



Make Way for Savings: Unlocking Barriers to Energy Savings Performance Contracting

Tuesday, May 16, 2017

11:15 am -12:30 pm

Panelists

- David LeMieux, Montana
- Karen Rantamaki, New Hampshire
- Robert Thomas; Newark, NJ
- Moderator:
Alice Dasek, U.S. Department of Energy

Overview

- Profile of ESPC Accelerator
- Accelerator Activity Areas
- ESPC Toolkit
- A Closer Look at Three ESPC Barrier Solutions

Accelerator Profile

Timeframe

2014-2016

Partners

25 partners (18 states, six cities, one school district)

Purpose

Expand access to Energy Savings Performance Contracting (ESPC) as a promising option for financing energy efficiency retrofits in the public sector

Outcome

4 More than \$2 billion invested in MUSH ESPC contracts

Accelerator Activity Areas

Area 1: Streamlining the ESPC Process

- Partners reviewed existing model ESPC documents

Area 2: Empowering the Market

- Partners participated in ePB feedback & training

Area 3: Resolving Individual ESPC Barriers

- Support successful, permanent, innovative, and replicable resolution of individual partner barriers

The ESPC Toolkit

- Considering ESPC
- Implementing ESPC
- Establishing ESPC
- Expanding ESPC
- Assessing ESPC Results



Considering ESPC

- Design-Bid-Build or ESPC?
- Self-Assessment Questions
- LBNL Market Study (2013)
- Legislative Library

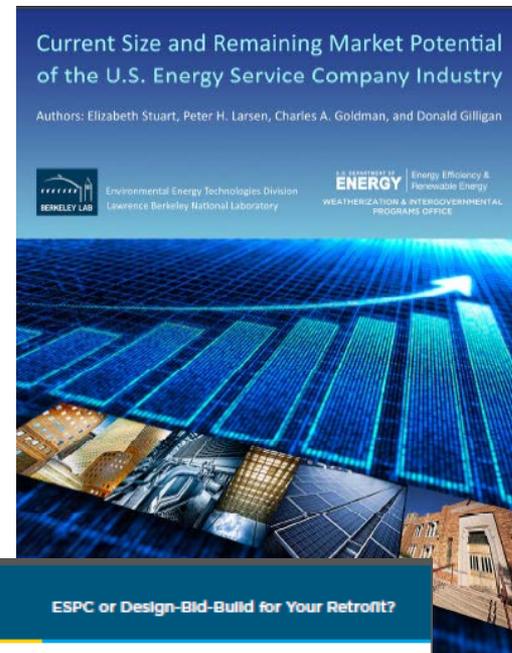


Figure 6: Preliminary Self-Diagnosis to Prioritize Projects

Preliminary Self-Diagnosis

Does your facility have more than 50,000 square feet of floor area?
 Do you spend more than \$60,000 each year on energy bills?
 If so, an energy performance contract may work for you. It is likely to benefit you even more if you have:

- Aging buildings or equipment
- Recurring maintenance problems or high maintenance costs
- Comfort complaints
- Scarce budget resources
- Too little energy management expertise
- Too many demands on your maintenance personnel
- No recent upgrades of your lighting or controls systems
- Energy-using equipment that is ready for replacement

ESPC or Design-Bid-Build for Your Retrofit?

Design Process Selection	Financing	Project Implementation	Post-Acceptance Performance
<ul style="list-style-type: none"> • Develop plans and specifications • Issue proposal • Award contract 	<ul style="list-style-type: none"> • Projects must find their own financing 	<ul style="list-style-type: none"> • Contractor completes project • Commissioning performed by commissioning agent if selected in contract 	<ul style="list-style-type: none"> • None, unless arrangements are made for a third-party firm or internal team to perform ongoing commissioning / measurement and verification
<ul style="list-style-type: none"> • ESPCs that are registered municipal advisors in your state may facilitate financing. Otherwise, projects must find their own financing and ESPCs may provide instruction/education about how financing is generally managed 	<ul style="list-style-type: none"> • ESPCs complete project • ESPCs perform commissioning 	<ul style="list-style-type: none"> • ESPCs perform ongoing measurement and verification to validate performance • ESPCs provide reimbursement if guaranteed savings are not met and/or face the problem of no additional cost 	

Advantages of ESPC

- ESPC accountable for project evaluation, design, construction, and post-installation monitoring
- Single point of contact
- No upfront cost
- Guaranteed cost and energy savings
- ESPC may be able to facilitate financing

Office of Energy Efficiency and Renewable Energy | For more information about best practices and other resources visit: <http://www.energy.gov/>

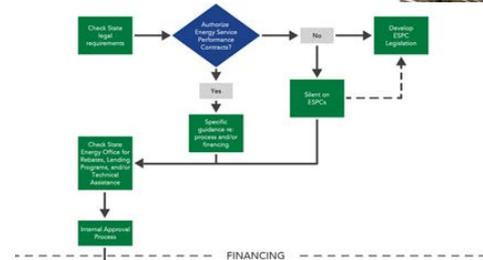
Implementing ESPC Projects

- ESPC Virtual Technical Assistant



Welcome to the Virtual Assistant for Energy Savings Performance Contracting

- Financing Decision Tree



Why? Savings Performance Contracting (ESPC) provides detailed steps and procedures for your organization and an ESCO on an ESPC project. The process has been designed to help you to complete projects successfully and within the framework.

- Best Practices for Selecting an ESCO



Best Practices for Selecting an ESCO

The RFP has been issued, the ESCOs have submitted their proposals... now what? The best practices that follow may be helpful in selecting which ESCOs to include on your pre-qualified list.

- Use the DOE Evaluation Workbook
- Evaluation offers are already tailored to match the DOE RFP Template
 - Accommodates up to 10 Evaluators and 10 ESCOs
 - Handles both the Proposal Review and the Interviews
 - Simplifies the process of collecting scores from Evaluators
 - Results are compiled automatically to save time and avoid transcription errors

Choose Evaluators Carefully

- Evaluating ESCO proposals is a major commitment of time – at least one to two hours per submittal, plus an hour each for any follow-up interviews. Each Evaluator has to review every proposal and participate in every interview to avoid biasing the results (i.e., some people score more generously than others). When inviting people to be Evaluators, explain the time requirements, and don't push if there is a reluctance to commit.
- Consider inviting people who have a stake in the outcome, such as local government entities who are interested in ESPC or utility energy efficiency managers.
- Try to invite people who might have a bias or conflict of interest.
- Avoid inviting people who might have a bias or conflict of interest.
- You'll want to be confident that at least three to four Evaluators are fully engaged and have the time to deliver their evaluations and participate in any follow-up interviews.

Proposal Review

- Allow time for review – probably two to three days for each proposal.
- Send reminders during the review period. Given two weeks for reviews, busy people will often wait until the second week to get started. Prompt people to review the first proposal ASAP so they can get a feel for how long to allow for the rest (and because taking the first step is often the hardest).

- Model ESPC Contract Documents



MODEL DOCUMENTS FOR AN ENERGY SAVINGS PERFORMANCE CONTRACT PROJECT

This page contains a model contract template and companion documents to help you launch energy efficiency projects through Energy Savings Performance Contracting (ESPC). Read about how these documents were developed.

The ESPC Model Documents were prepared as resources that can be used when developing or updating procurement and contracting documents for ESPC projects and programs. Neither the United States government nor any agency thereof, nor any of its employees, make any warranty, express or implied, or assume any legal liability or responsibility for the accuracy, completeness, or usefulness of any information, apparatus, product, or process disclosed or represent that its use would not infringe privately owned rights. Reference herein to any specific commercial product, process, or service by trade name, trademark, manufacturer, or otherwise does not necessarily constitute or imply its endorsement, recommendation, or favoring by the United States government or any agency thereof. The views and opinions of authors expressed herein do not necessarily state or reflect those of the United States government or any agency thereof.

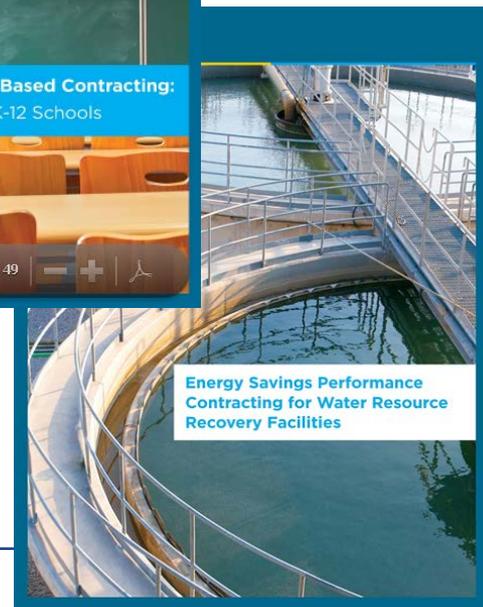
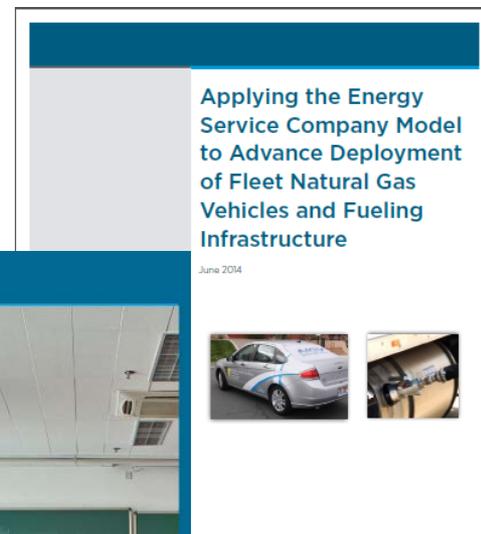
- eProject Builder



eProject Builder

Expanding ESPC

- ESPC Primer for K-12 Schools
- ESPC Guide for Fleets and Fueling Infrastructure
- ESPC Guide for Water Resource Recovery Facilities (coming soon)
- Implementation Model: Expanding ESPC to New Markets (coming soon)

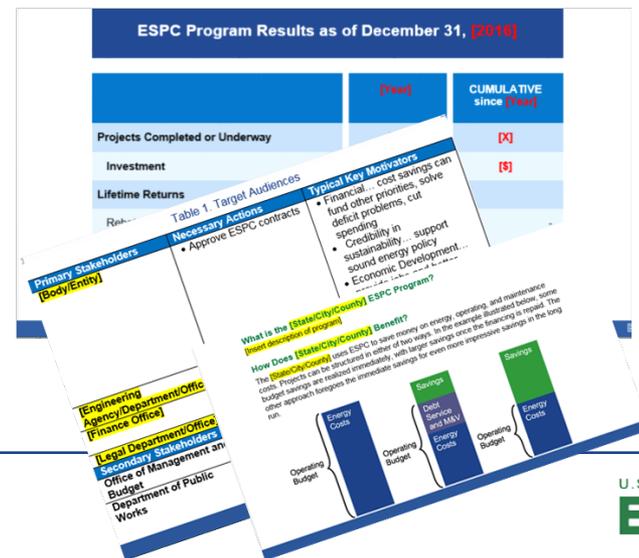


A Closer Look at Three Partner Solutions

- The ESPC Virtual Technical Assistant
- ESPC Champions Toolkit
- ESPC Networking Toolkit



The Virtual Assistant for Energy Savings Performance Contracting (ESPC) provides detailed steps and procedures for your organization and an ESCO to develop and implement an ESPC project. The process has been designed to help you to complete projects successfully and within the framework.



David LeMieux
ESPC Virtual Technical Assistant

State of Montana

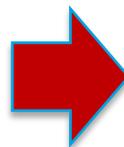
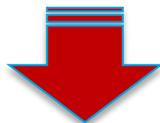
EPC Challenge

- 1. EPC Program established but not funded by legislature**
- 2. No EPC Oversight**
- 3. Entity Education**
- 4. Communication of EPC Program for use by Stakeholders**
 - Is EPC right for me?
 - How to Implement an EPC?
 - What documents to use?



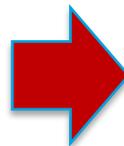
EPC Solution

“Virtual Technical Assistant”



State of Montana

<http://deq.mt.gov/Energy/EnergizeMT/Conservation/Energy-Performance-Contracting-Gateway-Page>

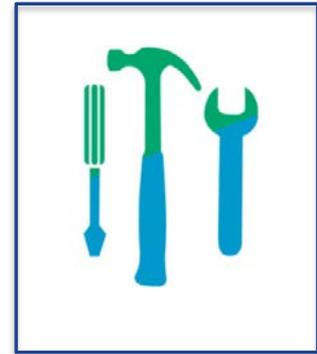


Dept. of Energy

<https://betterbuildingsolutioncenter.energy.gov/espc/home>

EPC Solution

DOE Virtual Technical Assistant



1. Enter as Project Owner

- Get help with EPC Implementation

2. Enter state/city EPC Assistance Program

- Download a Word version of the VTA
- Customize and program

<https://betterbuildingsolutioncenter.energy.gov/esp/home>

Today's Presentation

1. Montana's Program History

2. DOE Accelerator Framework

- Virtual Technical Assistant

*** Montana's Approach to EPC ***

Montana's Program History

1. Since 2005:

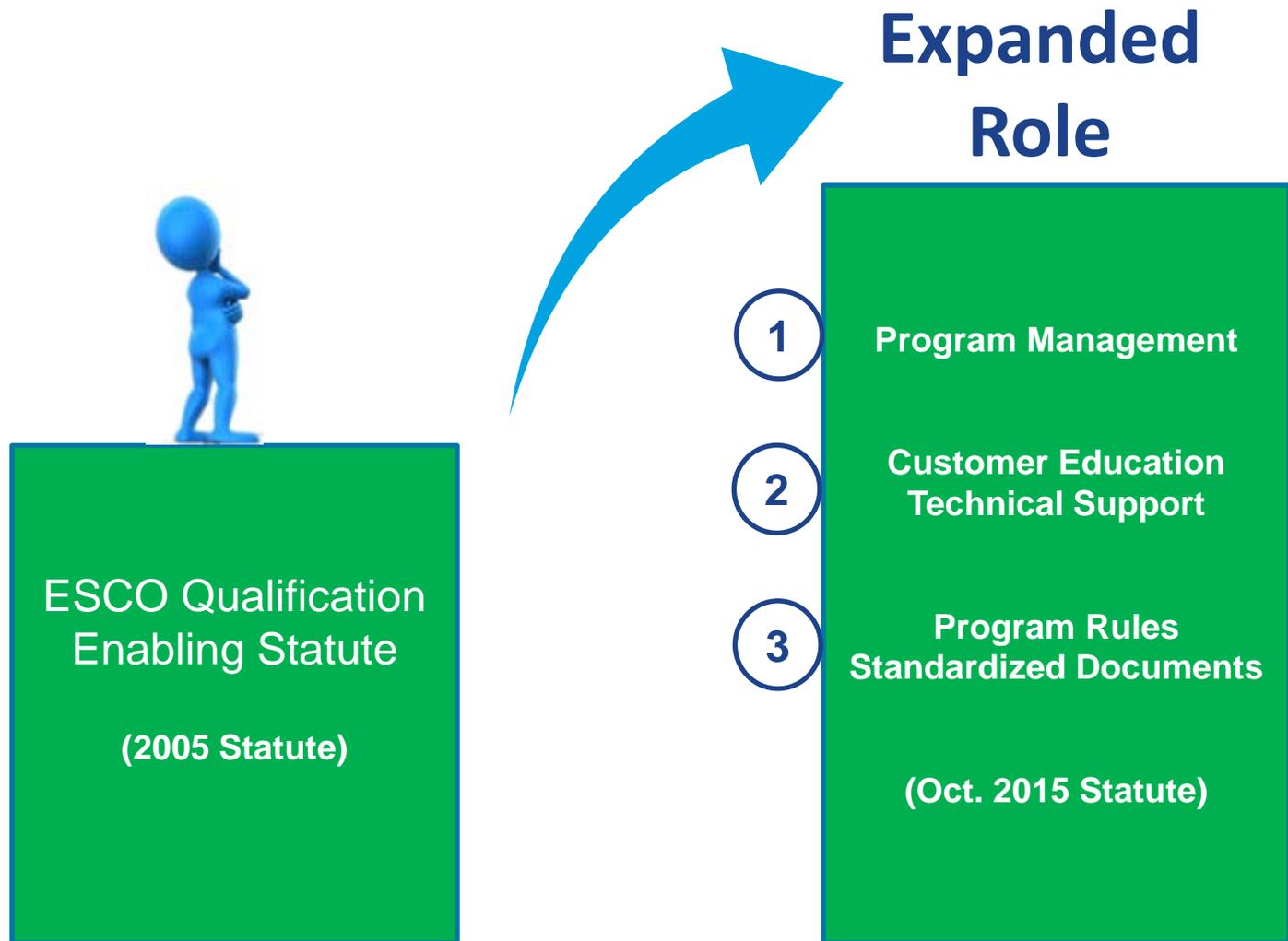
- Prequalified EPCs via RFQ process
- Provide Technical Support

2. Problems:

- No Project Monitoring
- No ESP Oversight / Customer Protection
- Customer Satisfaction (+ -)

3. Enabling Legislation 2015

Need for Virtual Technical Assistant



EPC Program - Network and Change

1. Industry Support

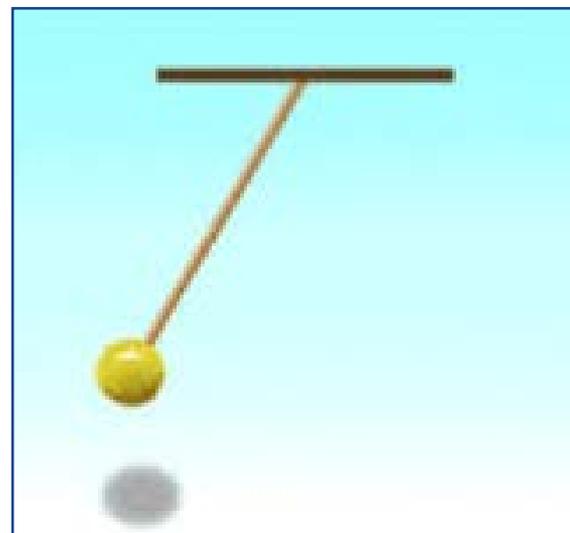
- Federal & State Levels
- Independent Technical Experts
- DOE Accelerator Framework

2. Industry Standards

3. In-house Education

4. Develop a Plan

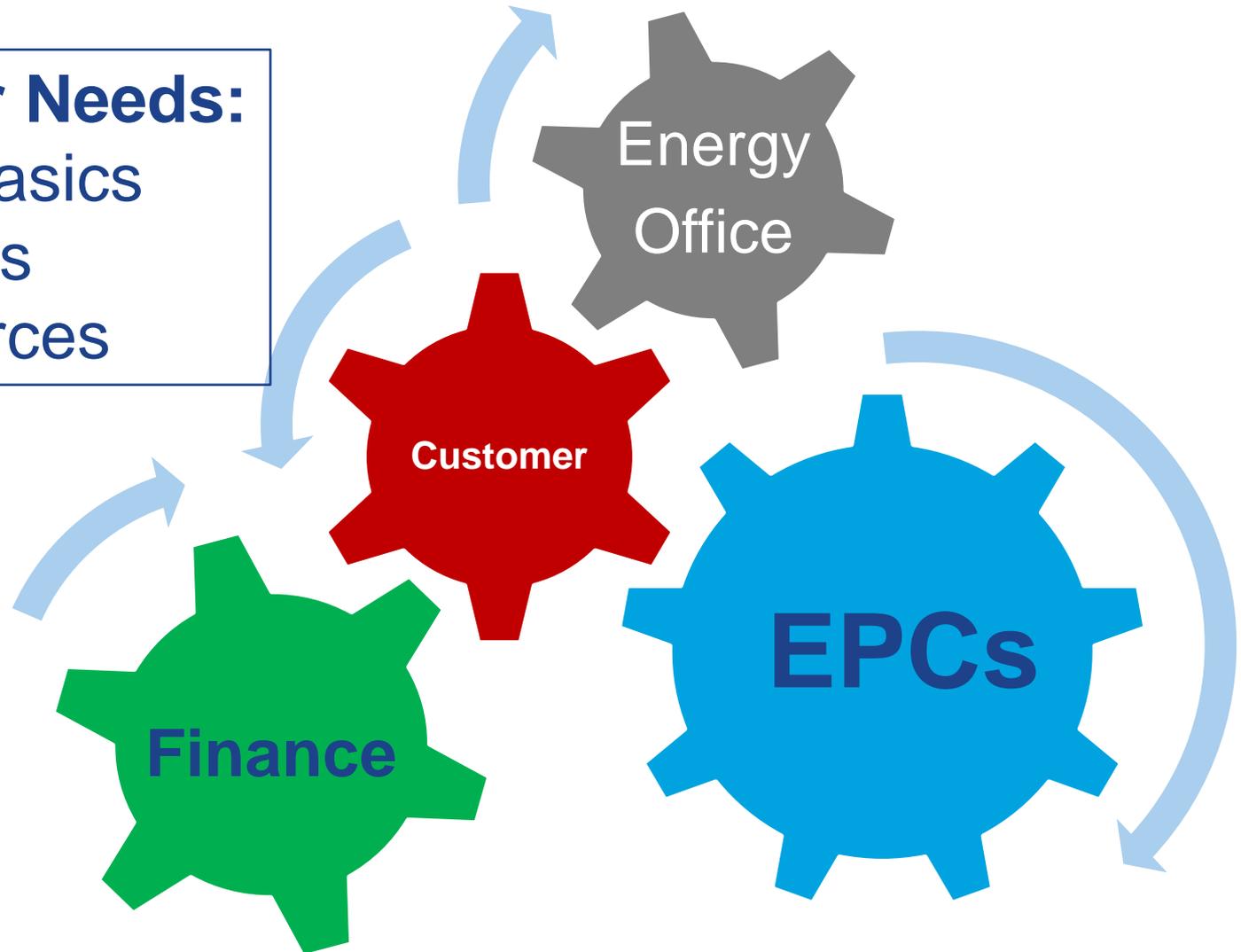
5. Build “VTA”



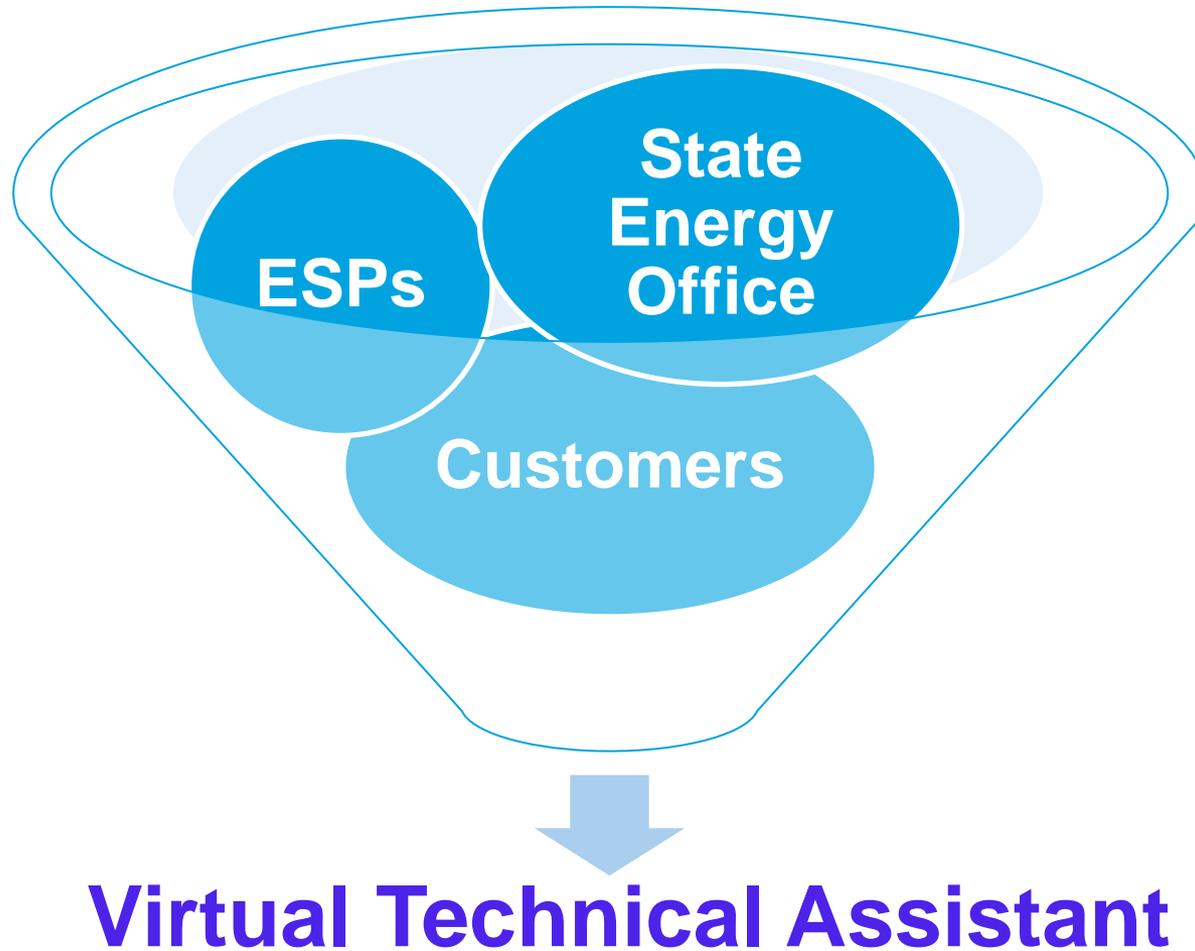
Key Problem

Customer Needs:

1. EPC Basics
2. Process
3. Resources

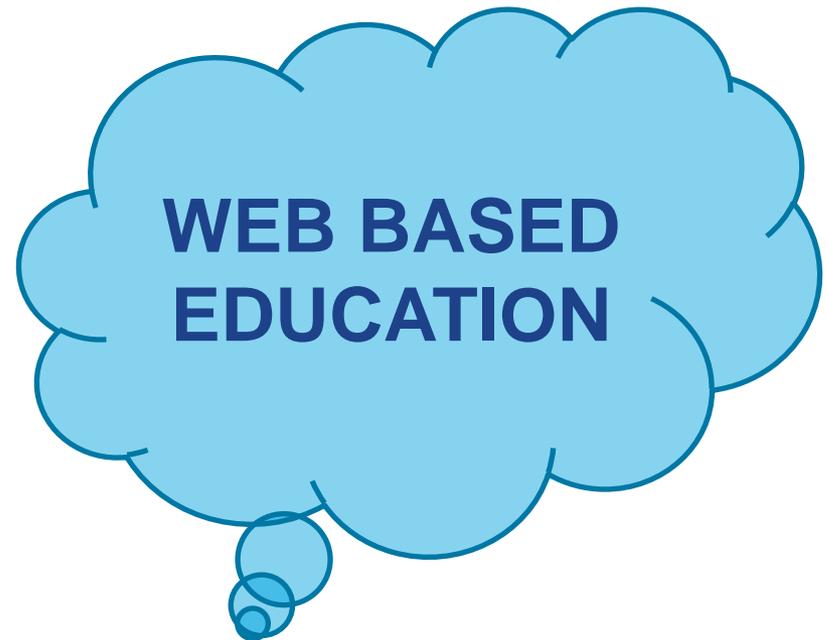


VTA – Virtual Technical Assistant



Virtual Technical Assistant #1

- **Introduction**
- **What is EPC?**
 - Types of Projects
 - Financing
 - Introduces Stakeholders
 - ESCOs
 - State Energy Office
 - Legal
 - Stakeholders (Internal and External)



Virtual Technical Assistant #2

- **Is EPC for me?**
 - EPC Pros and Cons
 - Procurement Decision Tree
- **Goals of the Virtual Assistant**
 - Program Documents
 - Structure EPC into 5-Step Process

Virtual Technical Assistant #3 - Tools

1. EPC Basics
2. 5-Step Process
3. Project Financing
4. Rules
5. Required & Resource Documents
6. FAQs
7. Contact Info.

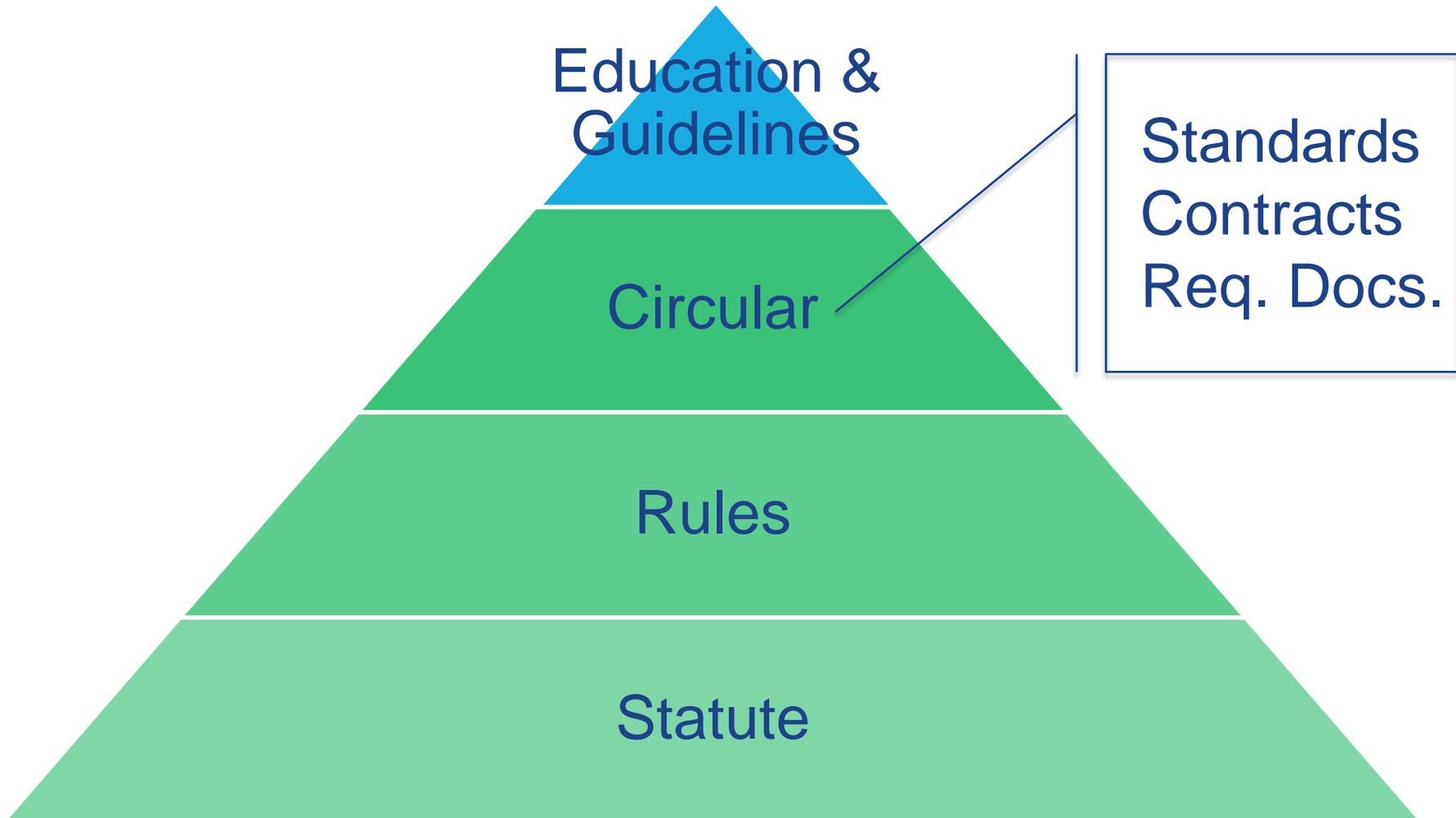


ESCO RFQs

ESCO Pre-Qual. List

Project Tracking

Program Documents



EPC Process

Virtual Assistant (5-Steps)

1. Project Planning

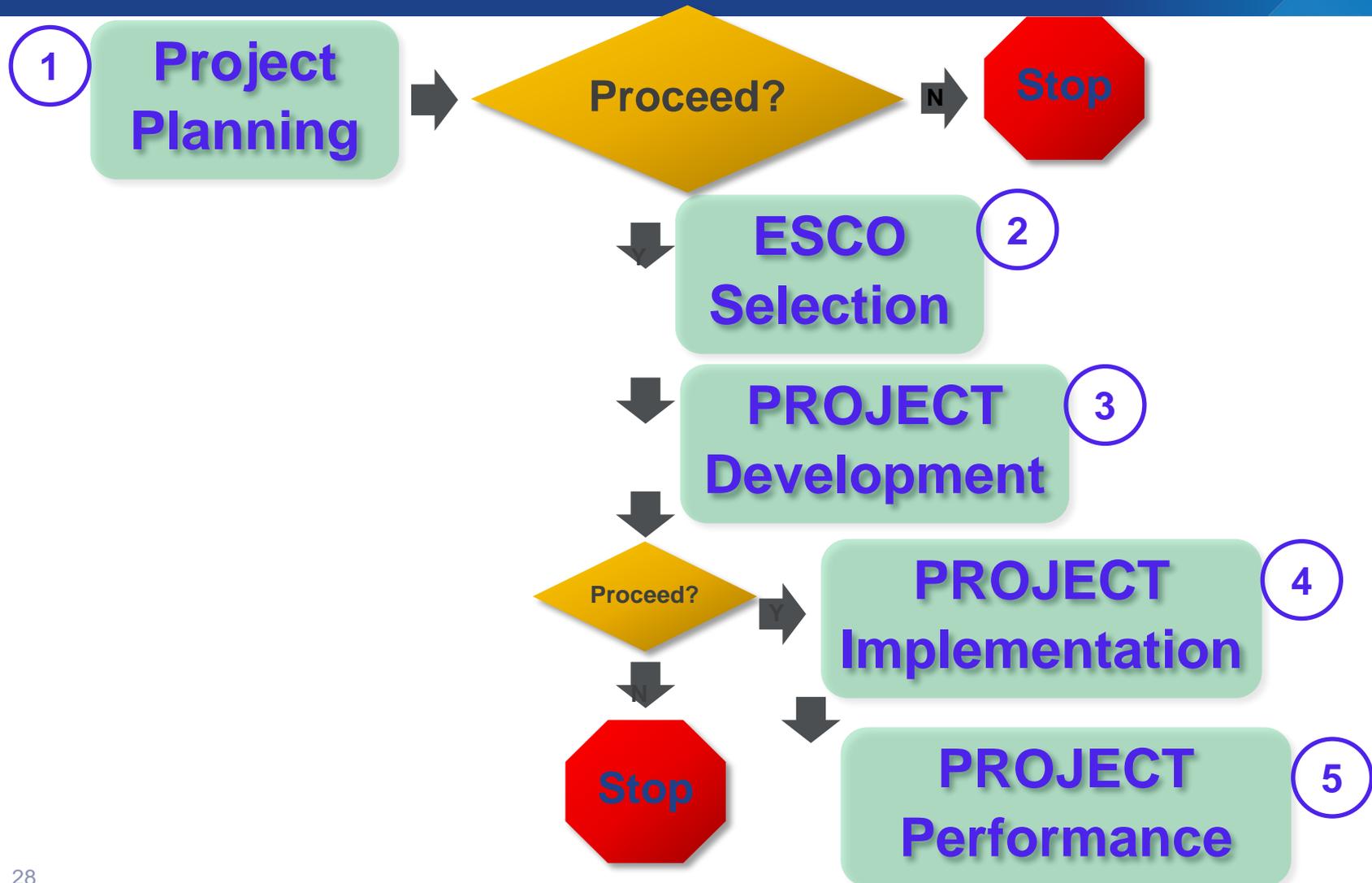
2. ESCO Selection Process

IGA **3. Project Development**

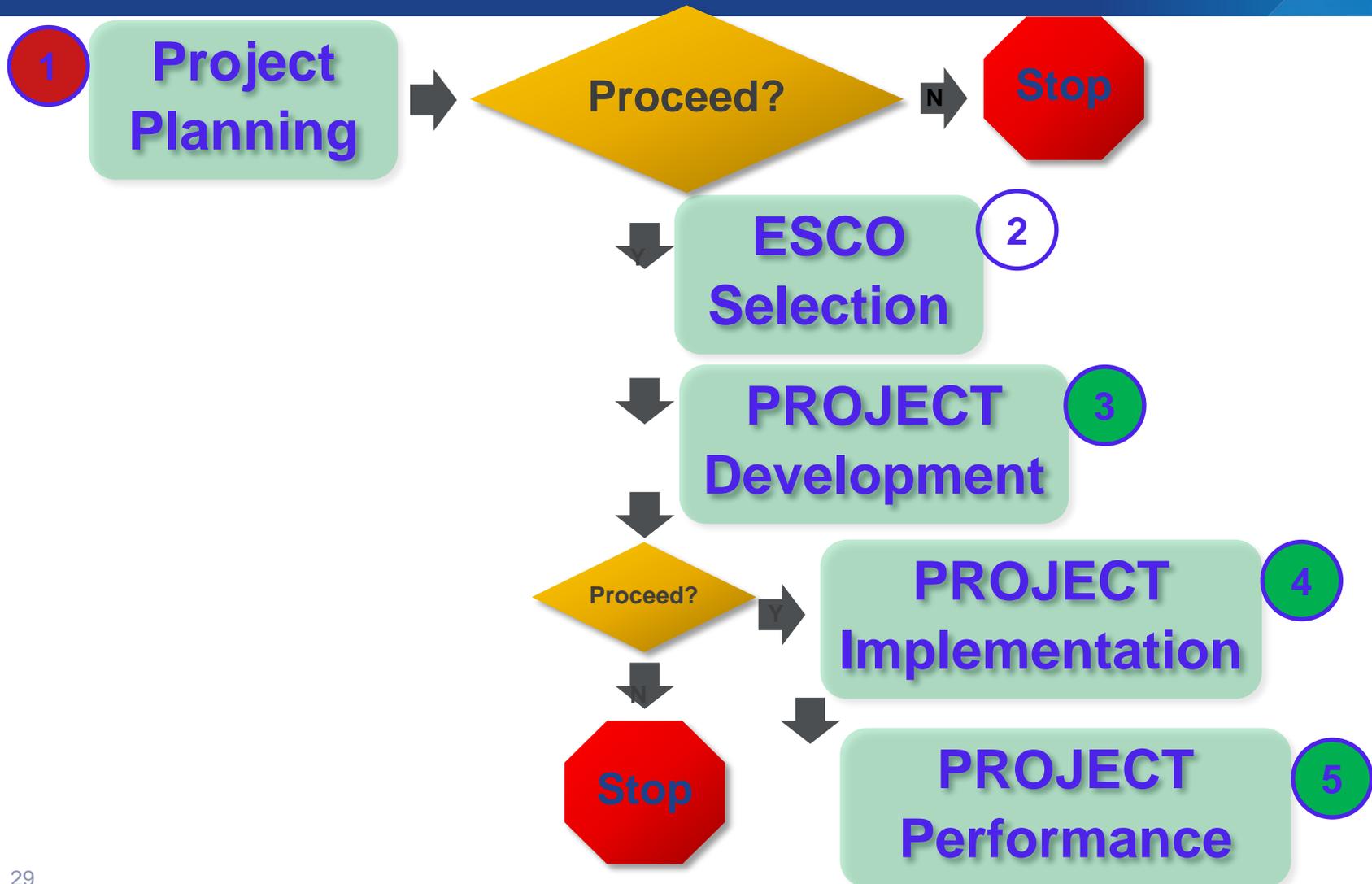
EPC **4. Project Implementation**

M&V **5. Project Performance**

EPC 5-Steps



EPC 5-Steps



Accelerator Toolkit Use

Design Use - Stakeholder Communication Portal

- Communication
- Education
- Document Repository
- Project Support

Ancillary Use

- Program Document Container
- Program Public Adoption - Stakeholder Communications

Thank you!

David LeMieux

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Karen Rantamaki
ESPC Champions Toolkit

State of New Hampshire

NH - ESPC Champions Toolkit

New Hampshire's Challenge

- Limited Capital Funds
- Lots of Energy Saving Potential
- Limited Energy Staff
- Stringent Energy and Fossil Fuel Reduction Goals

NH - ESPC Champions Toolkit

New Hampshire's Resources

- Network of Energy Coordinators
- Enabling Legislation for ESPC
- Ball was Rolling with Pilot Projects

NH - ESPC Champions Toolkit

NH Joins ESPC Accelerator in Early 2016

- Do more projects with limited resources
- Have agencies take ownership of projects
- Have SEM Office act as technical support

What We Needed to Do

Provide agencies with enough information and the right tools so that they could generate, facilitate and complete more energy saving projects.

NH - ESPC Champions Toolkit

Toolkit Components –

Leadership Tools

- Overview Presentation – Champions
- Overview Presentation – Agency Leadership

Champion Tools

- Introductory Memo
- UPGRADE Plan
- UPGRADE Reminder
- Leadership Engagement Presentation
- Project Implementation Checklist

NH - ESPC Champions Toolkit

Use benchmarking data

Plan potential improvements

Go talk to building facilities' teams

Recommend potential ECMs

Assemble a project team

Develop a project description

Engage agency leadership

NH - ESPC Champions Toolkit

In the Past Year

- Met one-on-one with most Energy Coordinators
- Continuing to convene group semi-annually
 - Annual State Energy Conference (spring)
 - Fall meeting

Next Steps

- Present to Commissioners' Group

Goals

- Make ESPC “Business as Usual”
- Keep Energy Coordinators engaged
- Complete more energy saving upgrades!

NH - ESPC Champions Toolkit

Recent Updates and Progress

- Collaborative project with 2-5 agencies
- Regional in scope (NH Seacoast area)
- Two energy coordinators initiated project as a result of our toolkit launch!

Additional Challenges

- Detaching ourselves from the process
- Understanding and support of upper-management

NH - ESPC Champions Toolkit

Additional Work

- Prompted additional research on the cost effectiveness of ESPC
- With the help of the Energy Services Coalition, NH has developed a comparison tool for ESPC vs. capital projects
- Worked with NH Treasury to show comparison of financing mechanisms

NH - ESPC Champions Toolkit

Questions?

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Robert Thomas
Newark's ESPC Networking Toolkit

Newark, NJ

Newark Municipal Energy Program (history)

- American Reinvestment and Recovery Act of 2009
 - Newark received ≈\$2.8M of EECBG funding
- Newark Sustainability Action Plan
 - Local government would utilize a LBE approach with a primary focus on EE
 - Prioritized ESPC as the mechanism to improve aged infrastructure, reduce costs and maximize local workforce
- ESPC RFP Issued Dec. 2012
 - Notice of intent to award issued Aug. 2013

Newark's ESPC Barrier

Galvanizing support for making systemic changes in the approaches taken to manage energy use and procurement, and making clear the benefits of these changes across a broad range of cross-sector local partners including public officials, residents, students, or businesses owners.

Solution: ESPC Networking Toolkit

- Goal: provide resources and a plan for how to build a comprehensive ESPC support network in the City of Newark OR... City of... OR State of...
- Toolkit includes:
 - Memo
 - Communications Plan
 - ESPC Slide deck
 - Handout/leave-behind
 - Annual Report

Successes/Lessons Learned

- The Toolkit works!
 - Newark used it in real-time
- It helps identify champions in other Depts./Divs. that can be extensions of you in their areas of expertise
 - Utilize every opportunity available to build relationships with key shareholders
- “Move without the basketball”

Next steps

- Construction – Summer 2017
- Phase II?
- Share successes and pitfalls with others
- Questions

Thank you!

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Thank You

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