Advancing Biomass Thermal in the Midwest: Lessons Learned from the Northeastern Experience

Eau Claire WI
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First, Congratulations!

• About the Northeast
• Recent efforts to organize to advance biomass thermal (2005->)
• Where we are today as an industry and “movement”
• Lessons learned: what can biomass thermal advocates in the Midwest learn from our experience
Jaffrey, NH and BES
Capacity 85,000 tons

Schuyler, NY
Capacity 85,000 tons

Deposit, NY
Capacity 85,000 tons
About the Northeast

• **Abundant, underutilized forest and agricultural resources**

• **Highest energy prices of anywhere in US**

• **Huge thermal (heat) market**, currently largely dependent on fossil energy (oil, propane, natural gas) – 40% of total energy consumption in the region

• **Long tradition of using wood as fuel**; aging demographics favor more convenience in burning wood

• **Population and demand density that enhances potential for bulk pellet and chip fuel distribution**

• **Generally favorable policy climate**
The NE states, due to a reliance on heating oil, are very dependent on petroleum.
2005-2008

• 2005 - Demand for biomass heating fuels spikes following hurricanes
• 2005 – Federal Energy Policy Act
• 2005-2008 – states adopt RPS programs
• 2007 – Federal Energy Independence and Security Act (RFS)
• 2008 – Rapid run-up in oil, natural gas prices
• Fall, 2008 – election of Barack Obama and expectation that renewable energy/climate change would get increased attention
2008 – “Train is Leaving the Station” and biomass thermal isn’t on it

- March 2009 – Biomass Thermal Energy Council Organized
- May 2009 – 1st “Heating the Northeast with Renewable Biomass” conference held
- Spring 2009 – American Renewable Biomass Heating Acts introduced in House and Senate
- Spring 2010 – 2nd conference and release of 2025 Vision
Heating the Northeast with Renewable Biomass: A Bold Vision for 2025

- An American Revolution in thermal renewable energy, to start in the Northeast
- 25% of all thermal energy in Northeast from renewable energy by 2025
- 75% of renewable thermal energy from sustainably-sourced forest and agricultural biomass by 2025 (balance from solar thermal and geothermal)

www.nebioheat.org/vision
New England and NY Thermal Energy is Currently from:

- Natural Gas, 54.93%
- Heating Oil, 29.23%
- Residual Fuel Oil, 4.82%
- LPG, 3.75%
- Kerosene, 0.94%
- Solar Thermal, 0.14%
- Geothermal, 0.06%
- Biomass, 4.16%

source: EIA, 2010
New England and NY Thermal Energy in 2025 from:

- Natural Gas, 47.00%
- Heating Oil, 19.00%
- Kerosene, 0.50%
- LPG, 2.50%
- Residual Fuel Oil, 4.50%
- Biomass, 18.50%
- Coal, 1.50%
- Geothermal, 1.50%
- Solar Thermal, 5.00%

source: EIA, 2010, forecast by FutureMetrics
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, **making our region more secure**

Conversion of 1.39 million homes and businesses will enable the **retention of more than $1.6 billion in annual income in our economy** instead of exporting to other economies

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 biomass thermal industry will result in retention/creation of **140,200 permanent jobs**
2010 – Formation of Northeast Biomass Thermal Working Group

- Informal, representation from nine states
- No dues!! Join BTEC!
- Hired TTC to provide admin support
- Website: www.nebioheat.org
- Database of supporters: now 1,400
- Identification of policy, regulatory and outreach objectives across region
- Close relationship with BTEC and state associations in NY, PA, ME
2011 – Call to Action

• Issued a **regional policy and regulatory reform agenda** to over 200 elected and appointed officials in eight states and Washington

• Signed by 440 business, organization and agency leaders

• Issued alerts on key state policy issues and to influence USDA advanced biofuels **strategy**

• Ensured **strong northeast representation** at 1st DC Biomass Thermal Summit (November)
 Initiated a working group to develop a bulk wood pellet delivery and storage standard, to ensure technically competent and safe operating procedures as this sector grows.
2011 Activities – Education/Outreach

✓ Issued state-specific biomass heating fact sheets for ME, NH, VT, MA, CT, RI, NY and PA

✓ Continued to promote “Heating the Northeast with Renewable Biomass: A Bold Vision for 2025”
2011 Activities – Education/Outreach

✓ ‘Biomass Thermal Pavilion’ at the Boston BE12 Expo

✓ Program guidance for the 4th Annual Northeast Biomass Heating Expo

✓ Supported biomass heating policy in NY and ME with $1K grants

✓ Provided a $2.5K grant to the “Heating the Midwest with Renewable Biomass”

✓ Expanded NEBTWG website resource library – on website

✓ Developed a regional media key contacts database
# Funding

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
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<tr>
<td>Total 2011 funds raised</td>
<td>$40,929</td>
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<tr>
<td>Total 2011 expenditures</td>
<td>$31,067</td>
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<td>Balance carry forward to 2012</td>
<td>$ 9,862</td>
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**Sources of Funds:**

- 2011 Heating the Northeast with Renewable Biomass Conference
- John Merck Fund (through BERC)
- West Penn Power Sustainable Energy Fund
☐ Support state biomass thermal policy initiatives, e.g. RPS reforms (action alerts, grassroots advocacy)

☐ Support state energy planning efforts (e.g. NY Biomass Thermal Roadmap)

☐ Ensure strong and coordinated NE regional voice on state/national emissions regulations

☐ Identify regulatory barriers across region and develop strategies to overcome (task force?)

☐ Organize more effective industry presence at trade shows, public meetings and legislative hearings

☐ Complete and promote bulk pellet delivery and storage standard

☐ Plan for 5th NE Biomass Heating Expo (Saratoga NY)

☐ Other?
Where are we today in Northeast?

- On the cusp of major policy advances in NH, VT (RPS)
- $350,000 NYSERDA investment in biomass thermal roadmap for NY
- MA – significant incentives anticipated in 2012-2013
- Key regulatory barriers overcome
- RGGI funds used to support biomass thermal projects in 3 states
- At least 100 significant projects in last two years, many with ARRA funding
- Expanding partnership with USDA
- Growing VALIDATION by policymakers that biomass thermal an important part of northeast energy future
Lessons Learned

• Develop a Vision; promote it
• Develop strategic priorities; pick a small number and start working to address
• Get some small victories under your belt early to keep people engaged
• Publicize your successes, even the little ones!
• Build a database of key contacts; keep them aware of what you are doing
• Be opportunistic; create a way to respond quickly
• Stay connected to allies around the country
Join BTEC

• Our industry needs a strong national trade organization
• Numbers talk: lots of members carry weight
• It takes members and their money to build it
• Too few members are shouldering too much of the burden
• BTEC is doing good work on a shoestring!

www.biomassthermal.org
A Possible Structure for a Strong National Biomass Thermal Industry Association

**National Affiliate**
501c6
Provide fiscal and administrative oversight for conferences

**Regional Affiliates**
Not incorporated
Provide content oversight for conferences

**Regional Affiliate**
Fiscal Agent
501C3

**Regional Conferences**
A program of BTEC

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**Northeast**
Biomass Thermal Working Group

**Midwest**
Biomass Thermal Working Group
You can’t do this with oil

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