



eProjectBuilder

Leveraging your data for ESPC success

**Energy Services Coalition
4th Annual Market Transformation Conference**

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U.S. DEPARTMENT OF
ENERGY

Energy Efficiency &
Renewable Energy





Your Project Data is Valuable!

- **EPC data can be gold mine for both agencies and ESCOs**
- **Critical for measuring project and program performance**
- **Critical for reporting up the chain, down the chain – and out to stakeholders and the public**
- **Necessary for telling your ESPC success story (agency or ESCO), overcome skepticism, educate your audiences**



Maximizing your Data's Value

- 1. Consistency** key to making your data useful
 - Consistent data collection processes
 - Consistent data types and format = strong database
- 2. Ready access** key to getting your story out
- 3. Institutionalization** critical for maximizing/
retaining value over time
- 4. Easy-to-use tools** important for all of the above



Data Tool: eProject Builder (ePB)

- **FREE** web-based system for housing and leveraging ESPC data for the life of the contract (up to 25 years)
- **Developed/maintained by LBNL for U.S. DOE**
- **Enables agencies and ESCOs to securely and quickly:**
 - **Develop** project scenarios with Excel-based template
 - **Upload, access** and **track** ESPC project information;
 - **Generate** financial schedules and data for analysis and reporting;
 - **Benchmark** new projects against historical project performance data.



Components and Access

ePB system comprises two components:

- 1. Excel-based data template** -- ESCO uses to input data, develop scenarios, and upload data to the online database
- 2. Online system** where project data is uploaded, accessed and tracked

Access:

- **Default access:** one customer/one ESCO per project
- **Two-step log-in** like other high-security sites



Inputs

- **Data template (awarded project data):**
 - **Contact and identifier information**
 - **Financial, e.g., interest rate, contract type, payment timing**
 - **ECM pricing, baseline, savings and guarantee**
 - **Performance period payments/incentives and costs**
- **M&V module**
 - **Adjusted baseline**
 - **Verified savings at ECM and project level**
 - **Lost savings opportunity (caused by ESCO or agency)**



Inputs: Excel-based Data Template

SUMMARY SCHEDULE BASIC PROJECT INFORMATION					
Project Contact Information	Role:	Institution:	Name:	Email:	Phone:
	Project Facilitator, if applicable				
	Customer (Project Initiator)				
	ESCO (Project Builder)				
	Finance Specialist				
Primary Financier					
Project Identification & Characteristics	Project Identification:		Project Characteristics:		
	Task Order #, if applicable		List of Sites in Project (separated by commas):		
	Contract #		Number of Buildings in Project:		
	Project Name:		List of Buildings in Project (separated by commas)		
	Primary Project Location-City:		Market Segment:		
	Primary Project Location-State:		Total Floor Area Affected by project (Square Feet):		
	Primary Project Location-Zipcode:		Average Annual Energy Consumption of Affected Buildings (MMBtu/yr)		
	Agency Name (combine Name):		Implementation Period (months):		
	Project Initiator (Customer)				
	ESCO Name (Project Builder)				
Costs & Financials	Financing Terms:		Project Capitalization:		
	Applicable Financial Index:		Total Implementation Price (from Schedule-2 Total):	\$0	
	Contract Term (years):	0	PLUS Financing Procurement Price-capitalized construction period interest (S):		
	Index Rate:		PLUS Financing Procurement Price-other expenses (S):		
	Added Premium (adjusted for tax incentives):		LESS Implementation Period Payments (from Schedule-1, (c)):	\$0	
	Project Interest Rate:	0.00%	Total Amount Financed (Principal):	\$0	
	Financing Issue Date (mm/dd/yyyy):		Performance Bond Amount:		
	Source (financier):		Annual Dollar Savings Retained by Customer:		
	Effective Through (mm/dd/yyyy):				
	Primary Type of Financing (choose from list):				
Project Agreement Type (choose from list):					
Payment Timing (beginning or end of performance year):					
Other Information	Guarantee % of Estimated Savings:				
	Federal Contract Type:				
	Primary Electric Utility:				
	Primary Natural Gas Utility:				
	Primary Water Utility:				

SCHEDULE #1 COST SAVINGS AND PAYMENTS			
Implementation Period:	(a)	(b)	(c)
	Estimated Annual Cost Savings	Guaranteed Cost Savings	Payments
Performance Period (Year):	(d)	(e)	(f)
	Estimated Annual Cost Savings	Guaranteed Annual Cost Savings	Annual Payments
1			
2			
3			
4			
5			
6			
7			
8			
9			
10			
11			
12			
13			
14			
15			
16			
17			
18			
19			
20			
21			
22			
23			
24			
25			
Total Performance Period:	\$0	\$0	\$0
Total Implementation & Performance Period		Total Guaranteed Cost Savings (b+e)	Total Payments (c+f)
		\$0	\$0



Outputs

- **Awarded project data:**
 - **Online summary of projects**
 - **Financial schedules (pdf or html)**
 - **Data download (.csv)**
- **Post-installation and M&V reports:**
 - **M&V summary report (pdf or html)**
 - **Project dashboard will display multi-year performance to date**



Online Summary of Projects

[Home](#)[View/Manage Projects](#)[Benchmarking](#)[Help/Documentation](#)[About](#)[Liz Test Customer ▾](#)[+ Enter New Project](#)[Download Project Template](#)[Download All Projects in Table as .csv](#)

- To **view** project data online, click the project name.
- To **download** a draft output schedule for pre-approved or approved projects, click the gear icon and the "download schedule" link.
- To **manage** names of who can view the project, click the gear icon and the "manage viewers" link.

Search:

Project ID	Project Name	Market	Agency	Award Date	Last Modified	Customer	ESCO	Total Implementation Cost	Total Guaranteed Savings	Stage	Status	Data % Complete	Actions
51962	Liz LBNL Test 1	Federal Government	agency	2014	2015-06-10 16:56:21	Customer Organization	ESCO organization	\$5,982,480	\$7,821,445	Proposal	Pending	100%	
52086	19 August Demo	Federal Government	agency	2015	2015-08-19 10:31:10	test 1	test 2	\$5,882,480	\$8,205,819	Proposal	Pre-Approval	100%	
52080	23 July test 2	State/Local Government	agency	2015	2015-08-19 10:24:37	test 1	test 2	\$5,882,480	\$7,378,885	Proposal	Pre-Approval	100%	
52076	9 July Nevada	State/Local Government	agency	2015	2015-08-05 17:54:22	test 1	test 2	\$5,882,480	\$7,378,885	Proposal	Approved	100%	

If you have questions, issues or feedback on eProject Builder please email: epb-support@lbl.gov



Financial Schedules: Schedule 1

SCHEDULE #1 COST SAVINGS AND CONTRACTOR PAYMENTS

Implementation Period (Year 0)	(a)	(b)	(c)	(g)
	Estimated Cost Savings \$47,000	Guaranteed Cost Savings \$46,500	Payments \$46,500	
Performance Period (Year)	(d)	(e)	(f)	(g)
	Estimated Annual Cost Savings	Guaranteed Annual Cost Savings	Annual Payments	Annual Dollar Savings Retained by Customer
1	\$680,000	\$646,000	\$626,000	\$20,000
2	\$797,000	\$757,150	\$757,149	\$1
3	\$714,425	\$678,704	\$678,703	\$1
4	\$732,286	\$695,671	\$695,670	\$1
5	\$750,593	\$713,063	\$713,062	\$1
6	\$769,358	\$730,890	\$730,889	\$1
7	\$788,592	\$749,162	\$749,161	\$1
8	\$808,306	\$767,891	\$767,890	\$1
9	\$828,514	\$787,088	\$787,087	\$1
10	\$849,227	\$806,765	\$723,752	\$83,013
Total Performance Period	\$7,718,300	\$7,332,385	\$7,229,364	\$103,021
Total Implementation & Performance Period		Total Guaranteed Cost Savings (b+e)	Total Payments (c+f)	
		\$7,378,885	\$7,275,864	

IMPORTANT INFORMATION:

- (1) Guaranteed % of estimated savings is share of project estimated savings that ESCO is guaranteeing.
- (2) The guaranteed annual cost savings are based on the general description of M&V plan proposed for the project.
- (3) The total of annual payments represents the contract price and should be supported by information submitted.
- (4) If applicable, prior to the performance period, implementation period payments and energy savings are one-time amounts only.
- (5) If applicable, the proposed guaranteed cost savings during the implementation and performance periods must exceed the payments.
- (6) Escalation rates (see Annual Escalation Rates) applied to initial estimated annual cost savings in column (d).



M&V Report: Summary Page



Annual Performance Period M&V Report for Year [#] (Post Installation Report)



BASIC PROJECT INFORMATION

Project Contact Information	Role:	Institution:	Name:	Email:	Phone:
	Customer (Project Initiator)				
	ESCO (Project Builder)				
	ESCO M&V Specialist				
	Other M&V Contact				
Third Party Verification					

Project Identification & Characteristics	Project Identification:	
	Task Order or Purchase Order #, if applicable	
	Contract #	
	Project Name:	
	Third Party Verified	
	Agency M&V Witnessed (name)	
	Notes	

Key Dates	
Performance Year	
M&V Report Due Date	
M&V Report Date	
Performance Period Begin Date	
Performance Period End Date	
Customer/Contracting Officer Approval Date	
M&V Witnessed Date	



ePB: Making Your Data Powerful

- **CONSISTENCY:** standardized data collection and financial schedules across ESCOs and across markets (federal, state, local, schools, etc.)
- **ACCESSIBILITY:** Secure centralized online database with permissions assigned by customer and ESCO
- **ACCESSIBILITY:** Ready access to portfolio of project data for multiple uses
- **TRANSPARENCY:** Increased transparency, customer ownership and stakeholder confidence
- **MARKET KNOWLEDGE:** Benchmarking provides access to statistics on historic project data



Benchmarking



Benchmarking

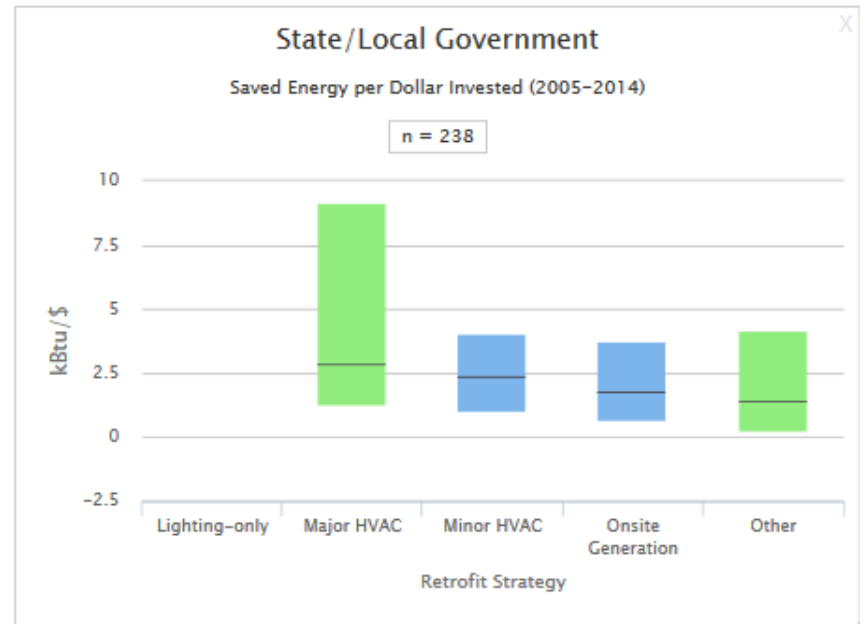
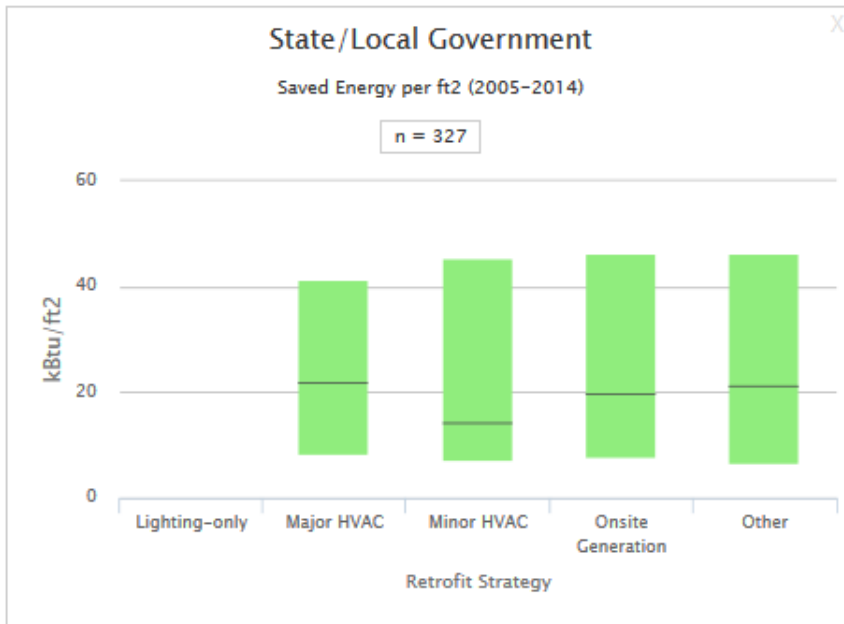
Help/Documentation

About

Benchmarking

30+ Projects 10~29 Projects <10 Projects

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ePB Status

- **Projects in the system:**
 - ~320 projects across MUSH and federal market sectors
 - NV, VA, GA and KY, cities and universities
 - NV first state to require ePB for all its ESCOs
 - FEMP: new and legacy projects
- **Future:**
 - M&V module, dashboard, document upload (fall 2015)
 - Exploring: ESCO project registry for Clean Power Plan



Accessing ePB

LEARN and EXPLORE on the training site:

<https://epb-test.lbl.gov>



ENTER PROJECTS on the main site:

<https://eprojectbuilder.lbl.gov>

(Requires separate credentials)

CONTACT US:

Email: epb-support@lbl.gov

Phone: (510) 486-7442





Extra Slides



Project Entry Workflow

Typical project entry workflow:

- Customer and ESCO register for ePB accounts
- Customer initiates project online; provides ESCO contact email
- System notifies the ESCO that the new project is available
- ESCO downloads data template from site; inputs project data into the template
- ESCO uploads completed data template to ePB site
- When project is at award stage, ESCO submits uploaded data template online for customer approval
- Customer reviews project data via output schedule; if project data is deemed final, customer approves project and it is archived in ePB
- Customer can “unlock” project for revisions (e.g., mods)