



Performance Contracting National Resource Center

ESPC Resources for State and Local Governments

Kurmit Rockwell
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Performance Contracting National Resource Center (PCNRC)

- **Established in 2020 at the direction of Congress as a hub for DOE best practices and solutions for energy savings performance contracts (ESPCs)**
 - Collaboration between the Federal Energy Management Program (FEMP) and the Office of State and Community Energy Programs (SCEP)
- **Supports federal as well as municipal and state government, university, school & hospital (MUSH) market ESPCs**
- **Provides guides, tools, templates, and trainings focused on performance contracting & workforce development, including:**
 - New Training Certificate Series
 - eProject eXpress: streamlined project tracking platform

Benefits of Energy Savings Performance Contracting

- **ESPC enables customer organizations to pay for today's facilities upgrades with tomorrow's energy savings**
- **ESPC is a budget-neutral approach to implementing facility improvement projects, addressing deferred maintenance, comfort and operations issues, and increasing efficiency– without tapping capital budgets**
- **Performance guarantee ensures that energy and cost savings to pay for project are realized**
- **ESPC is primed to leverage and combine funding streams**
 - Combine grants, loans, rate-payer funded incentives, tax credits, renewable energy credits, and more

PCNRC Training Certificate Series

- **Developed for federal, state/local, and other public stakeholders**
 - Free, on-demand, accredited & interactive trainings
- **Sponsored by FEMP, in collaboration with SCEP, National Laboratories, DOE contractors, and experts in MUSH market ESPCs**
- **Focuses on roles and responsibilities, particularly those of the Owner's Representative (OR), throughout the ESPC project cycle**
 - ORs provide vital technical expertise in each phase of an ESPC project and help customers navigate the ESPC process, mitigate risks, effectively engage all project stakeholders, and ensure long-term project success
- **To receive a certificate, users must complete all eight modules and pass a comprehensive assessment**

[Performance Contracting National Resource Center \(PCNRC\) Training Certificate Series](#)

PCNRC Training Certificate Series

- Addresses the following needs:

Clarity on ESPC Process, Risks & Best Practices

- Provides detailed education on ESPC process, key steps, risks, and best practices
- Confirms trainee's knowledge in the field through post-training assessments & a comprehensive exam

Compliance with State Recommendations & Requirements

- Emphasizes which facets of ESPCs vary by jurisdiction
- Demonstrates how to inform ESPC project development based on state- and site-specific requirements

Access to Technical Experts

- Supports the build-out of a larger ESPC project workforce
- Provides certificate to demonstrate completion & understanding of the curriculum

PCNRC Training Certificate Series

- **Designed for both emerging and experienced professionals**
 - Energy analysts at State Energy Office or Department of General Services
 - Energy consultants
 - Engineers or technical consultants
 - Facility managers
 - Energy managers or champions
 - Procurement and contracting professionals
- **Supports the following learning outcomes:**

Benefits of ESPCs

- Describe how ESPCs are tools for client energy and cost savings

Performance Contracting Process

- Understand the steps to plan, scope, perform, and validate an ESPC

Best Practices

- Understand the activities that set the stage for successful ESPC projects, including the responsibilities of all actors

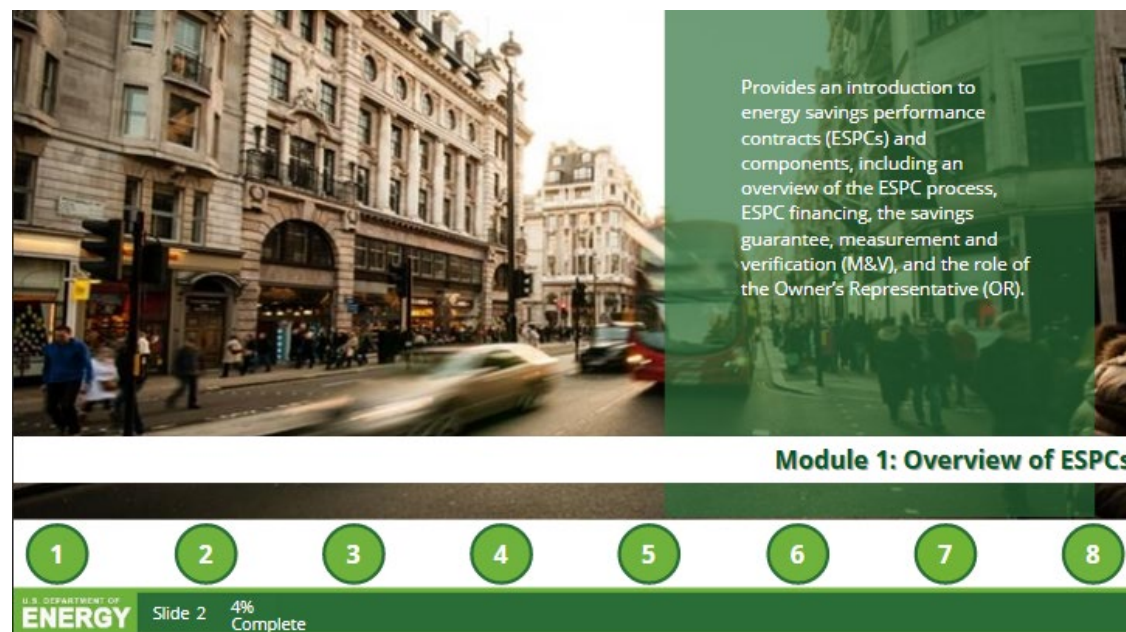
Technical Awareness

- Build familiarity with all tools, roles, resources, and applicable statutes necessary to facilitate a project

PCNRC Training Certificate Series

- First four interactive & on-demand accredited trainings available now
 1. Overview of ESPCs
 2. Getting Started with an ESPC Project
 3. Developing Scope for Project and Request for Proposal
 4. Measurement & Verification for ESPCs

[Click Here for Training](#)



Module 1: Overview of ESPCs

- **Learning Objectives**

- Explain why ESPC is a tool for energy and cost savings to Owners;
- Identify the ESPC process and steps;
- Describe how ESPCs reallocate current spending;
- Explain how an ESPC is financed; and
- Describe the Owner's Representative's responsibilities and competencies to successfully support an Owner's ESPC project.

OR Roles and Responsibilities

Overarching role of the OR is to ensure project:

Click each Role/Responsibility button to view information
You must review all information before proceeding

VALUE	Offers good long-term value to the customer (owner) and meets their objectives
LEADERSHIP	Has been explained to all primary owner stakeholders (from executive leadership down to O&M shops)
ANALYSIS	Is built upon a strong energy and water consumption baseline and strong engineering analyses
COSTS	Ensures project costs and markup structures are reasonable
RISK MANAGEMENT	Identifies, minimizes and manages customer risk
SUCCESS	
RESPONSIBILITY	

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OR Key Competencies

A combination of formal training and experience is needed in these areas

- | | |
|---|--|
| 01 Energy engineering & related technologies | 05 Commissioning (Cx) best practices |
| 02 Measurement and verification (options, measurement techniques, witnessing, etc.) | 06 Financing |
| 03 ESPC process | 07 Economic analysis, amortization, and escalation |
| 04 Baseline energy performance | 08 Risk assessment, assignment, and mitigation |

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Owner's Representative (OR) Role

Module 2: Getting Started with an ESPC Project

- **Learning Objectives**

- Recognize the OR's role in assisting an owner as they get started with an ESPC;
- Identify the fundamentals of the ESPC process, development stages and components;
- Recognize what drives ESPC success
- Recognize the types of facility information and data needed for informing the investment grade audit and proposal;
- Identify the financial, operational and performance risks and responsibilities of an ESPC; and
- Identify the difference between an ESPC and design-bid-build project.

OR Roles and Responsibilities in Project Planning

The Owner's Representative (OR) supports the best interests of the facility owner!

OR role may include any or all of the following, and more

Click each picture to learn more

Lead Project Team Facilitate

Manage Project Technical Oversight Educate and Advise



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OR Roles and Responsibilities in Project Planning

The Owner's Representative (OR) supports the best interests of the facility owner!

OR role may include any or all of the following, and more

Click each picture to learn more

Lead Project Team

Facilitating discussions with stakeholders and coordinating their feedback at key times

Manage Project Technical Oversight Educate and Advise

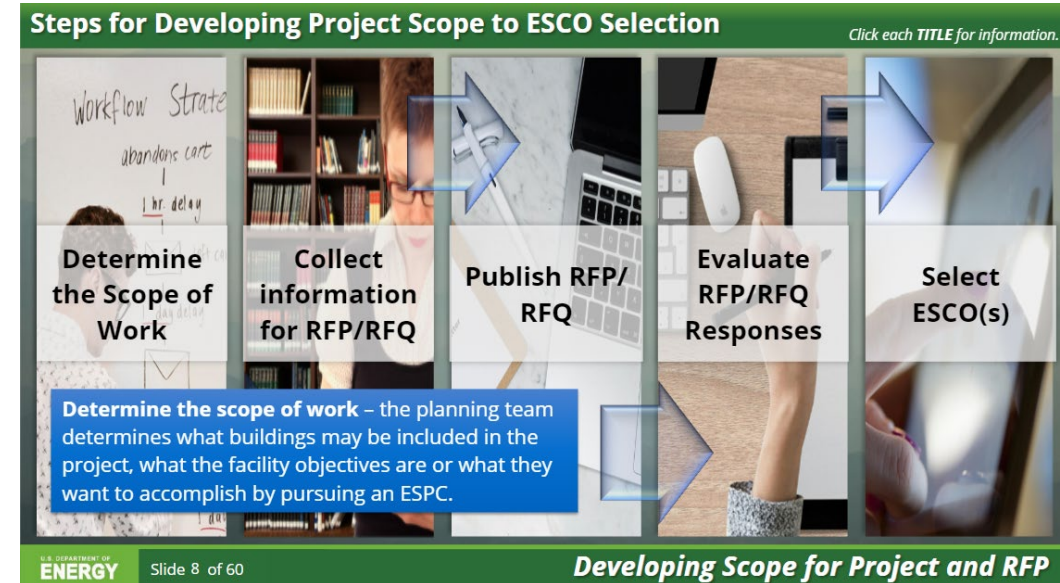


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Building the Project Team

Module 3: Developing Scope for Project and Request for Proposal

- **Learning Objectives**
 - Explain the process and steps in developing scope and request for proposal;
 - Describe the Owner's Representative's role in identifying Owner's needs, objectives, scope of potential project;
 - Identify information needed in developing project scope and the RFP;
 - Identify constraints and resources needed to develop and evaluate the RFP; and
 - Considerations when reviewing offeror's submissions for proposed savings and technical feasibility.



Module 4: Measurement & Verification for ESPCs

- **Learning Objectives**

- Describe why a facility owner needs M&V to ensure ESPC performance;
- Learn the importance of balancing performance uncertainty with cost;
- Identify the four main M&V options and understand how to choose an appropriate option for each ECM; and
- Apply the best practices for baseline development, witnessing, and M&V review.

Additional Benefits of Strong M&V

A solid M&V plan (that is included in the contract and followed) provides other benefits, such as:

Click each **ICON** for information.

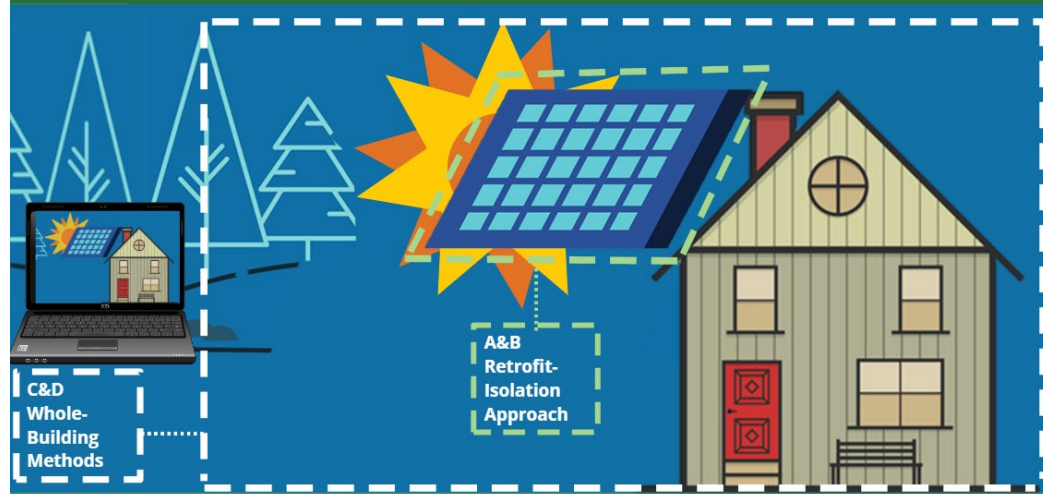


Safeguarding against future audits or program assessments

- ✓ Verifying and documenting performance
- ✓ Documenting ESCO and owner due diligence

Options A/B vs Options C/D

M&V Fundamentals



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Slide 40 of 65

M&V Options: Details and Examples

Next Steps for the Training Certificate Series

- Remaining four modules will be released on a rolling basis through early 2023
 5. Facilitating the Investment Grade Audit (IGA)
 6. Reviewing the IGA and Project Proposal
 7. Construction, Performance Verification, and Project Acceptance
 8. Performance Period

Other PCNRC Resources

Use the Training Certificate Series in concert with other available PCNRC resources

- The Training Certificate Series develops a foundational understanding of ESPC and the project management skills necessary to facilitate a successful project as an OR
- Other PCNRC tools and resources can support efficient and transparent performance contracting processes
 - [Ally in Your Corner](#): Shares the benefits of using an OR and key considerations for retaining one for an ESPC project.
 - [eProject eXpress](#): Tool to standardize, simplify, and expedite project and program data management and tracking.
 - Cross listed resources on [FEMP](#), [SCEP](#), and [Better Buildings ESPC Toolkit](#) websites

eProject eXpress

- **Made for the MUSH Market**

Leveraging the established eProject Builder platform, eProject eXpress (ePX) provides a streamlined pathway to meet state and local data management and reporting needs

- **Project Tracking Is Key To ESPC Project Success**

ePX provides free, secure, web-based energy retrofit project, program, and performance data tracking, reporting and preservation, safe-guarding public interest and dollars

- **Unlock Savings Potential**

ESPC can help the MUSH market realize the estimated 200-262 trillion BTU annual energy savings potential remaining¹



Free Training and Additional Resources

- Library of on-demand, sector-specific training webinars
- Custom team or state-specific trainings by request
- ePX technical support email: epb-support@lbl.gov
- ePX help and documentation page: <https://eprojectbuilder.lbl.gov/help>

1. Elizabeth Stuart et al. 2013. [Current Size and Remaining Market Potential of the U.S. Energy Service Company Industry](#). Lawrence Berkeley National Laboratory, LBNL-6300E.

eProject eXpress

- **Efficient**: Streamlined data entry, maintenance, and reporting processes save time for all users
- **Standardized**: Data collection fields track ESPC project and measurement and verification (M&V) data across sectors
- **Robust**: Free, secure web-based storage protects customer data and allows for record management and reporting continuity, even with staff turnover
- **Compliant**: Reporting features and statewide "rollup" summaries can fulfill ESPC reporting requirements and inform policymakers of ongoing trends
- **Illustrative**: Enables organizations to demonstrate successes, progress towards broader goals, and value of taxpayer-funded ESPC projects



Register for an account: <https://eprojectbuilder.lbl.gov>

Leveraging PCNRC Resources



Maximize impact of federal funding

- Combine funding and financing sources to accomplish more with ESPC
- Estimated \$66-208 billion remaining MUSH market ESPC project potential¹



Promote to stakeholders and applicable partners

- Share information about PCNRC resources to spread best practices and strengthen public agency staff capacity



Include in State ESPC programs

- Incorporate Training Certificate Series recommendations or requirements for owner's representatives to public ESPC projects
- Improve ESPC performance and data availability with ePX project tracking and M&V recommendations or requirements



Integrate into workforce training programs or curricula

- Utilize the Training Certificate Series in training workshops or career development programs

1. Peter Larsen et al. 2017. [Updated Estimates of the Remaining Market Potential of the U.S. ESPC Industry](#). Lawrence Berkeley National Laboratory, LBNL-2001027.

Stay Connected with Additional Resources

- **Performance Contracting National Resource Center**
Tools, resources, and best practices for federal and MUSH ESPC
- **Federal Energy Management Program**
Explore the FEMP training catalog
- **State and Local Solution Center**
Resource hub for states, local governments, and K-12 school districts
- **Better Buildings Solution Center**
Wide range of resources and trainings available by topic and sector, including the [ESPC Toolkit](#)

For more information, visit the PCNRC homepage:



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- <https://www.energy.gov/eere/femp/articles/femp-digest>

Questions?

Please contact PCNRC@hq.doe.gov with any further questions!