

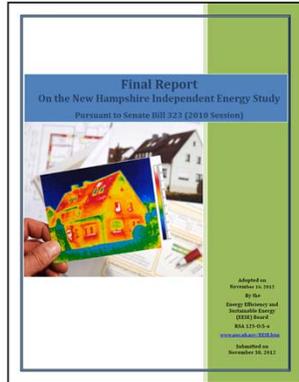
Notes:

Presentation on the work of the Energy Efficiency and Sustainable Energy Board, frequently referred to as the "EESE Board" which conducted a legislatively required review of the Independent energy study.

The Study was completed at the end of 2011 and the EESE Board issued its report at the end of 2012.

The Final Report represents the thinking and recommendations of the EESE Board following a year-long, comprehensive review that drew upon the input and guidance from the Board members as well as a considerable number of diverse stakeholders.

# Overview



1. Independent Study Overview
2. NH Energy Context
3. EESE Board Findings
4. Next Steps

## Notes:

1. Start presentation with an overview of the Independent Energy Study
2. Review the NH's energy landscape to understand the context in which the report was drafted and the Energy Efficiency and Sustainable Energy Board completed its review.
3. Consider the Boards findings including key themes that emerged from the process and the high level recommendations to address them.
4. Conclude with a brief discussion of next steps.

## Study Context

- NH “SB 323” charged NH PUC to:  
*“Contract for an independent study, through means of a non-adjudicative investigation utilizing a broad collaborative process, regarding legislative, regulatory, and market-based policy options, to address the following issues ...”*
- EESE Board responsibility:  
*“The energy efficiency and sustainable energy board shall provide its recommendations, upon review of the comprehensive study, to the senate president, the speaker of the house of representatives ..... as soon as practicable.”*

### Notes:

The Independent Energy Study came about through the passage of Senate Bill 323 (“SB 323”) during the 2010 legislative session.

The purpose of the study was to complete a:

*“Comprehensive review and analysis of EE, conservation, demand response, and SE programs and incentives ... and recommendations for possible improvements to maximize their effectiveness and increase coordination...”*

Including:

*“The appropriate role of regulated energy utilities, providers of energy and EE, and others ... to achieve the state’s EE potential for all fuels...”*

*“The effectiveness and sustainability of all funds available to stimulate investment in EE and clean energy to advance the state’s energy goals...”*

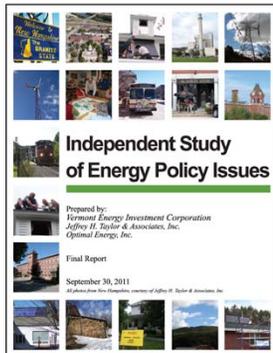
*“Policy changes that may be necessary ... to achieve the state’s EE and SE goals and to create the most cost-effective delivery systems to ensure optimum use of state funds, initiatives, and programs...”*

NHH PUC contracted with the Vermont Energy Investment Corporation (VEIC) through a competitive RFP

**EESE Board charged with completing a review to determine which aspects of the report to incorporate (or not) in its work moving forward**

# Independent Study Results

Report Completed September 30, 2011



- Key focus on Market Transformation
- Top 7 high-level policy recommendations:
  - Addressing the Legislature, Executive Branch, State Planners and Regulators as well as engaged citizens and stakeholders
- Including 14 Chapters on key subject areas and more than 300 detailed recommendations on EE and SE programs
- Very broad and very comprehensive

*The EESE Board undertook a thorough and detailed review and synthesis of the findings and their applicability in NH, and filed its Final Report on November 30, 2012.*

The final study represents an independent, third party review that:

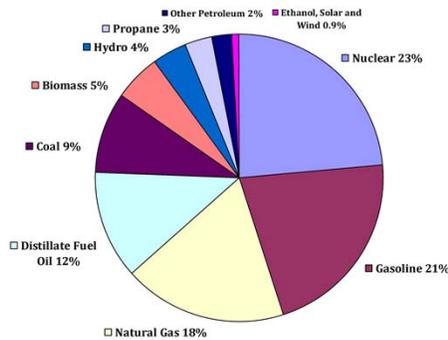
- Describes what is currently underway in NH
- Assesses how NH policies and approaches compare to “best practices” and lessons learned in other locations
- Contemplates new policies and approaches to overcoming barriers to market transformation
- Identifies a spectrum of policy changes and approaches that could maximize effectiveness, increase coordination, and result in sustainable funding through a combination of public support and private investment

Included 11 Content Chapters containing 300 + recommendations that focus on:

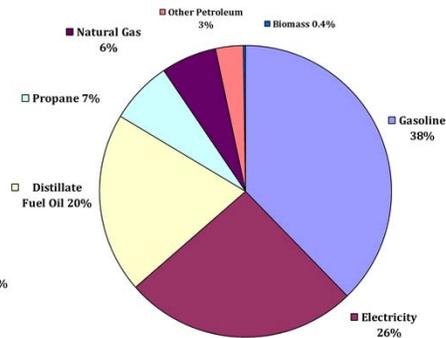
- Energy Efficiency Programs (4 chapters)
- Sustainable Energy
- Low Income
- Finance
- Smart Grid
- Energy Codes
- Land Use & Planning
- Government Leadership by Example

# NH Energy Background

## Energy Consumption



## Energy Expenditures



- 90% of primary energy use from nuclear and fossil fuels imported from other states (and countries)
- 2008 Energy Bill = \$ 6 Billion, Transportation = 38%, Electricity = 26% Buildings = 36%

## Notes

This shows the breakdown of NH' s energy sources by type.

These figures show the breakdown of PRIMARY energy in NH. Primary energy here is defined as the amount of energy combusted (fossil fuels and biomass) or generated (nuclear, hydro & solar) in NH. Energy USED in NH is slightly different due to imports and exports. This shows that NH sources nearly 90% of its energy from out of state as it has no instate sources of fossil fuels or fissile (nuclear) material.

We use these resources to generate electricity, heat our homes and businesses, and power our vehicles. Due to this reliance on external energy sources, New Hampshire is particularly vulnerable to fluctuations in the global energy markets. Our state is also heavily reliant on our rich natural resources to sustain our economy.

Dollars are exported in exchange for imported energy. Costs associated with external energy permanently lost to NH economy.

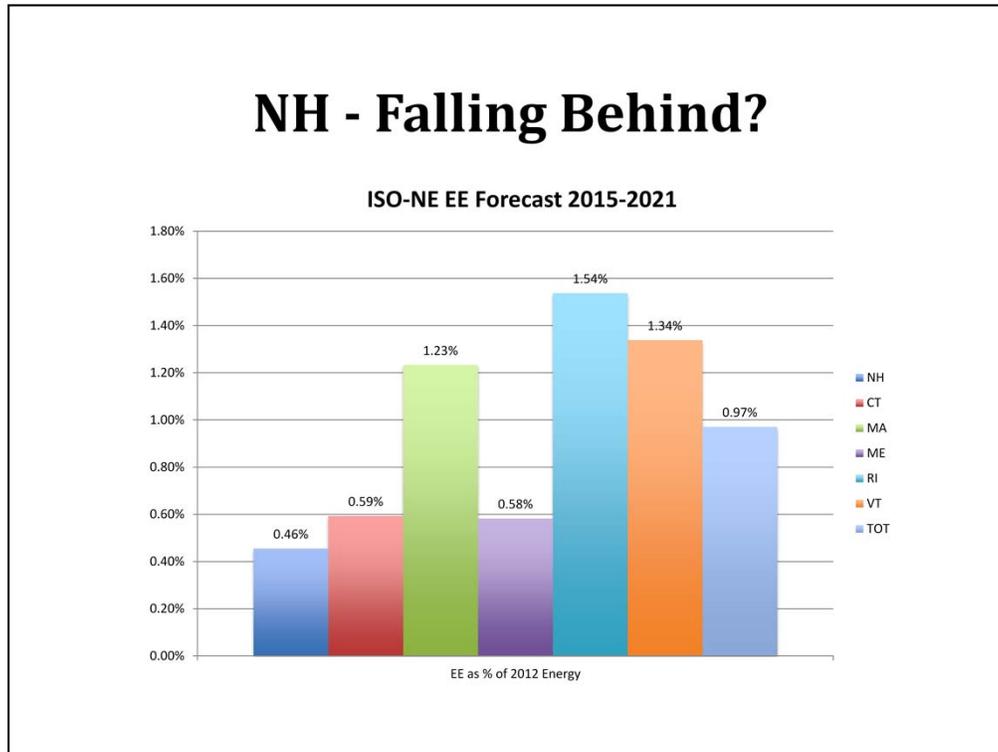
This has economic, energy security and environmental implications now and for the future.

NH 2008 Energy Bill - \$6 Billion (and rising)

\$4.1 Billion (68%) leaves the state immediately

Represents @7% of NH annual GDP

# NH - Falling Behind?



## Notes:

Energy is lifeblood of economy

- As northern NE state, heating, cooling, electricity, & transportation are all essential
- Reliable, affordable energy critical to citizens
- NH households spend 10-50% of income on energy
- Low & fixed income choose between food, housing, heat, medical care, and transportation
- Business and industry say energy costs factor into location and expansion decisions

## Description of figure to be added:

As a result of New Hampshire's fragmented policy landscape and the more favorable regulatory climate in nearby states, the state risks continuing to cede significant economic development, job creation, innovation and cost-saving opportunities to its neighbors.

With appropriate steps, a study by GDS & Associates demonstrated that residents could save \$309 million/yr once all households were improved to highest level of cost-effective EE

C&I would save an additional \$220 Million/year

Investment would cost >\$2 Billion and savings would offset investment in 4 years

Increased energy efficiency, when combined with an increase in renewable energy, will increase the resiliency and security of New Hampshire's energy supply.

# EESE Board Findings

## *Key Themes*

1. Need for a Clear, Coordinated and Consistent Policy and Program Landscape
2. Need for a Market Development and Market Transformation Focus
3. Need for Targeted Resources for Specific Program Areas



### Notes:

Following nearly 9 months of collective review by the EESE Board and a broad range of engaged stakeholders, a set of key themes were agreed upon that would guide selection of recommendations.

1. Agreed that the state residents, businesses and investors would benefit from a more stable and clearer policy and program landscape:
  - Clarity and consistency in market rules and in the design and implementation of programs over time is essential in order to achieve maximum benefits to the state and its consumers.
  - Stable and consistent state energy policy will benefit the private sector as businesses and corporations strive to develop business plans and investment decisions.
  - A more stable energy-policy landscape will provide the state the ability to attract the in-state and out-of-state capital investment that is needed to support residential, commercial, municipal and industrial energy-efficiency and renewable-energy projects.
2. Energy programs should encourage high-functioning markets that provide consumers and businesses with more options and better choices to achieve long-term energy priorities of efficiency, sustainability, and lower costs.
3. In order to maintain the trained workforce and build on the momentum created by the American Recovery and Reinvestment Act, careful and judicious increases in funding and staff support in specific program areas, such as low-income weatherization programs, would provide significant added benefits to the state and its consumers.

## **EESE Board Findings**

### *Priority Recommendations*

1. Clearly Articulate a Comprehensive Energy Policy
2. Develop and Establish an Energy Efficiency Resource Standard (EERS)
3. Maintain and Strengthen the Renewable Portfolio Standard (RPS)



Three Priority Recommendations to Support NH' s Long-Term Growth and Prosperity. The combination of these three recommendations forms an umbrella under which all New Hampshire energy programs and policies could be developed and aligned.

The state should establish a clear and comprehensive energy policy that creates a stable and sustained regulatory and programmatic landscape. Such a policy would: better enable businesses and corporations to develop plans and investment decisions; and attract the in-state and out-of-state capital investment necessary to support residential, commercial, municipal and industrial energy efficiency and renewable energy projects.

In addition to a comprehensive energy policy, the Board also recommends establishing an Energy Efficiency Resource Standard and maintaining and strengthening the Renewable Portfolio Standard. The combination of these three recommendations forms an umbrella under which all New Hampshire energy programs and policies could be developed and aligned.

## **EESE Board Findings**

### *Additional Recommendations*

#### Six specific short term priorities:

1. Improve Evaluation, Monitoring and Verification Practices
2. Maintain Momentum of Low-Income Weatherization Program
3. Develop Shared Information Technology Resources and Common Reporting Standards
4. Coordinate Existing Energy Project Loan Programs
5. Secure the Resources to Complete a State Development Plan
6. Utilize the Extended Maximum Performance Contract Terms

#### Detailed assessments and recommendations on each of the study chapters

- Some recommendations are already underway at the program level
- Others will take time and consideration

The EESE Board also has a number of discrete recommendations that are more modest, but which provide excellent near-term opportunities for implementation, including:

The goal is to foster markets that provide consumers and businesses with more options and better choices that achieve the long term energy priorities of efficiency, lower costs, and reduced uncertainty for all.

The objective of the EESE Board recommendations is for the state to take full advantage of its numerous opportunities to direct the state's energy demand, supply and consumption and, therefore, take greater control of our energy and economic future.

## Next Steps...



There are numerous opportunities to promote the state's strong and prosperous energy future.

The objective of the EESE Board recommendations is to foster the development of markets that provide consumers and businesses with more options and better choices that achieve the long term energy priorities of efficiency, lower costs, and decreased dependency on foreign sources – resulting in reduced uncertainty for all and greater control of our energy and economic future.

For additional information and more detail on these recommendations, please refer to the EESE Board's *Final Report on the New Hampshire Independent Energy Study*, as well as the accompanying *Summary Matrix on New Hampshire's Independent Energy Study* and the thirteen Chapter Syntheses.

The EESE Board and its members look forward to working with the legislature and other interested parties as we work together to build New Hampshire's market for energy efficiency and sustainable energy.