

File No. 100210

Committee Item No. 4

Board Item No. 7

### COMMITTEE/BOARD OF SUPERVISORS AGENDA PACKET CONTENTS LIST

Committee BUDGET AND FINANCE

Date 3/3/10

Board of Supervisors Meeting

Date 3/9/10

#### Cmte Board

- |                                     |                                     |  |
|-------------------------------------|-------------------------------------|--|
| <input type="checkbox"/>            | <input type="checkbox"/>            | Motion                                       |
| <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | Resolution                                   |
| <input type="checkbox"/>            | <input type="checkbox"/>            | Ordinance                                    |
| <input type="checkbox"/>            | <input type="checkbox"/>            | Legislative Digest                           |
| <input type="checkbox"/>            | <input type="checkbox"/>            | Budget Analyst Report                        |
| <input type="checkbox"/>            | <input type="checkbox"/>            | Legislative Analyst Report                   |
| <input type="checkbox"/>            | <input type="checkbox"/>            | Introduction Form (for hearings)             |
| <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | Department/Agency Cover Letter and/or Report |
| <input type="checkbox"/>            | <input type="checkbox"/>            | MOU  |
| <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | Grant Information Form                       |
| <input type="checkbox"/>            | <input type="checkbox"/>            | Grant Budget                                 |
| <input type="checkbox"/>            | <input type="checkbox"/>            | Subcontract Budget                           |
| <input type="checkbox"/>            | <input type="checkbox"/>            | Contract/Agreement                           |
| <input type="checkbox"/>            | <input type="checkbox"/>            | Award Letter                                 |
| <input type="checkbox"/>            | <input type="checkbox"/>            | Application                                  |
| <input type="checkbox"/>            | <input type="checkbox"/>            | Public Correspondence                        |

#### OTHER

(Use back side if additional space is needed)

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<input type="checkbox"/>	<input type="checkbox"/>	_____
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<input type="checkbox"/>	<input type="checkbox"/>	_____

Completed by: Gail Johnson

Date 2/26/10

Completed by: [Signature]

Date 3/4/10

An asterisked item represents the cover sheet to a document that exceeds 25 pages. The complete document is in the file.

2

01/01/0

1 [Accept Grant - American Recovery and Reinvestment Act - \$875,957.]

2  
3 **Resolution authorizing the Department of the Environment to accept a grant in the**  
4 **amount of \$875,957 from the California Energy Commission's State Energy Program**  
5 **through the Association of Bay Area Governments for the deployment of energy**  
6 **efficiency projects in the City.**

7 Note: Additions are single-underline italics Times New Roman;  
8 deletions are ~~strikethrough italics Times New Roman~~.  
9 Board amendment additions are double underlined.  
Board amendment deletions are ~~strikethrough-normal~~.

10 WHEREAS, The California Energy Commission's State Energy Program provides  
11 funds to eligible local governments for cost-effective energy efficiency projects based on a  
12 competitive selection process; and

13 WHEREAS, The City and County of San Francisco is eligible for funding under the  
14 California Energy Commission's State Energy Program; and

15 WHEREAS, The California Energy Commission's State Energy Program allows public  
16 agencies or non-profit entities to apply for funds on behalf of eligible local governments; and

17 WHEREAS, The San Francisco Department of the Environment collaborated with the  
18 Association of Bay Area Governments (ABAG) to submit a regional application to California  
19 Energy Commission's State Energy Program to implement the Retrofit Bay Area Program  
20 which includes energy efficiency projects in the City and County of San Francisco; and

21 WHEREAS, Based on the evaluation of applications, the California Energy  
22 Commission's State Energy Program selected the Association of Bay Area Governments  
23 (ABAG) to receive funding of \$10,750,000.00 for the Retrofit Bay Area Program; and

1           WHEREAS, The City and County of San Francisco will receive \$875,957.00 to  
2 implement energy efficiency projects as part of Retrofit Bay Area; and

3           WHEREAS, The City and County of San Francisco recognizes that it is vital for local,  
4 regional, state, and federal agencies to stimulate the economy; create and retain jobs; reduce  
5 fossil fuel emissions; reduce total energy usage; and improve energy efficiency; and

6           WHEREAS, The City and County of San Francisco has committed to an ongoing,  
7 coordinated effort to reduce the emissions that cause global warming, improve air quality,  
8 reduce waste, reduce energy use and save money; and

9           WHEREAS, The City and County of San Francisco is committed to reducing these  
10 community-wide greenhouse gas emissions by 20% below its 1990 levels by 2012; and

11           WHEREAS, In 2004, San Francisco's Department of the Environment and Public  
12 Utilities Commission released a "Climate Action Plan for San Francisco" identifying  
13 transportation, energy efficiency, renewable energy, and solid waste measures that could  
14 achieve significant greenhouse gas reductions; and

15           WHEREAS, The Climate Action Plan called for implementing energy efficiency  
16 programs and projects throughout the City; and

17           WHEREAS, The City and County of San Francisco has considered the application of  
18 the California Environmental Quality Act (CEQA) to the implementation of the proposed  
19 projects funded through this grant; and

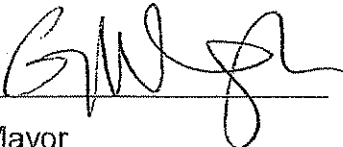

20           WHEREAS, All projects undertaken with this funding are in compliance with the  
21 California Environmental Quality Act (CEQA), California Public Resources Code Section  
22 21000; and


23           WHEREAS, The grant budget includes provision for indirect costs of \$82,501; and  
24  
25


1           WHEREAS, The term of the grant will be from April 1, 2010 through March 31, 2012;  
2 now, be it

3           RESOLVED, The Board of Supervisors hereby authorizes ABAG to accept a grant  
4 award on behalf of the City and County of San Francisco and to enter into all necessary  
5 contracts and agreements, and amendments thereto, on its behalf to implement and carry out  
6 energy efficiency projects; and, be it

7           FURTHER RESOLVED, The Department of the Environment is authorized to furnish  
8 whatever additional information or assurances the funding agency may request in connection  
9 with this grant, and to execute any and all agreements necessary to carry out the purpose of  
10 the grant.

11 APPROVED:   
12  Mayor

APPROVED:   
for Ben Rosenfield  
Controller

16 RECOMMENDED:  
17   
18 By: David Assmann, Acting Director  
19 Department of the Environment



TO: Angela Calvillo, Clerk of the Board of Supervisors  
FROM: Mayor Gavin Newsom  
RE: Resolution authorizing acceptance of grant in the amount of \$875,957  
from the California Energy Commission's State Energy Program  
through the Association of Bay Area Governments  
DATE: February 23, 2010

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Dear Madame Clerk:

Attached for introduction to the Board of Supervisors is a resolution authorizing the San Francisco Department of the Environment to accept a grant in the amount of \$875,957 from the California Energy Commission's State Energy Program through the Association of Bay Area Governments for the deployment of energy efficiency projects in the City and County of San Francisco.

I request that this item be scheduled in Budget and Finance Committee on March 3, 2010. Because of a state deadline, this grant requires a Board of Supervisors resolution no later than March 13, 2010 in order to retain these funds.

Should you have any questions, please contact Starr Terrell (415) 554-5262.

100210

File Number: \_\_\_\_\_  
(Provided by Clerk of Board of Supervisors)

**Grant Information Form**  
(Effective January 2000)

Purpose: Resolution authorizing SF Environment to accept grant funds

The following describes the grant referred to in the accompanying ordinance:

1. Grant Title: Retrofit Bay Area -San Francisco
2. Department: Department of the Environment (SF Environment)
3. Contact Person: Shawn Rosenmoss Telephone: 415-355-3746

4. Grant Approval Status (check one):

Approved by funding agency                       Not yet approved

5. Amount of Grant Funding Approved or Applied for: \$ 875,957.00

6a. Matching Funds Required: Yes                      \$ 348,000

b. Source(s) of matching funds (if applicable): Matching funds are primarily being provided through the salaries of existing City staff, who will contribute to the project by performing task that are currently part of their regular duties, as well as being matched with foundation funding.

7a. Grant Source Agency: California Energy Commission's State Energy Program, which will be awarded to the Association of Bay Area Governments (ABAG) and sub-awarded to SF Environment

b. Grant Pass-Through Agency (if applicable): Association of Bay Area Governments

8. Proposed Grant Project Summary:

The Association of Bay Area Governments is the lead in a regional effort to obtain funds from California Energy Commission's (CEC) State Energy Program (SEP), which are available to eligible local governments for cost-effective energy efficiency projects. The region-wide energy efficiency program will retrofit 17,000 homes (single family and multifamily) to achieve reduction in home energy consumption, while creating 1,730 home energy retrofit jobs. Members of the Steering Committee in charge of working with ABAG to create the proposal have agreed to a population-based allocation for each county-specific program. The proposed budget allocation for the City and County of San Francisco is \$875,957. **Funds were awarded on February 10, 2010 and the CEC requires that all counties participating in the project must provide a resolution authorizing acceptance of the funds within 30 days of the funds being awarded.**

9. Grant Project Schedule, as allowed in approval documents, or as proposed:

Start-Date: April 1, 2010                      End-Date: March 31, 2012

10. Number of new positions created and funded:

There will be new positions created for this project, however, in order to meet the time constraints for obtaining legislative approval to accept the funds, the Department of the Environment is submitting a resolution to Accept the funds and is also submitting an ASO Amendment Ordinance with orders to expend the funds as a separate document.

If new positions are created, explain the disposition of employees once the grant ends? If new positions are created, they would end when the grant funding ends.

12a. Amount budgeted for contractual services: \$610,109

b. Will contractual services be put out to bid?

Yes, Contracts to consultants will be awarded based on the standard City contracting process of issuing an RFP and selecting contractors based on responses.

c. If so, will contract services help to further the goals of the department's MBE/WBE requirements? Yes

d. Is this likely to be a one-time or ongoing request for contracting out? One-time

13a. Does the budget include indirect costs?  Yes  No

b1. If yes, how much? \$82,501

b2. How was the amount calculated? 10% of the total direct costs requested -- the amount allowed by the funding agency

c. If no, why are indirect costs not included?

Not allowed by granting agency

To maximize use of grant funds on direct services

Other (please explain):

14. Any other significant grant requirements or comments:

**\*\*Disability Access Checklist\*\***

15. This Grant is intended for activities at (check all that apply):

Existing Site(s)

Existing Structure(s)

Existing Program(s) or Service(s)

Rehabilitated Site(s)

Rehabilitated Structure(s)

New Program(s) or Service(s)

New Site(s)

New Structure(s)

16. The Departmental ADA Coordinator and/or the Mayor's Office on Disability have reviewed the proposal and concluded that the project as proposed will be in compliance with the Americans with Disabilities Act and all other Federal, State and local access laws and regulations and will allow the full inclusion of persons with disabilities, or will require unreasonable hardship exceptions, as described in the comments section:

Comments:

Departmental or Mayor's Office of Disability Reviewer: Claudia Molina  
(Name)

Date Reviewed: 2010  
2/12/2004

Department Approval: David Assmann Acting Director  
(Name) (Title)

(Signature)



## San Francisco Department of the Environment - Retrofit SF Project

### California Energy Commission-State Energy Program

	Description	Other notes	California Energy Commission	Match	Total Project
<b>PERSONNEL</b>					
Principal Environmental Specialist 5644 Energy Manager	13%FTE	Grant funded for the length of the grant. Ensure integration with other efficiency retrofit and climate projects	\$ 28,080		\$ 28,080
Environmental Specialist 5640-Renewable Energy	50% FTE	Grant funded for the length of the grant. Manage project; coordinate with other City programs and staff; coordinate with other municipalities	\$ 81,276		\$ 81,276
Account Clerk 1632	20.5% FTE	Grant funded for the length of the grant. Assist with project implementation, data tracking reporting	\$ 24,379		\$ 24,379
<b>Subtotal Personnel</b>			<b>\$ 133,735</b>	<b>\$ -</b>	<b>\$ 133,735</b>
Fringe	37%		\$ 49,517	\$ -	\$ 49,517
<b>Total personnel</b>			<b>\$ 183,252</b>	<b>\$ -</b>	<b>\$ 183,252</b>
<b>CONTRACTUAL</b>					
Retrofit Installations		Will be contracted using standard City practices for securing professional services of issuing an RFP, etc	\$ 500,000		\$ 500,000
Quality Assurance Activities		Will be contracted using standard City practices for securing professional services of issuing an RFP, etc	\$ 25,000		\$ 25,000
Public Relations & Marketing Campaigns		Marketing, PR, Participant recruitment, Policy support. Will be contracted using standard City practices for securing professional services of issuing an RFP, etc. Match provided through existing SF Environment programs and services	\$ 85,204	\$ 148,000	\$ 233,204
Workforce Development		Curriculum and Training, recruit placement sites, coordinate with other City Workforce programs for placements, etc. Match provided with existing foundation grants which have been approved		\$ 200,000	
<b>Subtotal Contractual</b>			<b>\$ 610,204</b>	<b>\$ 348,000</b>	<b>\$ 958,204</b>
<b>TOTAL DIRECT COSTS</b>			<b>\$ 793,456</b>	<b>\$ 348,000</b>	<b>\$ 1,141,456</b>
INDIRECT COSTS	10.45%	Amount allowed by Funding Source. Rent, utilities, phones, mail, etc.	\$ 82,501	\$ -	\$ 82,501
<b>TOTAL PROJECT (Direct + Indirect)</b>			<b>\$ 875,957</b>	<b>\$ 348,000</b>	<b>\$ 1,223,957</b>

NOTE: This is the total budget for a two-year grant and all budget line items are spread equally between the two years.



**Exhibit B**  
**Att B-2 - Sub ARRA-SF**

NOTE: Data in blue cells are calculated or transferred from other spreadsheets in this Excel workbook.

Only fill in the non-colored cells that apply to your project.

Budget for ARRA Reimbursement to Major Subcontractor #1 (1)		Personal Services		Project Operating Expenses					Indirect Costs			ARRA Reimbursable Task Costs for Sub #1	
		Direct Labor	Fringe Benefits	Materials	Equipment	Travel	Misc.	Sub-contractors	Indirect Overhead	G&A	Profit †		
<input type="checkbox"/> over sub													
City/County of San Francisco													
<b>1.0 Project Administration Activities</b>													
A.1	Attend Kick-off Meeting											1	1
A.2	CPR Meeting 1												0
A.2	CPR Meeting 2												0
A.3	Final Meeting												0
A.4	Monthly Progress Reports	8,319	3,078						5,128				16,525
A.5	Test Plans, Technical Reports and Interim Deliverables												
A.6	Final Report	2,080	769	0	0	0	0	0	1,282	0	0		4,131
A.6.1	Final Report Outline												0
A.6.2	Final Report	2,080	769						1,282				4,131
A.7	Identify and Obtain Leverage Funds												
A.8	Identify and Obtain Required Permits												
A.9	Electronic File Format												
A.10	Establish the PAC (Optional)												0
A.11	Conduct PAC Meetings (Optional)	3,743	1,385						2,308				7,436
<b>Administration Activities Subtotals</b>		<b>14,142</b>	<b>5,233</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>8,718</b>	<b>0</b>	<b>1</b>		<b>28,094</b>
<b>Project Technical Activities (Delete or add rows as necessary)</b>													
1.0	Implementation Plan	4,159	1,539						2,564				8,263
0.0	Critical Project Review												0
2.0	Workforce Development	1,040	385	0	0	0	0	0	641	0	0		2,066
2.1	Workforce Development Plan												0
2.2	Training Curriculum revisions												0
2.3	Ongoing training marketing and outreach	1,040	385						641				2,066
2.4	Establish Bulk Purchasing Agreements												0
3.0	Participant Recruitment	1,560	577	0	0	0	0	0	962	0	0		3,098
3.1	Stakeholder outreach	1,040	385						641				2,066
3.2	Contractor recruitment	520	192						321				1,033
4.0	Retrofit Installations	30,156	11,158					500,000	18,590				559,903
5.0	Quality Assurance	1,820	673	0	0	0	0	25,000	1,122	0	0		28,615
5.1	Establish quality and consumer protection policies	520	192						321				1,033
5.2	Review and revise/adapt CBPCA-PG&E Policy & Procedures Manual	520	192						321				1,033
5.3	Establish contractor/rater qualifications and certification requirements	780	289						481				1,549
5.4	Quality assurance activities							25,000					25,000
6.0	Verification of Energy Savings	0	0	0	0	0	0	0	0	0	0		0
6.1	Establish minimum energy efficiency threshold policy												0
6.2	Define and confirm job verification protocols												0
6.3	Energy and carbon savings calculation and reporting												0

**Exhibit B  
Att B-2 - Sub ARRA-SF**

Budget for ARRA Reimbursement to Major Subcontractor #1 (1)		Personal Services		Project Operating Expenses					Indirect Costs			ARRA Reimbursable Task Costs for Sub #1	
		Direct Labor	Fringe Benefits	Materials	Equipment	Travel	Misc.	Sub-contractors	Indirect Overhead	G&A	Profit <sup>1</sup>		
City/County of San Francisco													
7.0	Marketing and Outreach	78,613	29,087	0	0	0	0	85,109	48,462	0	0		241,271
7.1	Develop integrated marketing & outreach plan	2,080	769						1,282				4,131
7.2	Operate public relations and marketing campaigns	73,934	27,356					85,109	45,577				231,975
7.3	Operate customer interface via website and hotline system	1,040	385						641				2,066
7.4	Added-value development (MLS, etc.)	1,560	577						962				3,098
8.0	Public Policy Support	2,340	866	0	0	0	0	0	1,442	0	0		4,648
8.1	Recommend policy options for cities and county	520	192						321				1,033
8.2	Deliver policymaker presentations to elected officials and key decision makers	780	289						481				1,549
8.3	Meetings and briefings to county and stakeholders	1,040	385						641				2,066
<b>Technical Activities Subtotals</b>		<b>119,688</b>	<b>44,284</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>610,109</b>	<b>73,762</b>	<b>0</b>	<b>0</b>		<b>847,863</b>

Major Subcontractor #1	Direct Labor	Fringe Benefits	Materials	Equipment	Travel	Misc.	Minor Subcontractors	Indirect Overhead	G&A	Profit	Major Sub #1 ARRA Reimbursable Cost
<b>ARRA Reimbursable Totals</b>	<b>133,830</b>	<b>49,517</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>610,109</b>	<b>82,500</b>	<b>0</b>	<b>0</b>	<b>875,957</b>
<b>Percent of the Total</b>	<b>15%</b>	<b>6%</b>	<b>0%</b>	<b>0%</b>	<b>0%</b>	<b>0%</b>	<b>70%</b>	<b>9%</b>	<b>0%</b>	<b>0%</b>	<b>100%</b>
							<b>Total project expenses =</b>	<b>610,109</b>	<b>Total overhead &amp; profit =</b>		<b>82,501</b>

(1) Subcontractor profit is not allowed on Sub-subcontractor invoices and profit cannot exceed 10% of the ARRA funds allocated to the Task.

**SFE staffing**

5644 Environmental Manager to provide project oversight, select subcontractors, represent CCSF on regional project committee. Provide policy work. Oversee mkt campaign and integration with other energy efficiency projects of CCSF

5640 Environmental Specialist to provide day to day operation support, oversee contractors, project reporting and data synthesis. Coordinate Marketing campaign with other energy efficiency projects

5638 Environmental Associate Support day to day activities of project. Support project marketing

1632 Account Clerk--project fiscal support



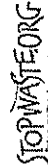
# Retrofit Bay Area: Comprehensive Residential Building Retrofit Program

Volume 2, Technical Program Proposal and Cost Information  
Submitted to the California Energy Commission in response  
to RFP #400-09-403

December 21, 2009

Submitted by  
Jerry Lahr, Energy Programs Manager  
Association of Bay Area Governments  
Joseph P. Bort MetroCenter  
101 8th Street  
Oakland, CA 94607

In association with



Requested Funding: \$10,750,000

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**Objectives**  
 To achieve these goals, *Retrofit Bay Area* has identified a set of three core program objectives that address the major barriers to market transformation and guide program design. These three objectives aim to spur comprehensive residential energy retrofits on a broad scale.

**Provide Property Assessed Clean Energy (PACE) financing to address the high upfront cost of retrofits.**  
 Energy retrofits require significant up-front capital investment, while payback occurs over many years. Financial incentives to offset up-front costs often do not reward whole-building, performance-based solutions and proper loading order. Long paybacks for major energy retrofits may leave property owners at risk of forfeiting part of their investment at time of sale. Lack of well-documented business case models and standardized analytical methodologies leave multifamily property owners ill-equipped to evaluate the technical and economic potential for retrofitting their properties.

*Retrofit Bay Area* will build on the regions existing investments into PACE financing and reduce or remove these barriers for a wide range of projects and population segments. Funding will not be used to directly fund local PACE programs.

**Demonstrate more effective marketing and outreach methods to inform and motivate property owner participation.**

Property owners are typically unaware of the benefits of comprehensive energy retrofits. Retrofit programs that rely primarily on economic arguments to drive participation ignore a broad range of behavioral factors and non-energy benefits that are known to strongly motivate or discourage action.

*Retrofit Bay Area* will bundle homeowner incentives (e.g., PACE financing, utility and local government rebates, tax credits, etc.) and employ an array of innovative outreach methods that reflect current behavioral science research; more effectively communicate current value propositions, and create new ones. Marketing and outreach messaging will strongly promote Tier 3 whole-house retrofits.

**Streamline participant, contractor, and administration processes to reduce the high transaction costs and build a quality green workforce.**

The whole-building performance-based approach to home energy retrofitting requires advanced building science training and substantial field experience at multiple stages including customer acquisition, home audit, work scope development, and project management. Managing large numbers of small projects at scale requires well-developed systems and a high degree of specialization and business acumen. Lack of uniform guidelines, standards, and procedures impedes training and quality control efforts. In addition, delivery and incentive programs are typically far too costly due to the lack of modern IT systems to automate and streamline administrative functions.

*Retrofit Bay Area* will use new cutting-edge data and decision software tools to reduce transaction costs for both contractors and the program. These innovations can contribute greatly to the growth and maturity of the building performance industry that will be capable of delivering building energy performance with strong momentum toward a mass scale at more reasonable cost. At the same time, the program will raise public confidence and trust in the value of building performance retrofits through rigorous contractor training, public education, quality assurance, and credible evaluation and feedback. Contractor incentives will be used to ensure broad participation.

The *Retrofit Bay Area* team is confident that this proposal amply demonstrates our ability and intent to deliver programs that fundamentally and permanently transform energy markets in a way that make energy efficiency and renewable energy the options of first choice. Our approach is built on a solid foundation of public-private partnership, unmatched experience and expertise, and an unparalleled political will to address climate change in a meaningful way. We look forward to collaborating with the California Energy Commission (Energy Commission) to address these shared priorities.

**Program Executive Summary**

**Introduction**

The Association of Bay Area Governments (ABAG) has partnered with eight counties, and a highly qualified team of public and private partners to implement *Retrofit Bay Area*, a comprehensive community-scale building retrofit program. The assembled partners represent 103 local governments in California's second most populous region and a diversity of program expertise that draws together leadership at the local, state, and national level. Our *Retrofit Bay Area* program will rapidly accelerate building energy retrofits across the region and achieve deep market penetration in focused neighborhoods. This program is designed to meet the economic and demographic diversity of the region that comprises nearly 20% of California's population. *Retrofit Bay Area* will demonstrate an innovative and impactful program model that is highly transferrable, both statewide and nationally.

**Building on Existing Investment**

*Retrofit Bay Area* is uniquely positioned to offer accelerated program roll-out. The Bay Area is far ahead of other regions of California in enacting advanced building efficiency policies and programs, and has led the state and nation in producing innovative and cutting-edge programs and policies. These include the Sonoma County Energy Independence Program and the Berkeley and San Francisco Residential Energy Conservation Ordinances (RECO). The Bay Area is also a leader in establishing large-scale PACE financing districts; seven of the nine counties are launching PACE financing programs by Q2 2010.

In addition, two of our consortium team members, Sonoma County Transportation Authority and StopWaste.Org, expect to have largely completed their planning process and initial development for comprehensive building retrofit programs in Sonoma and Alameda Counties before SEP funds become available. This substantial head start makes the Bay Area ideally suited for early local-area refinement and transfer of results to other regions. In addition, Bay Area regional resource agencies, local governments and utilities already collaborate closely and are remarkably well aligned in their commitment to implementing comprehensive building retrofit programs and funding at large scale.

This foundation will enable the region to utilize SEP funds immediately upon award to expand program implementation throughout the region. *Retrofit Bay Area* will leverage this investment to ensure that program design, homeowner incentives, and contractor incentives all strongly encourage and promote whole-house (Tier 3) strategies and align with utility whole-house rebate programs.

**Goals**

The goals of *Retrofit Bay Area* mirror those of the American Recovery and Reinvestment Act (ARRA): (a) energy savings, (b) job creation/preservation, and (c) economic recovery. The proposed program has been designed in alignment with the guiding principles set out in the RFP#406-09-403, to create jobs and stimulate the economy through a comprehensive program to implement energy retrofits in existing residential buildings.

Table 1. *Retrofit Bay Area* Impacts

Number of jobs created	15,000
Number of Single Family Homes retrofitted	\$5.7 million and 390 billion BTUs consumption
Number of Multifamily Homes retrofitted	\$170,261,990
Reduction of annual purchased energy consumption	
Total Economic Impact (\$ spent)	

### A. Program Design/Evaluation Criteria

The program design and work plan is consistent with our program objectives and the underlying market barriers. Retrofit Bay Area will support the transition to the whole-house, deep saving retrofits that are critical to achieving California and national energy and climate change mitigation goals. Program elements fall into four categories:

- Innovative financing and rebates
- Green workforce development
- Advanced outreach and marketing programs
- Efficient implementation and delivery

By delivering these program elements, Retrofit Bay Area will achieve its stated objectives, reduce or remove primary market barriers, and contribute to Recovery Act goals by (a) generating almost \$6.7 million in annual energy savings, (b) creating or preserving 1,739 jobs, and (c) contributing an economic impact of more than \$170 million. Tables 2 through 5 highlight Retrofit Bay Area program elements.

Table 2. Financing and Rebates

Strategy	Building Type(s)	Benefits
PACE financing	All	Repayment on property tax bill; terms up to 20 years; transfers with property upon sale
Homeowner Rebates	Single-family, multifamily	CSI-style declining rebates to attract participation, reduce customer's upfront investment costs, prioritize whole house retrofits, and build early program momentum
Contractor Business Expansion Loans	Single-family, multifamily	Short-term business expansion loans for home performance contractors will help scale contractor delivery capacity

Table 3. Green Workforce Development

Strategy	Building Type(s)	Benefits
Gap Analysis	Single-family, multifamily	Program will have necessary information to determine the need for additional or expanded trainings
Training	Single-family, multifamily	Workforce capacity to deliver large numbers of cost-effective retrofit projects with consistent quality, high performance, and validated results. Includes training for multifamily buildings.
Contractor Scholarships	Single-family, multifamily	Prioritize whole house retrofits and increase quality assurance by subsidizing BPI/HERS team and certification costs

Table 4. Marketing and Outreach Programs

Strategy	Building Type(s)	Benefits
Mass Media and Advertising	Single-family, multifamily	Establish broad program reach and access to drive participation; utilize high-level messaging and grassroots media channels throughout the region (includes multilingual approach)
HVAC service provider	Single-family	Leverage existing marketing and service delivery channels

Partnerships	multifamily	to target property owners in need of HVAC services
Retail home improvement partnerships	Single-family	Leverage in-store marketing and service delivery channels of home improvement retailers to target home-owners and contractors engaged in home improvement projects
Community-based social marketing	Single-family	Apply behavioral research from CSU San Marcos, Stanford U. Precourt, and others to leverage existing social networks and communication channels (e.g., schools, faith-based communities, large employers, etc.) generate word of mouth, create community visibility and recognition mechanisms, establish new social norms, and align with other motivators of human behavior
Local outreach	Single-family, multifamily	Geographically targeted campaigns to high-prospect neighborhoods; leverage existing social networks and communication channels; generate word of mouth; create community visibility; recognition mechanisms
Property-owner organization outreach	Multifamily	Leverage existing organizational structures and communication channels, specifically Apartment Owner Associations, Home Owners Associations, Real Estate Investment Trusts, and the Nonprofit Housing Association of Northern California
Green building labeling	Single-family, multifamily	Create new value propositions through enhanced market value of improved property; bundle energy efficiency with full spectrum of quality-of-life and environmental benefits
Centralized One-Stop-Shop	Single-family, multifamily	Regional website delivers superior Search Engine Optimization (SEO) results, call center and Environmental Service Centers provide enhanced customer service and regionalization of the call center and website reduce program delivery costs for each Countywide program.
Business Improvement Districts (BID)	Multifamily	Leverage existing organizational structures and communication channels; reach the public through BID's existing marketing efforts; emphasize energy efficiency benefits as part of bundled package of district-scale quality-of-life enhancements

Table 5. Implementation and Delivery

Strategy	Building Type(s)	Benefits
Whole neighborhood delivery	Single-family	Reduce cost of retrofit work scope development and delivery to tracts of uniform housing stock for Tier 2 and 3 retrofits
Bulk purchase of equipment & services	Single-family, multifamily	Leverage Energy Star Quality Guidelines and HUD Bulk purchase system; obtain discounted energy-efficient equipment and services





**SEP Municipal Financing Program (PON #400-09-401)**

Several counties have applied for SEP (401) funding to launch or expand PACE programs. PACE financing will play a critical role in program success by removing first cost barriers, driving early participation, and building program momentum. The need for continued financial support will decrease as the market matures, investors gain confidence in proven program models, and the federal government establishes loan guarantees.

**California Clean Energy Workforce Grants**

Over \$5.4 million in grants to local governments and workforce investment boards in the region have been awarded for green job training. The proposed curricula focus on green building, energy efficiency, and clean energy. However, we are only counting the Green Building and Clean Energy Retraining Category (\$2M) toward leverage funds because it is aligned with the Retrofit Bay Area workplan. Retrofit Bay Area plans to offer scholarships up to \$1000 per contractor for testing, field mentoring, and certification fees (e.g. BPI, HERS).

Table 8. California Clean Energy Workforce Training Program Awards

Green Building and Clean Energy Retraining Category	Award Amount
Contra Costa Community College District	\$1,000,000
Sonoma County	\$1,000,000
Green Building and Clean Energy Pre-Apprenticeship Training Partnerships Category	
Perella Community College District	\$1,000,000
City of Richmond	\$1,000,000
San Francisco Department of Economic & Workforce Development	\$998,550
Solano Community College	\$416,751
<b>Bay Area Total</b>	<b>\$5,417,301</b>

**Utility Incentives**

California's Investor-owned Utilities (IOUs) will program \$694 million for statewide residential energy efficiency programs in 2010-2012, of which \$113 million is earmarked for whole-house programs targeting single-family homes. ABAG's consultant team has been actively participating in the CPUC IOU stakeholder committees to develop the Statewide Program. Retrofit Bay Area will leverage all utility-based rebates and incentives to the greatest extent possible. For example, several local governments are planning to offer tiered front-loaded homeowner incentives for projects that achieve a minimum 20% energy reduction on average and larger incentives for projects that achieve higher energy savings. The design of this incentive will be consistent with the utility whole-house rebate design. The CPUC is likely to authorize additional larger amounts in the following years to meet climate action goals. Retrofit Bay Area will provide added justification for those dramatically increased utility and governmental investments in whole-building retrofit strategies for 2013-2020 and beyond.

**Private Investment**

Retrofit Bay Area plans to leverage over \$160 million in private investment through PACE and other financing mechanisms. The financing program will promote proper loading order by requiring energy efficiency improvements before renewables and will include rigorous quality assurance. Collaboration between Retrofit Bay Area and local municipalities will ensure that contractors pull required building permits.

Table 9. Leveraged Funds Assumptions for Utility Incentives and Private Capital

Building Type	Average Retrofit Cost Per Unit	Utility Incentive Per Unit	Number of Units Retrofitted	Utility Incentives	Private Capital
Single Family	\$10,000	\$1,000	15,000	\$15,000,000	\$50,000,000
Multifamily	\$5,000	\$50	2,000	\$100,000	\$10,000,000
<b>Total</b>			<b>17,000</b>	<b>\$15,100,000</b>	<b>\$160,000,000</b>

**Other Incentives**

Retrofit Bay Area will leverage anticipated new federal home retrofit incentives. President Obama has announced a new federal home retrofit program called HOME STAR, which is designed to jumpstart an industry of over 1 million workers retrofitting 100 million U.S. homes and reducing the carbon footprint of the United States by 5% by 2030. The details of this program are still being finalized, but it will include homeowner incentives, industry incentives, and consumer financing.

**C. Sustainability/Lasting Changes in the Market**

Retrofit Bay Area is explicitly designed to deliver meaningful and sustainable market transformation impacts that continue to multiply beyond the ARRA funding horizon. The Retrofit Bay Area program model builds on three key financing and incentive mechanisms that will continue indefinitely and offer substantial growth potential:

**PACE.** Retrofit Bay Area will promote the use of PACE financing to leverage private investment and ensure sustainability. Seven counties will have active PACE programs by Q2 2010, which will provide access to private capital markets to provide the upfront cost for energy efficiency and renewable energy improvements. Administrative costs are passed through to participants in order that the program can continue to provide financing with no additional cost to ABAG.

**Utility incentives.** California's Investor-owned Utilities (IOUs) will program \$694 million for statewide residential energy efficiency programs in 2010-2012, of which \$113 million is earmarked for whole-house programs targeting single-family homes. The CPUC is likely to authorize larger amounts in subsequent cycles to meet climate action goals.

**Energy-efficient Mortgages (EEMs) and Energy Improvement Mortgages (EIMs)** enable a borrower to add the cost of cost-effective energy efficiency improvements to an already approved mortgage loan with no additional down payment, up to 3% of the home value.

In addition to attracting greater long-term investment in home energy retrofits, the program will achieve sustained market transformation through marketing and outreach strategies that:

*Retrofit Bay Area Residential Building Retrofit Program*

- Use innovative marketing strategies and new partnership channels (e.g., Lowes, Ace Hardware, etc.) to lower contractors' cost of customer acquisition and expand the pool of property owners who are motivated to take action.
- Enlist local real estate, mortgage brokers, and bankers to be long-term promoters of home performance by making the business case that shows the added value for their business.
- Enhance market value for energy retrofits through energy ratings and green home labeling.

*Retrofit Bay Area* will enable the contractor industry to scale up to high-volume production through project delivery strategies that:

- Reduce project delivery costs by demonstrating more cost-effective retrofit solutions, modeling scopes of work based on common retrofit scenarios, utilizing high-efficiency large-scale program management tools and methods, and streamlining deployment methods for neighborhoods with uniform housing stock.
- Provide a credible, transparent, and visible contractor quality assurance process and require participating contractors to comply with national standards such as Building Performance Institute (BPI) accreditation and Home Performance with Energy Star. Extend the Home Performance with Energy Star model to address more effective program designs and stronger applicability to multifamily properties.
- Select, deploy, and refine a new fully automated process management software system to streamline overall program management and help home performance contractors rapidly increase their business volume while improving the quality and economy of their retrofit services.

In combination, these strategies will foster a mature building performance contracting industry capable of delivering comprehensive-energy retrofits on a mass-scale with fewer subsidies.

*Retrofit Bay Area's* ultimate goal is to achieve market transformation by taking a comprehensive approach, which includes aligning government policy, business capacity support, and consumer demand creation activities.

**D. Regional Approach**

Since 1961, the nine counties and 101 cities that comprise the Association of Bay Area Governments have worked together to share resources and address regional issues such as housing, transportation, economic development, education, and the environment. Drawing on this remarkably deep history, ABAG will coordinate countywide programs and act as fiscal sponsor. Eight of the nine counties are actively participating in *Retrofit Bay Area*. Napa County will not have a local implementation budget but will benefit from regional infrastructure, tools, and resources that can be utilized if they choose to invest in a building retrofit program in the future. Each of the countywide programs will tailor its retrofit program scope and budget to fit local conditions, existing initiatives, and priorities. *Retrofit Bay Area* will leverage those collaborative associations to address the housing, energy, workforce, and economic issues inherent in this effort to rapidly achieve deep energy retrofits in the region's housing stock.

Current associations with state and federal programs will increase the depth and breadth of ABAG's activities and allow ABAG to leverage its ARRA SEP funding.

In partnership with participating local governments, this proposed ABAG program will achieve the following regional benefits:

- Reduce program design and implementation costs by developing regional infrastructure, tools, and resources to support each countywide program.
- Instill program uniformity and achieve economies of scale while maintaining individual county and city priorities, consequently reducing confusion among contractors and property owners.
- Create a competitive regional grant application that maximizes funding from multiple resources.

*Retrofit Bay Area Residential Building Retrofit Program*

- Leveraging of early adopter programs (e.g., Alameda, Sonoma, and San Francisco Counties) that will have developed tools and templates before SEP money has been released.
- ABAG will be the prime contractor and subcontract with eight lead local government agencies representing eight separate countywide programs in the Bay Area. Cities in each County will sign a memorandum of understanding (MOU) to actively coordinate with *Retrofit Bay Area* but will not receive ARRA SEP funds. Although *Retrofit Bay Area* will build regional infrastructure and share tools and resources, each countywide program will be separately administered. ABAG has obtained 80 letters of support from Bay Area local governments.

The following table delineates specific regional and local roles designed to maximize these benefits.

Statement of Work	Regional Role (ABAG Consortium)	Local Role (8 Counties)
B1. Implementation Plan	Lead	Adopt
B2. Workforce Development	Lead	Lead training, marketing and outreach
B3. Participant Recruitment	Lead	Lead outreach to contractors and to local civic, labor, trade, and professional groups plus business, political, advocacy, and institutional leaders
B4. Retrofit Installations	Support	Lead development of county-level PACE financing districts
B5. Quality Assurance	Support	Lead establishment of QA and consumer protection policies, contractor qualifications and certification requirements, Policies and Procedures Manual
B6. Verification of Energy Savings	Support	Support
B7. Marketing and Outreach	Support	Support
B8. Public Policy	Support	Support

In support of these regional and local roles, ARRA SEP funds will be allocated as follows:

Table 10. Retrofit Bay Area Local Governments

Lead Agency	County	# of Participating Local Govts	Population	SEP Budget Allocation
ABAG	N/A	103	6,961,485	1,265,938
StopWaste Org (Alameda County Waste Management Authority)	Alameda	15	1,457,169	\$2,831,753
Contra Costa County	Contra Costa	20	1,016,696	\$1,117,274
Marin County	Marin	12	246,985	\$275,463
San Mateo County	San Mateo	21	798,176	\$785,935
Santa Clara County	Santa Clara	16	1,734,755	\$1,951,668
SF Dept. of the Environment	San Francisco	1	703,730	\$875,957
Solano County	Solano	9	407,274	\$553,376
Sonoma County Transportation Authority	Sonoma	10	463,326	\$1,194,941
<b>Total</b>				<b>\$10,750,000</b>

San Francisco, Alameda, and Sonoma County programs have already begun a broad-scale stakeholder involvement process. The Program will build on past efforts to engage industry partners, utilities, individual contractors and contractor groups, building industry associations, property owner groups, green jobs training coalitions, economic development organizations, nongovernmental organizations, and others. Such engagement will ensure that all relevant information, insights, and perspectives are woven into program design and implementation.

**E. Quality Assurance**

Retrofit Bay Area will work collaboratively with the local jurisdictions, governmental agencies, and utilities to implement strict protocols that will assure consistent project quality, high performance, and verifiable results. Consistent standards will be applied to build consumer confidence and maximize customer satisfaction. To ensure both credibility and replicability, the program will align with existing standards and rating systems such as Home Performance with Energy Star (HPWES), HERCC, Home Energy Rating System (HERS I and II), GreenPoint Rated, and other reputable programs.

Through both the performance path (Tier 3) and prescriptive path (Tier 2), contractors must apply to participate, be licensed and insured, demonstrate compliance with building codes as appropriate, and agree to meet program requirements for training and certification, project reporting, quality assurance,

Retrofit Bay Area Residential Building Retrofit Program  
and data management. Retrofit Bay Area will demonstrate the ability of the industry to scale up using a systems-management approach to home performance process by semi-automating auditing, work scope development, estimating, project management, and retrofitting quality control.

**Performance Path Quality Assurance (Tier 3)**

Retrofit Bay Area will utilize the existing quality assurance model for performance path home retrofits as required by the Environmental Protection Agency (EPA) and Department of Energy (DOE) Home Performance with Energy Star program implemented through the IOUs. This approach, which is consistent with HERS II, will be integrated in Pacific Gas and Electric's (PG&E) new 2010-12 Whole-House Program, as administered by a program partner, the California Building Performance Contractors Association (CBPCA). The following are the steps to ensure quality assurance in the performance path:

- The home performance contractor training and credential requirements will be established to be consistent with HERS II, HPWES, and BPI.
- A technical review of the contractor scope of work is conducted to determine if it meets program requirements.
- Field verification will occur for each contractor's first three jobs to ensure competence, then a minimum of five percent (1/20) of each home performance contractor's completed jobs as a condition of payment of homeowner incentives (e.g. rebates, financing).
- Field verifications to be done by a BPI Analyst-certified person (possibly later shifting to California Energy Commission HERS II qualification when it becomes operational) and include a full diagnostic retesting and homeowner interview to confirm the contractor's reported performance results, scope, and homeowner satisfaction.
- Contractor to be required to correct any deficiencies as a condition of continued program qualification.
- Contractors to pay for the costs of all field verifications.
- Verifications of performance contractors estimated energy savings will be confirmed through recalculation of actual energy savings from utility bills.

**Prescriptive Path Quality Assurance (Tier 2)**

The prescriptive pathway will focus on basic energy efficiency, water conservation, resource conservation, and indoor air quality measures such as basic air sealing, attic insulation, and efficient lighting. Pathway requirements focus on basic health and safety rather than the full HERS II protocols. This pathway provides a program entry point for single-trade contractors who want to transition to a whole-house approach. They will be given a specified period of time (e.g., 1 year, exact time TBD) to complete their higher level of training and certification. To maintain quality control and document energy savings, the field verification rate will increase to 1/7 (~15%). These retrofits will be in conformance with the California Building Energy Efficiency Standards (Title 24, Part 6, and related Part 1 requirements).

The following chart summarizes the performance and prescriptive paths:

Table 11. Performance and Prescriptive Paths

Definition	Prescriptive Path	Performance Path
	List of cost effective measures that must be performed	Energy use reduction based on HERS II diagnostic tests and rating
Performance tests required	Combustion safety blower door	Combustion safety, HERS II diagnostic test, and test-out

Who does Testing? (% QA)	HERS Rater, for all measures that apply (HERS II) (5%)	CA Whole-House Energy Rater (HERS II) (5%)	Building Performance Contractor (BPC) (5%)
Who does the work?	HERS Raters	HERS II Raters	Building Performance Contractors
Who does the verification?	HERS Rater, for all measures that apply (HERS II)	CA Whole-House Energy Rater (HERS II)	Building Performance Contractor (BPC)

**Quality Assurance for Multifamily Home Energy Retrofits**

The California HERS II program provides a new framework for multifamily projects to receive a California HERS score. While the Title 24 Alternative Calculations methods software can generate a HERS score for low-rise multifamily buildings, modifications need to be made to the program to provide more accurate multifamily cost-effectiveness information, to be applicable to multifamily residential high-rise buildings, and to further define multifamily specific modeling and verification protocols. *Retrofit Bay Area* team will coordinate a subgroup of the EPA's Home Energy Retrofit Coordinating Committee (HERCC) to vet Multifamily HERS II protocols and to work with the California HERS providers to deliver the protocols in their training programs.

As a subcontractor EnergySoft will tailor the HERS II components of EnergyPro to existing multifamily buildings and provide additional quality assurance and savings verification capabilities. Critical to the success of the program will be the accurate evaluation, measurement, and verification (EM&V) of results. The *Retrofit Bay Area* consultant team will develop and implement the process and protocols for tracking program performance and develop all related support systems and tools. Metrics include energy usage and GHG emissions reductions, renewable energy generation, jobs created, number and amount of loans processed, number of contractors/workers trained, number of residences retrofitted, and amounts of money saved by participants on their utility bills. Collected data will support CPUC EM&V efforts and will be used to modify and improve the Program on an ongoing basis.

**F. Conformance with California Law**

*Retrofit Bay Area* is designed to be fully compliant with HPwES and all state, regional, and local legislative and regulatory requirements. California law applies to these programs in several ways:

- Contractors must meet state licensing requirements, including a General Contracting (B) license for all performance-path contractors and the appropriate specialty (C) licenses for prescriptive path contractors.
- Contractors must provide a one year warranty on all work done, in keeping with state licensing requirements for jobs over \$500.
- The state's energy code (Titles 20 and 24) sets minimum performance and reporting requirements for a variety of energy related improvements.
- Building permits are typically required by local jurisdictions for many of the energy improvements included in *Retrofit Bay Area*, although there are exceptions by jurisdiction. Proof that building permits have been pulled will be required to receive municipal financing and rebates.
- Documentation of compliance with California's Prevailing Wage law whenever applicable.

The quality assurance requirements described in the previous section provides substantial assurance of

compliance with the energy code standards. In addition, the licensing requirements are to be met through initial contractor qualification and registration in collaboration with the utility whole house retrofit program. Copies of all building permits will be submitted by contractors as part of job qualification for incentives and financing. In addition, copies of registered HERS verification results will be submitted by contractors as part of job qualification for incentives and financing for measures covered by Building Energy Efficiency Standards. Project tracking and reporting will be validated with the HERS providers to assure consistency with HERS II.

**G. Collaboration with National and State Programs**

*Retrofit Bay Area* will align its performance path deliver model with HPwES. PG&E will be the HPwES Program sponsor for the Bay Area. Participating contractors will be required to meet industry standards established by HPwES and BPI, with the Performance Path contractors required to be BPI and HERS certified, and the prescriptive path contractors meeting these standards within a specified period of time (e.g., 1 year, exact time TBD) of joining the program.

The program will collaborate with other energy and water utility programs to coordinate program delivery, avoid service duplication, achieve economies of scale, and provide seamless delivery from the customer's perspective. A mapping strategy will be employed to map incentives for qualifying customers, and make the information available from the website, on marketing collateral, and on participating contractors.

**H. Targeting Economically Disadvantaged Areas**

*Retrofit Bay Area* will partner with other local agencies to identify and implement creative strategies to target economically disadvantaged areas and low-income neighborhoods throughout the region. In June 2009, the State of California had an unemployment rate of 11.6%, while the eight County-area had an unemployment rate of 10.8%, with Santa Clara County having the only unemployment rate higher than the state average (at 11.8%). In October 2009, 14 of the 96 cities in the eight county region had unemployment rates above the then state average of 12.5%. Two cities had unemployment rates above 20%, including the City of San Pablo (21.9%) and the City of East Palo Alto (20.5%). Other notable areas include San Martin (25.8%), Rollingwood (23.2%), and Bay Point (20.9%).

**Low-Income Weatherization**

The State Department of Community Services and Development (CSD) provide weatherization services to low-income households in the Bay Area via selected providers. The Bay Area is designated to receive AREA funding for the Weatherization Assistance and Low Income Housing Energy Assistance Programs. *Retrofit Bay Area* is designed to coordinate with, and complement, the selected providers of the Home Energy Assistance Program (HEAP) and weatherization programs. In addition, the *Retrofit Bay Area* will collaborate with the CPUC Low-Income Energy Efficiency Program (LIEE) services.

**Neighborhood Stabilization Program**

The Neighborhood Stabilization Program (NSP) offers an opportunity to upgrade home energy performance on a wholesale basis as part of other home rehab efforts, without the need for elaborate marketing efforts to gain participation from home owners. In November 2009, the eight counties collectively had 10,685 foreclosures, or approximately 1 out of every 248 housing units. Contra Costa and Solano Counties were the hardest hit, with 1 out of every 118 and 126 housing units in foreclosure, respectively. *Retrofit Bay Area* plans to coordinate with implementers of NSP programs to align program design, incentives, and quality assurance where feasible.

## Economic Outlook

ABAG's economic forecasts for the region show that although unemployment is slowing, there will continue to be job loss well into 2010. Within the Bay Area, job losses will continue to come from the construction sector. The slowdown in development also leads to loss of local government revenue, as permit applications decrease (leading also to a forecasted loss in government jobs into 2010). An increase of retrofits to existing buildings will serve to invigorate the slumping local construction sector and redefine the role of construction in the local economy. Significant efforts related to workforce preparedness will be conducted, and is described in detail in Section M.

### I. Verification of Energy Savings

Complete project data is essential for verification of energy savings and program success. Contractors will be required to submit project data in order for homeowners to receive PACE financing and rebates. *Retrofit Bay Area* will work directly with the third-party utility program implementer, CBPCA, to align data requirements and streamline project tracking, verification of energy savings, quality assurance, and reporting.

*Retrofit Bay Area* will collaborate with CBPCA to gain access to project data and report to local governments, the Energy Commission, and DOE. For performance projects, energy savings estimates will be determined using HERS II verification protocols using an industry-accepted database such as Database for Energy Efficiency Resources (DEER). As part of utility program implementation, CBPCA will do sample-based onsite retesting to verify quality and provide data for modeling energy savings for the utility.

Program participants will be required to give permission to access their utility bill data and demonstrate that building permits were obtained as necessary. Customer account information will be used to compile twelve months of pre- and post-improvement energy consumption data. Utility bills will be weather-normalized using standard methods such as PRISM and then disaggregated into weather-sensitive and base loads. This weather-normalized data will be used to validate the engineering estimates of energy consumption and savings and identify outliers that merit closer scrutiny. These energy savings will be reported to the Energy Commission after year one, and in the final report. Program-level analysis of utility bill data will be coordinated with evaluation efforts to be undertaken by the Energy Commission and the CPUC.

All eligible projects will be entered into the GreenPoint Rated tracking system and Climate Calculator, a publicly addressable and searchable database that tracks environmental results of projects and quantifies reductions in greenhouse gas emissions attributable to direct energy savings (therms, kWh), water savings, and tons of waste diverted. The data inputs for the climate calculator will be incorporated into the field data submittal process so that all participating homes will be assigned greenhouse gas and resource reduction benefits.

### J. Participant Recruitment and Communication

*Retrofit Bay Area* will utilize a portfolio of complementary and reinforcing marketing and outreach strategies and methods to inform and motivate homeowner participation. Although *Retrofit Bay Area* will include both Tier 2 and Tier 3 retrofits, whole-house (Tier 3) retrofits will be the centerpiece of the *Retrofit Bay Area* marketing and outreach strategy. The portfolio of marketing and outreach strategies and methods fall into the following categories:

Table 12. Marketing and Outreach Strategies and Methods

Marketing and Outreach Strategies	Methods/Tactics
Market Research	<ul style="list-style-type: none"> <li>Focus groups</li> <li>Telephone surveys</li> <li>Multilingual and culturally adapted versions of messages, marketing collateral, and other outreach tools</li> </ul>
Multi-Cultural/Multi-Lingual Outreach	<ul style="list-style-type: none"> <li>Strategic partner recruitment</li> <li>HVAC service provider partnerships</li> <li>Relationship improvement partnerships</li> <li>Contractors</li> <li>Schools</li> <li>Faith-based communities</li> <li>Large employers</li> <li>Governments</li> <li>Community Organizations</li> </ul>
Existing Delivery Channels	<ul style="list-style-type: none"> <li>PR and communications</li> <li>Mass media - Radio and TV</li> <li>Print advertising; bus signs, etc.</li> <li>Website</li> <li>Environmental Services Centers</li> </ul>
Community-based social marketing	<ul style="list-style-type: none"> <li>Whole neighborhood retrofits</li> <li>Business improvement districts (BID)</li> </ul>
Mass Media and Advertising	
Centralized One-Stop-Shop	
Neighborhood Targeting	

### Market Research

SEP funds will leverage initial market research conducted with EECBG funds to refine marketing and outreach strategies. Due to the size and diversity of the Bay Area, some additional market research using SEP funds will be required to include all Bay Area incorporated and unincorporated areas in the program. The focus of the market research will be to segment the market appropriately and understand the drivers that can be leveraged to motivate homeowners to take action and retrofit their homes. Stakeholder feedback, local surveys, and focus groups will test potential advertising messages and inform program design, including the development of the marketing and outreach campaign.

The *Retrofit Bay Area* team will also review results from Shelton Group's four consumer opinion studies - Utility Pulse, Eco Pulse, Green Living Pulse, and Energy Pulse® - to gain insights into consumer

perceptions regarding energy efficiency and the environment. Purchase of the Shelton Group reports is paid for out of a previously awarded EPA grant to Build It Green.

Additional market analysis will include:

- **Demographics.** Characteristics of the Bay Area such as population size, income, race, age, homeownership, education levels, cultural and language patterns, etc.
- **Climate.** Climate zones and sub-zones within the region with respect to the potential implications for the design of energy efficiency and renewable energy retrofit programs.
- **Market and Economic Conditions.** Data on employment patterns, consumer patterns, current socio-economic conditions, and profiles of business types.
- **Build Environment.** The region's housing stock, categorized on datasets that may include age, building type, construction type, location, size (square feet and height), energy usage, and utility rates.

**Multicultural/Multilingual Outreach**

As part of *Retrofit Bay Area* ally marketing, we will create culturally adapted, multilingual versions of messages, marketing collateral, and other outreach tools, taking special care to use the correct cultural nuances of wording, imagery, and design to reach the intended audience with communications that ring true. We will explore direct methods for reaching diverse communities, including engaging community leaders of diverse communities, hosting single-day events at churches, community centers and other venues to promote the program. Also, the program will use local TV channels, neighborhood newspapers, and community based organizations to reach diverse populations.

According to the U.S. Census Bureau estimates, nearly half (45.6%) of Bay Area (including Napa County) residents identify as White, nearly one-quarter (21.9%) identify as Hispanic, 21.8% identify as Asian and 6.7% identify as African American.

*Retrofit Bay Area* will conduct focus groups in various languages to confirm and fine-tune messaging and products. We will identify the appropriate media and venues to distribute advertisements and marketing collateral and can handle their placement. Resources include tools to identify the cultural heritage of individual residents of a target area, which may be instrumental in distributing outreach materials directly to specific audience members in a cost-effective manner.

**Existing Delivery Channels**

**Strategic Partner Recruitment:** *Retrofit Bay Area* will involve all appropriate regional stakeholders to ensure buy-in and inform program design. Outreach to stakeholders has already begun as a part of the development of building retrofit programs in Alameda, Sonoma, and San Francisco Counties. Important stakeholder groups include industry partners, utilities, individual contractors and contractor groups, building industry associations, property owner groups, real estate professionals, and community groups and organizations. Such broad participation will ensure that all relevant aspects are incorporated into the design and implementation of the program. The following table shows the broad range of potential stakeholder groups that *Retrofit Bay Area* will engage:

	Program Admin	Financing & Incentives	Retention/Implementation	Marketing & Outreach	Training/Work Force Development	Quality Assurance/Reporting
Public Sector Stakeholders						
Air Quality Management District	✓					
Community Colleges						
Energy Utilities						
Local Governments						
Waste Management Districts						
Water Districts						
Workforce Investment Boards						
State of California						
Apprentice Institute						
Association of Realtors						
Contractors						
Equipment Retailers and Wholesalers						
Financial Institutions						
HERS Providers						
Labor unions						
Media						
Realtors and Appraisers						
Trade Associations						
Coastal Community						
Chambers of Commerce						
Community Based Organizations						
Environmental Organizations						
Homeowners Associations						
Property Managers						
Residential Homeowners						

Stakeholder participation will lead to greater exposure for the program by leveraging the stakeholders' networks and outreach capabilities. This may involve use of their membership media, audiences, allies, and press relations.

**HVAC service provider partnerships:** Retrofit Bay Area will work with an established large body of HVAC contractors in the utilities' existing system improvement programs (e.g., refrigerant charge and airflow improvement on a direct-install basis) to expand their core competencies to include comprehensive home performance services as part of routine HVAC service calls.

**Retail home improvement partnerships:** Retrofit Bay Area will partner with national home improvement retailers such as Lowe's and local hardware stores to offer customers access to affordable home performance services. A model local hardware promotional system will be developed that can be replicated to other local hardware stores. Hardware store owners and managers will be trained on basic home performance concepts.

**Contractor Recruitment:** Retrofit Bay Area will train contractors and other industry allies to discuss energy efficiency improvements and incentives with property owners in conjunction with:

<p><b>Triggers:</b>                  General health and safety complaints                  HVAC repairs on blower</p>	<p><b>Industry Allies:</b>                  Home-performance contractors, HERS Raters                  HVAC contractors, EPC, SMACNA, City building departments, equipment retailers and wholesalers                  General contractors specializing in remodeling, design/build, City building departments, equipment retailers, and wholesalers                  Real estate professionals, Associations of Realtors, financial institutions</p>
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Contractors will need to meet program requirements for professional credentials, attend an orientation workshop, and agree to abide by the program terms and conditions. ABAG will develop two-hour training workshops in retrofit procedures for single-family and multifamily buildings to prepare private-sector professionals to participate in the program. Workshops will also cover programmatic subjects such as policies and procedures, financing, professional credential requirements, marketing plans, and benefits of participation. Workshop content will be shared with countywide programs for local delivery. Orientation workshops will be available on the Internet as podcasts or webinars for contractors who are unable to attend in person.

Workshop content will be further communicated to building professionals through guest presentations at trade association meetings and Green Building Professionals Guild events, newsletter announcements, and other trade communication channels.

Retrofit Bay Area will maintain a list of contractors (HERS, energy consultants, building performance contractors, auditors, etc.) who will receive email updates about incentive and financing options and program requirements. Communication channels will likely include periodic webinars, email listserves, online discussion forums, or other Internet-based networking channels.

### Community-Based Social Marketing

Retrofit Bay Area will apply existing behavioral science research and work through schools, faith-based

organizations, employers, governments, and community organizations to leverage resources, build awareness, and motivate participation. We will develop community-wide contests in which partnering organizations encourage member households to complete retrofits within a given timeframe. We will create a sense of urgency to take action through limited-time offers and declining incentive levels over time.

The social marketing component of the campaign will employ grassroots methods using volunteers and leverage ABAG funded community outreach workers to emphasize on-the-ground, personal interaction with target audiences, especially audiences less influenced by traditional media. Retrofit Bay Area will identify key opinion leaders within particular communities and meet with them early to discuss the best methods to reach their constituents. We will determine specific social marketing methods in the marketing plan, but potential methods might include: conducting informational "how to" open houses at community parks, street fairs, churches, or other venues where people congregate.

### Mass Media and Advertising

Regional resources have been programmed for PR (Public Relations). The level of mass media implementation is determined by each countywide program's budget. Retrofit Bay Area's communication efforts will involve a phased approach of general awareness building and targeted messaging. This approach will be geared toward both industry professionals and consumers, and it includes the following elements:

#### Phase I: Building Awareness

The goal of this phase will be to increase awareness of the program among as broad a sector of the market as possible, using high-level messaging and mass media channels. For the consumer, this phase involves media such as billboards, bus signage, radio and potential television spots. For industry professionals, it includes advertising in industry trade journals, websites, and other materials. Most content in this phase will be developed at the regional level. Actual media purchase and placement will be conducted on the local level using local funding.

#### Phase II: Building Comfort/Building Interest

In this phase, we will create more detailed messaging and use more targeted methods to reach specific audiences. By placing informational materials in city permitting offices, building supply outlets, and other venues, we will reach homeowners who are considering home renovations and may be more receptive to incorporating green retrofits into their plans. In addition, direct mail and bill inserts could include more detailed information about the program, as well as a specific call to action and links to a program website and/or call center.

For industry professionals, the second phase would involve educational seminars at local trade groups and professional development workshops. It could also include published articles in industry trade journals and postings on trade association websites and blogs.

#### Phase III: Sealing the Deal

The results of these marketing efforts will be to: 1) motivate homeowners to schedule home energy appraisals; and 2) motivate contractors and other industry professionals to register for training in the program. Appointment scheduling and contractor registration will need to be seamless, without any obstacles. This can be done on a dedicated website or through a phone contact. Both methods would allow for tracking and future outreach to assess the effectiveness of the marketing efforts (e.g., via a follow-up survey).

### Centralized One-Stop-Shop

Retrofit Bay Area builds on Sonoma and Alameda Counties current strategy using EECBG and other local funds to bundle incentives (financing, rebates, tax credits, etc.) and information to provide a convenient

and user-friendly experience for residents. Residents can either access this information through the program website, regional call-center, or by visiting an Environmental Service Center.

ABAG will develop a regional website focused on whole-house retrofits to provide interactive opportunities to market *Retrofit Bay Area* and elicit participation. Content will be added that educates residents on types and benefits of eligible retrofit improvements, available incentives, and where to find qualified contractors. Other electronic media in the form of on-line maps, internet marketing, or social media will be used to reach a broader range of constituents. In addition, ABAG will staff a regional call center to enhance customer service for those residents who are not internet savvy or just want to talk directly with a person to get their questions answered. The regional call center will reduce or eliminate the need for each county-wide program to provide this service. In addition, this will reduce training and staffing costs and provide one regional phone number to support consistent marketing and outreach. Some County-wide programs plan to use Environmental Service Centers which provide a brick and mortar location where residents can learn about whole-house retrofits and apply to participate in *Retrofit Bay Area*, as well as receive general guidance and feedback on specific improvements.

**Neighborhood Targeting**

*Retrofit Bay Area* will target specific single-family neighborhoods based on market targeting that yields the greatest potential energy savings. A variety of geographically focused outreach tactics will be utilized to achieve deep market penetration.

For multifamily buildings, select business improvement districts (BIDs) will be targeted to promote a multiple benefit strategy that emphasizes energy efficiency as the core element of a comprehensive building improvement approach to minimize operating and maintenance costs, enhance health and comfort, and reduce insurance premiums. It will also include an optional green building label, GreenPoint Rated, to enhance property values through rent premiums, lower vacancy rates, and lower tenant turnover rates. We will support efforts to establish the visibility of the building label among prospective tenants and support district-scale marketing efforts.

**Creating Additional Market Value**

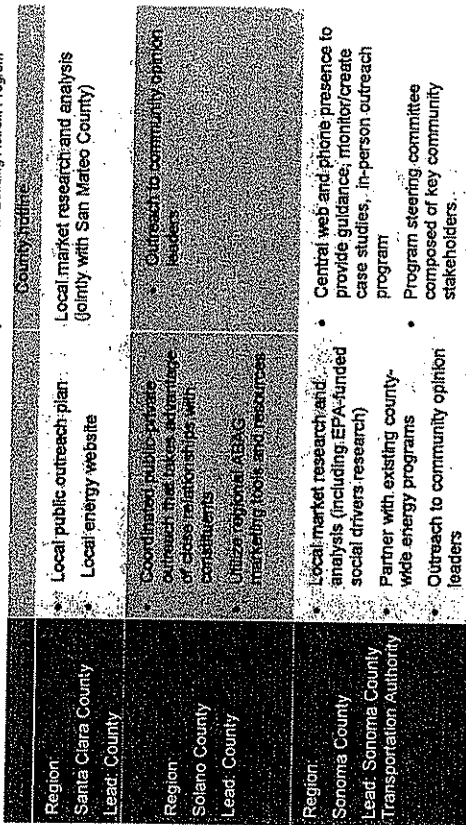
*Retrofit Bay Area* will work with local Associations of Realtors and Multiple Listing Services (MLS) to determine practical mechanisms for recognizing the added value of energy efficiency home improvements. The program will emphasize the high value of energy efficiency retrofits as a precursor to renewable energy installation and develop standard communication mechanisms to recognize added value. A key objective will be to gain inclusion of HERS and GreenPoint Rated scores on MLS listings to encourage considerations of home performance attributes at time of sale.

*Retrofit Bay Area* will develop and implement a comprehensive strategy for engaging the real estate community as champions for promoting green building practices at time of sale. This will begin with the establishment of an advisory group, consisting of program staff, leading green real estate professionals, and a representative from California Energy Commission's HERS 2 MLS initiative. Select county-wide programs will explore policy options that require home performance testing at time of sale.

Table 13. Local Government Marketing and Outreach Priorities

Region/Lead Agency	Marketing Strategy Summary
<p>Region: 9-County Bay Area Lead: Association of Bay Area Governments</p>	<ul style="list-style-type: none"> <li>Model marketing plan for local government partners</li> <li>Lead regionally coordinated marketing campaign</li> <li>Conduct market research (e.g. focus groups, phone survey)</li> <li>Templates for countywide marketing collateral, presentations, talking points</li> <li>Sales training content for contractors</li> <li>Regional website &amp; call center</li> <li>Develop realtor trainings</li> </ul>
<p>Region: Alameda County Lead: StopWaste.Org</p>	<ul style="list-style-type: none"> <li>Countywide media campaign and community-based social marketing outreach strategies</li> <li>Partners with retailers to deliver energy retrofit messages</li> <li>Informational website in coordination with regional website/call center</li> <li>DIY Yourself package for homeowners</li> <li>Multifamily property owner outreach</li> </ul>
<p>Region: Contra Costa County Lead: County</p>	<ul style="list-style-type: none"> <li>Energy Efficiency &amp; Conservation Toolkit as a user-friendly companion resource (website &amp; printed materials)</li> <li>Toolkit will provide information about existing incentives, tips and other available resources</li> </ul>
<p>Region: Marin County Lead: County</p>	<ul style="list-style-type: none"> <li>Coordinated public-private outreach that takes advantage of close relationships with constituents</li> <li>Coordinate with active community and environmental groups, business associations (e.g. Marin Builders Association, Marin Association of Realtors), local businesses</li> <li>Press releases, paid and free advertising, water bill inserts, city/town outreach</li> <li>Provide information during CYES Tier 1 Retrofit delivery</li> </ul>
<p>Region: San Francisco City and County Lead: SF Dept. of the Environment</p>	<ul style="list-style-type: none"> <li>Community based social marketing</li> <li>Outreach through Environment Now campaign; door-to-door, tabling</li> <li>Marketing through local hardware retailer</li> <li>Google GIS-based websites provide information to residents, contractors</li> <li>Marketing through local TV and radio stations, neighborhood-based newspapers</li> </ul>
<p>Region: San Mateo County Lead: County</p>	<ul style="list-style-type: none"> <li>Local market research and analysis (jointly with Santa Clara County)</li> <li>Community advisory committees with grant program for community partners to assist with outreach to target communities</li> <li>Promotional events/activities including meetings with city and county elected officials, community groups, homeowners associations and others</li> <li>Green Jobs and/or AmeriCorp interns to support local outreach efforts</li> <li>Regional call center, training protocols and scripts to support</li> </ul>





**K. Program Cost Effectiveness**

Retrofit Bay Area exceeds the DOE cost-effectiveness requirements and yields 36.3 million BTU per \$1000, which exceeds the requirement of 10 million BTU per \$1000 spent. The program will achieve its stated objectives, reduce or remove primary market barriers, and contribute to Recovery Act goals by (a) generating almost \$6.8 million in annual energy savings, (b) creating or preserving 1,739 jobs, and (c) contributing an economic impact of more than \$160 million. The table below is based on retrofitting 15,000 single-family and 2,000 multifamily housing units and achieving a minimum of a 20% energy reduction on average. Whole-house retrofits will be strongly promoted and we expect to have a significant number of projects attain 20%-40% energy reductions but we used the conservative 20% energy reduction for calculating cost-effectiveness.

**Table 14. Annual Program Energy Saved**

Program Energy Saved (Annual, million BTUs)	
Source Electricity	198,388
Natural Gas	192,280
<b>Total Energy</b>	<b>390,668</b>

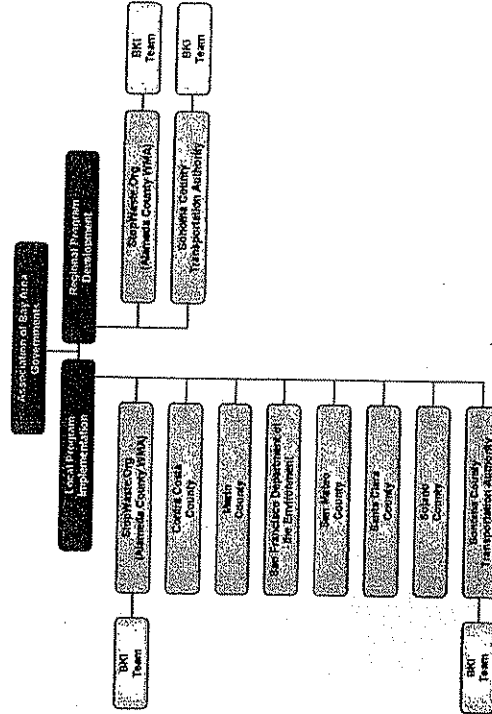
**L. Team Organizational Structure**

ABAG has established a diverse consortium of public and private entities representing leading organizations and individuals involved in building energy retrofit programs both in California and the

Retrofit Bay Area Residential Building Retrofit Program

nation. However, per the RFP, the following organizational chart focuses on the ABAG's relationship with subcontractors and the key local governments involved with implementing this proposed SEP program.

**Figure 1. Organizational Chart**



ABAG will be the prime contractor and program administrator, accountable for overall program success and all reporting functions to the Energy Commission and DOE. ABAG will take lead responsibility for managing that portion of the scope of work that has been deemed regional in scope. Portions of the regional work scope will be delegated to StopWaste.Org and SCTA to gain economics of scale and accelerated program development, made possible by the prior leadership Alameda and Sonoma Counties have demonstrated in program design. These two agencies have both completed competitive solicitation processes and have selected BRT as their lead contractor for program design and implementation.

ABAG will execute subcontract agreements with one lead agency in each county as designated above. The designated agency will act as fiscal agent and lead program implementer at the county level.

As a Regional Planning Organization formed in 1961, ABAG and its member agencies have a 48-year history of working together on plans and programs of regional significance. ABAG has spearheaded collaborative planning efforts to manage regional housing supply, develop the Bay Trail, maintain and upgrade the regional airport system, protect the San Francisco estuary, establish a power purchasing pool, implement a regional EnergyWatch program, and many more initiatives.

ABAG offers core competencies in regional program administration and fiscal management to provide the financial and programmatic controls necessary to maximize program impacts while aggressively

Partner	Role	Primary Contact
Santa Rosa, CA	protocols, and public policy support; lead local program implementer	
Beviacqua Knight, Inc. (BK), Oakland, CA	Consultant; sponsor of StopWaste.Org and SCTA; lead responsibility for implementing retrofits and local scope of work in Alameda and Sonoma Counties	Brian Giff brian@bk.com (510) 444-8707
California Building Performance Contractors Association (CBPCA), Oakland, CA	Non-profit organization; residential retrofit program implementer for PG&E; premier home performance contractor trainer in California; responsibility for quality assurance and reporting	Randel Riedel, riedel@cbpca.org (916) 704-9470
Build It Green, Berkeley, CA	Non-profit organization; part of BKI consultant team to StopWaste.Org and SCTA; responsibility for implementing regional and local scope of work in Alameda and Sonoma Counties	Ernie Nesi, enesi@builditgreen.org (510) 845-0472
Heschong Mahone Group (HMG)	Non-profit organization; part of BKI consultant team to StopWaste.Org and SCTA; responsibility for multifamily scope of work in Alameda and Sonoma Counties	Juleann Summerford summerford@h-m-g.com, (760) 436-7002

**M. Workforce Development and Job Creation**

Retrofit Bay Area will create 1,739 jobs during the two year grant timeframe and has been designed to leverage approximately \$184 million in private capital, utility incentives, and EECBG formula grants, and other local funding thereby allowing SEP funds to have a greater impact in increasing employment and stimulating the economy.

Retrofit Bay Area workforce strategy will leverage the EECBG and other local investment in developing a workforce training plan and schedule to ensure adequate supply-side capacity to meet expected demand for energy efficiency and renewable retrofits. The plan will integrate with existing local and statewide job training organizations and resources such as the California Building Performance Contractors Association (CBPCA), local Workforce Investment Boards (WIB), utility training centers, community college districts, local economic development programs, Build It Green, and others.

The process will begin with an inventory of all existing training and curricula to evaluate the capability of providing building performance training to the target audience. A gap analysis will be conducted to evaluate the need for additional or expanded trainings. The goal is to train and certify new and existing contractors, auditors, raters, and home performance industry workers capable of delivering large numbers of cost-effective retrofit projects with consistent quality, high performance, and validated results. All residential training and certification will conform to the national Home Performance with Energy Star Program guidelines and Building Performance Institute standards and HERS II requirements. Program

managing costs. ABAG is able to offer the Energy Commission complete transparency in program planning, management, and contract administration. Regional coordination will rely heavily on web conferencing systems such as GoToMeeting and Internet-based file sharing systems such as BaseCamp. The Energy Commission will be provided subscriber access to these systems, allowing Commission staff to monitor the regional discussion forum, participate in conference calls and web conferences, and review shared files.

Table 15. Roles and Responsibilities

Partner	Role	Primary Contact
Association of Bay Area Governments (ABAG), Oakland, CA	Regional planning organization and Council of Governments; prime contractor; regional contract administrator; lead developer for regional website and call center	Jerry Laehr, jerry.laehr@abag.ca.gov, (510) 464-7808
StopWaste.Org (Alameda County Waste Management Authority), Oakland, CA	County-level joint project Authority regional lead on developing multifamily tools and resources and marketing plan to launch lead local program implementer	Wendy Sommer, wendy@stopwaste.org (510) 891-6500
County of Contra Costa, Martinez, CA	County Government; lead local program implementer	Jason Crappo, jason.crappo@cdcd.communty.us, (925) 335-1108
County of Marin, San Rafael, CA	County Government; lead local program implementer	Dana Armstrong, darmstrong@com.marin.ca.us, (415) 663-3297
City and County of San Francisco, San Francisco, CA	City and County Government; lead local program implementer	Cal Broomhead, cal.broomhead@sfgov.org, (415) 355-3706
County of San Mateo, Redwood City, CA	County Government; lead local program implementer	Reyly Wilson, Reyly.Wilson@samco.org, (650) 965-4599
County of Santa Clara, San Jose, CA	County Government; lead local program implementer	Jill Boone, jill.boone@scso.sccgov.org, (408) 299-5164
County of Solano, Fairfield, CA	County Government; lead local program implementer	Nancy Johnson, NancyJohnson@solcocounty.com
Sonoma County Transportation Authority (SCTA), Fairfield, CA	County-level Joint Powers Authority; regional lead on coordinating with utility programs, workforce development, QA	Dave Brennan, dbrennan@sctainfo.org, (707) 565-6379

participants will be offered training in energy and water efficiency and renewable energy practices and technologies. The program will include both classroom and hands-on training. The extent of this training will range between the prescriptive and advanced whole-house delivery paths.

The SEP budget expects training delivery will occur through existing channels, including community colleges and self-funded training events. Qualified contractors will be eligible for up to a \$1,000 scholarship for testing and certification fees and field mentoring for approved training and certifications (e.g., BPI, HERS II, etc.). No additional program resources have been allocated for training delivery. This assumption reflects the substantial resources being targeted to green workforce development through California Clean Energy Workforce Training Program grants, combined with our past successes delivering fee-for-service trainings. In our experience, contractors are willing to pay for training if the training leads to tangible new business opportunities.

#### N. Energy, Peak Demand, and GHG Emissions Reductions

Electricity demand reduction is vitally important to the Bay Area and its serving utilities: PG&E and several other smaller municipal utilities. Due to Bay Area Air Quality Management District's air pollution restrictions and space constraints in the air basin, this area is served primarily by far-remote generating plants subject to service interruptions. In addition, the region's high population exerts a growing demand for power that strains the capacities of the serving transmission lines, and expansions are both logistically difficult and costly, if blackouts result from line overloads, historical studies indicate personal and business losses in the billions per event. All reasonable measures, including extensive energy efficiency measures such as those in this program, must be taken to avoid such risks.

The Bay Area's peak summer electricity demand is in the range of 15,000 MW, including all sectors, with some 2.6 million housing units accounting for about 40% of that peak. Based on peak demand data per home and the market penetration of air conditioning in this moderate climate, *Retrofit Bay Area* could reduce that demand by approximately 1kW per housing unit on average, or 17 MW for the 17,000 home program retrofit target. This savings is enough to make a difference in service reliability on peak days, potentially avoiding potential brownouts or blackouts or costly transmission and/or distribution system upgrades. In addition, it would eliminate the need for utility purchases of premium-price electricity at the margin. Such premiums can be \$1/kWh, or more for the utility's purchase of peak period power. At that assumed level, if this program's peak reduction effect were reduction of ten peak events per summer at two hours in duration it would reduce the utilities' electricity costs for the Bay Area by some \$340,000 each year. Future time-of-use pricing or rate reconciliation would only serve to reallocate that cost among different users. This level of annual electricity savings is a reduction of 174 million BTUs in source electricity.

#### O. Time Criticality

ABAG understands that time is of the essence in disbursing ARRA funds, getting contractors back to work, and reducing greenhouse gas emissions. The ABAG region is uniquely positioned to offer accelerated program roll-out because of the leadership of SCTA and StopWaste.Org. These two agencies have been charged with program design and implementation in their counties and are already well advanced in the planning process. They have already completed competitive solicitation processes to select their implementation teams and are expected to largely complete their program planning before SEP funds become available. Their strategic approach is well aligned with the consistent regional program model articulated in this proposal, which means the entire ABAG region will be able to leverage their advance planning efforts to move into program implementation soon after SEP funds arrive, thereby maximizing prospects of completing all planned energy retrofits by March 31, 2012.

ABAG likewise understands the importance of financial controls and accountability. All ARRA accountability provisions will be incorporated into ABAG's funding agreements with countywide

implementers. Program implementation plans will build in clear benchmarks and early indicators of success (see the Statement of Work for details) to permit ongoing monitoring and early action if certain program elements do not deliver expected benefits.

Attachment 21, Budget, includes a detailed schedule and Gantt Chart to March 31, 2012, that delineates progress reports, Critical Program Reviews, and other program milestones. As indicated in the schedule, progress reports will be provided and Critical Program Reviews will be conducted, including completion of the first Critical Program Review by June 30, 2010.

#### P. Program Transparency and Reporting

ABAG will use effective internal controls, highly qualified and experienced personnel, and well-designed data collection systems to comply with the transparency and reporting requirements. ABAG believes adequate internal controls are the key to safeguard assets and resources, produce reliable financial and project performance data, and comply with applicable state and federal regulations and laws. Sound internal controls can prevent fraud, waste, and program abuse. More importantly, sufficient policies and procedures can help to enforce compliance with transparency and accountability associated with the ARRA reporting requirements.

ABAG believes a good control environment sets the tone of the Association and promotes the control consciousness of employees. Over the years, ABAG has implemented effective policies and procedures to meet various requirements set by the state, federal government, and respective granting agencies. These standards and procedures are evaluated on an ongoing basis and updated as necessary. In addition, specific provisions are built into agreements and contracts awarded to sub-recipients and vendors. Flow-down provisions require sub-recipients and vendors to comply with the necessary state and federal laws and take full responsibilities for meeting the program goals and reporting requirements. Information technology plays a significant role when it comes to internal controls. ABAG's in-house IT professionals review system security on a regular basis. An external consultant is engaged to perform scans twice a year to identify system vulnerabilities. These security measures ensure the integrity of financial and operational data. ABAG's critical internal guidelines enable the Association to establish a formal and structured internal control system. ABAG will continue to utilize effective internal controls to comply with ARRA and other applicable reporting requirements.

ABAG realizes that effective and efficient communication is a significant factor in achieving project objectives. Newly developed or updated policies, procedures, contract templates, and forms are properly distributed to employees via e-mail or hard copy. The information is also available on ABAG's intranet to improve communication and grant management processes. Also, in some instances, formal meetings are conducted to ensure employees at different levels understand the new standards and know how to carry out control activities.

Grant oversight and monitoring processes are key in meeting the transparency and reporting requirements of the federal government. State of California, Energy Commission, ARRA, and DOE for SEP programs. ABAG will use an executive oversight team to oversee the reporting requirements. The team will develop timelines for sub-recipients and vendors to provide project performance data, key project metrics, and expenditure information. This executive level team will include the Deputy Executive Director, Legal Counsel, Legal Assistant, Energy Program Manager, Energy Program Assistants, Finance Director, Assistant Finance Director, Accounting Supervisor, Financial Specialists, Information Technology Director, Webmaster, and Computer Programmer. The executive team members are familiar with the state, federal, and ARRA reporting requirements (areas associated with their jobs responsibilities). The team members are adequately trained and have the knowledge to implement transparency and reporting requirements set in the SEP proposal. Continuing education classes are provided to team members on an ongoing basis. As a member of various membership associations, ABAG receives updates and guidance regarding ARRA reporting requirements from well-known organizations such as the Government Finance Officers Association, California CPA Society, and California Society of Municipal Finance Officers.

The Executive Director will oversee the entire reporting process at a high level. The Legal Team will develop agreements and contracts incorporating provisions required by ARRA, DOE, the Energy Commission, and other state and federal regulatory agencies. This is the initial step in communicating transparency and reporting requirements to sub-recipients and vendors. The Legal Team will provide guidance on how to handle reported frauds and follow the ARRA whistleblower provisions. The Energy Program Team will be responsible for developing project performance targets and key project metrics and evaluating implementation results. Energy Program and Accounting staff will coordinate with sub-recipients and vendors to gather data required for progress reports and quarterly ARRA reports. After all appropriate levels of reviews are complete, the Accounting staff will perform a final review of performance and financial data to ensure only accurate and valid information is submitted to the Energy Commission (or federal reporting system). The Accounting Team will be responsible for receiving funds and disbursing funds to sub-recipients and vendors in a timely manner. The Accounting Team will work closely with the Energy Program Team to ensure funds are distributed to sub-recipients/vendors that have performed satisfactory work. The IT Team will be in charge of modifying the data collection system (as needed) and converting data collected from sub-recipients and vendors into an Excel format. All team members will work collaboratively to ensure the team is up-to-date with ARRA updates, and appropriate reporting guidelines and computation methods are included in agreements and built into data collection templates. Through an ongoing monitoring process, the executive team will make sure sub-recipients and vendors implement the changes.

Prior to the start of this program, the Executive Team will meet with appointed staff from each county to communicate the transparency and reporting requirements. The following criteria will be discussed:

- Deadlines and processes for submitting data to ABAG in meeting ARRA reporting requirements.
- Timelines for meeting project performance targets and methods for computing key project metrics.
- Sub-recipients are required to enforce the transparency and reporting requirements for their vendors.
- Methods for reporting fraud, waste, and program abuse.

The Energy Program and Accounting staff will conduct site visits on a regular basis to make sure established project activities are implemented according to the guidelines set by the Energy Commission and DOE. The teams will review sub-recipients' internal controls and determine if methods used to report project performance and financial data are reasonable. Both teams will review progress reports and ARRA reports to ensure reported data are accurate and properly reflect project results. ABAG will establish collaborative working relationships with sub-recipients and vendors to make sure the compliance processes are implemented at all appropriate levels. Through site visits and ongoing conference calls/other forms of conversations, ABAG will evaluate whether sub-recipients and vendors have adequate knowledge to comply with ARRA reporting requirements. ABAG will provide directions and assistance to sub-recipients and vendors should any reporting issues arise.

ABAG has a proven data collection system using Adobe Acrobat PDF forms. The forms, once submitted by the sub-recipients, go into an Access-based application that outputs reports in either Excel or PDF format. This data collection system is the most efficient tool in collecting data from multiple sub-recipients. ABAG is planning to transfer data to the Energy Commission using Excel files. ABAG will follow the Energy Commission, DOE, and ARRA's guidelines to compute key project metrics (jobs created and retained, number of homes retrofitted, etc.).

ABAG will develop a project web site and program results will be published on it. Citizens will be able to review project activities for their counties and cities. Links to [www.energy.gov](http://www.energy.gov), the Energy Commission, and DOE will be included. Interested individuals can subscribe to ABAG's email list server to receive automatic email notifications of updated project results as well as electronic periodic updates. ABAG's experienced IT professionals have developed a data schema that allows for rapid random changes to the data collection system. For example, data fields and titles can be added, moved, or deleted as needed. Computational methods for calculating key project metrics can be reprogrammed. ABAG has

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sufficient technology and a qualified in-house Computer Programmer and Webmaster to make changes in a timely manner.

As mentioned above, ABAG uses effective internal controls to safeguard ARRA SEP funds from fraud, misuse, and waste. ABAG's well-designed financial system keeps track of grant funds by project and fund source (funds are not commingled together). An appropriate level of checks and balances is in place, and there is adequate segregation of duties. Grant funds are recorded by someone other than the person who prepares grant billings; funds are disbursed after proper approvals have been obtained; cash accounts receivable, accounts payable, deferred revenue, grant revenue, and grant expense reconciliations are prepared by the financial specialists and reviewed by the Finance Director/Assistant Finance Director in a timely manner.

All sub-awards will be properly monitored on an ongoing basis. Dual review process will be performed prior to the disbursement of funds. Assigned Energy Program and Accounting staff will review required progress reports and documentations/invoices submitted by sub-recipients to ensure incurred costs are consistent with the Energy Commission's funding agreements and ARRA requirements. Energy Program staff will monitor and verify project progress. In addition, site visits will be conducted on an ongoing basis to evaluate project results. ABAG will ensure funds are spent in accordance with Energy Commission and ARRA guidelines.

ABAG engages a CPA firm to audit the basic financial statements and federal grants every year. The auditors have issued an unqualified audit opinion/clean opinion on both basic financial statements and Single Audit report over the years. ABAG is considered a low-risk auditee. ABAG has processes in place to ensure financial reports and progress reports are submitted to grantors in a timely manner. Also, there are processes in place to address internal control weaknesses, correct findings, and deal with fraud issues. ABAG is in compliance with the cost principles and administrative and audit requirements set by the Office of Management and Budget. ABAG follows the state and federal government's procurement standards, wage rate acts, contracting acts, and other regulatory legal acts to ensure grants/contracts are awarded to authorized parties.

#### Q. Program Team Qualifications and Experience

ABAG has significant experience managing and implementing large multi-county energy and environmental programs. For over ten years, ABAG has implemented energy aggregation programs (electricity and natural gas) through its affiliate JPA: ABAG Publicly Owned Energy Resources (ABAG POWER). This program attempts to provide energy cost savings and price stability to local governments by aggregating their purchasing power. In 2004-05, ABAG implemented the "Local Government Energy Partnership" (LCEP) program which provided technical and policy assistance to local governments in the San Francisco and Monterey Bay Areas to develop energy efficiency projects within their facilities and wider communities. In 2006-09, ABAG augmented the services of the LCEP program in a new partnership effort with PG&E, the ABAG Energy Watch program. This program ultimately provided energy efficiency assistance to over 60 local governments in ABAG region, and implemented over 300 individual projects producing more than 25,000,000 kWh/year in savings.

In addition, as the comprehensive regional planning agency, ABAG implements many planning programs, such as the Regional Housing Needs Allocation, and "smart growth" initiatives. ABAG also offers many service programs, such as pooled liability insurance for local governments, financial services, Green Business program, Bay Trail project, and earthquake preparedness.

Sonoma County and StopWaste.Org have contracted with a uniquely qualified program consultant team, led by Beviaqua Knight, Inc. (BK), which brings together the recognized leading building energy retrofit expertise in California. The team is fully familiar with and highly qualified in all technical and programmatic elements in order to design and implement an effective program. The team offers extensive experience in energy efficiency program design, incorporating industry best practices and state-of-the-art market transformation strategies. Team members have played central roles in advising the Energy

*Retrofit Bay Area Residential Building Retrofit Program*

Commission on SEP program guidelines and shaping the California Home Energy Retrofit Coordinating Committee's (HERCC) consensus recommendations for program design. The team continues to provide key input into CPUC policy decisions pertaining to home energy retrofits and utility planning efforts for the Statewide Program for Residential Energy Efficiency.

In addition, the team has direct experience in developing the early adopter programs in California including the statewide California Communities AB 811 program, San Francisco Mello-Roos program, Sonoma County Retrofit/Renewables program, Alameda County Retrofit/Renewable program, and has been the only third-party implementer of utility whole-house retrofit programs in California for the past seven years.

**Bevilacqua Knight, Inc. (BKI)** – The BKI consultant team is led by Bevilacqua Knight, Inc. (BKI), a leading energy consulting firm that specializes in designing and implementing community-scale building retrofit programs and policies for government and utilities. BKI is the California Building Performance Contractors Association's home performance program designer and administrator, operating all comprehensive home retrofit programs in the state including large training and delivery programs in the PG&E and Southern California service areas. Energy policy research and development is another principal area of BKI expertise. The firm has led a broad range of such activities, ranging from a special study on optimizing the future societal value of electricity for the president of the Electric Power Research Institute to development of an analysis of California's energy efficiency program cost-effectiveness metrics and the proposal of a radical change to reflect true societal benefit. The firm was also principal contractor on several related California Energy Commission and PG&E projects to research and refine contractor methods for building science-based home diagnostics and retrofits, resulting in a long-term plan for statewide implementation. BKI is also leading a program for the California Energy Commission's PIER program that is developing complete protocols for home performance contractors, and was a key strategic participant in HUD's PATH 36 program to develop and deliver a comprehensive web-based best-practice protocols system for upgrading the energy-saving capabilities of home remodeling and repair contractors. Dr. Bob Knight (BKI President) brings a national perspective on program best practices through his participation on the Board of Directors of Affordable Comfort, Inc. and Efficiency First.

**Renewable Funding** – Renewable Funding specializes in developing innovative solutions for clean energy financing programs and has been active in working with federal agencies, major lending institutions, and leading law firms in developing national best practices for property-assessed clean energy (PACE) programs. The founders of Renewable Funding pioneered the PACE strategy used in Berkeley, California. Known as BerkeleyFIRST. To support these programs, the firm has created a unique turnkey solution and roster of program partners to provide program adoption, education, outreach, and administration, backed by a complete financing package. The firm now provides services for a number of communities, including Boulder County, Colorado, and San Francisco, California, and has been selected to administer and finance a California statewide program with a projected loan volume of \$250M. Renewable Funding has strong expertise in finance, government, operations, and renewable energy incentive programs and will be the lead partner in working the design and implementation of the AB 811 loan program.

Build It Green contributes extensive program design experience and expertise, particularly in the residential green building arena. In 2006, Build It Green launched GreenPoint Rated, a consumer-oriented label designed to stimulate market demand for single-family and multifamily green homes in California. Design activities addressed all program aspects, including technical specifications, program policies and procedures, professional training, quality assurance, marketing and outreach, and project tracking and reporting. GreenPoint Rated aligns with public-sector policy initiatives such as Assembly Bill 32, the California Global Warming Solutions Act, by helping cities measure the success of their climate change initiatives. In addition to addressing new homes, Build It Green recently launched GreenPoint Rated Existing Home, the first comprehensive green building rating system for existing homes in the nation. As

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part of the design process, Build It Green has managed 12 stakeholder engagement processes to enlist the technical expertise and input from key state agencies, including California Integrated Waste Management Board, California Energy Commission, Office of Environmental Health Hazard Assessment, Office of the State Architect, Department of General Services, Department of Water Resources, and California Air Resources Board. Build It Green's Director of Programs, Bruce Mast, brings additional program design expertise through his prior industry experience. Bruce was the lead author for four chapters of the CPUC-funded study of Best Practices in Energy Efficiency Programs (2005), including New Construction and HVAC, both residential and non-residential. He also authored the follow-up White Paper on emerging trends in energy efficiency programs in 2007. Bruce has served as Principal Investigator on a number of competitive assessments and market analyses for technologies as diverse as evaporative coolers, natural-gas fired air conditioners, and propane tractors. His program design expertise is informed by more than a decade of market research and program evaluation, examining initiatives as varied as residential new construction, commercial HVAC, and residential lighting fixture programs.

**California Building Performance Contractors Association Experience (CBPCA)** – The California Building Performance Contractors Association has implemented the utility Home Performance with Energy Star and related contractor training programs for the past several years. Those programs have trained well over 500 building technicians in building science and diagnostics, and supported building performance contractors with BPI certifications, standards, ongoing news and information, advanced trainings, energy savings estimations using building energy simulation models, data aggregation and reporting, and job verifications. Current work includes development of program design and incentive structures for the new round of home performance programs through 2012. CBPCA will assist in the coordination of workforce training for the Program.

**Heschong Mahone Group, Inc. - The Heschong Mahone Group, Inc. (HMG)** is an established firm providing professional consulting services in the field of building energy efficiency. The firm is specialized in the applications of building design and construction technology to the problem of making buildings more efficient. They have a motivated technical staff with diverse and complementary skills in architecture, engineering, construction and economics, along with data collection and analysis, market research, communication, and project management skills.

HMG is a woman-owned small business. Broad experience with both utility and government clients allows HMG to provide customized, expert consulting services tailored to the needs of the project, its budget and schedule.

HMG designed and implemented both the first multifamily new construction and comprehensive retrofit programs in the state of California. HMG also led the charge for utility allowance reform for energy efficient project and continues to evolve programs and policies to best serve the market. Below is a list of projects that comprise HMG's experience in designing and implementing multifamily programs.

- **Designed for Comfort (DFC):** HMG designed and implemented the state's only comprehensive multifamily rehab program. Since 2002, HMG has implemented DFC throughout the state. DFC provides existing affordable multifamily housing owners the mechanism to improve energy efficiency by a minimum of 20% through a process to audit, analyze, model, and verify energy efficiency in a "whole-house" capacity.
- **PG&E California Multifamily New Homes Program Implementation FY2006- present - HMG** designed and since 2006, implements PG&E's California Multifamily New Homes (CAIFNH) program that offers design assistance for an integrated design approach, cash incentives for projects that exceed Title 24 by a minimum of 15% and installing Energy Star appliances and lighting.
- **Affordable Housing Energy Efficiency Alliances (AHEEA)** - HMG designed and implemented AHEEA which served to help the affordable housing market incorporate energy efficiency into their projects, programs, funding, and policies. This innovative program serves as an energy

Program Activities: ABAG assumes responsibility for the quality of all subcontractor work. If new subcontractors are added, the Team will notify the CCM in accordance with the Energy Commission's process for adding or replacing subcontractors.

Deliverables: Updated schedule of deliverables and updated Gantt chart, updated list of leverage funds, and a schedule for recruiting Program Advisory Committee (PAC) members.

Due Dates: To be specified by Commission Contract Manager

**D. Monthly Progress Reports**

Task Goals: Periodically verify that satisfactory and continued progress is made toward achieving the objectives of the project.

Program Activities: In preparation for fulfilling its reporting duties, ABAG will establish administration, management, and reporting systems capable of tracking and reporting the metrics required to satisfy Energy Commission and ARRA reporting requirements.

ABAG will prepare and submit monthly progress reports to document progress toward project objectives. Reports will summarize all contract activities conducted by ABAG and its subcontractors for the reporting period, including an assessment of the ability to complete the contract within the current budget and any anticipated cost overruns. All reports will be consistent with Energy Commission and ARRA reporting requirements. Monthly progress reports will be accompanied by financial reports and invoices for all contract expenses incurred during the prior reporting period.

Deliverables: Monthly progress reports, monthly submittal of electronic data to ARRA SEP tracking and reporting entities.

Due Dates: Within 15 working days after the end of the reporting period

**E. Critical Program Review Meetings**

Task Goals: Determine if SEP funding should continue and whether any modifications need to be made to the tasks, subtasks, deliverables, schedule, or budget.

Program Activities: ABAG proposes to schedule the first CPR upon completion of the Draft Implementation Plan, which shall occur within the first three months of the contract start date. The goal of this CPR will be to determine the appropriate funding level for the tasks and to ensure that work will be completed on schedule. A second CPR will be scheduled for midway through program implementation.

In conjunction with each CPR, ABAG will prepare a CPR report that discusses the progress toward achieving the Agreement's goals and objectives, including recommendations and conclusions regarding continued program activities. The reports will be submitted to the CCM and any other designated reviewers at least 15 working days in advance of each CPR meeting.

Deliverables: CPR Reports, CPR deliverables identified in the Scope of Work.

Due Dates: July 9, 2010 (first meeting); second CPR meeting to be determined

**1.2 Final Meeting**

Task Goals: Present the Draft Final Report and review results and conclusions of the work done under this contract.

efficiency, cleaninghouse to provide training and information to affordable housing owner-developers, housing authorities, redevelopment agencies and support services agencies.

• EDR Green Design Calculator: For PG&E's Energy Design Resources (EDR), HMG is developing a Guidelines for Energy Impacts of Green Design and a Green Design Calculator for use in evaluation of green building measures not typically accounted for in building standards or energy efficiency programs.

• Multifamily Green Asset Management Toolkit: HMG assisted Enterprise Community Partners in developing a Green Asset Management Toolkit, an online resource for multifamily affordable housing properties asset managers. The toolkit offers guidance and resources on improving energy efficiency, water efficiency, health, and comfort for multifamily properties throughout the building lifecycle, including information on developing a green asset management plan, upgrade measures and approaches, operations and maintenance practices, hiring outside professionals, cost analysis, and program participation and funding leverage.

**Scope of Work and Deliverables**

**Task 1.1: Contract Management**

**A. Kickoff Meeting**

Task Goals: Establish the lines of communication and procedures for implementing this Agreement.

Program Activities: ABAG will attend the kickoff meeting with the Commission Contract Manager (CCM), the Contracts Officer, and a representative of the Accounting Office. The Retrofit Bay Area team will include the Project Manager, Contracts Administrator, Accounting Officer, Principals from key subcontracting implementers, and others designated by the Commission Contract Manager. The Retrofit Bay Area team will address the full list of agenda items, as specified in the RFP. ABAG assumes responsibility for the quality of all subcontractor work. If new subcontractors are added, ABAG will notify the CCM in accordance with the Energy Commission's process for adding or replacing subcontractors.

Deliverables: Updated schedule of deliverables and updated Gantt chart, updated list of leverage funds, and a schedule for recruiting Program Advisory Committee (PAC) members.

Due Dates: To be specified by Commission Contract Manager

**B. Invoices**

Task Goal: Cash recovery for contract expenses.

Program Activities: ABAG will prepare the invoice for all contract expenses performed at each stage identified in the schedule of the proposed program. The official invoice will be submitted to the Energy Commission's Accounting Office.

Deliverables: Prepare and submit invoices for contract expenses.

Due Dates: Monthly

**C. Subcontractors**

Task Goals: Manage subcontractors.

**Program Activities:** ABAG will attend the Final Meeting with the CCM. The Retrofit Bay Area team will include the Project Manager, Principals from key subcontracting implementers, and others designated by the CCM. The Retrofit Bay Area team will present the Draft Final Report and review results and conclusions of the work done under this contract.

**Deliverables:** Meeting agenda, meeting minutes.

**Due Dates:** March 16, 2012

### 1.3 Final Report

**Task Goals:** Prepare a comprehensive written Final Report.

**Program Activities:** The Final Report will be a comprehensive written document that describes the original purpose, approach, results, and conclusions of the work done under this contract. ABAG will lead this effort and report results to local governments and other stakeholders. The local lead agencies will support the effort.

**Deliverables:** Draft and Final Report outlines; Draft and Final Reports.

**Due Dates:** March 31, 2012

### 1.4 Identify and Obtain Leverage Funds

**Task Goals:** Identify and obtain leverage funds.

**Program Activities:** ABAG will develop agreements with each countywide program lead agency and regional utilities, such as leveraging Department of Community Services and Development (CSD) or California Public Utilities Commission administered low-income weatherization programs. It will also coordinate with PG&E's whole-house retrofit delivery and incentive program (performance and prescriptive paths). The local lead agencies will develop agreements with their cities, special districts, and local utilities.

**Deliverables:** Letter regarding leverage funds or stating that no leverage funds are provided; letter(s) for new leverage funds; a copy of each leverage fund commitment letter; letter that leverage funds were reduced (if applicable).

**Due Dates:** July 9, 2010 or first CRP meeting

### 1.5 Establish Program Advisory Committee (PAC)

**Task Goals:** Establish a regional Program Advisory Committee (PAC) that will coordinate the comprehensive residential building retrofit efforts of the eight counties.

**Program Activities:** ABAG will establish a regional PAC that will consist of a designated representative and alternate from each countywide program lead agency, as well as non-governmental personnel whose participation is considered essential for proper coordination. ABAG will recruit committee members and chair the committee. The local lead agencies will establish local committees to facilitate good communication and to help ensure buy-in at the local level.

**Deliverables:** Draft and final lists of PAC members; letters of commitment from each PAC member.

**Due Dates:** Draft list by April 12, 2010; letters of commitment by May 1, 2010; final list by May 1, 2010

### 1.5 Conduct PAC Meetings

**Task Goals:** Coordinate regional program design and implementation.

**Program Activities:** ABAG will host monthly PAC meetings. Designated representatives from each countywide program will provide advice and consent on regional tasks to assure that regional deliverables are consistent with local program needs.

**Deliverables:** Draft PAC meeting schedule; final PAC meeting schedule; PAC meeting agenda(s) with back-up materials for agenda items; written PAC meeting summaries, including recommended resolution of major PAC issues.

**Due Dates:** Monthly coordination meetings

### Program Delivery

#### 2.1 Implementation Plan

**Task Goals:** Develop a detailed plan to complete the proposed program.

**Program Activities:** The Retrofit Bay Area team will establish a regional framework for identifying and implementing early program objectives and strategy. The local lead agencies will engage their local committees to identify local priorities, to ensure that they are included within the regional framework. The Retrofit Bay Area team will coordinate efforts with PG&E, the Energy Commission, and the California Air Resources Board (ARB).

The Retrofit Bay Area team will work through the PAC to prepare an implementation plan that includes the following:

- Detailed plan for delivering the goals, objectives, and strategies of this RFP
- Specific activities that will be conducted for Second and Third Tier program elements
- Roles and responsibilities of Retrofit Bay Area, COGs, and subcontractors
- Program reporting and M&E data collection procedures, consistent with ARRA SEP and Energy Commission requirements
- Timeline for achieving program objectives, including activity schedules, milestones, and deliverable due dates
- Incentive structures and contractor scholarships
- Program policies and procedures, quality assurance, and consumer protection policies, contractor/rater qualifications and certification requirements, minimum energy efficiency thresholds, and verification protocols
- Workforce development plan
- Marketing plan
- Contingency plans for critical program components
- Methodology for establishing multifamily building energy audit and field verification approaches that are parallel and comparable to HERS II delivery of Third Tier level of services to achieve whole-building energy efficiency opportunities

Retrofit Bay Area will present the draft Implementation Plan to the Commission Contract Manager via a phone conference or in-person meeting. Retrofit Bay Area will then prepare the final Implementation Plan, incorporating the CCM's comments on the draft.

**Deliverables:** Draft and final implementation plans.

**Due Dates:** Draft implementation plan June 30, 2010; final implementation plan July 30, 2010

Due Dates: Draft workforce development plan June 30, 2010; final plan July 30, 2010; MOUs with strategic partners July 30, 2010; training curricula August 31, 2010; rosters of training graduates as part of monthly progress reports

**2.3 Participant Recruitment**

Task Goals: Engage stakeholders to provide input on effective design, cultivate partners and allies to champion the program through their communication channels.

**Stakeholder Outreach**

Program Activities: The Retrofit Bay Area team will lead the following activities with support from the COGs:

- Compile contact lists of regional decision makers and opinion leaders representing key regional stakeholder groups, including regional civic, labor, trade, and professional groups plus business, political, advocacy, and institutional leaders
- Host regional outreach meetings and workshops
- Develop talking points and presentation materials for stakeholder leaders to use in communicating to their constituencies
- Establish ongoing electronic communication channels
- Make guest presentations at regional stakeholder forums
- Countywide programs will pursue parallel activities at the local level.

Deliverables: Meeting schedules, presentation content, meeting reports.

Due Dates: First stakeholder workshop by September 1, 2010; monthly reports of subsequent recruitment activity

**Contractor Recruitment**

Program Activities: The Retrofit Bay Area team will lead the following activities with support from the local lead agencies:

- Compile contact lists of regional decision makers and opinion leaders representing key contractor audiences, including auditors, energy consultants, and HERS raters, as well as home performance contractors and specialty trades contractors
- Develop content for two-hour trainings for single-family and multifamily residential audiences
- Establish ongoing electronic communication channels
- Deliver workshops
- Make guest presentations at trade association meetings

Deliverables: Orientation workshop schedules, presentation content, attendance rosters.

Due Dates: First orientation workshop by September 1, 2010; monthly reports of subsequent recruitment activity

**2.4 Retrofit Installations**

Task Goals: Retrofit 17,000 housing units

Program Activities: Retrofit installations will be performed by participating contractors. Program activities will focus on developing eligible contractor list, reviewing project applications, and processing project data. Specific activities to be performed include:

- Assemble list of qualified contractors who meet professional training and credential requirements
- Screen contractor applications for compliance with State Contractors License, Business License.

**2.2 Workforce Development**

Task Goals: Establish a skilled work force capable of delivering the targeted volume of home retrofits, consistent with program quality standards.

Program Activities: Workforce development activities fall under the categories of planning, curriculum development, marketing and outreach, and delivery.

**Workforce Development Plan**

The Retrofit Bay Area team will establish training standards and professional credentials. All residential training and certification will conform to the applicable industry standards: Home Performance with Energy Star, Building Performance Institute, HERS II Rater and Building Performance Contractor, and GreenPoint Rated.

The Retrofit Bay Area team will conduct a gap analysis to identify training needs for single-family and multifamily residential retrofits for all three tiers. We will collaborate with the Community Colleges to establish training targets that reflect expected retrofit activity, assess their capacity to deliver the necessary training services in alignment with the established credential requirements, and identify remaining training needs. The gap analysis will inform a workforce development plan, to be submitted as part of the implementation plan (B1).

**Training Curriculum Development**

Retrofit Bay Area will develop a training curriculum specific to energy efficiency in multifamily buildings, building upon single-family training curriculum and the experience and resources developed through New York State Energy Research and Development Authority's (NYSERDA) Multifamily Performance Program. These trainings will help establish a mature workforce that can sustain retrofit activity after 2012.

**Training Marketing and Outreach**

Retrofit Bay Area will leverage the Workforce Investment Boards capacity to identify unemployed or underemployed contractors, guide people into the training program, refer them to the range of workforce funding sources. A Retrofit Bay Area representative will participate on the regional Employers' Councils to assure complete coordination around client intake and job placement.

We will conduct additional training program marketing and outreach in conjunction with contractor recruitment efforts in Task 2.3.

The Retrofit Bay Area team will coordinate with regional training providers, local Workforce Investment Boards (WIB), and community colleges to deliver training.

**Establish Bulk Purchase Agreements**

Retrofit Bay Area will evaluate alternatives for acquiring volume discount on retrofit products and services as part of the program implementation plan. Depending on research findings, ABAG may execute service agreements with selected providers or issue procurement RFPs.

**Establish Contractor Scholarship Fund**

Retrofit Bay Area will develop a contractor scholarship fund that will pay up to \$1000 per student for testing and certification fees and or field mentoring.

Deliverables: Plan submitted as part of implementation plan (B1); Memoranda of Understanding with relevant Community Colleges, Workforce Investment Boards, and independent training providers; multifamily curriculum; other updated curricula, as necessary; Rosters of training graduates.



- insurance, and related requirements
- Publish contractor list on the program website
- For targeted subdivisions of uniform housing stock, Retrofit Bay Area will test a more centralized approach to retrofit delivery. Associated activities include:
  - Identify prospective neighborhoods, based on energy savings potential, demographics, and other indicators of retrofit potential
  - Conduct in-depth analysis of prototypical house models to develop model scopes of work
  - Develop streamlined diagnostic protocols for determining applicability of model scopes of work to subsequent homes of the same model
  - Pre-select contractor(s) through an RFP process
  - Evaluate advanced project management software systems and assist selected contractors in deploying the selected system
  - Conduct geographically concentrated outreach campaign through the neighborhood to solicit participation at a discounted price for a limited period of time
  - Retrofit homes of participating households

Deliverables: Qualified Participating Contractor List, with quarterly updates; monthly reports of retrofit installation activity.

Due Dates: September 1, 2010

## 2.5 Quality Assurance

Task Goals: Apply consistent quality standards to build consumer confidence and maximize customer satisfaction.

Program Activities: In coordination with the utility incentive programs, Retrofit Bay Area will:

- Publish quality assurance protocols on the program website
- Conduct field verification for each contractor's first three jobs, including replication of performance tests, and recalculation of energy savings estimates
- Conduct field verification for 5% of jobs for qualified Home Performance Contractor credentials
- Conduct field verification for 15% of jobs for contractors that lack Home Performance Contractor credentials
- Conduct post-project customer satisfaction surveys with all participants
- Monitor contractor performance, provide enhanced visibility to high-performing contractors, provide additional field mentoring and related interventions for under-performing contractors, and exclude those contractors from the program who repeatedly under-perform

Deliverables: Monthly reports of QA activities and outcomes.

Due Dates: Monthly

## 2.6 Verification of Energy Savings

Task Goals: Document expected annual energy savings from participating projects, based on field verification of actual installed improvements; provide informative summary reports.

Program Activities: The Retrofit Bay Area team will establish minimum energy efficiency thresholds, project reporting procedures, verification protocols, and energy and carbon savings calculation methodologies. These elements will be incorporated into the implementation plan.

The Retrofit Bay Area team will develop a regional web-based tracking and reporting system for project results and environmental benefits. The Energy Commission will be granted real-time access and tracking

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system results will populate Retrofit Bay Area's monthly performance reports.

Retrofit Bay Area will collaborate with the utility incentive programs to assemble detailed project-specific data to support ARRA reporting and the CPUC's EM&V efforts, including energy usage and GHG emissions reductions, renewable energy generation, jobs created, number and amount of projects financed, number of contractors/workers trained, number of buildings and residences retrofitted, and utility bill savings by participants. Project-specific data will include pre- and post-retrofit home performance test results and billing data.

Deliverables: Minimum energy efficiency thresholds, project reporting procedures, verification protocols, submitted as part of implementation plan (B1); Energy Commission real-time access to web-based tracking system; monthly reports of energy savings and carbon reductions as part of program reporting (A4)

Due Dates: See Tasks 2.1 and 1.4

## 2.7 Marketing and Outreach

Task Goals: Develop and implement a communications strategy that will motivate property owners to invest in efficiency and/or solar retrofits to their properties.

### Develop integrated marketing & outreach plan

Program Activities: The Retrofit Bay Area team will conduct the following planning activities:

- Conduct market surveys and focus groups
- Assemble market data and conduct baseline analysis; prepare communications plan
- Develop model and templates

Local lead agencies will contribute local data sources and market intelligence, and help establish local marketing priorities.

Deliverables: Marketing plan, submitted as part of implementation plan (B1)

Due Dates: Draft marketing plan June 30, 2010; final plan July 30, 2010

### Operate public relations and marketing campaigns

Program Activities: The Retrofit Bay Area team will pursue a suite of marketing and outreach activities with support from the local lead agencies:

- Develop marketing collateral, model talking points and presentation materials, including Spanish-language content
- Recruit regional leaders and opinion leaders to act as spokespersons and role models
- Leverage existing social networks and communication as well as a variety of property-owner organizations for outreach
- Conduct regional PR and advertising campaigns
- Develop sales training content for contractors
- Collaborate with existing HVAC service provider partnerships to leverage their existing marketing and service delivery channels
- Work with existing retail improvement stores to leverage in-store marketing and service delivery channels
- Establish physical One-Stop shops for high-traffic locations

Local lead agencies will help recruit local leaders and opinion leaders to act as spokespersons and role

			be determined
1.2	Final meeting agenda, meeting minutes		March 16, 2012
1.3	Draft and final report outlines, and reports		March 31, 2012
1.4	Letter regarding leverage funds or stating that no leverage funds are provided; letter(s) for new leverage funds; a copy of each leverage fund commitment letter; letter that leverage funds were reduced (if applicable)		July 9, 2010 or first CRP meeting.
1.5	Draft and final list of Program Advisory Committee (PAC); letters of commitment from each member.		Draft list by April 12, 2010; letters of commitment by May 1, 2010; final list by May 1, 2010
1.6	Draft PAC meeting schedule; final PAC meeting schedule; PAC meeting agenda(s) with back-up materials for agenda items; written PAC meeting summaries, including recommended resolution of major PAC issues		Monthly coordination meetings.
2.1	Draft and final implementation plans.		Draft implementation plan June 30, 2010; final implementation plan July 30, 2010
2.2	Plan submitted as part of implementation plan (B1); Memoranda of Understanding with relevant Community Colleges, Workforce Investment Boards, and independent training providers; multifamily curriculum; other updated curricula, as necessary; Rosters of training graduates		Draft workforce development plan June 30, 2010; final plan July 30, 2010; MOUs with strategic partners July 30, 2010; training curricula August 31, 2010; rosters of training graduates as part of monthly progress reports
2.3	Stakeholder meeting scheduled, presentation content, meeting reports. Contractor orientation workshop scheduled, presentation content, attendance rosters.		First stakeholder workshop by September 1, 2010; monthly reports of subsequent recruitment activity. First contractor

models; implement social marketing campaigns; organize promotional events; produce and distribute marketing collateral; conduct local PR campaigns.

Deliverables: PR and marketing progress reports, as part of program reporting (A4).

Due Dates: Monthly

**Operate customer website**

Program Activities: The Retrofit Bay Area will establish a consumer website with a Second and Third Tier Decision Tool and search engine-optimized program content to spur customer acquisition.

Deliverables: Website activity tracking reports, as part of program reporting (A4).

Due Dates: Monthly

**Added-value development (MLS)**

Program Activities: The Retrofit Bay Area team will establish an advisory group, consisting of program staff, leading green real estate professionals, California Association of Realtors, and a representative from California Energy Commission's HERS 2 MLS initiative. Working through the advisory group, the Retrofit Bay Area team will develop the following content: four-hour orientation course to introduce real estate professionals to green building and the program; 16-hour training course for real estate professionals; consumer education tools. Retrofit Bay Area team will deliver training events for real estate professionals and engage with the local Associations of Realtors to get GreenPoint Rated and HERS verification results incorporated into the Multiple Listing Services.

Deliverables: Real estate training curricula, documentation of MLS listings as part of program reporting (A4).

Due Dates: Monthly

**Deliverables and Due Dates**

Task	Deliverable	Due Date
1.1A	Updated schedule of deliverables and updated Gantt chart, updated list of leverage funds, and a schedule for recruiting Program Advisory Committee (PAC) members	To be specified by Commission Contract Manager.
1.1B	Prepare and submit invoices for contract expenses.	Monthly
1.1C	Updated schedule of deliverables and updated Gantt chart, updated list of leverage funds, and a schedule for recruiting Program Advisory Committee (PAC) members	To be specified by Commission Contract Manager.
1.1D	Monthly progress reports, monthly submittal of electronic data to ARRA SEP tracking and reporting entities	Monthly
1.1D	CPR Reports, CPR deliverables identified in the Scope of Work	July 9, 2010 for first meeting, second meeting to

**Attachment 21: Budget (see attachment)**

		orientation workshop by September 1, 2010; monthly reports of subsequent recruitment activity
2.4	Retrofit installations. Qualified Participating Contractor List, with quarterly updates; monthly reports of retrofit installation activity	September 1, 2010
2.5	Reports of quality assurance activities and outcomes	Monthly
2.6	Minimum energy efficiency thresholds, project reporting procedures, verification protocols, submitted as part of implementation plan (B1); Energy Commission real-time access to web-based tracking system; monthly reports of energy savings and carbon reductions as part of program reporting (A4)	In Implementation Plan (Task 2.1), and Monthly Progress Reports (Task 1.1D)
2.7	Marketing plan, PR and marketing progress reports, as part of program reporting; Website tracking reports. Real estate training curricula; documentation of MLS listing.	Draft Marketing plan June 30, 2010; final July 30, 2010. Monthly progress reports, website tracking reports and MLS listings.

**Attachment 5: References**

RFP 400-09-403

**CLIENT REFERENCES**

STATE OF CALIFORNIA  
 CLIENT REFERENCES  
 CALIFORNIA ENERGY COMMISSION CONTRACTS OFFICE  
 ATTACHMENT 5

**CLIENT REFERENCES**

For the prime contractor and each subcontractor, provide a minimum of 3 references who can independently assess that prime's or subcontractor's effectiveness in previously delivering similar programs or responsibilities.

**Association of Bay Area Governments**

Reference 1

Name of Organization	Pacific Gas & Electric Company (PG&E)
Address	77 Beale St., San Francisco, CA 94105
Contact Name	Jenna Olsen
Contact Title	Senior Manager
Contact Phone Number	415-973-1477
Describe the services and products your firm provided to the organization.	Program implementation and administration for the 2006-08 ABAG Energy Watch program. This program provided energy efficiency assistance to local governments in the nine-county ABAG service territory.

Reference 2

Name of Organization	State Water Resources Control Board (SWRCB)
Address	1001 I Street, 16th Floor, Sacramento, CA 95814
Contact Name	Kari Holmes
Contact Title	Water Resources Control Engineer
Contact Phone Number	916-341-5636
Describe the services and products your firm provided to the organization.	ABAG is the sub recipient for many of SWRCB's state and federally funded grants. Recently, SWRCB awarded ABAG grants funded by ARRA stimulus money. Funds are used to support ABAG's San Francisco Estuary Program.

Reference 3

Name of Organization	Metropolitan Transportation Commission (MTC)
Address	101 8th Street, Oakland, CA 94607
Contact Name	Doug Johnson
Contact Title	Planning Manager
Contact Phone Number	510-817-5846
Describe the services and products your firm provided to the organization.	ABAG receives various grants from MTC. The funds are used to develop regional projections associated with demographics, population, employment, and land use. ABAG also performs analysis of the regional impacts in connection with corridor, regional transportation plan or related planning efforts.

**StopWaste.Org (Alameda County Waste Management Authority)**

Reference 1

Name of Organization	Energy Foundation
Address	San Francisco
Contact Name	John Wilson
Contact Title	Buildings Program Director
Contact Phone Number	415-561-6700 office
Describe the services and products your firm provided to the organization.	Existing Multifamily Building Project

Reference 2

Name of Organization	EPA Region IX
Address	San Francisco, CA
Contact Name	Leif Magnussen
Contact Title	Residential Green Building Coordinator
Contact Phone Number	(415) 972-3286
Describe the services and products your firm provided to the organization.	Energy Star and IAP High-Rise Multifamily Pilot

Reference 3

Name of Organization	California Air Resources Board
Address	Sacramento, CA
Contact Name	Dana Papke
Contact Title	Climate Action and Research Planning
Contact Phone Number	(916) 324-9615
Describe the services and products your firm provided to the organization.	Provided data on GHG quantification of buildings for Scoping Plan; collaboration on GreenPoint Rated Climate Calculator Version II

Contra Costa County

Reference 1

Name of Organization	City of Antioch
Address	P.O. Box 5007 Antioch, CA 94531-5007
Contact Name	Janet Kennedy
Contact Title	Housing Coordinator
Contact Phone Number	(925) 779-7013
Describe the previously delivered similar programs or responsibilities.	Neighborhood Preservation Program (NPP) offering loan assistance to income qualified households for the purpose of funding improvements that make homes safer and/or conserve energy.

Reference 2

Name of Organization	City of Richmond
Address	450 Civic Center Plaza, Richmond, CA 94804
Contact Name	Jenny Oorbeck
Contact Title	Environmental Manager
Contact Phone Number	(510) 412-2096
Describe the previously delivered similar programs or responsibilities.	Weatherization Assistance Program (WAP) offering fully subsidized improvements/repairs to income qualified households for the purpose of making their homes more energy efficient.

Reference 3

Name of Organization	City of Walnut Creek
Address	1666 North Main Street, Walnut Creek, CA 94596
Contact Name	Renee Zeimer
Contact Title	Assistant to the City Manager
Contact Phone Number	(925) 256-3503
Describe the previously delivered similar programs or responsibilities.	Neighborhood Preservation Program (NPP) & Weatherization Assistance Program (WAP)

Marin County

Reference 1

Name of Organization	City of Mill Valley
Address	26 Corte Madera Avenue Mill Valley, CA 94941
Contact Name	Carol Misseldine
Contact Title	Sustainability Director
Contact Phone Number	415-368-5273
Describe the services and products your firm provided to the organization.	Through efforts of Marin Energy Management Team (a project of the Marin Energy Watch Partnership) assisted City with energy audit of municipal facilities and completion of application for EECBG funds.

Reference 2

Name of Organization	City of Novato
Address	75 Rowland Way, #200 Novato, CA 94945
Contact Name	Gosia Woodfin
Contact Title	Engineer
Contact Phone Number	415-899-8997
Describe the services and products your firm provided to the organization.	The Marin Energy Management Team and the Marin Solar Program assisted City staff with energy efficiency audits and retrofits, solar potential studies and applications for Clean Renewable Energy Bonds for solar projects.

Reference 3

Name of Organization	Community Energy Services Corporation
Address	1013 Pardee Street, Suite 201 Berkeley, CA 94710
Contact Name	Kim Malcoff
Contact Title	Director
Contact Phone Number	510-981-7765
Describe the services and products your firm provided to the organization.	County of Marin manages contract with CESC for commercial energy services provided as part of Marin Energy Watch Partnership. The County has also worked with CESC on Green LEAP proposal.

**San Francisco City and County**

<b>Reference 1</b>	
Name of Organization	California Public Utilities Commission
Address	ztc@cpuc.ca.gov
Contact Name	Zenaide Tapawan-Conway
Contact Title	Program and Project Supervisor
Contact Phone Number	415-703-2824
Describe the services and products your firm provided to the organization.	
Retrofit lighting systems in 4,069 small businesses in San Francisco, 2001-02. 3 <sup>rd</sup> party EM&V proved success.	

<b>Reference 2</b>	
Name of Organization	PG&E
Address	pxcz@pge.com
Contact Name	Paul Carp
Contact Title	Senior Project Manager
Contact Phone Number	415-973-7254
Describe the services and products your firm provided to the organization.	
Deliver 44 million kWh savings in commercial and multi-family building in San Francisco, 2006-08	

<b>Reference 3</b>	
Name of Organization	U.S. Department of Energy, Sentech
Address	pkappaz@sentech.org
Contact Name	Patty Kappaz
Contact Title	Project Manager
Contact Phone Number	301-807-4929
Describe the services and products your firm provided to the organization.	
Solar America Cities Initiative. Developed models for residential and commercial solar marketing, training, permit streamlining, etc.	

**San Mateo County**

<b>Reference 1</b>	
Name of Organization	City/County Association of Governments
Address	555 County Center Fifth Floor Redwood City, California 94063
Contact Name	Richard Napier
Contact Title	Executive Director

Contact Phone Number	(650) 599-1420
Describe the previously delivered similar programs or responsibilities.	
Through a contract with C/CAG, County staff developed a countywide energy strategy that has been adopted by all 20 City Councils and the County Board of Supervisors. Deliverables included a comprehensive report and outreach to all 20 city councils and our Board.	

<b>Reference 2</b>	
Name of Organization	PG&E
Address	Pacific Gas and Electric Company PO Box 770000 MC N6G/415-973-6053 San Francisco, CA 94177
Contact Name	Manvin Nushwat
Contact Title	Program Manager
Contact Phone Number	415-973-6053
Describe the previously delivered similar programs or responsibilities.	
PG&E is a funding partner for the San Mateo County (SMC) Energy Watch program, which is a partnership between the City/County Association of Governments of San Mateo County (C/CAG), the County of San Mateo, and PG&E. SMC Energy Watch delivers a comprehensive portfolio of energy-efficiency services, including audits, retrofits and rebates to municipalities, small businesses, non-profits and residential customers. SMC Energy Watch also offers energy-efficiency education and training seminars, as well as support for countywide climate action efforts.	

<b>Reference 3</b>	
Name of Organization	Ecology Action
Address	P.O. Bpx 1188, Santa Cruz, CA 95061-1188
Contact Name	Mahlon Aldridge
Contact Title	Vice President, Strategic Development
Contact Phone Number	(831) 426-5925 ext. 116
Describe the previously delivered similar programs or responsibilities.	
San Mateo County works with Ecology Action on the Direct Install component of the San Mateo County Energy Watch program. Direct install provides lighting and other retrofit measures for municipal buildings throughout the County.	

**Santa Clara County**

Reference 1

Name of Organization	CORE Development
Address	470 South Market Street San Jose, CA 95110
Contact Name	David Neal
Contact Title	President
Contact Phone Number	408-292-7841
Describe the previously delivered similar programs or responsibilities.	County Office of Affordable Housing provided loans to CORE Development and Charities Housing for construction of affordable housing units.

Reference 2

Name of Organization	Charities Housing Development Corporation
Address	465 South First Street San Jose, CA 95110
Contact Name	Dan Wu
Contact Title	CEO
Contact Phone Number	408-282-1138
Describe the previously delivered similar programs or responsibilities.	County Office of Affordable Housing provided loans to CORE Development and Charities Housing for construction of affordable housing units.

Reference 3

Name of Organization	Mid-Peninsula Housing Coalition
Address	303 Vintage Park Drive, Suite 250 Foster City, CA 94404
Contact Name	Matthew Franklin
Contact Title	CEO
Contact Phone Number	650-356-2900
Describe the previously delivered similar programs or responsibilities.	County Office of Affordable Housing provided loans to Mid-Peninsula Housing Coalition for construction of affordable housing units.

**Solano County**

Reference 1

Name of Organization	Honeywell Building Solutions
Address	1740 Creekside Oaks Drive, Suite 150, Sacramento, CA 95833
Contact Name	Michael Manley
Contact Title	Energy Services Account Executive
Contact Phone Number	(916) 923-7839

Describe the previously delivered similar programs or responsibilities.	Power Purchase Agreement for Renewable Energy generated from 746 KW solar Facility.
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Reference 2

Name of Organization	Aircon Energy
Address	4234 North Freeway Blvd, Suite 100
Contact Name	Jeff Wagner
Contact Title	Executive Vice President / Principal
Contact Phone Number	(916)922-2004
Describe the previously delivered similar programs or responsibilities.	Energy Conservation Improvements in County Facility, including lighting retrofits, boiler replacement, Variable Frequency Drives.

Reference 3

Name of Organization	Chevron Energy Solutions L.P.
Address	345 California Street, 32 <sup>nd</sup> Floor, San Francisco, CA, 94104
Contact Name	Alviri Thoma
Contact Title	Director, Project Management
Contact Phone Number	(415)733-4684
Describe the previously delivered similar programs or responsibilities.	Energy conservation improvements including Cogeneration Plant Expansion, Lighting Retrofits, Chiller Replacement and Electronic Digital Controls upgrades.

**Sonoma County Transportation Authority**

Reference 1

Name of Organization	City of Santa Rosa, California
Address	55 Stony Point Road, Santa Rosa, CA 95401
Contact Name	Dell Tredinick
Contact Title	Project Development Manager,
Contact Phone Number	707 543-4545
Describe the services and products your firm provided to the organization.	Regional coordination for countywide retrofit/renewables program; grant opportunities/preparation support for building retrofit program/projects

**Attachment 24: Letters of Support (see attachment)**

Retrofit Bay Area Residential Building Retrofit Program

**Reference 2**

Name of Organization	City of Rohnert Park, California
Address	130 Avram Avenue, Rohnert Park, CA 94928
Contact Name	John McArthur
Contact Title	Utilities/General Services Director
Contact Phone Number	707 588-3300
Describe the services and products your firm provided to the organization.	Regional coordination for countywide retrofit/renewables program; grant opportunities/preparation support for building retrofit program/projects

**Reference 3**

Name of Organization	City of Petaluma
Address	11 English Street, Petaluma, CA 94952
Contact Name	Diane Ramirez
Contact Title	Public Works Project Manager
Contact Phone Number	707 776-3658
Describe the services and products your firm provided to the organization.	Regional coordination for countywide retrofit/renewables program; grant opportunities/preparation support for building retrofit program/projects



## CALIFORNIA ENERGY COMMISSION

1516 NINTH STREET  
SACRAMENTO, CA 95814-5512

**NOTICE OF PROPOSED AWARD**  
California Comprehensive Residential Retrofit Program  
RFP # 400-09-403

## Proposed Contractors:

SMUD

Association of Bay Area Governments

Regional Council of Rural Counties (CRHMFA Homebuyers Fund)

The San Francisco Mayor's Office of Housing

## Total Amount of Proposed Contracts:

\$50,212,451

## Final Scores and Rankings

Company	Final Score	Ranking	ARRA Funds Requested
SMUD	316.67	1	\$ 19,969,421.00
Association of Bay Area Governments	297.00	2	\$ 10,750,000.00
Regional Council of Rural Counties (CRHMFA Homebuyers Fund)	293.67	3	\$ 16,500,001.00
The San Francisco Mayor's Office of Housing	290.00	4	\$ 2,993,029.00

County of Los Angeles	266.00	*	\$ 12,890,000.00
San Diego Association of Governments (SANDAG)	259.00	*	\$ 5,944,839.00
San Joaquin Valley Unified Air Pollution Control District	232.00	*	\$ 4,994,474.00
Association of Monterey Bay Area Governments	213.33	*	\$ 4,175,582.00
NoRTEC	201.33	*	\$ 8,669,473.00
Greener Dawn, Inc.	201.33	*	\$ 7,982,379.00
Western Riverside Council of Governments (WRCOG)	188.67	*	\$ 20,000,000.00
Roseville Electric, City of Roseville	172.33	*	\$ 2,355,000.00

City of West Hollywood	172.00	*	\$ 3,014,784.00
City of Visalia	169.33	*	\$ 5,999,820.00
Amador-Tuolumne Community Action Agency (A-TCAA)	168.33	*	\$ 2,394,577.00
City of Vacaville	151.67	*	\$ 5,200,000.00
Syzygy Technologies, Inc.	120.67	*	\$ 20,000,000.00
Solar Sense, Inc.	13.33	*	\$ 2,000,000.00
n/a - CTG Energetics (Proposal was submitted for -402)	0.00		
* Did not meet the Minimum Technical Score of 280 points.			

Questions should be directed to: Angela Hockaday, Contract Officer  
California Energy Commission  
1516 Ninth Street, MS-18  
Sacramento, CA 95814  
(916) 654-5186

Dated: February 10, 2010  
Expires: February 22, 2010

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*Legislative Checklist to be submitted with all supporting materials for items scheduled on a Committee Consent Calendar*

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Board of Supervisors File Number: \_\_\_\_\_

Department: Environment

Department Contact: Shawn Rosenmoss

Contact Phone Number: 415-355-3746

Type of Legislation on Consent Calendar:

- amendments to the City Code that have no fiscal impact and have not been subjected to the 30-day rule provided in Rule 5.41 (which governs amendments to the City Code that have been determined by the President to create or revise major City policy);
- specific authorizations to sell bonds;
- the refunding of bonds when done only to achieve lower interest rates and cost savings for the City;
- authorizations for the acceptance of gifts;
- ◆ authorizations for the acceptance and expenditure of grant funds;
- authorizations for renewing property leases, with no significant changes in the terms of the lease (the implementation of COLAs is not considered a significant change in the terms of a lease);
- supplemental appropriations that only involve non-General Fund monies or re-appropriate funds that have been previously appropriated by the Board of Supervisors;
- releases of reserves under \$500,000;
- other items that the Committee Chair and the Budget Analyst agree do not require a Budget Analyst's review and report.

**Description:** Resolution authorizing the Department of the Environment to accept a grant in the amount of \$875,957.00 from the California Energy Commission's State Energy Program through the Association of Bay Area Governments (ABAG) for the deployment of energy efficiency projects in the City and County of San Francisco. San Francisco partnered with the Association of Bay Area Governments (ABAG), seven other Bay Area counties and a total of 104 local governments in the San Francisco Bay Area to propose Retrofit Bay Area – a region-wide energy efficiency program that will retrofit 17,000 homes (single family and multifamily) to achieve reduction in home energy consumption, while creating 1,739 home energy retrofit jobs. The project will establish the infrastructure for a market-driven residential retrofit program which will stimulate the economy and create jobs while transforming energy markets in California. *Funding was awarded by the CEC on February 10, 2010, and all participating counties must provide an authorizing acceptance resolution with in 30 days of the award.*

**Presentation of Budgetary Information to Board Committees in Conformance with Budget Analyst Reference Guide**

- ✓ Summary budget information included
- ✓ Position Detail Information (included in budget)
- Equipment Detail Information
- Capital/Facilities Improvement Project Information
- ✓ Consultant/Contractor Expenditures and Selection Processes
- Written explanation and justification for budget request.

**Information provided in Conformance with Budget Analyst Reference Guide for the following:**

- Amendments to City Code (Administrative Code, Municipal Code, Health Code, etc.)
- Issuance of Debt (i.e., Bonds)
- Gifts to the City
- ✓ Grants (authorization to apply for, accept and expend)
- Property Leases – City as Lessor
- Property Leases – City as Lessee
- "Proposition J" Contracts (City contractors under Charter Section 10.104)
- Releases of Reserves
- Supplemental Appropriations
- Memoranda of Understanding (MOU) and other Agreements

Other Information Provided:

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30. If there is a significant delay in seeking Board of Supervisor approval from the time the grant period began, state how the proposed project would be completed in the remaining period of time available and/or if the Department has asked for or received an extension of the grant period. NA

31. If the grant is a multi-year grant, state the amount of the grant in future years and if future years would be included in the Department's budget. Include a proposed multiyear budget. The grant is for \$875,957.00 over two years, which will be spread equally over both years.

32. Indicate whether or not matching funds are required from the City, and if so, in what amount and the source of such matching funds. Leveraged funds were required. The Department of the Environment is providing a match of \$348,000 through grant funding from the Frank Foundation and the Living Cities Initiative.

33. If matching funds are not required but the Department is providing in-kind contributions for the grant, the Department should clearly state how you are proposing to provide in-kind contributions. Also state whether these in-kind contributions are new services to supplement the grant or existing services. NA

34. Provide a detailed budget by object including personnel detail, equipment detail and details on services/consultants/contractors. Each line item in the budget should be explained. See attached

35. The number of full time equivalent positions (FTE), the Job Title, Classification, and percentage of fringe benefits should be clearly stated in the budget of the grant. In most cases, any position funded under a grant should be "G" coded, or designated as a grant funded position that would terminate when the grant expires. The resolution should state that the position(s) should be "G" coded. See attached budget.

36. If a portion of the grant funds would be spent on contractual services, the Department needs to clarify how those contracts were awarded, whether a sole-source or an RFP process. If a contract is proposed to be awarded on a sole source basis, the Department needs to clearly explain why the Department chose the contractor. The Department should provide a detailed budget for the contractual services, including the number of hours dedicated to the project and the hourly rate if applicable. SFE will secure subcontractors for this project using the standard RFP process.

37. If a Department plans on work-ordering grant funds to another Department, the Department should note what Department would receive the work-order and what services will be provided for the work ordered funds. NA

38. Indicate if indirect costs were included in the budget. If indirect costs are included, state how the indirect cost rate was determined. If indirect costs were not included, indicate why. The grant includes \$82,501 for indirect costs at 10%, as allowed by the funding source.

39. If travel is included in the budget, the Department should detail how many people are traveling, their identities (i.e. City employees or consultants), where they are going and for how long. Staff may expend a small amount of funding to travel to regional meetings, depending on the requirements of the funding entity

40. All grant reports must include a form entitled the "Grant Application Information Form" with a Disability Access Checklist at the end.

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## Budget Analyst Reference Guide Questions

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**23. Describe the source of funds.** These funds are part of the ARRA and have come from the California Energy Commission's State Energy Program through the project lead, the Association of Bay Area Governments.

**24. Describe the grant-funded project clearly, concisely and in layman's terms.**

In late 2009, the California Energy Commission's (CEC) State Energy Program (SEP) released \$95 million for energy projects in California. Funds were from ARRA and provided an unprecedented opportunity to develop and implement a regional community-scale building retrofit program. San Francisco partnered with the Association of Bay Area Governments (ABAG), other Bay Area counties and a total of 104 local governments in the San Francisco Bay Area to propose Retrofit Bay Area – a region-wide energy efficiency program that will retrofit 17,000 homes (single family and multifamily) to achieve reduction in home energy consumption, while creating 1,739 home energy retrofit jobs. The project will establish the infrastructure for a market-driven residential retrofit program will stimulate the economy and create jobs while transforming energy markets in California. Designed for scalability and transferability this program will create a model that can be replicated statewide and nationally.

ABAG applied for a \$10.75 million grant to fund Retrofit Bay Area, which includes regional program development, local program development and implementation, evaluation, measurement and implementation and administration and reporting. Project funds are being allocated based on population for each county-specific program with the City and County of San Francisco receiving \$875,957.00. **CEC funds were awarded on February 10, 2010 and all participating counties have a mere 30 days to complete a resolution authorizing acceptance of funding, approved by the city's/county's Governing Authority.**

**25. Provide context and detail to the grant so that the proposed project can be compared to current operations.**

The Department of the Environment has operated energy efficiency and retrofit programs serving small businesses for more than 8 years. In addition, it currently serves small multi-unit buildings as well. This funding, along with other ARRA funds coming to the City through the Department of Energy's Energy Efficiency and Conservation Block Grant funds supports and expands the number of residents and businesses that can be served. These funds will be released by ABAG to City and County of San Francisco as a program implementer.

San Francisco is seriously committed to energy security and reducing its carbon emissions in order to meet the goals of the City's Climate Action plan, as well as develop local sources of energy. The City's Climate Action Plan calls for reducing the city's CO<sup>2</sup> emissions through the development of renewable energy sources. These funds will support the City's commitment to stimulating the economy, creating and retaining jobs, reducing total energy usage and improving energy efficiency.

**26. Identify any ongoing costs for the Department once the grant funds expire, such as new personnel, new equipment, new leases, etc and how the Department would fund such future costs.** There will be no ongoing costs to the Department once grant funds expire.

**27. If the grant period has begun before the Department has been given Board of Supervisor approval, the Department should state why it is late in seeking approval and the resolution must provide for retroactivity.** NA—the project will not begin without board approval.

**28. State if the Department has accepted the grant or encumbered any expenses that the grant funds would reimburse the City. The Department should state why they have either accepted and/or began expending the grant funds before receiving approval.** NA

**29. If grant funds have been expended or encumbered, state the amount of funds that have been expended or encumbered and for what purpose.** NA