

Statewide Energy Conservation Plan

*Presented to the EESE Board
January 18, 2013*

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Legislation

- Senate Bill 73 introduced in 2010 session
- RSA 21-I:14-c, requires agencies to:
 - Aim for 25% reduction in fossil fuel usage, on a square-foot basis, over a 2005 baseline, by 2025
 - Submit an annual energy conservation plan to DAS by September 1 (starting in 2012)
 - Identify measures taken, measures proposed, progress towards goal, and problems with meeting goal
- DAS required to submit statewide plan by December 1

Executive Order

- Executive Order 2011-01 enforces some of the same goals in legislation
- Reinforces energy data tracking and reporting that was initially in EO2005-04
- High Performance EE Design Standard for new construction and major renovations

Process

- Communication with Commissioners' Group and agency Energy Coordinators
- Workshops in April – property owners, non-owners
- One-on-one assistance with plans (OEP, DAS)
- Reviewed and returned plans for corrections

Fiscal Year 2012 State Energy Report

- 5th year using this format
- Report includes over 500 state-owned buildings
- General trend of declining energy use per square foot
- Mild winter FY2012 caused a significant dip in heating energy used
- 16% drop in overall energy used, 26% drop in energy use per sq. ft. and 18% drop in fossil fuel used

2012 Statewide Energy Conservation Plan

- Nearly 250 measures recommended by agencies, totaling roughly \$40 million
- Many no- and low-cost measures that should be implemented immediately
- Prioritized measures for next 3 years, \$1 million per year recommended for projects facilitated through State Energy Manager

Energy Conservation Plan - Contents

- Progress Summary and Recommendations
- Building List
- Energy Usage Summary
- Measures Taken
- Measures Proposed

Case Study: DOT

		2005-2012 USE CHANGE	2005-2012 USE CHANGE %	2005-2012 COST CHANGE	2005-2012 COST CHANGE %	2005 Energy Use at 2012 Energy Prices NHDOT SAVINGS FROM REDUCED ENERGY USE
ELECTRICITY	kWH	-1,605,101	-27%	-\$45,518.15	-6%	\$239,151.08
HEATING FUEL OIL	Gals	-191,351	-51%	\$44,719.78	8%	\$634,707.23
NATURAL GAS	Therm	-22,826	-22%	-\$28,300.87	-23%	\$26,832.04
PROPANE	Gals	6,204	535%	\$11,356.78	722%	
				-\$17,742.46		
OVERALL AVERAGE			44%		-1.26%	\$900,690.35

Case Study: DOT

- Measures Implemented
 - Building Envelope
 - Insulation, Windows and Doors
 - Heating systems
 - Replace with EE boilers or furnaces
 - Alternative heating fuels – wood and recycled oil
 - Lighting
 - Behavioral

Case Study: DOT

- Measures Proposed – Barriers
 - Awareness of EE opportunities and solutions
 - Technical Assistance needed to identify and prioritize EE measures
 - Project Management assistance to implement projects
 - Funding: initial cost vs. operating cost
 - Training for operations and maintenance staff

Improving on the First Year

- Template should be simplified to encourage completion by agencies
- Standardize some fields with dropdown menus
- Expand education and outreach for agencies

Wrap-up and Conclusions

- Conservation Plan will be a useful tool for measuring our success, planning and budgeting for EE within the State and building support
- First year raised awareness of energy savings opportunities, benefits and barriers
- It was a learning process for administrators and agencies