



An Integrated Approach to Community-Scale Building Retrofitting

COMPREHENSIVE RETROFIT & SOLAR PROGRAM:

Overview and Background

This overview describes a comprehensive building retrofit and solar program that generates thousands of career-track new jobs while maximizing quantified energy, water, and carbon reductions. The program leverages multiple funding sources to encourage high participation while building the necessary workforce capacity and quality assurance to ensure success. Minimal local governmental staffing is required for program implementation. The principal goal is to engage the maximum number of residential and commercial buildings in the state's efforts to reduce energy use, water use, and carbon emissions all in support of AB32 and local Climate Action Plans. This program can be implemented at an individual city level but it is better to aggregate cities voluntarily at the county or Council of Government (COG) level to promote consistency and drive down program costs.

Climate Action Planning

Buildings represent 23% of carbon emissions in California and provide a tangible and actionable carbon mitigation strategy that is cost-effective. Existing homes and buildings represent the largest carbon reduction potential in this category because over 70% were built before the state's energy code was enacted and the remainder still have major energy savings opportunities. Today's buildings will dominate for decades. Comprehensive building retrofit and solar programs have become the centerpiece of local government Climate Action Plans because it is easier and more cost-effective to achieve carbon reductions than decreasing energy used for transportation or increasing utility-scale renewable generation and will help make up for expected shortfalls in these sectors.

Challenges

Utilities have a long history of directing energy efficiency programs at the existing building sector with differing results due to regulatory constraints, high costs and complexities of reaching a fragmented market. Financing has not been readily available for substantial market penetration and optimized results. The workforce is mostly untrained in proper procedures, and training has been too small in scale and often impractical. There are many related efficiency programs for low income, open-market housing, and non-residential buildings, but they are uncoordinated and have very different and conflicting requirements and processes. But recent governmental actions are changing the picture.

Stimulus and Other Funding

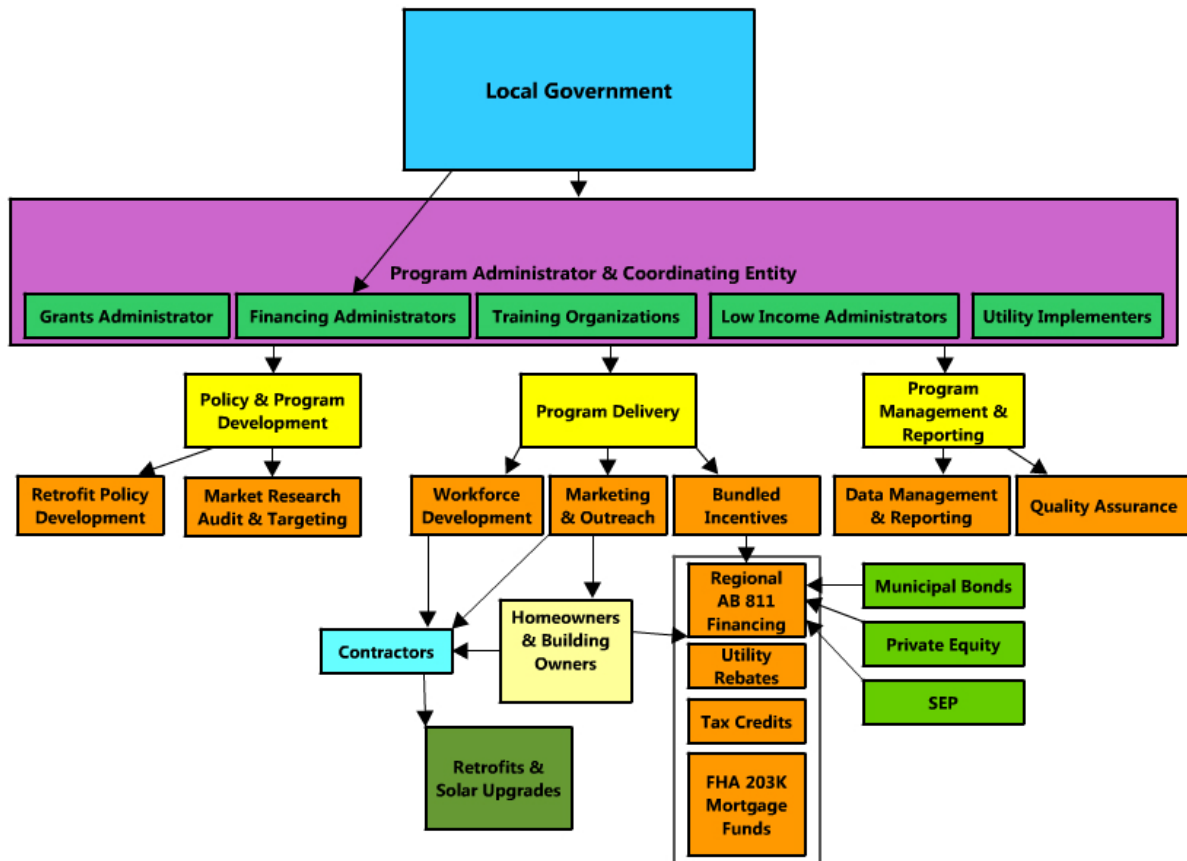
The program will seek to involve a combination funding sources including American Recovery and Reinvestment Act (ARRA) stimulus funds, financing for building owners through AB811 or Mello Roos special assessment districts, utility incentives, green workforce training grants, and Neighborhood Stabilization Program (NSP) funds.

A portion (10%-20%) of each participating local government's ARRA Energy Efficiency and Conservation Block Grant (EECBG) funding would be committed to help build program infrastructure and necessary program elements (e.g. policy, workforce, marketing & outreach, quality assurance, administrative, etc.) needed for successful implementation of an AB811 or Mello Roos special assessment district. The California Energy Commission (CEC) is exploring the potential of matching that amount if local governments join larger county or COG-level aggregations for greater efficiency. AB811 or Mello Roos special assessment districts and new mortgage instruments such as FHA 203K loans would provide the financing to building owners. New and expanded 2009-11 utility-funded programs will add cash incentives for both broad building retrofits and renewables. NSP funds also can be utilized to retrofit foreclosed properties and incorporate green improvements.

For More Information and Program Details Please Contact:
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The Proposed Program

Voluntary AB811 or Mello Roos special assessment districts are the centerpiece of the program because they remove the high first cost barrier by providing low-interest long-term financing to building owners via annual property tax payments that transfer with the building when sold. However, in order to ensure significant market penetration and program success several supporting program elements are required. These include consistent and credible program standards for energy efficiency with clear verification protocols, training to ensure a robust and capable workforce, an effective marketing and outreach strategy offering bundled incentives to attain high participation, and a strict quality assurance program to protect consumers and reduce local government liability. In addition, ongoing tracking, measurement, and reporting is required to ensure program effectiveness and to quantify energy, water, and carbon reduction benefits. Third party implementers will coordinate all program elements to provide an integrated delivery model that relieves local governments of technical and administrative responsibilities.



Recommended Next Steps

1. Identify internal champion
2. Prioritize portion (10%-15%) of EECBG funds to develop and oversee comprehensive retrofit and solar program
3. Coordinate regionally to ensure scalable program model
4. Engage 3 party implementers to support program development
5. Assess and select financing district options (e.g. Mello Roos, County AB811, Regional AB811, or CSCDA AB811)