ASSOCIATION OF BAY AREA GOVERNMENTS
Representing City and County Governments of the San Francisco Bay Area

ABAG

MEMO

Submitted to: ABAG Executive Board

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Subject: Solar and Energy Efficiency Financing District

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Executive Summary

ABAG and PG&E are jointly developing a San Francisco Bay Area region-wide solar and energy efficiency financing district. As currently envisioned, the program would offer a "one-stop shop" for customers to take advantage of property-based financing in support of 'bundled' energy efficiency and renewable projects to meet their energy management needs. The initial program concept was outlined in a staff report for the March 2009 Executive Board meeting, and a status update was provided at the May 2009 Executive Board meeting. This staff report outlines progress made to date on broad program design elements; market research planning; business case development; and provides a legislative update on Senate Bill 279.

Recommended Action

This agenda item is informational. The attached staff report provides an update on program activities.

Next Steps

ABAG and PG&E will continue working together to advance program design, market research analysis, business case development, and passage of SB 279.

Attachments: Solar and Energy Efficiency Financing District Report

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Solar and Energy Efficiency Financing District

Continued Program Definition

Overview

ABAG and PG&E are jointly developing a San Francisco Bay Area region-wide solar and energy efficiency financing district. As currently envisioned, the program would offer a "one-stop shop" for customers to take advantage of property-based financing in support of 'bundled' energy efficiency and renewable projects to meet their energy management needs. The program would be supportive of climate goals outlined in the Scoping Plan prepared by the California Air Resources Board, the California Energy Efficiency Strategic Plan, and local climate action plans, while also promoting job creation. The initial program concept was outlined in a staff report for the March 2009 Executive Board meeting, and a status update was provided at the May 2009 Executive Board meeting. This staff report outlines progress made to date on broad program design elements; market research planning; business case development; and provides a legislative update on Senate Bill 279. Since the program is in the development phase, information provided in this report is subject to change.

Program Design Activities

Progress continues to be made on the design of the program, which includes energy efficiency and renewable measures that can be promoted through incentives or financed under this program. Although several dependencies exist to determine an absolute launch date, including the passage of SB279, the current estimate is August 2010.

ABAG recently hired the consulting firm Bevilacqua Knight, Inc. (BKi) to outline the broad program design elements of the financing district. Definition of the program design elements along with market research results and estimated costs will lead to the development of a business case to test program viability.

The current target market for this program is low-rise (1-3 stories) residential buildings, but other building types may be considered in later phases. We expect a customer considering energy efficiency improvements to their home will have many options. As an example, the Sonoma County Energy Independence Program's has identified over 20 home improvements that can reduce energy consumption. These improvements, listed below, provide a broad example of the types of available upgrades and will be considered as the list of eligible measures for the regional financing district is developed.

- High efficiency HVAC systems and HVAC system sealing
- Duct and home sealing
- Evaporative coolers
- Efficient natural gas storage water heaters
- Tankless water heaters
- Solar water heater systems
- Cool roof systems
- Reflective roofs and coatings

- Attic and wall insulation
- Reflective insulation or radiant barriers
- Whole house fans and attic fans
- High efficiency windows and glass doors
- Window filming
- Weather stripping
- Efficient skylights
- Solar tubes
- Additional building openings to provide addition natural light
- High efficiency lighting installation
- High efficiency pool equipment
- Electric vehicle plug-in stations
- Geothermal exchange heat pumps
- Solar thermal systems for pool heating

Program Pathways to Entry
The energy financing district seeks to provide customers with easy and flexible project selection options by packaging home energy improvements depending on their budget, goals, and energy needs. All options would start with some level of energy assessment based on the complexity of the project design, but financing is limited to building shell improvements. ABAG and PG&E will be performing a detailed market survey to determine if a three pathway approach is the most useful to customers and will adjust the program accordingly in light of the market survey results. In the interim, the following options represent current thinking on three possible pathways to enter the program:

Basic home energy upgrade
This pathway serves homeowners who are seeking a basic energy retrofit that will deliver net financial savings. Expected budget range would be $5K-$10K. The basic home energy upgrade would focus on the most cost-effective energy efficiency measures such as air sealing, attic insulation, lighting, and insulating the hot water heater system. These projects should deliver an average energy reduction of at least 20% and would not include major system replacements like HVAC or more costly improvements such as window replacement. The basic home energy upgrade can be combined with onsite renewables depending on the homeowner's goals for the project.

Advanced home performance
This pathway serves homeowners that elect to address specific energy systems and/or are motivated to achieve deeper energy savings (e.g. 20%-70%). These projects typically have a budget range of $11K-$40K and are usually triggered by the need to replace majors systems (furnace, air conditioner, etc.) or as part of a remodeling project This pathway would utilize existing Home Performance with ENERGY STAR, a national initiative of the U.S. EPA and U.S. DOE, providing a comprehensive whole-house approach to improving energy efficiency and comfort at home while helping to protect the environment and could be combined with onsite renewables depending on the homeowner's goals for the project.

Onsite renewables

This pathway serves homeowners interested in solar electric or solar thermal technologies. These homeowners are comfortable financing projects with a budget range of $20K-$60K. Although not required, homeowners would be strongly encouraged to incorporate the basic home energy upgrade as a part of their solar project. This would protect consumers from paying for oversized and less cost-effective solar systems and would maximize societal and homeowner benefits. Due to the relatively mild climate in much of the ABAG service territory, many solar electric projects in this area result in substantial homeowner costs beyond current energy bill savings even with rebates. Other onsite renewable technologies (wind turbines, fuel cells, etc.) may be considered in the future but will not be included in this the first phase of program design due to their current higher net costs.

ABAG is also in discussions with SolarTech, an initiative of the Silicon Valley Leadership Group, to identify how this non-governmental organization can support the design of the program to address solar installation issues. A few areas that have been discussed include quality control standards, documentation for project tracking and audits, program applications related to solar, application approval criteria, products available for financing, installation criteria, certification of work completed, and coordination of solar and energy efficiency incentives. One issue regarding solar system installations that has been raised as a concern is the ability to expand a modular solar system at a later date if a customer's load increases. Based on discussions with SolarTech, a solar system does not need to be over-sized when it is first installed, even if a customer anticipates a future increased load, such as from a new plug-in hybrid car. Addressing solar issues such as this example will improve the program design. Partnerships on specific program aspects will continue to be explored.

Customer Financing Approval Criteria

Once a customer expresses interest in the program, an application will be submitted for consideration. One of the items that will be reviewed for application approval is customer eligibility for the purpose of reasonable credit risk mitigation. While the energy financing district eligibility requirements are still being defined, Sonoma County Energy Independence Program has performed an analysis and identified the following seven eligibility requirements in their program application:

- Applicant(s) is/are legal owner of the property described in the Application (the "Property").
- Property is developed and located within Sonoma County. Mobile homes are not eligible.
- Property Owner is current on property taxes.
- Property Owner is current on mortgage(s). For commercial property, lender has given consent to SCEIP Financing;
- Property Owner is not in bankruptcy and the property is not an asset in a bankruptcy.
- There are no federal or state income tax liens, judgment liens or similar involuntary liens on the Property.

- Improvements costs are reasonable for the scope of the proposed project and to Property value.

ABAG will continue to analyze credit risk considerations as the energy financing district eligibility requirements are established.

Program Financing Mechanism
In order to finance energy efficiency and solar projects for customers through the energy financing district, a community facilities district must be formed. The Mello-Roos Community Facilities Act of 1982 authorizes property based financing for improvements of certain facilities. If Senate Bill 279 is signed into law this year, solar and energy efficiency improvements to or on real property and in buildings would also be authorized by this Act. Under the Mello-Roos Act, Section 53317(h) of the Government Code, a joint powers agency (the "JPA") is authorized to use the law to create a community facilities district. The Act outlines several distinct steps that the JPA must follow to set the district formation and financing processes in motion, including adopting resolutions and holding a public hearing. In addition to the process undertaken by the JPA, a public hearing in connection with the district's formation and proposed bond financing will also need to be held at least at the county level.

The ABAG Financing Authority for Nonprofit Corporations ("Authority"), as a JPA, has experience with property based financing. Since 1993 the Authority has offered its Special Assessment Bond Round-Up ("SABR") Program for the pooled financing and issuance of local assessment district and community facilities district bonds. To date, the Authority has brought 13 SABR Program issues to market aggregating nearly $458 million. The JPA itself does not take on the obligation for repayment of any land-secured financings. Each underlying bond issue stands on its own credit meaning that there is no cross-collateralization or pooled credit aspect among jurisdictions. The JPA's role is strictly as a conduit, with repayments limited to amounts received.

Repayment of the bonds would be secured by property taxes collected by the County on the regular property tax bills sent to property owner/homeowners. Any such bonds would not be rated; however, the Authority's obligation to make payment on these bonds, as in all of its land secured securities, is strictly limited to property tax payments passed through by the County to the Bond Trustee. Neither ABAG nor its members take on any obligation to make payment on these securities.

Within this financing mechanism, the energy financing district will continue to refine program parameters for project approval.

Division of Program Responsibilities
ABAG and PG&E are jointly working on the design of the program. The following list provides a preliminary view of how the various tasks can be divided among the main implementing parties, but all are subject to revision.

Joint ABAG/PG&E. ABAG and PG&E will jointly develop the financing district program. In developing the program an emphasis will be placed on ensuring ease of use for the customer. Program viability will be tested through a market research/analysis and development of a business financial model. Joint tasks may include:

- Establish program goals, limitations, and strategy
- Select program administrator(s)
- Establish basic project eligibility criteria
  - Minimum and maximum amount that may be financed
  - List of approved technologies and improvements that can be financed
- Coordinate with community choice aggregation communities and municipal utilities

ABAG. ABAG will implement and maintain the community facilities district, coordinate with member agencies, and provide overall program oversight. Specific tasks may include:

- Provide oversight and direction
- Select financing strategy
- Arrange for bond sales
- Establish community facilities district. ABAG anticipates creating the District through its joint powers agency, the ABAG Financing Authority for Nonprofit Corporations
- Coordinate with trustee to process property tax payments to bondholders
- Coordinate with other member property tax financing programs in the Bay Area
- Monitor program and report routinely to participating local governments
- Information and outreach to local governments and their communities

Financial Administrator. The Financial Administrator will ensure financial resources are available to fund each project and work with the County Tax Offices to ensure proper processing of individual liens. The Financial Administrator will work under contract to the community facilities district and in close collaboration with the Program Administrator. Tasks may include:

- Secure interim financing for job payments
- Develop and manage application and approval processes
- Secure consumer consent to contract and lien
- Place property tax liens on participating properties
- Process payments to installers/contractors
- Arrange loan-loss fund source and operations
- Report status, results, and outlook regularly to all sponsoring authorities

Program Administrator / Process Manager. ABAG and PG&E will determine the most efficient and effective Program Administrator. The Program Administrator will have

primary responsibility for conducting initial site visits and feasibility analysis, tracking project implementation, conducting marketing campaigns, coordinating with contractors, processing rebates/incentives, and customer service. Tasks may include:

- Develop program implementation plan (Program Guidelines)
- Conduct telephone screenings, site visits, and project feasibility analyses
- Conduct energy savings modeling and estimation as required, including utility bill data acquisition and analysis
- Approve jobs for financing - report to Financial Administrator
- Maintain approved contractor lists, and monitor overall contractor activity
- Coordinate with other utility energy efficiency programs, as appropriate, including Local Government Partnerships and "Third Party" incentive programs
- Manage the processing of utility and state incentive payments for both energy efficiency and renewable project installations
- Develop and manage energy efficiency and solar project integration policies and procedures
- Develop various disclosure forms
- Monitor and assess individual job status
- Certify completion of projects
- Design and conduct marketing campaign and materials
- Set up and operate program web/phone information center
- Track and report energy and carbon savings to all stakeholders
- Customer service including customer care and assistance to assure adequate customer feedback, complaint, and dispute resolution process.
- Coordinate contractor training and certification process, as necessary
- Arrange local government staff training as needed (e.g. permitting issues)
- Provide ongoing contractor support systems (web, meetings, news, forum etc.)
- Coordinate continuously among participants and stakeholders
- Manage funding and budget for program administration

Market Research Plan

ABAG in partnership with PG&E is conducting a market research study to determine the customer's interest in participating in an energy financing district. The results of the study will iteratively inform program design and define target audience and outreach strategies. The study will be conducted in three phases and will utilize online surveys, focus groups and in-depth interviews. The research results are expected on a rolling basis starting in August and into the fourth quarter of 2009.

Phase one will include a program concept study which will identify which residents are most likely to participate in energy financing district and what levers will drive their participation. This phase will also determine the specific energy efficiency and solar upgrades that are in demand. Online surveys will be completed by a diverse range of residents in the ABAG service territory including a mix of income levels, types of homes, age of homes, and energy usage.

Phase two uses qualitative research methods such as focus groups and in-depth interviews to determine the value and benefits to participating in energy financing district. Results will determine what would prevent or encourage participation. This will allow the program design team to gain valuable feedback on the initial program design and ensure a customer-centric offering.

Phase three focuses on the profile of the target customer and is based on the results of the previous research phases. In-depth profiles of target customers will be created and include demographics, energy usage, living environment, psychographics, and media channels. Available marketing channels will be evaluated to most effectively reach target customers.

Business Case

A business case will be developed for the energy financing district. Major components to the business case include a description of the product and/or service provided to customers, strategic business goals, market overview, strategies for positioning and for marketing and communicating the product/service, financial and risk analysis, exit strategy, and measurements for program success. The major components to the business case are expected to be completed by September 2009. Creating a business case is a necessary step for obtaining PG&E program approval. Once completed, the business case will be presented to PG&E and the ABAG Executive Board.

Legislative Update on SB 279

The energy financing district concept is based on the financing mechanism that would be allowed by the passage of Senate Bill 279 (SB 279). The bill is based on the Mello-Roos Community Facilities Act of 1982, which allows a community facilities district to finance community improvements, and would amend this act to allow a district to finance energy efficiency and renewable energy improvements to or on real property. Passage of this bill is seen as critical to the creation of the energy financing district. Senator Hancock introduced SB 279 this year. The bill passed the Senate and the Assembly Local Government Committee. *The bill has been amended to incorporate water conservation.*

Next Steps

ABAG and PG&E will continue working together to advance the program design, market research, and business case. Additionally, with the SB 279 amendment to include water conservation, ABAG will begin exploring a partnership with water districts to incorporate water elements into the program concept. Lastly, ABAG will continue to coordinate with other financing programs to ensure lessons learned and best practices are incorporated into the program design.