

## Massachusetts Success Story – A Performance Contracting Program

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*The State of Massachusetts* committed to performance contracting in a big way in 1986 when the legislature authorized three different agencies to develop guidelines for their particular sectors of state government facilities, public housing and local governments.

- 1) The Division of Capital Asset Management (DCAM), through its Office of Facilities Maintenance, has an *E-Team* (Energy Management and Sustainability Team) dedicated to help facilities achieve optimum levels of energy and water use.  
that manages and oversees most state agency and higher education projects.
- 2) The state's energy office, the Department of Energy Resources (DOER), under the Executive Office of Energy and Environmental Affairs, works under the motto of "creating a greener energy future for the commonwealth" as it helps local governments implement performance contracting projects.
- 3) The Department of Housing and Community Development oversees public housing projects.

"The market is very active in all three sectors," said Eileen McHugh of the Department of Energy Resources (DOER). Between the three oversight agencies, 65 projects totaling \$325 million have been completed. "We work closely together and report jointly," added Jenna Ide, Deputy Director, DCAM E-Team. DCAM started its program to develop guidelines and processes in about 1980 and issued its first RFPs in 1984 to proceed with four pilot projects. The early success led to a permanent program formally recognized and authorized by the legislature.

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# Three-Pronged Program

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### *Challenge:*

Increase the number of projects in state government and meet an aggressive executive order.

**Solution:** Streamline the process.

The Department of Capital Asset Management (DCAM) manages projects for most all state agencies as well as higher education institutions, working within a three-party agreement with the ESCO and the client, with its permanent staff of about 10 full-time people devoted

**"Our program gets us most of the way there," to meet an executive order to cut energy use 20% by 2012.**

*- Hope Davis, Division of Capital Asset Management (DCAM)*

to performance contracting along with a number of contract consultants. CAM took a second look at the well-developed process and set-out to streamline it with three goals in mind: speed up the process, increase the number of projects, and achieve more energy efficiency for the Commonwealth. At the same time, DCAM wanted to keep the high level of rigor for ESCO competition while minimizing DCAM's review time and ESCO preparation time.



**Energy Services Coalition**

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To revamp its process, DCAM held a forum with ESCOs, enlisted ESC's input and researched processes that worked for other states. The new process is working well so far. DCAM minimized its front-end internal audits to focus its effort on reviewing ESCO audits; reduced the level of detail required from ESCOs competing for any project and established a process to group like projects (e.g., an RFP for a project in 17 courts requires a detailed assessment of only one measure in one court); instituted a phased audit-implementation approach so that lighting projects could quickly proceed from audit to installation to payment, while planning and design is still being completed for more complex measures such as controls. "It's still a tough, rigid program but it's good for us," said Davis.

In 2007 an executive order, Clean Energy and Efficient Buildings – Leading by Example, set a high bar to reduce greenhouse gas by 25% by 2012, reduce energy consumption by 20% by 2012, increase renewable capacity by 15%, and reduce water use by 10%, with escalated goals for 2020. It requires energy performance contracting for all state facilities over 100,000 square feet. "Our program gets us most of the way there," said Davis.



*A combined heat and power system, substantial water saving improvements and even security windows were funded through a \$16.8 million performance contracting project.*

### Bridgewater State Correctional Complex

**Solution:** Help ESCOs having difficulty accessing capital in this tight economy.

State administration put up \$237 million in general obligation bond funds to pay for projects. "The

state is taking financial risk, but it also allows us to get projects going," said Hope Davis, \_\_\_\_\_. "The challenge is how to balance the sharing of risk with payment terms." DCAM re-tooled its payment structure to help ESCOs cash-flow, paying for projects in phases and making progress payments as in a standard construction project.

**Solution:** Increase technical assistance.

With the help of ARRA funds, DCAM hired additional technical staff and cut its 5-year project roll-out schedule in half. "This is huge leveraging – more than if we had applied the funds to projects," added Davis.

**Solution:** Apply commissioning and monitoring and verification (m&v) practices.

DCAM applies commissioning for every construction project and has high standards for commissioning in performance contracting. "Commissioning makes monitoring and verification simpler," said Davis. "Setting up monitoring and verification plans in advance also makes m&v easier," said Ide.

**Solution:** Incorporate renewable projects.

Performance contracting is the financial vehicle that's delivering renewable energy. "We quadrupled renewable energy projects from 2MW to 8MW by signing these contracts for wind turbines and photovoltaics," said Davis.

**CHALLENGE:** Encourage municipalities and other governments.

**Solution:** Establish an ESC state chapter to mobilize an educational effort.

With ESC's help, DOER invited ESCOs and others to formalize a public-private partnership through an ESC state chapter. Working together they easily put on several successful regional workshops to introduce performance contracting to



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municipalities. “With 351 cities and towns in the Commonwealth, we need help to reach them,” said Eileen McHugh, Municipal Energy Programs – DOER.

**Solution:** Provide guidance to municipalities.

DOER established recommended processes for municipalities to follow and is now in the process of updating a guide and model documents. DOER offers Energy Advisors to provide technical assistance. “More oversight rigor is needed,” said McHugh, “to help municipalities address the particular issues they face.” Legislation requires municipalities to get project approval from DOER.

**CHALLENGE:** Develop projects in low-income housing.

**Solution:** Start with Public Housing Authorities (PHAs) in the largest cities where the potential for bigger projects fits the ESCo model, focusing on state-funded facilities to manage budgets.

“Now, we’re done with biggest cities and are looking at clustering small cities that need work,” said Debra Hall, Sustainability Programs Director, Department of Housing and Community Development (DHCD), who focuses on the agency’s 48,000 state-funded facilities – mostly low-rise and high-rise buildings. DHCD’s construction team of architects and engineers oversees performance contracts in their role to provide construction services to PHAs, coordinating the process, negotiating contracts and reviewing all phases of the work. Six large PHA projects have proven results, including Worcester which is just now wrapping up construction “and already saving \$300 per day,” Hall said. “We’ve confirmed the projects are meeting the contract requirements with savings of 25-30 percent from the baseline year. I like to show off these projects to the community – when people start seeing renewables and energy efficiency projects installed in housing for low-income people, they start seeing that these projects are very viable and cost-effective.”

**Solution:** Capture water savings.

“Water savings often out-pace energy savings and can carry a project,” said Hall, “and performance contracts include water-saving measures such as low-flow toilets.”

**Solution:** Balance budgeting priorities.

Whether a performance contract is the best fit for a PHA financially depends on how the legislature funds operation budgets versus capital budgets. In this tough economy, operating budgets are cut making it more difficult to do ESCO work, and capital budgets are increasing to fund retrofit projects. “It’s a trade-off – operationalizing a capital cost works best when operating budgets are more robust,” said Hall.

## AT A GLANCE ESC’s Best Practices in Action

State Leadership (point person; program)	X
Legislation and Governor’s Support	X
Pre-Qualified ESCOs	
Consensus – Procurement/Legal/Finance	X
Pre-Approved Contracts	X
Public/Private Partnership (ESC Chapter)	X
Project Oversight; Technical assistance	X
Education & Outreach	X
Program Funding through Savings	*
Data Tracking	X
*Alternative approach	



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The **Energy Services Coalition** is a national nonprofit organization composed of a network of experts from a wide range of organizations working together at the state and local level to increase energy efficiency and building upgrades through energy savings performance contracting.

Energy savings performance contracting enables building owners to use future energy savings to pay for up-front costs of energy-saving projects, eliminating the need to dip into capital budgets.

Please visit: [www.energyservicescoalition.org](http://www.energyservicescoalition.org)

