

EPA's State Climate and Energy Technical Forum

State Programs for Building Local Government Climate and Energy Planning Capacity

May 28, 2009

Many cities and counties have been stepping forward to advance clean energy, address climate change, and take advantage of the related multiple benefits including saving money, creating jobs, promoting sustainable growth and reducing air pollution. In fact, almost 1,000 cities have signed the U.S. Conference of Mayors Climate Protection Agreement that commits them to meeting the Kyoto Protocol targets, and counties across the country have agreed to the Cool Counties Climate Stabilization Declaration.^{1 2} In addition, many cities and counties have developed Climate Action Plans³ and are leading by example in implementing clean energy projects.

The American Recovery and Reinvestment Act of 2009 (ARRA) will help local governments expand their roles, by appropriating \$3.2 billion for block grants that promote clean energy initiatives in cities and towns around the country. Local governments are seeking advice on designing, managing, implementing, and monitoring the programs to be funded under these grants. **States have an important role to play by providing resources, technical assistance, model programs and funding to local governments to design and implement clean energy and climate initiatives.** In this background paper, we detail priority sectors where local governments have jurisdiction, provide examples of ways states are supporting local initiatives, and include a resource list with more information on state climate and energy resources for local governments.

I. Local Responsibilities and Opportunities in Energy and Climate Planning

There is enormous potential for local governments to use clean energy to promote energy savings and climate protection. **Local governments have jurisdiction over a wide array of sectors, policies and programs that influence energy use and greenhouse gas emissions.**

- Local governments have **set targets and implemented programs for increased energy efficiency, green procurement, and renewable energy use in the government sector.**
- Local governments can deploy **community-scale renewable and other clean distributed generation in schools and government buildings.**
- In conjunction with federal and state governments, local agencies oversee **weatherization programs** to improve energy efficiency in low-income housing and can incorporate efficiency and renewable energy projects and standards in new **affordable housing construction.**
- Local governments have jurisdiction over **public transit options and manage other public fleets.** They can purchase low-emission buses and alternative fuel vehicles to reduce energy and GHG emissions.
- Through **local land use and transportation planning**, local governments can reduce vehicle miles traveled (VMT), encourage smart growth, **and invest in green infrastructure.**

¹ For the agreement and list of signatories, see <http://www.usmayors.org/climateprotection/agreement.htm>

² <http://www.sierraclub.org/pressroom/releases/pr2007-07-16.asp>

³ EPA has put together a matrix of cities with active climate action plans:
<http://yosemite.epa.gov/gw/statepolicyactions.nsf/matrices/local?OpenDocument>

Open space preservation, urban and community forestry, green roofs and other measures reduce the air conditioning energy needs by lowering ambient temperatures.

- Local governments can **harmonize clean energy and climate actions with other state and local objectives**, including:
 - Enhancing economic development and green job growth
 - Improving air quality and public health
 - Developing and applying new technologies that improve energy efficiency and save money
 - Ensuring a reliable and secure energy supply through the development of efficient power generation technologies and renewable energy resources⁴
- Municipalities in charge of **water treatment and wastewater management facilities** can look for opportunities to achieve significant energy and GHG reductions. These facilities are typically the municipality's largest energy consumers, **accounting for 30 to 40% of the total energy consumed**.
- Local government waste collection and landfill management can benefit from **landfill gas to energy projects**. Cities and counties can also take advantage of programs such as WasteWise, a federal program which helps to reduce and recycle municipal solid waste and selected industrial wastes.
- Local governments also have an important role in **climate adaptation planning**. Many of climate change's impacts – changing temperature and weather patterns, drought, flooding, and sea level rise -- will be felt most directly at the local level. Some local governments are already preparing for these changes, since they have first-hand knowledge of the local ecosystem and human-built environment and infrastructure. For that reason, many local governments are now embracing climate change adaptation as an accompanying strategy to their climate mitigation efforts.⁵
- Local governments are critical to enforcing **efficient building codes** that are often set by the state, and can set their own codes in some cases. The Southwest Energy Efficiency Project estimates that life-cycle energy cost savings from upgrading from a baseline energy efficiency standard to that of the 2000 IECC are greater than \$7,000.⁶

EPA provides tools and resources on many of these best practices. For more information, see <http://www.epa.gov/cleanenergy/energy-programs/state-and-local/local.html>.

The **American Recovery and Reinvestment Act of 2009 (ARRA)**, which appropriated **\$3.2 billion for the Energy Efficiency and Conservation Block Grant (EECBG) Program** will allow local governments to expand their role in climate and energy planning. The program, modeled after the Community Development Block Grant Program administered by the Department of Housing and Urban Development (HUD), provides federal grants to units of local government, Indian tribes, states, and territories to reduce energy use and fossil fuel emissions, and for improvements in energy efficiency in the transportation, building, and other sectors.

⁴EPA website on Local Best Practices in Climate and Energy. <http://www.epa.gov/cleanenergy/energy-programs/state-and-local/local-best-practices.html>

⁵http://www.icleiusa.org/programs/climate/Climate_Adaptation/the-importance-of-climate-adaptation

⁶Increasing Energy Efficiency in New Buildings in the Southwest: Energy Codes and Best Practices. Available: http://www.swenergy.org/ieenb/codes_report.pdf.

Over \$2.7 billion in formula grants is now available: \$1.86 billion for eligible cities and counties; \$767 million for states, U.S. territories, and the District of Columbia (60% of which must pass on to cities and counties that are ineligible for direct formula grants); and \$54.8 million for eligible Indian tribes. States will have responsibility in directing funds to local government and providing support for the development of effective programs. For more information on what is eligible under the EECBG Program, see <http://www.eecbg.energy.gov/>.

Another **opportunity for local governments to expand their role in climate and energy planning is through the Climate Showcase Communities Grant Program, which EPA will launch in June 2009.** This \$10 million grant program will provide funding to communities to implement and grow their own climate change programs while achieving additional environmental, economic, public health, and/or community benefits. The overall goal of the grant program is to create replicable models of sustainable community action that generate cost-effective and persistent greenhouse gas reductions while improving the environmental, economic, public health, or social conditions in a community. Grant awards will range between \$100k- \$500k and will be awarded to 30 and 40 communities across the country by the end of the year. The solicitation will be posted on http://epa.gov/air/grants_funding.html.

II. Opportunities for States to Assist Local Governments

Because local governments have jurisdiction in a number of key areas, many states see local government action as an important factor in meeting their climate and energy goals. To further this activity, many states provide grants and loans to local governments, especially to promote clean energy. However, a few states are taking this a step further and, in addition to funding, are providing technical assistance and guidance to help local governments with their energy and climate planning and program implementation. Some examples of this assistance include helping local governments create greenhouse gas inventories, set energy and greenhouse gas benchmarks and reduction targets, evaluate options for meeting targets, and track progress. Wisconsin, Texas, Massachusetts, California, Pennsylvania, Oregon and Washington have shown leadership by developing programs that help local governments build capacity for climate and energy planning.

Wisconsin

Wisconsin has made a concerted effort to become a national leader in the drive toward clean energy, with its program Focus on Energy and its Office of Energy Independence (OEI).⁷ Governor Doyle created the OEI in 2007 to implement a series of executive orders to increase renewable energy in the state. The state's goal of generating **25% of its electric power and transportation fuels from renewable resources by 2025 (25x25)** has been an important policy driver behind a number of initiatives to work more closely with local governments and businesses. To coordinate implementation, the state created an Energy Independence cabinet made up of representatives from key agencies, including the OEI, Public Service Commission, Department of Natural Resources, Department of Commerce, Department of Agriculture, and Department of Workforce Development.

Wisconsin's Energy Independent (EI) Communities program is the centerpiece of the state's effort to work with local governments to achieve the energy independence goals. Communities that join the Wisconsin Energy Independent Community Partnership must commit to the 25x25 renewable energy target, and are encouraged to use the state's Energy Independence cabinet as a model to coordinate their efforts. In turn, they receive additional access to state and federal funding, increased technical assistance

⁷ <http://energyindependence.wi.gov/index.asp?locid=160>

from state and federal agencies, and motivation for improved energy efficiency in local government operations, which in turn generates additional savings and capital for budgets.⁸

The state's approach is to create a stronger relationship with local officials, let the community decide the level of energy independence commitment beyond 25x25, deploy a state-coordinated resource team, and have the community create its own EI plan based on the advice of team. At the local level, the program specifically promotes communication and education through group postings and hosting of events which create a culture of leadership and pride in energy independence issues.

There are more than **80 EI communities and the program continues to grow**. Some communities have formed regional coalitions to coordinate their efforts. Two counties, two tribes, four villages and a transit system in northern Wisconsin are collaborating to meet their EI commitments. The program has also been pivotal in creating a local government network that the state used effectively to gather input on the most important needs for ARRA funding among communities.

In another interagency collaboration, the Office of **Energy Independence and the Wisconsin Department of Commerce are offering outreach workshops** for Wisconsin entitlement and non-entitlement communities interested in applying for Energy Efficiency and Conservation Block Grants (EECBG).

Texas

In 2001, the Texas State Legislature passed **Senate Bill 5 (SB5) to encourage the use of energy efficiency to reduce ozone levels**, particularly in parts of the state in non-attainment with air quality standards. In 2007, **Senate Bill 12 (SB12) was passed, bolstering SB5's commitment** to conform to the federal air quality standards through the deployment of energy efficiency. The bill contains specific energy-efficiency strategies intended to decrease energy consumption while improving air quality. All of the 41 non-attainment or near non-attainment counties in Texas are required to:

- **Adopt a goal to reduce electric consumption** by 5 percent each year for six years, beginning September 1, 2007.
- **Implement all cost-effective energy-efficiency measures** to reduce electric consumption by existing facilities. (Cost effectiveness is interpreted by this legislation to provide a 20 year return on investment.)
- **Report annually** to the State Energy Conservation Office (SECO) on the entity's progress, efforts and consumption data.

SECO offers a number of resources to communities and organizations to assist with identifying energy efficiency opportunities, including: preliminary energy assessments, codes assistance, and funding for EE retrofits and upgrade projects through a program called LoanSTAR. SECO also provides policy and technical assistance to local governments in order to help them determine and implement strategies in their communities and also to try to coordinate efforts among entities with similar goals and interests. Information regarding these resources can be located at:

- Preliminary Energy Assessments: <http://www.seco.cpa.state.tx.us/sch-gov.htm#pea>
- LoanSTAR Revolving Loan Program: <http://www.seco.cpa.state.tx.us/lr.htm>
- Codes Assistance: http://www.seco.cpa.state.tx.us/sa_codes.html

⁸ <http://energyindependence.wi.gov/docview.asp?docid=13453&locid=160>

Massachusetts

Massachusetts' Department of Energy Resources (MA DOER) created the **Green Communities Program**. Its goal is to enable cities and towns to implement significant energy efficiency measures, construct large renewable energy projects, or pursue other innovative projects that further the communities' efforts to reduce their fossil fuel energy consumption. **MA DER provides several services for cities and towns to help them take advantage of this program**, including technical assistance on becoming a Green Community, a Green Communities Toolkit, an Energy Audit Program, and Energy Management Services Technical Assistance. In addition, the program provides grants and loans for communities that meet criteria involving zoning and permitting of energy facilities, energy use benchmarking, plans for reducing energy use, use of fuel efficient vehicles, and minimizing life-cycle energy costs for new construction. In light of the new ARRA funding, the DER has also issued a guidance document on how to determine the best way to use ARRA funds, maximize community benefits, and navigate the application process.⁹

The **Massachusetts Technology Collaborative (MTC) Renewable Energy Trust** has an array of programs that address energy use at public facilities, and a program that helps communities explore the possibility of installing wind turbines on public land. For example, the Community Wind Collaborative offers qualified interested communities technical assistance, wind monitoring equipment, data analysis, and competitively secured resources for wind energy projects.¹⁰

Another program administered by the **MA Executive Office of Energy and Environmental Affairs, Commonwealth Capital**, includes seven grant & loan programs. The policy endorses planning and zoning measures that are consistent with the Commonwealth's Sustainable Development Principles and encourages municipal implementation by using state funding as an incentive.¹¹ In addition, an innovative new climate adaptation-related program being run by the Massachusetts Office of Coastal Zone Management is available, called the **StormSmart Coasts program**. It is designed to help people working in coastal communities address the challenges arising from storms, floods, sea level rise, and climate change, and provides a menu of tools for successful coastal floodplain management.¹² This is supported by more general technical assistance from that office provided to local decision-makers.

California

California has been the stage for a variety of climate and energy planning efforts, some from the state offices and many from non-profits who link cities with other local governments around the country. The **California Energy Commission works with municipalities through the Energy Partnership Program**. The EPP helps identify cost-effective energy saving opportunities within city, county, hospital, and university buildings. The Energy Commission provides an energy audit that identifies energy saving recommendations, and provides technical assistance through contracted engineering and architectural consultants. Local governments who take advantage of this program also receive advice on how to access state loans and other financing mechanisms.¹³ Similarly, the **Bright Schools Program helps public K-12 schools** identify and evaluate their maintenance plans or perform energy audits of facilities, as well as plan and design major renovations that can reduce energy costs in the long-run, thereby affecting the organization's carbon footprint.

⁹ <http://www.mass.gov/Eoea/docs/doer/ARRA/2009/04/02/stimulus-funding-guidance.pdf>

¹⁰ From the Massachusetts Technology Collaborative:
<http://www.masstech.org/renewableenergy/greencommunities.html>

¹¹ MA Executive Office of Energy and Environmental Affairs
<http://www.mass.gov/?pageID=eoeesubtopic&L=3&L0=Home&L1=Grants+%26+Technical+Assistance&L2=Grant+%26+Loan+Programs&sid=Eoea>

¹² <http://www.mass.gov/czm/stormsmart/index.htm>

¹³ <http://www.energy.ca.gov/efficiency/partnership/index.html>

Several state programs try to forge a greater link between the state and municipalities in California. For instance, the CEC's **Local Agency Assistance Unit** provides guidance, information and technical assistance to local and regional decision makers who are working to conserve energy and reduce greenhouse gas emissions. By helping local governments make improved land use and development choices, the unit strives to achieve the goals laid out in AB 32, The Global Warming Solutions Act of 2006.¹⁴ Also, the CEC Office of Planning and Research will release CA Environmental Quality Assessment **guidelines "for the mitigation of greenhouse gas emissions or the effects of greenhouse gas emissions,"** by July 1, 2009. The state hopes the guidelines will inspire and motivate citizens on the local level to participate in efforts to address climate change.

Pennsylvania

The PA Department of Environmental Protection (DEP) provides an online training for counties on energy management planning and lists resources to help counties with efforts around energy efficiency, alternative energy, financial incentives, and other tools and resources.¹⁵

The **Local Government GHG Pilot Grant Program** helps municipalities develop greenhouse gas inventories and emissions-reduction action plans.¹⁶ Beginning May 24, 2009, local governments or regional partnerships can apply for a portion of \$300,000 that will provide grants to as many as 15 municipalities to hire technical service providers that can help establish an inventory and develop an emissions-reduction action plan.

The DEP Office of Energy & Technology Deployment (OETD) provides non-regulatory **Energy Management Technical Assistance** to industrial and local government throughout the Commonwealth. OETD staff have provided pollution prevention and energy management support to nearly 600 Commonwealth businesses since the program's inception in 1995. DEP has created specially trained energy management teams in its six regional offices to provide technical support for energy and waste reduction initiatives. Specifically, the teams will assist in the development and application of renewable energy sources, new technologies, efficiency improvements and energy system education. Other resources include a list of **Commonwealth energy assessment service providers** and a **Handbook for Local Governments** offered as a guide for all of the department's program areas.¹⁷

Regional Programs

California, Oregon and Washington created the **PLanning for Community Energy, Economic and Environmental Sustainability (PLACE³S) program**.¹⁸ This integrated planning method combines focused public participation, community development and design, and computer-assisted quantification tools (GIS) to help communities produce plans that retain dollars in the local economy, save energy, attract jobs and development, reduce pollution and traffic congestion and conserve open space. PLACE³S creates an information base that functions as a common yardstick, empowering a community to compare components of each plan "apples-to-apples," make informed trade-offs, and arrive at a consensus Smart Growth plan. **This plan will encourage Smart Growth benefits to be tracked and reported annually.** By advancing community understanding of Smart Growth linkages, PLACE³S opens doors for implementing a variety of state programs at the local level.

¹⁴ <http://www.energy.ca.gov/transportation/index.html>

¹⁵ <http://www.depweb.state.pa.us/energy/cwp/view.asp?a=1379&q=485061&energyNav=|>

¹⁶ <http://www.depweb.state.pa.us/energy/cwp/view.asp?a=1532&q=536497>

¹⁷ <http://www.depweb.state.pa.us/enintech/cwp/view.asp?a=1380&q=534271>

¹⁸ <http://www.energy.ca.gov/places/>

RESOURCE GUIDE

General Guidance for State and Local Governments

U.S. DOE Energy Efficiency and Conservation Block Grant (EECBG) Program – about the program	http://www.eecbg.energy.gov/#lc
U.S. DOE Energy Efficiency and Conservation Block Grant (EECBG) Program – State and Local Grant Allocations	http://www.eecbg.energy.gov/grantalloc.html
University of Washington – “Preparing for Climate Change: A Guidebook for Local, Regional, and State Governments”	http://www.cses.washington.edu/db/pdf/snoveretalgb574.pdf
“Energy-Efficient Purchasing by State and Local Government: Triggering a Landslide down the Slippery Slope to Market Transformation”	http://www.pepsonline.org/publications/Energy%20Efficient%20Purchasing%20By%20State%20and%20Local%20Government.pdf
International Council for Local Environmental Initiatives – “Empowering Local Government Climate Action: Blueprint for President Obama and 111th Congress”	http://climatecommunities.us/documents/blueprint.pdf
Climate Communities – “Accessing Stimulus Dollars: A Guide for Local Governments”	http://www.climatecommunities.us/documents/stimulus_guide.pdf
US EPA – Local Government Clean Energy Resource database	http://cfpub.epa.gov/ceird/index.cfm?fuseaction=local.search_js
US EPA – Local Action Plan Recommendations Matrix	http://yosemite.epa.gov/gw/StatePolicyActions.nsf/matrices/local
ICF – “Transportation Demand Management Programs as an Emissions Reduction Strategy: New Challenges and Opportunities”	http://www.icfi.com/markets/transportation/doc_files/tdm-strategies.pdf
ICLEI-USA – CAPP Decision Support Tool	http://www.icleiusa.org/action-center/tools/decision-support-tool

ICLEI Local Government GHG Protocol Project	http://www.icleiusa.org/programs/climate/ghg-protocol
State and Local Government Resources (Selected Examples)	
Alabama	
Alabama Department of Economic and Community Affairs – Local Government Energy Loan Program	http://www.adeca.alabama.gov/C3/Local%20Government%20Energy%20Loan%20P/default.aspx
California	
The California Local Energy Efficiency Program – Local Energy Efficiency Program Workbook, March, 2006	http://www.caleep.com/docs/workbook/CALeep%20Workbook%20Final%20050106.pdf
“Sustainable Cities: Engage Your Community in Bold Initiatives on Climate Change” by Kathleen Les of the Institute for Local Government's (ILG) California Climate Action Network	http://www.icma.org/upload/library/2008-05/%7BCF61C920-AC4C-475A-9B02-CCC0ABEB9210%7D.pdf
California Local Government Sustainable Energy Coalition	http://www.lgc.org/lgsec/index.html
Institute for Local Government: California Climate Action Network	http://www.cacities.org/index.jsp?displaytype=&section=climate&zone=ilsg
Florida	
The Florida Green Local Government Standard	http://www.floridagreenbuilding.org/db/?q=node/5751
Georgia	
Georgia Environmental Facilities Authority – the Governor’s Energy Challenge for State Agencies and Local Governments	http://www.gefa.org/Index.aspx?page=395
Atlanta Regional Commission – Certified Green Communities Program	http://www.atlantaregional.com/html/4708.aspx
Massachusetts	

Massachusetts Department of Energy – Green Communities Program	http://www.mass.gov/?pageID=eoeeaternal&L=5&L0=Home&L1=Energy%2c+Utilities+%26+Clean+Technologies&L2=Renewable+Energy&L3=Renewable+Portfolio+Standard&L4=Green+Communities&sid=Eoeea&b=terminalcontent&f=doer_rps_gc_green_comm_div&csid=Eoeea
New Jersey	
The Star Ledger – “State wants to help local governments save energy” with a new program called the Energy Savings Improvement Plan	http://www.nj.com/news/local/index.ssf/2009/04/state_wants_to_help_local_gove.html
New South Wales, AU	
New South Wales Government Department of Environment and Climate Change – Toolkits and Resources for State and Local Governments	http://www.environment.nsw.gov.au/forgovernment.htm
New York	
NYSERDA’s Local Government Sustainability Initiatives in New York State	http://www.nyserda.org/municipalities/default.asp
North Carolina	
North Carolina Energy Improvement Loan Program	http://www.energync.net/funding/eilp.html
Oregon	
Oregon Department of Energy – Community Energy Planning Tool	http://www.oregon.gov/ENERGY/GBLWRM/docs/CommunityEnergyPlanningTool.pdf
Pennsylvania	
Pennsylvania Department of Environmental Protection - Local Government Greenhouse Gas Pilot Grant Program	http://www.depweb.state.pa.us/energy/cwp/view.asp?a=1532&q=536497
South Carolina	
South Carolina Energy Office – “Saving Energy: Public Institutions – A Guide for Local Government Planning”	http://www.energy.sc.gov/index.aspx?m=7&t=51&h=189
Texas	
Texas – State Energy and Conservation Office	http://www.seco.cpa.state.tx.us/government/seco_projects.php
Wisconsin	
Wisconsin Office of Energy Independence – Energy Independent Communities	http://energyindependence.wi.gov/section.asp?linkid=1514&locid=160
Vermont	
Vermont Natural Resources Council – Town Energy and Climate Action Guide	http://www.vnrc.org/article/view/14458/1/625