the **Strategy**

Strategies and Policies to Achieve the Vision

Action is needed at state, federal, and regional levels to catalyze real change in how we heat and cool our buildings. To meet its stated renewable energy goals and objectives, the government must address fossil fuel use in the thermal sector. By shifting to an outcome-driven approach, the government can level the playing field for all technologies and allow solutions to compete based on their outcome, not their energy source.

Core Objectives of Clean Energy Policy

- Efficiency
- Affordability
- Sustainability
- Security
- Clean Emissions
- Climate Change Mitigation

Effective Policy Frameworks

- Financing, taxes, grants, loans
- Carbon Policy
- Sustainability Measures
- Emissions Measures

Strategies to Achieve the Vision

- Research & Development
- High Efficiency & Ultra-Clean Emissions Technology
- Investment in Fuel Collection, Storage, Transportation, and Delivery Infrastructure
- Investment in pellet & chip manufacturing/refining
- Capturing and Utilizing Heat from Distributed Electric Power Generation
- Education & Promotion

a call to **Action**

What you can do to help make this happen

- ☐ **Contact BTEC to offer feedback, criticism and ideas to improve this Vision:**

  Biomass Thermal Energy Council (BTEC)
  1211 Connecticut Ave., NW, Suite 600
  Washington DC 20036
  Phone: (202) 596-3974
  Email: info@biomassthermal.org
  Web: BiomassThermal.org
- ☐ **Share the Vision document with anyone who may be interested. Invite their feedback.**
- ☐ **Raise these issues with your governor, state and federal officials, and state legislators.**
- ☐ **Join and financially support one or more of the organizations that have presented this Vision.**

Funding for this initiative was provided by the sponsors and attendees at the 2nd Annual Heating the Northeast with Renewable Biomass conference, held April 27th & 28th, 2010 in Manchester, NH. We gratefully acknowledge this support. www.HeatNE.com

want to learn **More?**

The full 40-page version of the Vision report is available online from www.BiomassThermal.org or www.HeatNE.com

this **Vision** *was developed and presented by*

Maine Pellet Fuels Association — www.mepfa.org

Pellet Fuels Institute — www.pelletheat.org

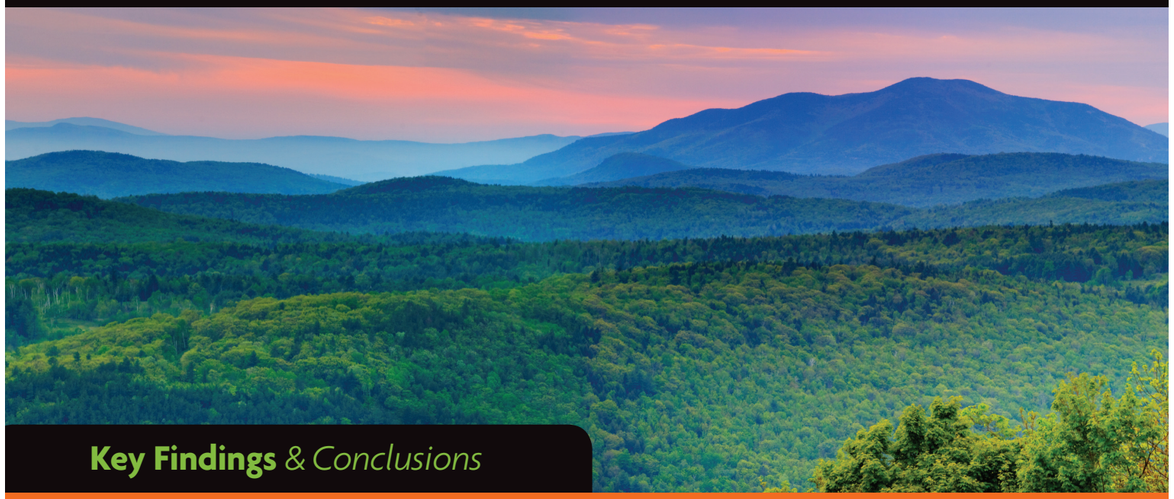
New York Biomass Energy Alliance — www.newyorkbiomass.org

BTEC Biomass Thermal Energy Council — www.biomassthermal.org

ALLIANCE FOR GREEN HEAT clean, renewable & local — www.forgreenheat.org

Heating the Northeast with Renewable Biomass

A Bold Vision *for 2025*



Key Findings *& Conclusions*

✔ **Supply 19 million**
green tons of sustainable biomass for thermal energy available annually from forest and farm sources

✔ **Achieve 25%**
of all thermal energy from renewable resources by 2025

✔ **Achieve 75%**
of thermal renewable energy from biomass by 2025

✔ **Convert 1.38 million**
households in the seven states to biomass for thermal needs

✔ **Reduce 1.14 billion**
gallons of heating oil annually

✔ **Reinvest $4.5 billion**
in resulting economic weatlh in the Northeast economy

✔ **Create 140,200 jobs**

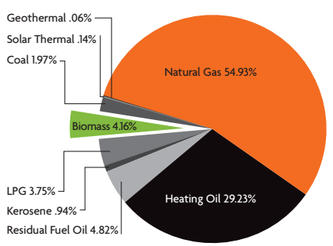
✔ **Healthier communities**
Improve air quality, reduce greenhouse gases and build healthier communities

the Vision

We, the five proposing organizations, call for an American Revolution to domestically produce the thermal energy consumed in the six New England states and New York. We propose that 25% of all thermal energy requirements in the Northeast are met with renewable energy resources by the year 2025. This shift in our sources for thermal energy will produce extraordinary economic, social and environmental benefits for the region, which currently relies on fossil fuel for 96% of its thermal energy. Furthermore, we call for three quarters of the renewable energy to come from sustainably produced biomass from forest and farm resources transformed into heat with clean and efficient technology, and for solar and geothermal technologies to provide the balance. Today, renewable energy accounts for 4.3% of the total thermal energy sources for the region, and forest biomass comprises 96% of all renewable thermal energy in the region.

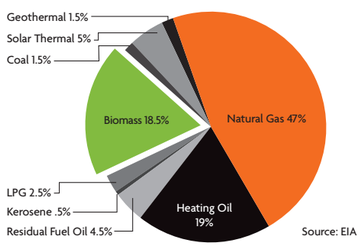
2010

New England and New York thermal energy from:



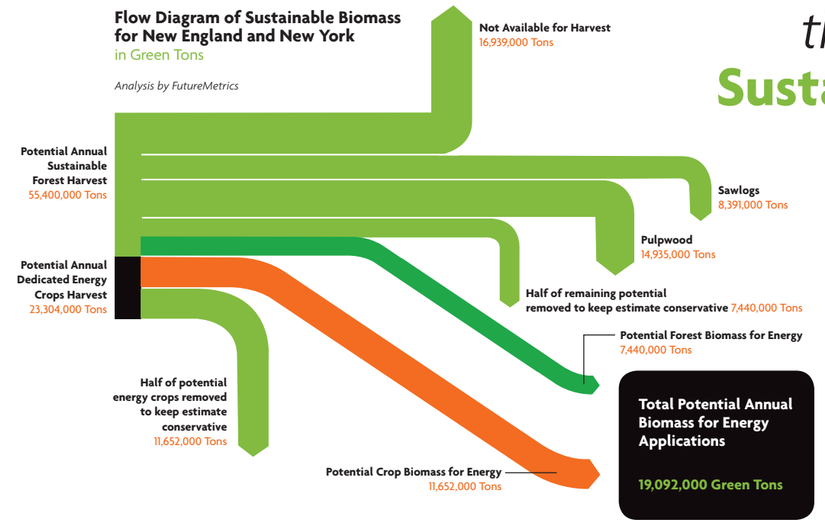
2025

New England and New York thermal energy from:



This vision is consistent with consensus national and regional goals to reduce reliance on non-renewable fossil energy. A robust market economy will provide tens of thousands of new jobs in forest and farm production of biomass feedstocks, manufacturing, distribution and maintenance of clean, high efficiency thermal energy combustion systems, along with fuel processing, production and delivery. Leading academic institutions in the region will provide cutting edge research and development for continuous improvement of technology. State and local governments will recognize and support the continued expansion of biomass thermal through favorable tax, regulatory and incentive policies. The northeast will be recognized as a global leader in the advancement of biomass thermal energy.

the imperative of Sustainable Supply



If sourced responsibly, biomass from forests, crops and clean waste streams can be sustainable, have a low-carbon footprint, protect sensitive ecosystems, and benefit local communities. Overall, we must ensure that biomass for thermal energy reduces carbon in the atmosphere. We must avoid converting the most mature forests to forest plantations harvested for energy. And, we must maintain healthy forests for water quality, soil productivity, wildlife habitat and bio-diversity.

the Benefits Economic, Social & Environmental Benefits of Achieving the Vision

- By 2025, the Northeast would have more than *$4.5 billion new dollars per year* injected into the regional economy
- This retention of wealth and expansion of the thermal biomass industry will result in a total of *140,200 permanent jobs*
- The conversion to biomass thermal will *displace over 1.14 billion gallons of oil annually* by 2025. This represents over 20% of all heating oil consumed in the Northeast.
- The use of biomass *greatly reduces mercury and acid rain causing sulfur emissions* as compared to the heating oil it can replace
- Replacing oil (a high carbon fuel) with biomass (a low carbon fuel) *reduces greenhouse gas emissions* that contribute to climate change
- Achieving the vision will result in the conversion of 1.39 million homes and businesses enabling the *retention of more than $1.6 billion in annual income in our economy* instead of exporting overseas
- The enhanced value of biomass will contribute to *healthy rural communities* through improved economics of forest and farm ownership