

Task Force on Wood to Energy

Meeting Minutes Organizational Meeting 01/30/2008

Roster:

Attending:

Les Otten, Chair Maine Energy Systems LLC
Pat McGowan Commissioner, Dept. of Conservation
Dutch Dresser Maine Energy Systems LLC
Jane Lincoln Governor's Office, Chief of Staff
Chip Gavin Bureau of General Services
Doug Smith State Senator/Tree Farmer
Bill Strauss FutureMetrics
Jon Hinck State Representative/Attorney
Charlie Agnew (on behalf of Bill Bell) Biomass Commodities Corp.
George Soffron (on behalf of Ken Eldredge) Corinth Wood Pellets
Keith Van Scotter Lincoln Pulp and Tissue
Mark Walker (on behalf of Jim Delamater) Maine Bankers Association
Doug Gardner Prof. of Wood Science, UMaine
Dale McCormick Maine State Housing Authority
Wick Johnson Kennebec Tool & Die
Patrick Strauch Maine Forest Products Council
Ian Burnes Maine Office of Energy Independence
John Fitzsimmons Maine Community College System
Ed Miller American Lung Association of Maine
Hemant Pendse Prof & Chr ChB Eng Dept, UMaine

Also on the Task Force but not present:

Dana Connors Maine State Chamber of Commerce
Charlie Spies CEI Capital Management LLC
Jack Cashman Governor's Office, Senior Economic Advisor

Introduction:

Les Otten

- This Task Force was specifically asked to look at wood to energy options - not solar, geothermal, offshore or onshore wind, or pyrolytic oil.
- The Task Force will focus on wood pellets and the viability of wood pellet boilers in homes and businesses and institutions around the state of Maine.
- One of the first issues to look at is the availability of our forest resources and the needs of Maine's forest products industry
- The current energy environment is dominated by crude which takes 30% energy to refine
- Oil is 85-90% efficient with a carbon positive contribution
- Wood energy has a negative carbon footprint
- Wood fiber is the backbone of the Maine economy

- It is essential that the Task Force does not recommend solutions that negatively impact the important economic drivers for the state of Maine
- We need to get an data-substantiated picture of our available wood basket
- Should we further increase the tonnage of trucks to move products more efficiently
- Should we provide tax credits to wood industry
- Skinny machines could be used to harvest unused forest byproducts
- Essentially, there is a lot to learn
- 76 percent of the homes in Austria are heated by wood pellets.
- We believe we have the resources right here to find a Maine solution to a Maine problem
- Statistical Numbers
 - Cost of a retail pellet is 50% of the equivalent btu cost of oil
 - Need to model the demand for wood over time against available supply
 - Need to discover whether burning wood efficiently is more efficient than oil
- Questions that require answers:
 - Do we have the resources available within Maine to make the wood pellet technologies worthwhile?
 - How do we develop new technologies and shift existing technologies to create what we need?
- Need to look at:
 - Finances of converting to wood pellets from fossil fuels
 - Available technology
 - Available resources
 - The impact that new jobs in the wood pellet industry will have on the Maine economy
 - The Impact in exports versus using the resources here

Pat McGowan

- The Dept. of Conservation manages 700,000 acres
- Of that, 120 tons of wood is harvested per year from state managed land
- We need to explore public/private partnership opportunities
- DOC has already converted one office to a pellet furnace
- Several residences have been converted
- The Task Force should focus on outreach to:
 - Schools
 - Hospitals
 - Universities
 - Municipalities
- Currently, 180,000 acres of parklands are undergoing pilot cuts

Scope:

Les Otten

- What should we be discussing as a Task Force?

John Fitzsimmons :

- What would the impacts be of wood pellets on our current pulp and paper industry?
- Would this interfere with their existing methods of doing business in Maine?
- What are the conversion costs?

Dutch Dresser

- Can forest production in Maine sustain both endeavors?

Keith Van Scotter

- Need to start with the end in mind
- Can bring perspective on infrastructure, extraction, costs

Les Otten

- How do we look at the available wood baskets by region?
- The wood pellet plants in Corinth and Ashland – what is their current inventory and what are their future capacities?

Pat Strauch

- Individual mills have an idea of their markets and information may be consolidated

Les Otten

- There are 30,000 – 50,000 acres of potato fields in ME which are not being used
- Willow trees, planted on those acres, as they do in Germany, may be an opportunity
- Could subsidize growing fiber for fuel

Doug Smith

- We must determine if we are talking about specific types of wood species or all wood species

Jon Hinck

- There is a need for access to good economic data
- The federal government failed in trying to subsidize ethanol and went too far in subsidizing corn

Hemant Pendse

- We must look to researchers from outside the United States and from other states

Les Otten

- Bill Strauss has done considerable economic analysis of the wood pellet market

Bill Strauss

- Need to step back and take cold and dismal look at economic future of pulp and paper and saw log industry
- Looking at the current pulp and paper industry should we be worried that the trend will continue and that jobs will be lost, value-added will drop
- This effort could supplement those losses
- It would help to have an analysis of the future of the market
- We have unique fibers available
- We have the ability to supply niche markets

Les Otten

- The Task Force needs to look at the health impact of burning wood pellets. There is “good” wood and there is “bad” wood in terms of what to burn.

Ed Miller

- Maine people don't want to be cold; it's not healthy and we must find solutions to our oil crisis
- Maine people should not have to struggle for food, heat and shelter
- The Lung Association is concerned about making sure that what we do moves us in the direction of reducing particulate emissions
- Encouraged by the idea of energy independence

George Soffron

- Gearing up wood pellet production
- Have put a lot of thought into the process

Les Otten

- What about pellet plants? What is happening with them?

- We must research how much is being produced, and needs to be produced in the future
- We should identify how many mills are coming on line
- We need to figure out just how much is being exported

Ian Burnes

- Licensing and legal requirements must be examined – what are the legal and state regulatory barriers to accomplishing our goal? Can we minimize the role government plays?
 - Solid fuel licenses can be a barrier
 - Wood quality stamps can be a barrier
 - Air quality standards can be a barrier
 - Insurance barriers – insurers won't insure a home with a wood pellet furnace
 - Delivery truck regulations can be a barrier
- Concerned that wood pellets cannot legally be used as a primary heat source
- Oil dealers can drive a truck down a posted road to deliver oil but pellet trucks cannot

Les Otten

- The Task Force should consider presentations from European experts in wood pellets
- There is a major difference between how people look at internal v external furnaces
- Need to look at a refined fiber wood
 - How does it burn?
 - Will need to grade things based on viability in the marketplace
- There is a cultural blockade about the actual dirtiness of fuels

Dale McCormick

- Need to account for efficiency of wood pellets compared to regularly burned wood
- How many BTU's are required for manufacturing – need to btu comparisons
- That should be a part of the efficiency and carbon analysis
- Are we in a global pellet market?
- Would we be able to keep pellets here?
- Since Europe has already adopted Kyoto protocols they have added incentives that the U.S. does not have

Charlie Agnew

- Don't tax or pursue fuels that are sustainable alternatives
- The Euro/dollar difference makes our fuel products attractive

Doug Gardner

- Visited Denmark recently and large scale wood burning plants that have been replaced by the burning of wheat straw from local farmers – they have stopped burning wood.
- Suggestion for future speaker: Jonathan Rubin Resource & Economic Dept. University of Maine

Les Otten

- Should we protect our wood basket?
- A full analysis of everything that we can grow for fuel should be completed

Pat Strauch

- Does our scope just include heating homes and commercial facilities
- Are we talking about something more broad that incorporates all energy needs

Guest: Ken Laustsen, Maine Forest Service, (207) 287-3135

- Maine is cooperating with the USFS in the Forest Inventory Analysis
- Maine has 3500 plots that are measured on a regular basis
 - Study determines growth patterns, harvest patterns etc.
 - Data is used to determine sustainability
 - Can be specific to regions including counties and larger and smaller regions

- The report has mostly been used to do harvest analysis for the future
 - Last done in 1998 – Timber Supply Outlook
 - Looking at expanding analysis to look at other impacts
 - Previously looked at high value timber products
 - New analysis should include biomass and other byproduct potentials
 - What are impacts to resources –habitat, wildlife, water quality?
- The MFS has a comprehensive report, will be revisiting report soon
- MFS receives calls from municipalities, companies and other parties regarding data
- Can do a working circle anywhere from 20 to 100 miles
- Maine is not alone, other states conducting the analysis include MA, NH, VT and others
- Ken is the only state government level employee available to do analysis out of all the participating states

Les Otten

- Requested a report by next meeting about the potential for making some of Maine's wood basket available for production of cellulosic fuels?
- What are some of the things that would be helpful to increase the basket on a long term basis?

Ken Laustsen

Other Concerns Include:

- Which landowners will sell wood
- Do we have the infrastructure
- Do we have the labor force

Doug Gardner

- Margaret Chase Smith Center is conducting a study on wood fuel availability
- The Resource Economics Center is also a worthwhile resource

John Fitzsimmons

- It looks like the Task Force is laying out a large business plan
- Perhaps the Task Force Report could be framed as a business plan for the state?

Wick Johnson

- There should be two levels of scope
 - Energy Independence as a state
 - Where wood fits into the entire plan
 - What are the little things that make a difference
 - Infrastructure is there
 - The Task Force should look at large State buildings to use as examples

Les Otten

- Office of Energy Independence exists to explore those issues

Chip Gavin

- Nearly a quarter of the next 21 public schools (K-12) on the drawing board or under construction in Maine plan to incorporate some form of renewable energy. Some are using geothermal, and one of those five projects is using woody bio-mass. The Department of Education, local owners, and BGS cooperate on school projects and look carefully at energy issues during planning and design.
- Task Force could look at what other kinds of pilot projects would it make sense to carry out?
- Task Force could look at what other types of facilities should be converted?
- State government faces the same licensing and compliance requirements as any other project would

- We need to develop an understanding of how to procure these type of projects (how to put them out to bid)
 - That makes a big difference to the state and the ability to carry out a project
 - When you have a facility with a certain kind of fuel system it makes it tough for new energies to break into system because of the bid process
 - Most efforts have been in new construction
 - Looking at some innovative procurement efforts
 - Example: Would it be possible to solicit bids for the entire energy needs of a facility rather than the mechanical components of it?
- BGS looks very carefully at renewable energies – geothermal, LEED certified, possible biomass strategies
- This fuel source is part of the answer but may not be the entire answer
- The Governor feels very strongly about these efforts and wood to energy is only the newest component of a comprehensive look at alternative energy resources

Les Otten

- How can we go from there to how wood can work for energy in the short term for State buildings?
- What do you need the Task Force to recommend for the State to move forward
- Requested that Chip deliver the scope of the upcoming report by the next meeting

Jane Lincoln

- The current budget specifically gives BGS more latitude with the East Side Campus
- Is it smart to pour good fuel into an energy inefficient building?
- Jane anticipated a list of protocols that we ought to fit into what would make sense

Dale McCormick

- The best return for the dollar is in conservation rather than efficiency

Bill Strauss

- Changing over the least efficient buildings would actually be the most worthwhile generator of savings

Les Otten

- The Task Force can't ignore discussing the overall envelope of a facility

Wick Johnson

- If you research the history for Maine you find a lot of failed initiatives; we must make this work in a practical manner
- There needs to be an integrated solution

Bill Strauss

- The numbers if you retrofitted 10% of oil burning homes with wood pellet boilers: 44,000 homes would save \$63 million/year

Les Otten

- We are going to need to train people and teach them how to service these boilers

John Fitzsimmons

- It is a new technology for the schools
- We need to determine the length of the programs, the need for graduates, the required curriculum
- Figuring out the specific skills required and the capacity needed are the key elements

Charlie Agnew

- North American Stove Manufacturers Include:
Pinnacle Stoves - BC

Harman Stove Company – US

Dale McCormick

- We need to compare the wood pellet investment against alternative investments

Bill Strauss

A wood pellet industry could:

- Create 1200 forest products jobs
- Create 450 technicians' jobs
- Generate roughly 66 million in income for new jobs created per year

Bill Strauss

- New Hampshire is experimenting with gasification of wood pellets (Jaffrey, NH)

Hemant Pendse

- The Task Force should look at the old steam boiler building on the Orono campus

Les Otten

- Bankers should conference amongst themselves to figure out how the banks can help
- What financial incentives can be thrown into the mix to stimulate wood to energy initiatives?

Mark Walker

- The banking community is liquid and eager to help
- There are natural resource focused lenders
- Investment also depends on what the fiscal health of the borrower is

David Gardner

- UMaine is looking at wood pellets that are enhanced with added byproducts from other projects and industry sectors to increase efficiency

Jane Lincoln

- Jack Cashman can discuss the Atlantica BioEnergy Initiative ongoing currently with New Brunswick and Nova Scotia at a future meeting of the Task Force

Patrick Strauch

- Will share with the Task Force members the report which will be coming out from yesterday's Forestry Forum at the Maine Forest Products Council

Patrick McGowan

- Distributed DOC's briefing "Wood-Based Biofuels and Pellet Production in Maine"

Future Meetings:

Every other Wednesday at 10:00 AM, beginning on February 13. Specific location will be announced.

Theme of next meeting: Taking a closer look at Maine's wood basket.

Other: Items pertaining to future meetings:

- The public will be given a time period to comment and there will be press opportunities
- Within 4-6 months the Task Force will issue a report to the Governor

Action Items (order of when topics will be presented at which future meetings still to be determined):

1. Task Force members: Suggest speakers who should be present at future meetings
Suggested at the meeting:
 - Jonathan Rubin Resource & Economic Dept. University of Maine
 - Margaret Chase Smith Center (re: their study on wood fuel availability)
2. Ken Laustsen – Provide a report on the existing forest resources in Maine and the potential for their use for alternative energy efforts
3. Pat Strauch – Provide a synopsis of the Forestry Forum sponsored by the MFPC
4. Doug Gardner – Provide a synopsis of the UMaine wood pellet projects
5. Dale McCormick – Provide an analysis of the monetary investment necessary to seal and tighten the average older home in Maine
6. Chip Gavin – Provide a report on procurement efforts by the state
7. Wick Johnson and Hemant Pendse - Provide an update on the UMaine steam plant retrofit project
8. Jon Hinck and Doug Smith – report on what legislative involvement is required to meet the goals of the Task Force and how the Utilities and Energy Committee looks at wood pellets as an alternative energy
9. Bill Strauss – provide economic analysis he has already compiled
10. Jack Cashman – provide information on the Atlantica BioEnergy Initiative
11. Les Otten – information on Germany’s willow tree production; European experts to invite
12. Banking industry – provide information on opportunities for investment in wood pellets

Much more...but this gets us started...