

# Energy Efficiency and Sustainable Energy Board Work Plan 2010 - 2011

## Section 1. FINDINGS

The N.H. Energy Efficiency and Sustainable Energy Board finds that ...

- Many New Hampshire residents, businesses, and governments do not utilize energy resources in the most effective and efficient manner, and, as a result, contribute to excessive levels of greenhouse gases and spend more money than necessary. In addition, many New Hampshire residents, businesses and governments do not have sufficient knowledge of or access to a robust selection of EE and SE programs, financing, and technical assistance to enable them to engage in the most efficient and wise use of energy resources.
- The NH Climate Action Plan's goal to reduce carbon dioxide by 80% cannot be achieved without dramatic advances in EE and SE for electric and thermal needs
- There is enormous untapped potential for providing significant portions of New Hampshire's energy needs through increased efficiency. An estimate prepared for the Public Utilities Commission, and considered by many to be conservative, suggests that between 8% and 15% savings are achievable.
- Clean energy was the fastest growing job sector in the first half of 2009 nationally; increasing access to efficiency and renewables will keep more money in New Hampshire, employ workers across the spectrum of skills and needs, and have a range of other positive public benefits
- Significant assets are in place to increase access to efficiency and renewables, including:
  - An short-term allocation of federal funding through the American Recovery and Reinvestment Act
  - State funding for private and public action through the Greenhouse Gas Emissions Reduction Fund, the Renewable Energy Fund, and the Systems Benefit Charge
  - Well-researched and broadly supported recommendations in the Climate Action Plan
  - Forums for stakeholders to develop consensus solutions – the EESE Board, the Energy and Climate Collaborative, and others
  - Strong interest and dedicated leaders in legislature, state and local government, business, and nonprofit sectors.
- Significant barriers also exist. These include:
  - Energy pricing that does not always include the hidden costs of fossil fuel
  - High initial investment costs
  - Access to capital
  - Competing incentives and disincentives
  - Consumer confidence and complexity
  - Inadequate access to information
- Lowering these barriers and taking most advantage of the assets will require a coordinated approach that includes:

- Statutory and regulatory policy
- Codes and standards
- Workforce and infrastructure
- Education and awareness
- Research, development, and demonstration
- Expansion of and access to public and private investment capital

## **Section 2. VISION**

### **Vision 2025**

In the year 2025, New Hampshire is a recognized leader among states in realizing progress toward a clean, sustainable and economically advantageous energy future.

Through public policy, private entrepreneurship, and civic engagement, our state has fully capitalized on cooperative ventures, advanced renewable energy technologies and efficiency to achieve the following major milestones:

- A 20% reduction in greenhouse gas emissions relative to 1990 levels<sup>1</sup>
- Over 25% of all energy consumption (electric, thermal, transportation) derived from renewable and sustainably sourced resources and technologies<sup>2</sup>
- A robust energy economy that circulates fuel and technology expenditures as much as possible in the New Hampshire economy, and has created clean energy jobs at a rate significantly higher than overall job growth since 2010<sup>3</sup>
- A 20% reduction of state, county and municipal government expenditures for energy (vs. 2010 expenditures) through investment in renewable energy and energy efficiency<sup>4</sup>
- A broad and competitive array of energy options to ensure affordability and reliability of energy to citizens in all socio-economic strata
- Strong central planning, cooperation at all levels of government and with the private sector, and effective utilization of incentives, subsidies, grants, and technical assistance to ensure efficient delivery of services and solutions for residential, commercial and industrial energy consumers
- Weatherization and energy efficiency services have been provided to \_\_\_% of the low income households in the state through a combination of public and private efforts.

As a result of progress in meeting these milestones, New Hampshire retains the healthy environment and unique quality of life that makes our state an outstanding place to live, work, and raise a family.

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<sup>1</sup> NH Climate Action Plan

[http://des.nh.gov/organization/divisions/air/tsb/tps/climate/action\\_plan/nh\\_climate\\_action\\_plan.htm](http://des.nh.gov/organization/divisions/air/tsb/tps/climate/action_plan/nh_climate_action_plan.htm)

<sup>2</sup> Governor John Lynch's August 2006 endorsement of 25x'25 <http://www.25x25.org/>

<sup>3</sup> Pick a number!? Pew Study may provide basis – haven't had chance to read fully [http://www.pewglobalwarming.org/cleanenergyeconomy/Clean\\_Energy\\_Economy\\_Report.pdf](http://www.pewglobalwarming.org/cleanenergyeconomy/Clean_Energy_Economy_Report.pdf)

<sup>4</sup> Pick a number!?

<sup>1</sup> NH Climate Action Plan

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### **Section 3.**

#### **PROGRAM PRIORITIES: 2009-2011**

The EESE Board believes that the following programs are necessary to achieve the vision and goals. The Board will focus its energy on advancing these programs through guiding investment of public funds, encouraging private capital, increasing access to technical expertise, recommending policy changes, and collaborating on program design and development. Several of these programs will require testing and expansion of new financing mechanisms – bank programs, utility bill programs, special assessment, mortgage-based, etc.

It is essential that these programs be:

1. Coordinated
2. Measurable
3. Sustainable

# 1. ENHANCED DELIVERY SYSTEM FOR EE AND SE PROGRAMS

## Overview

New Hampshire would benefit by significant expansion and enhancement of the primary delivery systems for EE and SE programs. The Core utility programs should be strengthened and more effectively coordinated, measured, and integrated with other EE and SE initiatives that provide all New Hampshire customers and communities a flexible and responsive set of services. The EESE Board recommends, and will help coordinate and advance, a comprehensive review of the potential for expanding and enhancing these programs, including exploring innovative models that could better meet changing needs, expectations, and demands.

## Key Elements

- State regulations and/or legislation that create a supportive regulatory and/or policy framework
- Exploration of ways to best design, budget, and implement EE and SE programs with an eye toward achieving NH's RPS and GHG reduction goals
- Exploration of means to achieve coordinated structure which enables all customers to understand and access full range of EE and SE options

## EESE Board Roles for 2010

- Embrace relevant Climate Action Plan goals, including GHG reduction and RPS goals
- Develop and broadcast EE and SE program annual targets to meet these goals
- Consider milestones and achievements of the current Core Programs as a component of these goals
- Assess approaches that build upon, expand and/or supplant existing programs in complementary and non-duplicative ways so as to optimize EE and SE investments
- Assess appropriately aligned utility incentives and disincentives, as relevant, that take into account rate impacts and help to advance these goals
- Inform policy and regulatory developments that will facilitate program expansion, enhanced funding, and delivery coordination

## Desired Results

- Expanded and integrated EE and SE resources that are customer focused
- Acquisition of all cost-effective energy efficiency and SE measures and technologies
- "All fuels" and "whole building" approaches that serve all customers, including low-income, other residential, commercial and industrial
- Achievement of near and long-term goals of Climate Action Plan, including GHG reduction and RPS goals

## **2. COORDINATED MUNICIPAL ENERGY PROGRAM**

### Overview

There is a unique opportunity to make long lasting energy reductions within municipal government. Reducing municipal energy use would have far reaching financial and environmental benefits as well as increase the public's awareness of the need to reduce energy use. Given limited resources and varying levels of expertise in municipal government, communities will be best served through a coordinated and integrated approach that offers a logical path and easy, consistent way to access a multitude of services, programs and assistance. The EESE Board recommends, and will help coordinate and advance, a comprehensive approach that is accessible and comprehensible to municipal staff, public boards and concerned citizens. This approach will build upon existing programs and efforts, making it easier for municipalities to access services and implement energy saving measures.

### Key Elements

- Municipalities will have access to a coherent, consistent roadmap to achieving energy reductions.
- This roadmap will enable communities, working with their energy committees or commissions, to proceed through a deliberate five step process:
  1. Inventory energy usage in public facilities and vehicle fleets.
  2. Prioritize which facilities/fleets should be addressed first.
  3. Audit the facilities/fleets and recommend actions to improve energy use.
  4. Take Action to implement energy improvements.
  5. Measure, Verify and Monitor energy savings.
- To successfully achieve and optimize lasting energy savings, municipalities will need:
  1. Technical Assistance to identify resources, establish a baseline, select vendors, prioritize tasks, implement energy savings, and verify results.
  2. Tools and technologies including a trusted web-based information clearinghouse and a database for sharing inventories and documented results.
  3. Funding and financing mechanisms, including both public and private dollars, to make energy improvements feasible and affordable.
    - Coordination and communication among the many nonprofit, public, and private entities engaged in planning and/or delivery of relevant EE programs, services and resources - each of which brings complementary strengths and relationships to the table.

### EESE Board Roles for 2010:

- Facilitate coordination and collaboration among parties, funding streams, and relevant activities
- Support use of RGGI and other funds under the PUC's jurisdiction in coordination with this effort
- Assist in coordination of application for ARRA or other competitive federal funds, and help guide investment of existing ARRA funds
- Develop and broadcast specific annual goals for achieving energy use and GHG reductions at the municipal level
- Foster communication and assist in sharing stories of results achieved as means to enhance municipal engagement and success
- Inform policy and regulatory developments that will facilitate municipal participation, strengthen capacity to compete for federal funds, facilitate market transformation, etc.

Desired Results:

- Existence of a clear, well-traveled path for municipal energy saving investments
- Achievement of interim annual local milestones toward long-term RPS and GHG reduction goals
- Achievement of state's long-term RPS and GHG goals at the local level
- Municipal policies, regulations and practices incorporate EE and SE considerations as routine part of annual operating and capital budgeting processes
- Creation of sustainable funding and financing mechanisms

### 3. BEACON COMMUNITIES

#### Overview:

In addition to efforts to achieve steady and incremental improvements in municipal energy use throughout the state, it would be beneficial if certain NH communities were able to model transformative and dramatic energy improvements. These communities will work with the state and other partners to leverage public and private dollars to do innovative and extensive energy efficiency and renewable energy projects within specified geographic areas. By geographically concentrating these energy investments and services it will be possible to achieve deep reductions in fossil fuel use and increases in economic activity. Community-wide energy efficiency improvements will include work in residential, commercial, industrial and municipal buildings. The EESE Board recommends, and will coordinate and advance, a “Beacon Communities” initiative to accomplish this goal. An application to the Department of Energy under their Retrofit Ramp-Up Program will be submitted for funding to jumpstart pursuit of this initiative.

#### Key Elements:

- Through an open process, a limited number of communities will be selected for initial participation
- Criteria for selection will include:
  - potential for significant CO<sub>2</sub> and energy use reductions
  - community leadership and readiness to take action
  - social equity
  - potential for demonstration project/s
  - access to private and public funding
  - mix of end uses (residential/commercial/industrial/municipal)
  - geographic diversity
- Projects incorporate a full menu of EE and SE measures and technologies that address a range of energy uses – electricity, gas, heating, cooling, and transportation
- Projects result in deeper savings than those typically being achieved in current marketplace
- Early participants serve as learning laboratory for other communities

#### EESE Board Roles for 2010:

- Facilitate coordination and collaboration among parties
- Assist in coordination of an application to the Department of Energy for competitive grant funds to launch this work
- Support use of RGGI, ARRA and other funding sources in conjunction with this effort
- Work with the Congressional delegation and others as appropriate to identify additional potential funding sources and to secure added funding
- Foster communication and assist in sharing stories of results achieved as means to advance community engagement, and to facilitate replication
- Monitor and chronicle key obstacles and key successes
- Inform policy and regulatory developments to enhance municipal participation and success, strengthen capacity to compete for federal funds, facilitate market transformation.

#### Desired Results:

- By 2012 a minimum of five communities, totaling 50,000 people, will have reduced their thermal/electrical needs by 30% from 2009 consumption levels

- These communities demonstrate coordinated, comprehensive, measurable and sustainable examples of what can be accomplished with focused efforts to improve energy use in communities
- Heightened levels of interest, enthusiasm, knowledge, commitment to action, and follow through in other NH communities that seek to replicate these models

## 4. MARKETING AND EDUCATION

### Overview

A substantial information gap undermines the ability to transform the way we use energy in New Hampshire. Many consumers and businesses lack basic information regarding the urgent need for energy efficiency and conservation, renewable energy and distributed generation options, the link between investments in clean energy and job creation/ economic development, the environmental and public health benefits associated with such investments, and the cost-effectiveness of investments in energy efficiency across all sectors. The EESE Board recommends, and will help coordinate and advance, an integrated, comprehensive public education campaign on energy efficiency and renewable energy. This should include a robust and flexible single “portal” as the go-to place for consumers and decision makers to access information on incentives and public programs, education programs, trusted vendor information, technical advice from neutral entities, as well as accurate and independent assessments of energy and carbon savings from various EE and RE investments through easy-to-understand data models. This approach will build upon existing efforts including that begun through a GHGRF grant to the NH Carbon Challenge.

### Key Elements

- Core principles among key partners, which inform messaging
- Shared branding and consistent messaging developed by marketing experts and jointly used by key stakeholders, including state and local government, utilities, nonprofits, private contractors and trade partners
- Integrated and coordinated system for information, education, and guidance to locate services and funding that can be accessed by all people statewide
- Multiple sources and media tools, including but not limited to a single web-based portal
- Message and marketing strategies closely linked to evolving implementation efforts in NH (RGGI funded efforts, Weatherization, ARRA funded programs, core programs, private contractors, etc.)
- Evaluation and reassessment, so that education and marketing techniques follow effective practices, and approaches proven ineffective are discontinued

### EESE Board Roles for 2010

- Facilitate statewide coordination of existing marketing, outreach and education activities
- Identify gaps in existing efforts and help to allocate responsibility for filling these gaps
- Support use of RGGI and other funds under the PUC’s jurisdiction to advance this initiative
- Help to ensure that all key partners are involved and using consistent branding and messaging once it is developed
- Foster communication and assist in sharing stories of results achieved as means to enhance public education effectiveness
- Inform policy and regulatory developments that will facilitate effective public education, consumer behavior change, and resultant market transformation

### Desired Results

- Coordinated, accurate, accessible and trusted energy efficiency and renewable energy information for all NH citizens and businesses
- Enhanced understanding among NH citizens and businesses of their energy usage and the ability to modify this usage

- A cultural change whereby energy considerations become a routine component of individual and institutional decision making
- Achievement of state's interim annual milestones toward long-term RPS and GHG reduction goals
- Achievement of state's long-term RPS and GHG goals

## **5. CLEAN ENERGY JOBS**

### Overview

According to a recent report from the Pew Charitable Trusts., growth rate of green jobs nationwide was 9.1% from 1998 to 2007, compared with a 3.7% increase for all jobs during the same period. And a UC Berkeley study concluded that "the renewable energy sector generates more jobs per megawatt of power installed, per unit of energy produced and per dollar of investment, than the fossil fuel-based energy sector." (Los Angeles Times, 11-15-09). New Hampshire can take best advantage of this burgeoning and competitive jobs market through a comprehensive energy sector jobs strategy. This would require a new level of shared vision and cooperation between state agencies, business and trade associations, educational institutions, labor groups, and employers.

As a major step forward, the EESE Board endorses the creation of the New Hampshire Energy Sector Partnership (NHESP), which includes many members of the board. The NHESP, through the Workforce Opportunity Council and DRED, has submitted a grant request of \$2.75 million to the Department of Labor to develop, fund, and coordinate a range of clean energy job training and placement programs. The NHESP will provide strategic advising and coordination of energy efficiency workforce programs and trainings. Building on and responding to employer insight among its membership, the NHESP will align training programs with available and emerging occupational opportunities by reviewing and approving eligible training and curricula, and coordinating services across local programs and resources. The NHESP will thoroughly analyze existing gaps in training programs and service delivery to determine what additional relevant curricula should be developed within the state. This close partnership among providers and employers allows ongoing analysis to directly inform training and services, based upon current data about the workforce needs of employers throughout the state.

### **Section 4.**

#### **GOALS**

**(To be presented at January meeting)**