

THE BIOMASS MONITOR



March 2012

Clean energy doesn't come out of a smokestack...

From the Editor

- by Rachel Smolker, Managing Editor

This month saw reports from environmental groups focusing on the impacts of bioenergy on the Southeastern U.S., which industry likes to refer to as "the Saudi Arabia of bioenergy."

The region is targeted for its massive industrial pine plantations, not only to supply the pulp industry and domestic bioenergy demands, but also for exports of pellets and chips to meet European bioenergy demands.

There are also plans for a "controlled release" of genetically engineered eucalyptus—fast growing and cold tolerant to provide "more biomass," and large areas of invasive Miscanthus grass as well. The future of the southeastern forests will depend to a large degree on our effective grassroots organizing!

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State Lines

Springfield, VT Fights Biomass Power

- by Josh Schlossberg

Feb. 23, 2012: Over 200 Springfield, VT residents filled the local high school cafeteria for a presentation by **Winstanley**, a Massachusetts developer looking to build a 25-35 megawatt biomass power incinerator on the north end of town. During a Q&A segment, citizens raised several concerns, including air pollution, truck traffic, water withdrawals, and forest degradation.



Trees for Burlington, VT's McNeil Biomass Power

"Why would the citizens of Springfield allow the construction of a power plant that is dirtier in many respects than a coal plant?" asked Springfield resident Maggie Kelly, citing numbers from **Winstanley's** own air permit application demonstrating higher levels of asthma-causing particulate matter (PM) than the Mt. Tom coal plant in Holyoke, Mass.

"Mt. Tom is actually a pretty good coal-firing plant...so it's not so bad to be compared to Mt. Tom," responded **Winstanley** consultant Dale Raczynski. "There's an existing coal plant out there that has very low emissions. We're being compared to that. And we have also very low emissions..."

A citizens' group, North Springfield Action Group, has formed to oppose the incinerator.

Source Watch

Study: More Whole Trees Cut for Southern Biomass

- by Josh Schlossberg

Feb. 14, 2012: The expansion of biomass energy in the southeastern U.S. may play a role in triggering runaway climate change by increasing the logging of whole trees, says a study by National Wildlife Federation and Southern Environmental Law Center.

Biomass Supply and Carbon Accounting for Southeastern Forests calculates that an expansion of biomass energy "creates a carbon debt that takes 35-50 years to recover before yielding ongoing carbon benefits relative to fossil fuels." The findings cause concern with "climate scientists who assert that the next 20-30 years are a critical time for reducing carbon additions to the atmosphere."

BIOMASS BUSTER of the Month Therese Vick – North Carolina



Therese Vick is at the heart of biomass opposition across North Carolina. A community organizer for **Blue Ridge Environmental Defense League**, Therese puts in more than her share of time "educating the public, decisionmakers, and other environmentalists" to put the brakes on biomass incineration.

Though up against a recent **North Carolina Court of Appeals** decision granting State "renewable energy" subsidies for the burning of whole trees for electricity, Therese remains optimistic. "My hope is that policy makers and the public will stop believing the industry greenwash, end the perks and tax breaks, and take a hard look at the damage that is being caused by this industry before it is too late." The expansion of biomass energy likely involves burning through available supplies of forest "residues," says the study, resulting in the logging of more whole trees. "The evidence clearly suggests that any expanded biomass energy in the Southeast will come from harvested wood."



Clearcut outside of Green Swamp, North Carolina (Photo: Abigail Singer)

North Carolina Biomass Statement

- by Josh Schlossberg

The following are excerpts from *Sustainable Forest Bioenergy for North Carolina*, by **Environmental Defense Fund, Southern Environmental Law Center, Southern Alliance for Clean Energy** and several other environmental organizations.

"Utilization of forest biomass for energy should be net carbon beneficial within a timeframe necessary to avoid adding greenhouse gases that could exacerbate negative climate change impacts.

"Robust ambient air quality monitoring and proper siting should be required to identify the potential for community impacts or hotspots.

"The utilization of forest biomass for energy production must not harm North Carolina's forests, waters or wildlife or the health of the state's citizens.

"Look-back studies conducted every 3-5 years should evaluate economic, climate and landscape impacts associated with the utilization of forest biomass in bioenergy." ρ

Our Health

Does EPA Underestimate Toxic Air Pollution from Biomass Incinerators?

- by Josh Schlossberg

The U.S. Environmental Protection Agency (EPA) may be underestimating the levels of Hazardous Air Pollutants (HAPs) emitted from biomass incinerators, which consist of dozens of toxic and carcinogenic chemicals including arsenic, chlorine, and styrene.

"Permits to pollute are based upon estimates made with factors the EPA clearly states are not accurate for specific facilities," writes Alec Kalla, of French Lick, Indiana in *Biomass is Dirty Business.* "The smokestack approved for your neighborhood could be spewing a hundred or a million times more poison than its owner and regulators even suspect."



The **EPA** estimates air pollution emissions from "factors" in its "AP-42 Compilation of Air Pollutant Emission Factors," which are "simply averages of all available data of acceptable quality." They admit that "emission factors are not intended to provide exact estimates of releases of air toxics from specific facilities."

"Only Continuous Emissions Monitoring of HAPs can yield accuracy," says Kalla, who has opposed biomass projects in Indiana, including the defeated Crawford County incinerator, "because emissions can vary by orders of magnitude even at the same facility."

"The odds of calculated emissions from burning biomass being wrong are two in three," cautions Kalla. "Even Russian Roulette offers better odds."

Read "Biomass is Dirty Business" at NoBiomassBurning.org/air-pollution

State Lines (continued)

Incineration Forced on Connecticut Communities

- *by Josh Schlossberg* (source: Lori Valigra, Mass High Tech, Jan. 10, 2012)

Connecticut residents are facing two new biomass power incinerator proposals, a 37.5 megawatt proposal for Plainfield and a 42 megawatt proposal (conversion from natural gas and oil plant) for Montville.

The **Plainfield Renewable Energy (PRE)** incinerator is a subsidiary of the **Enova Energy Group**, based in Georgia and Florida. The incinerator, which would burn primarily construction and demolition debris, has received all its needed permits and construction is estimated to be completed in December 2013, according to the developers.



Computer model of PRE Incinerator (Photo: www.enovaenergygroup.com)

"PRE will produce 10 times more air pollution than a natural gas fired plant per megawatt of electricity produced," said Randy Stilwell of **Concerned Citizens of Plainfield,** a group opposing the incinerator. "The amount of air pollution produced by PRE is worse than a dirty coal fired plant."

The incinerator will burn unlimited amounts of wood treated with the preservative pentachlorophenol, which is "extremely toxic to humans," with inhalation causing "neurological, blood, and liver effects," according to the **EPA**.

"Trash is not a renewable energy source and PRE will be one of the dirtiest power plants in the region," warns Stilwell.

State Lines (continued)

VT Biomass Working Group Wants More Incineration

Feb. 8, 2012: Recommendations in the final report of the State of Vermont's legislativelyappointed Biomass Energy Development Working Group (BEWG), released in late January, would allow an increase in air pollution, and the emission of millions of tons of climatechanging greenhouse gases, degrade Vermont's iconic forests through intensive "whole-tree harvesting," and heighten the risk of transporting invasive insects like the emerald ash borer.



The **BEWG** chose not to address public health impacts from biomass burning despite numerous complaints from communities facing biomass proposals across the state and concerns from public health organizations, such as the **American Lung Association in Vermont**. The **BEWG** also chose not to address the carbon dioxide smokestack emissions of burning biomass.

Eye on D.C.

Washington State Bill Boosts Burning - by Rachel Smolker

Some view Washington State's magnificent temperate rainforests as a biodiversity treasure desperately in need of protection. The biomass energy industry, however, sees big trees with a lot of "biomass" to be burned.

The industry got a boost this month with the State Senate's passage of the "Legacy" biomass bill. The bill, sponsored by Sen. Brian Hatfield (D), will alter the states "Initiative 937" which previously mandated newer, larger utilities to produce a portion of their power from renewable energy. The

Beyond Burning

Plant-Based Solar Panels?

- by Amber Veverka

http://www.newsobserver.com/2011/12/19/1719502/thepurple-power-of-pokeweed.html



Natural dyes from plants rich in compounds called flavonoids can produce electrical current when sandwiched between the layers of a solar cell, in the spot where silicon would normally go. David Carroll and his **Wake Forest** team set out to find a plant whose dye would work the best. Eventually the team tried pokeweed.

The team painted the purple juice on a transparent conductor, a piece of glass or plastic with an aluminum zinc oxide coating. That was sandwiched against a second plate covered with a very thin metal coating with a dilute solution of iodine between and placed in the sun.

"A large panel of this stuff, a couple of meters on each side, could produce 5 to 10 watts pretty easily. That's going to charge a battery up pretty fast," Carroll said. \checkmark

Legacy bill will also allow older facilities to benefit from subsidies for burning, primarily black liquor byproducts of pulp processing, and would expand the definition of eligible biomass to include more materials. Now the bill will go to the House.

Meanwhile, **Occupy Seattle** activists protested with a "die in" at **Seattle Steam's** polluting incinerator, which has been granted \$55 million in federal supports to expand operations.

TAKE ACTION!

Want to help get the word out about impacts from biomass incineration? Become an e-distributor of The Biomass Monitor! Email us at thebiomassmonitor@gmail.com for details.