



**G Brown
Newsletter**

AUGUST 2012

Gerald W brown * 7202 County Road U * Danbury, WI 54830

Phone

715-866-8535

Gerald Brown is solely responsible for the content in this newsletter

- ✓ **ETHANOL WAIVER SOUGHT AMID DROUGHT**
- ✓ **WOOD BIOMASS**
- ✓ **THEY CAN'T BUILD HOMES FAST ENOUGH
HERE**
- ✓ **WOOD PELLETS BURN ON BARGE AT PORT
PANAMA CITY**
- ✓ **LETTER: HELP LOGGERS WITH SOLUTION
TO BLOW-DOWN CATASTROPHE**
- ✓ **WHAT'S HAPPENING IN THE WOOD ENERGY
MARKET?**
- ✓ **NREL STUDY SHOWS RENEWABLE ENERGY
POTENTIAL IN EVERY STATE**

- ✓ **PONDERING PELLETS UP NORTH**
- ✓ **PULP CHIP PRICES FALLING**
- ✓ **BIOMASS HEATING AND RHI PROVES POPULAR WITH POULTRY FARMERS**
- ✓ **BERLIN, NH HOMEOWNERS SKIP OUT ON HEATING FUEL CONTRACTS**
- ✓ **TRENDSPOTTING: US STATES WARMING UP TO RENEWABLE ENERGY HEATING AND COOLING, PART 2**
- ✓ **LOGS FOR SCHOOLS: DONATED TIMBER HELPS DARBY DISTRICT CUT HEATING FUEL COSTS**
- ✓ **CANADIAN PELLET INDUSTRY POISED TO PROFIT**
- ✓ **ANALYST: WOOD PELLETS FROM BOWATER LANDS 'LONG SHOT'**
- ✓ **MASSACHUSETTS FINALIZES STRICT REGULATIONS ON BIOMASS PLANTS**
- ✓ **SWEDEN'S OIL FREE FUTURE**
- ✓ **AREA BUSINESS ENERGIZED BY GREEN INITIATIVES, BIOMASS**

- ✓ **U WISCONSIN TO BUILD US\$75 M POULTRY PRODUCTS LAB**
- ✓ **MINNESOTA LOGGERS LOSE MARKETS AS MILLS CLOSE DOWN**

ETHANOL WAIVER SOUGHT AMID DROUGHT

Groups representing the livestock and poultry industry are petitioning the Obama administration to waive requirements for gasoline refineries to blend ethanol into their fuel production for one year.

The groups have asked the Environmental Protection Agency to suspend the practice in order to curb the [rising cost of grain](#) as extreme drought conditions spike feed costs for Midwestern farmers. In a conference call with reporters, industry representatives said the price of meat will continue to rise for consumers unless the waiver is granted.

“We’re worried about having enough corn, soybeans, and other crops at any price to feed our animals,” said Tom Super of the National Chicken Producers Council. “These aren’t unfounded fears.”

Citing USDA statistics, Super says a poor corn yield this year could result in a 4 percent increase in food prices. The drought has forced the price of turkey alone up 50 percent.

John Burkel of the National Turkey Federation suggested the holiday season could see a disproportionate effect.

“You will see a drop in production across all the meats and prices that just put the consumer in a position where they can’t afford to buy meat anymore, or very little of it.” he said, adding, “At Thanksgiving they’ll splurge, but they’re not going to put the extra bird in the freezer.”

The petition comes little over a week since poultry groups [lost a challenge](#) to the mandate in federal court, the latest in the spat between some farming organizations and the ethanol industry. Opponents of the biofuel contend the federal mandate for its inclusion in gasoline is a form of non-competitive subsidy.

But not all agricultural groups are on board. On Friday the National Farmers' Union, which represents both ranchers and produce growers, questioned the practicality of eliminating the mandate.

"NFU stands by the belief that concerns from the livestock sector and some members of Congress are unwarranted," it said in a statement, adding that "eliminating the [Renewable Fuel Standard] would reduce corn prices less than 5 percent."

The stat is referencing a [study](#) released by Iowa State University on the impact of the drought. On the call a meat industry spokesman said that seemingly small figure translated into roughly \$1 billion in revenue for meat distributors.

Get more pure politics at [ABC News.com/Politics](http://ABCNews.com/Politics) and a lighter take on the news at OTUSNews.com

Bob Dineen of the Renewable Fuels Association says while they understand the farmers' plight, the only beneficiary to an ethanol suspension would be oil companies.

"Waiving the RFS won't bring the type of relief the livestock groups are seeking, nor will it result in significantly lower feed prices," Dineen maintains. "In fact, because ethanol plants also produce a high protein feed, limiting ethanol production will only further complicate drought related feed issues and costs."

The NFU and other groups have called for the creation of a federally owned grain reserve, similar to the one in place for petroleum. When questioned on the subject, a livestock representative on the conference call said their organizations were focused on more "immediate relief."

This week Congress expects to vote on a number of measures aimed at [disaster relief](#) for the drought, particularly for beef, pork, and poultry farms — sectors that are not partially shielded by government subsidies.

WOOD BIOMASS

As traditional energy sources become more expensive and government initiatives take shape to develop more sustainable energy production, wood biomass technology has become a viable option for businesses with a heat requirement.

Whether it is supplying hot water or heating to buildings, cottages, dwellings around the farm or estate, cleaning down dairy parlours or machinery, installing under floor heating systems, managing a consistent temperature requirement for poultry or horticulture, or supplying heat and hot water requirements to holiday lets, shower blocks or swimming pools, wood biomass boilers are now proving a lower cost option than traditional fuels. In many cases, installing a wood biomass boiler will not mean the decommissioning of your existing system.

With the introduction of the Renewable Heat Incentive (RHI), UK government will now pay you for the heat that you use providing it is generated from a supported renewable source, such as wood biomass boilers. This incentive will now provide an attractive return on an investment that will also deliver lower operating costs than your existing heating system.

BIOMASS WOOD BOILERS

There are three real options as far as biomass wood fuel is concerned, each with different benefits and disadvantages and each likely to appeal to different users, depending on their specific needs. Biomass wood boilers use three different types of wood fuel, pellets, woodchip or logs.

There are a number of things to consider when deciding on a type of boiler, for example:

- **What heat requirements do I have within my business?**
- **What capacity boiler do I need to meet my heat requirements?**
- **Do I have an available wood fuel source I could utilize?**
- **Do I have sufficient space for fuel storage with relevant access?**
- **What are the fuel cost savings and RHI benefits available to me?**
- **What is the return on my investment?**

Another key question is what level of automation do you require? Most people have become used to oil boilers and the low level of human input requirement for them to operate. Pellet boilers provide the nearest equivalent for ease of operation.

Pellet boilers: These tend to be 15kW upwards and have their own integral fuel hopper. The pellets are fed into the combustion chamber of the boiler, usually via an auger. Larger boilers can have an automated supply from an external fuel store. Pellets are supplied in small bags 10kg/15kg or 1 tonne dumpy bags where suitable handling equipment is available. Bulk blown deliveries of pellets are also available where suitable size stores are installed.

Wood chip boilers: In practice these tend to be 100kW upwards in size as they require a dedicated fuel storage area. The fuel is fed to the boiler by auger or moving grate. Wood chip is one of the least expensive types of fuel, but initial set up costs tend to be higher than for other boiler types. These boilers have a larger footprint and require more space than other types.

Log boilers: Usually 15kW upwards; logs are manually loaded into the boiler. Log boilers tend to run fewer times but for longer periods than other boilers and usually require large heat stores to hold the volumes of hot water produced. Log boilers require the most human input to keep them fuelled and logs are the most labour intensive of the biomass fuels.

Basic operation: A typical system consists of a biomass boiler and equipment including flues and pipe work. Systems also require a fuel store and if not manually fed, a fuel transfer system to deliver it to the boiler unit.

Space requirements: Biomass boilers are bigger than gas or oil boilers and require sufficient space for a fuel store and in some cases, a buffer vessel. Systems can be installed in an internal plant-room, an outdoor plant-room or provided as a containerised solution.

Benefits

- Low emissions – burning wood produces significantly less CO₂ emissions than burning oil, gas, electricity or coal per kWh.
- Sustainable fuel source – wood is a sustainable fuel as it is continuously replaced.
- Low cost – wood is cheaper per kWh to purchase than other fuels, particularly heating oil, LPG gas and electricity.
- Efficient – wood boilers have high heating efficiencies and can achieve up to 94% efficiency.
- Retrofit – wood boilers, particularly wood pellet boilers operate in the same way as an oil boiler. They also have low levels of maintenance making this technology the closest match to existing oil and gas systems.

An individual site survey will identify a tailor-made solution for your heat requirements. Boiler capacities vary and during the site survey, we will verify the space requirement for your solution.

THEY CAN'T BUILD HOMES FAST ENOUGH HERE

MarketWatch **W**atch By [Amy Hoak](#) | MarketWatch – Mon, Jul 30, 2012 12:01 AM EDT

CHICAGO (MarketWatch)—People in most housing markets are elated about trends showing that home prices are on the way up and a housing recovery could be underway.

If you're living in parts of North Dakota, however, you've lived with rising home prices for a while now. Moreover, the shortages in supply are making it a challenge to even find a place to live.

Local markets, especially in the western part of the state, are booming due to increased oil production in the Bakken Formation. Only Texas produces more oil than North Dakota these days, thanks to advances including hydraulic fracturing and horizontal drilling.

And that's creating a dire need for everything from new housing to commercial development.

At a recent conference in Chicago, sponsored by the Midwest Real Estate News, Minnesota Real Estate Journal and Illinois Real Estate Journal, a parade of marketers, developers and other interested parties told story after story about how communities are struggling to keep up with growing populations in North Dakota. Meanwhile, housing prices and rental rates are on the rise due to increased demand.

It's not uncommon for some workers who have migrated to the area for employment to sleep in modest accommodations called "crew camps," or even in their cars. For them, the sacrifice is worth it: The average wage in the oil and gas extraction industry was \$89,020 in 2011, well above the statewide average of \$40,914, according to the North Dakota Petroleum Council.

While some are content with their temporary living arrangement, others who head to the Bakken are seeking a new career and life—and a place to live.

"When I moved here in 2002, there were a lot of houses on the market," said Jeff Zarling, president of Dawa Solutions, a business development and marketing firm located in Williston, N.D.

Not only is that not the case today, but prices are much higher.

In 2002, a 1,800 square foot home in Williston cost in the \$80,000 range, he said. Today, a comparable 2,000 square foot home built in 1978 is listed for \$327,000.

The average price of a single-family home is currently \$227,274 in Williston, compared with \$172,948 in July 2011 and \$129,183 in July 2009, according to the Williston Board of Realtors.

Meanwhile, in 2002, rent on a two-bedroom apartment might have averaged \$340 a month, Zarling said. Today, a developer is proposing a complex where 2-bedroom apartments will range from \$1,755 to \$2,700 a month, he added.

There's also an increased need for services in the area, and some developers are eyeing the opportunities. A speaker at the Chicago conference said it can take weeks to get a haircut appointment in the area, for example, and people are best off scheduling their next oil change while they're getting one done.

Zarling's company has been involved in the marketing of the area to the rest of the country, partly through investor conferences about the Bakken in Minot, N.D., and also through a field tour that takes potential investors through key sites. Organizers are considering taking the conference on the road, possibly making presentations in the Southwestern and/or Southeastern regions of the country. They may even schedule a conference for investors in New York.

"We truly believe that one person's problem is another person's opportunity," Zarling said. "The largest [problem] is the need for housing." One estimate provided at the Chicago conference suggested there could be pent-up demand for as many as 6,000 housing units in Williston alone, he said.

There are a number of other communities also in critical need of housing.

Minot, for example, is a community that now has an estimated permanent population of between 46,000 and 47,000 people, said Jerry Chavez, president and chief executive of the Minot Area Development Corporation. That's up from about 38,000 two and a half years ago, he said.

The price of an average single-family residence was \$246,000 at the end of the first quarter, said Todd Fettig, president of the Minot Board of Realtors. That's up from \$197,600 in the first quarter of 2010 and \$125,000 in the first quarter of 2008.

The town's housing shortage was compounded by last year's devastating flood in the area, in which 4,100 homes were lost, Chavez said. About 2,000 homes are scheduled to be built by the end of this year, and apartment and hotel projects are also underway.

Of course, not everyone is flocking to the area to invest. More than one speaker at the Chicago conference said that the biggest question investors ask is whether this oil boom is here to stay. Plus, environmentalists say the new drilling

technology can have negative effects on the environment, including to an area's groundwater.

But right now, none of that is changing the fact that there are more than 200 oil rigs operating in the state, and each active rig provides about 120 direct and indirect jobs, according to the North Dakota Petroleum Council.

"We don't call it a boom, we call it an industry," Chavez said.

Wood pellets burn on barge at Port Panama City

July 30, 2012 08:52:10 PM

[ShareThis](#) | [Print Story](#) | [E-Mail Story](#)

[RANDAL YAKEY / News Herald Writer](#)

Twitter: @ryakey

PANAMA CITY — A FIRE ABOARD A BARGE AT PORT PANAMA CITY WAS SQUELCHED AT ABOUT 5:30 a.m. Monday.

The fire is suspected of starting sometime between 3:30 and 4 a.m., according to port officials. Smoke emanated from a barge that was at docked at the port, so the Panama City Fire Department was called to the scene and doused the fire, port officials said.

"It did flame up when we took the top off," said Port Executive Director Wayne Stubbs.

Stubbs said wood pellets, which are currently being stored on the barges, caught fire. He said the cause of the fire has yet to be determined.

Stubbs said it is the first time he has heard of wood pellets catching fire in a barge.

The pellets are being stored on barges at the port while the warehouse where they usually are stored is reconstructed. In early May, a large fire broke out in an 80,000-square-foot, 75-foot-tall warehouse for wood pellets, essentially gutting the facility.

The pellets are manufactured in Jackson County, brought to the port and shipped out to power plants in Europe, Stubbs said.

Stubbs said the warehouse should be up and running in a couple of weeks.

About 600,000 tons of pellets pass through the port each year. The port is investing in more than \$10 million in upgrades and is looking for an additional \$4.6 million in upgrades over the next few years.

Read more: <http://www.newsherald.com/articles/pamama-104450-pellets-port.html#ixzz22D9xG4Mx>

Superior **TELEGRAM**

LETTER: HELP LOGGERS WITH SOLUTION TO BLOW-DOWN CATASTROPHE

To the Telegram: In Minnesota and Wisconsin, there is fast emerging a storm damage disaster from a storm damage disaster.

To the Telegram:

In Minnesota and Wisconsin, there is fast emerging a storm damage disaster from a storm damage disaster.

Immediately after the blow down the trees were simply bent over and with a small percent touching the ground. This ideal time to harvest the trees and sell the wood to manufacturers and power plants could use it.

The problem is the market became flooded with harvested biomass material and manufacturers stopped buying the material due to a large influx of material in the market.

Loggers are now sitting with many salvaged cords on their holding landings (storage areas), which will be fed to the stream at a later date. In the meantime, the existing downed trees are of no use to anyone and the market has halted. The longer the un-harvested trees lay on the ground decomposing there is a serious time whereby the downed trees are fast becoming not economically harvestable. First, the Aspen poplar then the pine then the other softwoods etc. The landowners are being told they must clean up the mess to avoid the upcoming massive fire hazard being created. This is going to put an unnecessary burden on landowners because the material will soon be considered unsalable and costly to remove as trash material. The state Department of Natural

Resources cannot allow the development of the fire hazards, nor can U.S. Forestry.

The manufacturers are not going to purchase stock they don't need nor can afford in their typical operating capital expense funds. The company I work for cannot afford to buy the material ahead of time simply because the financing banks are not there to offer inventory funding any longer. Our company could take over 85,000 tons right now but can't obtain the funding. All the companies that could immediately take the material are in the same situation. Companies like ours must wait and buy incremental purchases of raw materials as they can afford them to keep the delicate chain of custody moving in the industry.

What comes to a halt — harvester, trucking and manufacturing jobs.

Thousands of jobs lost in both states all going on unemployment. The loggers file bankruptcy and our logging industry diminishes tenfold. What is so shameful about this is the loggers did their job and reacted to the disaster paying for the wood and harvesting the wood as fast as they could. Now the loggers have little income and must lay off thousands of employees.

A simple solution is available to this dilemma. There are many plants that can take the harvested wood and store it on pads thereby salvaging the material with very little decomposition loss. What is needed is the state to determine the area a disaster area and provide low-interest loan guarantees to the financial institutions of the manufacturers so they can afford to bring in the harvested material. There isn't time for the 18 months to file SBA and the typical banking channels. There is no incentive for the manufacturers to go through that process. The manufacturers need only to wait and buy as needed. This is not asking for grants or free money this is simply asking for finance guarantees for low interest inventory funding which is paid back with the interest. By being able to purchase the materials now at a lower cost the interest if low enough is paid through the savings on the material. Our plant alone could take 85,000 tons immediately and keep stocking through the year as the material is used and paid for. This would allow continue stocking until the wood is harvested in the state. The solution is simple and it costs no one anything. Together we can help save our loggers, truck drivers and related local jobs in retail of products and services.

How can you help us? Simply send an email to your local and federal representatives' offices and encourage them to get behind this effort.

The landowners can ill afford to have to pay premium cost to remove the trees due to some mandate. We call the "Great Lakes Disaster Program." Simply call your local city office, and get your representatives' email or phone and let them know they can easily help get this done. You're not asking them to fund anything, you're asking them to support the loggers jobs in our states of Minnesota and Wisconsin.

For example: Honorable (Representative) I am writing/emailing you to help save the logging industry in our state. We are not asking for funding. Instead, we are asking for your support in the Great Lakes Disaster Program effort. In Minnesota and Wisconsin, there is a fast emerging storm damage disaster. Immediately after the blow down the trees were simply bent over and with a small percent touching the ground. This was the ideal time to harvest the trees and sell the wood for manufacturing and power plants use. The problem is that the market became flooded with harvested biomass material and the manufacturers stopped buying the material due to a large influx of the material flooding in the market.

We need your support in helping us by urging the state to guarantee inventory stock piling of harvested wood with guaranteed low interest loans available to the processing plants that can use the materials and get it to a safe drying area and off the property owners land. We urge you to help in solving the massive fire disaster we are facing in our counties.

Jerry Brown,

Oakland, Wis.

Editor's note: Brown lives in the town of Oakland, between Danbury and Webster in Burnett County, not the town in Douglas County.

WHAT'S HAPPENING IN THE WOOD ENERGY MARKET?

Many believe that the wood energy market is just getting started. But what sectors are the most promising? And what factors could affect future demand?

By DeAnna Stephens Baker

Date Posted: 8/1/2012

The demand for renewable energy is here to stay and wood-based energy's share of the market is only expected to increase. Wood energy offers the United States energy security due to its potential for local energy generation and reduced dependence on foreign energy sources. Because of this potential, many believe that the wood energy industry is just getting started.

According to RISI's North American Bioenergy 5-Year Forecast, the capacity of the bioenergy industry is expected to more than double in the next five years, creating tremendous demand growth for wood biomass, intensifying competition for fiber and changing the playing field for wood biomass supply.

In Europe, wood has been confirmed as the primary source of renewable energy from as early as 2009, when it accounted for 3% of the total primary energy supply and 47% of the renewable energy supply (RES), according to the United Nations Economic Commission for Europe. The Nordic countries especially have tapped into this source of renewable energy, with both Sweden

and Finland already supplying close to 20% of their total primary energy supply with wood energy. Based on these numbers, the United States is lagging behind, at around 2%. But there are many who are working to change that.

The potential includes all forms of woody biomass, but as of now, the amount ranges significantly between the different forms as well as geographical locations. Out of the different energy sectors, biofuel is currently receiving the most attention in the country, but it is not the biggest. Though it is a promising market – especially in financial terms - it is still in need of a lot of research and development. As Graph 1 shows, of the three bioenergy markets, biofuels currently has the lowest fiber consumption rate and is expected to see the smallest increase over the next five years. Using wood to produce electricity and heat is being done now on a commercial scale. But an economical way of producing fuel from wood has not yet been developed. This means that it is not yet a big market driver, but it could become one, according to William Perritt, executive editor of RISI's Wood Biomass Market Report.

“In the future it could become a significant driver, especially when you look at oil playing around the \$100 a barrel mark, and there being a lot of excitement about getting biofuels into the stream and getting us off of foreign oil,” Perritt said. “It could be a big market.”

Biofuels also have the benefit of large amounts of funding right now, from both private investors who are expecting a big payback and governments that are pouring research and development money into promising renewable energy sources.

Examples of recent federal government funding for biofuels include military research into jet fuel, a \$40 million grant from the Department of Agriculture (USDA) to help the Northwest Advanced Renewables Alliance (NARA) research develop a viable aviation fuel industry using wood and wood waste, and the USDA, Department of Energy and the U.S. Navy announced over \$130 million in new funding opportunities for the development of drop-in biofuels.

“The federal government is very big on putting funding into that technology because it is politically popular. It causes a lot of excitement in Washington when you say ‘We can squeeze gasoline out of a tree.’ That really gets attention,” said Perritt. “Wood fired power is an old technology. It’s been around for decades. Before we got into the whole biomass hype back in 2006 or 2007, it was already the largest source of renewable energy in this country. When the buzz dies down on this thing, it will still be the largest source of renewable energy. But it’s not a technology that gets people very excited, at least on the regulatory side.”

Despite all the hype currently surrounding biofuels, the biggest increase is expected to be in the wood pellet sector, which remains the most promising opportunity for wood energy – both domestically and for exports. According to Dr. Bill Strauss, president of FutureMetrics, a bioenergy consultancy and chief economist for the Biomass Thermal Energy Council, biomass thermal yields the most efficient use of biomass by far.

“Pellet fueled boilers get 85% to 95% efficiency,” he said. “That compares to maybe 30% from a biomass to power plant. Biofuel is as yet not commercially

proven or the energy balance (net energy out given energy to produce) is poor. The best use of this wonderful 'solar battery' is direct thermal conversion."

Domestically, residential use of pellet boilers is probably going to be the biggest driver, particularly in regions where the gap between natural gas availability and heating oil dependence is the greatest, according to Strauss.

"The natural domestic growth areas are where it is cold and there are lot of trees and a thriving forest products industry," said Strauss. "There are more than 9 million homes in the Northeast that use heating oil but do not have natural gas and most will never have natural gas due to the rural demographics. Pellet fuel is half the cost of heating oil so the market is there.

But what's seeing the most action and expected to be the main driver of the pellet sector in the coming years is exports. Thanks to renewable energy mandates throughout Europe, the already established European biomass market is poised for a dramatic growth spurt – and the accompanying growth in wood demand.

"Looking through 2015 or 2016 all of the biomass power projects that have been announced in Europe could bump up demand for wood biomass, on a green ton basis, by as much as 80 million tons a year," Perritt said. "Most of that is going to come in the form of pellets. So it would be about maybe 40 million tons of wood pellets."

With so much demand on the horizon, the Southern United States is in the best position to benefit, according to many industry watchers, due to its port facilities and shorter shipping distances than other regions that have enough supply, strong wood supply, and currently the most affordable wood prices in North America for roundwood. There is currently a lot of activity going on in the region, in terms of new pellet mills and increasing capacity. According to Forisk Consulting's wood bioenergy research, though the South has fewer announced and operating wood bioenergy projects than the North, the projected total wood use of the southern projects is significantly higher than in the North – 62.8 million green tons per year, versus 41.6 million green tons by 2020. When analyzed through Forisk's viability screens, the South is still expected to annually use 33.2 million green tons compared to 26.3 million green tons in the North. That is an additional 18.5 million tons of wood per year in the South over the next decade, but only 9.7 million additional tons in the North.

The rising demand for wood pellets has pulp mills in the region concerned about competition for wood fiber. Some analysts do not see this as too much of a problem for pulp mills, as they can afford to pay more for fiber than pellet mills. However, the new pellet mills might be able to gain an advantage by trying new procurement practices, according to a recent article in RISI's Wood Biomass Market Report. "Long avoided by pulp and paper, new elements being rolled out among pellet players include guaranteed, long-term volume orders to loggers and timber owners, as well as binding commitments sufficient for bankrolling efficient but expensive harvesting crews," wrote Chris Lyddan, timber director at RISI.

"These pellet mills are not like the conventional, domestic premium grade pellet mills that produce material that goes into stoves in people's homes," Perritt

said. “Those consume shavings, sawdust and chips – clean, dry material that comes out of sawmills. Whereas the export pellet mills of the South are large capacity and they’re just taking in pulpwood.”

Additionally, there are several large OSB mills in the South that were idled following the housing market crash. Perritt believes these facilities will be started back up again as the housing market recovers. OSB prices are already beginning to stabilize, and other OSB mills are already starting to add additional shifts, he said. These OSB plants are vying for the same pulpwood that pulp mills and export pellet facilities are.

The biomass market is still very subsidy driven due to certain challenges, such as the lack of an established supply chain, slow moving legislation and opposition from other industries.

“One of the problems we have in the United States, is we have 16 different definitions of biomass,” said Bill Holmberg, biomass coordinator for the American Council On Renewable

Energy (ACORE). “So if someone wants to stop a biomass project, they can basically go into the regulations and find a reason to stop it, or they can take it to court, or they can prolong the permitting process for an amount of time that makes the project uneconomically viable.”

ACORE is currently working to have Congress adopt a single, universal definition of biomass to eliminate the current competing definitions, which it believes hinder progress in scaling up the biomass industry. But some point out that domestic policy is not going to change very quickly, especially since it is an election year. Perritt said he expects that state standards will drive localized demand, but that the biggest driver in the next several years will be foreign policy.

“As far as policy drivers are concerned, they’re not domestic. It’s European. And that’s what’s making things tick for the southern industrial pellet companies,” explained Perritt.

Unfortunately, these problems make it hard for small or start-up companies to make it in the biomass market. Cory Schrock, plant manager at Fiber By-Products, Corp., a pellet producer said that he has seen many small players jumping into the biomass industry over the past several years, with an especially high glut of new companies in the last year to year and a half. However, due to the difficulties involved with being in the market, such as new regulations and costs, he believes that many of them will soon be gone.

“Because of the cost to produce and the regulations that are coming, I don’t think the small players will be able to play much longer,” said Schrock.

NREL STUDY SHOWS RENEWABLE ENERGY POTENTIAL IN EVERY STATE

A new study of renewable energy's technical potential finds that every state in the nation has the space and resources to generate clean energy. The Department of Energy's National Renewable Energy Laboratory (NREL) produced the study, *U.S. Renewable Energy Technical Potentials*, which looks at each state's available renewable resources for solar, wind, biopower, geothermal, and hydropower energy. The study establishes an upper-boundary estimate of development potential. Economic or market restraints would factor into what projects might actually be deployed.

The report is valuable for decision makers and utility executives because it compares estimates across renewable energy technologies and unifies assumptions and methods. It shows the achievable energy generation of a particular technology given resource availability, system performance, topographic limitations, and environmental and land-use constraints. The study includes state-level maps and tables containing available land area (square kilometers), installed capacity (gigawatts), and electric generation (gigawatt-hours) for each technology. See the [NREL press release](#) and the [complete report](#).

PONDERING PELLETS UP NORTH

By [Anna Simet](#) | August 07, 2012



For the August issue of *Biomass Magazine*, I wrote an article exploring the potential of utilizing biomass heat in northern communities, and it appears as though wood pellets offer the most promise.

In places like northern Alaska and Canada's Northwest Territories, the cost of fuel oil is ridiculous. I was told that in some Alaskan towns on the road system, it can equate to about 50 cents per kilowatt-hour (in North Dakota where I live, the cost of power is about 8 cents/kWh), and in some rural villages, it is nearly double that, up to 90 cent/kWh. The owner of a biomass boiler company up in

Yellowknife in the NWT said shipping oil to some communities up there can end up costing over \$1.40/kWh.

Anyway, there has been quite a bit of recent research delving into potential solutions for these communities—much of it done by the Arctic Energy Council—and it sounds like small, community-scale thermal systems might be the most appropriate solutions in many cases. Shipping pellets by barge might be an option in some places, but in a lot of instances it could end up being close to the cost of shipping a fossil fuel. Instead, some communities could build local, minisize pellet plants and use wood from nearby forests, or even trees or logs that fall into the rivers during the winter (which I guess is a substantial amount).

After I wrote that story, I began to notice lots of news on the same topic, and whether I am now just more aware (you buy a new car and suddenly everyone seems to be driving the same model) whether it's a coincidence, or if things are just really starting to roll up there, it's exciting to see. For example, just last week the Canadian Northern Economic Development Agency and the Northwest Territories Minister of Environment and Natural Resources gave \$5.7 million to Canada's Northwest Territories, to "create opportunities for a sustainable woody biomass industry."

Initially, the funding will go to complete forest inventories and sustainability analyses for broad forest areas, so these communities can directly benefit from the strategic development of biomass energy and forest resource development opportunities in the NWT.

I have a hunch that wood pellets will play a role in this program, as well as in many other plans to reduce energy costs in the northern communities that desperately need new, inexpensive, local solutions.

And of course, being renewable is the icing on the cake.

PULP CHIP PRICES FALLING

by Hakan Ekstrom | Aug 2012



Wood chip prices fell throughout the US and Canada in the second quarter of 2012, as the US South continues to have the lowest chip prices and eastern Canada the highest, reports the North American Wood Fiber Review.

Prices for softwood chips have trended downward in both the US and Canada during the first six months of 2012. The biggest declines came in British Columbia and Alberta because of lower market pulp prices. Chip prices in the US South, the Lake States and the Northeast experienced only minor price adjustments during the first half of this year.

High wood fiber inventories, plenty of sawmill chips and pulp logs, and maintenance shutdowns by a number of pulp mills were the main reasons wood chip prices fell by almost seven percent in the 2Q in the US Northwest. Current chip prices are the lowest they have been in over a year, but still well over the 25-year average.

In the US South, softwood chip prices have stayed remarkably stable for almost two years. This is a testament to the well-functioning market dynamics that can balance the fiber supply and demand in an efficient manner despite recent droughts, wildfires and flooding. Chip prices in the US South are currently the lowest in North America, and are slightly below the historical trend.

Over the past six months, wood chip prices in British Columbia have fallen 16 per cent, the second biggest price decline in North America the past two quarters behind Alberta. Temporary pulp mill shutdowns have led to lower wood fiber demand and sharply reduced prices for market pulp, resulting in the biggest price decline for chips since 2008.

Sawmill shutdowns

Just when many sawmills were marginally increasing their lumber production across eastern Canada, several had to temporarily curtail their operations due to an excess of residual chips that they were unable to move. Pulpmill fiber buyers

initially attempted to fulfill their fiber needs by purchasing residual chips from all sawmills, but as the quarter progressed, they protected their own company-integrated sawmills rather than independent sawmills.

Softwood chips prices declined by about ten percent in eastern Ontario and Quebec in the second quarter from the fall of 2011, but were still among the highest in North America.

The North American Wood Fiber Review has tracked wood fiber markets in the US and Canada for over 20 years and it is the only publication that includes prices for sawlogs,, pulpwood, wood chips and biomass in North America. The 36-page quarterly report includes wood market updates for 15 regions on the continent in addition to the latest export statistics for sawlogs, wood pellets and wood chips. Visit www.woodprices.com for more info.

BIOMASS HEATING AND RHI PROVES POPULAR WITH POULTRY FARMERS

Published 6th August, 2012

Increasing numbers of poultry producers are signing up to the Renewable Heat Incentive, and biomass heating is one of the key ways to benefit from this scheme.

Such systems are becoming increasingly popular in broiler sheds. With biomass, the difference in using biomass boiler heating, with the positive environmental impact for the birds as well as the cheaper, sustainable fuel and RHI Government payback could improve your margin by as much as **9p per bird**.

Payments are based on the maximum number of kilowatt thermal hours of heating the system can produce and are split into three bands of income. All payments are made direct to the owner of the installation in quarterly installments, based on submitted meter readings.

Biomass boiler installations can service more than one building, including a mixture of domestic and commercial. An individual heat meter can be used where the heat loss is less than 6%. Metering is the key to achieving RHI payback. It is also important to mention that the boiler must be MCS accredited to achieve RHI qualification, of which ALL Herz boiler sizes are now certified (yes, even the smallest boiler unlike most!)

Rural Energy are already working on a number of RHI and poultry farm biomass projects, and are celebrating ten years in biomass this year. Speak to us today on **0203 189 0676** or email jackk@ruralenergy.co.uk to discuss your project further.

BERLIN, NH HOMEOWNERS SKIP OUT ON HEATING FUEL CONTRACTS TO CUT BACK ON HEATING COSTS, SUPPORT LOCAL ECONOMY WITH BULK-FED WOOD PELLET BOILERS THANKS TO FUNDING

Posted: Aug 06, 2012 12:14 PM CDT

This article was originally distributed via PRWeb. PRWeb, WorldNow and this Site make no warranties or representations in connection therewith.

SOURCE: Maine Energy Systems

Many New Englanders are faced with signing heating fuel contracts this month but not for 16 Berlin homeowners that have already taken advantage of the Northern Forest Center's Model Neighborhood Project. This project provides subsidies to cover up to 60% of costs for bulk-fed wood pellet boilers from Bethel, Maine based Maine Energy Systems to qualifying Berlin homeowners as a way to cut down heating cost and help local forest industry.

Berlin, NH (PRWEB) August 06, 2012

Several Berlin homeowners will not be signing heating fuel contracts this month. Instead they will be burning locally produced wood pellets this winter in their Maine Energy System (MESys) AutoPellet boiler system thanks to the [Model Neighborhood Project](#) launched by the Northern Forest Center last November.

The Model Neighborhood Project's mission is to assist the region through the transition away from dependence on imported oil toward a local energy source that will create jobs and strengthen the forest economy. Switching to the locally produced renewable fuel cuts heating costs for homeowners by 40-50% while reducing carbon output by 86%.

The program's popularity grew rapidly in its first eight months with 16 completed installations to date. The Northern Forest Center anticipates completing 30 out of the 40 planned installations over the next three months just in time for heating season.

Wood pellets, a highly compressed wood product with low ash content, are a product of Northeast forests. Directing Manager of the Bethel, Maine based wood pellet boiler company [Maine Energy Systems](#), Dr. Harry "Dutch" Dresser states, "Currently, \$0.78 of every dollar spent on #2 heating oil leaves the regional economy. Heating with locally-produced wood pellets retains 100% of the money spent on pellets in the local and regional economy while creating new, permanent jobs and reducing heating costs for consumers right here in the Northeast."

To be eligible for the Model Neighborhood Project, homeowners must participate in the [Berlin BetterBuildings](#) energy efficiency program and undergo a home energy analysis to target a minimum 15% energy savings. Up to 40 project candidates are selected from Berlin BetterBuildings participants to receive direct subsidies from the Northern Forest Center. These subsidies cover up to 60% of the cost and installation of the MESys AutoPellet. Additional funding is available through Berlin BetterBuilding's low-interest financing for additional related expenses.

Wood pellets are delivered bagless in bulk to homeowners' storage bins. Pellets are dispensed automatically from bins to a day hopper to be self-fed into the MESys AutoPellet. The MESys AutoPellet burns the pellets to heat the home through a central heating system along with domestic hot water. The homeowner controls temperature using their pre-existing thermostat. The automatic cleaning of the MESys AutoPellet compresses ash into self-contained compartment to be emptied two to four times annually.

The Northern Forest Center is still looking for remaining candidates. Visit Berlin BetterBuildings at <http://www.betterbuildingsnh.com> for more information on completing a home energy audit.

ABOUT NORTHERN FOREST CENTER

The Northern Forest Center advocates for the Northern Forest region and helps its communities benefit from forest-based economic and conservation initiatives. The Center and its subsidiary, Sustainable Forest Futures, work on specific projects within communities across the 30-million-acre Northern Forest, spanning northern New Hampshire, Vermont, Maine and New York. The Center fills a unique niche as the only organization coordinating regional strategy across the multiple interest areas of conservation, economic development and community development.

ABOUT MAINE ENERGY SYSTEMS

Headquartered in Bethel Maine, Maine Energy Systems primary mission is to support a transition to the use of renewable wood pellet fuel for heating of homes, businesses and municipalities. By offering stably priced carbon neutral source of heat, MESys keeps home and business owners comfortable with their heat and comfortable in the knowledge that they are being good stewards of our

environment. This fuel transition not only lowers costs for users, it also helps retain and create jobs in the region while significantly reducing the region's carbon footprint.

For the original version on PRWeb visit:

<http://www.prweb.com/releases/prweb2012/8/prweb9756449.htm>

TRENDSPOTTING: US STATES WARMING UP TO RENEWABLE ENERGY HEATING AND COOLING, PART 2

By [Jennifer Runyon, Managing Editor, RenewableEnergyWorld.com](#)

August 10, 2012 | [1 Comment](#)



New Hampshire, U.S.A. -- If states are going to add a heating requirement to their RPS or even allow heat energy to be applicable, monitoring and metering will be key and that can be problematic.

First of all, in the U.S. heat is measured in British Thermal Units (BTUs) whereas electricity is measured in kilowatt-hours (kWh) or megawatt-hours (MWh).

NEWP's Niebling said that the U.S. and the U.K. are the only places in the world where heat is measured differently than electricity. 'In the rest of the world, at least outside of the U.K., everybody measures heat in MW- and kW-hours,' he said. 'But the simple fact is that both heat and electricity can be measured, can be metered and are measured and metered in the same units,' added Niebling. The conversion is a straight kWh to BTU mathematical equation whereas 1 kWh = 3412.141 BTUs. Plus, said Niebling, 'heat meters have been around for decades and they are no different than an electricity meter.' He said in Europe where district heating is in use, heat measurement tools are ubiquitous.

'[In Europe] The home will have a heat meter and it is measuring the temperature and the flow rate of the water coming into the home and then it is measuring the temperature and the flow rate of the water leaving the home and the delta between the two is the amount of heat energy being used,' he explained. 'It is standard, off-the-shelf foolproof stuff,' he said.

EOS Research's Ron Gehl, whose company produces monitoring and measurement equipment for thermal energy, echoes that sentiment. 'The fact of

the matter is that it is not very difficult to monitor and measure BTUs. We've been doing it in systems for years and years,' he said.

Gehl mentions two stumbling blocks on the way to widespread adoption of thermal energy metering and monitoring. First, is the additional cost for smaller systems. He said that for larger systems, particularly solar water heating, measurement tools are already included. 'The majority of commercial and industrial type systems these days are including BTU monitoring and measurement aspects. It's not that difficult to do particularly when you look at it being such a tiny proportion of the overall cost of such a system,' he said.

'The difficulty comes in coming up with something that is fairly accurate at low enough cost for any old two-panel residential hot water system. That's a bit more of a higher threshold to reach as far as making it inexpensive enough for more widespread use,' he explained.

Heatspring's Williams who consults on the sales side of solar thermal systems makes another point regarding the cost of residential systems. 'The cost to monitor it is around \$1,000 for Sunreports,' he said. But 'in PV, it's built into the cost, it already comes with the inverter. So it makes selling it difficult because you are trying to sell a residential solar thermal system for \$8,000 and then in order to monitor it, it's another grand.'

Williams said this is one of the 'catch-22's' of solar thermal technology. It is so cheap already that the additional cost of monitoring seems enormous.

In order to alleviate the additional cost of monitoring smaller systems, some states like Maryland allow 'modeled output' rather than metered output to count towards renewable energy goals for systems under a certain size. Gehl thinks that workaround makes sense for now, but he'd rather see the industry figure out how to measure the output and use of small and large systems alike.

'I think from a consumer perspective it will become increasingly important to know exactly what the output of a system is,' he said, also pointing out that reliable, measurable numbers will help the industry to gain more credibility.

Gehl would like to see a national standard in place and said that the industry is working toward having one adopted. He believes that once there are nationally recognised standards for measuring and monitoring thermal renewable energy, more widespread use of the technology will result. He said that the industry is working on creating an ANSI (American National Standards Institute) standard regarding BTU metering. 'That is something that will need to be more widely recognised,' he said. But once it is, 'at that point in time it's no different than having a kWh meter on a PV system,' he said. Gehl expects to see a national standard by the end of the year.

States Making a Difference - New Hampshire, Maryland, and Others

The state of New Hampshire made history this summer by becoming the first state to require utilities to obtain a portion of their renewable energy from thermal energy. The N.H. RPS, which compels the state to get 23.8% of its energy from renewables by 2025, will now require that some of its Class I renewables come from thermal energy 'including biomass, solar thermal and geothermal projects that commence operation after January 1, 2013, and produce 'useful thermal energy,' said Niebling. Specifically, the law allocates the energy equivalent of 0.2% of total electric load in 2013, increasing each year by that amount to 2.6% by 2025 when the RPS sunsets.

Thermal projects that meet PUC requirements will be able to qualify their energy output (on a straight BTU per MWh conversion basis whereas 3.412 million BTUs equals 1MWh) for renewable energy certificates worth up to \$25/MWh in 2013, and increasing each year through 2025.

The thermal provision is structured as a 'carve-out' whereby N.H. load serving entities are required to purchase the thermal RECs or pay the \$25/MWh alternative compliance payment (ACP).

Niebling offered the following example:

A 250-kW wood-fired boiler, operating 2,000 hours at load, will generate approximately 500 MWhs of useful thermal energy. Assuming RECs for this energy output sell at the maximum price, the project would produce certificates worth \$12,500 per year through 2025. A 100-kW solar thermal project producing hot water for a commercial enterprise, and operating at load 2,000 hours, would produce 200 RECs, worth \$5,000 per year through 2025.

Niebling noted that it would be more likely that RECs will sell at a price between \$10-15/MWh once the market is established.

Niebling believes that the new law will have an enormous impact on the biomass thermal industry, because the thermal RECs will be enough to tip the scales in favor of new project. 'It fundamentally changes the equation for people looking to make these investments,' he said. He expects that larger commercial and industrial projects will be early adopters of thermal renewable energy before the residential market takes off. 'So for municipalities, county governments, businesses, large and small, this has enormous implications,' he said.

In Maryland where there already exists a solar carve-out, the legislature has pushed up the date by which the state must meet its 2% solar energy requirement by two years. Solar thermal systems as well as PV systems can produce SRECs in that state. The legislature made the change in order to

address volatility in the SREC market. To date, only Maryland and DC allow SWH systems to generate SRECs.

According to Brad Bowery, CEO of SRECTrade, 'The most common way that solar thermal SRECs are counted is as follows: systems that displace fewer than 10,000 kWhs of electricity annually can count SRECs based off of estimated generation based on a conversion of expected BTU output to kWhs (similarly, PV systems in some states under 10 kW can count SRECs based on PV Watts estimates).'

Bowery continued, 'for systems that displace more than 10,000 kWhs of electricity annually, an OIML meter is typically required to measure the BTU output, which is then converted to kWhs by GATS [the generation attribute tracking system], which in then is converted into SRECs for each MWh.

But while Md. and N.H. are leading the pack in terms of thermal energy and their RPS's other states are considering making changes to their laws as well. Niebling believes that this is a trend in the making. 'You've got Vermont [which] has passed legislation about a month ago that directs its department of public service to study and make recommendations on something it is calling a 'total energy standard' which would be electricity, heat and transportation energy use,' he pointed out. Niebling also said that Mass. is looking at a bill that would direct its DOER to study including thermal in its APS, the state's alternative portfolio standard. He mentioned a few other states to watch as well including N.C., Ohio, Va., Wis., and Ariz.

Particularly in states where oil is used for heat and hot water, thermal renewable energy is perhaps a cheaper, easier way to achieve state RPS goals of fuel diversity and in-state economic development. Niebling added 'much of N.H., Vt. and Maine does not have access to natural gas and are unlikely to see it anytime soon. So for these states it's a real powerful incentive – we hope – for people to take the plunge, spend the capital, to transition away from fossil heating fuels to locally produced fuels or locally installed technologies.'

LOGS FOR SCHOOLS: DONATED TIMBER HELPS DARBY DISTRICT CUT HEATING FUEL COSTS



Perry Backus - Ravalli Republic

Darby mayor Rick Scheele and Darby Schools superintendent Loyd Rennaker look over the pile of logs that someday will become the chips used to heat the school district's buildings. Many of the logs were donated by local residents as a part of an innovative program that provides tax incentives to private landowners willing to give their wood the district.

DARBY – When Mike Anderson first bought his land west of Darby in 1997, he thought the ponderosa pine growing there would be a cash crop.

He doesn't think that any more.

This summer when crews were thinning the forest behind his home, Anderson wasn't quite sure what he was going to do with all the logs they harvested that weren't worth enough to pay for the gasoline to haul them to Missoula.

As so often is the case, one man's waste is another's treasure.

Over the last couple of years, the Darby School District has been working with local landowners willing to donate their wood in exchange for a tax deduction.

The district paid for the transportation fees to have the logs hauled to a yard on city lands where they will eventually be ground into chips that will be burned in a biomass boiler to keep schoolchildren warm during the long winter months.

In its first three years, the Darby Fuels for Schools Stewardship Program has saved the district thousands of dollars, while providing local landowners with another option for dealing with their excess trees.

That donated material helped drop the schools' cost for chips to \$18 a ton last year from earlier prices that ranged from \$32 to \$25 a ton.

School officials estimate that donated material saved the district close to \$200,000 over the cost of fuel oil it once used to heat all the buildings.

"When you figure that a teacher costs the district between \$40,000 and \$50,000 a year, you can see that it makes quite a difference for our schools," said Darby Superintendent Loyd Rennaker. "The program provides a lot of benefits to a lot of different people in our community."

Darby was the first school in Montana to receive a grant from the U.S. Forest Service to purchase a biomass boiler that burned wood chips to create heat. That first Fuels for Schools boiler was installed in 2003.

"At the time, they didn't know if it would work in the West because of our soft woods," Rennaker said. "There were a lot of them operating in eastern states."

Darby mayor and local biomass boiler expert, Rick Scheele, said the school has learned what woods work well in the biomass boiler over the past few years.

They know now that cottonwood and poplar chips don't generate as much heat as pine. When they can get it, fir is their wood of choice.

Some of the wood comes from national forest timber sales. And some comes from local residents looking to get rid of beetle-killed trees and thin forests around their homes to create defensible space from wildfire.

Some of that thinning work on private property is being funded, in part, by state grants administered by the Bitterroot RC&D office in Hamilton.

Bill Miller is an assistant community forester with that office. He's seen, firsthand, the challenges that many Ravalli County landowners face in getting rid of the trees removed in fuel-reduction projects, especially from the southern reaches of the valley.

"There's not much of a market for the kind of trees they remove in these fuel-reduction projects," Miller said. "Even the market for large lodgepole that 10

years ago were worth a lot of money to log homebuilders is way down. Now those logs are just firewood.”

This year, the Bitterroot RC&D received nearly \$275,000 to help pay for fuel-reduction projects on private lands. People interested in looking into those grants can go online to get an application.

Landowners have to pick up half the cost of thinning their forests. That can range from \$500 to \$1,200 an acre, depending on a number of different factors.

The Darby School stewardship project allows them to get a tax deduction for their portion of the cost.

“We’ve had a lot of grants this year,” Miller said. “I think we’re going to have a lot of wood to give them.”

The school district has been piling logs on a piece Darby town land near the river. The 20-foot-tall pile is almost as long as a football field.

“I think we have almost 1,600 tons in the pile right now,” Rennaker said. “We’re hoping to have something close to 3,000 tons when we bring the chipper back.”

That amount of chips would keep the school buildings warm for about three years. The district burns between 800 and 1,000 tons a year.

“This whole program has really made quite a difference for the school and this community,” Scheele said. “With the way this economy is right now, this school really has become the heart of the community and people want to help however they can.”

Anderson agreed. And he’s also happy to find someone who has a use for the logs he no longer wants.

“This really helps me out,” Anderson said. “I first thought all these trees were going to be an asset to me. Now, they’re just a liability.”

Reach reporter Perry Backus at 363-3300 or pbackus@ravallirepublic.com.

CANADIAN PELLET INDUSTRY POISED TO PROFIT

By [Anna Simet](#) | August 17, 2012



The Wood Pellet Association of Canada just released a new report on what might be store for the country's wood pellet industry, and my conclusion after reading it is that it appears to be positioned to reap the benefits of the federal government's policy to lower carbon dioxide emissions from coal-fired power plants.

Why? Mainly because of coal plants' limited options. Due to lack of economics, carbon capture and storage isn't going to happen in the near- or medium-term future (and the law goes into effect beginning in 2013), the report says, and if plants aren't located near natural gas pipelines that really isn't an economical option, either. So that brings them to option three: wood pellets (or torrefied wood when the market develops), which fit quite well with existing coal plant infrastructure, compared to wood chips.

Canada is the leading wood pellet exporter to Europe, and there's a great amount of potential for expanded production. According to *Biomass Magazine's* most recent North American Pellet Production Map, which can be accessed [here](#), there's over 3.4 million tons of existing and developing wood pellet capacity.

On the flipside, to give you a brief perspective on what the Canadian coal power industry looks like, it currently has 21 coal-burning power plants with a total of 53 units in operation, 60 percent of which will reach the end of their useful life by 2025, according to the report, though some may make some modifications to extend their lives a bit.

Based upon that data, the average unit size is about 314 MW. Calculating the theoretical market for corifing, the report says that based on a cofiring rate of 20 percent, by 2015 there would be a demand of nearly 4.7 million tons of pellets annually.

That's already bigger than the existing market.

As more plants make the transition and utilize wood pellets, by 2025, there could be a demand of over 14 million tons of wood pellets annually.

The report points out that for the wood pellet industry to respond to the potential demand, it is imperative that it be part of the planning process, as it would be a

challenging scenario requiring extraordinary planning and allocation of fiber resources in Canada.

And perhaps what I found the most interesting that the report says this would essentially *eliminate all exports of pellets*.

Meaning European buyers would have to look elsewhere for their supply. Makes me wonder if I should have titled this, "U.S. Pellet Industry Poised to Profit"...from Canada's carbon reduction policies. It's just too bad we would be capitalizing on our neighbor's initiatives to clean up its act, rather than our own.

Access the report [here](#).

ANALYST: WOOD PELLETS FROM BOWATER LANDS 'LONG SHOT'

August 17, 2012 - 7:21pm [By CHRIS LAMBIE Business Editor](#)

If **Emera** is negotiating to buy **Bowater Mersey Paper Co. Ltd.'s** assets, they face lots of hurdles, says an energy analyst.

Bowater's majority owner, **Resolute Forest Products Inc.** of Montreal, is trying to sell the Brooklyn, Queens County, paper plant it shuttered in June and its 220,000-hectare forest, the largest private landholding in Nova Scotia.

But Tom Adams is skeptical about a report that Emera wants to get its hands on the woodlands to make torrefied wood pellets that would feed **Nova Scotia Power's** coal-fired plants.

"I am not surprised at all that they're looking at torrefication as a possibility. I personally think it's a long shot," Adams, a Toronto energy analyst, said Friday.

"But whether they're looking at the (Bowater) assets or not, that becomes a very intense regulatory question. If they had a feeling like they could recover the cost for alternative fuel experiments, then that would make them very more likely to seek out those assets. But if there's regulatory uncertainty about how they're going to recover those costs, if the torrefication thing doesn't go well, now what do you do?"

Torrefaction, a French term for roasting, entails heating up wood to make a pelletized fuel that can be burned in power plants designed to take coal.

“Nobody’s yet demonstrated a way to do this on a practical commercial scale that doesn’t cost an arm and a leg,” Adams said.

Nova Scotia’s already-high electrical rates have prompted public backlash in the past, he said.

“As soon as you get into these exotic green things, there’s going to be upward rate pressure, and that’s going to make the company very nervous.”

Pending federal regulations are pushing power utilities, including Nova Scotia Power, to gradually reduce carbon dioxide emissions by weaning themselves off coal.

The provincial government wants renewable energy to account for 25 per cent of Nova Scotia’s power need by 2015, increasing to 40 per cent by 2020.

“When you look at the potential barriers that Emera or Nova Scotia Power might face in going toward forest biomass as a significant source of electricity supply in order to meet their 40 per cent objective, you can make a long list of potential barriers,” Adams said.

“Is the public prepared to accept chopping down forests and using them for fuel? A lot of people like trees.”

Another hurdle is whether the provincial regulator would be prepared to pass on the higher cost of doing so to customers, Adams said.

“If not, where does the risk lie? Is that a shareholder responsibility?”

Electricity from coal accounts for 57 per cent of Nova Scotia’s energy generation, down from 80 per cent five years ago.

Sasha Irving, who speaks for Emera, wouldn’t say Friday whether the company is negotiating to buy Bowater Mersey’s assets.

“We won’t be making any comments.”

In Queens County, rumours abound about who is kicking the tires at Bowater, said Allan Laws, president of Local 259 of the Communications, Energy and Paperworkers Union of Canada, who represents hundreds of people who used to work at the mill.

“I’ve heard through roundabout sources that there’s some sort of big announcement coming, but I’m not sure what that is,” Laws said.

“There’s all kinds of rumblings about **Irving**. There are stories about an Asian company talking about (buying Bowater assets to produce pulp for rayon).”

Nova Scotia Power is one of several Canadian utilities that offered up a site for a commercial-scale test of torrefied wood pellets, said a report produced last year by Natural Resources Canada.

Torrefication involves heating wood, including pine, fir, spruce or poplar, to about 280 C in an oxygen-depleted atmosphere, Staffan Melin, who co-authored the report, said Friday.

“We take it out and grind it down to finer particles and then we pelletize it so it becomes like a bio-coal,” said Melin, a research director at the Wood Pellet Association of Canada who also teaches at the University of British Columbia.

“It’s a direct replacement for fossil coal.”

While lots of pilot plants are burning torrefied wood pellets, the process has yet to be commercialized, he said.

“The negative side of it is it is more expensive than regular coal, and I think it will be for some time to come.

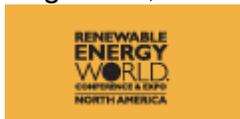
“Typically, it’s probably 30 or 40 per cent higher in cost.”

clambie@herald.ca

MASSACHUSETTS FINALIZES STRICT REGULATIONS ON BIOMASS PLANTS

By [Meg Cichon, Associate Editor, RenewableEnergyWorld.com](#)

August 21, 2012 | [11 Comments](#)



New Hampshire, U.S.A. -- The Massachusetts Department of Energy Resources (DOER) finalized the Massachusetts Renewable Portfolio Standard Class I regulations for biomass eligibility yesterday after more than two years of evaluation and heated debate.

The final standards [require all woody biomass plants](#) to generate power at minimum 50 percent efficiency to receive one half of a renewable energy credit (REC), and 60 percent efficiency to receive one full REC. Previously plants were required to operate at 25 percent efficiency. All plants must also achieve a 50 percent reduction in lifecycle emissions over 20 years.

These new standards are expected to shake up the industry, and some fear that they will influence regulation throughout the country. If these standards were applied nationally, almost 50 percent of the biomass power plants in operation would be considered non-renewable, according to Bob Cleaves, CEO of the Biomass Power Association.

In addition to these strict measures, Massachusetts will also require a Forest Impact Assessment every five years to determine the industry's influence on the environment and ensure its preservation. The state will also create a special category of biomass units deemed to be advancing the technology that will be eligible for half-RECs at an efficiency of 40 percent.

The final standards have been influenced by the [2010 Manomet Center for Conversion Sciences study](#) that determined biomass energy is not carbon neutral and does not cut greenhouse gases. The study states that burning biomass creates an even larger carbon debt and releases more CO₂ for every kilowatt of energy produced than some fossil fuels.

The Monomet findings have been [debated extensively](#), with some analysts claiming that the study failed to account for the use of waste wood — burning dead, rotting material from the forest floor, which can promote new growth and carbon absorption — and the selective harvesting method. This method states that carbon released from harvesting a certain number of trees in a set system is offset by carbon accumulation from the entire remaining system.

Despite the ongoing arguments, DOER believes that these regulations will ultimately help Massachusetts reach its carbon reduction goals — the Commonwealth must reduce its greenhouse gas emissions 80 percent by 2050, according to the Warming Solutions Act (GWSA) set in 2008.

“The adoption of this revised regulation and guidelines demonstrates the Patrick-Murray Administration’s commitment to advancing the Commonwealth’s clean energy goals and greenhouse gas reduction commitments based on sound science and prudent policy,” said DOER Commissioner Mark Sylvia in a release. “Through this regulation and other initiatives, DOER believes there is a role for biomass energy in the Commonwealth focused on high efficiency use of the limited sustainable wood resource.”

Lead image: [Gavel](#) via Shutterstock

SWEDEN'S OIL FREE FUTURE

Posted on [20/08/2012](#)

Back in 2006 Sweden became the first advanced western economy in the world to pledge itself to an oil free future. This impressive goal was made in line with the carbon reduction targets set by the European Union, but it's not just a pie-in-the-sky hope, it's an honest-to-goodness, plan-in-hand target which the Swedes are eager to hit.

The plan allows the country until 2020 to meet its ground-breaking goal, and what is perhaps most impressive for some is that it doesn't call for the construction of additional nuclear plants. "We want to be both mentally and technically prepared for a world without oil. The plan is a response to global climate change, rising petroleum prices and warnings by some experts that the world may soon be running out of oil." Said a government official when the plan was first announced. Mona Sahlin, Sweden's Minister of Sustainable Development also commented, "Our dependency on oil should be broken by 2020...There shall always be better alternatives to oil, which means no house should need oil for heating, and no driver should need to turn solely to gasoline."

So what's the game plan for such a tremendous and seemingly impossible objective? As expected, there are many parts to play, including adopting strict electricity efficiency measures, improving public transport, and reducing external dependencies (gas and oil imports, etc.). But most intriguing for us here at Nuburn is that a great part of this plan includes the increased use of biofuels. No less than 65% of Sweden's vast landscape is natural forest, a hugely viable resource that Sweden plans to tap into to meet a large portion of their target. This means that a great deal of their success will depend upon the uptake of biomass, an outcome we are excited to see play out. It will help prove to a global audience that a country can use its natural resources responsibly, especially its trees and forests, and that deforestation only poses a problem when harvesting is mismanaged.

As always, the skeptics are looming, chuckling at the supposed impossibility of Sweden's ambition. But I think whether or not they can actually achieve this goal is almost beside the point. Isn't it enough that they are willing to attempt such a huge and wonderfully optimistic change? That their government and citizens have communally and publicly announced their commitment to a complete, total, 100% sustainable future? I mean, come on, that's impressive! So I say let the skeptics revel in their doubt; even if they fail, well at least they'll be the only nation that tried – and that says a lot.

Besides, history is on Sweden's side. They've already proved their ability to reduce fuel consumption (and keep consumption down for that matter). As one of the countries that was hit hard during the oil shortage of the 1970's, they were resolved to reduce their oil consumption long before the rest of us. In fact, they managed to cut the nation's oil dependence from 77% in 1970 to a mere 32% in 2003. In that same year it was revealed that 26% of Sweden's energy was derived from renewable sources, this at a time when the EU average was a measly 6%. Their history has already shown the world how quickly and efficiently they can bring about change, leading me to believe that they stand a very real chance of reaching their goal (or at least coming very close) in the next eight years.

Our hats are off to you, Sweden. We hope you do it, and we hope that your action and ambition will inspire the rest of us to do more than just be adequate. Going above and beyond and setting those "impossible" goals is the only way history is made. In any case, we think you're already great for trying.

For more information about Sweden's target and how they plan to achieve it, please see their Commission on Oil Independence document here:
<http://www.swedenabroad.com/SelectImage/48414/finalreportcomoilindep.pdf>

AREA BUSINESS ENERGIZED BY GREEN INITIATIVES, BIOMASS

Enchanted Forest, Griffiss planning to use alternative energy

Upstate New York is leading the way in the biomass industry, and local businesses are tapping in.

Old Forge Properties — including Enchanted Forest/Water Safari and Water's Edge Inn and Conference Center — recently announced a biomass heating project and anticipates receiving a grant to cover 75 percent of the \$2.2 million endeavor, President and CEO Tim Noonan said.

And earlier this month Griffiss Utility Services Corp. broke ground on an \$18 million biofuel project to supply heat and electricity for tenants of Rome's Griffiss Business and Technology Park.

"We've seen a lot of increasing activity within the last three to five years (in biomass energy conversion)," said Tom Richard, director of the Biomass Energy Center at Penn State University. "Part of that has been the increase in cost of

coal and oil and wider recognition of doing something serious about carbon footprint.”

Biomass energy involves combusting organic waste — such as woody plants and stocks and stems of grasses — to produce heat and electricity with a minimal carbon footprint. The biomass usually comes in the form of woodchips or pellets.

Noonan projects the Old Forge project could offset 480 tons of fossilized carbon emissions annually, while also saving about \$100,000 each year in energy costs. He also said it would offset 95 percent of the businesses’ current fuel usage.

“Because we use fuel both in the summer and winter, it makes sense,” Noonan said, adding that a grant is necessary in order for there to be a savings.

Enchanted Forest/Water Safari currently uses oil to heat water for the park in the summer, and a combination of oil and propane to heat the Water’s Edge Inn and other buildings in the winter, according to the project summary.

Benefits to biomass

Businesses aren’t the only ones who benefit from the switch — the local economy does, too.

Dennis Rak, president of Double A Vineyards and Double A Willow in Fredonia, said business becomes cost prohibitive if they ship wood chips farther than 75 miles.

“The money from biomass stays in the local economy,” he said.

Eric Carlson, president and CEO of the Empire State Forest Products Association, said over the last few years several wood pellet manufacturers have popped up, marking the state as a leader in the new industry.

The U.S. Department of Agriculture recently announced it would invest \$4.3 million in ReEnergy and SUNY College of Environmental Science and Forestry to encourage growth of shrub willow as a renewable energy fuel. This is anticipated to support willow on farmland across Central New York and the North Country, including farms in Oneida and Otsego counties

U WISCONSIN TO BUILD US\$75 M POULTRY PRODUCTS LAB

//30 Aug 2012

The University of Wisconsin Regent's Board has approved plans to build a US\$75 million poultry and livestock products lab on the Madison campus.

The lab will contain research and training facilities for developing new products for animal and human use.

It would also include an "isolatable" pilot processing plant where researchers could test ideas for preventing contamination of food by disease-causing organisms.

The plan still remains subject for approval by the state building commission, only then can it be included in the state budget.

The state of Wisconsin would provide half of the funding for the project, the other half must be sought from private firms and organizations involved in the poultry , milk, and meat and industries.

MINNESOTA LOGGERS LOSE MARKETS AS MILLS CLOSE DOWN

by [Tom Robertson](#), Minnesota Public Radio
August 31, 2012

BEMIDJI, Minn. — August was a tough month for Minnesota's timber industry. The Verso paper mill in Sartell and the Georgia-Pacific hardboard plant in Duluth both shut down permanently, putting 400 people out of work.

The plant closings were among the latest blows to an industry that's been on the ropes since the last recession began. In all, six mills have closed over the past five years. That's about a third of the industry.

Some fear that they also could signal the end of the road for some of the state's struggling loggers. Among those still working are the half-dozen loggers who recently used heavy equipment to harvest trees on a 120-acre stretch of private land south of Bemidji.

Mark Benson, who co-owns Benson Brothers Trucking Inc., based in Blackduck, said the company used to have twice as many employees. But when mills started shutting down, they had to let people go.

"I would say the logging industry right now is close to a dying breed," Benson said.

The Benson Brothers sold hundreds of truck loads of balsam each year to the Verso paper mill in Sartell, one of the few consumers of balsam in the state. Verso accounted for about 25 percent of the company's business. But that market is gone.

"We aggressively bought particular tracts just for the balsam, for them," Benson said. "And now we have a lot of them in our inventory of sales that we're not going to be able to cut, even, because we're going to be short a balsam market."



Logging equipment

The same is true for other loggers in northwestern Minnesota, he said. Some have stockpiles of balsam that now have little value.

"Several loggers are going to have to quit, because there just isn't enough market for them anymore," Benson said.

Many loggers have been operating on razor-thin profit margins since the recession, due to low demand. Timber consumption in Minnesota is down about 35 percent since the early 2000s, according to the Minnesota Timber Producers Association.

A recent nationwide survey published in Timber Harvesting magazine found that in 2010, more than half of logging companies either lost money or barely broke even. Another 21 percent were operating on only a one to three percent profit margin. They own expensive equipment they can't afford to replace.

There are only about 1,500 loggers left in the state, a number that is down about a third from a few years ago, said Scott Dane, director of Associated Contract Loggers and Truckers of Minnesota, a trade association representing more than 150 companies.

If the logging capacity continues to erode, Dane said, there's a risk the entire industry could collapse.

"The most recent mill closures actually represent a tipping point that will push some loggers over the edge and they won't be able to recover," he said.

"Minnesota is losing the timber industry."

Dane said loggers holding large amounts of unmarketable balsam should be released from their contracts without penalty. But state Department of Natural Resources officials say by law that would require legislative action.

In the meantime, the state can help by giving loggers one-year extensions on their contracts, said Dave Thomas, the DNR's regional forest manager for northwest Minnesota. That would give them more time to find a balsam market.

But Thomas said it could be awhile before a new market emerges, and that would likely depend on the state's ability to attract new industry, such as ethanol, bioenergy or electricity plants.

"If we don't have something like that come in, then we are going to have some significant problems for these guys finding a market and we are going to lose a number of them that are out there," Thomas said.

It's not all bad news in the timber industry. Another company, Norbord, is investing millions to modernize its plant west of Bemidji. It's the state's only surviving producer of a fabricated building material called oriented-strand board.

Also, the Sappi paper mill in Cloquet, Minn., is undergoing a \$170 million expansion that will convert wood pulp into cellulose fiber for use in making rayon textiles and other materials. It will be the first of its kind in the state.

DNR forest economist Don Deckard said that kind of innovation will be key to the future viability of the wood products industry.

"The fact is, we've got a lot of wood here in the state that right now isn't being utilized," he said. "We're looking for new ways to use it. And I think the paper companies are going to be part of that going into the future."

Sappi's new textile expansion in Cloquet is expected to come online next spring. Industry observers say there's potential for paper mills to enter other emerging markets for things like petroleum substitutes, fibers and biochemicals.