



STATE OF WASHINGTON

**DEPARTMENT OF CORRECTIONS**  
**ADMINISTRATIVE OPERATIONS DIVISION**  
**CAPITAL PLANNING & DEVELOPMENT**

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November 30, 2016

Ms. Donna Albert  
Department of Enterprise Services Energy  
P.O. Box 41476, 1599 Jefferson Street SE  
Olympia, WA 98501

Re: Executive Order 12-06

Dear Ms. Albert:

The Department of Corrections (Department) is submitting the following information on Executive Order 12-06 Reporting Form and the Executive Order Agency Progress Check List. Department of Enterprise Services (DES) identified in the 2012 Portfolio Manager Benchmarking Report that it is not possible to fully comply with the Energy Benchmarking Law because of inadequate metering on millions of square feet of state buildings. To comply with the spirit of the executive order and find the best opportunities for building energy retrofits, DES encouraged agencies, colleges and universities to benchmark at the campus level and pursue metering of buildings.

The Department has taken the campus level approach and tracks data overall energy usage at all of our major correctional facilities.

Although the Department was not included in any of the appropriations to support this effort, the agency has been proactive in meeting the intent and, where possible, the explicit requirements of the order. Our intent is to meet the goal of Executive Order 12-06 goals with the limited resources available.

If you have questions or need further assistance please contact me at (360) 725-8354.

Sincerely,

Nanette Graham, P. E., Director of Capital Planning & Development  
Department of Corrections

NG:sh

Attachments (2)

cc: Julie Vanneste, Sustainability Coordinator, Department of Corrections  
File

# Executive Order 12-06 Report

## ACHIEVING ENERGY EFFICIENCY IN STATE BUILDINGS

December 2016

<b>Agency Name:</b>	<b>Department of Corrections</b>
<b>Agency Point of Contact:</b>	<b>Julie Vanneste</b>
<b>Point of Contact Title:</b>	<b>Sustainable Operations Manager</b>
<b>Telephone Number:</b>	<b>(360) 725-8396</b>
<b>E-mail Address:</b>	<b>Julie.vanneste@doc.wa.gov</b>

**Describe benchmarking, metering, audits, and energy retrofits completed by the agency in 2012 through 2016 to meet the requirements of EO 12-06. What percentage of agency owned square footage has been audited (all systems) and all life-cycle cost effective measures installed, since 2012?**

The Department of Corrections has completed investment grade energy audits on all their owned facilities over the past thirteen years. New audits will reoccur and be completed when new opportunities, or reason for renewed investigation arise and funding is available to complete the improvements.

The decision to investigate and proceed with proposed projects will be based on the premise that it is good financial stewardship to invest in energy projects which pay for themselves within the life of those measures proposed.

Prioritization will focus on those campuses which are using the most energy per square foot or per offender.

Audits and projects initiated or completed within the last year include:

Completed investment grade audits in 2016:

- Clallam Bay Corrections Center (CBCC),
- Monroe Correctional Complex (MCC),
- Washington Corrections Center (WCC)

The proposed projects produced from these investigations for CBCC, MCC and WCC are currently under consideration.

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Energy retrofits completed in 2016 include a statewide initiative to retrofit a wide portfolio of lighting applications with LED technology. Operational funding was made available to all prison and work release facilities to compete lighting upgrades as they could within existing maintenance department capacity. Capital programs supported lighting projects include replacing high-mast, 45 foot perimeter 20,000 watt bulbs with 2,000 watt LEDs on 40 foot poles at the Washington State Penitentiary.

The department also kicked off a facility energy conservation and maintenance support pilot project to reduce the deferred maintenance of mechanical systems. Objectives of the pilot include; energy and water conservation, empowered and enabled workforce, opportunities and training for incarcerated population, reduction of number and scope of projects in the Ten-Year Capital plan.

Prior activities include:

- Washington State Penitentiary (WSP) completed an investment grade audit in 2013 resulting in no cost effective means to complete identified energy conservation measures/projects.
- Airway Heights Corrections Center (AHCC) completed two investment grade audits and proposed projects in 2012 and 2014. Total project costs \$335,703 and \$4,743,159
- Monroe Corrections Center (MCC) completed a comprehensive investment grade audit in 2012, and completed the proposed project in 2013. Total project cost \$2,092,492.
- Olympic Corrections Center (OCC) completed an investment grade audit and project in 2011. Total project cost \$643,495.
- The Eleanor Chase Work Release (ECWR) completed an Audit and project in 2011. Total project cost \$594,625.
- The Mission Creek Corrections Center for Women (MCCCW) completed an investment grade audit and project in 2011. Total project cost \$390,939
- Washington Corrections Center completed an audit and project in 2010. Total project cost \$1,196,969.

10 other investment grade energy projects were completed at prison facilities between 2003 and 2007.

### **Preliminary Surveys completed:**

WCC- 2015, completed by Ameresco

MCC- 2014, completed by Integrity

WCCW- 2014, completed by Apollo

WCCW- 2013, completed by Ameresco

WSP – 2013, completed by Apollo

CBCC- 2013, completed by Ameresco

CBCC – 2015, completed by UMC Energy & Environment

WCC – 2015, completed by Ameresco

MCC – 2015, completed by Ameresco

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The Clallam Bay Corrections Center, Monroe Correctional Complex, Washington State Penitentiary and Washington Corrections Center for Women completed preliminary audits in 2013 and 2014 with no subsequent cost effective projects identified. Clallam Bay Corrections Center completed a preliminary survey in 2013 but funding was not secured or committed to progress investigation.

**Describe benchmarking, metering, audits, and energy retrofits that the agency plans to implement in the next 5 years to meet the requirements of EO 12-06. What percentage of agency owned square footage will be audited (all systems) and all life-cycle cost effective measured installed, from 2012 – 2022?**

Department plans going into 2016 and over the next 5 years include data quality audits and maintenance of all benchmarked facilities, continued engagement with utility rebate programs to facilitate focused energy projects, and engagement with energy service companies to complete investment grade audits where the Department feels funding can be committed to the investment.

Specific energy conservation projects identified include:

- Stafford Creek Corrections Center- Replace heat exchangers
- CBCC – Boiler replacement
- MCC – Close sewer lagoon
- WCCW: Bldg. E roof Replacement
- MCC: Minimum Security Unit (MSU) - Heat exchanger replacement
- MCC: (MSU) Roof Replacement
- WCCW: Exterior Lighting replacement
- LCC: Repair heating loop piping and add isolation valves
- MCCCW: Domestic water system repair
- MCC: SOU replace hot water tank
- AVWR: replace boilers
- OCC: HVAC repairs
- Brownstone Work Release: Replace boilers
- MCC: Steam plant operating system upgrade
- SCCC: Outdoor air handler unit repair or replacement
- Peninsula work release: Replace HVAC system

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- MCC: SOU, Replace hot water piping in core building
- AHCC: refurbish two cooling towers
- WCCW: Minimum security unit, Climate control improvements
- SCCC: replace walk-in coolers and freezers
- OCC: replace walk-in coolers and freezers
- WCCW: Building 1 roof replacement
- MCCCW: boiler replacement
- MCC: SOU replace domestic hot water pipes in in A-B and C-D units
- LCC: Housing unit HVAC repair
- CBCC: LED light replacement - count lights

The department will audit all systems where there is a perceived cost effective benefit. Where funding is approved the department will implement the cost effective measures identified by the audits.

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**Describe how the agency used Energy Star Portfolio Manager benchmarking in lease negotiations for new or renewed leases in 2012 – 2016, and how benchmarking will be used in future leased negotiations:**

DOC currently leases 10 buildings which make up just over 3% of the Departments overall square footage that it operates. These buildings which are over 10,000 sqft are benchmarked in portfolio manager. The Department is looking to DES to provide guidance and leadership in assisting agencies on implementation of new leases.

**Describe actions that will be taken in 2017 to save energy through operational changes and continuous monitoring using Portfolio Manager. Describe how you will engage occupants and staff to reduce energy use in the next 5 years:**

The Department continues to work with all staff to identify and enhance all energy conservation opportunities.

Specific strategies include offering an environmental literacy training to all residents of our prison facilities. This 50 hour training course is currently available in all major facilities.

The Facility Energy Conservation and Maintenance Support Pilot program will support energy conservation efforts by:

- Creating a program and approach which will leverage existing facility resources i.e. staff and inmate population, to proactively address mechanical systems maintenance.

Objectives of the pilot include:

- Reduction in deferred maintenance backlog
- Well trained and educated DOC maintenance staff will receive additional training and support to stay abreast of the technology and equipment being installed in their facilities
- Inmates selected for program will obtain experience and training directly beneficial to post-release living wage job opportunities in the trades
- Project will reduce the number and/or size of deferred maintenance projects in the Department's 10-year budget
- Reducing risk of system failures
- Measurable reduction in energy and water and emergency repair costs

Executive Order 12-06 Reporting Form


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**Attachment:**

**A - Agency Progress in Implementing EO 12-06 (by building)**

**Resources:**

**Go to the DES Portfolio Manager webpage for a link to EO 12-06, previous reports, RCWs, EPA resources and training, Step by Step Instructions, and Frequently Asked Questions at <http://des.wa.gov/services/facilities-leasing/energy-program/energy-star-portfolio-manager>**