



Wiregrass Activists for Clean Energy

A Chapter of the Blue Ridge Environmental Defense League (BREDL)

"Clean Air does Not Come out of Smoke Stacks!" (Newsletter, Winter 2010-11)

Myths versus Facts about the Proposed Biomass Plant:

MYTH: Biomass is Clean.

FACT: Biomass Is Dirtier Than Coal!

Biomass incinerators produce more pollutants than coal plants. Here an example from Georgia:

	Proposed Coal Plant, Sandersville, GA	Proposed Biomass Plant, Valdosta, GA
Emissions:	PM 0.018 lb / mmbtu	PM 0.025 lb / mmbtu (+ 39%)
	SO ₂ 0.052 lb / mmbtu	SO ₂ 0.090 lb / mmbtu (+ 73%)
	NO _x 0.050 lb / mmbtu	NO _x 0.090 lb / mmbtu (+ 80%)

MYTH: Biomass is "State of the Art".

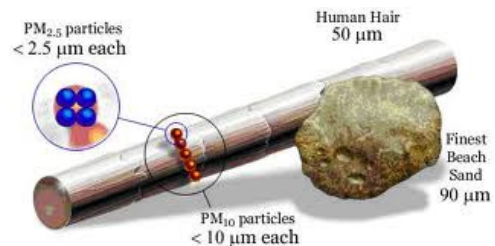
FACT: Wiregrass Avoids Using Best Available Technology!

Wiregrass Biomass LLC avoids best available technology (BACT, MACT) to control air pollution. BACT and MACT would significantly reduce air pollution! Here the example for particulate matter (PM):

	Biomass in Berlin, NH	Wiregrass Biomass Plant in Valdosta, GA
Emissions:	PM 0.010 lb / mmbtu	PM 0.025 lb / mmbtu (+ 150%)

Thus, this "state of the art" leaves the citizens of Lowndes County with the following air pollution:

- 247 tons sulfur dioxide (SO₂) / year
- 247 tons nitrogen oxide (NO_x) / year
- 247 tons carbon monoxide (CO) / year
- 135 tons particulate matter (PM) / year
- 113 tons of PM₁₀ / year
- 87 tons of PM_{2.5} / year
- 60 tons volatile organic compounds / year
- 14 tons of hazardous air pollutants / year



A Comparison of Particle Sizes

MYTH: Biomass Incineration is "Safe".

FACT: Biomass Bears Significant Health Risks!

Increase in risk for cardiovascular diseases (e.g. heart attacks) and mortality with exposure to increased PM_{2.5} levels.

(Robert D. Brook et al., 2010: "Particulate Matter Air Pollution and Cardiovascular Disease", Circulation, Journal of the American Heart Association, pp. 2331-2378)

Total, cardiovascular, and lung cancer mortality rates go up when PM_{2.5} levels rise.

(Francine Laden et al., 2006: "Reduction in Fine Particulate Air Pollution and Mortality", American Journal of Respiratory and Critical Care Medicine, pp. 667-672)

Increased air pollution from the plant (e.g. NO_x, PM_{2.5}) harms children's health, leading to development of new asthma cases and worsening of existing asthma conditions.

(Nino Künzli et al., 2003: "Reviewing the Evidence", American Journal of Public Health, pp. 1494-1499)

MYTH: Biomass is a good investment for our community.

FACT: This is a risky project, fueled by our tax dollars!

Wiregrass Biomass LLC will take advantage of a variety of tax incentives and credits to finance their project. Originally, estimated costs were \$110 million, of which a minimum of \$33 million would come out of the pockets of tax payers. Both these costs as well as the tax money wasted are likely to increase.

The same pattern is repeated throughout the United States, and at a time with record deficits! Thus, this will add up to billions of tax dollars over the next decade for our government and for communities throughout the nation. This is simply fiscally irresponsible, particularly at this time and age.

- a) In an article from October 18, 2010, the Wall Street Journal makes the observation that biomass plants across the country have run into issues with excessive costs, as tax subsidies as well as inexpensive wood supplies run out. As a result, quite a few of them had to shut down.
- b) On November 29, 2010, Xcel Energy Inc. halted plans to build a biomass plant in Ashland, WI, as a result of cost increases for the plant, as well as declining costs for other generation options.

MYTH: Biomass is “Green” and “Safe” for our Environment.

FACT: Biomass Incineration Threatens our Natural Resources!

As more and more biomass plants are proposed for our region and the nation, the pressures on our natural resources become increasingly larger, and biomass itself becomes clearly unsustainable.

On April 27, 2010, the USA Today reported that:

“The one part of the contiguous USA that experienced the most forest loss was the Southeast, a large chunk of which lost more than 10% of its forest cover from 2000 to 2005 ...”

(Doyle Rice, “US losing trees faster than other heavily forested nations”, April 27, 2010, USA Today)

Wiregrass Biomass LLC plans to burn 637,000 tons of wood per year, more than 1 ton of wood per minute! There is not enough “waste wood” to keep the plant running without eventually having to use other fuel sources (e.g. whole trees) particularly if you consider that other plants are proposed for our region.

Examples for this reality can already be found throughout the United States, although these plants first promised to only use “wood waste”: see the McNeal Biomass Plant, VT, and Duke Energy, NC.

MYTH: Biomass is taking care of “waste” and improving air quality.

FACT: Biomass Incineration is Both Wasteful and Poisonous!

- a) Forest ecologists state that there is no such thing as “wood waste”. It adds nutrients to the soil, suppresses the growth of competing vegetation, and provides habitat for flora and fauna.
- b) The idea that a biomass incinerator can be a “health benefit” for the community, because it helps to get rid of “wood waste” that would otherwise be burned in the open, is misleading at best.
 - The amount of such fires does not even compare to an incinerator that burns more than a ton of wood per minute! In any regard, such wood waste could best be turned into valuable mulch, as is done elsewhere.
- c) The question of overfilled landfills is also used as an excuse, but is simply a management problem. Just like “wood waste” does not belong into landfills, and neither do recyclable materials such as glass, metal, paper, plastic, etc.
 - By the way, landfills in Europe capture greenhouse gases such as methane for further use (e.g. for buses providing public transportation)

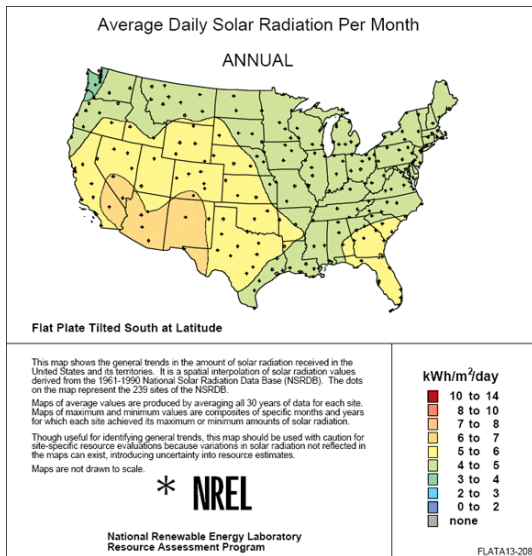
Why would we want to pay with our taxes for a project that threatens our health and reduces real estate values?

The Good News Is: We Have Alternatives for Creating Jobs and Economic Growth, while Keeping our Children and Elderly Safe!

1) The Sierra Club, one of many environmental groups opposed to the burning of biomass (in particular sewage sludge) clearly states:

"[We] believe that energy use should be minimized through conservation and efficiency. In the near future, efficiency is the only "energy source" which does not incur some environmental damage and which is available immediately in generous supply. Sophisticated building construction, efficient appliances, recycling, modernized industrial processes, "smart" buildings that turn off lights and lower the temperature in unused rooms, programmable thermostats, public transit supplemented by fuel-efficient cars, and many other innovative technologies can reduce energy use tremendously, usually while saving money."

2) Georgia ranks 5th in the nation for solar power potentials:



Georgia Power states that:

"Insolation values in Georgia are significant enough to support solar energy systems in our state, with the southern two-thirds of Georgia having equivalent solar insolation values to most of the state of Florida."

Since Lowndes County is already one of the most air polluted counties in the state and nation (80th to 90th percentile), we clearly do not want to see more air pollution added on.

An investment in solar power throughout the community (Wiregrass Solar, residences, schools, office buildings, etc.) and a focus on energy conservation and energy efficiency, would not only protect our health and environment, but also save money and create jobs ... without having to trade the health of our children, neighbors and friends for employment!