs, access to technical assistance at the national labs, and cooperative relationships with US EPA, HUD and other federal agencies. West Coast representatives from US DOE, US EPA and HUD meet regularly to enhance their coordination. The chance of success for tackling any given problem is greatly increased by bringing together these resources with State agencies and local governments.

### Next Steps

Specific items the working group participants identified to improve communication include:

### *Between State and Local*

Local governments should participate in the CPUC process to the extent possible. Current items of interest for this group of local government energy professionals include future administration of energy efficiency public goods funding, and community choice aggregation. To accomplish this will require a means of notification in advance of pertinent rule makings. This could happen by designating an association of local governments, such as the LGC, League or CSAC, to attend the meetings as representatives of local government. A CPUC employee could alert that association of pertinent rulemakings. The association could notify its members who could decide whether or not to attend in person. Feedback on the meetings to local governments would follow.

Local governments should develop outreach opportunities with the CPA. The CPA was planning to have financing available for public and private efficiency and generation projects. Local governments need and want to be aware of what is available and how to access it for their own projects and how to encourage the private sector to pursue community-friendly projects. (**Note:** this CPA program has been suspended.)

The CEC and CPUC should designate a staff position or positions for local government coordination.

A legislation/public hearing website/email listserv for local government issues should be developed to allow everyone better access to this type of information. This would facilitate local government involvement in important decisions. This could be a task for the State or for a local government association.

The energy professionals networking group should create a list of local government point people who can work with the state. These people can serve as a local government energy speaker bureau and can be expert witnesses at legislative and regulatory hearings, etc.

### *Between Local Governments*

Develop a local government energy network. There was strong support for continuing the information sharing and planning that workshops like these offer. An email listserv could provide some of the same benefits as local meetings. There could be more than one listserv to cover different local energy-related subjects. (**Note:** the local energy professionals network meetings have continued. The group met in November 2002 in San Diego, in February 2003 in San Jose, and is scheduled to meet in May 2003 in Santa Monica. The email addresses of these working group meetings have been used to share information, and alert participants to workshops, funding, and CPUC and CEC meetings and proceedings.)

Create a statewide association of regional energy offices. There are only a few in the state now, but an association can provide representation at the state and federal levels and educational opportunities, as their numbers increase.

### *With Other Organizations*

The energy professionals networking group should work with US DOE to tap into its resources to help advance these next steps. The US DOE is interested in developing partnerships; the State and local governments need to take advantage of that interest.

Invite tribal representatives to participate in these networking workshops. Tribal groups in California are many and varied. They range from very poor communities to very wealthy, particularly those with casinos. The poorer communities can benefit from many state and federal programs to improve their buildings' efficiencies and to generate power onsite. Likewise the wealthier tribes, who are funding a lot of new construction, should be doing the same.

Local governments, through the energy professionals networking group, should collaborate with other groups that are working on similar issues. For example, the national mayors' organization has published a useful energy handbook.

### **Barrier #3: Need for Education at the Local Level**

Local government leaders and staff have limited knowledge, or time to expend to learn about energy issues, both simple and complex. Unless there is an energy staff person, there is no one to regularly update the council or board on energy issues. Even when an energy staff position exists, the ability of that person, or persons, to keep up with everything that is transpiring in the state is limited. What is needed is unbiased advice for local elected officials and staff.

### **Overcoming Barriers**

Working group participants came up with specific education items that local governments need. They also identified workshops, networking meeting and web sites as avenues for delivering that information. Local governments want access to unbiased, reliable information on a variety of energy topics. They would prefer to get that advice from another agency working in the public interest rather than from private vendors.

### *General Energy Education*

Local governments would like 'turn-key' outreach and educational programs that provide tools and mechanisms for training and educating local officials, permitting and public works personnel, and the general public on the full range of energy topics from conservation and efficiency to renewable and distributed generation. Regional forums, a 'road show' for elected leaders on energy issues, were another idea of the working groups.

They would like examples of how to implement ‘green’ community initiatives. A number of local governments are developing or implementing green building programs, and more would like to. Some are interested in purchasing green energy; during the restructuring experiment, the majority of electricity consumers who left their incumbent utilities switched to providers of green electricity.

Interest in developing a community energy plan is increasing among local governments in California. In order to develop such a plan a community needs to know how much energy it is using, in which sectors (residential, commercial, industrial), when, where it comes from, and how it is delivered. To do this, they need to be able to assess local energy use and determine future needs. They need help understanding how to go through this process. They need help accessing the information.

Local governments investing in energy programs, whether conservation or generation, need to be able to monitor and evaluate the cost and effectiveness of them. In order to justify the investments in time and resources, feedback to the decision makers and the public is vital. Again they need help with developing such a monitoring system, including accessing community consumption records overtime. The utilities would be the source of this information, but with restructuring, they may not be required to collect it in a manner useful to a community, or to divulge it if asked.

There is revived interest in developing Energy Elements for local General Plans. In the 1980s, the CEC provided grants for a number of California cities and counties to adopt Energy Elements. Funding assistance is no longer available. The LGC, working with an energy consulting firm and one of the IOUs, developed some model language for energy elements or local policies. The document is awaiting general release.

### *Renewable Energy Education*

Interest in renewable generation is also high among California’s local governments. The working groups saw an opportunity for the State to develop materials of statewide benefit that would serve to increase the amount of renewable generation by reducing the duplication of individual efforts.

Samples of Request For Proposals (RFPs) for renewable equipment and technical services were high on the list of local government needs. These models would help them control and issue their own RFPs for installers and service providers without having to spend time and money on proposal development. These RFP models should allow for flexible contracts that include design, installation, and equipment or any combination of the three. (**Note:** LGC has collected some of this information, available at [www.lgc.org/spire](http://www.lgc.org/spire).)

The State should go through the procurement process once and then develop qualified equipment and supplier/ installer procurement lists, including third party ownership options. The alternative is for each city or county to invest the time and money individually. The equipment lists could be for individual components or for entire

systems of various sizes, for example, 10, 30 & 50kW systems for different sites (rooftop, building integrated photovoltaics (BIPV), shade structures, stand alone fields), and 2 –4 kW options for residents. These vendor/ service provider lists should be sortable by region of the state. (**Note:** The CPA has created a qualified bid list for renewable generation projects, and the California Department of General Services is working on a similar list of third party providers.)

There is interest in State-negotiated utility pre-approved connection agreements for renewable energy systems. Another big stumbling block for distributed generation is the connection agreements that accompany them. Standardizing these agreements for various distributed generation technologies would give project proponents and local decision makers more certainty in their cost and timing variables.

Public sector participants also would like a legal directive on tax credit ownership issues in order to better understand how and when local state and federal tax credits can be applied in third party equity scenarios and other business model approaches. Again this could be done once most efficiently by the State rather than repeatedly by local governments.

### Next Steps

The working groups identified several education materials and strategies that would benefit local governments now.

- Convene more networking meetings like this. (**Note:** this is happening.)
- Hold other workshops for local governments, including one with political strategists to discuss the politics of local energy opportunities.
- Develop a white paper on project meetings. (**Note:** there was already a commitment to write this document.)
- Develop briefing papers on the 10 most important questions for local governments to ask before taking action on various energy subjects. The networking group could identify the subjects. Funding could be sought from the CEC, CPUC, US DOE, or foundations.
- Develop a local government energy website that could save local government staff a lot of time in searching for information. It could have model ordinances, a handbook on Best Practices, finance issues, links to other resources, local energy plans, and much more. It could provide a single source for state, federal and nonprofit funding opportunities available to local government organizations (like the Office of Planning and Research's website for state funding opportunities). The website resources should be searchable by size, type, etc. (**Note:** LGC is starting to provide some of these resources. We will look for funding to make it more comprehensive.)
- Hold more workshops on what the CEC and CPUC are doing. Upcoming ones could be on the CEC's modeling and benchmarking project and the CPUC's community aggregation implementation planning.

- Improve access to local energy data statistics to improve strategic planning - e.g., what is occurring in different sectors by cities and neighborhoods for both electricity and natural gas. This would need to be coordinated with the electric and gas utilities, and may require a ruling by the CPUC.
- Provide written descriptions for different models of local government energy structures along with supporting materials, including strategic plans.
- Expand funding for UC Extension Service to focus on local energy education.

#### **Barrier #4: Lack of Local Government Resources**

A core barrier for local government energy programs is the lack of local resources. Missing resources include staff knowledge, staff time, and the funds to remedy this situation. This lack of resources affects every aspect of local government involvement in energy policy and programs in the state. It prevents coordination with state agencies, including filing comments on CPUC proceedings. It makes it difficult to provide ongoing communication between local governments facing similar issues. It does not allow for local governments to get the information and knowledge they need to conduct meaningful energy conservation, efficiency and renewable generation projects.

#### **Overcoming Barriers**

The local government working group participants were especially creative in thinking of ways to overcome this barrier. The primary mode identified to develop local government resources for energy programs was to establish local energy departments or offices and develop the long term funding support they need to implement their goals and strategies. These offices could be established within one local government or be regional when individual communities do not have the resources to go it alone. The working groups identified ideas for the potential structure of an energy office, the types of programs it might implement, and how to fund it.

Regardless of where it is located, a local energy office can only exist with political support from the city council or county supervisors, when it demonstrates value to the community, and if it can secure either internal or external funding to keep it going. Energy offices need to create strong local constituencies in support of their mission, goals and strategies. The more that the public can understand how these organizations help them, the better. Grassroots support drives political support. Working group suggestions to garner public support include:

- Making sure the public knows about the importance of the organization. Board members, advisory committees, newsletters, websites and other efforts will help.
- Mass purchasing of efficiency technologies (e.g., compact fluorescent light bulbs), or distributed generation (e.g., PV systems) for the public and private sector, and facilitating access to utility and state programs that reduce costs to businesses and residents support and advance the organization's mission.

- Support for job training programs that lead to increased employment opportunities and reduced costs for PV installation, energy efficiency programs and more.

### *Energy Office Structural Options*

#### **Municipal Energy Offices**

At the working group meetings, representatives from San Jose and Santa Monica provided information about how their cities have internally developed the staffing structure to advance their energy strategies. Internal local governmental departments, office of the mayor or other internal city structures can accomplish a great deal, though each has limitations.

The energy program staff can be their own department, or as in the case of Santa Monica, do part-time energy work from within the Environmental Programs Division. Local government energy staff and programs are primarily funded through enterprise funds and not through city general funds. To use enterprise funds the energy project needs a link to the water, sewage, garbage, or other enterprise fund.

City energy programs do not have a board of directors per se. The City Council takes on the decision-making role. Most city programs have a relationship with a citizen's energy task force or public advisory commission. City programs work better and have more support from management and the council when there is grassroots support for the programs, especially from within the business community.

A significant problem area for city programs relates to public works departments. For example, if the installation of PV on a city building is handled as a purchase, it can be done quickly with little red tape. If it is a public works project, it must go through a bid process that can involve a great deal of time. Public works departments often do not have experience with these types of projects and resist them.

Cities can pursue tax-exempt finance bonds for energy projects. A portion of these funds can be allocated to pay for public works and other staff support.

Municipal energy offices can:

- Work cooperatively with nonprofits and other organizations.
- Develop the local government's strategic energy plan, which the governing body can adopt.
- Propose conservation and renewable energy ordinances and policies.
- Secure renewable energy for city buildings (100% of Santa Monica's city buildings use renewable energy through a geothermal source).
- Run programs including: retrofitting affordable housing with conservation measures, helping with demand side management, using grants to help local businesses conserve energy, improving the energy efficiency of municipal operations, and advancing local energy conservation through public education.

- Work with schools and other governmental agencies to help with their energy needs.
- Advance green energy policies and the local government's strategic energy plan.
- Develop public-private partnerships for conservation or renewable energy projects.

### **Nonprofit Energy Offices**

Representatives from the San Diego Regional Energy Office (SDREO), Community Energy Services Corporation of Berkeley (CESC), and the City of Berkeley shared their experiences with nonprofit organizations working on energy programs in cooperation with local governments.

Nonprofits can come in many forms and have a lot of flexibility in how they operate, as long as they stay within the legal limits as set by state and federal law. Each of the organizations had a different method for selecting their board of directors. Berkeley's CESC board is appointed by the City Council. This can be problematic if the council picks board members for political reasons rather than based on what the organization needs. The San Diego Regional Energy Office has an independent board of directors as well as an advisory committee. Berkeley also has an advisory committee in addition to its board.

Some of the types of projects these nonprofits have worked on include:

- Developing local and regional energy strategies, including coordinating strategies across governmental boundaries.
- Evaluating 20-30 year energy infrastructure supply, demand, transmission, efficiency, demand response, real time pricing tariffs and more.
- Implementing efficiency and generation programs.
- Providing technical assistance to public agencies.
- Helping craft local ordinances including conservation requirements, auditing, and education.
- Having licensed contractor capabilities.
- Providing public outreach and education.
- Sole source contracting when a city or county would have to go out to bid.

The City of Berkeley is unique in that it has an energy office within city government, and it has set up CESC as a nonprofit. The dual entities in Berkeley allow for more flexibility when seeking funding (sometimes only local governments may apply for funding, sometimes they are excluded), and in implementing programs (e.g., nonprofits do not have the same procurement responsibilities as local governments).

### **Regional Energy Offices**

The San Diego Regional Energy Office (SDREO) is the only operating example of a regional model. The LGC is currently working with communities in Humboldt and Ventura counties to help them establish regional offices. Both communities are expected to adopt the governing documents in March or April 2003 to establish their offices.

### *Joint Powers Agreements*

One regional option is to enter into a Joint Powers Authority (JPA) to set up the office. JPAs are used in a variety of areas where coordination beyond city or county jurisdiction makes sense, including reaping the benefits of economy of scale operations. Common examples include transportation and water. JPAs are between public entities, and their board members are appointed by the participating jurisdictions.

A Regional Council of Rural Counties (RCRC) representative provided background on the work it has done in developing JPAs as a means to advance its member rural governments' energy strategies.

A JPA can sponsor and issue revenue bonds to fund self-generation of power. A local vote by citizens in the JPA area can pass the bonds. (**Note:** There is not a good track record of many successful bonds being sold. Difficulties lie in gaining the financial expertise to develop the bonds, finding issuers of the bonds, and gaining local majority votes of the electorate, overcoming utility opposition and more.)

A JPA can conduct an RFP before pursuing a bond in order to set up a team of consultants or hire professionals to develop the projects. One area for which a JPA cannot issue revenue bonds is for development or ownership of the energy distribution system.

### *Community Energy Authorities*

The City of Arcata representative described the City's efforts to develop a Community Energy Authority (CEA). An energy attorney working with LGC to provide assistance to Humboldt and Ventura Counties, provided background information on CEA legislation, which was enacted in the early 1980s. CEAs are similar to JPAs but have some differences. They can do the following:

- Be composed of single or multiple jurisdictions.
- Issue revenue bonds.
- Hold public hearings.
- Link up with other local governments to create Regional Authorities.
- Improve efficiency in grant writing, office costs, and staffing through economies of scale.

CEAs may have their own staff or can use the staff of the local governments that set them up. CEAs have a governing council set up by the local governments that are its members. While JPAs are common in California, few communities have established CEAs since the enabling legislation was passed in 1984.

## **Other Options**

Other options include creating public-private partnerships, municipal utilities, or combinations of the above. To our knowledge, no one has established an energy office through public-private partnership. Such partnerships, however, are becoming more common in the area of renewable electricity generation. Private companies, in agreement with public agencies, are buying and installing renewable energy systems, usually on a public site, and then selling the electricity directly to the public agency at a favorable rate. Often the public agency acquires the generation facility after a number of years for low or no cost. The private partner gets the benefit of renewable generation tax credits that the public agency cannot access.

Municipal utilities differ from municipal utility districts (MUD) because they are not separate local government entities with officials elected by citizens. A municipal utility is governed by the city council, and cannot own the energy distribution system, unlike a MUD.

Communities can also develop energy programs by combining the above options. Berkeley, with its nonprofit and city program is an example of a combination of structures. Most of the options can combine with some other structure, either formally or informally.

### *Programs*

Energy offices can provide many programs and services to their communities. We focus here on utility energy programs, but transportation energy could be a large component of an energy office's work.

A local or regional energy office can assist a community, or communities, with developing policies, ordinances, standards and programs related to municipal and community energy use and generation. Building codes, design guidelines, and development ordinances are among the many tasks local energy offices can tackle. San Jose developed a solar access design manual for residential construction. Santa Monica has developed green building guidelines. Berkeley has a small business assistance program. San Diego REO coordinates the Million Solar Roofs Initiative in the area. There are numerous additional examples.

In addition to building efficiency and renewable energy programs, energy offices can contribute to planning efforts within a community. San Jose's Environmental Services Department meets with the Planning and Public Works Departments to review development applications. Although Marin County does not yet have an energy office, it did review its policies and programs to correct programs and ordinances that conflicted with the County's goals of efficiency and renewable generation. This could be an ongoing activity of an energy office. Overseeing creation of a General Plan Energy Element could be another.

The CEC has developed PLACE<sup>3</sup>S (Planning for Community Energy, Environmental, and Economic Sustainability), a tool that creates linkages between energy and community growth and land use planning. Energy is ubiquitous in government activities.

Transportation consumes energy in obvious ways (fuel for vehicles), but also in less obvious ways such as in road construction (extracting, moving, processing materials), lighting, treatment of run off, and so on. Water treatment and pumping are huge components of local government energy bills. How a community consumes and generates energy can greatly impact the amount of greenhouse gases it produces. The program areas for an energy office are enormous.

### *Funding*

However an energy office is funded, it is a good idea to provide a feedback mechanism to those who provide the organization with funds, so that they can measure their cost effectiveness and accountability. This could lead to increased trust and future funds.

### Enterprise Funds

The most common way that enduring local government energy programs have been funded is through Enterprise Funds. In order to use these funds, the energy programs must link to the water, sewage, garbage or other enterprise activity that provides the funds. Energy can be identified and used as the unifying component in almost every program. The CEC's PLACE<sup>3</sup>S demonstrates the linkages between energy and community growth issues that include all of the enterprise funds topics. Enterprise funds allow the office or programs to escape general fund budget negotiations each year.

### Municipal Energy Consumption Ideas

Another suggestion for funding an energy office is to verify energy savings that result from the office's actions, and then use a portion of the savings for the office. Operating savings that are gained through efficient building design, energy conservation and other actions are accounted for and given back to the energy office in an increased budget. It was suggested that some of the savings remain with the departments that reduce their energy costs in order to provide incentives to participate.

The energy office could be responsible for overseeing and processing municipal energy bills for payment. A surcharge to each department's energy bill could cover this cost. In many cases, no one within local government is overseeing energy usage, and therefore, there is little chance to identify opportunities to reduce those costs. One of the office's duties could be to monitor energy bills to identify potential cost reduction opportunities. Alameda County funds some of its energy program this way. Portland, Oregon has a 1% surcharge on the energy bills for all City departments.

## Grants and Contracts

Foundations provide grants to nonprofit organizations. If an energy office is set up as a nonprofit, or if a government office sets up a nonprofit to operate the office, then foundation funding can be a good revenue source. There are a number of foundations that have energy as a focus of interest. The Foundation Center has a guide to grant seeking on the web at: <http://www.fdncenter.org/funders/>

State and federal government also offer grants to local governments. They have provided numerous grants from pilot projects for generation technologies to writing energy elements. The CPUC oversees the administration of \$250 million in energy efficiency public goods charge (PCG) funds annually. An energy office can competitively apply for these funds. Once community choice aggregation is in operation in California, a portion of PGC funds collected within an aggregator's territory will be available to the aggregator for efficiency programs.

In addition to grants, the state and utilities offer many funding opportunities that could help an office offset municipal energy costs through energy efficiency or municipal generation. Some of these offset costs could be applied to energy office funding.

## Fee for Service

The energy office can generate funds by charging for services such as energy audits, utility bill management, and for other programs to municipalities not affiliated with the office. It could also charge businesses for some energy services.

Sale of energy products is another potential source of funding. Energy efficiency products such as compact fluorescent light bulbs could be purchased in bulk and resold to residents and businesses at a small profit. Community education and office income both benefit.

Similarly, an energy office could provide lower pricing for PV and other renewable energy systems through aggregated purchasing. Adding a surcharge to the lower price could help fund the energy department. Using the lower priced product to increase the amount of energy production that a local government owns, thus reducing dollars spent on utility energy, can increase the long term funding base for the energy office.

## Power Generation Ownership

Local government opportunities for generation projects are numerous. Many local governments own landfills or water treatment facilities. Both produce methane, which can be used to generate electricity for sale or use on sight, or to power mechanical equipment. There are successful local government co-generation projects in California that provide electricity and heat for municipal projects. Co-generation improves the efficiency of energy conversion, and the economics for a project.

The CPA has financing authority for new generation projects, including for public agencies. Its Public Leadership Solutions for Energy (PULSE) program offers public agencies tax-exempt financing for energy efficiency and clean on-site power generation. The CEC and CPUC (through IOUs) offer rebates for new renewable (and some non-renewable) generation projects. Funds for pilot projects are sometimes available for PVs, fuel cells and micro-turbines.

Working group participants thought that local governments should attempt to own a part or all of new power plants in their jurisdictions. They encouraged them to develop public - private ventures to construct and own new power plants and use the revenue to provide long term funding for the energy department.

### Other Ideas

The groups came up with other innovative ideas to gain local energy program funding:

- Support and advocate for private energy generation projects that utilize local energy resources and increase the diversity of fuel supplies.
- Look to regional collaborations to meet the staffing needs for a number of small governmental entities that could not afford to hire an energy staff person on their own.
- Gain in-lieu fees on new development. Consider a green house gas fee on new development. (Note: This might work best if it was done on a regional level so that developers couldn't play one city off of another.)
- Pass a local tax for energy seed money that sunsets after a few years. Use the seed money to start a sustainable program and own the resources that provide sustainable funding after the tax sunsets. (e.g., a 1/4 cent sales tax)
- Link a local tax or funding source to local job development. Job programs are often supported by the local business community and voting public.
- Tie funding sources into preparation for energy emergencies. For example, cover some of the costs for creating off the grid energy systems on governmental buildings so that these places can be back up locations during energy and other emergencies such as possible terrorists actions against the energy transmission system. (**Note:** distributed energy within cities offers secure energy supplies.)
- Tie in funding to improvements in cleaner air. State implemented clean air plans could provide a source of money for energy efficiency and renewable energy projects.
- Renegotiate franchise rights to include funds for an energy department.

### Next Steps

The working groups identified the following activities that should be pursued in order to provide resources and support for local government energy programs. They centered on building an effective local energy network, and finding funding to support local programs. They also had ideas on how to support the renewable energy market in California.

### **Energy Network**

The local energy professionals networking group has been mentioned several times. It provides opportunities for local governments to share information, ideas and concerns. It benefits experienced energy professionals and those just starting out. It provides regular opportunities to meet face-to-face, and venues to invite others from state and federal agencies, the legislature, and the energy industry.

One of the most important ways to affect change is by providing a united voice. The network facilitates sharing ideas and concerns, and developing a unified message for multiple jurisdictions that pushes for state programs that benefit local governments and the policies and programs they support.

The group would like to develop funding to advance local energy group networking. Particularly useful would be funding to support a web-based forum for sharing; a web page that houses model policies, codes, ordinances, RFPs, contract language, lists of contractors and vendors, etc.; and especially to provide funding for travel between Northern and Southern California for the networking meetings.

### **Funding**

In order to research funding opportunities for local government, the networking group should create a sub-group that focuses on it. At a minimum this group could help categorize funding opportunities and assist in web page development. Ideas to pursue include:

- Document ways in which local governments can save money from energy programs. If an energy program can demonstrate that it is saving more money than it costs, it should not be difficult to get support to start or continue it.
- Research Community Choice (AB117) opportunities. The CPUC will be ruling soon on non-IOU efficiency program funding for the coming years. Later it will be making decisions on how to implement AB117. Local governments need to be involved with both processes.
- Research public-private partnership opportunities. Already mentioned were the third party energy generation programs that cities and counties are pursuing to develop renewable energy systems on their facilities. The IOUs provide a

program called Standard Performance Contracting that provides similar funding for efficiency projects through energy services companies (ESCO).

- Tap into the Rebuild America program, and other programs offered by US DOE.
- Pursue regional energy departments for locals who can't afford their own. Sharing the cost of an energy office and staff can make it possible for even small communities to focus on reducing energy costs. LGC is working with Humboldt and Ventura Counties under the auspices of the CPUC to do just that.
- Identify non-monetary barriers that hinder the implementation of good ideas.

### **Promoting Renewable Energy**

Ideas to promote the use of renewable energy in California and thus grow the industry and reduce the volatility of supply and prices of energy include:

Incorporate distributed generation technologies in public facilities and operations. The State of California's East End Project, five new state office buildings in downtown Sacramento, uses PVs to shield rooftop equipment from view and PV shade structures on the top levels of its parking garages. Local governments likewise are placing renewable energy systems in public places such as city halls, parking lots and garages, and bus shelters. Public investment in visible projects helps to familiarize residents and business owners with them, and hopefully encourage more production.

Pursue a state law requiring life cycle energy calculations on new buildings. Life cycle accounting, which includes operations costs as well as initial costs, allows for buildings to be more efficient and cost the occupants less over time. In addition to new buildings, short pay back periods for renewable energy systems are also a problem. Often the deathblow to a renewable system is the short pay back period required for financing. The state is considering extending the pay back time for its renewable financing from 10 years to 15 years. This will allow many more installations.

Support improvements in the state's processes and infrastructure so that local energy projects can better access state and federal funding and affect state decision-making. Extending the pay back period above is one improvement that will help.

Work to reduce demand and standby charges imposed by IOUs that inhibit distributed renewable project development at local governments.

Collect best practices, model policies and programs in one place to facilitate their adoption by other local governments. (**Note:** LGC has started to do this with a fact sheet on local government policies and programs, and with model RFPs that are available at [www.lgc.org/spire](http://www.lgc.org/spire).)