
Regional ESCO II – Municipal Energy Efficiency Finance

Funding provided by the
District Local Technical Assistance
program

Prepared for
MAPC Municipalities

December 27, 2012

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Acknowledgements

This project was undertaken with funds from the District Local Technical Assistance program. MAPC wishes to express our thanks to the Governor and the members of the Legislature for their continued support and funding of this program.

This report was produced by the Metropolitan Area Planning Council. Professional technical assistance and project coordination was provided by Helen Aki, Energy Services Coordinator. Additional project support was provided by Erin Brandt, Energy Planner; and Po-Yu Yuen, Energy Division Intern. Project oversight was provided by Rebecca Davis, Government Affairs Manager.

Special thanks for presentations, technical advice, and program support are due to: Holly Andreozzi, Bank of America; Matthew Foran, National Grid; Mark Rooney, NSTAR; Elizabeth Celluci, Columbia Gas; Steve Weisman, Peregrine Energy Group; Beth Greenblatt, Beacon Integrated Solutions; Eileen McHugh, DOER; Elise Avers, DOER; Aimee Powelka, DOER.

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Executive Summary

The initial purpose of this project was to facilitate a second group Request for Qualifications (RFQ) process for an ESCO to implement comprehensive Energy Management Services (EMS) in the facilities of participating municipalities. However, as MAPC tracked and helped to facilitate the success of the first round of Regional ESCO communities (those who participated in the RFQ funded under 2011 DLTA), MAPC identified early on in the project a fundamental challenge: communities that are most likely to take advantage of group RFQ project are the least likely to benefit from an ESCO, as they tend to have proactive staff members that have already captured many “low-hanging fruit” efficiency projects.

Faced with this challenge, MAPC opted to focus its efforts for this project on education on mechanism of energy savings performance contracting itself (referred to as EMS in Massachusetts, ESPC in other parts of the country), as well as the wide variety of resources available for communities to help them finance capital-intensive, energy-saving improvements in their facilities. These efforts culminated in a half-day workshop on Municipal Energy Efficiency Finance, held at the Bank of America headquarters in Boston, which brought together over 60 municipal representatives to speak with representatives from Bank of America, NSTAR, National Grid, Columbia Gas, the Department of Energy Resources, and owner’s agents in the performance contracting field.

MAPC also provided ongoing technical assistance and presentations to municipalities in the region as they explored working with an ESCO through a performance contract.

Step 1: Local Technical Assistance

MAPC staff made presentations and provided technical assistance to communities who had either participated in the 2011 DLTA Regional ESCO procurement project, or who were interested in participating in a second round of procurement (anticipated to take place in Spring 2013). These included:

- **February 28, 2012:** Presentation to Framingham Board of Selectmen
- **April 9, 2012:** Presentation to Gloucester Energy Committee & City Staff
- **October 30, 2012:** Presentation to Stoughton Board of Selectmen

A copy of the “Regional ESCO & Performance Contracting 101” slides are included as an Appendix to this report.

MAPC prepared and distributed information to communities who had participated in the 2011 procurement project, as well as provided information on the RFQ and MOU with the selected ESCO vendor to communities interested in pursuing performance contracting outside of the 2011 participants. By the end of 2012, 9 out of the 14 communities who had participated in then 2011 RFQ for Energy Management Services had executed contracts to proceed with the selected ESCO vendor, Ameresco: **Ashland, Chelsea, Framingham, Melrose, Norwell, Sherborn, Sudbury, Topsfield and Wayland.**

The following is a sample memo prepared by MAPC staff:

MEMORANDUM

To: Gloucester Clean Energy Committee & City Staff
From: Helen Aki, MAPC Energy Services Coordinator
Subject: Overview of MAPC Regional ESCO Procurement
Date: April 9, 2012

M.G.L. Ch. 25A §11i allows public agencies seeking to improve the energy efficiency of their facilities to issue a Request for Qualifications (RFQ) for ESCOs that are qualified in Massachusetts to provide comprehensive energy management services (EMS). This procurement process can also be initiated by a regional entity on behalf of public entities in its region. The selection of an ESCO through a regional procurement process qualifies the selected vendor to enter into ESPCs with the participating entities, but does not bind any of the participants to entering into such contracts.

Last year, MAPC put together an RFQ for EMS on behalf of some of its interested member municipalities. These were: **Ashland, Arlington, Chelsea, Everett, Framingham, Gloucester, Melrose, Norwell, Sharon, Sherborn, Sudbury, Topsfield and Wayland.** MAPC contracted with Peregrine Energy Group to help develop the RFQ documents, and worked with each of the 14 communities to collect facility and energy use information to include in the RFQ.

MAPC received eight (8) proposals in response to this RFQ, all from qualified ESCOs. In order to evaluate these proposals, MAPC assembled a Selection Committee of representatives from some of the 14 cities and towns. The Selection Committee members represented a diverse range of municipal interests, from administrative and finance personnel to energy staff and planners. They read each proposal and evaluated the merits of each vendor through a process facilitated by MAPC and Peregrine. The top three candidates were invited to conduct a sample audit of an elementary school in Melrose, and to participate in a group interview session with the Selection Committee.

After the extensive review process was complete, the Selection Committee unanimously identified Ameresco, Inc. as their top choice. As the basis for their decision, the Committee cited Ameresco's breadth and quality of experience and past work for municipal and public school clients, high level of professionalism, and excellent caliber of personnel as represented in Ameresco's proposal, written responses to questions, sample audit presentation and in-person interviews, and as substantiated by conversations with project references. **Although MAPC and Peregrine served in a facilitative role throughout this process, they were not members of the Selection Committee, and did not vote on the final vendor decision.**

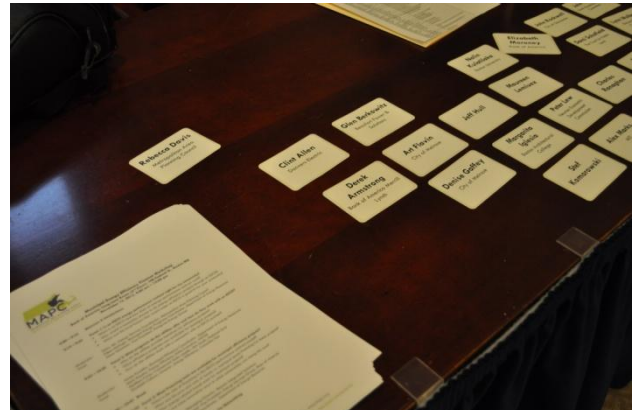
This procurement process has satisfied the requirements of Ch. 25A, and all participating cities and towns are now eligible to enter into contracts with Ameresco, if they so choose. MAPC strongly recommends that each city or town proceeding with a performance contract additionally contract with an independent "Owner's Agent"/project engineer as early as possible in its engagement with Ameresco to represent their interests in technical and financial discussions and negotiations.

About ESPC: An ESPC is a special type of performance contract allowed under Ch. 25A that is used to install energy and water saving facility improvements. **The ESPC structure allows these efficiency improvements to be constructed at no upfront cost and paid for out of guaranteed savings from an existing operating budget.** In other words, an ESPC is an innovative financing mechanism whereby guaranteed savings from the operating budget can be reinvested into capital improvements relating to energy and water efficiency.

Ch. 25A procurements enable ESPCs to be design-build contracts, under which **a selected ESCO is able to perform the design, construction, commissioning, measurement and verification, and even maintenance responsibilities for a bundle of energy conservation projects across a portfolio of buildings.** The ESCO acts as the general contractor for these projects.

Step 2: Municipal Efficiency Finance Workshop

MAPC hosted a workshop at the Bank of America offices in downtown Boston on Municipal Energy Efficiency Finance on November 15, 2012. This three-hour workshop represented a several week-long collaborative effort between and featured presentations from Bank of America, NSTAR, National Grid, Columbia Gas, the Department of Energy Resources, and several owner's agents in the ESCO field.



The following is a summary of the information shared at the event:

1. Introduction
2. Panel 1: Is an ESCO performance contract right for my community?
3. Panel 2: What programs do the utilities offer and how do they work with an ESCO?
4. Panel 3: What financing tools are available for efficiency projects?
5. Links to Additional Resources

Introduction

- Workshop goal: Communities will gain insight on what implementation path to choose for completing energy efficiency projects, **comprehensively** and **in a timely manner**.
- Specifically, “Should we pay an ESCO to do all of our work at once vs. should we do projects one-by-one based on available resources and staff/volunteer time?”
 - “Who is paying for the work, and how? How can we best take advantage of available rebates and incentives?”
 - “How can we move a project forward that captures both deep and immediate savings?”

Panel 1: Is an ESCO energy performance contract right for my community?

What is an ESCO and how does an energy performance contract work?

Helen Aki, Energy Services Coordinator, Metropolitan Area Planning Council

- **ESCO = Energy Services Company.** Most ESCOs do lots of different types of projects in the building energy management/construction/project management space. Some of them are part of larger manufacturing companies that specialize in building control systems, HVAC equipment, and so forth. Some of them are independent companies that specialize in their energy efficiency and renewable energy practices.
- **ESPC = Energy Savings Performance Contract (also referred to as EMSA = Energy Management Services Agreement).** When a community says they are working with an ESCO, generally what they mean is they have an energy savings performance contract with an ESCO. This is a contract that says: the ESCO will install a portfolio of energy saving measures (such as control systems, heating system upgrades, lighting improvements), that are guaranteed to save a save enough energy on an annual basis over the lifetime of the contract (up to 20 years) such that the town can repay the debt service on the upfront investment, so that the project is ultimately cost-neutral.
 - Note: If these guarantees aren't met, the ESCO has to pay; therefore, the ESCOs tend towards being conservative in their estimates of guaranteed savings.
- **Energy efficiency is only one angle of working with an ESCO through an ESPC.** Saving energy is certainly going to be an outcome. But really what's happening here is that this is a way to finance improvements to your buildings; a mechanism for asset modernization.
- **ESCO projects need to have financing secured upfront.** This financing is then paid off through the performance contract using energy cost savings and other funding (such as utility rebates or grant funds).
- **This can be a really good mechanism for some communities to get this work done, but every community is different.** It's important to move quickly to capture savings as quickly as possible.
- **MAPC can help communities go out to bid for these services in groups, and anticipates putting out another group solicitation early next year.**

Why and how would a community choose to implement an Energy Management Services (EMS)/ESCO project?

Eileen McHugh, Municipal Energy Programs Coordinator, Department of Energy Resources

- **MassEnergyInsight is a helpful and free baselining tool;** municipalities can use it to get a sense of their portfolio of municipal facilities and how they use energy.
- **None of these things are mutually exclusive:** You can work with an ESCO and leverage utility programs. Utility incentives are effectively applied to “buy down” the cost of an ESCO project.
 - In other words: Energy savings don't have to cover the entire cost of the project; you can also contribute utility rebates, grant funds, additional resources to cover additional improvements outside of the guaranteed energy savings.
- **EMS = Energy Management Services.** These projects are public construction projects. Chapter 25A (the “Green Communities Act”) provides an expedited procurement pathway

referred to as Energy Management Services, which provides an alternative to the procurement process under Ch. 149.

- **149:** Contracts are design-bid-build; after a certain dollar threshold you have to conduct feasibility studies and hire a designer/engineer before you get to construction process; and you have to prequalify general contractors/subcontractors.
- **25A:** Contracts are streamlined design-build; no dollar threshold; process is the same regardless of project value. DOER is the filing agency that regulates 25A procurements.
- **25A EMS projects allow you to reallocate resources from your operations budget to finance upfront improvements to your building.**
 - Obviously it's cheaper to do projects without financing if you have the upfront resources and capacity to manage them.
 - However: if your community lacks project management expertise and has limited access to capital, EMS may be a good tool, and will result in guaranteed projects.
- **Criteria for EMS project eligibility:** Any project for which energy savings can be quantified and guaranteed.

Is ESCO performance contracting a good fit for your community?

Steve Weisman, Vice President, Peregrine Energy Group

Performance contracting is a very effective tool for infrastructure modernization, and achieving energy efficiency in a rapid fashion. It's not the only way to achieve those things, but it's a pretty useful tool that the Commonwealth has created as an alternative to the Chapter 149 process, which is labor-intensive and can be challenging to use when it comes to these energy projects.

Five things to consider when deciding whether to work with an ESCO:

- 1. What is the condition of your energy infrastructure?** In many communities, systems may be functional but out-of-date; while new technology could seriously improve performance, there may be more pressing capital budget needs. Performance contracting is a way to accelerate the renewal of your energy systems and infrastructure, as opposed to having them compete for resources in the rest of your capital improvement planning process.
- 2. Is there available energy efficiency potential?** The question is not "have you participated in utility programs" but "have you participated broadly and have you participated recently," because technology changes over time and often there are additional potential savings over past projects. Everyone's sense of "what's new" is different: "new" buildings by municipal standards may not actual be "new" buildings in terms of efficiency in operations and best available technology. If your building maintenance and management resources are limited, this may be creating efficiency potential as well.
 - **If you don't have any available energy efficiency potential, performance contracting is probably not for you**, since that's the main resource being tapped to pay for these performance contracts.
- 3. What are your Green Community aspirations and goals?** If you've committed to a 20% reduction but are unclear about how to implement it within a 5-year timeframe, this may be a good option. If you've started to report to Green Communities and are finding savings are below what you had projected, this might be a way to catch up. Finally, if you haven't become a Green Community, working with an ESCO basically takes care of Criterion 3 (the Energy Reduction Plan).

4. **What is your in-house technical capacity and capabilities?** It's very time-consuming to complete multiple projects in multiple buildings under the 149 procurement process; you may not have the engineering expertise or knowledge on technology advancements; staff might not know what they're looking for.
 - **Commissioning is important** but tends to fall out of project budgets. This process requires ongoing commissioning & verification in order to meet the savings guarantee.
5. **What are your other capital improvement funding sources?** Either way, the community will have to pay for the project. Think about whether your financial rating is good enough to do any project; how much additional debt can you take on as a community. Is your community willing to level-fund utility budgets up to 20 years? In order for this project to work, the community has to commit to using energy savings to pay for the debt service on the performance contract, and not reallocating those savings elsewhere.
 - **Note:** If you do projects through 149, somehow you have to pay the contractor. This is the same thing; the contractor is going to need to be paid. The difference between the two is that in 25A you're paying the debt service out of your operating budget, and in 149 you're paying for it some other way.

In sum, this can be a good strategy for accelerating energy infrastructure renewal. If you decide to pursue a performance contract, some things to keep in mind are:

- You need to be willing and able to incur debt to finance the performance contract; the ESCO doesn't pay for it.
- Even when you're working with an ESCO, you need to have some internal staff participation to coordinate with the ESCO, make key project decisions, and consider allocating resources to retain outside expertise (e.g., and owner's agent).

Additional Questions (to all panelists):

Q: Do communities typically enter into contracts with the ESCO for maintenance?

A: Keep in mind that working with an ESCO basically eliminates deferred maintenance, as the savings guarantee component of the performance contract is essentially a warranty on the installed measures that says the community will properly operate and maintain equipment. Maintenance is the responsibility of the community.

- Communities can and often will sign an additional maintenance agreement with the ESCO.
- On the other hand, the advantage to doing maintenance in-house is that you have someone on the ground to respond to conditions as they arise (as opposed to waiting until something goes wrong and the maintenance agreement kicks in).
- This also applies to having an in-house energy manager who can pay close attention to regularly making sure equipment is operating properly and controls are set right; these positions can often be paid for out of additional energy savings over what is guaranteed in the ESCO contract.
- The ESCO will also provide training for your in-house staff.

Q: Do most of these contracts go up to the maximum allowable time period?

A: Yes, in MA most contracts end up extending up to the 20 year maximum.

Q: What is the average size of an ESCO project?

A: It ranges – in MA we've seen projects from \$280,000 up to \$15 million. This demonstrates the flexibility of the projects.

Q: Can you realistically extend these contracts over 20 years, even though technology is changing and you're likely to replace it halfway through the performance period?

A: This question comes up a lot, particularly with lighting, which you tend to replace every 5 years or so as a regular course of business. You should consider the economics of every additional investment & incremental savings. However, since you're always improving, you're never losing the savings from the initial investment, and this tends to not really be an important concern.

Panel 2: What programs do the utilities offer and how do they work with an ESCO?

What programs do utilities offer through MassSave, and how do they work with an ESCO?

Aimee Powelka, Municipal Efficiency Coordinator, Department of Energy Resources

- MA has been ranked #1 for energy efficiency policies by the American Council for an Energy-Efficient Economy for two years in a row!
- Electric and gas utilities are required by law to pursue all cost-effective energy efficiency opportunities, and explain how they will do that through statewide 3-year plans. Between 2009-2013, the utilities spent \$2 billion on projects that are anticipated to realize \$6 billion in value over their lifetime. This is paid for through ratepayer funds.
- The most recent 3-year plans (for 2013-2015) were just approved; these new plans include strategies for all utilities to shift towards specific, direct-install municipal programs (similar to what NSTAR has already).
- Annual adjustments are made to specific program details, which is why it can be tough to get certain incentives/program funding over the winter months
- Utilities pre-qualify vendors for their direct-install programs which can be used without bidding up to \$100k according to 25A

What efficiency programs are available for municipal projects? How do the utilities work with a community with an ESCO partner?

Mark Rooney, Energy Efficiency Sales Executive, NSTAR

Matthew Foran, Commercial Sales Leader, MA South, National Grid

Elizabeth Cellucci, Director, Energy Efficiency, Colombia Gas

- **All this money being spent by the utility companies is YOUR money!** These funds come from a surcharge on all customers' bills.
- **It's not an "either/or" question of whether to work with the ESCO or work with the utility.**
 - One benefit of working with an ESCO is that it makes life easier for the utility by packaging and streamlining projects.

- **NSTAR Municipal Program:** Has a pre-approved list of “preferred vendors” with pre-negotiated cost-plus pricing. Municipalities can however work with whomever they choose and still gain access to NSTAR’s incentives, including an ESCO.
 - Don’t have to go through bid process to work with the preferred vendors, but projects are limited to \$100,000 (stipulation of Ch. 25A)
- **National Grid:** Working to improve coordination between NSTAR/National Grid offerings and expect to develop a more formal municipal program in 2013. Current programs include:
 - Small business/direct install program (for customers that use under 300kW); limited menu of simple ECMs
 - Large commercial programs with a combination of prescriptive and custom incentives available. There is a preference for comprehensiveness in measures through the large commercial programs (another benefit of ESCO).
- **Columbia Gas:** Current program offerings also differentiate between small business (under 40,000 therms/year) and large businesses (over 40,000 therms/year). These programs involve a walkthrough-evaluation, which yields a proposed report for potential projects. Columbia will cover 50% of the installed cost up to \$50k per master meter for small businesses and \$100k per master meter for large businesses.
- **When working with an ESCO, bringing a utility rep into the conversation early on is key.** Make sure ESCOs understand the availability of custom incentives, which are sometimes time-sensitive. Project incentives can sometimes be increased by combining all prescriptive efficiency measures into one big, custom package.

Panel 3: What financing tools are available for municipal efficiency projects?

What is the role of financing in the ESCO performance contract model?

Beth Greenblatt, Managing Director, Beacon Integrated Solutions

- **Financing is necessary to pay for these projects.** ESCOs are general contractors that will look to get paid; communities will either borrow or look for alternative funds to pay them for design, construction, project management, training, commissioning, etc.
 - ESCO performance contracts tend to pull projects off your deferred maintenance list – think through all the options to pay for these projects.
- **What kinds of borrowing services are out there?** High level overview:
 - **Self-Implement.** Use money in your operating & capital budgets and leverage local expertise.
 - **Use a Financing Option.**
 - **QECBs.** Elise will talk about this.
 - **QZABs** (Qualified Zone Academy Bonds) Can be used for school systems; implemented through MA School Building Authority. Low-interest financing tool.
 - **General Obligation Bond.**
 - **Tax-Exempt Municipal Lease.** Holly will talk about this.
 - **Permanent State House Serial Notes.** Shorter-term, available for projects that may be below typical thresholds for bonds or leases.

- **USDA Community Facility Program.** Funding made available for energy efficiency in communities designated as “rural.” Fairly low interest rates, good for small communities with low debt capacity.
- **Performance contracting in a nutshell:** This is a way to reinvest current energy dollars from operating budgets back into your building, in a creative way that blends projects with short and long payback times and is fuel-blind (i.e., lighting savings paying for heating upgrades). The borrowing is effectively backstopped by the ESCO guarantee vs. additional tax revenues.

What are the pros and cons of bonds vs. municipal lease financing for these projects?

Holly Andreozzi, Senior Vice President, Energy Services Group, Banc of America

- BofA Energy Services Group finances energy performance contracts and efficiency projects across the country
 - Holly focuses on municipalities and 501c3's, particular in the northeast
- The financing end is the easy part! Hard part is project development.
- **The “creative” financing vehicles used in this work have actually all been around for a long time and are very straightforward.**
- **ESCOs do not pay for the project – this is a common misconception.** However, they do have an interest in the project getting financed, so sometimes they can advise you on financing options.
- **Two agreements:**
 - **Energy Savings Performance Contract:** This is the contract between the municipality and the ESCO that includes the savings guarantee; the ESCO must pay the customer if the savings aren't realized.
 - **Financing Agreement.** This is a separate agreement between the municipality and the financier, and **MUST** be paid. This is generally not a problem; in BofA's experience with a portfolio of \$2 billion worth of projects, only one project has ever had an issue.
- **Most common choices for financing:**
 - **General obligation bonds:** You are probably familiar with these; most communities do these once or twice annually. There are high administrative costs associated with issuing a GO bond, such as holding a public offering.
 - **If you have a regularly scheduled bond issue coming up you might consider rolling in a bond for one of these projects** – if you're doing one anyway, there's no extra cost really.
 - **Municipal leasing:** You may or may not be familiar with this; MA is not as active as other states in using this approach.
 - **Tax-exempt leases are secured by equipment** (i.e., lights, insulation, boilers, chillers, pipes); the security for a tax-exempt lease is the equipment, rather than the taxing power/general obligation of the municipality.
 - **Leases are subject to annual appropriation so it's not technically part of your debt capacity,** although it will be factored in if you're being rated.
 - **Leases have a slightly shorter term than GO bonds, and tend to be limited to 15 years** based on what lenders are willing to take on.

- **You don't need a rating or a public offering document to obtain a lease because typically you just deal with one lender;** this is very similar to simply going to a bank and obtaining a loan.
- **Leases allow you to get a lock on an interest rate & provide greater certainty in advance.** All of these deals are done through a private placement arrangement, which helps you avoid market risk. It can take a long time to develop these projects (years sometimes); knowing the interest rate for certain can be very important, because if your assumptions are old and the interest rate has changed, this can change the economics of your project. 6-9 months is reasonable advance time to lock in a rate vs. waiting for the public market and getting whatever rate you do on that particular day.
- **Little-known fact about QECBs, QZABs:** Although the US Treasury refers to these instruments as bonds, they're really obligations. If you get an allocation of these sorts of bonds, you can issue them as a lease; you don't have to structure them as a general obligation bond.
- **Most performance contracts require a combination of financing mechanisms.** It's not uncommon to see a project funded with utility incentives, a small QECB allocation, and some lease financing. It might sound complicated, but it's not, and there are lots of experts out there that can help you take advantage to these various different types of resources.

What energy-related bonds exist for municipal projects?

Elise Avers, Program Coordinator, Department of Energy Resources

- **QECBs or Qualified Energy Conservation Bonds** are very attractive tools for financing energy-saving projects; they have specific energy savings requirements.
 - Vastly expanded under ARRA
 - Commonwealth allocated about \$2 million worth of QECBs for projects
 - Several awards made to performance contracting projects
- **QECBs** must be used for "qualified conservation purposes." Allows you to get very low interest rate (subsidized by Treasury essentially). 1-2% is common.
- **"Qualified Conservation Purposes"** – most typical are:
 - **Energy Efficiency Upgrades.** Need to have plan for 20% reduction; an energy audit is sufficient to show that. A performance contract is a great way to get there, but isn't required.
 - **Renewable energy production.** Solar PV, wind turbines, etc. Anything that is eligible for production tax credit under IRS code is eligible for QECB.
 - **Implementing Green Community programs, e.g.,** streetlighting projects (not tied to a building, but affecting overall municipal energy use).
- **Case Study: Belchertown:** They had a fully-developed project with a variety of funding sources; when when QECBs were released, they got the project size down using through other funding sources, and then financed the rest completely using QECBs.
 - Opted to receive quarterly direct payment subsidies; this can result in a lower net interest rate but you don't have to do it that way (it's a little more work)
 - Important to work with your bond counsel, as they will understand the nuances of the IRS tax code related to using QECBs
 - Large project: \$3.3 million

- **Case Study: Gill.** Smallest QECB ever issued at around \$127,000. Point being: you can use QECBs for smaller projects, although keep in mind the administrative costs are fairly static.
 - Gill had limited staff capabilities and old buildings with oil heat – their energy costs were high, but they had little free capital for implementing upgrades.
 - Had never issued a bond before.
 - Did a private placement w/ Greenfield Cooperative Bank.
 - Note: if you're doing a small project, you need to do legwork to find a buyer, since big banks like Bank of America are not going to be interested. Local banks may be the way to go.
 - Issued bond to the local bank itself; bank takes the tax credit under this scenario.
- **Next Solicitation for QECBs will be posted on Comm-PASS in early 2013.** There will be approximately \$5 million available for public projects.
- **Interesting...** some folks opt not to go the rebate route these days because they are unwilling to take the federal government risk! The tax credit route: the lender will not give you as favorable pricing as they have to take the tax credit and it's not as worthwhile.

Wrap Up/Summary: How to proceed?

Beth Greenblatt, Managing Director, Beacon Integrated Solutions

- **ESCO projects tend to combine a range of different funding and financing sources; use them all to your advantage.**
- Belchertown took advantage of **all incentives** to buy down the total project cost
 - Using QECBs allowed them to reduce the cost of borrowing (saved almost a million dollars in interest costs over the lifetime of the project)
- Gill: this was the first borrowing the town ever did! They took advantage of an EECBG grant and utility rebates, which brought them down to the \$127k amount, and then were just looking to finance that remaining amount.
 - Engage your financial advisor early in the process! Gill didn't have one so they hired an owner's agent.
 - Gill used an ESCO/ESCP mechanism because even though they had a high energy cost, they had a small budget, and they didn't have other resources/additional tax revenues to make the building upgrades.
 - Note: The elementary school in this example was served by a regional school district.
 - Did an IMA that required school to give the savings back to the town directly (not in operations budget but actual payment) so they could pay the financing. Closed that loop. Encourage this kind of arrangement.
- **If you choose to work with an ESCO, make them work to meet your local priorities.** Give them your deferred maintenance plan, capital improvement plan, etc. Let them come back with a plan that you can then whittle down into something that is financeable and meets your needs. Decide if it makes sense
- **Don't be reactive; be proactive.** Once you've decided what you want to achieve in your community with respect to building improvements, decide if you want to use a performance contract, and make sure your plan for measurement & verification will result in your buildings performing better over time.

Additional Resources

Metropolitan Area Planning Council Clean Energy Division:

- View resources and learn more about upcoming events and project opportunities at: <http://mapc.org/clean-energy>

Energy Management Services (EMS)

- Model documents and guidance available at: <http://www.mass.gov/eea/energy-utilities-clean-tech/green-communities/ems.html>

Department of Energy Resources Green Communities Division:

- View resources and sign up to receive news and updates at: <http://www.mass.gov/eea/energy-utilities-clean-tech/green-communities/>

Appendix: Regional ESCO & Performance Contracting 101

Regional ESCO & Performance Contracting 101

Stoughton Board of Selectmen

October 30, 2012

For more information, contact:

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Why Do Performance Contracting?



- Energy efficiency and infrastructure renewal
- Multiple projects in multiple buildings bundled into single contract
- Design/build (vs. design/bid/build)
- Reduced risk of project problems – expertise in design, professional construction management, commissioning and testing
- Project savings will exceed debt service (state mandated)
- Savings guarantee (ensures you will have ongoing MBCx, usually first to be cut out of project budgets)

Performance contracting is a mechanism for **capital improvements** and **asset modernization**.

(more than energy savings)

Overview of the Energy Savings Performance Contracting (ESPC) Process

Prerequisite: Vendor Selection
MGL Ch 25A, s. 11c (RFP) or s. 11i. (RFQ)

Phase I: Development (3-5 months)

Contract #1: Investment Grade Audit (IGA) Agreement
Municipality must reserve break-up fee to execute IGA (\$25-75k)

Data Collection/ Building Audits

Preliminary Energy Audit (PEA)
submitted for review

Energy Conservation Measures (ECMs)
selected by municipal stakeholders

IGA Report
submitted for review

Financing identified

Contract #2: Begin negotiation

Contract #2: Energy Management Services Agreement (EMSA)
Municipality approves IGA report, financing and project before executing

2 to 3 months

1 to 2 months

Phase II: Design/Build (~1 year)

Design & Engineering Submittals
• Equipment specifications
• Construction schedules

Equipment procurement; subcontract solicitations issued (by ESCO)

ECMs constructed & commissioned

Phase III: Performance Period (up to 20 years)

(optional) Contract #3: Operations & Maintenance Agreement

Annual Monitoring & Verification reports
Shortfalls are compensated

Staff Training



Performance Contracting Process



- 1) ESCO selected; begins marketing to Town
- 2) Town signs Investment Grade Audit agreement with ESCO
 - Breakage fee (typically: 5-10 cents per sf)
- 3) ESCO conducts Preliminary Energy Assessment and creates list of potential projects (2 mos)
- 4) Town selects projects for IGA (1 mo)
- 5) ESCO completes IGA and proposal (1-2 mos)
- 6) Town proceeds with Energy Services Agreement **or** pays for IGA

Now is the time to begin **educating municipal staff** and **developing project wish-lists** for each building

Cash Flows



- 1) Town secures project financing
 - **Common misconception: “the ESCO pays for the projects.” This is false.**
- 2) ESCO is paid as projects are completed
- 3) Energy savings should exceed debt service
 - **Important: keep utility line flat!**
- 4) Savings are measured and verified
- 5) Actual savings reconciled against guarantees

COSTS

- **IGA breakage fee (\$10-50k)**
- **Owner’s Agent fee (\$10-50k)**
- **Financing for full ESA (total project cost)**

Owner's Agent Role



- Provides support during contract review
- Reviews proposed project list, pricing & savings estimates
- Reviews proposed M&V protocols
- Critiques design submittals and proposed equipment
- Observes systems commissioning and testing during construction
- Verify that documentation is complete and that staff receives proper training

MAPC **strongly recommends** that all participating communities **hire an owner's agent**, either through MAPC's contract with Peregrine or through their own process.

Why Regionalize?



- More bidders
- More competitive pricing
- Greater leverage in negotiations
- Cities and towns given equal consideration
- Wider range of experience engaged in collaborative selection process

*Participating communities have the **option** to contract with the selected ESCO without going through their own procurement process. **There is no obligation to do so.***



Regional ESCO 2011



Objective: To select a single Energy Services Company (ESCO) to provide comprehensive energy services to all 14 participating communities.

- Arlington
- **Ashland**
- **Chelsea**
- Everett
- Framingham
- Gloucester
- Melrose
- **Norwell**
- Rockport
- Sharon
- **Sherborn**
- Sudbury
- **Topsfield**
- Wayland

- Procurement funded under the MA District Local Technical Assistance (DLTA) program in 2011
- Satisfies public contracting requirements under M.G.L. Ch. 25A §11i
- Peregrine Energy Group hired as advisor

Bold = signed IGA agreements as of 10/3012

