

# **Energy Performance Contracts** for Local Governments

Industry Standards and Best Practices Guide
June 2013

## Disclaimer:

This report was prepared by VHB Engineering, Surveying and Landscape Architecture, P.C. (VHB) in the course of performing work contracted for and sponsored by the New York State Energy Research and Development Authority (hereafter "NYSERDA"). The opinions expressed in this report do not necessarily reflect those of NYSERDA or the State of New York, and reference to any specific product, service, process, or method does not constitute an implied or expressed recommendation or endorsement of it. Further, NYSERDA, the State of New York, and the contractor make no warranties or representations, expressed or implied, as to the fitness for particular purpose or merchantability of any product, apparatus, or service, or the usefulness, completeness, or accuracy of any processes, methods, or other information contained, described, disclosed, or referred to in this report. NYSERDA, the State of New York, and the contractor make no representation that the use of any product, apparatus, process, method, or other information will not infringe privately owned rights and will assume no liability for any loss, injury, or damage resulting from, or occurring in connection with, the use of information contained, described, disclosed, or referred to in this report.

# **Table of Contents**

A.	Introduction	1
B.	Climate Smart Communities Overview	1
C.	Energy Performance Contracts	1
	EPCs in New York State	1
	Making the Case for EPCs	2
	By the Numbers	3
D.	Best Practices and Case Studies	5
	Key Steps and Best Practices	5
	Local Government EPCs in New York	10
	Case Study: Town of Orangetown	10
	Local Government EPCs in the Mid-Hudson Region	11
	Other EPCs in the Region	11
E.	Additional Resources	13
	Financing Resources for Energy Efficiency Projects	13
	How to Finance an EPC	13
	Flex Tech Program	13
	Model Documents and Referenced Standards	13
	More EPC Guidance for Local Governments	13

## A. Introduction

This guide contains resources and information for local governments in the Mid-Hudson Region exploring energy performance contracts (EPCs), a common tool for financing and implementing energy efficiency improvements. The guide includes a brief overview of EPCs and their benefits, industry standards, and case studies from the region and elsewhere.

## B. Climate Smart Communities Overview

The Climate Smart Communities (CSC) program is a New York State initiative to help local communities reduce greenhouse gas (GHG) emissions, prepare for the effects of climate change and save taxpayers money. The program is designed to address 10 focus areas, or "pledge elements," outlined in the CSC Pledge. As part of this program, the state is offering technical support to communities that have adopted the CSC Pledge. This guide was initiated through technical support for the Town of Cortlandt, NY but is applicable to any local government in the state.

# C. Energy Performance Contracts

Local governments have been using EPCs to increase energy efficiency, improve operations, and save money for over twenty years. Large-scale energy-efficiency improvements result in energy and operational savings but can require a significant initial investment. An EPC uses those energy savings to finance the cost of new equipment and other capital improvements over several years. In addition, by bundling multiple small up-front improvements, an EPC allows local governments to leverage money from quick paybacks on those improvements to finance the larger scale investments.

In a typical EPC process, the local government hires a private energy services company (ESCO) to conduct an investment-grade energy audit<sup>1</sup> of its assets and identify cost-saving energy improvements. If the local government and ESCO agree to pursue the contract, the ESCO guarantees a level of cost savings to result from implementation of the energy improvements. An EPC can vary in scope. Some contracts are for just one building or a sample of buildings, while others are for managing an entire portfolio of buildings.

## **EPCs in New York State**

EPCs for local governments in New York State are regulated under New York State Energy Law (ENG) Article 9: Energy Performance Contracts in Connection with Public Buildings and Facilities (Appendix A). Article 9 sets general standards for EPCs in New York State, including the following:

<sup>&</sup>lt;sup>1</sup> An investment-grade audit (IGA) is a technical and economic analysis of potential energy saving projects in a facility. Source: <a href="http://www.eereblogs.energy.gov/tap/post/QA-Understanding-Investment-Grade-Energy-Audits.aspx">http://www.eereblogs.energy.gov/tap/post/QA-Understanding-Investment-Grade-Energy-Audits.aspx</a>

- The law limits the duration of the contract to 35 years or, if shorter, the useful life of the equipment and building.
- EPCs must include a specific liability clause limiting the appropriation of additional monies for the purpose of the contract (see Appendix A: ENG Article 9).
- EPCs in New York can be procured through competitive bid or a written request for proposals in accordance with local policies.

The code recommends working with the New York State Energy Research and Development Authority (NYSERDA) for assistance when preparing an EPC. Contact information for NYSERDA is provided in **Section E: Additional Resources**.

## Making the Case for EPCs

Is an EPC the right option for your local government's needs? For any local government that is considering entering into an EPC, it may be helpful to evaluate the facility needs, staff capacity, and potential for energy improvements. The Massachusetts Department of Energy Resources has identified the following as factors that may make entering into an EPC the right decision for a local government:<sup>2</sup>

- More than 40,000 square feet of floor area
- More than \$40,000 annually on energy costs
- Aging buildings or equipment
- Recurring maintenance problems or high maintenance costs
- Comfort complaints
- Scarce budget resources
- Limited energy-management expertise
- Too many demands on maintenance staff
- No recent upgrades to lighting, controls, or HVAC equipment

There are a number of benefits to the local government in entering into an EPC. An EPC allows energy cost savings, rather than an initial capital investment, to pay for the upgrades that achieved those savings. Project costs and savings are guaranteed through the ESCO, which serves as a single point of accountability. Energy savings are also measured and verified to provide further assurance that improvements are performing as planned. If projects fail to perform as well as planned, the ESCO is responsible for covering the energy-savings shortfall and will be responsible for replacing any failed equipment. The ESCO will also partner with local governments to access low-interest financing, rebates, and incentive programs.

<sup>&</sup>lt;sup>2</sup> Massachusetts Department of Energy Resources. "Energy Management Services" Handout, http://www.mass.gov/eea/docs/doer/green-communities/ems/five-step2pc-pdf-step2pc.pdf

<sup>&</sup>lt;sup>3</sup> The ESCO may choose to purchase Energy-Savings Insurance (ESI) in order to transfer the financial risk of an energy savings shortfall from the ESCO to an insurance company. More information available at: <a href="http://usa.marsh.com/NewsInsights/ThoughtLeadership/Articles/ID/31049/Energy-Savings-Guarantee-Reducing-the-Cost-of-Performance.aspx">http://usa.marsh.com/NewsInsights/ThoughtLeadership/Articles/ID/31049/Energy-Savings-Guarantee-Reducing-the-Cost-of-Performance.aspx</a>

## By the Numbers

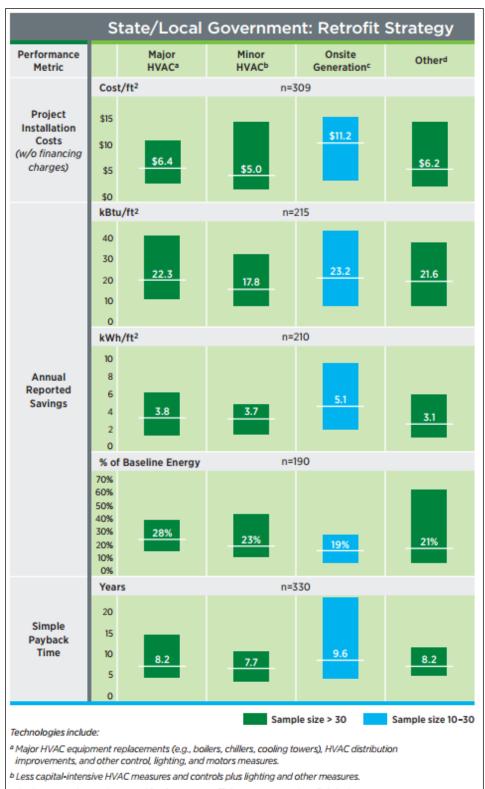
EPCs enable local governments to pursue substantial cost savings for a number of efficiency improvements, including major heating, ventilation and air conditioning (HVAC) systems, lighting, hot water systems, controls, appliance upgrades, and other project types. The Lawrence Berkeley National Laboratory has collected data on a larger range of performance contracts nationally and reports average investment costs, payback periods, and savings in Table 1. According to this report, EPCs produce energy savings of 19 to 28 percent of total baseline energy use.<sup>4</sup>

\_

<sup>&</sup>lt;sup>4</sup> Lawrence Berkeley National Laboratory, EECBG and SEP Technical Assistance Program. "Energy Service Company (ESCO) Benchmarking Project,"

http://www1.eere.energy.gov/wip/solutioncenter/pdfs/stateanlocalgovprojectperformancebenchmarks.pdf

Table 1: Average investment costs, payback periods, and savings from building retrofits



Onsite generation equipment with other energy efficiency measures (e.g., lighting).

<sup>&</sup>lt;sup>d</sup> Domestic hot water, water conservation, other energy-efficient equipment and strategies such as vending machines, lighting, laundry/office equipment, refrigeration, industrial process improvements, staff training, and utility tariff negotiations.

## D. Best Practices and Case Studies

## Key Steps and Best Practices

## Step 1: Develop a Request for Proposals (RFP)

The first step in the process of entering into an EPC is to develop the RFP that will be put out to bid for potential ESCOs. Fortunately, there are a number of model RFPs that local governments can draw from, and the NYSERDA Flex Tech program can assist in developing the RFP. Links to model RFPs and information on the Flex Tech Program are provided in *Section E: Additional Resources*. The local government will, of course, need to adapt the RFP language to specific local circumstances and legal requirements in consultation with legal and procurement staff. Provide specific goals for the project in the RFP, including any energy reduction targets that the local government has adopted.

A key thing to remember for developing this RFP is that there will be two key phases to the overall EPC process. First, the responding ESCO will enter into an audit contract and then, post-audit, will enter into the full EPC. Both phases should be clearly articulated in the RFP. Detailed cost analyses for the EPC will not be available until the initial audit is conducted. The RFP should include an overview of the project, a proposed schedule, submission requirements, evaluation criteria, and articulation of all the phases of the process, including the following:

- ESCO selection
- Investment grade audit (IGA)
- Energy conservation measure (ECM) identification and implementation proposal
- Performance contract and financing
- Implementation of ECMs
- Measurement and verification (M&V)

Each of the following sections includes best practices for the individual phases of selection and carrying out the EPC. The best way to ensure those best practices are implemented is to make sure all roles, responsibilities, requirements, and assumptions are clearly articulated within the RFP and resulting contract documents.

## Helpful Tips:

- Ensure funds are available to cover the cost of the IGA prior to putting out the RFP. The energy
  savings achieved during the EPC phase will recover these costs, but this initial investment on the
  part of the local government will be required. It is important to note that if your IGA determines
  that you do not have a viable opportunity to reduce energy expenses, the costs for the IGA will
  not be recovered.
- The local government may want to consider providing a site visit (facility walk-through) option
  prior to proposal submission. If doing so, this site visit should be made available to all proposing
  entities at one specified date and time. However, since it may not be possible for all proposing

entities to meet at that time, a more equitable approach may be not to include a site visit stage at all, and to only provide comprehensive facility information within the RFP. Whichever approach is used, the primary consideration is to ensure that all responders are preparing proposals based on the same facility information and no one proposer has more information about facilities or equipment than another.

- Include specific concerns or considerations in providing the background on the project, such as
  unique systems (geothermal or other renewable energy systems), so that a responder can
  ensure they have the necessary expertise for the job. However, avoid providing a detailed list of
  specific projects to be completed as the ESCO will determine the most cost-effective approach
  to maximize energy savings.
- Include model EPC language in the RFP, including specific financing and M&V requirements.
- Require that the proposing ESCO provide a list of references.

## Step 2: Select ESCO and Contract ESCO for Investment Grade Audit (IGA)

Once proposals are received, the next step is to review and select the ESCO, negotiate the IGA, contract the ESCO for the IGA, and for the ESCO to then conduct the IGA. The local government will be responsible for providing utility bills and facility information. In addition to the best practices listed below, links to additional resources to assist in ESCO selection and IGA contract development are provided in *Section E: Additional Resources*.

#### **Best Practices:**

- Take advantage of resources provided by NYSERDA through the Flex Tech program and coordinate with the agency to determine if there is a list of preferred ESCOs in the region.
- Collect building and utility data in advance of the audit to streamline the audit process and provide the ESCO with all necessary data.
- Provide specific goals for the project, including any energy reduction targets that the local government has adopted. (These should also be articulated in the project background description in the RFP, as noted in Step 1.)
- Contact references to get information on the ESCOs' prior work and performance. The ESCO and
  the staff identified to do the work should have at least five to eight years of experience working
  under an EPC, and preferably experience with energy efficiency projects for local governments
  within New York.
- Ensure that the ESCO clearly defines in the contract the methodology to be used for calculating
  energy savings estimates from ECMs. The local government may wish to have a third party
  review the methodology if it does not have in-house expertise to ensure savings are being
  estimated appropriately.

#### Step 3: Finalize ESP Contract with ESCO and Coordinate Financing

Based on the findings of the IGA, the ESCO will develop a list of ECMs for implementation. Accompanying this will be energy savings estimates, project costs, implementation details and financing

plans. Tables 2, 3 and 4 can be used to outline this information. These tables are taken from the Energy Services Coalition "Attachment F: Technical Energy Audit and Project Proposal" model document. A link to the full model document can be found in Section E: Additional Resources.

Table 2: Proposed Annual Savings Overview

[Include all applicable fuels/commodities for project, e.g., electric energy, electric demand, natural gas, fuel oil, coal, water, etc.]

ECM	Total energy savings (MBtu/yr)	Electric energy savings (kWh/yr)	Electric demand savings (kW/yr)*	Natural gas savings (MBtu/yr)**	Water savings (gallons/yr)	Other energy savings (MBtu/yr) **	Total energy and water cost savings, Year 1 (\$/yr)	related O&M cost	Year I (\$/yr)
Total savings									
First Year Guaranteed Cost Savings: \$									
Notes									

\*Annual electric demand savings (kW/yr) is the sum of the monthly demand savings.

MBtu=10° Btu.

\*\*If energy is reported in units other than MBtu, provide a conversion factor to MBtu for link to cost schedules (e.g., 0.003413 MBtu/kWh)

Table 3: Measurement and Verification Plan Summary

-

<sup>\*</sup>M&V options include A, B, C, and D of the International Performance Measurement and Verification Protocol (IPMVP).

Table 4: Schedule of Verification Reporting Activities

Item	Recommended time of submission	Institution's review and acceptance period
Post-Installation Report	30 to 60 days after acceptance	30 days
Annual Report	30 to 60 days after annual performance period	30 days

Times are recommended based on industry practice; modify as needed.

**Table 5:** Project Budget Template

		Project Budget	Percent of Total Project Price	Price/ Cost
		Base Construction Costs		
	a	Subcontractor Costs (Contractor Costs to ESCO)		
	b	Other Direct Purchases of Equipment, Material, Supplies (Supplier Costs to ESCO)		
		Design		
		Project Management		
	e	Permits		
	f	Performance Bond		
	g	Commissioning		
	h	Training		
	i	Construction Measurement and Verification		
sum (a:i)	j	Sum Project Direct Costs		
	k	Overhead Percent		
	T	Profit Percent		
Sum (j:l)	m	PROJECT PRICE SUB TOTAL w/OH &P		
	n	Technical Energy Audit and Project Proposal		
	0	Contingency		
Sum (m;o)	р	TOTAL PROJECT PRICE		

## Helpful Tips:

- Require that, in the EPC, the ESCO has articulated the *guaranteed* annual energy savings that
  will result from the implemented ECMs and that the ESCO is financially accountable for any
  shortfall of savings. Details on when the local government will be compensated by the ESCO for
  any shortfall should also be clearly defined in the contract.
- Require that the ESCO provide a *guaranteed* maximum cost for the project that includes installation costs.
- Require that the ESCO use transparent pricing methods in which all project costs, including labor, materials, overhead, and profit are clearly documented.
- Require that the ESCO identify all potential rebates and incentives for the ECMs implemented and assist with documentation and application for such incentives.
- The EPC should define each party's roles and responsibilities for the project so that there are no questions once implementation begins.

- Identify or hire a lead staff person to represent the local government and oversee the overall process. This can be very time consuming and involves many technical details. You can often roll the cost of a new hire to oversee the project into the EPC.
- Determine how the EPC will be financed. Ideally, this can be done in coordination with the ESCO, but may also be done through independently secured financing. Additional resources on financing the EPC are provided in **Section E: Additional Resources**.

## Step 4: ESCO Implements Energy Improvements

Once the EPC is finalized and signed, the ESCO can begin implementing the ECMs, training staff on proper operation and maintenance (O&M), and putting measurement and verification mechanisms in place.

## Helpful Tips:

- Require that the ESCO provide training to local government staff on the proper O&M of each ECM implemented. This should include guidance documentation (to account for staff turnover) that specifies appropriate O&M procedures, settings, replacement schedules, and replacement specifications.
- Adopt a formal acceptance process for each ECM project to document that the local government staff have reviewed and approved each installation/project completion.
- The local government will also be responsible for operating and maintaining facilities and equipment according to the ESCO's guidance and specifications. Again, this responsibility should be clearly articulated in the contract as mentioned in Step 3.

## Step 5: Measure and Verify

Measurement and verification (M&V) that ECMs have been installed according to plan and that energy savings are being achieved to the levels estimated is critical to the success of an EPC. The M&V process is also essential for ensuring that the ESCO is fulfilling its responsibilities and that any shortfall in energy savings will be covered by the ESCO.

#### Helpful Tips:

• ECMs should be measured and verified according to the most current edition of the International Performance Measurement and Verification Protocol (IPMVP).<sup>5</sup>

 Require that the ESCO provide a commissioning plan for the ECMs implemented to ensure proper implementation of ECMs.

<sup>&</sup>lt;sup>5</sup> As of the writing of this guide, the 2012 edition of the IPMVP is the most current version available.

## Local Government EPCs in New York

## Case Study: Town of Orangetown

## Background

The Town of Orangetown entered a ten-year, \$2.5 million energy performance contract with Siemens Building Technologies, Inc. in 2011 under the leadership of the town's finance director. The contract was developed with involvement from the internal engineer, wastewater manager, buildings manager and town board.

Orangetown's EPC includes lighting upgrades to LEDs and compact fluorescents, replacing thermostats with automatic control thermostats, replacing boilers and other improvements across more than ten town buildings. The EPC guarantees compensation if the improvements fail to generate the guaranteed level of savings of \$220,000 annually, or if the parties cannot agree on a renegotiation of the contract terms due to unforeseen circumstances. Grants obtained by Siemens helped mitigate a portion of the upfront costs of the EPC and were critical in obtaining buy-in from the town board.

The contract is administered by the finance director. However, town facilities staff work with Siemens on a day-to-day basis to implement the M&V protocol. Siemens is required to produce an annual verification report based on electricity and natural gas usage.

#### Outcomes to Date

In Year 1, the town realized measured savings of \$167,000 for electricity/gas usage and \$62,000 in operational savings. Siemens calculated a savings total of \$229,000, compared to the guaranteed savings of \$220,000 total.

#### Lessons Learned

The Town did not previously contract with Siemens for operations and maintenance, and did not hire a third-party consultant to review the contract. Some municipalities find it helpful to secure a third-party consultant to interpret the technical reports that are generated and help with the procurement process and developing contract documents. Qualified staff may not be in place to oversee these steps, so the third-party consultant can help to navigate the process.

Involvement of the wastewater and buildings managers was especially critical to achieving Orangetown's energy savings. For example, one challenge emerged due to staff distrust of a newly automated process in the Sewer Department. Siemens is working with the department to retrain staff on the new equipment or to modify the terms of the monitoring and verification protocol.

<sup>&</sup>lt;sup>6</sup> VHB conducted an interview with Jeffrey Bencik, Finance Director for the Town of Orangetown, on January 3, 2013 on the town's energy performance contract.

Even though he did not help to develop the EPC, the finance director has had little difficulty transitioning into his role in administering the contract. He also noted that Siemens has been open to communicating, resolving issues and making any necessary renegotiations.

## Local Government EPCs in the Mid-Hudson Region

- The **City of Yonkers** is currently developing an energy performance contract for replacing cityowned streetlights with energy-efficient LEDs. The city issued a request for proposals (RFP) in June 2012 and expects to begin implementation in 2013.
- The Town of Mamaroneck is exploring an energy performance contract for the Hommocks ice
  rink and potentially the town center. The town is in the early scoping stages and is open to
  opportunities that would simultaneously accomplish needed renovations, reduce energy use,
  save money and possibly use renewable energy.
- The **City of White Plains** was finalizing an RFP for an energy performance contract as of January 2013.
- The City of Kingston entered into an EPC with Wendel Duchscherer Architects & Engineers, P.C. to implement energy savings measures in 25 city facilities, including its wastewater treatment plant. The ESCO assisted the city in obtaining an initial loan and incentives from NYSERDA. The EPC has guaranteed annual energy savings of nearly \$150,000, approximately 25 percent savings from the City's baseline. More details on the City of Kingston's EPC can be found at <a href="http://www.naesco.org/resources/casestudies/documents/City%20of%20Kingston%20WWTP%20Efficiency%20Improvements.pdf">http://www.naesco.org/resources/casestudies/documents/City%20of%20Kingston%20WWTP%20Efficiency%20Improvements.pdf</a>.

## Other EPCs in the Region

- The Town and School District of Thomaston, Connecticut entered into an energy performance contract with ECG Engineering in March 2013, to explore ways the town could save on energy costs. The improvements, which include lighting, kitchen, boiler system and other upgrades, are expected to result in a 25 percent reduction in energy costs and an annual energy savings of \$185,967.<sup>7</sup>
- Southern Westchester County Board of Cooperative Educational Services entered a \$2.2 million energy performance contract with ECG Engineering in August 2012. The improvements, which include lighting, energy management system, boiler system and other upgrades, are expected to result in a 25.3 percent reduction in energy costs and an annual energy savings of \$123,499.8
- Dutchess Community College in Poughkeepsie, NY received at least \$308,000 in rebates from NYSERDA for its energy performance contract. The contract includes improvements to the

http://www.ecgengineering.com/southernwestchesterboces-portfolio.html

<sup>&</sup>lt;sup>7</sup> ECG Engineering, "Thomaston Portfolio," 2012, <a href="http://ecgengineering.com/thomaston-portfolio.html">http://ecgengineering.com/thomaston-portfolio.html</a>

<sup>&</sup>lt;sup>8</sup> ECG Engineering," Southern Westchester BOCES Portfolio," 2012,

heating and cooling systems and is expected to cut electric consumption by 40 percent during air conditioning season.9

Haldane Central School District in Cold Spring, NY entered an 18-year, \$2.2 million energy performance contract with ConEdison Solutions in 2010. The improvements, which include lighting, energy management, and other upgrades, will result in a guaranteed savings of \$126,354 annually. The district pursued a loan for upfront payments. 10

<sup>9</sup> American School & University Magazine, "Sign up for Savings," October 2002,

http://asumag.com/mag/university\_sign\_savings/

10 Putnam County News Record, "Haldane Voters Approve Energy Contract," http://www.pcnr.com/news/2010-10-27/Front Page/Haldane Voters Approve Energy Contract.html

## E. Additional Resources

## Financing Resources for Energy Efficiency Projects

## How to Finance an EPC, US Department of Energy:

http://www1.eere.energy.gov/wip/solutioncenter/pdfs/T2 ICF FS4 HowtoFinance FINAL 052311.pdf

## Flex Tech Program

http://www.nyserda.ny.gov/en/Commercial-and-Industrial/CI-Programs/FlexTech-Program.aspx

**Flex Tech** is a state program, administered through NYSERDA that provides technical and financial assistance to eligible municipalities seeking to implement energy efficiency projects, including EPCs. Flex Tech is targeted to commercial/industrial (non-residential) projects ranging from large commercial real estate entities to towns and villages. Eligible municipalities must be contributing to the Systems Benefits Charge, which finances the Flex Tech assistance program. <sup>11</sup>

Flex Tech provides a 50-percent cost share for energy feasibility studies related to EPCs. Flex Tech would help the entity define the scope of work and determine whether there is an opportunity to cost-share the assessment. Flex Tech would not get involved in financing the project's annual payments. However, a municipality could receive an incentive for the equipment installations through the Existing Facilities Program.

• For more information, contact Joanna Moore, Associate Project Manager, at 518-862-1090, Ext. 3220 or jm1@nyserda.ny.gov

## Model Documents and Referenced Standards

Massachusetts Department of Energy Resources, Energy Management Services Model Request for Responses: <a href="http://www.mass.gov/eea/docs/doer/green-communities/ems/model-rfr.pdf">http://www.mass.gov/eea/docs/doer/green-communities/ems/model-rfr.pdf</a>

Energy Services Coalition, Model Procurement and Contracting Documents: http://www.energyservicescoalition.org/resources/model/index.html

International Performance and Measurement Verification Protocol, 2012:

http://www.ase.org/associates/updates/2012-edition-international-performance-measurement-and-verification-protocol-ipmv

## More EPC Guidance for Local Governments

U.S. Department of Energy Solutions Center—Energy Savings Performance Contracting (ESPC):

<sup>&</sup>lt;sup>11</sup> Refer to: <a href="http://aceee.org/sector/state-policy/new-york">http://aceee.org/sector/state-policy/new-york</a> for more information on the systems benefits charge.

http://www1.eere.energy.gov/wip/solutioncenter/buildings/performance contracting.html

*Introduction to Performance Contracting*. ICF International and the National Association of Energy Service Companies, 2007:

http://www.energystar.gov/ia/partners/spp res/Introduction to Performance Contracting.pdf

Energy Management Services Guide V. 2.1: Providing Energy Savings through Energy Performance Contracting. Commonwealth of Massachusetts, Executive Office of Energy and Environmental Affairs, Department of Energy Resources:

http://www.mass.gov/eea/docs/doer/green-communities/pubs-reports/ems-guide.pdf

Massachusetts Energy Management Services (EMS) website:

http://www.mass.gov/eea/energy-utilities-clean-tech/green-communities/ems.html

North Carolina Guide to Energy Performance Contracting for K-12 Schools, Local Governments & Community Colleges. Waste Reduction Partners, Land-of-Sky Regional Council, 2008:

http://portal.ncdenr.org/c/document\_library/get\_file?uuid=c2726a02-f235-423e-b483-95c24d23709c&groupId=38322

Paying for Capital Investment with Resulting Savings – Evaluating Guaranteed Energy Saving Contracts in North Carolina, University of North Carolina-Chapel Hill, Masters Program Paper March 29, 2003: http://www.efc.unc.edu/publications/2004/GESCManagement.pdf

• This collection of case studies summarizes the experiences of five EPCs in North Carolina.

Public and Institutional Markets for ESCO Services: Comparing Programs, Practices and Performance, March 2005, Berkeley National Laboratory:

http://eetd.lbl.gov/EA/EMp/reports/55002.pdf

• This survey covers 570 municipalities, local governments, K-12 schools and community colleges that had implemented ESCO services between 1990 and 2003. The study includes data from 172 local governments and municipalities.



This guide was assembled for the Climate Smart Communities Program. March 2013

## Appendix A:

#### **NEW YORK STATE ENERGY LAW**

#### ARTICLE 9 - ENERGY PERFORMANCE CONTRACTS IN CONNECTION WITH PUBLIC BUILDINGS AND FACILITIES

#### § 9-101. Purpose

The purpose of this article is to obtain long-term energy and cost savings for agencies and municipalities by facilitating prompt incorporation of energy conservation improvements or energy production equipment, or both, in connection with buildings or facilities owned, operated or under the supervision and control of agencies or municipalities, in cooperation with providers of such services and associated materials from the private sector. Such arrangements will improve and protect the health, safety, security, and welfare of the people of the state by promoting energy conservation and independence, developing alternate sources of energy, and fostering business activity.

#### § 9-102. Definitions

For the purposes of this article, the following words and phrases shall have the following meanings unless a different meaning is plainly required by the context.

- 1. "Owner" means any state department, agency, board, commission, office, or division.
- 2. "Municipality" means a municipal corporation, as defined in section two of the general municipal law, school district, board of cooperative educational services, fire district, district corporation or special improvement district governed by a separate board of commissioners.
- 3. "Public authority" means any public authority, public benefit corporation, or the port authority of New York and New Jersey, to the extent its facilities are located within the state of New York.
- 4. "Energy performance contract" means an agreement for the provision of energy services, including but not limited to electricity, heating, ventilation, cooling, steam or hot water, in which a person agrees to install, maintain or manage energy systems or equipment to improve the energy efficiency of, or produce energy in connection with, a building or facility in exchange for a portion of the energy savings or revenues.

#### § 9-103. Energy performance contracts

- 1. Notwithstanding any other provision of law, any agency, municipality, or public authority, in addition to existing powers, is authorized to enter into energy performance contracts of up to thirty-five years duration, provided, that the duration of any such contract shall not exceed the reasonably expected useful life of the energy facilities or equipment subject to such contract.
- 2. Any energy performance contract entered into by any agency or municipality shall contain the following clause: "This contract shall be deemed executory only to the extent of the monies appropriated and available for the purpose of the contract, and no liability on account therefor shall be incurred beyond the amount of such monies. It is understood that neither this contract nor any representation by any public employee or officer creates any legal or moral obligation to request, appropriate or make available monies for the purpose of the contract."
- 3. In the case of a school district or a board of cooperative educational services, an energy performance contract shall be an ordinary contingent expense, and shall in no event be construed as or deemed a lease or lease-purchase of a building or facility, for purposes of the education law.

- 4. Agencies, municipalities, and public authorities are encouraged to consult with and seek advice and assistance from the New York state energy research and development authority concerning energy performance contacts.
- 5. Notwithstanding any other provision of law, in order to convey an interest in real property necessary for the construction of facilities or the operation of equipment provided for in an energy performance contract, any agency, municipality or public authority may enter into a lease of such real property to which it holds title or which is under its administrative jurisdiction as is necessary for such construction or operation, with an energy performance contractor, for the same length of time as the term of such energy performance contract, and on such terms and conditions as may be agreeable to the parties thereto and are not otherwise inconsistent with law, and notwithstanding that such real property may remain useful to such agency, municipality or public authority for the purpose for which such real property was originally acquired or devoted or for which such real property is being used.
- 6. In lieu of any other competitive procurement or acquisition process that may apply pursuant to any other provision of law, an agency, municipality, or public authority may procure an energy performance contractor by issuing and advertising a written request for proposals in accordance with procurement or internal control policies, procedures, or guidelines that the agency, municipality, or public authority has adopted pursuant to applicable provisions of the state finance law, the executive law, the general municipal law, or the public authorities law, as the case may be.
- 7. Sections one hundred three and one hundred nine-b of the general municipal law shall not apply to an energy performance contract for which a written request for proposals is issued pursuant to subdivision six of this section.
- 8. In the case of a school district or a board of cooperative educational services, an energy performance contract shall be developed and approved pursuant to the requirements of this section and pursuant to regulations promulgated by the commissioner of education in consultation with the New York state energy research and development authority. Such regulations shall include, but shall not be limited to: a list of the appropriate type of projects that qualify as energy performance contracts; an approval process that includes review of the type and nature of the proposed project, the scope and nature of the work to be performed, and a detailed breakdown of the energy savings to be derived each year and for the duration of the energy performance contract; and a process for ensuring that districts have obtained financing at the lowest cost possible. Such regulations shall require that all energy performance contracts which contain maintenance and monitoring charges as part of the energy performance contract price state such maintenance and monitoring charges separately in the contract in a clear and conspicuous manner. Such regulations shall not apply to energy performance contracts entered into prior to the effective date of such regulations, nor shall they apply to energy performance contracts for which a request for proposals was issued prior to such effective date.

Added L. 1985, c. 733, § 2; amended L. 1989, c. 638, §§ 1,2; amended L. 1994, c. 368, §§ 1,2; amended L. 1995, c.83, §47; amended L. 1997, c. 436, §78.