SCEP
STATE & COMMUNITY ENERGY PROGRAMS

# ESPC Campaign Training – Paying for Your Project: Understanding ESPC Project Financials, Financing Options, and the Leveraging Effect on Contributed Funds

December 5, 2024

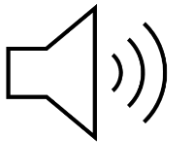
*A copy of the slides from today's presentation will be provided to you for reference.*

ENERGY SERVICES COALITION
A Public Private Partnership
www.energyservicescoalition.org

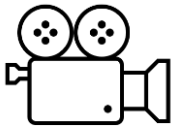
ESPC Campaign

# 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

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# Presenter's Bio

- 39 years' experience in energy efficiency industry, including engineering, management, marketing, and sales at several engineering firms and energy service companies (ESCOs)
- Founded and ran an ESPC Owner's Rep firm for 18+ years
- U.S. Department of Energy Project Facilitator for Federal ESPCs for 20+ years
- Quality Assurance on $2.5 billion of ESPCs for dozens of state and local governments, K-12, and higher education clients, as well as DOE, DOD, FBI, FDA, GSA, DHS, and others
- BSME from University of South Florida
- Registered Professional Engineer in Nevada
- Certified by the Association of Energy Engineers (AEE) as a Certified Energy Manager (CEM) and Certified Measurement & Verification Professional (CMVP).

# About ESC

**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

- DBB = Design, Bid, Build
- DOE = Department of Energy
- ECM = Energy Conservation Measure
- ESCO = Energy Services Company
- ESPC = Energy Savings Performance Contract
- FA = Financial Advisor
- IGA = Investment Grade Audit
- IGAA = Investment Grade Audit Agreement
- M&V = Measurement & Verification
- NIST = National Institute of Science and Technology
- OMR&R = Operations, Maintenance, Repair and Replacement
- OR = Owner's Representative
- PIR = Post-Installation Report
- RFP = Request for Proposal

# Agenda

**Learning Objective:** An overview of ESPC project financials, financing options, and the leveraging effect on contributed funds.

- Introductions
- What is ESPC?
- Understanding ESPC Project Financials
- Process for Securing Funding and Financing
- Sources of Financing/Funding and Capital Stacking
- Pro Forma Cash Flows
- Questions and Discussion
- Resources, Closing Thoughts, and Next Steps

***This symbol indicates that more information on this topic will be featured in future trainings.***

***Designed by Freepik***

*Note: U.S DOE and the Energy Services Coalition are not financial advisors. Nothing in this presentation should be considered financial advice, in compliance with the Sarbanes-Oxley Act of 2002.*

# 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.

# Understanding ESPC Project Financials

# Understanding ESPC Project Financials

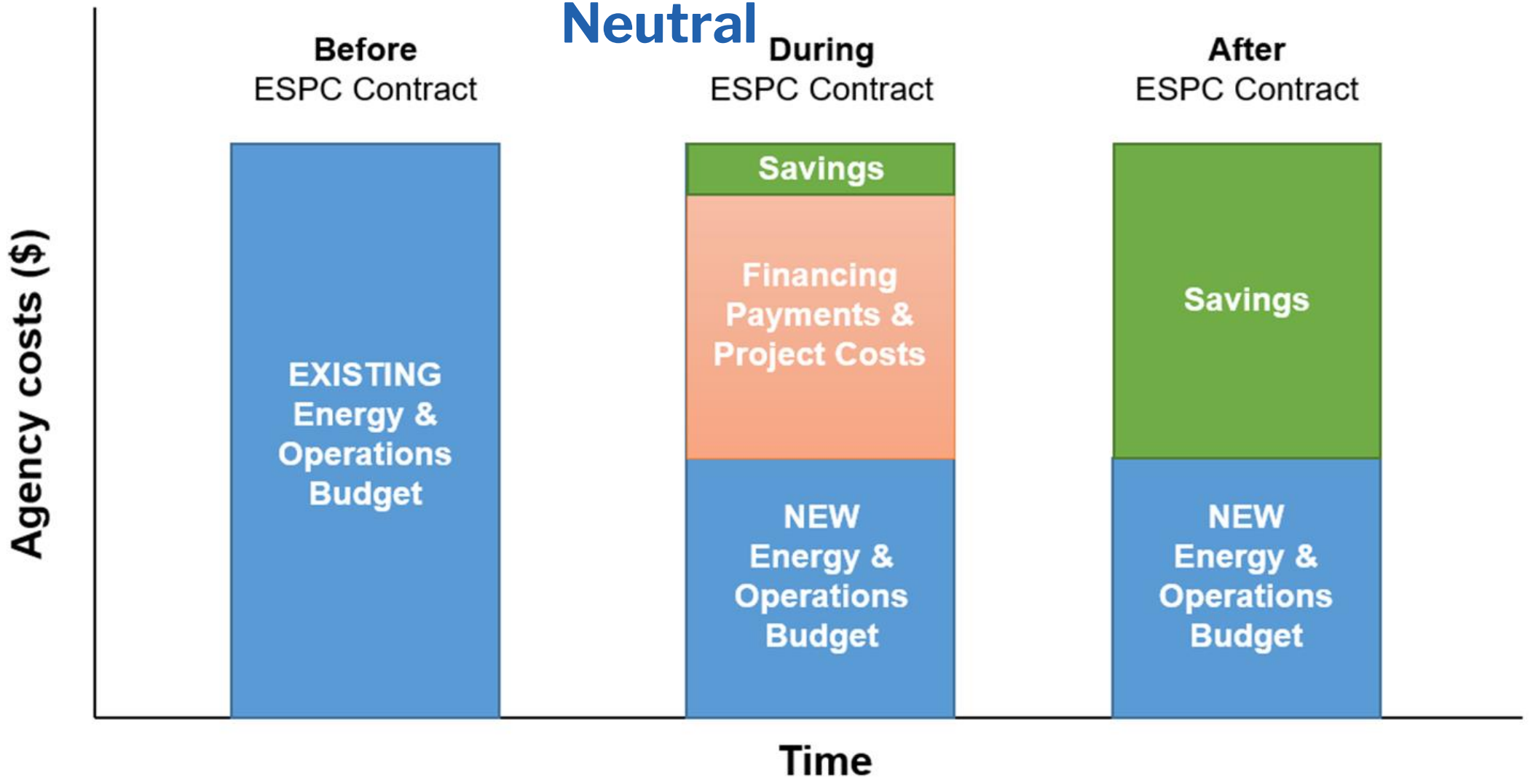
ESPCs work by using **guaranteed annual energy savings to pay for energy-saving improvements.** The energy service company (ESCO) designs and installs the necessary upgrades, and the facility pays for the project through reduced utility and other operating expenditures.

Key financial aspects include:

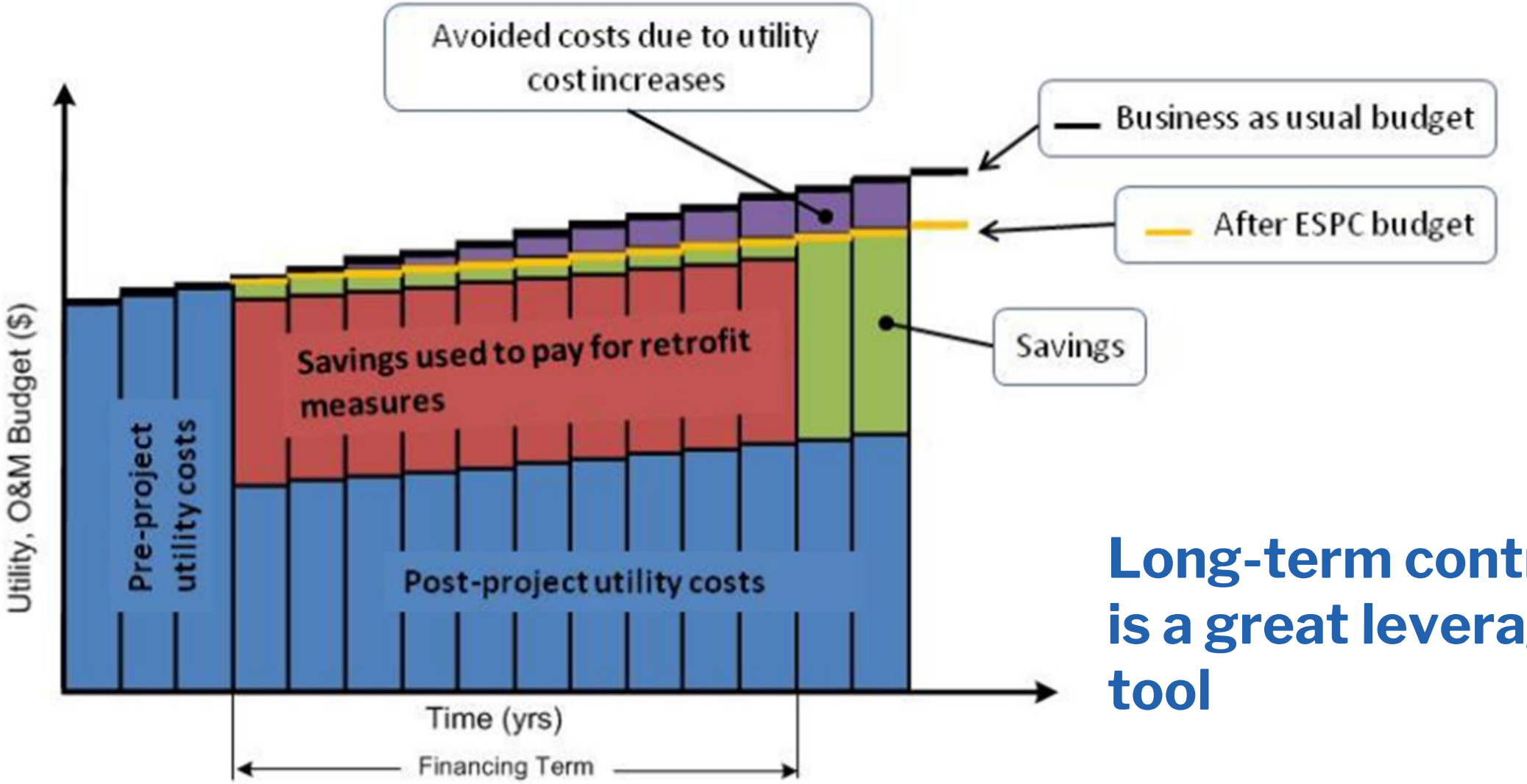
- No up-front investments required from the facility.
- Owner can leverage capital funds with private financing.
- Projects are financed utilizing the guaranteed annual savings as the source of repayment.
- Contractors must guarantee that savings will at least equal payments for upgrades.
- Typical contract terms range from 15 - 25 years.
- Many financiers are very interested in ESPC because their risk of non-payment is very low due to the savings guarantee.

# Understanding ESPC Project Financials

## Budget Cost Neutral



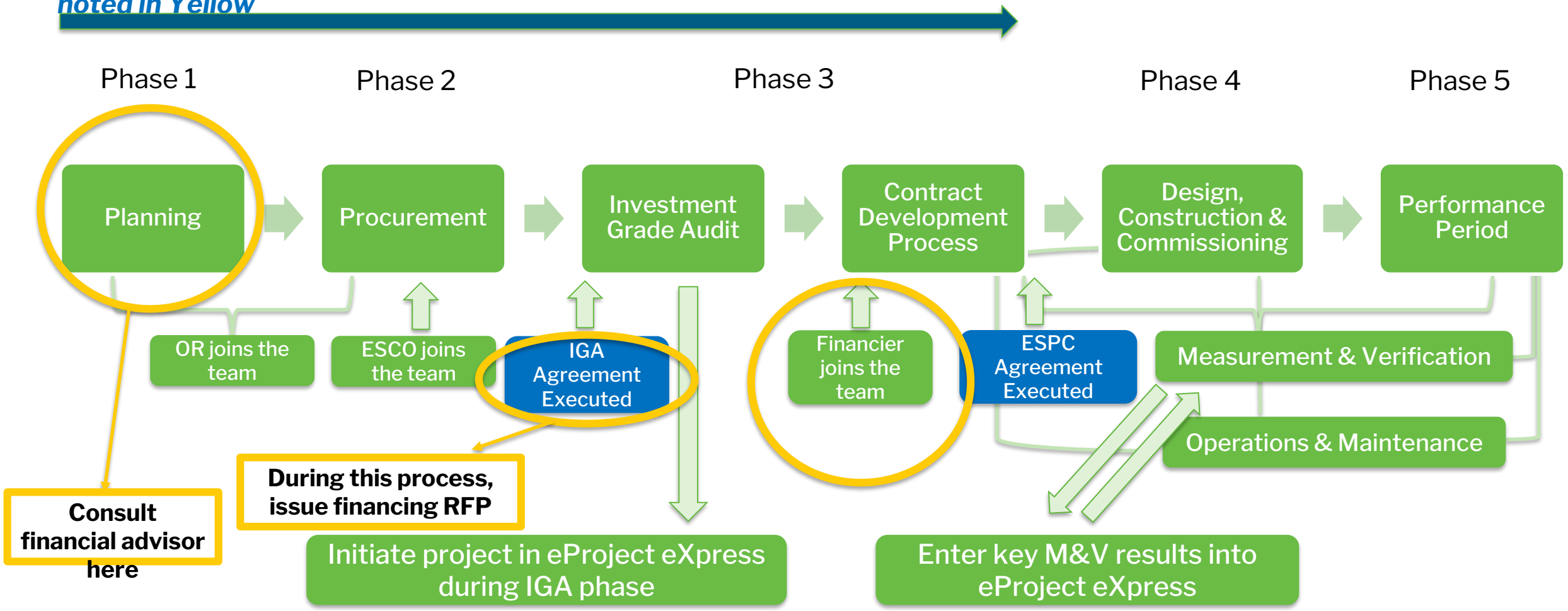
# Understanding ESPC Project Financials




**Long-term contract is a great leveraging tool**

# Where are we in the ESPC Process?

***Planning for and securing Financing happens from inception through end of the Development phase, specifically noted in Yellow***



# Process for Securing Funding and Financing

# Process to obtain project funding/financing

1. Is there an achievable project opportunity?

1. Identify the potential project scope and "ballpark" costs and savings by hiring an experienced ESPC Owner's Representative to conduct a high-level "pre-qualification assessment", featuring an ECM Summary Table.

1. Evaluate any capital appropriations that your organization, and/or State Energy Office may have available.

1. Work with your Financial Advisor (FA)/Broker through an initial due diligence process to determine any constraints on your ability to finance a project. They may include debt capacity, pre-existing collateralization of facilities, credit rating issues, public relations, etc.

# Process to obtain project funding/financing (continued)

5. Issue ESCO RFP, negotiate Investment Grade Audit Agreement (IGAA), set out financial expectations, including:
   - Maximum contract term
   - Maximum ESCO fees, markups, etc.
   - Maximum capital contributions expected from Owner
   - Maximum escalation rates for labor and energy costs

1. Before ESCO submits 60% IGA, issue Financing RFP, select Financier, obtain indicative pricing to use in Pro Forma Cash Flows. (More to come on Pro Formas!)

1. Once 90% IGA is approved, execute contract with Financier, deposit proceeds of loan, lease, bond, etc., into custodian account.

1. Set up process for Financier making payments to ESCO during design and construction phase, with Owner's & OR's review and approval of Monthly Draw Requests

# Sources of Financing/Funding and Capital Stacking

# Common Financing and Funding Sources

With ESPC, you can structure your project's "Capital Stack" to meet organizational needs.

- **Third-party financing:** Customers typically arrange financing through a third party, often with assistance from a Financial Advisor. U.S. DOE's Better Buildings Solutions Center summarizes some common **third-party financing** options.

- **Tax-Exempt Lease Purchase (TELP) Agreements** are the most common financing approach for ESPC. Benefits of TELPs include:
  - **Tax-exempt interest** - The interest payments received from the government are exempt from federal income tax, which reduces the effective interest rate.
  - **Easy approval** - TELPs are not considered debt in most states, so they rarely require public approval.
  - **Quick access to funds** - TELPs can provide fast access to lease funds.
  - **Non-appropriation language** - The lease contract can include a non-appropriation clause, which means that if the customer doesn't appropriate funds to pay the lease, the lease is terminated, and the equipment is returned. This can make the lease easier to approve and allow for payments from operating budgets.

# Common Financing and Funding Sources

## Other Example Financing Options

- **Bonds:** Some projects may be financed through bond issuances. Low cost, and allow for 30-year terms, but are less flexible than TELP, and often require a public referendum.
- **Loans:** Certain states offer loan programs for ESPC projects. Consult your State Energy Office.
- **Certificates of Participation:** Can be used by schools, municipalities, and other government bodies to attract investment from a wide range of investors.

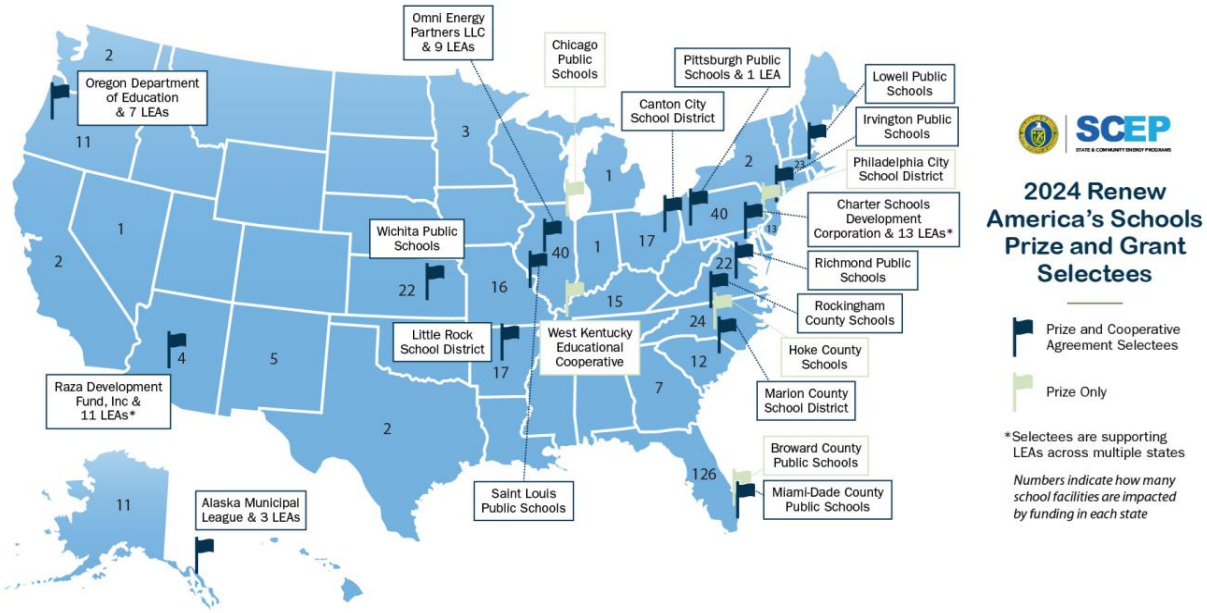
## Example Funding Options

- **Grants and trust funds:** These can be used to supplement other financing sources. Can leverage private financing, and lower loan/lease principal. See next slide for more details.
- **Capital funds:** Organizations may allocate some capital funds to support ESPC projects. *Capital that is already budgeted is usually committed, to avoid problems.*
- **Utility rebates and incentives:** Most electric and gas utilities have offerings for ECMs. Database of State Incentives for Renewables & Efficiency® www.dsireusa.org
- **Tax incentives:** Tax deductions and credits include 179D and Elective Pay.

# Current sources available for Schools and Municipalities

- U.S. DOE funding for **K-12 Schools** include Renew America's Schools Grants. See examples of actual awards to the right. The Department of Energy anticipates opening applications for a third round of funding in Fall 2025.

- U.S. DOE funding for **State/Local Governments** include Energy Efficiency and Conservation Block Grants. See examples of actual awards below:



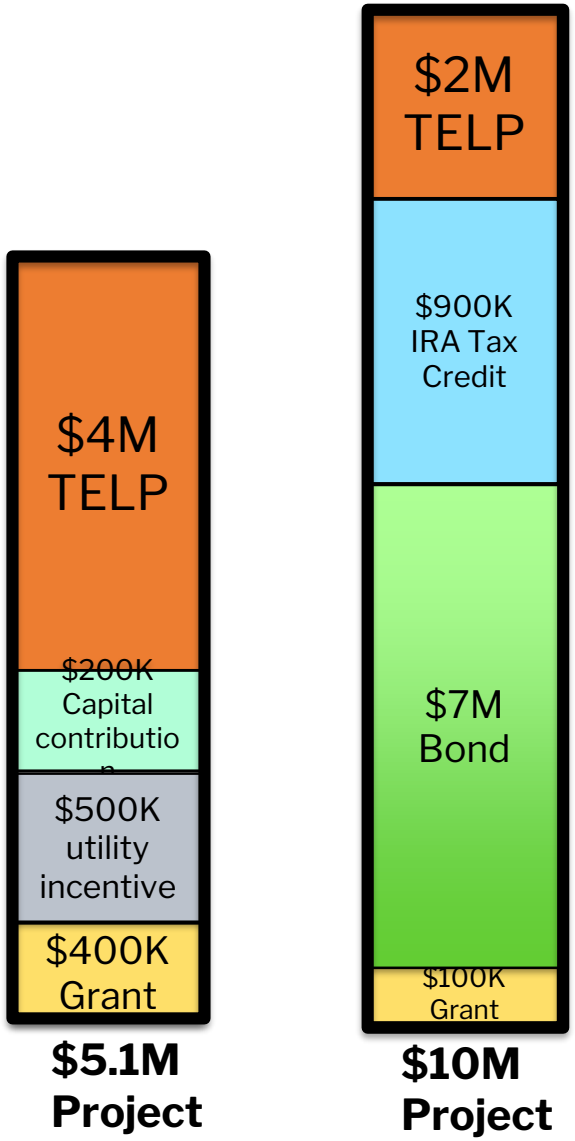

| | | | | | |
|---|---|---|---|---|---|
| Delaware | DE | State | $1,615,060 | Delaware will sub-grant 60 percent of its allocation to local governments to carry out energy efficiency projects. The state will also install solar panels and battery storage in emergency shelters across Delaware's three counties. | Grant |
| Wilmington | DE | City | $135,280 | Develop a GHG Reduction Plan that outlines pathways for the city to reduce its municipal GHG emissions 50 percent by 2030. | Grant |

# Leveraging Funds via Capital Stacking

ESPCs can have a significant leveraging effect on contributed funds:

- **Multiplier effect:** A small amount of contributed funds can enable much larger energy-saving projects through the ESPC model.
- **Increased project scope:** By combining contributed funds with ESPC financing, organizations can implement more comprehensive ECMs.
- **Accelerated savings:** Additional funds can help implement projects faster, leading to earlier realization of energy savings.
- **Reduced financing costs:** Contributing funds upfront can lower the amount that needs to be financed, potentially reducing interest payments over the contract term.

***Caution: Many utility incentives & rebates, and the IRA Direct Pay Subsidies are paid after the project is completed. Requires detailed financial planning!***



# The Power of Leveraging Funds in ESPC

Snapshot of Summary Slide from March ESPC Campaign webinar about leveraging funds to optimize financing of an ESPC project.

| Line | Factor | Base | Add Rebates | Add ITC for Solar | Add Owner Funds |
|---|---|---|---|---|---|
| A | Annual Savings | $1.3M | $1.45M | $1.47M | $1.53M |
| B | Total Project Cost funded by savings only | $16.4M | $19.3M | $19.8M | $20.6M |
| C | Total Project Cost funded by savings and leveraged funds | $16.4M | $21.9M | $23.1M | $28.1M |
| D | Additional Scope Funded Beyond Base $16.4M Project | $0 | $5.5M | $6.7M | $11.7M |
| E | Total Funds Leveraged | $0 | $2.5M | $3.25M | $7.50M |
| **F = D/E** | **Leveraging Ratio** | **N/A** | **2.20** | **2.06** | **1.56** |

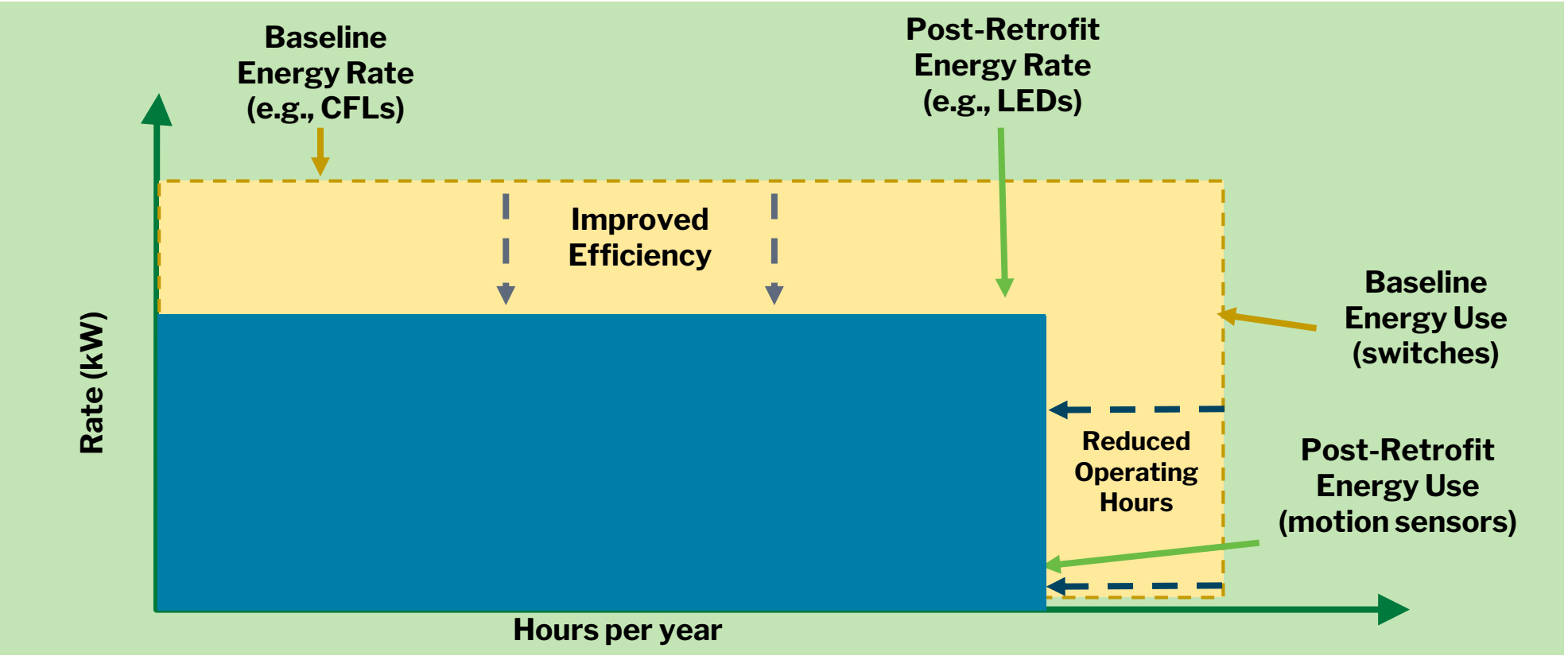
- Per Oak Ridge National Laboratory, the Leveraging Ratio is defined as the ratio of the total amount of new investment (Line D) to the funds contributed (Line E).
- Typical Leveraging Ratios are 1.3 – 2.1. For every $1 leveraged, 1.3-2.1x of scope can be added to the project.

# Everything (kind of) You Wanted to Know about Pro Forma Cash Flows but were Afraid to Ask

# Sample ECM Summary Table

| ECM | ESCO Total Cost ($) | Owner's Rep Fee ($) | Total Project Cost ($) | Rebates/RECs/DR Revenue Estimates ($) | Total Annual Savings Estimate - Energy ($) | Total Annual Savings Estimate - O&M ($) | SPB |
|---|---|---|---|---|---|---|---|
| Project Level Costs | $ 469,543 | | $ 469,543 | | | | |
| Boiler Replacement - All Condensing Boiler Option | $ 1,947,087 | $ 70,095 | $ 2,017,182 | $ 69,985 | $ 53,994 | $ 5,000 | 33 |
| Cogeneration | $ 742,888 | $ 26,744 | $ 769,632 | $ 360,000 | $ 73,013 | $ - | 5.6 |
| Solar PV | $ 4,926,088 | $ 176,339 | $ 5,103,428 | $ 785,210 | $ 185,494 | $ - | 23.2 |
| Transformer Replacement | $ 396,469 | $ 14,273 | $ 410,742 | $ 15,203 | $ 11,012 | $ - | 21.8 |
| Water Conservation | $ 91,789 | $ 3,304 | $ 95,093 | $ 3,588 | $ 12,082 | $ - | 7.6 |
| Demand Response | $ 34,922 | $ 1,214 | $ 36,136 | $ 145,203 | $ - | $ - | 0.2 |
| Retro Commissioning | $ 27,915 | $ 1,005 | $ 28,920 | $ 1,031 | $ 5,656 | $ - | 4.9 |
| Plug Load Controls | $ 80,629 | $ 2,903 | $ 83,531 | $ 3,092 | $ 3,854 | $ - | 18.5 |
| Air Cooled Chiller Replacement | $ 781,200 | $ 28,123 | $ 809,323 | $ 28,337 | $ 8,771 | $ - | 89 |
| Install Town Wide DDC System | $ 476,470 | $ 17,153 | $ 493,623 | $ 2,795 | $ 4,320 | $ 1,500 | 17.5 |
| DDC System Expansion | $ 75,368 | $ 3,024 | $ 78,392 | $ - | $ - | $ - | 15.6 |
| DCV Control | $ 7,811 | $ 313 | $ 8,124 | $ - | $ - | $ - | 42.8 |
| Programmable Thermostats | $ 17,600 | $ 632 | $ 18,232 | $ 649 | $ - | $ - | 28.1 |
| Cooling Tower Replacement (w/ CW Reset) | $ 489,903 | $ 17,736 | $ 507,539 | $ 17,770 | $ 15,111 | $ 9,000 | 20.3 |
| AHU/RTU Replacement | $ 601,848 | $ 21,667 | $ 623,515 | $ 20,551 | $ 15,934 | $ 17,000 | 32.3 |
| Lower Pressure Drop AHU Filters | $ 120,686 | $ 4,345 | $ 125,031 | $ 4,541 | $ 2,932 | $ - | 13.5 |
| Lighting - Interior and Controls - Option A Lamps & Drivers | $ 1,094,992 | $ 39,420 | $ 1,134,412 | $ 133,688 | $ 78,934 | $ 12,947 | 11 |
| Lighting - Interior and Controls - Option B Fixtures | $ 1,488,962 | $ 58,503 | $ 1,542,564 | $ 238,932 | $ 84,599 | $ 8,059 | 19.3 |
| Lighting - Exterior | $ 215,707 | $ 7,765 | $ 223,472 | $ 16,120 | $ 6,975 | $ 1,585 | 27.1 |
| Building Envelope - Weatherization, Insulation | $ 234,588 | $ 8,855 | $ 243,443 | $ 9,266 | $ 43,097 | $ - | 5.7 |
| Pipe, Valve & Fitting Insulation | $ 98,537 | $ 3,381 | $ 102,918 | $ 3,374 | $ 10,328 | $ - | 10 |
| Lighting Add/Alt #1 - Drop-Off Circle Site Lighting Addition | $ 99,432 | $ 3,486 | $ 102,918 | $ 3,374 | $ 10,328 | $ - | 10 |
| Site Supervisor | $ 285,790 | $ 10,281 | $ 295,071 | $ - | $ - | $ - | 28.7 |
| Site Integration | $ 285,571 | $ 10,281 | $ 295,852 | $ - | $ - | $ - | 0 |
| **Total** | **$ 15,091,795** | **$ 530,842** | **$ 15,618,636** | **$ 1,862,709** | **$ 626,434** | **$ 55,091** | **20.24** |

# Sources of Savings




1. Energy savings
   Your LED lights use less kWh (improved efficiency)
2. Operational savings
   Less run time, fewer replacements
3. Maintenance savings
   You need less outside contractor funding to maintain the lights

# Pro Forma Cash Flow Documents in ESPC Projects

Pro forma cash flow documents play a crucial role in Energy Savings Performance Contracts by providing a detailed financial projection of the project over its lifetime.

They are ***always open book*** and show all sub costs and each ESCO cost on a line-by-line basis in open Excel file.

These documents are used in several ways:

1. **Project Feasibility Assessment:** Pro forma cash flows help determine if an ESPC project is financially viable. They demonstrate whether the projected energy savings will be sufficient to cover the costs of improvements and financing over the contract term.
2. **Financial Planning:** Facility owners and managers use these documents to understand the long-term financial impact of the ESPC. They can see how the project affects their budget over time, including when they will start realizing net savings.
3. **Comparison of Financing Options:** Pro forma cash flows allow for comparison between different financing scenarios, such as self-funding versus using an ESPC. This helps decision-makers choose the most financially advantageous option.

# Pro Forma Cash Flow Documents in ESPC Projects

These documents are used in several ways (continued):

2. **Risk Assessment:** By including factors like annual utility rate increases and operational cost changes, pro forma cash flows help stakeholders assess potential risks and variabilities in the project's financial performance.

1. **Contract Negotiations:** These documents serve as a basis for negotiations between the facility owner and the ESCO, helping to establish agreed-upon financial terms and performance metrics.

1. ***Best Practice:*** *Ask your ESCO to provide regular updates during IGA progress meetings featuring a live, real-time demo of the Cash Flow as inputs are changed, such as ECM scope, costs, interest & escalation rates.*

# Sample Pro Forma Cash Flow

Inputs and Assumptions

Terms and Timelines

Costs and Savings

*Project Name* Town of ESPC

ENERGY PERFORMANCE CONTRACT CASH FLOW

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Project Value | $14,922,390 | | | | | | |
| Down Payment | | | | | | | |
| Utility Rebates | $588,740 | Use as Down Payment? (Y or N) | | | Y | | |
| Client Contingency | | | | | | | |
| Owner's Rep Fee | $520,302 | | 3.60% | | | | |
| Other Fees | | | | | | | |
| LOAN VALUE | $14,853,953 | | | | | | |
| TELP Rate (%) | 2.50% | Utility Escalation | 3.50% | | O&M Escalation | 3.00% | |

Project Scenario 1

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Savings Term | 20 | years | Construction Period | | 18 | Months | |
| Loan Repayment Term | 20 | years | Payment at | | 1 | Start of the period | |
| M&V Term | 3 | years | Construction Start | | 1/1/2021 | | |
| Mech Term | 20 | years | Construction End | | 7/2/2022 | | |
| O&M Savings Term | 20 | years | Finance PMT Start | | 7/4/2022 | Specify → 7/15/2019 | |
| Payment Freq | Annual | | Finance PMT End | | 6/27/2041 | | |
| Loan Payment | Variable | | | | | | |
| Minimum Balance | $0 | | | | | | |
| Inc Const Savings in Yr 1? | Yes | Escrow | Yes | | Retainage | 3.0% | |
| Apply CP Interest? | Yes | Traditional | No | | Escrow APR | 1.0% | |

NJ ESIP No

Included SEP Aid No

CASH FLOW ANALYSIS

| Year | Guaranteed Annual Energy Savings | | O & M Savings | ZREC Revenue | Class III REC Revenue | DR Revenue - Curtailment | Capital Cost Avoidance | Total | Loan Payment | ESCO M&V Costs | Owner's Rep M&V Costs | Service Costs | Total Costs | Net Savings |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Construction | $105,614 | | $0 | $0 | | | $0 | $105,614 | | $0 | | $0 | $0 | $105,614 |
| 1 | $723,367 | | $56,744 | $ 54,960 | $ 18,000 | $ 45,875 | $0 | $898,946 | $805,332 | $49,115 | $12,355 | $32,144 | $898,946 | $0 |
| 2 | $639,374 | | $58,446 | $ 54,576 | $ 18,000 | $ 39,584 | $0 | $809,980 | $714,232 | $49,852 | $12,787 | $33,109 | $809,980 | $0 |
| 3 | $661,752 | | $60,199 | $ 54,194 | $ 18,000 | $ 24,384 | $0 | $818,529 | $720,593 | $50,599 | $13,235 | $34,102 | $818,529 | $0 |
| 4 | $684,914 | | $62,005 | $ 53,814 | $ 18,000 | $ 35,360 | $0 | $854,093 | $818,968 | $0 | | $35,125 | $854,093 | $0 |
| 5 | $708,886 | | $63,866 | $ 53,438 | $ 18,000 | $ - | $0 | $844,189 | $808,010 | $0 | | $36,179 | $844,189 | $0 |
| 6 | $733,697 | | $65,782 | $ 53,063 | $ 18,000 | $ - | $0 | $870,542 | $833,278 | $0 | | $37,264 | $870,542 | $0 |
| 7 | $759,376 | | $67,755 | $ 52,692 | $ 18,000 | $ - | $0 | $897,823 | $859,441 | $0 | | $38,382 | $897,823 | $0 |
| 8 | $785,954 | | $69,788 | $ 52,323 | $ 18,000 | $ - | $0 | $926,065 | $886,532 | $0 | | $39,533 | $926,065 | $0 |
| 9 | $813,463 | | $71,881 | $ 51,957 | $ 18,000 | $ - | $0 | $955,301 | $914,582 | $0 | | $40,719 | $955,301 | $0 |
| 10 | $841,934 | | $74,038 | $ 51,593 | $ 18,000 | $ - | $0 | $985,565 | $943,624 | $0 | | $41,941 | $985,565 | $0 |
| 11 | $871,402 | | $76,259 | $ 51,232 | $ 18,000 | $ - | $0 | $1,016,893 | $973,693 | $0 | | $43,199 | $1,016,893 | $0 |
| 12 | $901,901 | | $78,547 | $ 50,873 | $ 18,000 | $ - | $0 | $1,049,321 | $1,004,826 | $0 | | $44,495 | $1,049,321 | $0 |
| 13 | $933,467 | | $80,903 | $ 50,517 | $ 18,000 | $ - | $0 | $1,082,888 | $1,037,058 | $0 | | $45,830 | $1,082,888 | $0 |
| 14 | $966,139 | | $83,330 | $ 50,164 | $ 18,000 | $ - | $0 | $1,117,632 | $1,070,427 | $0 | | $47,205 | $1,117,632 | $0 |
| 15 | $999,953 | | $85,830 | $ 49,813 | $ 18,000 | $ - | $0 | $1,153,596 | $1,104,975 | $0 | | $48,621 | $1,153,596 | $0 |
| 16 | $1,034,952 | | $88,405 | $ - | $ 18,000 | $ - | $0 | $1,141,357 | $1,091,277 | $0 | | $50,080 | $1,141,357 | $0 |
| 17 | $1,071,175 | | $91,057 | $ - | $ 18,000 | $ - | $0 | $1,180,232 | $1,128,650 | $0 | | $51,582 | $1,180,232 | $0 |
| 18 | $1,108,666 | | $93,789 | $ - | $ 18,000 | $ - | $0 | $1,220,455 | $1,167,325 | $0 | | $53,130 | $1,220,455 | $0 |
| 19 | $1,147,469 | | $96,602 | $ - | $ 18,000 | $ - | $0 | $1,262,072 | $1,207,348 | $0 | | $54,723 | $1,262,072 | $0 |
| 20 | $1,187,631 | | $99,500 | $ - | $ 18,000 | $ - | $0 | $1,305,131 | $1,117,050 | $0 | | $56,365 | $1,173,415 | $131,717 |
| **AGGREGATE** | **$17,575,471** | | **$1,524,725** | **$785,210** | **$360,000** | **$145,203** | **$0** | **$20,390,609** | **$19,207,221** | **$149,566** | **$38,378** | **$863,728** | **$20,258,892** | **$237,330** |

# Sample Pro Forma Cash Flow: Inputs and Assumptions

## Notes

| | | | |
|---|---|---|---|
| Project Value | $14,922,390 | | *ESCO's project "Sell price"* |
| Down Payment | | | |
| Utility Rebates | $588,740 | | *Total of utility rebates. Here, the Owner is deducting the rebates from the financed amount, so the ESCO must be guaranteeing the rebate, which is not typical.* |
| Use as Down Payment? (Y/N) | Y | | |
| Client Contingency | | | |
| OR Fee | $520,302 | 3.60% | *OR Fee is financed with ESCO fees, so no "Net" out of pocket costs for Owner.* |
| Other Fees | | | |
| Loan Value | $14,853,952 | | *Total amount to be borrowed* |
| TELP Rate (%) | 2.50% | | *Can have significant effect on cash flow* |
| Utility Escalation | 3.50% | | *Both escalation rates must be carefully researched and negotiated. Can have outsized effect on cash flow. NIST provides escalation estimates for most energy categories..* |
| O&M Escalation | 3% | | |

# Sample Pro Forma Cash Flow: Terms and Timelines

| | | | | | |
|---|---|---|---|---|---|
| **Savings Term** | 20 Years | **Construction Period** | 18 months | | |
| **Loan Repayment Term** | 20 Years | **Payment (Pmt) at** | Month 1 (start of period) | | |
| **M&V Term** | 3 Years | **Construction Start** | 1/1/22 | | |
| **Mech Term** | 20 Years | **Construction End** | 7/2/22 | | |
| **O&M Savings Term** | 20 Years | **Finance Pmt Start** | 7/4/22 | | |
| **Payment Freq** | Annual | **Finance Pmt End** | 6/27/41 | | |
| **Loan Payment** | Variable | | | | |
| **Minimum Balance** | $0 | | | | |
| | | | | | |
| **Inc Const Savings in Yr 1? (Y/N)** | Yes | **Escrow** | Yes | Retainage | 3% |
| **Apply CP Interest? (Y/N)** | Yes | **Traditional** | No | Escrow APR | 1% |

| Item | Notes |
|---|---|
| Savings Term | # years energy savings accrue |
| Loan Repayment Term | # years of finance term, usually matches savings term, and must be greater than useful life of ECMs. ***Scope of ECMs can affect term.*** |
| M&V Term | # years savings measured |
| Mech. Term | Weighted average useful life of ECMs. Usually, ≤ finance term |
| O&M Savings Term | # years O&M savings accrue |
| Finance Pmt Start | Note payments start 2 months after Construction ends, allows for PIR approval |
| Construction Savings | Constr. Savings can be included in cash flow, as a "Year 0 payment" |

# Sample Pro Forma Cash Flow: Savings vs Costs

| Year | Guaranteed Annual Energy Savings | O&M Savings | ZREC Revenue | Class III REC Revenue | Capital Cost Avoidance | Total Savings | Loan Payment | Net Savings |
|---|---|---|---|---|---|---|---|---|
| Construction | $ 105,614 | $ - | $ - | $ - | $ - | $ 105,614 | $ - | $ 105,614 |
| | $ 723,367 | $ 56,544 | $ 54,960 | $ 18,000 | $ [illegible] | $ [illegible]39,846 | $ 805,332 | $ 8,462 |
| | $ 693,937 | $ 58,648 | $ | 18,000 | | [illegible]09,980 | $ 774,232 | $ 35,748 |
| | $ 661,752 | $ 60,593 | | 18,000 | | [illegible]15,529 | $ 720,593 | $ 94,937 |
| | $ 684,914 | $ 62,366 | | 18,000 | | [illegible]09,830 | $ 714,[illegible]15 | $ 95 |
| term. | $ 708,866 | $ 63,686 | well. | 18,000 | $ 34,402 | $ 812,786 | $ 703,810 | $ [illegible]76 |
| 6 | $ 735,976 | $ 65,178 | $ 52,293 | $ 18,000 | $ 33,822 | $ 8[illegible] | $ [illegible]2,532 | $ [illegible]89 |
| 7 | $ 759,354 | $ 66,699 | $ 51,653 | $ 18,000 | $ 33,266 | $ 8[illegible] | $ [illegible]0,856 | $ 137,816 |
| 8 | $ 785,354 | $ 68,178 | $ 51,013 | $ 18,000 | $ 32,720 | $ 8[illegible] | $ [illegible]0,137 | $ 153,474 |
| 9 | $ 813,621 | $ 69,696 | $ 50,417 | $ 18,000 | $ 32,208 | $ 8[illegible] | $ [illegible]9,582 | $ 169,335 |
| 10 | $ 842,934 | $ 71,408 | $ 49,778 | $ 18,000 | $ 31,717 | $ 838,037 | $ 649,243 | $ 188,794 |
| 11 | $ 871,201 | $ 73,144 | $ 49,159 | $ 18,000 | $ 31,239 | $ 847,143 | $ 638,426 | $ 208,717 |
| 12 | $ 901,005 | $ 74,921 | $ 48,540 | $ 18,000 | $ 30,761 | $ 856,226 | $ 628,093 | $ 228,133 |
| 13 | $ 933,467 | $ 76,758 | $ 47,921 | $ 18,000 | $ 30,303 | $ 865,149 | $ 617,657 | $ 247,492 |

1st few years savings sometimes fluctuate, then escalate at agreed rate for term.

Annual revenue paid by state, utility, or electric grid operator for renewable or CHP energy over agreed term. Demand Response (DR) payments can be used as well.

Owner agrees to set aside future budgeted capital and commit to ESPC repayment. ***Very rare, and controversial.***

Combination of annually escalating energy and O&M savings, with annual payments for RE&CHP allows annual payment to be reduced every year. ***Not typical for ESPCs***

Net positive cash flow, for every year of the term, is required by most states

# Q&A and Discussion

# Common Finance and Funding Questions

1. My Facilities staff keeps telling me we need to address our deferred maintenance backlog. Can ESPC help me fund this challenge?

1. How much research should I do regarding funding and financing for the project before starting the ESCO RFP process?

1. How can I find out what a "ballpark" project costs and savings might be before going through the whole ESCO procurement process?

1. Where can I find good resources for financial incentives and rebates?

1. If I only have half the funding I need to do a major upgrade, such as a chiller plant replacement, can ESPC help me leverage that money?

# DOE Resources
# And
# Upcoming Events

# Resources

**U. S. DOE State and Community Energy Program:**

- SEO Guide to Braiding and Stacking

**U. S. DOE Better Buildings Program:**

- ESPC Financing Decision Tree
- ESPC Financing Options
- List of the Better Buildings Financial Allies
- ESPC Toolkit
  - Model Financing Solicitation

**U.S DOE Federal Energy Management Program:**

- Performance Contracting National Resource Center - Hub for ESPC resources: legislation by state, SEO contacts, trainings

**Written Guides & Reports:**

- ESPC: Improve Infrastructure & Turning Waste Into Wins
- Business Case for Conducting M&V in State and Local ESPC Projects
- Expanding ESPC to New Markets: Hospitals, Small Projects, K-12, Water Facilities

# 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*

Complete the Expression of Interest form to obtain a Partner Agreement

# Upcoming Events

## Trainings

- **Monday, December 9th 2-3:30PM ET** – EECBG Blueprint Cohort training on "Financing - understand project cash flow proforma, learn how to secure financing." Complete this form and express interest in Cohort 2B to receive training invites and registration links from the Energy Efficiency and Conservation Block Grant (EECBG) Blueprint Cohort on ESPC topics.

- **Thursday, January 9th 2-3:30PM ET** - The Performance Period: Best Practices for Measuring ESPC Impact and Ensuring Success. This training will focus on helping Owner organizations understand how to measure impact and ensure the best outcomes and results from ESPC projects.

- **Monday, January 13th 2-3:30PM ET -** EECBG Blueprint Cohort training on "Contracting - learn about standard contract forms and forming the contract". Complete this form and express interest in Cohort 2B to receive training invites and registration links from the EECBG Blueprint Cohort on ESPC topics.

- **Wednesday, January 15th 2-3:00PM ET –** Getting Started with eProject eXpress. This training will showcase the capabilities of the eProject eXpress platform and walk users through how to get started using the platform to track your ESPC projects and accomplishments.

## Office Hours

- State and local ESPC Campaign partners are invited to set up a time to speak with a U.S. DOE PF (Owner's Representative for virtual office hours. Discussion topics can be anything regarding an ESPC project, including specific questions on your project. **To request a meeting time,** please complete this **Office Hours Sign-Up Form**.

# Thank you!

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