

CURRENTS

AN ENERGY NEWSLETTER FOR LOCAL GOVERNMENTS

State Energy Experts Offer Help to Local Governments

NOV/DEC 1998

by Peter Asmus

Local governments have long been providers of utility service — whether electricity, natural gas, or water services. In more recent years, however, many local governments have handed off the business of providing electricity services to private utility companies through awarding service franchises.

With the dismantling of these electric utility monopolies that has resulted from the passage of AB 1890, California's landmark restructuring law, a range of new opportunities for local governments to take greater control of their energy futures exist.

While local governments in San Diego and San Francisco Bay Area are approaching the challenges and opportunities associated with

restructuring through regional planning efforts, others are teaming up with the California Department of General Services/Energy Assessments (DGS/EA), a long-time leader when it comes to energy innovation.

■ DGS/EAs Broad Energy Efficiency Program

With the advent of electricity restructuring, DGS/EA is testing the waters for ways state and local government institutions and agencies can cut



CONTINUED ON PAGE 3 >

LEAP TOOLS HELP PROMOTE ENERGY CONSERVATION IN NEW DEVELOPMENTS

The Local Energy Assistance Program (LEAP) is showing California local governments how to bring energy conservation and other sustainability issues to the negotiating table when considering plans for new development. A program of the Local Government Commission (LGC) and ADM Associates, Inc., LEAP provides cities and counties with technical assistance and resources to create more energy efficient neighborhoods and buildings through narrower streets, tree canopy, modified street lighting, solar orientation, natural drainage, heating and cooling system upgrades and more.

LEAP experts analyze plans for proposed developments, compute the energy and dollar savings associated with various improvement options, and prepare detailed reports with conceptual drawings and bottom line figures for the city or county, developer and future building owners and occupants. The recommended changes reduce the energy needs of future developments while lowering development costs by hundreds of thousands of dollars. As a result, local leaders and project developers alike are armed with the numbers necessary to work energy efficiency provi-

CONTINUED ON PAGE 2 >

WHAT'S INSIDE

LEAP Energy Tools

Santa Monica's Green

Energy Tips for Winter

Seminar Dates

Locals Win DOE Dough

Energy Conservation in New Developments

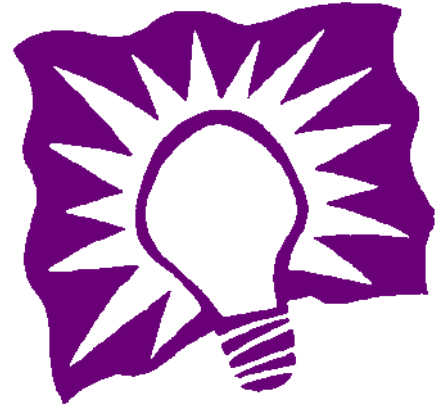
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sions into plans for new development.

The LEAP team has already prepared assessments for Escalon, Fullerton, Carson, San Jose, and Lindsay. LGC also provided the City of Santa Clarita with recommendations for updating the Open Space and Conservation Element of its General Plan, complete with model language and supporting excerpts from other city and county documents. Several more projects are underway.

LGC's Pat Stoner encourages planners and officials to order copies of LEAP reports. "Give us a call. These reports are great examples of how energy-saving site planning pays all around. They also provide an idea of how other projects can benefit from LEAP analysis."

In addition to providing technical assistance on specific projects, ADM is preparing "LEAP-1," a computer education and screening tool to help local staff conduct their own simplified energy analyses for future development. This program computes general land improvement costs associated with street pavement, lighting and street trees for existing and proposed alternate plans to increase energy efficiency. Energy and cost savings for alternate plans are then calculated. The program also covers a wide range of basic improvement options for buildings, which are included in the plan comparison. LEAP-1, which focuses on residential developments, will be available in early December 1998, and is available to LEAP participants that have undergone plan analyses.



■ **Free Resource Documents.** The LGC just completed the guide, *Energy Conservation Under the Sun: A Resource Book for Local Governments*, now available free of charge to LEAP participants and other interested cities and counties (see the enclosed flyer). It contains over a hundred pages of policy ideas, ordinance language, and background information pertaining to solar orientation, solar water heating and solar pool heating as conservation tools. A summary of state legislation and case studies are included as well. Work on a similar guide of ideas and programs for encouraging new construction to meet or go beyond beyond the state Title-24 building energy efficiency standards is in progress.

The LEAP team is also preparing design standards for narrower streets and tree selection and planting guidelines for communities in the San Joaquin Valley to cool neighborhoods and reduce pollution. Supported by original research, together these documents will show communities in the Valley the one, two punch for bringing down local temperatures and energy bills — heat-absorbing pavement reduction combined with more shading. Indeed, neigh-

PLUG INTO UPCOMING ENERGY EFFICIENCY SEMINARS

A series of four one-day seminars will be held in November and February to provide training on the upcoming 1998 Non-residential Building Energy Efficiency Standards.

Seminar dates are:

- * November 17, 1998 (San Francisco)
- * November 18, 1998 (LA Area)
- * November 19, 1998 (San Diego)
- * February 26, 1999 (San Francisco - Advanced)

Each seminar will be taught by industry experts in the Lighting, Mechanical, Envelope, and Performance Compliance fields. Sponsors for the workshop series include the Energy Commission, PG&E, SCE, SDG&E, SMUD and CABEC.

Each seminar costs \$30 (for \$60, you also receive a copy of the Nonresidential Manual, to be shipped January 1999). For more information, please call Jennie Lathum at ☎(415) 883-5900. Information is also available on the Internet at www.energysoft.com/seminar.

CONTINUED ON PAGE 8 ►

Local Governments Offered Energy Advice

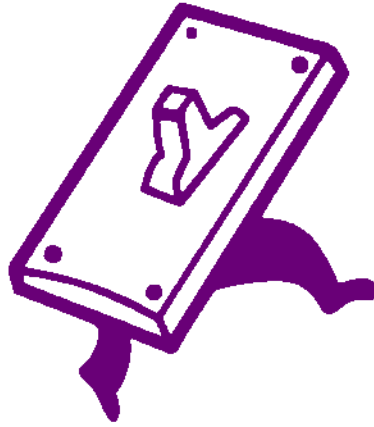
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expenses and thereby reduce costs associated with providing public sector services. From lining up the financing for energy efficiency projects to aggregating municipal facility natural gas and electricity supply purchases, DGS/EA offers local governments the benefits of bulk discounts and technical expertise while teaming up with other fellow state and local government institutions.

DGS/EA has an impressive track record with energy efficiency projects. Over the past five years, DGS/EA customers have saved \$174 million in long-term energy costs. Unlike specialists such as power brokers, consultants, electric service providers or natural gas marketers, DGS/EA can offer a local government a wider range of energy-related services — with no up-front costs.

DGS/EA can help a local government select and contract for services with an Energy Service Company (ESCO). DGS/EA can assist local governments obtain low-interest loans for energy efficiency projects or structure a repayment schedule that can provide a net positive cash flow from annual energy savings. DGS/EA can also perform preliminary energy audits, energy project feasibility projects and help develop contracts with service providers.

One of the biggest questions facing local governments seeking to become more energy efficient is how to finance such projects in the absence of ratepayer funded programs designed and managed by their electric utilities. The management of ratepayer funds earmarked for energy efficiency is opening up



to other potential market players that can include local governments. An estimated \$220 million will be invested annually in energy efficiency in California between 1998 and 2002. These ratepayer funds are earmarked for “market transformation” energy efficiency programs and will be dispersed by the California Board for Energy Efficiency (CBEE). “Market transformation” programs seek to make permanent reductions in electricity use by changing the structure of the energy efficiency market in order to reduce the need for ongoing subsidies.

Researching available funding sources for energy efficiency projects should be one of the first steps a local government takes when evaluating any long-term strategy to develop a more sustainable community through local energy policies.

The three main funding sources that DGS/EA offers include:

❶ **Energy Efficiency Revenue Bonds:** The California Legislature approved legislation in 1982 authorizing the sale of \$500 million in state revenue bonds to finance energy efficiency projects. To date, only \$216 million of these bonds

have been approved by the State Public Works Board. DGS/EA can help put together large enough local government project packages to secure a timely financing of any energy efficiency project through these bonds.

- ❷ **Lease Purchase Financing:** DGS/EA has created the G\$SMART Program, which allows DGS/EA to solicit private funding for a wide range of energy efficiency projects. For a very small fee, DGS/EA can secure funding for projects within a few weeks.
- ❸ **Third Party Financing:** DGS/EA can also help local governments find private developer partners to develop energy efficiency and cogeneration projects. To date, DGS/EA has negotiated \$200 million of third-party projects.

Other DGS/EA Services

When the California Public Utilities Commission (CPUC) deregulated the state’s natural gas industry for large consumers in 1986, DGS/EA responded by developing a natural gas aggregation program. Starting with four accounts in 1987, the program has grown to include 110 customers and generated approximately \$4 million in annual savings in 1997. That figure represents a 16% average savings if compared to the incumbent utility gas service. Among the local government participants in this aggregation effort are the City and County of San Francisco, and Alameda, Solano, San Joaquin and Kern counties.

With the passage of AB 1890, local govern-

CONTINUED ON PAGE 7 ►

Household Tips for Reducing Energy Use This Winter

■ Install Storm Windows

Storm windows create extra insulation for your home. They also keep the street noise out.

■ Turn Down the Water Heater

Most households don't need extremely hot water. Turning your water heater usually the home's second largest energy user down to 120° F can save a lot of energy, and money too (up to \$50 a year).

■ Turn Down the Thermostat

Ideally, keep your home heated to 68° F during the day and 60° F at night. Use extra blankets and sweaters instead of turning up the heat. Or, just snuggle up with a loved one!



Energy Buy Makes Santa Monica First Local Government in California to Vote "Green"

by Peter Asmus

The Santa Monica City Council voted unanimously on October 12 to release a Request For Proposals (RFP) to purchase five megawatts of clean, renewable electricity, an amount that represents a \$2.5 million annual purchase — the equivalent power consumed by 5,000 to 6,000 average homes. The City Council's vote is the first by a California local government to commit to buying green power for all of its municipal needs.

"I'm please that a forward-looking local government has taken this first step," said Judy Corbett, Executive Director of the Local Government Commission (LGC). "We hope to build upon this decision by Santa Monica to help show other local governments in California how they can develop

more sustainable and livable cities through purchases of renewable energy and installation of new renewable energy plants," she added.

Santa Monica's vote on green power purchases is one aspect of a much broader comprehensive community-based energy plan. Future tasks include an assessment of the community's awareness of the impacts of electricity deregulation, identifying specific information and services that the City could provide to residents, businesses and others, and an evaluation of the community's interest in purchasing green electricity. Based on the results of this information, Henwood Energy Services, the city's energy consultant, will determine how to design a plan to collect or aggregate Santa Monica consumers interested in buying green

power.

"The purchase of green electricity is one of the most significant single actions that a consumer can take to protect and preserve the environment," said Councilmember Paul Rosenstein. "Renewable energy resources are less polluting because they do not rely on burning fossil fuels and are regularly replenished using the earth's own natural resources."

Other issues which will be addressed in the comprehensive energy management plan include improving energy efficiency and siting distributed renewable generation technologies such as solar photovoltaics. Santa Monica city staff expects to come back to the City Council with a recommendation on a green power provider early next year.

Hot Off the Presses!

Order your copy of *Energy Conservation Under the Sun: A Resource Book for Local Governments*. Fill out the enclosed order form today, or call ☎(916) 448-1198 for more information.

Fourteen Local Energy Projects Win Dollars from Dept. of Energy

Fourteen cities and counties have received funding from the Municipal Energy Management Program (MEMP) to study different approaches to energy management. MEMP is operated by Public Technology, Inc. on behalf of the U.S. Department of Energy's Energy Efficiency and Renewable Energy Division. The division provides local government with funding for energy related projects that will enhance services.

Highlights of the winners include:

■ Economic Development

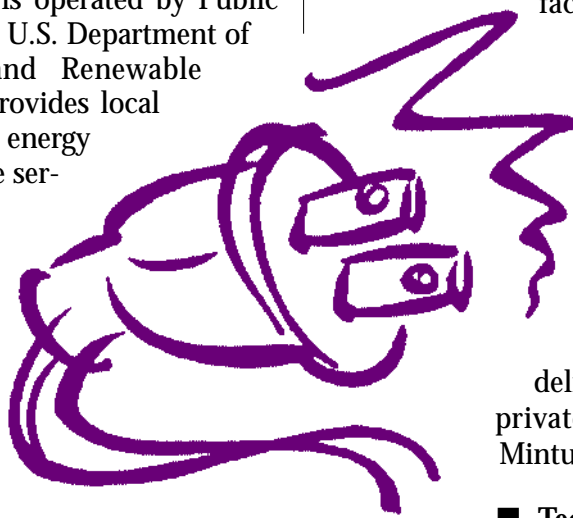
Project Greenbelt, Seattle, WA, to promote and support market transformation of sustainable building construction design and techniques. Contact: Marya Castellano, ☎(206) 684-3740.

Photovoltaic Electricity and Solar Hydrogen Development, Thousand Palms, CA, to develop photovoltaic electricity that can produce renewable solar hydrogen and provide energy to the region. Wind generated electricity will electrolyze water from hydrogen that will be used to operate public transit buses. Contact: Bruce Finely, ☎(760) 343-3456.

■ Energy Usage

Renewable Energy in Urban Setting, Chicago, IL, to develop innovative ways of meeting local government's energy needs without purchasing local electric utility

energy. The project will build on an aggregation process begun by the city last year to develop more efficient ways to manage energy consumption in facilities. Contact: Dwight Bailey, ☎(312) 744-8901.



Meeting the President's Million Solar Roof Initiative, Albuquerque, NM, to produce a guidebook on solar applications for public facilities and housing projects. The book will inform local governments about the best ways to develop codes, incentives and delivery mechanisms through public-private partnerships. Contact: Mike Minturn, ☎(505) 768-5300.

■ Technology Transfer

Green Building Basics – the Interactive Internet and a CD ROM Course, Austin, TX, to develop a course on the basic design and construction principles of green building. Contact: Mary McLeod, ☎(512) 499-2547.

■ Utility Restructuring

Energy Efficiency Services in a Restructured Electric Industry, San Francisco, CA, to evaluate energy efficiency services in the newly restructured utility industry and to develop a program that provides city facilities with in-house energy management services, permitting retention of public funds. Contact: John Deakin, ☎(415) 554-3180.

Water District to Increase Energy Efficiency

The San Juan Water District in suburban Sacramento will update lighting fixtures and pump station motors to save on energy costs. The water district, which serves 180,000 customers, has borrowed \$100,000 from the California Energy Commission to put energy efficient fluorescent lamps and twelve new premium efficient motors at two pump stations. New heat pumps will be installed to upgrade the district's heating, ventilation and air conditioning systems.

With these energy improvements, the district is expected to save almost \$13,000 a year in energy bills. The energy savings alone will enable the district to repay the loan in less than eight years. Funds for the loan comes from the Energy Conservation Assistance Act to help reduce energy consumption and cost in public and private schools and hospitals, local governments, special district and public care institutions.

Get Your Energy News

There are a vast number of newsletters and magazines addressing energy efficiency and renewable energy issues besides *Currents*. For an extended list, see the U.S. Department of Energy Energy Efficiency and Renewable Energy Network's "Newsletters and Magazines" web page at: www.eren.doe.gov/events/newsletters.html

■ *American Local Power News* American Local Power Project

This bimonthly newsletter sums up local government efforts across the country regarding electric utility restructuring, energy efficiency and green power, and developing customer aggregation programs.

web: www.local.org

■ *California Energy Markets* Energy News Data Corporation

The best weekly summary of energy news in California and throughout the Pacific Northwest and Southwest, this site also includes a clips section of articles published in major Western newspapers.

e-mail: newsdata@newsdata.com
web: www.newsdata.com/enernet

■ *Clean Power Journal* Center For Energy Efficiency & Renewable Technologies (CEERT)

CEERT is a unique collaboration of major environmental organizations, public interest groups and clean technology companies working to achieve a more sustainable energy future. Published quarterly, this journal includes articles from experts throughout the nation.

1100 11th St., Suite 311
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e-mail: info@ceert.org
web: www.ceert.org

CITY OF CHICAGO RECRUITS BUSINESSES TO SAVE ENERGY

Chicago, Illinois, is participating in the International Council for Local Environmental Initiatives' Local Government/Industrial Partnership Program, through which the city recruits private sector companies to adopt energy-savings measures and reduce greenhouse gas emissions. Chicago's Energy Office was awarded funding from the State of Illinois' Department of Commerce and Community Affairs to expand these efforts.

The additional funds will allow the city to install energy efficient equipment and improve plant operations in three to five small industrial companies (target industries are plastics, steel fabrication, and food processing), and conduct a public education campaign centered on the findings of their retrofit and recruitment efforts.

Contact: Dwight Bailey, Directory of Energy Management, City of Chicago, ☎(312) 744-8901.

■ *E2 / Energy Center of Wisconsin*

E2 addresses a wide range of energy-related topics, including green building, residential energy retrofits, and marketing strategies for green power.

595 Science Drive
Madison, WI 53711-1060
☎ (608) 238-4601
e-mail: ecw@ecw.org
web: www.ecw.org

■ *Energy and Environmental News* The Common Purpose Institute for Environmental and Energy Solutions

An excellent news-clip resource with daily updates on electric industry deregulation, renewable power, energy efficiency and other energy articles from the national and international press. An e-mail delivery service is also available.

web: [www.serve.com/
commonpurpose/news.html](http://www.serve.com/commonpurpose/news.html)

■ *Energy Source Builder*

Energy Source Builder is filled with nuts-and-bolts information on building energy-efficient homes (design ideas, construction details and product information).

web: www.oikos.com/esb

■ *ENERGY STAR Buildings* and Green Lights Bulletin U.S. Environmental Protection Agency (EPA) and U.S. Department of Energy (DOE)

The ENERGY STAR Buildings & Green Lights Bulletin provides biweekly faxes and e-mails on notices on upcoming events in the ENERGY STAR Buildings and Green Lights program, which promotes the purchase and use of energy-efficient appliances and equipment.

web: www.epa.gov/appdstar/news/

■ *State Renewable Energy News* Office of Utility Technologies, Department of Energy

Promotes information sharing on renewable energy activities.

web: [www.nrel.gov/analysis/
emma/projects/sren](http://www.nrel.gov/analysis/emma/projects/sren)

■ *Environmental Building News*

Features articles, reviews, and news stories on energy-efficient, resource-efficient and healthy building practices.

web: www.ebuild.com

Local Governments Offered Energy Advice

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ments can now, for the first time, also shop for electricity under a “direct access” contract with a power provider other than the current incumbent utility. DGS/EA is recruiting local governments to join a statewide aggregation program that would allow local governments to choose from an array of power providers — including at least two that offer green power products. All of these firms have signed a Master Services Agreement with DGS/EA which enables local government participants in the aggregation program to take advantage of updated electricity price quotes generated by each energy service provider on a quarterly basis.



Savings estimates for electricity aggregation participants range from 3.25 to 4.25% on most accounts. In a few select cases, such as water agency accounts, savings may be as much as 7%.

One of the chief benefits for local governments and other public agencies of joining the DGS/EA energy management program stems from the fact that the public sector is subject to competitive bidding requirements for procurement of energy services. DGS/EA simplifies this process considerably by offering a list of firms that have been “qualified” through DGS/EAs competitive bidding process.

For more information: Doug Grandy, Department of General Services/ Energy Assessments, 717 K St., Suite 409, Sacramento, CA 95814, ☎(916) 323-8777; e-mail: doug_grandy@dgs.ca.gov; website: www.dgs.ca.gov/ea

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LEAP Forward

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borhoods with narrow, tree-shaded streets can be up to ten degrees cooler than those with broad, exposed asphalt surfaces on a hot summer day.

Other benefits include reduced runoff, lower street construction and maintenance costs, more land for other uses, lower traffic-related injuries and fatalities, and higher property values. Free copies of these materials will be ready by the end of this year.

■ **LEAP Workshop.** Come to Sacramento on December 11 to learn the benefits of community energy planning. Topics include LEAP case studies, tree and street

guidelines for cooler neighborhoods and buildings, and ideas for enacting “community energy authorities” to lower energy costs, pursue conservation programs, provide assistance to low-income customers and finance alternative energy projects. It’s an excellent opportunity to learn how, through energy efficient planning, local governments can save money and achieve other goals of sustainability and livability, such as pedestrian-friendly neighborhoods, walkable downtowns, provision of green-space, and improved air and water quality. To register for the workshop, contact Bismarck Obando at ☎(916) 448-1198, ext. 311.

LGC has an Energy Information Clearinghouse web site at: www.lgc.org/energy to provide commu-

nity leaders with up-to-date information on energy restructuring, energy efficiency, and renewable resources. It contains information about LEAP, resource materials produced by LGC and others, upcoming conferences and workshops, funding sources for energy-related projects, and a host of links to other pertinent web sites. Energy factsheets and case studies can also be viewed.

To receive free LEAP assistance or learn more about the program, make suggestions for the web site, or to receive free copies of LEAP reports and resource materials, call LGC’s Energy Project Coordinator Josh Meyer at ☎(916) 448-1198, ext. 302.

LOCAL GOVERNMENT COMMISSION

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8

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