



# SCEP

STATE & COMMUNITY ENERGY PROGRAMS

## ESPC Campaign Webinar – Ally in Your Corner: Working with Owner’s Representatives

October 16, 2025

*A copy of the slides from today’s presentation will be provided to you for reference.*



**ENERGY SERVICES  
COALITION**

*A Public Private Partnership*

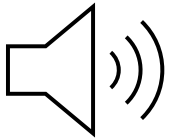
[www.energyservicescoalition.org](http://www.energyservicescoalition.org)



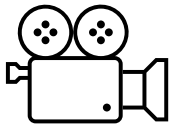
# Virtual Housekeeping



Drop your questions in the Q&A box – or raise your hand at the end!



Unmute your microphone to ask questions or join the conversation



A recording of this training (minus the final Q&A) will be posted online

# Speakers



**Dub Taylor**  
Executive Director,  
Energy Services Coalition  
[dtaylor@energyservicescoalition.org](mailto:dtaylor@energyservicescoalition.org)



**Chris Halpin**  
PE, CEM, CMVP, DOE  
Project Facilitator  
Consultant,  
Energy Services Coalition  
[chalpin@energyservicescoalition.org](mailto:chalpin@energyservicescoalition.org)



**Aldo Mazzaferro, PE, CEM, CEA**  
Executive Director  
NV5 Clean Energy Group  
[Aldo.Mazzaferro@nv5.com](mailto:Aldo.Mazzaferro@nv5.com)



**George Buchanan, CEM,**  
DOE Project Facilitator  
CEO & Founder  
2KB Energy Services  
[george.buchanan@2kbco.com](mailto:george.buchanan@2kbco.com)

# Presenter's Bios

- **Dub Taylor:** Dub is the Executive Director of the Energy Services Coalition, and the COO of the Texas PACE Authority. Dub has over 25 years of clean energy policy, programmatic, operations and technology deployment experience, including 20 years as the Director of the Texas State Energy Conservation Office.
- **Chris Halpin:** Chris runs Celtic Energy, PLLC, based in Las Vegas, NV. ESC, U.S. DOE, and Berkeley Lab are his primary clients. He has 40 years' experience in the energy efficiency industry, including founding and running an ESPC Owner's Rep firm for 18+ years where he oversaw over \$2.5 billion of ESPC projects. He has a BS Mechanical Engineering, is a registered PE in Nevada, and Certified by the Association of Energy Engineers (AEE) as a Certified Energy Manager (CEM) and Certified Measurement & Verification Professional (CMVP). He is also a USDOE FEMP certified Project Facilitator.
- **Aldo Mazzaferro:** Aldo is the Executive Director of Business Development for NV5's Clean Energy Group. Based out of New York City, Aldo helps public agencies of all sizes from across the nation with the planning, procurement, implementation, and long-term monitoring of their ESPC initiatives. Aldo is a Professional Engineer (PE), Certified Energy Manager (CEM), Certified Energy Auditor (CEA), and he holds a Masters in Energy Systems Engineering.
- **George Buchanan:** George is the Founder and CEO of 2KB Energy Services, an Atlanta-based firm specializing in comprehensive energy efficiency projects. With nearly 30 years in the industry, George specializes in translating complex technical concepts into actionable strategies for sustainable energy solutions. He holds a BS in Electrical Engineering, an MBA, and is certified as a USDOE FEMP Project Facilitator and Certified Energy Manager (CEM).

**The Energy Services Coalition (ESC)** is a national nonprofit organization composed of a network of experts from a wide range of organizations working together at the state and local level to increase energy efficiency and building upgrades through **E**nergy **S**avings **P**erformance **C**ontracting.

*Local chapters; public and private sector individuals coming together to provide outreach and education.*

# Acronyms Explained

- BAS = Building Automation System
- Cx = Commissioning
- DOE = Department of Energy
- ECM = Energy Conservation Measure
- ESCO = Energy Services Company
- ESPC = Energy Savings Performance Contract
- FA = Financial Advisor
- HVAC = Heating, Ventilation, and Air Conditioning
- IGA = Investment Grade Audit
- IGAA = Investment Grade Audit Agreement
- M&V = Measurement & Verification
- OMR&R = Operations, Maintenance, Repair and Replacement
- OR = Owner's Representative
- PIR = Post-Installation Report
- RFP = Request for Proposal

# Agenda

**Learning Objective:** This webinar will explore the value of working with an Owner's Rep—an independent advocate who helps owners navigate complex ESPC projects, maximize benefits, and minimize risks.

- Introductions
- What is ESPC? Where are we in the ESPC Process?
- The Owner's Rep role
- Bringing an Owners Rep on Board
- Value of an OR throughout ESPC, and Best Practices for working together
- Questions, and Discussion
- Resources and Upcoming Events

# What is ESPC?

The use of **guaranteed savings** from the maintenance and operations budget (utilities) as capital to make needed upgrades and modernizations to your building environmental systems, financed over a specified period of time.”

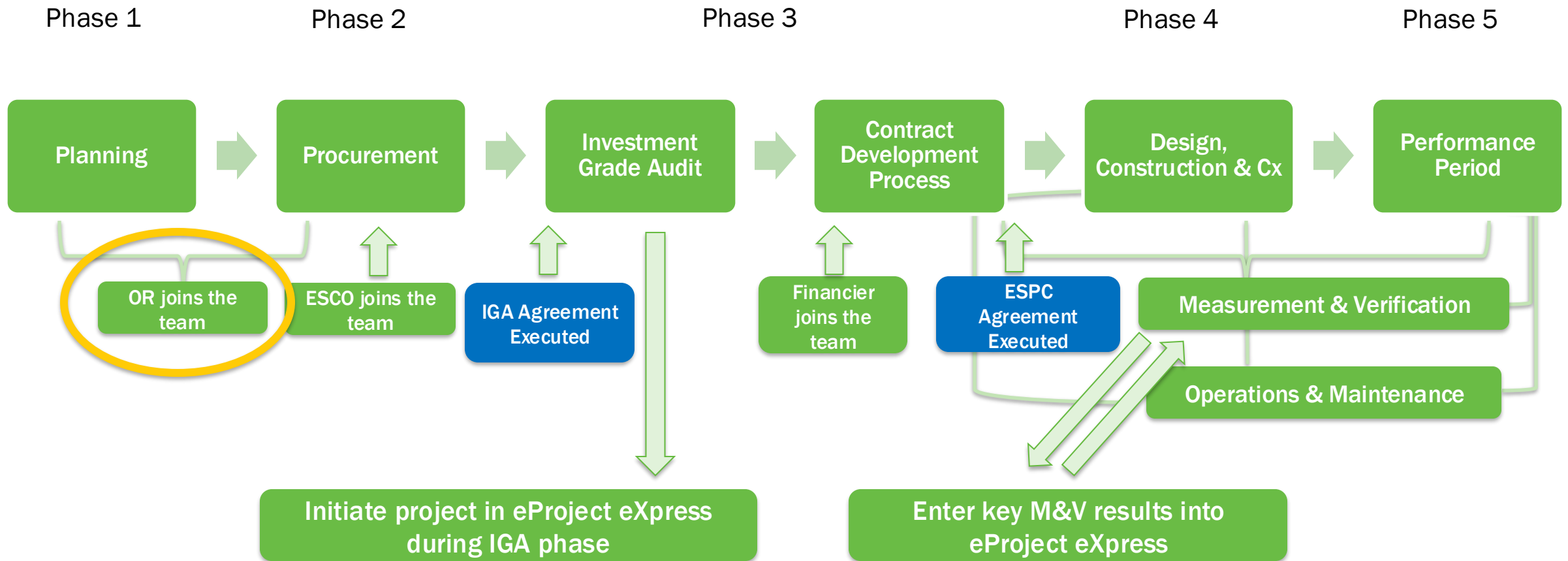
- United States Department of Energy - 1999

“ESPC is a financial mechanism used to pay for today’s facility upgrades with tomorrow's energy savings – without tapping your organization’s capital budget. Done properly, it has the performance of a hedge fund, with the risk of a T-bill.”

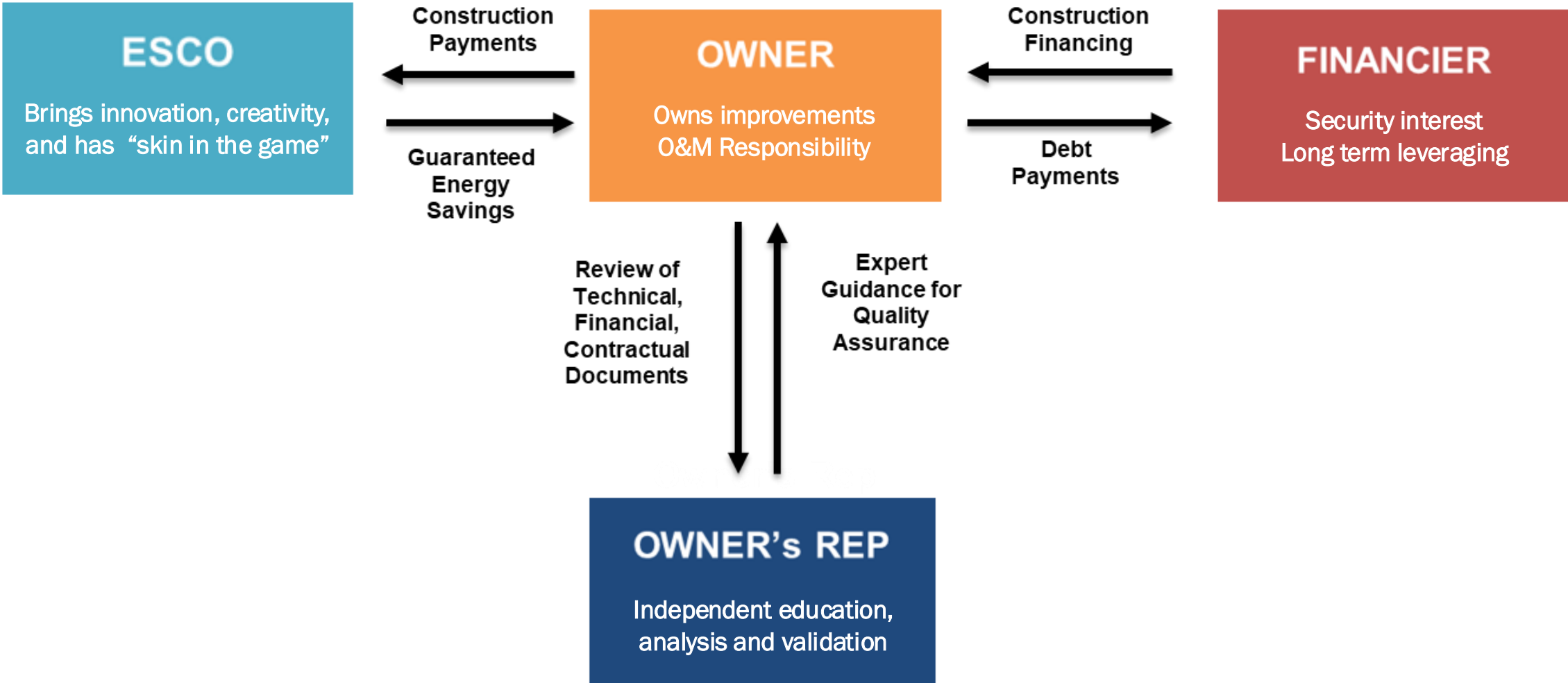
- Chris Halpin - seems like every day

A version of **design-build** contracting, with a focus on guaranteed energy savings.

# Where are we in the ESPC Process?



# ESPC Roles and Responsibilities



# The Role of an Owners' Rep

# What is an Owners Rep?

**Owner's Representatives (ORs)** help ESPC customers maximize savings and minimize risks throughout complex performance contracting projects<sub>1</sub>. They do this through:

- Protecting customer interests (Negotiation skills and customer advocacy)
- Ensuring proper M&V (Quality assurance)
- Providing technical expertise
- Negotiating better value
- Facilitating clear Communication
- Overseeing project implementation.

*Many of the concepts covered in this webinar were first presented in the "Ally in your Corner: Benefits of Owner's Representatives" white paper cited below.*

[1] <https://www.energy.gov/sites/default/files/2021-11/ally-in-your-corner-benefits-owner-representatives.pdf>

# Protect Customer Interests

Owner's Reps act as advocates for the customer's interests throughout the ESPC process.

They help mitigate risks such as legal disputes, unclear roles/responsibilities, inaccurate baseline calculations, poor measurement & verification (M&V), and inadequate commissioning<sub>1</sub>. Their expertise helps avoid costly issues.



Image by FreePik

# Ensure Proper M&V

Owner’s Reps play a crucial role in ensuring M&V is planned and conducted properly according to industry standards like IPMVP<sub>1</sub>.

Effective M&V, typically 2-3% of project costs, helps verify guaranteed savings and can identify excess savings<sub>1</sub>.

|                                          |                                                                                                                    |
|------------------------------------------|--------------------------------------------------------------------------------------------------------------------|
| Phase 3: Project Development             | Determine baselines and estimated savings:<br><i>Defined in the investment-grade audit and proposal</i>            |
| Phase 3: Project Development             | Develop M&V plan:<br><i>Created as part of the technical proposal</i>                                              |
| Phase 4: Implementation and Construction | Develop post-installation M&V report:<br><i>ECM performance verified</i>                                           |
| Phase 5: Post-Acceptance Performance     | Perform annual M&V:<br><i>Activities outlined in M&amp;V plan</i><br><i>Findings documented in M&amp;V reports</i> |

Image by USDOE

[Link to recent webinar on M&V](#)

# Provide Technical Expertise

Owner's Reps offer deep technical knowledge across all stages of ESPC projects - from audits and design to construction oversight and commissioning<sub>1</sub>.

Their expertise helps validate appropriate technologies and optimize energy savings opportunities.



Image by FreePik

# Negotiate Better Value

Owner's Reps thoroughly review proposals and can assist in negotiating a fair and balanced financial deal.

One university saved \$350,000 through an Owner's Rep's assistance in an afternoon of negotiation with the ESCO<sub>1</sub>.



**Negotiation**  
*[ni-ˌgō-shē-ˈā-shən]*

A strategic discussion that resolves an issue in a way that both parties find acceptable.

Investopedia

# Facilitate Clear Communication

Owner's Reps help ensure clear communication between the customer and ESCO to align expectations and avoid misunderstandings that can lead to disputes<sub>1</sub>.



Image by FreePik

# Oversee Implementation of Project

Owner's Reps provide implementation oversight to verify equipment meets specs, commissioning is done properly, and operating procedures are documented<sub>1</sub>. Typically, not a full-time onsite role, only at strategic points for Cx/M&V, etc.



Image by FreePik

This protects against shortfalls.

# Bringing an Owner's Rep On Board

# Selecting and Hiring an Owners Rep

## 1. Issue an RFP/RFQ

- If your State has a pre-qualified list of ORs, issue an RFP to the pre-qualified list<sub>2</sub>.
  - [Owner's Representative list](#) from ESPC Campaign Supporters webpage.
- If your institution does not have a pre-qualified list available, the Owner can issue an RFP directly to the open market through your organization's procurement department, or various available solicitation channels such as Demand Star, Periscope S2G, etc.
- See considerations for OR qualifications on next slide.
- *Note: Beware of hiring your local design engineer or construction manager. They may be good at design/GC of new or renovated buildings but are typically not ESPC experts.*
- Template documents coming soon to ESC site

## 2. Interview the top few respondents

- You want to make sure there is a sense of trust, rapport, and integrity in the relationship with your selected OR.

## 3. Utilize a Master Professional Services Agreement (MPSA) <sub>2</sub>

- These "on-call" or "blanket" contracts allow you to negotiate the basic terms and conditions once and then award "Task Orders" containing specific scopes of work against the MPSA as the project progresses through the five ESPC project phases.
- Template documents coming soon to ESC site

[2] Current Best Practice

# Considerations for Owners Rep Qualifications

- Energy industry recognized credentials issued by the:
  - Association of Energy Engineers (AEE):
    - [Certified Energy Manager \(CEM\)](#)
    - [Certified Measurement & Verification Professional \(CMVP\)](#)
  - Efficiency Valuation Organization (EVO)
    - [Performance Measurement and Verification Analyst \(PMVA\)](#)
    - [Performance Measurement and Verification Expert \(PMVE\)](#)
  - U.S. Department of Energy (DOE)
    - [FEMP Project Facilitator](#) (DOE PF)
    - [Owner's Rep Certificate Series](#) (US DOE Performance Contracting National Resource Center)
- Engineering degrees including Mechanical and Electrical Engineering.
- At least one Professional Engineer (PE) registered in the Owner's state.
- References demonstrating ESPC-specific experience working as an Owner's Representative.
- Inclusion of a statement in the proposal stating, *"Our firm is a dedicated Owner's Representative in the ESPC market, and we will discontinue all subcontracting relationships with ESCOs in this State's market if awarded this contract" to avoid conflict of interest.*
- Information demonstrating that the Owner's Representative has overseen multiple ESCOs. This demonstrates the OR's neutrality in the industry.



# **OR Support Throughout Your ESPC Project... and Best Practices**

**Aldo Mazzaferro & George Buchanan**

# Value of an Owner's Rep *Before* ESCO Engagement

Hiring an Owner's Rep early delivers stronger outcomes, smoother procurement, and long-term project success.

## Project Planning

- Educate stakeholders on ESPC value
- Set goals, scope, budget, and timeline
- Align departments and expectations

## Opportunity Assessment

- Identify energy, water, and ops improvements
- Build a solid business case

## ESCO Procurement

- Develop RFP & manage selection
- Ensure transparency and fair competition
- Negotiate balanced pricing & risk

## Project Development

- Facilitate communication & troubleshoot early
- Set up a smooth path to IGA and implementation

# Best Practices: *Before* the ESCO is Engaged

## Planning the Project

- Develop the business case, but don't duplicate future ESCO efforts!
- Leverage existing information & past studies.
- Communicate findings & set expectations for those with "veto power"
- Determine a plan for procurement, financing, etc. Don't wait until you're there!
- Educate the stakeholders on best practices and debunk ESCO myths!

## Procuring the ESCO

- Procure the Partner, not the Project
- Primarily Qualifications-based selection
- Take advantage of competition phase to solicit indicative pricing & negotiate key terms & conditions of future agreements.
- Interview top performing partners!!

# The Value of an Owner's Representative *After* ESCO Engagement

Once an ESCO is selected and the project moves into the Investment Grade Audit (IGA) and implementation phases, an Owner's Representative (OR) plays a critical role in ensuring the client's interests are protected, project risks are managed, and savings are realized as promised.

## Investment Grade Audit

- Verify technical accuracy, savings estimates, and cost reasonableness
- Identify risks and ensure alignment with contract terms
- Support negotiations and resolution of comments

## Construction Oversight

- Monitor timelines, milestones, and change orders
- Confirm equipment meets design intent and specs
- Witness commissioning, training, and O&M delivery

## Measurement & Verification

- Review M&V plan and annual reports for accuracy
- Validate baseline and post-installation data
- Recommend adjustments for operational changes

## Dispute Resolution

- Provide objective guidance and documentation
- Help prevent or mediate issues early

# Best Practices – After the ESCO is engaged

## Investment Grade Audit

- This is your project
  - Communicate all design, specification, and installation standards/requirements
  - What, exactly, will happen after commissioning/start-up?
- Know what you are buying
  - Equipment settings can save lots of energy... and make everyone miserable
  - If you can't explain the savings methods, then you shouldn't agree to them
- Ancient history? No! Commitments made during the solicitation count!

## Construction and Start-up

- Last call for design and specifications
- The ESCO is your GC – don't get caught managing their subs
- Help them help you – engage in all training and turnover activities

## M&V

- No such thing as a dumb question – make them make you an expert
- Know your limits – small operational changes can have big impacts

# How do Owner's Reps pay for themselves?

Consider a sample \$20M Project with \$1M/yr in Annual Savings

- **Example #1 - Identify errors in savings calculations**
  - ESCO calculates \$1 Million per year in savings (\$30M over 20 yrs)
  - Owner's Rep finds an error overestimating savings by 2.5% or \$25k/yr (~\$750k over 20 yrs)
  - The Net Present Value (NPV) of that error = ~\$500,000
- **Example #2 – Negotiates fair ESCO Markup Structure**
  - With the help of an Owner's Rep, the customer negotiates a 2.5% savings on Overhead & Profit.
  - On a \$20M Project, this is equivalent to \$250,000 that can be re-invested into new equipment
- **Example #3 – Modify costs based on change in scope**
  - Hospital decided not to retrofit a floor due to upcoming renovation, lighting sub forgot to deduct \$50k from build-up.

| Example Findings                         | Value to Owner   |
|------------------------------------------|------------------|
| Example #1 – Identify Savings Calc Error | \$500,000        |
| Example #2 – Negotiate Fair Markup       | \$250,000        |
| Example #3 - Correct cost buildup        | \$50,000         |
| <u>Total</u>                             | <u>\$800,000</u> |

ORs usually find 5-10X their costs in cost savings to Owners

# Q&A Discussion

# Common Owner's Rep Questions

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- When is the ideal time to hire an Owner's Rep?
- I've already started my project. Is it too late to hire an OR?
- What is the right balance for on-site support from an OR during construction/commissioning?
- What is the best way for an Owner to fund an OR's fees?
- Does the OR add cost to the project?

Any other questions?

# **DOE Resources and Upcoming Events**

# Resources

## Coming soon: OR template documents

- ESC will be posting on their website soon. They will include RFPs as well as MPSAs for State Energy Offices as well as individual organizations or projects.
- An educational companion piece will also be provided to give more context and guidance.

## U. S. DOE Better Buildings Program:

- [ESPC Toolkit](#)
  - [Evaluating ESPC Results](#)
  - [The Business Case for Conducting Measurement and Verification In State and Local Government Energy Savings Performance Contract Projects](#)

## U.S DOE Federal Energy Management Program:

- [Performance Contracting National Resource Center](#) - Hub for ESPC resources: legislation by state, SEO contacts, trainings
- [M&V Guidelines: Measurement and Verification for Performance-Based Contracts Version 5.0](#)

## Written Guides & Reports:

- [IPMVP Core Concepts](#)
- [M&V and Energy Performance Contracting for Facility Owners](#)

# Resources: ESPC Campaign



The **Energy Savings Performance Contracting (ESPC) Campaign** engages states, local governments, school districts, universities and colleges, hospitals, and other market stakeholders to:

- **Support** the use of performance contracting to increase efficiency, modernize public buildings, reduce utility expenses, increase resilience, and meet lead-by-example goals
- **Share and Leverage Practical Resources** to strengthen ESPC and measurement & verification (M&V)
- **Amplify and Implement Best Practice Approaches** for ESPC projects and programs
- **Demonstrate Impact** with measured and verified energy and cost savings
- **Showcase Achievements** and share examples of successful ESPC implementation

- ✓ *Expert-led Trainings*
- ✓ *Webinars*
- ✓ *Peer Exchanges*
- ✓ *“Ask-an-Expert” Office Hours*
- ✓ *Resource Library*

**Case Study  
Submission  
Form [Here](#)**

Complete the [Expression of Interest](#) form to obtain a Partner Agreement

# Technical Assistance

State and local ESPC Campaign partners are invited to set up a time to speak with an ESPC Subject Matter Expert for direct technical assistance. Discussion topics can be anything regarding an ESPC project or program, including specific questions on your project. **To request a meeting time**, please complete this **Technical Assistance Sign-Up Form**.



*"The USDOE's ESPC Campaign has been an invaluable partner in helping us strengthen collaboration with ESCOs and implement the eProject eXpress (ePX) platform effectively. Through opportunities like speaking at the Energy Services Coalition Regional Meeting and participating in a Peer Exchange, as well as receiving direct support from a DOE subject matter expert, we've made significant progress. Our ePX portfolio has become far more usable, and the interest from partners across our state has grown tremendously. The Campaign's technical assistance makes complex information clear and actionable, and I would strongly recommend it to any organization looking to advance their ESPC efforts."*

-Miracle Wilson  
Energy Resource Project Manager  
Georgia Environmental Finance Authority

# Upcoming Events

## Webinars

- Using eProject eXpress to Track and Report ESPC Legacy Project Data (Led by LBNL)  
October 21, 2025, 1:00pm CT
- State of States : How are States encouraging ESPC : The evolving role of State Energy Offices in fostering successful MUSH market projects  
October 28, 2025, 1:00pm CT
- Using eProject eXpress to Track and Report ESPC Legacy M&V Data (Led by LBNL)  
November 10, 2025, 12:00pm-1:00pm PST

## In-Person

- 2025 Annual R3 Conference and Innovation Expo - Join us in Las Vegas for the Annual Conference of the National Association of Energy Service Companies!  
November 3-5, 2025 - Paris Las Vegas, Las Vegas, NV



**Thank you!**

[ESPCcampaign@hq.doe.gov](mailto:ESPCcampaign@hq.doe.gov)

Chris Halpin

Energy Services Coalition

[www.energyservicescoalition.org](http://www.energyservicescoalition.org)

[chalpin@energyservicescoalition.org](mailto:chalpin@energyservicescoalition.org)

