eProject Builder (ePB)

- Secure, web-based energy project data tracking & reporting system
- Free tool developed/maintained by LBNL
- Funded by U.S. DOE: FEMP and WIP
- Enables ESCOs and their customers to securely:
  - Preserve, track & report project and M&V info in perpetuity
  - Generate range of reports on portfolio of projects
  - Develop project scenarios using standardized calculations
  - Benchmark proposed projects against historical ones
  - Enter and track ESPC, UESC, ESA and other project types
  - Be audit-ready!
## Current Status

### Participation

<table>
<thead>
<tr>
<th>Description</th>
<th>Details</th>
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<tbody>
<tr>
<td>Contains <strong>653</strong> projects representing implementation costs of <strong>$5.2B</strong> and cumulative guaranteed savings of <strong>$10.7B</strong></td>
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<td>398 federal projects (IDIQ, ENABLE, Army Corps, UESC, GSA Area-wide)</td>
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<td>255 state/local/educational/commercial/industrial/other</td>
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<td>&gt; <strong>1000</strong> individuals have trained on ePB: agency, ESCO, and facilitator staff</td>
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### Who requires eProject Builder

- DOE-FEMP IDIQ 3 contracts
- DOE Qualified List of ESCOs accreditation process
- MATOC
- Required or used by increasing number of state ESPC programs
- NAESCO – required as platform for annual accreditation process
ePB Benefits

• Standardization, relational database
• Data and document preservation in perpetuity
• Enables reliable analysis and reporting to stakeholders
• Enables agencies to be audit-ready
• M&V tracking facilitates identifying shortfalls and holding ESCOs accountable
ePB Components and Security

- Two Key System Components
  - Excel-based data template for ESCO to enter data and develop project scenarios
  - Online system where data and documents are uploaded, accessed and tracked

- Security Features
  - Encrypted protocol (https)
  - Two-step log-in similar to high-security e-commerce sites
  - Project access restricted to one ESCO and one customer account
    - Others may be granted read-only access by customer or ESCO
  - Zero risk score via 2 levels of vulnerability testing/remediation
    - National lab IT security scans
    - 3rd-party scans from government cybersecurity expert
Inputs and Outputs

• Inputs and database content
  – Collects data at project level—not at building or facility level
  – ePB is FLEXIBLE—collect the types of info important to you
  – Available data types include:
    • Key project dates
    • Financing and guarantee terms; escalation rates
    • Implementation price
    • Baseline usage; estimated and guaranteed savings
    • M&V verified savings

• Outputs - reports
  – Project financial and savings schedules
  – Portfolio-level analysis: output data, tables and graphs
  – M&V results – per year and cumulative
Typical ePB Workflow

- On ESCO selection, Customer initiates project online, providing ESCO contact e-mail (takes <1 minute)
- ESCO may use ePB data template to iterate on proposal
- ESCO inputs project proposal into template and uploads to online system
- ESCO may generate PDF schedules to drop into project proposals
- When project is at award stage, ESCO finalizes proposal info in ePB and submits for customer approval
- Customer reviews; when proposal deemed final, customer approves project and schedules are archived on ePB
- At post-installation verification, ESCO enters and submits expected savings into ePB and annual M&V results thereafter
- Customer must “unlock” project for revisions (e.g., mods); ESCO updates project data and re-submits for customer review
Planned for FY19-20

- Accommodate wide range of federal project types and project variations
- Data exchange between ePB and CTS
- More options/flexibility to the data template
- Upgraded analysis and reporting functionality
- Scoping compliance with DoD cybersecurity protocols
- Investigate and implement additional ways ePB can help agencies be audit-ready
- Dynamic benchmarking using data in ePB (current tool draws statistics from historic database)
Q&A

ePB website: eprojectbuilder.lbl.gov
Email: epb-support@lbl.gov
Phone: (510) 486-7442 (message line)

Thank you!

Elizabeth Stuart: estuart@lbl.gov
Extra Slides
M&V Reports

- Output single year and cumulative project reports

Test IDIQ project - M&V Year 0

ANNUAL PERFORMANCE PERIOD M&V FOR YEAR 0
ANNUAL EXPECTED SAVINGS BY ENERGY CONSERVATION MEASURE

ANNUAL PERFORMANCE PERIOD M&V
GUARANTEED AND VERIFIED COST SAVINGS

IMPLEMENTATION PERIOD

PERFORMANCE PERIOD

TOTAL PERFORMANCE PERIOD

IMPORTANT INFORMATION:
1. The guaranteed annual cost savings are based on the Schedule 1 presented along with the final proposal.
2. Negative Variance in Annual Cost Savings (b-d) indicate that the Verified Annual Cost Savings are less than the Guaranteed Cost Savings.
Analysis & Reporting Tool

- Choose fields to include in analysis, similar to pivot tables
- Display and download tables and graphs
- Start with library canned queries or create your own
- Save your favorite queries
Benchmarking statistics for different combinations of metrics, market segments, and years

Users query aggregated data from the LBNL/NAESCO database of ~ 6,000 ESCO projects (not projects in ePB)
How do I access ePB?

- Go to eprojectbuilder.lbl.gov and request an account for:
  - Main ePB site (eprojectbuilder.lbl.gov) to enter actual projects; and/or
  - Training site (epb-test.lbl.gov) to enter test data and explore tool from both ESCO and customer perspectives