

# STATE BUILDING ENERGY CONSERVATION PROGRAM

## Program Description

The State Building Energy Conservation Program (SBECP), administered by the Department of Environmental Quality (DEQ), was established by the 1989 Legislature to reduce operating costs of state facilities by identifying and funding cost-effective energy efficiency improvements. Statutory authority is found in Title 90, Chapter 4, part 6, MCA. Energy efficiency improvements include projects such as:

- \* Replacing old, inefficient boilers
- \* Insulating buildings
- \* Upgrading inefficient lighting
- \* Providing more effective temperature controls
- \* Increasing ventilation system efficiency
- \* Upgrading water conservation systems

Projects come to the attention of SBECP either directly because of the energy saving benefits or in conjunction with projects planned under the Long-Range Building Program (LRBP). DEQ offers state agencies assistance in evaluating energy use and identifying energy conservation projects. Program engineers evaluate all projects proposed for the LRBP to assess the energy savings potential on proposed remodeling projects. Projects with the potential for energy savings are funded through the SBECP, and are often jointly funded with LRBP deferred maintenance funds.

## Summary of Legislative Action

The Sixty-third Legislature provided \$3.5 million of appropriations for the SBECP in the 2015 biennium. The figure below shows the projects appropriated in HB 5 and includes the anticipated annual energy savings associated with the projects and the total years of savings required to repay the project costs.

State Building Energy Conservation Program (SBCEP)				
Appropriations - HB 5 - 2015 Biennium				
Department	Project Title	Appropriation	Annual Savings	Simple Payback/Yrs
Corrections	Pine Hills Youth Correctional Facility, Repair and upgrade building systems	\$500,000	\$50,000	13
Administration	Capitol Building: Repair and upgrade HVAC systems	500,000	53,000	12
Environmental Quality				
Corrections	Men's Prison Laundry Improvements	600,000	53,000	15
University System	Science Lab Improvements, Retro-commissioning, MSU Tietz Hall HVAC Upgrade	1,000,000	88,000	15
Energy Improvements	Statewide lighting upgrades, minor HVAC	<u>900,000</u>	<u>80,000</u>	15
Total Appropriation / Savings		<u>\$3,500,000</u>	<u>\$324,000</u>	

## Project Descriptions

- Pine Hills Youth Correctional Facility. This project includes:
  - Upgrades to temperature control systems
  - Conversion of constant volume heating, ventilation, and air-conditioning (HVAC) systems to variable air volume
  - Adding variable frequency drives to the heating water pumps
  - Replacing one boiler with two condensing boilers
- Capitol Building. This project includes:
  - Upgrades to the temperature control system
  - Replacement of heating and cooling control valves
  - HVAC modifications for the hearing rooms
  - Lighting upgrades

- Prison laundry improvements, Department of Corrections, Deer Lodge – This project includes:
  - Modifications that would eliminate the need for the fluid heater
  - Improvements to the domestic water heaters
  - Installation of an ozone injection system
  - Replacement of electric dryers with gas dryers
- University system improvements, MSU – This project includes:
  - Upgrades to HVAC
  - Retro-commissioning to improve performance at science labs and Tietz Hall at MSU
- Energy improvements, Statewide - This project will primarily provide lighting improvements for state facilities, specific projects will be identified during the biennium

Note: all projects described above are funded through the State Building Energy Conservation state special revenue fund.

## **FUNDING**

The SBCEP is formed to operate like a “revolving loan program”. Agencies effectively borrow the funding for the projects and reimburse the program (plus a 3% fee to cover the administrative costs of the program - appropriated in HB 2) from the energy savings. In FY 2013 reimbursements are expected to generate approximately \$1.4 million, and the reimbursements are expected to remain at that annual level throughout the 2015 biennium. Consequently, some of the project costs in the 2015 biennium will be funded with the program’s fund balance. As seen in the figure above, the investment of \$3.5 million will provide estimated savings of \$324,000 per fiscal year, once the projects are complete and the agencies begin reimbursements. Savings derived from the projects is expected to continue for at least 15 years, in most cases. Those funds will be used for projects in future years.

## **Executive Budget Comparison**

The Sixty-third Legislature made no changes from the executive request for the SBCEP.

## **Other Legislation**

The Sixty-third Legislature did not enact any other legislation that would directly impact the SBCEP program.