



Energy Management Services: FREQUENTLY ASKED QUESTIONS



1) What is an Energy Service Company or ESCO?

An Energy Service Company (known as an ESCO) is a firm that coordinates all of the activities of a performance contracting project, including: technical audits, design engineering, equipment installation, construction management, project financing, staff training, equipment maintenance, and project monitoring. ESCOs must be DCAM certified. A list of certified ESCOs is available online.

2) Why should I consider EMS contracting instead of a regular construction project?

You may want to consider EMS contracting to reduce your energy bills and obtain new capital equipment with little or no up-front capital investment. Most public agencies consider EMS contracting when they have identified energy and water conservation potential in their buildings, but they do not have sufficient funding to make the improvements.

In addition, EMS contracting offers significant benefits that are not usually associated with standard construction projects, such as a performance guarantee or staff training for preventative maintenance. Over the contract term, an ESCO may train facility staff to optimize the performance of installed equipment.

EMS contracting also allows the contracting entity to minimize risks related to the recouping of costs associated with new efficiency equipment. When the ESCO guarantees a specified amount of energy savings attributable to the installation and operation of the energy conservation measures, if those guaranteed savings do not materialize then the ESCO pays the difference.

3) What is the maximum term for an Energy Management Services Agreement (EMSA)?

The maximum term for either the RFP process (§11C) or the RFQ process (§11I) is 20 years.

4) What payment arrangements are available for Energy Management Services (EMS)?

There are various types of payment arrangements. Third-party financing is an alternative method of procuring energy and water conservation equipment at little or no up-front cost. Equipment is generally purchased through the energy and water cost savings generated by the conservation equipment installed. This type of arrangement may require a 10 to 12 year contract (20 years is the maximum allowable term) whereby the ESCO guarantees that the energy savings resulting from the improvements will be equal to or greater than the project costs. Municipalities may use a combination of funds including, but not limited to, utility rebates, lease arrangements, municipal bonds, capital funds, operating funds, and grant funds.

Supplying additional funding could allow you to add improvements with longer paybacks, such as windows or insulation. Although you may “subsidize” an EMS contracting project, clearly state the value that the funds add to a project. For instance, if you consider a cost-based approach to the final contract, you could identify the specific equipment installed because of your investment in the project.

5) EMS contracting allows the same contractor to perform both design and construction. Does that conflict with M.G.L. c. 30B or M.G.L. c.149?

No. One may undertake EMS contracting as specified in Massachusetts General Laws Chapter 25A §11C and §11I. This statute allows for the purchase of a “program of services,” including design and construction work that is primarily intended to reduce energy and water consumption.

6) What sort of equipment can I fund with an EMSA?

Under an EMSA, public agencies may procure any equipment that saves energy or water, including, but not limited to, the following: energy controls, lighting retrofits, HVAC upgrades, fuel switching, high efficiency motors and pumps, heat recovery systems, onsite electricity generation, and cogeneration.

7) I need a custodian. Can I get one through EMS contracting?

No. To hire a custodian or procure services that are primarily maintenance in nature, you must follow specifications outlined in M.G.L. c. 30B.

8) We have insufficient funds to support an EMS contract for all of the efficiency improvements that we would like to make. Can we add bond funds?

Yes, municipalities may provide bond funding. (See Chapter 44, §7.)

9) What can we do if our energy and water bills are high, but we have very limited funds?

If you are short on funds and your annual energy and water utility bills total over \$1,000,000, you may have the potential to develop a successful EMS project, depending on the energy efficiency opportunities within your facilities. If your energy and water consumption is too small, consider collaborating with other entities (aggregate several projects into one).

The amount you can save on your utility bills depends on many things: the design of your building, how heavily it is used, whether you are already conserving effectively, alternate fuels available, the amount of capital you can invest, etc.

10) We are planning major renovations to our buildings in the next few years. Should we still consider EMS contracting?

You should consider EMS contracting only if reliable energy and water baselines can be established. EMS is a viable financing option if you are planning to improve your energy and water systems; however, if renovations would increase utility costs, you should reconsider or delay implementing an EMS contract.

11) Our town hall needs a lot of work, but it is not big enough for an EMS contract. What can we do to develop a viable project?

Expand the scope of the project by including more buildings or evaluating additional conservation improvements. The buildings in a project should cost enough in annual utility bills, including gas, electricity, water, and oil to generate sufficient savings to cover the investment. Usually a single building is not big enough to support a successful EMS contracting project. For example, consider expanding the project to include schools, libraries, and

water treatment plants over which the city or town has jurisdiction, or consider joining with another municipality in a combined bid.

Some of the smaller towns may want to explore advertising their projects with others. For successful projects, determine the evaluation criteria, the method of allocating savings, and the contract monitoring before advertising the project. To date, three regional groups have aggregated bids: Franklin Regional Council of Government (FRCOG), Pioneer Valley Planning Commission (PVPC), and Merrimack Valley Planning Commission (MVPC).

12) A contractor claimed that our buildings have great potential for energy and water efficiency improvements. The contractor offered to perform an audit and provided sample bid documents. Should I accept?

DOER provides model documents published on the EMS web page. Do not rely on a contractor to develop your Request for Proposal (RFP) or Request for Qualifications (RFQ). Working with an ESCO, either before or during the procurement process may create a perception of giving unfair preference and hindering fair competition. You might face bid protests, legal protests, or, at a minimum, be forced to re-bid the project.

However, hiring a consultant to conduct an energy audit of the premises, assist in establishing measurement and verification standards, and monitor the actual energy savings achieved, could prove to be very helpful, so long as the consultant (and any ESCOs associated with the consultant) is forbidden from bidding on the project.

13) Will I get contractors that are more qualified if I require several DCAM certifications?

In accordance with M.G.L. c.25A §11C §11I and 225 C.M.R. 10.00, public agencies must require that firms obtain DCAM certification. However, a company needs only one Energy Management Services certification. Requiring additional certifications, such as electrical or HVAC, will unnecessarily limit competition to those few firms that possess the combination of certifications that you are requesting. Firms that meet the criteria for Energy Management Services are fully capable of performing extensive electrical, heating, and ventilation services.

14) Should both parties be able to terminate the EMS Agreement?

It is reasonable to have provisions in the EMSA (as accepted by both parties) that detail causes under which either party may terminate the agreement. The parties may simply terminate or modify the contract by mutual agreement. DOER's model EMSA includes examples of provisions for termination.

15) We would like to expedite this process. How long do I need to advertise?

Allow at least two weeks between initial advertising and the proposal submission deadline. However, good business practices would indicate that at least six weeks is a more realistic period given the level of complexity of these projects. Giving firms at least six weeks to respond to the RFP/RFQ decreases the likelihood of bid protests, based on the perception that one firm had prior or preferential access to the site during the brief two-week interval. A six-week timeframe will also give more firms time to learn about the project, thus increasing the competition and quality of responses.

16) Have other municipalities implemented Energy Management Services projects?

Yes, many communities and k-12 schools have used this method.

17) I do not know how to verify the savings. Should I let the ESCO suggest the best method?

The ESCOs must follow the most recent version of the Federal Energy Management Program (FEMP) Measurement and Verification Guidelines for accepted methods of calculating measurement and verification of energy savings or onsite electric generation. FEMP M&V allows four options (A, B, C, and D) and provides guidelines for their use.

Furthermore, do not rely solely on an ESCO that may be bidding on the project to develop the energy baseline. It is the local governmental agency's responsibility to assure that the baseline accurately reflects the facility's energy consumption patterns.

18) Is the ESCO or developer required to provide a performance bond to cover the performance guarantee for the entire term of the contract?

No. The performance and payment bonds are in effect for the installation period only. The performance guarantee should not be confused with a performance and/or payment bond.

A performance bond is a type of contract bond that guarantees satisfactory completion of a project during the implementation period (the installation and testing of the energy conservation measures or onsite electricity generation). The contractor is required to provide a performance bond to protect the awarding authority in the event the contractor fails to complete the project.

Another type of contract bond is a payment bond. The contractor provides a payment bond that guarantees the awarding authority that subcontractors and suppliers are paid the monies that they are due for labor and materials necessary for construction of a project.

Once the owner accepts the installation as complete and operational, according to the specifications and design in the contract, then the owner releases the performance and payment bonds. The cost for the performance bond is typically 1-2 percent of the total project cost.

19) Is there a specific time frame in which an ESCO or developer must cure a breach of the EMS Agreement?

There is no requirement in Ch. 25A regarding a specific time in which the ESCO or developer has to cure a breach of the contract. However, in the agreement there are typically a specified number of days, agreed upon by both parties, in which the ESCO or developer is required to cure a breach of the contract. In certain cases, a specific breach may not be curable in the limited time stated in the contract. If the ESCO or developer diligently pursues a cure, but requires more time, the parties should determine a reasonable time extension.

20) Does the state have examples of RFQs and contracts that they recommend we can use?

DOER recommends that municipalities start with the agency's model documents and not the ESCO's. We provide procurement assistance and enforcement to support public officials in contracting under Chapter 25A, sections 11C and 11I. The EMS web page has a wealth of information including model documents. The agency is working on updates to all our model documents.

21) When and where do I file the bid?

There are several filing requirements:

- a. First, file the RFP/RFQ with DOER one week before publishing (electronic filing is preferable). Once you receive DOER's acknowledgement, then publish the document, as you would do so for any other bid. To file electronically, email it to EMS.DOER@state.ma.us.

All signed agreements, including Investment Grade Audit Agreements and the EMS Agreement must be filed with DOER. Awarding authorities must also file an annual savings report.

- b. Second, publish the bid in the Central Register. All EMS bids must be published in the Register. State law (Ch.9, section 20A) and state regulations (950 CMR 21.00) mandate that state, county, and local government agencies all place their bid notices for certain design, construction-related, and real estate projects in the Central Register.
- c. Third, you have the option to publish the bid on Comm-PASS.

22) Can you word the contract to insure that the municipality reaps most of the savings and the ESCO's portion is limited?

Shared savings is a model not used in Massachusetts; instead, the ESCO guarantees a fixed amount that contributes to paying for the energy conservation measures implemented under the program. If the guaranteed savings are not realized (called a shortfall), then the ESCO must make the customer whole. The ESCO covers any shortfall in savings and the awarding authority retains any excess savings. Allowing carry-over provisions negatively impacts the awarding authority's budget and is discouraged.

23) We are using Ch 25A for our solar project. How is a shortfall in the guaranteed electricity generation calculated?

Should a PV system fail to provide the annual electricity generation guaranteed by the ESCO or developer, the payment due the municipality for the shortfall may be calculated as the retail cost of the electricity (energy and distribution and transmission charges) the municipality paid to its electric utility minus the contract price for all electricity (in kWh) not delivered by the PV system, including net metering credits. For example, (using arbitrary prices) if the retail price of electricity delivered by the electric utility company is 20 cents/kWh and the contract price is 15 cents/kWh, then the ESCO or developer would cover only the difference of 5 cents.

24) Are we required to include a decommissioning provision for our solar project under a Ch 25A Energy Management Services Agreement (EMSA)?

No, a decommissioning provision is not a required. Whether or not to include a decommissioning provision is a business decision for the municipality to make. A municipality may consider including a decommissioning provision if it does not intend to own a solar PV system at the end of the Power Purchase Agreement and/or intends to have the system removed. Any required decommissioning provisions will likely have costs associated with them.

25) Do municipalities have the ability to indemnify an ESCO or developer?

No. Section 1 of Article 62 of the Amendments to the Massachusetts Constitution (as itself amended by Article 84) states that: “[t]he credit of the Commonwealth shall not in any manner be given or loaned to or in aid of any individual, or of any private association, or of any corporation which is privately owned and managed. A municipality’s liability for damages arising out of its negligent or wrongful acts or the negligent or wrongful acts of its employees is governed by M.G.L. c. 258. M.G.L. c. 258, § two limits the liability of the municipality to \$100,000.

26) Is a municipality required to obtain consent from Town Meeting for Assignment/Collateral Assignment of the EMS and PV system under Ch. 25A?

There is no requirement under Ch. 25A for the municipality to obtain consent from town meeting for assignment/collateral assignment. While it is important that the town be notified of a change in assignment of the EMS or PV array to a new entity, requiring the developer to get consent from the town may prevent institutional investors from financing the project. For tax purposes, the tax equity investor must also act as the nominal owner while the PPA provider remains the actual owner-operator for all other purposes. This condition must be met in order to qualify for the Federal Investment Tax Credit (ITC). The ITC is equal to 30% of the value of the PV System, and a critical piece to how a project may be financed, which is why the assignment rights are an important part of the Agreement. Similarly, a term lender needs a collateral assignment of the EMS and the PV system so that it can file a UCC-1 on the personal property (the PV System) in order to have some security for their investment.

27) In the RFQ process, are you locked into the ESCO markups? Are the markups negotiable?

Part of the bid response evaluation is rating the ESCO based on the criteria set out in the solicitation, one of which is markups. Once the selection process is complete, price discovery may uncover additional information to reveal that the markup should be adjusted. Awarding authorities should use due diligence during the price discovery period. All pricing must be competitive.

28) Is Town Meeting approval always required to move project financing forward?

Town meeting approval depends on many factors, including the type of financing used and local requirements. Local governmental agencies may need town meeting approval to appropriate funds or to enter into a contract beyond three years, however, there is no requirement for a two-thirds approval vote related to M.G.L. Chapter 25A §11C or §11I. Municipalities may want to educate stakeholders to set accurate expectations and gain support for EMS projects.

29) I understand the community needs someone on staff to oversee the life of this project. What percentage of the person's time would oversee this after construction?

Resource needs will change over time. The municipality’s project manager would dedicate a good deal of time to the project during the audit, contract negotiations, construction, commissioning, and acceptance of the work. Once the project guaranteed savings period starts, the time dedicated to the project would diminish. The person would need to understand and monitor the measurement and verification reports provided by the ESCO. They would also want to be mindful that the equipment is operating as designed, and that all operations and maintenance requirements are being met.

30) Do we have to do measurement and tracking after implementation SEPARATE from what the ESCO does?

The concerned parties establish the appropriate level for any savings determination. Where the firm performing the energy savings calculations has more experience than the owner does, the owner may seek assistance in reviewing savings reports. Full review of baseline adjustments requires good understanding of the facility and its operations. In Massachusetts, ESCOs must use the most recent version of the Federal Energy Management Measurement and Verification Guidelines.

DOER provides MassEnergyInsight (MEI), a web-based energy-tracking tool, free to all municipalities, school departments, and regional schools –municipalities using MEI and engaging in an EMS project can set-up and access an ESCO report to track energy usage. Nevertheless, MEI ESCO reports will not give a dollar-for-dollar comparison; instead, it will provide a “ballpark” comparison and show usage trends over time.

For more information on Energy Management Services in Massachusetts, please contact Eileen McHugh at the Department of Energy Resources, (617) 626-7305.