

New Hampshire's Independent Energy Study Synthesis Chapter 13 - State Government Leading by Example November 30, 2012

Summary of Chapter Intent

Chapter 13 of the New Hampshire Independent Energy Study focuses on state government leading by example and the efforts currently in place to capture greater energy efficiency in the state's 500 buildings and its 2600 vehicle fleet. The chapter contains 6 recommendations and sub-recommendations. The chapter also emphasizes the important role state government can play in stimulating development of energy efficiency and sustainable energy markets in the state.

The chapter identifies several areas where further action should be taken by the State, including ensuring full implementation of Executive Order 2011-1¹; educating and informing the public about the activities and successes of the State's energy efficiency efforts to date; and promoting residential efficiency opportunities to the more than 11,000 state employees². The State is also encouraged to leverage its substantial purchasing power to obtain favorable pricing for energy efficient equipment and services for both state and municipal operations, and to utilize the large volume of purchases to help transform the market. The study further recommends the State extend the allowable term for performance contracts beyond the current ten year term and, in the absence of federal American Recovery and Reinvestment Act (ARRA) funding, better utilize CORE energy funding for efficiency improvements in state buildings and operations.

Findings

The Energy Efficiency & Sustainable Energy (EESE) Board agrees with the recommendations in this chapter and has identified some specific actions beyond the recommendations noted above that are detailed in the *Areas for Further Consideration* section of this report. It should be noted that any of these recommendations would be more effectively and more quickly implemented with additional staff. Current state energy resources are already stretched extraordinarily thin. With greater investment in energy efficiency and select renewable energy projects, the state could potentially save money over time and more than recoup the investment in additional staff needed to oversee planning and implementation of energy projects and related equipment maintenance. An analysis of potential savings from such investment should be undertaken.

Only one of the Independent Energy Study's recommendations required legislative action: *Extend Maximum Performance Contract Terms*, and this was accomplished in the 2012 session through Senate Bill 252³. The remaining recommended actions are already under the purview of the Interagency Energy Efficiency Committee, the Dept. of Administrative Services, the State Energy Manager, or OEP which are tasked with their proper implementation by the state. Beyond a review

¹ Executive Order [2011-1](#), signed by Governor John Lynch, required the State of New Hampshire to reduce fossil-fuel use in its facilities by 25 percent over 2005 levels on a square foot basis by 2025, and for the State Energy Manager, and the IEEC to establish interim goals for 2015 and 2020.

² <http://www2.census.gov/govs/apes/10stnh.txt>

³ [NH Senate Bill 252](#) (2012 Session), signed into law on June 7, 2012.

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in the future to ensure those recommendations have been acted upon, no further action is required by the EESE board on these recommendations. However, the EESE Board identified several related additional recommendations, included below in *the Areas for Further Consideration* section, which may need further review or action by the EESE board and/or the Legislature.

Top Priorities for Early Action

Achieve Full Implementation of Executive Order 2011-1

While significant progress has been made on EO 2011-1, there are several areas that will require additional and on-going effort by the State. The Department of Administrative Services (DAS) and the Interagency Energy Efficiency Committee (IEEC) are positioned to continue that work. The IEEC should strive to better understand and communicate to state agencies available financing options which can minimize upfront capital outlays, and should empower agencies to act quickly on energy improvements.

1) Implementation:

Department of Administrative Services in coordination with the Office of Energy & Planning and the Department of Environmental Services in coordination with the Interagency Energy Efficiency Committee.

Educate and Inform the Public Regarding the Benefits of State Government Energy Projects

By providing more information to the public, including municipalities, about the EE efforts that the State has undertaken and their financial and environmental benefits the State can build additional support for these actions within the general public and the NH General Court. Since State investments in energy efficiency and renewable energy may take several years to produce an appreciable return, education may be a key leverage point to enable more robust investments as state budgets are developed on a two-year cycle. The State should also continue to support efforts to inform the public regarding measures that can be utilized to manage their own energy consumption and costs.

1) Implementation:

Department of Administrative Services in coordination with the Office of Energy & Planning and the Department of Environmental Services in coordination with the Interagency Energy Efficiency Committee.

Leverage State Government's Purchasing Power

DAS currently goes out to bid on most state purchases, and thus is already leveraging the purchasing power of the state. Municipalities may participate in most statewide contracts, including vehicle purchases, but exempting electricity and natural gas contracts. The State should

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continue to better educate and inform municipalities of the advantages of participating in the statewide contracts for efficient vehicles and equipment. The State should also communicate its efforts and celebrate its successes to the broader public, municipalities and businesses in order to demonstrate the benefits of energy management.

1) Implementation:

Department of Administrative Services and the Office of Energy & Planning in coordination with the Interagency Energy Efficiency Committee and in partnership with the Local Government Center, Business and Industry Association and others as appropriate.

[Utilize] Extend[ed] Maximum Performance Contract Terms.

With the passage of Senate Bill 252 (2012 Session)⁴, the State, operating through the DAS, and with consideration by the IEEC, should move quickly to identify additional energy efficiency opportunities, as well as on site renewable energy generation that can either be paid for directly out of agency operating budgets, included in a performance contract or master lease agreement, or realized through demand response funds or capital fund outlays for energy efficiency.

1) Implementation:

Department of Administrative Services in coordination with the Office of Energy & Planning and the Department of Environmental Services and the Interagency Energy Efficiency Committee.

Priorities for Medium or Long-Term Action

Promote Residential Efficiency to State Workers

While this recommendation is important, it does not rise to the same level as those called out above and therefore, due to staff limitations, may have to wait for full implementation. Education and outreach information developed for the general public should certainly be shared with state employees as well. This could be integrated into the State Energy Conservation Plans that are developed by each state agency annually. As state workers adopt energy conservation habits at home, they will bring these habits back to their work environment and incorporate this thinking into their projects and programs. This change in mindset may provide a small but systemic change in how efficiency is valued across the state.

1) Implementation:

Coordinated through the Interagency Energy Efficiency Committee.

⁴ [NH Senate Bill 252](#) (2012 Session), signed into law on June 7, 2012.

Create a Home for Energy Efficiency and Sustainable Energy Implementation Support and Oversight in State Government⁵

The study recommends the state designate a single entity within New Hampshire state government as having the broad ability to operate across government departments and divisions with regard to energy issues. Currently there are a number of Commissions, agencies, divisions, and Boards within state government that each have a share of the responsibility for guiding energy efficiency and sustainable energy policy in New Hampshire. No single entity has lead responsibility to make sure New Hampshire citizens gain the greatest possible benefit from energy efficiency and sustainable energy. The Independent Energy Study envisions a single state entity would be:

- charged with overseeing and providing support for achievement of state energy efficiency and sustainable energy policies and goals;
- chartered to advocate for energy efficiency and sustainable energy in both governmental and non-governmental forums; and
- provided with the resources necessary to contribute to regulatory, legislative, and governmental decision making that will lower consumer bills, increase energy independence, strengthen the New Hampshire economy, and foster public/private partnerships.

The EESE Board agrees that energy efficiency and sustainable energy efforts in the state would benefit from more centralized oversight within state government.

1) Development:

Energy Efficiency & Sustainable Energy Board and relevant stakeholders

2) Establishment:

Governor and/or Legislature depending on final plan

Areas for Further Consideration

In order to more fully implement the recommendations in this chapter, the following additional considerations were identified. Following subsequent discussion of these items, some of these issues may rise to the level of “early priorities” while others may be determined to be lower priority or contingent upon other actions. To determine the importance of each area for consideration, the EESE Board strongly recommends that the IEEC and affiliate agencies should consider these issues in the short-term and engage the EESE Board in further discussion on any items that might require legislative action.

⁵ This recommendation was identified in Chapter 14 rather than Chapter 13 of the Study. Chapter 14 is focused on strategically implementing the Study’s entire suite of recommendations in order to leverage the greatest benefit. This particular item was identified as Step 6 on pages 14-14 and 14-15. It is felt that this particular recommendation needs to be considered within the context of state leadership and is therefore germane to Chapter 13 and has been so referred.

1. Increase Resources Necessary to Achieve Greater Energy Cost Reductions

a. Increased Staffing

Current state energy-related staff resources are already stretched extraordinarily thin, and an increase in personnel in this area has the potential to save more tax-dollars than the cost of the associated salary & benefits. As also recommended in the NH Climate Action Plan⁶, additional staffing resources would allow expanded energy management initiatives in state buildings, to reduce energy consumption and avoid the associated tax-payer expense.

1) Development:

Department of Administrative Services in coordination with the Office of Energy & Planning and the Department of Environmental Services and the Interagency Energy Efficiency Committee.

2) Establishment:

Fiscal Committee and Legislature

3) Administration:

Department of Administrative Services

b. Increased Funding

i. Capital Budget Allocation

The State should make additional financial resources available for investment in energy efficiency in state buildings to reduce energy consumption and avoid the associated energy costs. While the extension of the allowable term for energy performance contracts is helpful, not all state energy projects are appropriate for energy performance contracts (EPC). To address this, state agencies should be supported in their efforts to identify energy saving opportunities and include them in their capital budget requests either as stand alone items or in conjunction with other capital requests (such as adding insulation when a wall or roof cavity is opened up for other work). Additionally, having flexibility in how energy efficiency funds are spent will allow the state to move quickly to implement current technologies and complete urgent items before the next budget cycle. **Legislative approval (budget) will be required.**

1) Development:

Department of Administrative Services in coordination with the Office of Energy & Planning and the Department of Environmental Services and the Interagency Energy Efficiency Committee.

⁶ CCPTF (2009). Establish an Energy Management Unit to Address State Energy Use and 3 Greenhouse Gas Emissions (GLA 1.1), NH Climate Change Action Plan Appendix 4.8, *NH Climate Change Policy Task Force*, pp. 3, http://des.nh.gov/organization/divisions/air/tsb/tps/climate/action_plan/documents/032509_nhccptf_appendix_4.8.pdf

2) Establishment:

Fiscal Committee and Legislature

3) Administration:

Department of Administrative Services

ii. Expand State Energy Efficiency Fund (EEF)

Consistent with recommended action, GLA 1.3⁷, in the NH Climate Action Plan, the State should consider changes to NH RSA 21-I:19-e to allow a portion/percentage of the energy-cost savings, which result from an energy-performance contract, a shared-savings contract, or the lease of energy-saving equipment or services, to be deposited into the State Energy Efficiency Fund (EEF). The cost savings to be considered would be available at the end of a contract or when the energy-cost savings exceed the payments for the equipment or services. Additionally, any energy-efficiency rebates that are issued to the state from utilities or other sources could be deposited into this account for further investment in energy efficiency.

Legislative action will be required.

To support increasing available resources the state should evaluate the annual cost and benefit that such an investment in staff and financial resources could bring to the state over time. This evaluation should take into account the state's budget cycle and will need to document how increases in one budget cycle may reduce longer term costs.

1) Development:

Department of Administrative Services in coordination with the Office of Energy & Planning and the Department of Environmental Services and the Interagency Energy Efficiency Committee.

2) Establishment:

Legislature

3) Administration:

Department of Administrative Services

2. Strengthen Infrastructure Maintenance Efforts

State agencies should be encouraged to review their building maintenance budgets to ensure that sufficient resources, including human resources, are being utilized to prevent premature failure or decline in performance of heating and cooling equipment, distribution systems, air handlers, and the like. Proper maintenance throughout the life of equipment reduces the lifecycle

7 CCPTF (2009). Establish a Self-Sustaining Fund for Energy Efficiency Projects in State Government (GLA 1.3), NH Climate Change Action Plan Appendix 4.8, *NH Climate Change Policy Task Force*, pp. 8, http://des.nh.gov/organization/divisions/air/tsb/tps/climate/action_plan/documents/032509_nhccptf_appendix_4.8.pdf

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cost (i.e., the total sum of capital, operating and maintenance costs) by avoiding declines in performance and more expensive and premature failures. **This should be discussed by the IEEC.**

1) Development:

Department of Administrative Services in coordination with the Interagency Energy Efficiency Committee

2) Administration:

Department of Administrative Services in coordination with the Interagency Energy Efficiency Committee

3. Update Energy Management Database

The State should consider replacing its existing Enterprise Energy [Data] Management System, which is populated and maintained by state employees, with one of the many robust energy data services commonly used to manage building energy data and decision making by universities, states and counties, and municipalities across the country. Such deployment by the State, combined with automatic population of the database by electricity and gas utilities, could lead to more accurate data, more immediate identification of energy management problems, spikes in energy use or demand, and prioritization of buildings for attention and financial resources.

1) Development:

Department of Administrative Services in coordination with the Interagency Energy Efficiency Committee

2) Administration:

Department of Administrative Services

4. Improve Project Planning and Approval Time

Aside from one-time fund awards, such as ARRA, and the modest energy efficiency fund generated through participation in the demand response program, the State is held to completing energy efficiency projects with capital budget appropriations or through a performance contract. Due to the lengthy approval process for the capital budget and the nature of the performance contract process, it is very difficult to complete projects in a timely manner. Once effective projects are identified, it makes sense to implement them right away to recognize the energy savings as soon as possible.

1) Implementation:

Department of Administrative Services

5. Encourage Strong Programs to Continue

The state DOT should be encouraged and supported in its effort to identify lighting projects to reduce energy consumption. This can include:

- a. Identifying lights on state property throughout the state, including on state highways, that can be safely and permanently turned off with the poles removed;
- b. Improving the energy efficiency of street lights, crossing signs and traffic signal by upgrading to the most current LED and high-pressure sodium lighting; and
- c. Utilizing the “midnight outdoor light rate⁸” that allow lights to be turned off during specific hours of the night when they are least needed.

1) Implementation:

Department of Transportation (DOT)

6. Improve Fuel Efficiency and Reduce Petroleum Use in the State’s Vehicle Fleet

While this goal is established in the Governor’s Executive Order discussed earlier, the EESE Board adds two more specific recommendations. In the 2008 session the General Court established a requirement for the purchase of biodiesel blends for use in state buildings and vehicle fleets.⁹ To date the state has not purchased either biodiesel heating oil blends or, beyond the use of a biodiesel blend at one DOT fueling station, the use of this fuel on a statewide basis.

The state should also consider fuel efficiency requirements for the state’s medium and heavy duty fleet vehicles in addition to the efficiency goals for the light duty passenger vehicle fleet already established by the IEEC. Additionally, fuel saving devices such as idle reduction technology could reduce fuel use in the state fleet and thereby save money.

1) Consideration:

Department of Administrative Services in coordination with the Office of Energy & Planning and the Department of Environmental Services and the Interagency Energy Efficiency Committee and the Fleet Policy Working Group

2) Administration:

All state agencies

Background

The State of NH, as noted in the Independent Energy Study, has “*demonstrated a strong commitment to energy efficiency and sustainable energy in numerous and diverse ways*” including

⁸ PSNH’s Midnight Outdoor Light Rate - [FAQs](#).

⁹ House Bill 1631 amended RSA 21-I:11 and RSA 228:24-a

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recent Executive Orders¹⁰, legislative initiatives¹¹, the Climate Action Plan, the leadership provided by the Interagency Energy Efficiency Committee, the continued existence of the Office of State Energy Manager.

In terms of actual investment, the authors cite the State's experience with performance contracting, utilization of over \$13 million in ARRA funds for energy efficiency and renewable projects for both state and higher education building improvements, bulk power and gas purchase agreements containing a minimum renewable energy requirement, as well as participation in the region's demand response program as evidence of the state's commitment to energy efficiency.

The State Energy Efficiency Fund, established through NH RSA 21-I:19-f, currently only contains funds received by the state for participating in demand response programs through ISO-NE. Moneys in the fund are non-lapsing and continually appropriated to the division of plant and property management to be used exclusively to fund energy efficiency projects and energy efficiency contracts, and to reimburse state agencies for demand response program expenses.

Recent Efforts

With support and involvement of several state agencies, the Office of Energy and Planning commissioned a feasibility study in the fall of 2011 to investigate the opportunity for cost-effective renewable energy and energy efficiency in state owned facilities; the results of the study were made available in July, 2012. Preliminary results show significant opportunity for the state to immediately realize both energy and cost savings through energy efficiency improvements at specific sites that were selected for study.

¹⁰ Executive Orders [2005-4](#) & [2011-1](#) signed by Governor John Lynch.

¹¹ During the 2010 Legislative Session, [Senate Bill 73](#) was passed and requires that the NH state government: reduce energy use per square foot in state buildings by 25% below a 2005 baseline by 2025; develop an energy conservation plan; and to make an annual report on the state's energy consumption.