

Application for Federal Assistance SF-424		Version 02
* 1. Type of Submission: <input type="checkbox"/> Preapplication <input checked="" type="checkbox"/> Application <input type="checkbox"/> Changed/Corrected Application		* 2. Type of Application: <input checked="" type="checkbox"/> New <input type="checkbox"/> Continuation <input type="checkbox"/> Revision
* 3. Date Received: 12/14/2009		* If Revision, select appropriate letter(s): <input type="text"/> * Other (Specify): <input type="text"/>
4. Applicant Identifier: <input type="text"/>		
5a. Federal Entity Identifier: <input type="text"/>		* 5b. Federal Award Identifier: <input type="text"/>
State Use Only:		
6. Date Received by State: <input type="text"/>		7. State Application Identifier: <input type="text"/>
8. APPLICANT INFORMATION:		
* a. Legal Name: <input type="text" value="County of Los Angeles"/>		
* b. Employer/Taxpayer Identification Number (EIN/TIN): <input type="text" value="956000927"/>		* c. Organizational DUNS: <input type="text" value="017621702"/>
d. Address:		
* Street1: <input type="text" value="1100 N. Eastern Avenue, Room 300"/>		
Street2: <input type="text"/>		
* City: <input type="text" value="Los Angeles"/>		
County: <input type="text"/>		
* State: <input type="text" value="CA: California"/>		
Province: <input type="text"/>		
* Country: <input type="text" value="USA: UNITED STATES"/>		
* Zip / Postal Code: <input type="text" value="90063"/>		
e. Organizational Unit:		
Department Name: <input type="text" value="Internal Services Department"/>		Division Name: <input type="text"/>
f. Name and contact information of person to be contacted on matters involving this application:		
Prefix: <input type="text"/>	* First Name: <input type="text" value="Howard"/>	
Middle Name: <input type="text"/>		
* Last Name: <input type="text" value="Choy"/>		
Suffix: <input type="text"/>		
Title: <input type="text" value="Energy Division Manager"/>		
Organizational Affiliation: <input type="text"/>		
* Telephone Number: <input type="text" value="(323)267-2006"/>		Fax Number: <input type="text"/>
* Email: <input type="text" value="HChoy@isd.lacounty.gov"/>		

Application for Federal Assistance SF-424

Version 02

9. Type of Applicant 1: Select Applicant Type:

B: County Government

Type of Applicant 2: Select Applicant Type:

Type of Applicant 3: Select Applicant Type:

* Other (specify):

*** 10. Name of Federal Agency:**

Environmental Management Consolidated Business Cen

11. Catalog of Federal Domestic Assistance Number:

81.128

CFDA Title:

Energy Efficiency & Conservation Block Grant Program

*** 12. Funding Opportunity Number:**

DE-FOA-0000148

* Title:

Recovery Act: Energy Efficiency and Conservation Block Grants: Competitive Solicitation: Retrofit Ramp-up and General Innovation Fund Programs

13. Competition Identification Number:

Title:

14. Areas Affected by Project (Cities, Counties, States, etc.):

The California counties of Alameda, Contra Costa, El Dorado, Los Angeles, Marin, Napa, Placer, Sacramento, San Diego, San Francisco, San Mateo, Santa Clara, Solano, Sonoma, Sutter, Yolo, Yuba

*** 15. Descriptive Title of Applicant's Project:**

Retrofit California

Attach supporting documents as specified in agency instructions.

Add Attachments

Delete Attachments

View Attachments

Application for Federal Assistance SF-424

Version 02

16. Congressional Districts Of:

* a. Applicant CA-032

* b. Program/Project CA-032

Attach an additional list of Program/Project Congressional Districts if needed.

LA County congressional dist

Add Attachment

Delete Attachment

View Attachment

17. Proposed Project:

* a. Start Date: 07/01/2010

* b. End Date: 06/30/2013

18. Estimated Funding (\$):

* a. Federal	74,982,395.00
* b. Applicant	0.00
* c. State	0.00
* d. Local	0.00
* e. Other	0.00
* f. Program Income	0.00
* g. TOTAL	74,982,395.00

* 19. Is Application Subject to Review By State Under Executive Order 12372 Process?

- a. This application was made available to the State under the Executive Order 12372 Process for review on .
- b. Program is subject to E.O. 12372 but has not been selected by the State for review.
- c. Program is not covered by E.O. 12372.

* 20. Is the Applicant Delinquent On Any Federal Debt? (If "Yes", provide explanation.)

Yes No

21. *By signing this application, I certify (1) to the statements contained in the list of certifications** and (2) that the statements herein are true, complete and accurate to the best of my knowledge. I also provide the required assurances** and agree to comply with any resulting terms if I accept an award. I am aware that any false, fictitious, or fraudulent statements or claims may subject me to criminal, civil, or administrative penalties. (U.S. Code, Title 218, Section 1001)

 ** I AGREE

** The list of certifications and assurances, or an internet site where you may obtain this list, is contained in the announcement or agency specific instructions.

Authorized Representative:

Prefix: * First Name: HowardMiddle Name:

* Last Name: Choy

Suffix:

* Title: Energy Division Manager

* Telephone Number: (323) 267-2006 Fax Number:

* Email: HChoy@isd.lacounty.gov

* Signature of Authorized Representative: Bruce Mast * Date Signed: 12/14/2009

Application for Federal Assistance SF-424

Version 02

*** Applicant Federal Debt Delinquency Explanation**

The following field should contain an explanation if the Applicant organization is delinquent on any Federal Debt. Maximum number of characters that can be entered is 4,000. Try and avoid extra spaces and carriage returns to maximize the availability of space.

Project/Performance Site Location(s)

Project/Performance Site Primary Location I am submitting an application as an individual, and not on behalf of a company, state, local or tribal government, academia, or other type of organization.

Organization Name:

DUNS Number:

* Street1:

Street2:

* City: County:

* State:

Province:

* Country:

* ZIP / Postal Code: * Project/ Performance Site Congressional District:

Project/Performance Site Location 1 I am submitting an application as an individual, and not on behalf of a company, state, local or tribal government, academia, or other type of organization.

Organization Name:

DUNS Number:

* Street1:

Street2:

* City: County:

* State:

Province:

* Country:

* ZIP / Postal Code: * Project/ Performance Site Congressional District:

Project/Performance Site Location 2 I am submitting an application as an individual, and not on behalf of a company, state, local or tribal government, academia, or other type of organization.

Organization Name:

DUNS Number:

* Street1:

Street2:

* City: County:

* State:

Province:

* Country:

* ZIP / Postal Code: * Project/ Performance Site Congressional District:

Project/Performance Site Location(s)

Project/Performance Site Location 3

I am submitting an application as an individual, and not on behalf of a company, state, local or tribal government, academia, or other type of organization.

Organization Name: Sacramento Municipal Utility District

DUNS Number: 0092353420000

* Street1: 6201 S Street

Street2:

* City: Sacramento County:

* State: CA: California

Province:

* Country: USA: UNITED STATES

* ZIP / Postal Code: 95817-1899 * Project/ Performance Site Congressional District: CA-005

Budget Information - Non Construction Programs

Section A - Budget Summary				
Grant Program Function or Activity (a)	Catalog of Federal Domestic Assistance Number (b)	Estimated Unobligated Funds		
		Federal (c)	Non-Federal (d)	Federal (e)
1.				\$10,123,668
2.				
3.				
4.				
5. Totals		\$0	\$0	\$10,123,668

Section B - Budget Categories			
6. Object Class Categories	Grant Program, Function or Activity		
	(1)	(2)	(3)
a. Personnel	\$807,039		
b. Fringe Benefits	\$330,887		
c. Travel	\$20,880		
d. Equipment			
e. Supplies	\$398,250		
f. Contractual	\$3,351,066		
g. Construction			
h. Other	\$4,089,000		
i. Total Direct Charges (sum of 6a-6h)	\$8,997,122	\$0	\$0
j. Indirect Charges	\$1,126,547		
k. Totals (sum of 6i-6j)	\$10,123,668	\$0	\$0
7. Program Income			

Previous Edition Usable

Authorized for Local Reproduction

Section C - Non-Federal Resources		
(a) Grant Program	(b) Applicant	(c) State
8.		
9.		
10.		
11.		

12. Total (sum of lines 8 - 11)		\$0	\$0
Section D - Forecasted Cash Needs			
	Total for 1st Year	1st Quarter	2nd Quarter
13. Federal	\$0		
14. Non-Federal	\$0		
15. Total (sum of lines 13 and 14)	\$0	\$0	\$0
Section E - Budget Estimates of Federal Funds Needed for Balance of the Project			
		Future Fur	
(a) Grant Program		(b) First	(c) Second
16.			
17.			
18.			
19.			
20. Total (sum of lines 16-19)			
Section F - Other Budget Information			
21. Direct Charges	22. Indirect Charges		
23. Remarks			

Previous Edition Usable

Authorized for Local Reproduction

Instructions for the SF-424A

Public Reporting Burden for this collection of information is estimated to average 3.0 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Please do not return your completed form to the Office of Management and Budget; send it to the address provided by the sponsoring agency.

General Instructions

This form is designed so that application can be made for funds from one or more grant programs. In preparing the budget, adhere to any existing Federal grantor agency guidelines which prescribe how and whether budgeted amounts should be separately shown for different functions or activities within the program. For some programs, grantor agencies may require budgets to be separately shown by function or activity. For other programs, grantor agencies may require a breakdown by function or activity. Sections A, B, C, and D should include budget estimates for the whole project except when applying for assistance which requires Federal authorization in annual or other funding period increments. In the later case, Sections A, B, C, and D should provide the budget for the first budget period (usually a year) and Section E should present the need for Federal assistance in the subsequent budget periods. All applications should contain a breakdown by the object class categories shown in Lines a-k of Section B.

Section A. Budget Summary Lines 1-4 Columns (a) and (b)

For applications pertaining to a single Federal grant program (Federal Domestic Assistance Catalog number) and not requiring a functional or activity breakdown, enter on Line 1 under Column (a) the catalog program title and the catalog number in Column (b).

For applications pertaining to a single program requiring budget amounts by

For continuing grant program applications, submit these forms before the end of each funding period as required by the grantor agency. Enter in Columns (c) and (d) the estimated amounts of funds which will remain unobligated at the end of the grant funding period only if the Federal grantor agency instructions provide for this. Otherwise, leave these columns blank. Enter in columns (e) and (f) the amounts of funds needed for the upcoming period. The amount(s) in Column (g) should be the sum of amounts in Columns (e) and (f).

For supplemental grants and changes to existing grants, do not use Columns (c) and (d). Enter in Column (e) the amount of the increase or decrease of Federal funds and enter in Column (f) the amount of the increase or decrease of non-Federal funds. In Column (g) enter the new total budgeted amount (Federal and non-Federal) which includes the total previous authorized budgeted amounts plus or minus, as appropriate, the amounts shown in Columns (e) and (f). The amount(s) in Column (g) should not equal the sum of amounts in Columns (e) and (f).

Line 5—Show the totals for all columns used.

Section B. Budget Categories

In the column headings (a) through (4), enter the titles of the same programs, functions, and activities shown on Lines 1-4, Column (a), Section A. When

multiple functions or activities, enter the name of each activity or function on each line in Column (a), and enter the catalog number in Column (b). For applications pertaining to multiple programs where none of the programs require a breakdown by function or activity, enter the catalog program title on each line in Column (a) and the respective catalog number on each line in Column (b).

For applications pertaining to **multiple** programs where one or more programs require a breakdown by function or activity, prepare a separate sheet for each program requiring the breakdown. Additional sheets should be used when one form does not provide adequate space for all breakdown of data required. However, when more than one sheet is used, the first page should provide the summary totals by programs.

Lines 1-4, Columns (c) through (g)

For new applications, leave Columns (c) and (d) blank. For each line entry in Columns (a) and (b), enter in Columns (e), (f), and (g) the appropriate amounts of funds needed to support the project for the first funding period (usually a year).

additional sheets are prepared for Section A, provide similar column headings on each sheet. For each program, function or activity, fill in the total requirements for funds (both Federal and non-Federal) by object class categories.

Lines 6a-i—Show the totals of Lines 6a to 6h in each column.

Line 6j—Show the amount of indirect cost.

Line 6k—Enter the total of amounts on Lines 6i and 6j. For all applications for new grants and continuation grants the total amount in column (5), Line 6k, should be the same as the total amount shown in Section A, Column (g), Line 5. For supplemental grants and changes to grants, the total amount of the increase or decrease as shown in Columns (1)-(4), Line 6k should be the same as the sum of the amounts in Section A, Columns (e) and (f) on Line 5.

Line 7—Enter the estimated amount of income, if any, expected to be generated from this project. Do not add or subtract this amount from the total project amount. Show under the program narrative statement the nature and source of income. The estimated amount of program income may be considered by the federal grantor agency in determining the total amount of the grant.

Section C. Non-Federal Resources

Lines 8-11—Enter amounts of non-Federal resources that will be used on the grant. If in-kind contributions are included, provide a brief explanation on a separate sheet.

Column (a)—Enter the program titles identical to Column (a), Section A. A breakdown by function or activity is not necessary.

Column (b)—Enter the contribution to be made by the applicant.

Column (c)—Enter the amount of the State's cash and in-kind contribution if the applicant is not a State or State agency. Applicants which are a State or State agencies should leave this column blank.

Column (d)—Enter the amount of cash and in-kind contributions to be made from all other sources.

Column (e)—Enter totals of Columns (b), (c), and (d).

Line 12—Enter the total for each of Columns (b)-(e). The amount in Column (e) should be equal to the amount on Line 5, Column (f) Section A.

Section D. Forecasted Cash Needs

Line 13—Enter the amount of cash needed by quarter from the grantor agency during the first year.

Line 14—Enter the amount of cash from all other sources needed by quarter during the first year.

Line 15—Enter the totals of amounts on Lines 13 and 14.

Section E. Budget Estimates of Federal Funds Needed for Balance of the Project

Lines 16-19—Enter in Column (a) the same grant program titles shown in Column (a), Section A. A breakdown by function or activity is not necessary. For new applications and continuation grant applications, enter in the proper columns amounts of Federal funds which will be needed to complete the program or project over the succeeding funding periods (usually in years). This section need not be completed for revisions (amendments, changes, or supplements) to funds for the current year of existing grants.

If more than four lines are needed to list the program titles, submit additional schedules as necessary.

Line 20—Enter the total for each of the Columns (b)-(e). When additional schedules are prepared for this Section, annotate accordingly and show the overall totals on this line.

Section F. Other Budget Information

Line 21—Use this space to explain amounts for individual direct object-class cost categories that may appear to be out of the ordinary or to explain the details as required by the Federal grantor agency.

Line 22—Enter the type of indirect rate (provisional, predetermined, final or fixed) that will be in effect during the funding period, the estimated amount of the base to which the rate is applied, and the total indirect expense.

Line 23—Provide any other explanations or comments deemed necessary.

Previous Edition Usable

Authorized for Local Reproduction

SF-424A (Rev. 4-92)
Prescribed by OMB Circular A-102

New or Revised Budget	
Non-Federal (f)	Total (g)
	\$10,123,668
	\$0
	\$0
	\$0
\$0	\$10,123,668

(4)	Total (5)
	\$807,039
	\$330,887
	\$20,880
	\$0
	\$398,250
	\$3,351,066
	\$0
	\$4,089,000
\$0	\$8,997,122
	\$1,126,547
\$0	\$10,123,668
	\$0

SF-424A (Rev. 4-92)
 Prescribed by OMB Circular A-102

(d) Other Sources	(e) Totals
	\$0
	\$0
	\$0
	\$0

Instructions and Summary

Award Number: DE-FOA-0000148
 Award Recipient: County of Los Angeles

Date of Submission: 12/14/2009
 Form submitted by: County of Los Angeles
 (May be award recipient or sub-recipient)

**Please read the instructions on each page before starting.
 If you have any questions, please ask your DOE contact. It will save you time!**

On this form, provide detailed support for the estimated project costs identified on the SF-424A form (Budget).

- The dollar amounts on this page must match the amounts on the associated SF-424A.
- The award recipient and each sub-recipient with estimated costs of \$100,000 or more must complete this form and a SF-424A form.
- The total budget presented on this form and on the SF-424A must include both Federal (DOE), and Non-Federal (cost share) portions, thereby reflecting **TOTAL PROJECT COSTS** proposed.
- For costs in each Object Class Category on the SF-424A, complete the corresponding worksheet on this form (tab at the bottom of the page).
- All costs incurred by the preparer's sub-recipients, vendors, contractors, consultants and Federal Research and Development Centers (FRDCs), should be entered only in section f. Contractual. All other sections are for the costs of the preparer only.

SUMMARY OF BUDGET CATEGORY COSTS PROPOSED

(Note: The values in this summary table are from entries made in each budget category sheet.)

CATEGORY	Budget Period 1 Costs	Budget Period 2 Costs	Budget Period 3 Costs	Total Costs	Project Costs %	Comments (Add comments as needed)
a. Personnel	\$553,677	\$532,040	\$459,712	\$1,545,429	2.1%	
b. Fringe Benefits	\$0	\$0	\$0	\$0	0.0%	
c. Travel	\$8,200	\$5,200	\$5,200	\$18,600	0.0%	
d. Equipment	\$0	\$0	\$0	\$0	0.0%	
e. Supplies	\$0	\$0	\$0	\$0	0.0%	
f. Contractual	\$12,253,114	\$15,072,241	\$11,602,112	\$38,927,467	51.9%	
Sub-recipient	\$0	\$0	\$0	\$0	0.0%	
FFRDC	\$10,116,100	\$6,815,150	\$4,863,724	\$21,794,974	29.1%	
Vendor	\$22,369,214	\$21,887,391	\$16,465,836	\$60,722,441	81.0%	
Total Contractual	\$0	\$0	\$0	\$0	0.0%	
g. Construction	\$4,231,975	\$4,231,975	\$4,231,975	\$12,695,925	16.9%	
h. Other Direct Costs	\$0	\$0	\$0	\$0	0.0%	
i. Indirect Charges	\$27,163,066	\$26,656,606	\$21,162,723	\$74,982,395	100.0%	
Total Project Costs						

Additional Explanations/Comments (as necessary)

Task # and Title	Position Title	Budget Period 1			Budget Period 2			Budget Period 3			Project Total Hours	Project Total Dollars	Rate Basis
		Time (Hours)	Pay Rate (\$/Hr)	Total Budget Period 1	Time (Hours)	Pay Rate (\$/Hr)	Total Budget Period 2	Time (Hours)	Pay Rate (\$/Hr)	Total Budget Period 3			

b. Fringe Benefits

	Budget Period 1	Budget Period 2	Budget Period 3	Total
Rate applied:				
Total fringe requested:	\$0	\$0	\$0	\$0

A federally approved fringe benefit rate agreement, or a proposed rate supported and agreed upon by DOE for estimating purposes is required if reimbursement for fringe benefits is requested. Please check (X) one of the options below and provide the requested information, if it has not already been provided to the Contracting Officer, OR if it has changed since it was. Calculate the fringe rate and enter the total amount in Section B, line 6.b. ("Fringe Benefits") of form SF-424A.

A fringe benefit rate has been negotiated with, or approved by, a federal government agency. A copy of the latest rate agreement is included with this application, and will be provided electronically to the Contracting Officer for this project.
(When this option is selected, a presentation of the budget that demonstrates the application of the approved rate, to arrive at the proposed fringes benefits dollars should also be provided.)

There is not a current, federally approved rate agreement negotiated and available.
(When this option is checked, the entity preparing this form shall submit a rate proposal in the format provided at the following website, or a format that provides the same level of information and which will support the rates being proposed for use in performance of the proposed project. Go to <https://www.eere-pmc.energy.gov/forms.aspx> and select PMC 400.2 Sample Rate Proposal.)

Additional explanation/comments (as necessary)

Purpose of travel	No. of Travelers	Depart From (not required for domestic travel)	Destination (not required for domestic travel)	No. of Days	Cost per Traveler	Cost per Trip
Budget Period 2						
Domestic Travel						
DOE project review meeting in Washington D.C.	2	Los Angeles	Wash. D.C.	3	\$1,200	\$2,400
Coordination meetings with Calif. Energy Commission and CARB	4	Los Angeles	Sacramento	2	\$700	\$2,800
						\$0
						\$0
Domestic Travel subtotal						\$5,200
International Travel						
International Travel subtotal						\$0
Budget Period 2 Total						\$5,200
Budget Period 3						
Domestic Travel						
DOE project review meeting in Washington D.C.	2	Los Angeles	Wash. D.C.	3	\$1,200	\$2,400
Coordination meetings with Calif. Energy Commission and CARB	4	Los Angeles	Sacramento	2	\$700	\$2,800
						\$0
						\$0
						\$0
						\$0
						\$0
						\$0
						\$0
						\$0
Domestic Travel subtotal						\$5,200
International Travel						
						\$0
						\$0
						\$0
						\$0
						\$0
						\$0
International Travel subtotal						\$0
Budget Period 3 Total						\$5,200
PROJECT TOTAL						\$18,600

Additional Explanations/Comments (as necessary)

Purpose of travel	No. of Travelers	Depart From (not required for domestic travel)	Destination (not required for domestic travel)	No. of Days	Cost per Traveler	Cost per Trip

Basis for Estimating Costs

f. Contractual

PLEASE READ!!!

The entity completing this form must provide all costs related to sub-recipients, vendors, contractors, consultants and FFRDC partners in the applicable boxes below.

Sub-recipients (partners, sub-awardees):

For each sub-recipient with total project costs of \$100,000 or more, a separate SF-424A budget and PMC123.1 budget justification form must be submitted. These sub-recipient forms may be completed by either the sub-recipients themselves or by the preparer of this form. The budget totals on the sub-recipient's forms must match the sub-recipient entries below.

The preparer of this form need only provide further support of the completed sub-recipient budget forms as they deem necessary. The support to justify the budgets of sub-recipients with estimated costs less than \$100,000 may be in any format, and at a minimum should provide what Statement of Project Objectives task(s) are being performed, the purpose/need for the effort, and a basis of the estimated costs that is considered sufficient for DOE evaluation.

Vendors (includes contractors and consultants):

List all vendors, contractors and consultants supplying commercial supplies or services used to support the project. The support to justify vendor costs (in any amount) should provide the purpose for the products or services and a basis of the estimated costs that is considered sufficient for DOE evaluation.

Federal Research and Development Centers (FFRDCs):

For FFRDC partners, award recipient will provide a Field Work Proposal (if not already provided with the original application), along with the FFRDC labor mix and hours, by category and FFRDC major purchases greater than \$25,000, including Quantity, Unit Cost, Basis of Cost, and Justification. The award recipient may allow the FFRDC to provide this information directly to DOE.

Add rows as needed. If rows are added, formulas/calculations may need to be adjusted by the preparer.

Sub-Recipient Name/Organization	Purpose/Tasks in SOPO	Budget Period 1 Costs	Budget Period 2 Costs	Budget Period 3 Costs	Project Total
EXAMPLE ONLY!!! XYZ Corp.	Partner to develop optimal fresnel lens for Gen 2 product - Task 2.4	\$48,000	\$32,000	\$16,000	\$96,000
Association of Bay Area Governments	Deploy program in nine-county San Francisco Bay Area	\$5,627,339	\$9,143,771	\$6,999,575	\$21,770,685
California Center for Sustainable Energy	Deploy program in San Diego County	\$4,296,454	\$3,631,974	\$2,195,240	\$10,123,668
Sacramento Municipal Utility District	Deploy program in six-county Sacramento Area	\$2,329,321	\$2,296,496	\$2,407,297	\$7,033,114
					\$0
					\$0

Sub-Recipient Name/Organization	Purpose/Tasks in SOPO	Budget Period 1 Costs	Budget Period 2 Costs	Budget Period 3 Costs	Project Total
FFRDC Name/Organization	Purpose				
					\$0
					\$0
					\$0
		\$0	\$0	\$0	\$0
Total Contractual		\$22,369,214	\$21,887,391	\$16,465,836	\$60,722,441

Additional Explanations/Comments (as necessary)

h. Other Direct Costs

PLEASE READ!!!

Other direct costs are direct cost items required for the project which do not fit clearly into other categories, and are not included in the indirect pool for which the indirect rate is being applied to this project. Examples are meeting costs, postage, couriers or express mail, telephone/fax costs, printing costs, etc.

Basis of cost are items such as vendor quotes, prior purchases of similar or like items, published price list, etc.

Add rows as needed. If rows are added, formulas/calculations may need to be adjusted by the preparer.

General description	Cost	Basis of Cost	Justification of need
Budget Period 1			
EXAMPLE ONLY!!! Grad student tuition	\$16,000	Established UCD costs	Support of graduate students working on project
Green Affordable Housing Retrofit Fund	\$375,000	300 housing units @ \$1250 each	25% public financing to attract private capital to affordable housing energy efficient retrofit projects
Incentives for GreenPoint Rated multifamily retrofits	\$531,975	865 housing units @ \$615 each	Offset investment costs of building energy retrofits and green labeling
Incentives for Single Family comprehensive retrofit pilot project	\$3,325,000	3,500 single family buildings @ \$950	Offset costs of comprehensive home assessment and high cost of investment in energy retrofits
Budget Period 1 Total	\$4,231,975		
Budget Period 2			
Green Affordable Housing Retrofit Fund	\$375,000	300 housing units @ \$1250 each	25% public financing to attract private capital to affordable housing energy efficient retrofit projects
Incentives for GreenPoint Rated multifamily retrofits	\$531,975	865 housing units @ \$615 each	Offset investment costs of building energy retrofits and green labeling
Incentives for Single Family comprehensive retrofit pilot project	\$3,325,000	3,500 single family buildings @ \$950	Offset costs of comprehensive home assessment and high cost of investment in energy retrofits
Budget Period 2 Total	\$4,231,975		
Budget Period 3			
Green Affordable Housing Retrofit Fund	\$375,000	300 housing units @ \$1250 each	25% public financing to attract private capital to affordable housing energy efficient retrofit projects
Incentives for GreenPoint Rated multifamily retrofits	\$531,975	865 housing units @ \$615 each	Offset investment costs of building energy retrofits and green labeling
Incentives for Single Family comprehensive retrofit pilot project	\$3,325,000	3,500 single family buildings @ \$950	Offset costs of comprehensive home assessment and high cost of investment in energy retrofits
Budget Period 3 Total	\$4,231,975		

General description	Cost	Basis of Cost	Justification of need
PROJECT TOTAL	\$12,695,925		
Additional Explanations/Comments (as necessary)			

i. Indirect Costs

	Budget Period 1	Budget Period 2	Budget Period 3	Total
Rate applied:	43.0%	43.0%	43.0%	
Total indirect costs requested:	\$0			\$0

A federally approved indirect rate agreement, or rate proposed supported and agreed upon by DOE for estimating purposes is required if reimbursement of fringe benefits is requested. Please check (X) one of the options below and provide the requested information if it has not already been provided as requested, or has changed. Calculate the indirect rate dollars and enter the total in the Section B., line 6.j. (Indirect Charges) of form SF 424A.

There is a federally approved indirect rate agreement. A copy is provided with this application and will be provided electronically to the Contracting Officer for this project.
(When this option is selected, a presentation of the budget that demonstrates the application of the approved rate, to arrive at the proposed indirect charges proposed should also be provided.)

There is no current, federally-approved indirect rate agreement.
(When this option is checked, the entity preparing this form shall submit an indirect cost rate proposal in the format provided at the following website, or in a format that provides the same level of information and which supports the rate(s) being proposed for use in estimating the project. Go to <https://www.eere-pmc.energy.gov/forms.aspx> and select PMC 400.2 Sample Rate Proposal.)

Additional Explanations/Comments (as necessary)
 SFPUC, the grantee, is similar in structure to the SF Dept. of Public Works whose Indirect Cost Plan has been approved by the U.S. Department of Transportation. A copy of that approved plan will be provided to the Contracting Officer upon assignment.

Cost Share

PLEASE READ!!!

A detailed presentation of the cash or cash value of all cost share proposed for the project must be provided in the table below. Identify the source & amount of each item of cost share proposed by the award recipient and each sub-recipient or vendor. **Letters of commitment must be submitted for all third party cost share (other than award recipient).**

Note that "cost-share" is not limited to cash investment. Other items that may be assigned value in a budget as incurred as part of the project budget and necessary to performance of the project, may be considered as cost share, such as: contribution of services or property; donated, purchased or existing equipment; buildings or land; donated, purchased or existing supplies; and/or unrecovered personnel, fringe benefits and indirect costs, etc. For each cost share contribution identified as other than cash, identify the item and describe how the value of the cost share contribution was calculated.

Funds from other Federal sources MAY NOT be counted as cost share. This prohibition includes FFRDC sub-recipients. Non-Federal sources include private, state or local Government, or any source not originally derived from Federal funds. Documentation of cost sharing commitments must be provided, if not already provided with the original application and they have not changed since its submission.

Fee or profit will not be paid to the award recipients or subrecipients of financial assistance awards. Additionally, foregone fee or profit by the applicant shall not be considered cost sharing under any resulting award. Reimbursement of actual costs will only include those costs that are allowable and allocable to the project as determined in accordance with the applicable cost principles prescribed in 10 CFR 600.127, 10 CFR 600.222 or 10 CFR 600.317. Also see 10 CFR 600.318 relative to profit or fee.

Add rows as needed. If rows are added, formulas/calculations may need to be adjusted by the preparer.

Organization/Source	Type (cash or other)	Cost Share Item	Budget Period 1 Cost Share	Budget Period 2 Cost Share	Budget Period 3 Cost Share	Total Project Cost Share
ABC Company EXAMPLE ONLY!!!	Cash	Project partner ABC Company will provide 40 PV modules for product development at 50% off the of the retail price of \$680	\$13,600			\$13,600
			\$0			\$0
						\$0
						\$0
						\$0
						\$0
						\$0

Organization/Source	Type (cash or other)	Cost Share Item	Budget Period 1 Cost Share	Budget Period 2 Cost Share	Budget Period 3 Cost Share	Total Project Cost Share
						\$0
						\$0
						\$0
						\$0
Totals			\$0	\$0	\$0	\$0

Total Project Cost: \$74,982,395

Cost Share Percent of Award: 0.0%

Additional Explanations/Comments (as necessary)

Project Impact Table For Topic 1

Project Impact Metrics		During Project Period			Post project period, years 4 to 6		
		Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Number of buildings retrofitted	TOTAL	9,121	13,682	22,803	50,007	78,010	100,013
	<i>Residential</i>	<i>9,047</i>	<i>13,570</i>	<i>22,617</i>	<i>49,598</i>	<i>77,372</i>	<i>99,195</i>
	<i>Commercial</i>	<i>75</i>	<i>112</i>	<i>187</i>	<i>409</i>	<i>638</i>	<i>818</i>
Total square footage of buildings retrofitted	TOTAL	15,706,682	23,560,022	39,266,704	86,111,193	134,333,461	172,222,386
	<i>Residential</i>	<i>14,528,682</i>	<i>21,793,022</i>	<i>36,321,704</i>	<i>79,652,860</i>	<i>124,258,461</i>	<i>159,305,719</i>
	<i>Commercial</i>	<i>1,178,000</i>	<i>1,767,000</i>	<i>2,945,000</i>	<i>6,458,333</i>	<i>10,075,000</i>	<i>12,916,667</i>
Annual utilities savings (e.g. end-user cost and fuel savings achieved)	TOTAL (annual average of \$396/unit and 0.021 billion source BTUs/unit)	\$3.6 million; 190 billion source BTUs	\$5.4 million; 280 billion source BTUs	\$9 million; 470 billion source BTUs	\$19.8 million; 1,040 billion source BTUs	\$30.9 million; 1,620 billion source BTUs	\$39.6 million; 2,080 billion source BTUs
	<i>Residential</i> (annual average of \$216/unit and 0.016 billion source BTUs/unit)	<i>\$2 million; 140 billion source BTUs</i>	<i>\$2.9 million; 220 billion source BTUs</i>	<i>\$4.9 million; 360 billion source BTUs</i>	<i>\$10.7 million; 790 billion source BTUs</i>	<i>\$16.7 million; 1,240 billion source BTUs</i>	<i>\$21.4 million; 1,580 billion source BTUs</i>
	<i>Commercial</i> (annual average of \$12,773/unit and 0.60 billion source BTUs/unit)	<i>\$1 million; 40 billion source BTUs</i>	<i>\$1.4 million; 70 billion source BTUs</i>	<i>\$2.4 million; 110 billion source BTUs</i>	<i>\$5.2 million; 250 billion source BTUs</i>	<i>\$8.1 million; 380 billion source BTUs</i>	<i>\$10.4 million; 490 billion source BTUs</i>
Jobs created or retained		1,490	2,074	2,997	5,507	8,591	11,014
Average annual emissions reductions (MMT CO ₂ equivalent)	TOTAL (annual average of 1.0 metric ton/unit)	0.009	0.013	0.022	0.049	0.076	0.098
	<i>Residential</i> (annual average of 0.8 metric ton/unit)	<i>0.007</i>	<i>0.010</i>	<i>0.017</i>	<i>0.038</i>	<i>0.059</i>	<i>0.076</i>
	<i>Commercial</i> (annual average of 27 metric ton/unit)	<i>0.002</i>	<i>0.003</i>	<i>0.005</i>	<i>0.011</i>	<i>0.017</i>	<i>0.022</i>
EECBG Funds Expended		\$27,163,066	\$26,656,606	\$21,162,723			
Leveraged Funds and In-Kind Resources Expended		\$120 million	\$170 million	\$240 million	\$510 million	\$790 million	\$1,010 million

Resumes of Key Personnel for *Retrofit California*

Principal Investigators

- Howard Choy, L.A. County (L.A.)
- Gerald Lahr, ABAG (Bay Area)
- J. Andrew McAllister, CCSE (San Diego)
- Alexandra Crawford, SMUD (Sacramento)

- Cecilia Jensen, Sacramento County
- Peter Ucovich, Sacramento County
- Yvette Rincon, City of Sacramento
- Bruce Cenicerros, SMUD
- Ed Hamzawi, SMUD
- Richard Oberg, SMUD
- Sam Starks, SMUD

Los Angeles Region

- Craig Perkins, Energy Coalition
- Brian Gitt, Bevilacqua-Knight
- Robert Knight, Bevilacqua-Knight
- Bruce Mast, Build It Green
- David Blanke, Build It Green
- Francisco DeVries, Renewable Funding
- Mimi Frusha, Renewable Funding
- Joanna Karger, Renewable Funding

Bay Area Region

- Cal Broomhead, City & County of San Francisco
- Ann Kelly, City & County of San Francisco
- Wendy Sommer, StopWaster.Org
- Karen Kho, StopWaste.Org
- Heather Larson, StopWaste.Org
- Ann Hancock, Sonoma County
- Chris Cone, Sonoma County
- Dave Brennan, Sonoma County
- Mary Tucker, City of San Jose
- Javier Vanga, City of San Jose
- Walter Lin, City of San Jose

San Diego Region

- Devon Muto, County of San Diego
- Brendan Reed, City of Chula Vista
- Andrew Martin, SANDAG
- Siobhan Foley, California Center for Sustainable Energy
- Heather Honea, San Diego State University

Sacramento Region

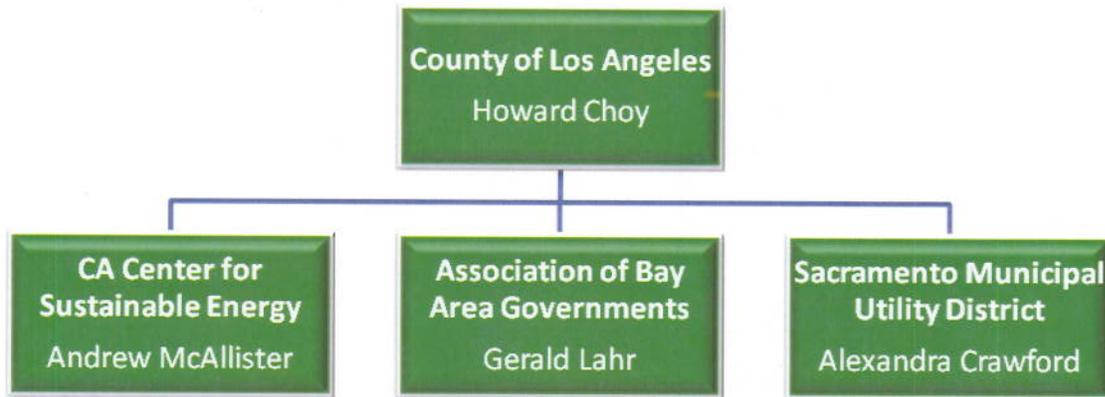
- Robert Chase, Sacramento County

Program Partners

- Panama Bartholomy, CEC
- G. William Pennington, CEC
- Nancy McKeever, CARB
- Anthony Eggert, CARB
- Rick Wylie, Beutler
- Wesley Schultz, CSU San Marcos
- Iain Walker, Lawrence Berkeley National Laboratory
- Matt Golden, Recurve
- K. Carrie Armel, Stanford Precourt Center
- Thomas Robinson, Stanford Precourt Center

Coordination and Management Plan

The Retrofit California Program will be supervised by four Principal Investigators (PI), representing the four collaborating regions, under the overall direction of County of Los Angeles (Prime). The three regions outside of Los Angeles County (i.e., San Diego County, the nine-county San Francisco Bay Area, and the six-county Sacramento Area), will be represented by lead agencies (Subawardees) who will receive and disburse subawards on behalf of their regions, as shown in the following Organizational Chart.



Roles and responsibilities of the PIs and participating regions will be specified in a Memorandum of Understanding (MOU) that the Prime will execute with each Subawardee. The MOU will include provisions for assigning to the Subawardees the same obligations and accountability provisions that DOE will require of the Prime.

The Prime will provide technical leadership and management direction to help ensure that the Retrofit California program delivers its goals on time, within budget, and in a safe and environmentally acceptable manner. Good communications with DOE, other Retrofit Ramp-Up participants, and Subawardees will be maintained.

Sound management requires solid **planning** to clearly articulate objectives and target outcomes, clear **communication** to establish unambiguous roles and responsibilities, and mutual and shared **accountability** for achieving results.

Planning

The Team will take an adaptive management approach to program design and implementation, emphasizing an iterative decision-making process to reduce uncertainty over time and maximize prospects of success. This approach mirrors the Building America Stage Gate process. Two key iterations will guide our decision-making:

- **Iteration 1, Planning:** Within three months of commencement, we will complete detailed implementation planning. In-depth research efforts will validate or modify initial planning assumptions and support any needed adjustments in the pilot concepts. Outcome will be a Project Management Plan (PMP). The PMP will provide a concise summary of the technical objectives and approach for each Task and will include a detailed plan for reporting on the key activities and/or tasks. The PMP provide detailed schedules and planned expenditures for each Task, major milestones, and decision points, including the criteria upon which GO/NO decisions will be based
- **Iteration 2, Phase 1 Implementation:** Within 12 months of commencement, pilot implementation will be far enough advanced to permit a mid-course process evaluation. The focus will be to determine whether previously defined success criteria have been met, review planning assumptions for continued validity, and distill lessons learned. The results will inform any mid-course adjustments and Phase 2 investment decisions.

The Team will utilize Microsoft Project to manage work plan implementation, assign personnel resources, schedule activities, and monitor planned versus actual performance. The MS Project file will reflect the PMP and track plan modifications in response to changing conditions in the field.

Communication Plans

The team's internal communication plan reflects the guiding philosophy that assembling the best minds in the industry and providing a structure for collaboration and sharing will provide the best prospects of overall success. The plan will provide the necessary structure to ensure ample sharing of lessons learned and best practices, thorough peer review, and complete accountability.

The Team will establish a Steering Committee to guide program planning and implementation. The Steering Committee shall consist of the four PIs and program or project managers from the various local agencies responsible for leading pilot projects. The Team will also establish an Advisory Council, made up of subject matter experts and key non-governmental stakeholders, including the partners listed in this proposal.

The team will utilize a number of ongoing communication strategies to guide implementation in accordance with the PMP include the following:

- **Monthly coordination.** Throughout program implementation, the Steering Committee will engage in monthly conference calls to review prior month performance, solidify plans for the upcoming month, share results and lessons learned, and address longer-term opportunities and challenges. All deliverables will be tracked by schedule and status reported at each monthly reporting milestone. Smaller teams will convene as needed to work on specific tasks. Advisory Council members and other key interveners will be invited to participate as appropriate. The Team will use web-conference services such as GoToMeeting to host virtual meetings as needed.

- **Quarterly coordination.** The Steering Committee will convene in-person quarterly workshops to facilitate information exchange among project leads and subject matter experts. Workshops will include Advisory Council members, participating local governments, and other invited stakeholders.
- **Ongoing communication.** The Steering Committee will use Basecamp or comparable web-based collaboration tool to share files, collaborate on writing tasks, post messages, provide milestone and action item reminders, and perform related functions.
- **Stakeholder outreach.** Program progress and lessons learned will be disseminated through existing local government communication channels in the four regions, including local Technical Advisory Group meetings, Mayors' Conference proceedings, utility Energy Watch programs, and Build It Green's Public Agency Council chapters.

Accountability

The Retrofit California Team Management Approach uses a matrix style of project control and coordination. That approach is coordinated by the Prime, whose focus will be on arraying specific task lead and support responsibilities among the team's participants and monitoring progress. The Team participant leading a given task will then be fully responsible for completion of that task and management of the supporting team members. The Prime's monitoring role will be organized to set task milestones and intervene on an exception basis. This approach is designed to minimize levels of management and spread managerial decision-making appropriately among the leaders of each participating team member.

PI roles and administrative, technical and scientific responsibilities for the project

The Prime PI has overall responsibility for ensuring that the Retrofit California program satisfies both the letter and spirit of its DOE agreement, ARRA funding provisions, and related programmatic, financial, and legal requirements. Subawardee PIs bear that same responsibility within their respective regions.

Process for making decisions on scientific/technical direction

The Steering Committee will be responsible for crafting recommendations on scientific/technical direction, drawing on input from the Advisory Committee, previously published research, and other resources. In the event the Steering Committee cannot formulate a consensus recommendation, the four PIs will confer on a decision. In this and all decisions, the Prime PI will be the final arbiter.

Publications

Retrofit California will disseminate program results to industry leaders throughout the U.S. through the following activities:

- Publish program's Project Management Plan and evaluation studies on the County of Los Angeles website for free download with no user restrictions; resources will be available for publication on other websites on request
- Submit conference papers and prepare presentations for Affordable Comfort Inc. annual conference and the American Council Energy-Efficient Economy's bi-annual Summer Study on Energy Efficiency in Buildings

All publications that make use of Retrofit California data or describe Retrofit California activities or outcomes will be reviewed and approved by the Steering Committee. Publications will include acknowledgement of ARRA funding through DOE's Retrofit Ramp-Up program, under the direction of County of Los Angeles.

Intellectual Property Issues

To the extent allowable under federal funding provisions, all know-how, inventions, trademarks, patents and copyrights ("Intellectual Property") resulting solely from work of employees or contractors, as the case may be, of the Prime shall belong exclusively to the Prime, and all Intellectual Property resulting solely from work of employees or contracts, as the case may be, of a Subawardee or its designee shall belong solely to that Subawardee or its designee. All pre-existing intellectual property shall remain the property of its inventor.

Procedures for Resolving Conflicts

Decision-making procedures will be specified in the MOUs. The four PIs will confer on all substantive decisions having program-level implications and seek consensus on appropriate actions. When a consensus-based decision is not possible, the Prime PI's decision shall prevail.

Education and Training

University of California at Berkeley, B.Sc. Mechanical Engineering
Certified Professional Engineer, State of California

Research and Professional Experience

Los Angeles County Office of Sustainability, Manager

- Proposed, budgeted and staffed the County's Office of Sustainability created to guide the County through local, state and federal policy, regulatory and legislative issues related to climate change and sustainability programs.
- Developed and gained Board approval for the County's Energy & Environmental (E&E) Policy which provides energy and environmental guidelines for the County's internal operations and community programs; created and chaired the E&E Policy Team which provides input into the Policy.
- Participate on various regional sustainability organizations including: Local Government Sustainable Energy Coalition (Board Chairperson), Los Angeles Regional Sustainability Coalition (Steering Committee Member), Los Angeles County PACE Financing Program (Program Manager).

Los Angeles County, Energy Division Manager

- Manage an organization of over 100 employees responsible for all energy and utility related business for Los Angeles County. Maintain overall budget responsibility for nearly \$200 million annually in utility purchases and provision of energy services.
- Responsible for the County's \$150 million in annual energy purchases. Led efforts to save over 15% in purchases through the streamlining of Countywide energy efficiency programs and development of innovative procurement contracting.
- Manage the operation and maintenance of the County's cogeneration and central heating and cooling plants budgeted at \$20 million per year. Improved the plants profitability during California's volatile energy market periods by over 10%.
- Furthered the County's already successful "in-house" energy projects program by obtaining over \$20 million in project funding from traditional and new sources over the past 4 years.
- Developed, proposed, and implemented a state-of-the-art Enterprise Energy Management Information System that allows "on-line" energy management functions at over 80 of the County's largest facilities. Obtained over \$3 million to fund the program and necessary budget approval for a 15 person organization to manage its operation.
- Increased the County's role as a regulatory and legislative force through frequent participation and testimony at the CA Public Utilities Commission and lobbying and testimony at California's state legislative proceedings.
- Additional two year highlights include: improved internal customer service ratings for the division to "excellent" over two years (15% rating increase), development of an energy asset optimization program, and led energy litigation activities resulting in nearly \$20 million in settlements for the County.

EES Consulting, Inc. (Seattle, WA), Senior Project Manager

- Managed the firm's commercial and industrial client base regarding utility deregulation issues. Prepared proposals for clients for energy management services, administrated

- energy management programs, prepared specifications for energy suppliers and energy service providers.
- Led technical teams in the evaluation of utility system assets to be purchased by public power utility clients. These included the Flathead Electric Cooperative purchase of PacifiCorp's transmission and distribution system in Montana, West Oregon Electric Cooperative purchase of part of Portland General Electric's distribution system north of Portland, and the Nor-Cal Electric Authority purchase of PacifiCorp's transmission and distribution system in northern California.
 - Developed key portions of Nor-Cal Electric Authority's Business and Operating Plan, organization structure, labor agreement, budget forecast, and financial pro-forma. Presented findings to employees, utility management, government officials, and the public.
 - Led the process to select an energy partner for ENERconnect, a partnership of over 200 municipal electric utilities in Ontario representing about 5000 MW of load, to provide wholesale procurement, trading, risk management, retail services, and strategic planning. Scope of work included RFP preparation, evaluation of proposals, selection interviews, and presentations to executive staff.

Industrial Accounts, Marketing and Customer Services, Los Angeles Department of Water & Power (LADWP), Senior Marketing Manager

- Managed a group of industrial account representatives and their customer activities, developed business plans for customer groups and segments, directed development of account management plans for large customers, met with and negotiated customer energy contracts. The segments included over 300 customers and annual electric revenues of \$200 million.
- Negotiated and administered energy contracts for existing and potential cogeneration customers, developed products for increasing customer load and utility revenues.

Engineering Support Services, (LADWP), Manager of Marketing & Special Projects

- Engineering Manager of Valley G.S. Gas Turbine Project Partnership w/ Louisville Gas & Electric. Negotiated fuel purchase agreements with the Gas Company to lower overall project payback period and save over \$5 million of the project's capital costs of \$50 million. Led technical negotiations with DWP's financing partner for the gas turbine installation and energy marketing plan.
- Project Manager - Cogeneration Studies. Led engineering groups to perform economic and engineering feasibility studies as requested by various clients. Assessed and made recommendations on technical and economic viability of potential cogeneration projects at Hyperion Treatment Plant, Tidelands Oil Co., and L.A. International Airport.

Project Management Section, LADWP, Project Engineer for the Harbor Generating Station Repowering Project

- Developed, planned, budgeted, and directed a 100-member project team, through the project's feasibility study, design engineering, regulatory and environmental licensing, construction, commissioning, project closure, and final analysis. The project competed for Power Magazine's National "project of the year" honors based on final \$/MW completed costs and performance criteria.
- Directed activities of multi-discipline project team (over 100 members), including: generation engineering, construction engineering, environmental engineering, transmission and distribution engineering, operations support, commissioning team, contractors, procurement and purchasing groups, finance and accounting personnel, public affairs, and legal resources.

EDUCATION AND TRAINING

Undergraduate: U.S. Naval Academy, BS Mathematics, 1982

Graduate: Creighton University, Master of Business Administration, 1997

PROFESSIONAL EXPERIENCE

Association of Bay Area Governments, Energy Programs Manager, 2000 - Present

Bay Area Governments Publicly Owned Energy Resources (ABAG POWER) Joint Power Agency (JPA)

- The principle goal of ABAG POWER is to conduct pooled purchasing of electricity and natural gas on behalf of local governments and special districts. Pooled purchasing enables local governments to achieve more competitive pricing from suppliers who are interested in larger and more attractive combined loads. ABAG POWER currently has 67 local governments (cities, counties and special districts) in Northern California as members.
- Program Manager for the ABAG Energy Watch Partnership (2006-08). This program provided assistance to over 60 local governments to implement energy efficiency projects in public facilities, and policy assistance for community-wide energy savings. More than 300 energy-efficiency projects were completed saving over 25,000,000 kWh of electricity and 582,000 therms of natural gas.
- Provide general energy management assistance to local governments in the San Francisco Bay Area.

PREVIOUS RELEVANT ENERGY EXPERIENCE (1990 – 2000)

Honeywell Energy Services, Operations Manager

- Manager of operations for various energy efficiency programs in the Western/Pacific Region. Programs include: Residential Standard Performance Contract Program; Energy Efficiency Resource Center; Enhanced Outage Notification installations; Automatic Meter Reading administration; Solar Water Heating inspections.

The Bentley Company, Project Engineer

- Project Engineer and Construction Manager for Energy Efficiency projects. Evaluation, implementation and project management of energy efficiency and demand-side management (DSM) projects, including measurement and verification and public construction work.

Proven Alternatives, Incorporated, Project Administrator/Purchaser

- Managed project administration, purchasing and quality assurance for Pacific Gas & Electric Company's Energy Efficiency Pilot Project, consisting of over 100 energy audits and 35 site installations. Projects included: lighting retrofits, motor replacements, HVAC system modifications and EMS control upgrades.

California Energy Company, Operations Analyst

- Corporate interface with power operations in the areas of: Plant Operations, Steam Production, Overall Maintenance. Developed revenue models and statistical analysis procedure for plant energy production
-

Synergistic Activities

1. U.S. NAVY (1982-1989) Lieutenant - Assistant Professor of Naval Science, University of Moscow, Idaho. Lieutenant - Navigator, USS San Jose (AFS-7), Guam, M.I. Operating areas: Western Pacific, Indian Ocean.
Ensign/Lieutenant j.g. - Division Officer, USS Kinkaid (DD-965), San Diego, CA. Operating areas: Eastern and Western Pacific Ocean, Indian Ocean, Persian Gulf.

Education and Training

University of California at Berkeley, Energy and Resources Group
PhD candidate.

University of California at Berkeley, M.S. Thesis: Electricity Load Management in Bolivia: Background and Prospects, 1992

Dartmouth College, Hanover, NH, B .A., Magna Cum Laude; G.P.A. 3.61 out of 4.0,
Double major: Engineering Sciences modified with Environmental Studies; Art History,
1987

Research and Professional Experience

California Center for Sustainable Energy, Director of Programs, (July 2006-present)

- Responsible for program implementation for a non-profit 501(c)3 organization working to promote a sustainable energy future through education, demonstration, and program implementation. Oversee \$35 million annually in publicly-funded energy efficiency and renewable energy programs, through a team of up to 10 direct reports covering a staff of up to 22. Responsible for startup and implementation in the San Diego region of the California Solar Initiative, a 10-year, \$3 billion state-funded effort to transform markets for solar electric and thermal technologies. Oversee contracting, budgeting and reporting to the CPUC, CA Energy Commission, local governments, electric utility clients and other key funding agencies. Direct development of official comments within CPUC proceedings on Energy Efficiency and Distributed Generation.

Binational Programs Specialist, (12/ '05-7/ '06)

- Responsible for execution of the Border Energy Savings Program, an effort funded by NADBank and the California Energy Commission to identify energy efficiency and cogeneration in maquiladoras and other industries in the U.S.-Mexico border.

Energy Solutions, Project Manager, (10/2000-'03)

- Managed the FastTrack Efficient Lighting Program, a \$1.5M upstream incentive program focused on lighting vendors and contractors, designed to stimulate the commercial sector market for innovative efficient lighting technologies. Responsible for developing marketing and implementation strategies for a variety of CA efficiency program.

NRECA International, Ltd., Energy Efficiency Consultant, (1/'04-6/2005)

- Series of short-term engagements to design and guide implementation of a program to quantify the energy efficiency potential of the large population of government-owned buildings in the D.R. Training of energy auditors, selection of first-tier buildings for auditing, analysis of technical and economic savings potential of technologies, and reporting to the National Energy Commission.

Berkeley, CA and Dhaka, Bangladesh, Renewable Energy Specialist , (12/'98-;10/'02)

- Provision of renewables technical expertise and personnel training to the Rural Electrification Board of Bangladesh and member utilities, during the formation of REB's nascent renewables

Rural Electrification Specialist,(November 1998)

- Part of a three-person team in the Dominican Republic to evaluate the impacts of hurricane Georges on electricity systems. The study was commissioned by USAID/DR with the goal of performing a comparative analysis of damage to the interconnected grid and to small-scale renewable energy systems in remote areas. One conclusion was that supply diversity of renewable energy solutions in long-range planning can increase reliability of rural electric service.

Publications

Solar Today, the magazine of the American Solar Energy Society. Profiled in the July/August 2009 issue. <http://www.solartoday-digital.org/solartoday/20090708/?pg=28>.

McAllister, A and H Oschner "Creating a Sustainable Solar Water Heating Market in California," Proceedings of the 19th National Energy Services Conference, San Diego CA, January 2009.

Jennifer Porter and Andrew McAllister "Renewable Energy Opportunities in the Crossborder Region," prepared for USCD-San Diego Dialogue's Forum Fronterizo, October 2008. http://www.sandiegodialogue.org/pdfs/SDD_Renewable_Energy_Oct_08.pdf.

McAllister, J.A., A. Henderson and N. Chaset "Solar Water Heating: Ready for Prime Time?" Proceedings of the ACEEE 2008 Summer Study on Energy Efficiency in Buildings, Asilomar, CA.

Op-Ed, San Diego Union-Tribune: "Determining the cost of solar energy." April 25, 2008. http://www.signonsandiego.com/uniontrib/20080425/news_lz1e25mcallis.html.

McAllister, J.A. and D.B. Waddle "Rural Electricity Subsidies and the Private Sector in Chile," Chapter 8 in D. Barnes (ed.) The Challenge of Rural Electrification. (Washington, DC: Resources for the Future, July 2007). http://www.rff.org/rff_press/bookdetail.cfm?outputID=9414.

McAllister, J.A. and A.E. Farrell "Electricity consumption by battery-powered consumer electronics: A household-level survey." ENERGY: The International Journal. Elsevier Ltd., 2006.

McAllister, J.A. and A.E. Farrell "Power in a Portable World: Usage Patterns and Efficiency Opportunities for Consumer Battery Chargers." ACEEE 2004 Summer Study on Energy Efficiency in Buildings, Asilomar, CA, Vol. 11: 107-118.

Synergistic Activities

1. Board Member, California Solar Energy Industries Association (CALSEIA), 2008-2009
2. Member, Environment Advisory Committee, San Diego Port Commission
3. Advisory Committee member: California Energy Commission's New Solar Homes Partnership

Alexandra Crawford, Project Manager II, Sacramento Municipal Utility District

Education and Training

University of California at San Diego, B.Sc. Biochemistry and Cell Biology, Minor French Literature and Psychology

Sacramento State University, Masters in Business Administration

Sacramento State University, Masters in Biological Sciences (Candidate)

Certifications:

Creating a Collaborative Work Environment, 2008

Discovering Your Strengths, 2008

Advanced Project Management, 2007

Contributing Through Others, 2007

CPR Certified, 2007

Leadership Awakening, 2007

Effective Project Leadership, 2006

Applied Project Management, 2004

Electric Systems Operation, 2004

Group Fitness Instructor Certified, 2003

Open Water Scuba Diver Certified, 2002

Research and Professional Experience

Sacramento Municipal Utility District, Project Manager II, 2007 – Present

- Promoted to manage technology and process improvement projects, design new programs and services and provide multi-year strategic planning for operational programs and departments.
- Partnering with Sacramento County, City of Sacramento, City of Elk Grove, Los Rios, CSUS and other local organizations to develop joint applications for Economic Stimulus funding.
- Launched a carbon offset program and online carbon footprint calculator, improving local air quality and supporting local economic development.
- Launched Home Electricity Reports to change usage behavior and save electricity purchasing costs.
- Contributed to the redesign of \$45M portfolio of energy efficiency programs.
- Provide strategic planning, budget development and forecasting for District revenue and carbon reduction programs.

Sacramento Municipal Utility District, New Business Developer, 2004 – 2007

- Hired to develop new programs, products and services, as well as evaluate existing programs to improve operational effectiveness, customer acquisition and retention and return on investment.
- Launched a program to enable commercial and industrial companies to purchase renewable energy credits.
- Managed several technology and process improvement projects including implementation of an automated call transfer system for the contact center.
- Implemented a contact center incentive program to double sales and reduce average acquisition costs.

- Prepared dozens of opportunity assessments, business cases, whitepapers, breakeven analyses, surveys, benchmark studies, market assessments and Board presentations for programs and services such as broadband over power lines, instant rebate kiosks, fixed billing, mobile data dispatch, predictive maintenance and more.
- Developed one and three year plans for District residential programs and the residential department.

The Hoyt Company, Special Projects Manager, 2003 - 2004

- Hired to evaluate and improve processes and systems, to develop new business and marketing strategies and to provide community outreach.
- Purchased and installed computer network and digital phone systems.
- Created company standard operating procedures.
- Renegotiated payer and vendor contracts to increase profit margins 150%.
- Purchased and installed computer network and digital phone systems.
- Implemented accounting and reporting systems and recovered \$500K in uncollected receivables.

New Dawn Recovery Centers, General Manager/Director of Marketing, 2002 - 2003

- Hired to manage marketing, sales, operations, facilities, information systems, human resources and accounting.
- Developed business reorganization and reprioritization plan.
- Created corporate brand, launched corporate website and developed annual marketing plan.
- Renegotiated payer and vendor contracts to increase profit margins 150%.
- Purchased and installed computer network and digital phone systems.
- Implemented accounting and reporting systems and recovered \$500K in uncollected receivables.

Schwann Publications, Publisher, 2000 – 2002

- Promoted to provide executive leadership and operational management to this multi-million dollar corporation.
- Managed a staff of 50 employees in New Mexico and California producing six print publications distributed internationally and one online publication.
- Created and launched DVD Advance, the then best-selling US DVD magazine, capitalizing on market timing.
- Created and launched Schwann Online, the largest subscription web music database.
- Revitalized the corporate brand, developed a corporate website and transformed the company into an industry leader on music and video trends, and key provider of information and data for the digital future.
- Developed and managed annual budgets, fiscal and strategic plans.

Synergistic Activities

1. Launched the nation's first pilot of the Home Electricity Reports, printed and customized energy reports designed to change usage behavior.
2. Initiated the Sacramento Regional Energy Alliance, a consortium of jurisdictions, educational institutions, not-for-profit agencies and private companies united in improving energy efficiency and creating jobs in the Sacramento region.
3. Contributor to the redesign of SMUD's Energy Efficiency Portfolio.
4. Principle Carbon Emissions Reduction Strategic Planner for Sacramento District.

CRAIG A. PERKINS, President & Executive Director, The Energy Coalition

EDUCATION & TRAINING

California State University, Dominguez Hills, **M.P.A.**, Public Administration, 1983
University of California, Los Angeles: **M.A.**, Latin American Studies, 1981
University of California, Los Angeles: **M.A.**, Political Science, 1980
University of California, Los Angeles: Foreign Language and Area Studies Scholarship recipient, 1978-1980
University of California, Los Angeles: Inter-American Foundation Fellowship for thesis research in Peru, 1981
University of California, Berkeley, **B.A.**, Sociology, 1975

Research and Professional Experience

The Energy Coalition, President & Executive Director, March 2008 to Present

- As a non-profit 501(c)3 corporation, The Energy Coalition has been developing energy efficiency partnerships with local governments, their communities and their serving utilities for almost thirty years. The mission of The Energy Coalition is to create and implement the most comprehensive, integrated and innovative approaches for reducing energy demand, increasing clean energy generation and decreasing greenhouse gas emissions. Current Energy Coalition programs include the Community Energy Partnership comprised of nine Southern California cities; PEAK Student Energy Actions, an energy education effort that reaches over 50,000 California students; the Business Energy Coalition which achieves peak demand energy reductions at 120 business sites in Northern California; and the Palm Desert Partnership that will achieve a 30% reduction in Palm Desert's citywide energy use over a five year period.

City of Santa Monica, Director of Environmental & Public Works Management, 1993 to 2008

- Directed operations, programs, policies and initiatives for the City's water, wastewater and stormwater systems; managed the design, engineering and construction of City capital improvement projects; managed environmental protection, resource efficiency, alternative fuels and renewable energy programs; directed the solid waste, recycling and street maintenance operations; and oversaw implementation of the Sustainable City Plan. Managed an annual operating budget of \$70 million, a capital budget of \$300 million and 350 employees.

City of Santa Monica Environmental Programs Manager, January 1991 to August 1993

- Managed programs for water and energy conservation, pollution prevention and hazardous materials management, solid waste collection and recycling, and urban runoff pollution control. Proposed and implemented new utility rate structures to increase customer equity and improve service levels. Created the Santa Monica Sustainable City Plan.

City of Santa Monica, Budget Director / Administrative Svcs. Manager / Senior Management Analyst,

July 1983 to January 1991

- Directed the City's operating and capital improvement budget process, performed fiscal and policy analyses and provided recommendations to the City Manager and City Council. Managed organizational development efforts to improve efficiency and cost-effectiveness of City operations. Created a multi-year CIP budget and developed and implemented operating and capital budgets for the Public Works Department.

UCLA Latin American Center, Research Associate, September 1981 to July 1983

- Conducted focused research on Latin American policy issues and assisted in development of specialized publications for the Latin American Center.
-

PUBLICATIONS

Author and co-author of articles on solar electric projects, alternative fuel vehicles, water and energy efficiency, and urban runoff management practices.

Synergistic Activities

1. J. Robert Fluor Award, 2002
2. Asian American Architects and Engineers Association Award 2002
3. Heal the Bay Award, 2004
4. City of Los Angeles Mayoral appointee to Citizens Proposition "O" Stormwater Bond Oversight Committee

Brian Gitt, Principal Partner, Bevilacqua-Knight, Inc. (BKl)

Education and Training

Prescott College, B.Sc. Environmental Studies,
Certified Green Building Professional
LEED (Leadership in Energy & Environmental Design) Accredited
Professional

Research and Professional Experience

Bevilacqua-Knight, Inc. (BKl), Principal Partner, 2008 - Present

- Brian Gitt, a principal of BKl, is an entrepreneurial, results-oriented industry leader with 10 years experience in energy efficiency and green building.
- He is currently working with governments and utilities throughout California to develop community-scale building retrofit and solar programs.

2006-2008, Executive Director, Build It Green

- Transformed a 1-person NGO into one of the fastest growing green building organizations in the United States.
- Delivering executive leadership and accountability through 21 FTEs in demanding, fast-paced environment.
- Full responsibility for implementing strategic and work plans, P&L management, and all marketing and communication initiatives.
- Recognized thought leader on climate change, energy, water, air quality, waste, transportation, and resource conservation.
- Notable Accomplishments Include:
- Increased company revenue 300% and organizational membership 250% in 3.5 years
- Lead successful merger of two leading green building organizations
- Built broad-based coalition and network of over 400 building industry stakeholders including private sector, public sector, and NGO's to mainstream green building in California
- Established innovative marketing initiatives and programs such as the Build It Green Home Tour - an ongoing program that has attracted over 6000 attendees and 90 showcase homes
- Served as an effective liaison between the public and private sectors - worked with over 100 local governments to design new, effective green building policies and programs
- Solidified key strategic partnerships with important building industry stakeholders including all 4 California investor owned utilities, municipal utilities, water districts, local governments, building industry market leaders and NGOs
- Developed robust professional certification program that has, to date, certified over 1000 building professionals
- Led development and launch of new consumer label and associated third-party verification program for green homes

- Delivered thought leadership via over 200 presentations and keynote addresses throughout the United States

Biosystem Solutions, Founder/Vice President Business Development, 2000 - 2003

- Founded environmental technology company that provides comprehensive biodegradable waste management solutions.
- Led development of next generation in-vessel automated composting systems to convert biodegradable waste closest to the source of generation into a premium organic soil supplement.
- Systems effectively reduce hauling and disposal costs while creating a revenue stream from sale of soil product.
- Performed project analysis/feasibility review for waste processing facilities totaling \$20M.
- Created business identity, sales/marketing strategies & collateral materials.
- Spearheaded business development efforts & established strategic partnerships.
- Completed in-depth municipal, business and agricultural waste stream research and analysis.
- Awarded and authored grants totaling \$131,000 related to management of biodegradable waste.
- Assisted in fundraising efforts and secured \$1M in investment capital.

Building Solutions, Project Manager, 1998 - 2000

- Performed in-depth project management of all phases of high-end residential construction projects.
- Demonstrated proficiency in all aspects of construction contract administration.
- Executed project budgets, schedules, change orders, RFI's and subcontractor bid packages.
- Completed and maintained efficient document control.
- Facilitated effective communications between client, architect, superintendent, subcontractors and vendors.
- Secured subcontractor and vendor quotes and selected/purchased building materials.

Synergistic Activities

1. West Coast Green Advisory Board - largest residential green building conference + expo in the US
2. National Green Home Remodeling Guidelines Advisory Committee – joint project of the United States Green Building Council and American Society of Interior Designers to develop national guidelines for home remodeling
3. Sustainable Economic Development Task Force – City of Berkeley Mayor's green initiative

Dr. Robert Knight, President, Bevilacqua-Knight, Inc. (BK_i)

Education and Training

University of California, Berkeley, B.Sc. Civil Engineering, 1963
UC Berkeley, M.Sc Industrial Engineering and Management, 1965
US Army Engineering Officer Program Graduate (1Lt), 1966
Northwestern University, Ph.D. Urban Systems Engineering, 1971

Research and Professional Experience

Bevilacqua-Knight, Inc., President, 1980 - Present

- Development of stimulus-funded local and state building retrofit programs for CEC and California cities and counties.
- Research into building performance testing protocols and program management issues, R&D business case development methods, and lighting/HVAC technology commercialization (California Energy Commission, PG&E, EPRI, HUD).
- Research roadmap planning studies for various electric and gas technologies for EPRI, CEC, and California Fuel Cell Partnership.
- Ongoing management of CaFCP staff and management operations.
- Earlier development of commercialization strategies and programs for energy generation, transmission, and use of efficiency innovations (EPRI, utilities).

California Building Performance Contractors Association, Program Director, 2001 - Present

- Design and management of Home Performance with Energy Star programs for California utilities.

Sage Management Consultants, Director of Systems Research, 1978 - 1979

- Development of management systems for urban transit system operations.

DeLeuw, Cather & Company, Director of Planning, 1973 - 1978

- Design and management of controlled DOT urban transit experiments and implementation programs

Environmental Institute, University of Wisconsin, Postdoctoral Research Associate, 1972 - 1973

- Research into homebuyer preferences and choice prediction among subdivision land use attributes.

American-Yugoslav Program, Ljubljana, Yugoslavia, Urban Systems Researcher, 1971 - 1972

- Research in urban development computer models and applicability of such models in centrally managed economies.

Northwestern University, Faculty Instructor, 1970 - 1971

- Development and teaching of courses in urban planning and infrastructure

Publications

1. Robert Knight, Bevilacqua-Knight, Inc., Fran Curl, Southern California Edison, Subid Wagley, Pacific Gas & Electric, Ganesh Venkat, Sempra Utilities. "Home Performance with ENERGY STAR® in California: Moving Into the Spotlight." Proceedings of the 2008 ACEEE Summer Study on Energy Efficiency in Buildings; CD, Panel 2, pp. 171-181. Available through www.aceee.org.
2. Robert L. Knight, Bevilacqua-Knight, Inc., L. Lutzenhiser and S. Lutzenhiser, Lutzenhiser Associates. "Why Comprehensive Residential Energy Efficiency Retrofits Are Undervalued." Proceedings of the 2006 ACEEE Summer Study on Energy Efficiency in Buildings; CD, Panel 2, pp. 229-241. Available through www.aceee.org.
3. Michael Rogers, GreenHomes America, M. Edmunds, E-Star Colorado, and R. Knight, Bevilacqua-Knight, Inc. "Home Performance with ENERGY STAR®: Delivering Savings with a Whole-House Approach." Proceedings of the 2006 ACEEE Summer Study on Energy Efficiency in Buildings; CD, Panel 7, pp. 141-150. Available through www.aceee.org.
4. Knight, Robert, L. Lutzenhiser, and S. Lutzenhiser. "Selling Residential Energy Efficiency Retrofits: Why Do They Buy?" *Proceedings of the 2004 ACEEE Summer Study*, American Council for an Energy Efficient Economy, Washington, DC.

Synergistic Activities

1. Board of Directors, California Building Performance Contractors Association
2. Board of Directors, ACI (national building science education and professional development)
3. Board of Directors, Efficiency First
4. Board of Directors, Home Energy Magazine
5. Home Energy Retrofit Coordinating Committee (EPA/SF, California)

Bruce Mast, Director of Programs, Build It Green

Education and Training

B.A., Physics, Rice University, 1988
Certified Green Building Professional

Research and Professional Experience

Build It Green, Development Director/Director of Programs, 2006- Present

- Primary responsibility for strategic planning; budget development and management; organizational development and fundraising; program direction and staff management
- Helped guide organizational growth over 3 years from 12 employees and \$1 million annual budget to 22 employees and annual budget exceeding \$2.7 million
- Developed and launched GreenPoint Rated program
- Expanded Government Relations initiative and obtained grant funding to hire permanent Government Relations Manager
- Solidified key strategic partnerships with public agencies, utilities, building industry market leaders and non-profit organizations throughout California

Build It Green, Board of Directors, Green Resource Center and 2003-2006

- Spearheaded merger of Green Resource Center and Bay Area Build It Green
- Oversaw organizational growth over 4 years from 1 employee and \$30,000 annual budget to 12 employees and annual budget exceeding \$1 million

Frontier Associates, Manager, 1996-2006

- Obtained funding and successfully managed PG&E-funded green building education initiative worth \$1.6 million over 4 years; earned \$70,000 bonus payment for contract performance in 2004-2005.
- Secured \$1.5 million in renewed funding from PG&E as continuing successful program for 2006-2008
- Founded Green Affordable Housing Coalition
- Managed PG&E funds to help establish Public Agency Council, expand Ask an Expert and Green Product Directory, launch Green Home Tours, and additional programmatic support for Green Resource Center and Build It Green
- Lead author for 4 chapters of CPUC-funded study of Best Practices in Energy Efficiency Programs (2005)
- Authored White Paper on emerging trends in energy efficiency programs (2007)
- Contributed key technical expertise for marketing and energy efficiency program consulting services to electric and gas utilities including market research, competitive assessment, marketing/business plan development, program design and implementation, and monitoring and evaluation services