



**CLEAN** ⚡ **COALITION**  
Making Clean Local Energy Accessible Now

# Local CLEAN Program Guide

## Module 7: Gaining Support for a CLEAN Program



June 2012

## About the Clean Coalition

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The Clean Coalition is a nonprofit organization whose mission is to accelerate the transition to cost-effective clean energy across the United States. The Clean Coalition believes that the right policies will result in a timely transition to clean energy while yielding tremendous economic benefits.

## Contact Us

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If you have any questions about the Guide or if you are interested in becoming a local champion for a CLEAN Program in your community, please email [LocalGuide@Clean-Coalition.org](mailto:LocalGuide@Clean-Coalition.org).



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## Overview of the Guide

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CLEAN Programs create local jobs and investment opportunities.

### The Purpose of the Guide

This Local CLEAN Program Guide is designed to help communities and their local utilities evaluate, design, and enact **Clean Local Energy Accessible Now (CLEAN) Programs** based on global best practices and the expertise developed by the Clean Coalition through our work on designing and advocating for CLEAN Programs throughout the United States.

### The Structure of the Guide

The Local CLEAN Program Guide is comprised of seven modules.

**Module 1: Overview & Key Considerations** provides an overview of CLEAN Programs and guides readers through the process of evaluating how a local CLEAN Program will match community goals, resources, and constraints.

**Module 2: Establishing CLEAN Contracts Prices** provides a roadmap for establishing optimal fixed prices for CLEAN Contracts.

**Module 3: Evaluating Avoided Costs** provides approaches for determining avoided costs to the utility and/or community.

**Module 4: Determining Program Size & Cost Impact** explains how to assess the amount of renewable electricity to purchase through a CLEAN Program and determine the associated cost impact, if any.

**Module 5: Estimating CLEAN Economic Benefits** provides approaches for estimating the local economic value of energy purchased through CLEAN Contracts.

**Module 6: Designing CLEAN Policies & Procedures** explains how to design streamlined program policies and procedures.

**Module 7: Gaining Support for a CLEAN Program** describes how to obtain community support and gain official approval for the program.

# 1) Overview of the Process



The process of gaining support for a CLEAN Program requires exploration of the community's goals and alignment of the program to these goals.

This module of the Local CLEAN Program Guide is intended to help readers generate support for a well-designed CLEAN Program for their community-controlled utility. In locations where the city or county does have control over its electric utility, or has control of wholesale purchases of electricity but not the electric grid, local advocates may be able to generate support for a Hybrid CLEAN Program through a similar or simpler process.<sup>i</sup> This module is also useful for communities that purchase energy from an investor-owned utility; however, if the local investor-owned utility is not interested in voluntarily creating a CLEAN Program, local advocates may choose to launch a state legislative campaign to mandate a program.

Since the goal is to secure approval for a well-designed CLEAN Program, the process of gaining support requires exploration of the community's goals and alignment of the program to those goals. Such an approach will help assure early success and broad support for future expansion.

**Table A: Steps for Gaining Support for a CLEAN Program**

- 1) Develop a strategic plan for securing program approval
- 2) Conduct outreach to policymakers and their key influencers
- 3) Define program goals
- 4) Build momentum for the program

The following section explains how to develop a strategic plan for securing approval for a well-designed CLEAN Program. Section 3 provides approaches and resources for conducting outreach to local utility policymakers and their key influencers, identifying the community's existing goals, and building momentum to secure approval for a well-designed program.



## 2) Developing the Strategic Plan

A good strategic plan will outline the most straightforward path towards securing approval for a local CLEAN Program. When a policymaker for the utility acts as the local advocate for a CLEAN Program, the program proposal can be integrated into existing local utility planning processes. In contrast, an influential organization that acts as the local advocate for a CLEAN Program may find it necessary to build a coalition of organizations and potentially lead a public education campaign, as shown in Table B below.

**Table B: Steps for Developing a Strategic Plan**

- 1) Determine whether the local utility is governed by:
  - a generally elected group of officials, such as the city council,
  - a separately elected governing board, or
  - a separately appointed governing board.
- 2) Determine whether any of the policymakers will act as the local advocate for the program.
  - If policymakers are ready to act as local advocates, work with them to navigate the program proposal through the usual process for approving new utility programs.
  - If policymakers are not ready to act as local advocates, determine which community members and/or organizations are key influencers of the policymakers, and determine whether any of these key influencers will act as local advocates.
- 3) Evaluate whether to build a coalition of key influencers to support the program.
- 4) Decide whether to build a public education campaign to support the program.

Generally, the questions in Table B can be best answered through informal meetings with policymakers and key influencers.

### Policyholders

Local utility policymakers, including key staff members, can initiate a CLEAN Program through the utility's existing planning processes, as exemplified by the [City of Palo Alto](#) in Appendix A. In many cases, key utility staff members can be the most effective advocates for a CLEAN Program. Appendix C describes how an informal group of utility staff members initiated the [Sacramento CLEAN Program](#) by working with each department within the utility to design and gain support for the proposal.

In addition, utility policymakers may also choose to include information about the benefits of a CLEAN Program in their political platforms and campaign messaging. Policymakers can highlight the local economic and sustainability benefits that would be rapidly achieved by a local CLEAN Program. Table C on the following page lists many of the common interests of policymakers and explains how a local CLEAN Program can address these interests.

**Table C: Policymakers' Interests**

Interest	Relevant Attributes of CLEAN Programs
Promote local job creation and economic growth	CLEAN Programs bring the economic benefits of energy production to local communities. These programs maximize local job creation and give community members the opportunity to invest in local renewable energy facilities by reducing the complexity, risk exposure, and transaction costs of renewable project development.
Achieve existing renewable energy and sustainability goals	CLEAN Programs have been proven worldwide to be the most effective way to spur renewable energy development. This policy tool has driven 75% of all solar PV capacity and 45% of all wind energy installed in the world before 2008. <sup>1</sup> A robust CLEAN Program will rapidly increase commercial-scale local renewable energy project installations, which will reduce the community's need to rely on fossil fuel energy.
Lock in reasonable electricity rates	A well-designed CLEAN Program protects utility customers from rising fossil fuel costs without any capital investment by the utility. Although a CLEAN Program may result in a small rate increase, depending on the pricing relative to avoided costs, policymakers can cap any ratepayer impact in the program design. A CLEAN Program with a low short-term rate increase can experience tremendous success. Sacramento's CLEAN Program added 100 megawatts of clean local energy at no additional cost to utility customers than business as usual. <sup>2</sup>
Increase local government revenues	Unlike many other policies and programs designed to support clean local energy, CLEAN Programs do not rely on state, or local government subsidies or rebates. Instead, CLEAN Programs simply boost tax revenues by increasing local private investment and job creation in renewable energy.
Strengthen reputation for clean energy and sustainability leadership	By enacting a CLEAN Program, policymakers can demonstrate strong renewable energy and sustainability leadership.
Limit program impacts on utility staff	A basic CLEAN Program may be implemented and administered without major staffing requirements. Gainesville Regional Utilities did not hire a single new employee to develop, implement, or administer its highly effective program.
Limit program impacts on the local electric grid	CLEAN Programs generally do not require significant grid upgrades. Despite the remarkable increase in local renewable energy generation in Germany and Spain, neither country has required any major changes to their electrical grids, which have similar attributes to electrical grids in the U.S. <sup>3</sup> However, in locations where more than 15-20% of load is served by intermittent distributed generation resources, intelligent grid solutions may be necessary. <sup>4</sup>
Ensure program success	In contrast to experimental renewable energy policies, CLEAN Programs have been implemented on every continent, from Germany to China, and from Sacramento, California to San Antonio, Texas. Local communities in the U.S. can learn from the best practices as well as the mistakes of these existing programs. Policymakers can ensure that program success and maintain local support for future program expansion by first implementing a pilot program, as described in Modules 2 and 4.
Reduce local electric grid vulnerability	Local energy production makes U.S. communities less vulnerable to central station power plant and/or transmission failures, such as the Southwest blackout that left millions of Americans without power for multiple days in September 2011.

1 Toby D. Couture ET AL., A Policymaker's Guide to Feed-in Tariff Policy Design, (National Renewable Energy Laboratory, 2010), available at <http://www.nrel.gov/docs/fy10osti/44849.pdf>.

2 See Appendix C of Module 1.

3 Letter to Integrated Energy Policy Report (IEPR) Committee (KEMA, April 29, 2011) available at [http://www.energy.ca.gov/2011\\_energy\\_policy/documents/2011-05-09\\_workshop/documents/Memo%20Physical%20Infrastructure%20and%20DG%20Interconnection.pdf](http://www.energy.ca.gov/2011_energy_policy/documents/2011-05-09_workshop/documents/Memo%20Physical%20Infrastructure%20and%20DG%20Interconnection.pdf).

4 See [www.clean-coalition.org/intelligent-grid](http://www.clean-coalition.org/intelligent-grid).

## Key Influencers

Key influencers are individuals and organizations with significant influence on the local utility's policymakers. Key influencers can play important roles at each stage of the CLEAN Program development process. Early in the process, they can build awareness by educating policymakers about CLEAN Programs and encouraging them to enact a local program.

Once a utility begins to design a CLEAN Program, key influencers can propose design preferences and play a critical role in mobilizing and coordinating outreach efforts. These roles may include collecting and disseminating data about local renewable resource availability and costs, convening local stakeholders, and educating other key influencers and the general public about the program. For example, the Los Angeles Business Council led a diverse group of local policymakers, community groups, and academic institutions that successfully explored, promoted, and developed the **Los Angeles CLEAN Program**; see Appendix B for details.

Before reaching out to key influencers, it is helpful to have a general understanding of how their interests relate to a local CLEAN Program. Table D on the following page lists common interests of community members, the key influencers who are likely to be motivated by each listed interest, and the attributes of CLEAN Programs that are relevant to each listed interest. Figure 1 below illustrates the broad range of key influencers that support CLEAN Programs in California.

**Figure 1: CLEAN California Campaign Partners<sup>ii</sup>**





**Table D: Key Influencers' Interests**

Interest	Key Influencers	Relevant Attributes of CLEAN Programs
Invest in renewable energy projects and/or develop new sources of revenue	Property and business owners, trade groups, including those related to renewables, business, property, and/or agriculture, tribal organizations	<p>A local CLEAN Program gives local businesses, farmers, and other property owners the opportunity to transform unproductive spaces and agricultural wastes into new sources of revenue.</p> <p>Any party wishing to invest in renewable energy projects is likely to have an interest in straightforward opportunities for getting involved.</p>
Maximize local clean energy job creation	Organized labor, social justice organizations, chambers of commerce, tribal organizations	<p>CLEAN projects are installed in the communities that use the energy they produce, thereby creating local jobs. Without a CLEAN Program, state and local renewable energy goals would likely be met with out-of-state renewable energy, which transfers money outside of the local area. Note that labor unions will focus on ensuring that newly created jobs will be union jobs.</p>
Lock in reasonable electricity rates	Property and business owners, trade groups, social justice organizations, ratepayer advocates, tribal organizations	<p>A well-designed CLEAN Program protects utility customers from rising fossil fuel costs without any capital investment by the utility. Since CLEAN pricing is fixed for long durations, typically 20 years, utilities and ratepayers alike benefit from predictable and stable electricity prices.</p> <p>Even if a CLEAN Program causes a small initial increase to rates, all parties are typically well served by the rate stability of CLEAN Contracts. In contrast, fossil fuel electricity rates continue to increase, surpassing the CLEAN energy prices along the way. (See Module 3.)</p>
Reduce greenhouse gas emissions, air and water pollution, food contamination, and reliance on fossil fuel and nuclear power	Sustainability organizations, academic institutions & student organizations, public health organizations, social justice organizations, religious groups, tribal organizations	<p>A robust CLEAN Program will rapidly increase local renewable energy project installations, which will reduce the community's need to rely on fossil fuel and nuclear power plants.</p> <p>Fossil fuel power plants are often located near low-income neighborhoods.</p>
Protect natural resources and biodiversity	Environmental organizations, religious groups, tribal organizations	<p>CLEAN projects can be integrated into built environments and disturbed lands, avoiding environmental impacts to pristine and sensitive lands.</p>
Increase access to renewable energy development opportunities	Business and property owners, trade groups, social justice organizations, academic institutions, student organizations, tribal organizations	<p>By reducing barriers to participation in renewable energy production, CLEAN Programs give all parties access to these new economy opportunities.</p>

### 3) Building Consensus

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When building consensus for a CLEAN Program proposal, the first step is to conduct outreach to policymakers and key influencers to assess their interests and concerns. The next step is to work with these key stakeholders to define the program's goals in the context of the community's existing goals. Once program goals have been clearly defined, policymakers can create program proposals designed to meet these goals, as delineated in Modules 2 through 6 of this Guide. The last step is to build momentum to secure approval for a program proposal.

Generally, the biggest obstacle that local advocates face is inertia. Policymakers, utility staff members, and key influencers generally have heavy workloads and limited resources for meeting existing commitments. It is vital to emphasize to these individuals that a local CLEAN Program can help them achieve their existing renewable energy, sustainability, and economic development goals with little burden on any party, including the utility and its staff, taxpayers, and ratepayers. It is especially important to highlight that CLEAN Programs are cost-effective for utility customers, both from the start and over the lifecycle of a Program. Clean local energy provides superior value to ratepayers, as explained in Module 3, which assesses avoided costs. Utility staff members who advocated for **Sacramento's CLEAN Program** found that resistance melted away when they pointed out that the proposed program would be cost neutral from day one.<sup>iii</sup>

#### Conducting Outreach

A local advocate can quickly assess the interests and concerns of local policymakers and influential community stakeholders through private meetings. While Section 2 above provides a rough guide to potential interests and concerns, it is necessary to identify the specific issues that will motivate each key segment of the community. Private meetings facilitate candid exchanges of information about the interests and concerns of the parties at the meeting and outside parties as well.

Private meetings are an excellent way to generate interest in a CLEAN Program or secure local advocates. In **Palo Alto, California**, for example, individual City Council Members met with the Clean Coalition to discuss how a CLEAN Program could advance a sustainable strategy for meeting the city's future energy needs. Soon thereafter, several City Council Members submitted a formal letter in support of CLEAN Programs to the entire Council. As a result, the CLEAN Program design and evaluation processes were soon underway. For more details on Palo Alto's CLEAN Program, see Appendix A.

Some communities have found it helpful to conduct a customer survey to demonstrate public support for a CLEAN Program. For example, before implementing its CLEAN Program, the **City of Gainesville, Florida** surveyed 400 residential customers with the question, "Would you support or oppose Gainesville Regional Utilities' efforts to encourage solar energy investment in your community if it would add one dollar or less per month to all customers' utility bills?". Seventy-five percent of the respondents answered "Support."<sup>iv</sup>

Outreach efforts should eventually include other local government departments, such as city and county building, tax, and land use departments. By conversing with a broad range of relevant parties, a local advocate can avoid the emergence of last-minute surprises as the program proposal reaches major milestones, such as finalizing the design or final program approval.

## Defining Program Goals

One of the main advantages of CLEAN Programs is that they help communities achieve economic, environmental, and sustainability goals. Generally, the process will begin with a proposed set of CLEAN Program goals that promote existing community goals as well as the interests and concerns of policymakers and key influencers. These program goals are then discussed and refined through public processes, such as formal meetings and events that solicit input from key stakeholders.

When defining the program's goals, the community should consider the following basic questions:

- What are the community's existing sustainability goals?
  - Do they focus on reducing emissions and/or protecting natural resources?
- What are the community's existing renewable energy deployment goals?
  - Is there a carve-out for local generation?
- What are the community's existing health goals?
- What are the community's economic development goals?
  - Do they focus on job creation?
  - Do they focus on private investment by local businesses?
  - Does the community aim to be a clean energy market leader?
- How much of a short-term rate increase would the community support to speed up the development of the local clean energy market?

After answering the basic questions above, the community can evaluate the following design-specific questions raised in Modules 1 through 6:

- Which types of renewable energy projects will be eligible for the program?
- What is the avoided cost of energy to the community?
- How large should the program be and how much energy should it aim to buy from each eligible project type?
- How much does it cost experienced developers to produce energy from each eligible project type?
- What is the value to the community of energy produced by an eligible project type?
- Which types of projects should receive pricing premiums or other preferences?

In addition to determining which types of projects will be eligible, the community must also determine whether certain types of projects should be encouraged with higher prices, tax breaks, or other preferences. For example, most CLEAN Programs encourage the development of a range of project sizes by creating higher rates for smaller projects, as shown in Module 2. Similarly, a community with the primary goal of encouraging local private investment may create local tax breaks or higher CLEAN Contracts prices for projects that are owned by customers of the local utility. Other preferences may be given to projects that repurpose brownfields or unproductive farmland.

The priority level given to each program goal will influence the overall design of a program. For example, when the primary goal is increasing renewable project deployment and creating jobs, the pricing and program size should be designed to encourage a larger volume of renewable energy installations. Conversely, when a community's top priority is to limit the ratepayer impact, the program size and pricing should be designed to ensure that rates will not exceed an acceptable and predefined limit.

The **City of Gainesville, Florida** provides a good example of how program goals may be balanced, as seen in Appendix D. Gainesville's policymakers sought to provide the highest rate of solar energy deployment across a broad spectrum of project sizes for a negligible rate impact to utility customers. With these goals in mind, Gainesville implemented a CLEAN Program that resulted in a 2000% increase in its cumulative capacity of installed solar and significant growth in local solar industry employment in its first two and a half years, all with a rate impact of less than 1%.<sup>v</sup> Please see Appendix A and Appendix B of Module 1 for more information about Gainesville's CLEAN Program.

## Building Momentum

Once program goals have been clearly defined, the program can be designed and approved in accordance with these goals. CLEAN Program advocates can build the momentum necessary to get a program proposal approved in several different ways.

The **City of Palo Alto, California** provides an example of how local policymakers can incorporate a CLEAN Program into their utility's existing planning process. In 2010, Palo Alto policymakers evaluated the cost-effectiveness of implementing a local CLEAN Program as part of its strategic planning process; see Appendix A for details.

The **Los Angeles Business Council (LABC)** offers an effective model for how a key influencer can build a campaign and leverage the support of partners to push for a local CLEAN Program. The LABC secured the support of a broad coalition, including the solar industry, commercial real estate owners, health associations, environmental organizations, and low income housing groups. The LABC also commissioned a series of studies by the University of California, Los Angeles (UCLA) to determine the best design for a solar CLEAN Program. The studies include assessments of potential job creation impacts, cost-effectiveness, local solar resources, best practices and lessons learned from CLEAN Programs in North America and worldwide, and promoting the participation of affordable housing properties. The LABC's efforts are further described in Appendix B.

Additional resources for local advocates interested in building a coalition or a campaign to support a CLEAN Program are available in Appendix E.

## References for Module 7

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<sup>i</sup> Please email [LocalGuide@Clean-Coalition.org](mailto:LocalGuide@Clean-Coalition.org).

<sup>ii</sup> See the CLEAN California Campaign website for the full list of endorsers, *available at* <http://www.EnergyJobsNow.org>.

<sup>iii</sup> Phone interview on September 13, 2011 with Jon Bertolino, Superintendent of Renewable Generation Assets, Power Generation, Sacramento Municipal Utility District.

<sup>iv</sup> Gainesville: The Nation's First Solar Feed-In Tariff, presented by Mayor Pegeen Hanrahan, P.E. at Rocky Mountain Innovation Initiative's Innovation After Hours on January 27, 2010, *available at* <http://energync.org/media/Presentations%20-%20Mayor%20Pegeen%20Hanrahan.pdf>.

<sup>v</sup> See Appendix A of Module 1.



## Appendix A – Palo Alto, CA – Leadership by Policymakers

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The **City of Palo Alto, California** provides a compelling example of how local policymakers can initiate a CLEAN Program through the utility's existing planning processes. The electricity customers of the City of Palo Alto, California are served by the **City of Palo Alto Utilities (CPAU)**, which is governed by the **Palo Alto City Council** and advised by the local **Utilities Advisory Commission (UAC)**. The CPAU relies on a “**Utilities Strategic Plan**” and “**Long-term Electric Acquisition Plan**” to orient its resource acquisition strategy as a municipal electric service provider.<sup>i</sup>

### Timeline for Palo Alto's CLEAN Program:

- **Spring 2010:** Individual City Council Members met informally with the Clean Coalition to discuss CLEAN policies and implementation.
- **April – May 2010:** The Mayor, Vice Mayor, and two City Council Members sent a memo to the City Council to request that the full Council direct the UAC, supported by CPAU staff, to undertake a comprehensive review of the CPAU energy efficiency and renewables procurement strategy.<sup>ii</sup> In response to the memo, the City Council directed CPAU staff and the UAC to make recommendations to the Council on a comprehensive energy efficiency and renewables procurement strategy.<sup>iii</sup>
- **July 2010 – January 2011:** CPAU staff drafted and revised the Utilities Strategic Plan and Long-term Electric Acquisitions Plan, incorporating feedback from the UAC and community members.<sup>iv</sup>
- **February 2011:** After a Clean Coalition presentation and a presentation by City staff on the feasibility of a Palo Alto CLEAN Program, UAC Commissioners expressed support for moving forward with a CLEAN Program.<sup>v</sup>
- **March – June 2011:** CPAU staff continued to research CLEAN Programs and brought a proposal to the UAC. The UAC recommended City Council approval of the proposed CLEAN Program's Policies and Guidelines.<sup>vi</sup>
- **June 2011:** City Council's Finance Committee recommended City Council approval of the proposed CLEAN Program's Policies & Guidelines.<sup>vii</sup>
- **August 2011:** City Council approved the proposed CLEAN Program's Policies & Guidelines.<sup>viii</sup>
- **October – February 2012:** Development of the program's pricing and design.
- **March 2012:** City Council approval of Palo Alto CLEAN.<sup>ix</sup>
- **April 2012:** Launch of Palo Alto CLEAN.

## References for Appendix A

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- <sup>i</sup> “Utilities Advisory Commission Recommendation to Approve the 2011 Utilities Strategic Plan,” *City of Palo Alto Finance Committee Staff Report*, June 7, 2011. Document ID #1351, pg. 7-8, *available at* <http://www.cityofpaloalto.org/civica/filebank/blobdload.asp?BlobID=27458>.
- <sup>ii</sup> Document ID #1351, pg. 2.
- <sup>iii</sup> Ibid, pg. 2.
- <sup>iv</sup> Ibid, pg. 2.
- <sup>v</sup> Ibid, pg. 1-2.
- <sup>vi</sup> Final: Utilities Advisory Commission Meeting Minutes of March 2, 2011 of the Palo Alto Utilities Advisory Commission, pg. 3-4, *available at* <http://www.cityofpaloalto.org/civica/filebank/blobdload.asp?BlobID=26948>; See also, Final: Utilities Advisory Commission Meeting Minutes of April 6, 2011 of the Palo Alto Utilities Advisory Commission, pg. 2-3, *available at* <http://www.cityofpaloalto.org/civica/filebank/blobdload.asp?BlobID=27260>; See also, Final: Utilities Advisory Commission Meeting Minutes of May 4, 2011 of the Palo Alto Utilities Advisory Commission, pg. 5, *available at* <http://www.cityofpaloalto.org/civica/filebank/blobdload.asp?BlobID=27695>.
- <sup>vii</sup> Meeting Minutes of June 7, 2011, City of Palo Alto Finance Committee, *available at* <http://www.cityofpaloalto.org/civica/filebank/blobdload.asp?BlobID=28278>.
- <sup>viii</sup> Sheyner, Gennady, Palo Alto Online, Palo Alto Targeting Solar Panels for Green Power, August 15, 2011, *available at* [http://www.paloaltoonline.com/news/show\\_story.php?id=22142](http://www.paloaltoonline.com/news/show_story.php?id=22142).
- <sup>ix</sup> Clean Coalition press release, Palo Alto Leading the Charge on CLEAN Programs, March 6, 2012, *available at* <http://www.clean-coalition.org/press-releases-and-advisories/2012/3/6/palo-alto-leading-the-charge-on-clean-programs.html>.

## Appendix B – Los Angeles, CA – Leadership by Active Key Influencers

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The **City of Los Angeles, California** provides a compelling example of how key influencers can raise support for a local CLEAN Program. As a longtime advocate of sustainability, the **Los Angeles Business Council (LABC)** convened local policymakers, community groups, and academic institutions to collaborate on a CLEAN Program aimed specifically at deploying solar photovoltaic (PV) projects in the service territory of the **Los Angeles Department of Water and Power**.<sup>i</sup> By building a broad coalition of policymakers and key influencers (the **CLEAN LA Coalition**), conducting a strategic public education campaign, and organizing several high-profile events, the LABC achieved broad support for a local solar CLEAN Program.

### Actions Taken by Key Influencers to Gain Support for the Program:

- **Mayor's Ambitious Solar Plan Unveiled (November 2008):** Mayor Antonio Villaraigosa launches Solar LA, the largest solar plan in the U.S., which calls for 1.3 gigawatts (GWs) of solar power in Los Angeles by 2020.<sup>ii</sup>
- **Initiate the Process (2008 – 2009):** The LABC commits to supporting Mayor Antonio Villaraigosa's call to increase solar power in the city. The LABC recognizes that CLEAN Programs will be instrumental in helping the city achieve its goal.<sup>iii</sup>
- **Outreach to Key Stakeholders (2009 – 2011):** LABC conducts outreach and secures CLEAN Program endorsements from a broad range of policymakers and key influencers, including the Mayor, the City Council, businesses, large property owners, educational institutions, housing groups, and healthcare organizations.<sup>iv</sup>
- **Partner with Universities and Research Institutions (2009 – 2011):** LABC forms a partnership with the University of California, Los Angeles, and the University of Southern California and commissions a series of studies to determine the best framework, design and price for a Solar CLEAN Program, based on North American best practices and the specific attributes of Los Angeles. The studies recommend a 600 megawatt CLEAN Program.<sup>v</sup>
- **Conduct Survey of Public Support (2010 – 2011):** LABC commissions a citywide survey by Richard Maullin of Fairbank, Maslin, Maullin & Metz, which finds broad public support for a solar CLEAN Program in Los Angeles.<sup>vi</sup>
- **Organize High-Profile Events (2010 – 2011):** The CLEAN LA Coalition convenes high-profile events with academics and public figures to publicize the program's benefits and likelihood for success. These include:
  - Solar Leadership Roundtable (October 2010)
  - Public Dialogue with Robert F. Kennedy, Jr. (February 2011)
  - Sustainability Summit Salon of Masters (April 2011)<sup>vii</sup>

### Status of Los Angeles' CLEAN Program (as of October 2011):

LADWP has announced plans for a 5 MW pilot CLEAN Program during 2011-2012, in support of a 75 MW program by 2016. The CLEAN LA Coalition is continuing to work with policymakers to ensure that a larger, more robust CLEAN Program will be enacted to take full advantage of the economic and environmental benefits of a local program.<sup>viii</sup>

## References for Appendix B

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- <sup>i</sup> June 2011 presentation by Mary Leslie, Los Angeles Business Council (LABC) President, to the Rockefeller Brothers Fund (LABC Presentation).
- <sup>ii</sup> David Zahniser and Phil Willon, “Mayor Unveils Ambitious Solar Plan,” *Los Angeles Times*, November 25, 2008, *available at* <http://articles.latimes.com/2008/nov/25/local/me-solar25>.
- <sup>iii</sup> Mary Leslie, LABC President, presentation to the Rockefeller Brothers Fund.
- <sup>iv</sup> Ibid.
- <sup>v</sup> The studies are available at <http://www.labusinesscouncil.org/sustainability>.
- <sup>vi</sup> “New Study Shows Apartment Buildings Are Huge Source for Solar Energy in LA; Installations Could Begin as Soon as Next Year,” *Business Wire*, April 12, 2011, *available at* <http://www.businesswire.com/news/home/20110412005746/en/Study-Shows-Apartment-Buildings-Huge-Source-Solar>.
- <sup>vii</sup> Mary Leslie, LABC President, presentation to the Rockefeller Brothers Fund.
- <sup>viii</sup> The current status of the CLEAN LA Program is *available at* <http://www.labusinesscouncil.org/sustainability>.

## Appendix C – Sacramento, CA – Leadership by Utility Staff Members

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**Sacramento Municipal Utilities District (SMUD)**, the municipal utility of Sacramento, California, is the sixth largest publicly owned utility in United States<sup>i</sup> and serves nearly 4% of California's electric load.<sup>ii</sup> As a result of the leadership of its staff members, SMUD implemented a robust, well-designed CLEAN Program (locally known as a feed-in tariff), which includes several renewable energy technologies and has a total program size cap of 100 megawatts.<sup>iii</sup> For context, it is worth noting that the proportional expansion of SMUD's 100 megawatt program across the State of California would result in 2,500 megawatts of clean local energy.

### Timeline of SMUD's CLEAN Program:

- **2008 – 2009:** An unofficial group of SMUD staff members formed to work on designing a CLEAN Program. The group created goals for the program, including making sure that the program is cost neutral, and then worked with key staff members from each department within SMUD to design a proposal that would meet these goals. By engaging each department of the utility from the beginning of the process and continuing to consult with them throughout the design process, the group secured the buy-in of a broad range of utility staff members and ensured that the program was designed appropriately to meet its goals.<sup>iv</sup>
- **June 2009:** SMUD Board of Directors approves the development of a CLEAN Program as part of the utility's General Manager's Report and Recommendation on Rates and Services.<sup>v</sup>
- **July 2009:** SMUD announces its CLEAN Program as a "bold step" that will save money, protect the environment, increase energy efficiency, and reduce the climate impacts of electricity generation.<sup>vi</sup>
- **September 2009:** SMUD's Board of Directors officially approves the CLEAN Program, allowing the utility to purchase energy from eligible renewable resources and combined heat and power installations.<sup>vii</sup>
- **January 2010:** SMUD's CLEAN Program goes into effect.<sup>viii</sup>
- **August 4, 2010:** SMUD suspends the acceptance of new CLEAN Program applications due to full queue.<sup>ix</sup>



## References for Appendix C

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<sup>i</sup> Tim Tutt, Sacramento Municipal Utilities District, SMUD's Successful Value-Based Feed-In Tariff, May 26, 2011, *available at* <http://www.cleanenergystates.org/assets/2011-Files/States-Advancing-Solar/CESA-Webinar-5262011-Tim-Tutt.pdf>.

<sup>ii</sup> SMUD serves 1.4 million people, Source: Sacramento Municipal Utilities District, "Fingertip Facts," pg. 5, *available at* <http://www.smud.org/en/about/Documents/fingertip-facts-2011.pdf>; the population of California is roughly 37 million people, Source: U.S. Census Bureau, California Quick Facts, 2011, *available at* <http://quickfacts.census.gov/qfd/states/06000.html>.

<sup>iii</sup> Sacramento Municipal Utility District (SMUD) website, "SMUD's Feed-In Tariff," 2011, *available at* <http://www.smud.org/en/community-environment/solar-renewables/pages/feed-in-tariff.aspx>.

<sup>iv</sup> Phone interview on September 13, 2011 with Jon Bertolino, Superintendent of Renewable Generation Assets, Power Generation, Sacramento Municipal Utility District (SMUD).

<sup>v</sup> Sacramento Municipal Utility District (SMUD) News Release, "SMUD establishes feed-in tariff for customer-sited distributed generation: First muni to do so sees move as bold step that other utilities will follow," July 17, 2009, *available at* [http://www.smud.org/en/news/Documents/09archive/07-17-09\\_smud\\_feed-in-tariff.pdf](http://www.smud.org/en/news/Documents/09archive/07-17-09_smud_feed-in-tariff.pdf).

<sup>vi</sup> Ibid.

<sup>vii</sup> Sacramento Municipal Utility District (SMUD) website, SMUD's Feed-In Tariff, 2011.

<sup>viii</sup> Sacramento Municipal Utility District (SMUD) News Release, "SMUD establishes feed-in tariff for customer-sited distributed generation: First muni to do so sees move as bold step that other utilities will follow," July 17, 2009, *available at* [http://www.smud.org/en/news/Documents/09archive/07-17-09\\_smud\\_feed-in-tariff.pdf](http://www.smud.org/en/news/Documents/09archive/07-17-09_smud_feed-in-tariff.pdf); See also, <http://www.smud.org/en/community-environment/solar-renewables/Pages/feed-in-tariff.aspx>.

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## Appendix D – Gainesville, FL – Leadership by Policymakers and Utility Staff Members

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Gainesville Regional Utilities (GRU) serves 90,000 electric customers in the **City of Gainesville, Florida**.<sup>i</sup> The city's commitment to environmental sustainability, as demonstrated by its membership in ICLEI<sup>ii</sup> and its adoption of the U.S. Conference of Mayors' Climate Protection Agreement,<sup>iii</sup> inspired a lively conversation about how the community could change its local energy sources to reduce greenhouse gas emissions. After trying several programs to increase the amount of renewable energy in the community, including a rebate program and a net-metering program, GRU decided to implement a solar CLEAN Program (locally known as a "feed-in tariff"). Drawing upon the example of the successful German CLEAN Program, GRU enacted the first cost-based CLEAN Program in the U.S. in March of 2009.<sup>iv</sup>

### Timeline for Gainesville's CLEAN Program:

- **Mid-2008:** GRU began searching for alternative programs to increase the deployment of renewables because the existing PV rebate and net-metering programs had major shortcomings. For example, the rebate program did not reward performance and the net-metering program was generally only used for owner-occupied buildings.<sup>v</sup> Additionally, these programs required an exorbitant amount of GRU staff time to administer.<sup>vi</sup>
- **June 2008:** GRU's Assistant General Manager for Strategic Planning went to Germany on a fact-finding mission sponsored by the Solar Electric Power Association (SEPA). The GRU representative was very impressed by Germany's CLEAN Program (locally known as a "feed-in tariff" program), which allowed the country to dramatically increase its deployment of renewable energy with a ratepayer impact equal to the cost of a cup of coffee per month per household.<sup>vii</sup>
- **June 2008-February 2009:** GRU staff began the process of replacing their rebate program with a CLEAN Program modeled on Germany's program.<sup>viii</sup>
- **February 2009:** GRU's board of directors, the Gainesville City Commission, unanimously approved a solar CLEAN Program for the city.<sup>ix</sup>
- **March 2009:** Gainesville offered the first cost-based CLEAN Program in the U.S.<sup>x</sup>
- **March 2009-April 2011:** GRU filled all 32 megawatts of its CLEAN project allocations through 2016,<sup>xi</sup> and started a multi-year waiting list.<sup>xii</sup> Since implementing its CLEAN Program in March 2009, the city has experienced a 2,000% increase in its installed solar PV capacity, which has been accompanied by less than a 1% ratepayer impact.<sup>xiii</sup>

### Next Steps for Gainesville's CLEAN Program (as of October 2011):

- **January 2012:** The next round of applications for the Gainesville CLEAN Program will open.<sup>xiv</sup>
- **2013:** Largely due to GRU's leadership in creating programs to support the development of clean local energy, such as the city's CLEAN Program, Gainesville is expected reach its carbon dioxide (CO<sub>2</sub>) reduction goals by this year.<sup>xv</sup>

## References for Appendix D

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- <sup>i</sup> Gainesville Regional Utilities (GRU), About GRU, 2011, *available at* <https://www.gru.com/AboutGRU/default.jsp>.
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- <sup>iii</sup> Ibid.
- <sup>iv</sup> Database of State Incentives for Renewables & Efficiency, U.S. Department of Energy, Interstate Renewable Energy Council, and North Carolina Solar Center, 2011, *available at* [http://www.dsireusa.org/incentives/incentive.cfm?Incentive\\_Code=FL77F&re=1&ee=1](http://www.dsireusa.org/incentives/incentive.cfm?Incentive_Code=FL77F&re=1&ee=1).
- <sup>v</sup> Ibid.
- <sup>vi</sup> Letter from John Crider, Strategic Planning Engineer, Gainesville Regional Utilities, “Implementing the Gainesville Feed-in Tariff,” *available at* <http://www.clean-coalition.org/storage/references/Letter%20from%20CLEAN%20Gainesville%20administrator%20John%20Crider%205%20Jul%202011.pdf>.
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- <sup>xi</sup> Kathleen Davis, PR Newswire, “POWERGRID International Magazine Names Projects of the Year Award Winners at DistribUTECH 2010,” March 23, 2010, *available at* <http://www.prnewswire.com/news-releases/powergrid-international-magazine-names-projects-of-the-year-award-winners-at-distributetech-2010-88897197.html>.
- <sup>xii</sup> Pegeen Hanrahan, P.E., “Gainesville, Florida’s Feed-in Tariff Experience,” Presented at the Applied Solutions Annual Conference, November 2010, *available at* <http://www.drivecms.com/uploads/appliedsolutionsworkshop.com/1085203963Hanrahan%20-%20Applied%20Solutions%20FIT%20Session%20Hanrahan%20Nov%2011%202010.pdf>.
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- <sup>xiv</sup> Database of State Incentives for Renewables & Efficiency, U.S. Department of Energy, Interstate Renewable Energy Council, and North Carolina Solar Center, 2011.
- <sup>xv</sup> “Gainesville: The Nation’s First Solar Feed-In Tariff,” presented at the University of Boulder by Pegeen Hanrahan, P.E. and Mayor of Gainesville from 2006–2010 (term limited in 2010).

## Appendix E – Additional Resources for Local Advocates

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### **CLEAN Campaign Websites:**

- CLEAN California Campaign, *available at* <http://www.EnergyJobsNow.org>.
- CLEAN LA Coalition, *available at* <http://www.labusinesscouncil.org/sustainability.php>.