



## Burning more wood is for cavemen

By Chris Matera

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We need to get serious about global warming and clean energy, but wood-burning biomass incinerators are a false solution that will worsen our problems, not help solve them.

While the word "biomass" conjures up pleasant images, the promotion of this old caveman incinerator technology as "clean and green" is a colossal "greenwash" by the timber, trash and energy industries attempting to cash in on lucrative public "clean" energy subsidies.

One can become quite cynical to learn that our "green" energy subsidies are being directed to cutting forests and burning them in dirty biomass incinerators instead of promoting genuinely clean energy solutions such as solar, geothermal, appropriately scaled and located wind and hydro and, most importantly, conservation and efficiency.

Here is a biomass reality check:

Contrary to industry claims, biomass energy does not reduce carbon dioxide emissions; it increases them. Wood-burning biomass power production emits 50 percent more CO<sub>2</sub> per unit of energy than coal. That is not a typo, and is based on numbers from the proponents' own reports. Since burning wood is so inefficient, burning living trees is actually worse than burning coal. Brand new electric biomass power plants emit about 3,300 lbs/MWh of carbon dioxide, while existing coal plants emit 2,100 lbs/MWh, existing natural gas plants about 1,300 lbs/MWh and new natural gas plants about 760 lbs/MWh.

Not only is wood burning biomass energy worse than fossil fuels for CO<sub>2</sub> emissions, but it also usually emits higher rates of conventional pollutants such as particulates, CO, NO<sub>x</sub> and VOCs than fossil fuels. The McNeil biomass plant near Burlington, Vt., touted by biomass proponents, is the No. 1 air-pollution source in the entire state of Vermont and emits 79 pollutants. See: [www.planethazard.com](http://www.planethazard.com).

In short, "clean" energy does not come out of a smokestack.

Wood-burning energy production is extremely inefficient. A typical power plant burns at about 23 percent efficiency, so 77 percent of the trees cut go up in smoke, without producing any energy. This means enormous amounts of forest need to be cut to provide tiny amounts of power. This large fuel demand will lead to increased clear-cutting of forests, which even the forestry consultant to the proposed Pownal facility admitted to at the Sept. 25 public meeting.

It is very important to realize that the vast majority of the fuel for the biomass energy would come from living trees, not "waste" wood as pitched to the public. The industry includes trees that they call "junk" or "low grade" in its definition of "waste" simply because they are a species, or have characteristics, that do not provide high commercial market value. However, to the rest of us, and to nature, these are still valuable trees that filter the air and water, sequester carbon, maintain the soil, attract tourists and provide fish and wildlife habitat.

The proposed Pownal facility alone would require nearly 600,000 green tons of wood per year for electricity generation and pellets. This is about 150 percent of the entire public and private annual timber harvest in Massachusetts and yet would produce only about 2 percent more power for Vermont.

Achievable and more economical conservation and efficiency measures could reduce our energy use by 30 percent. "Phantom" loads alone -- for example when our TV is plugged in but not on -- account for 5 percent of our electricity use and could easily be avoided by using power strips.

While making better use of the energy we already have would have the least impacts, the damage is already done with Hydro Quebec, so utilizing this available energy source would have minimal new impacts in comparison to increased cutting and burning of our important forests.

There are also other large biomass-burning proposals in Fairhaven, Ludlow and Springfield, Vt., as well as Pittsfield, Greenfield, Russell and Springfield, Mass., that all have overlapping wood demands which would require cutting forests at more than 300 percent of today's cutting rates and would seriously threaten our forests.

Tourists and recreationists come from around the world and support a lucrative tourism industry in order to visit New England's "Golden Goose" -- our forests, in their glory. They will not come to see them cut down, chipped, burned and belched into the atmosphere in industrial burners.

The reason these biomass incinerators are popping up like mushrooms on a rainy Seattle day is because of the enormous public subsidies being directed their way. A typical incinerator like the one in Pownal is eligible for a \$50 million to \$80 million federal cash grant if it can break ground by Dec. 31, and about \$20 million in annual public subsidies. Imagine all the genuinely clean jobs and energy that could instead be created with that money by installing solar panels and insulating homes. Rather than 25 to 50 or so destructive jobs cutting and burning forests, the \$20 million annual subsidy alone could instead be used to support 400 clean and green jobs at \$50,000 per year.

In summary, at this time of polluted air, global warming, already stressed forests and bankrupt governments, there is no reasonable argument for forcing taxpayers to subsidize the construction of new dirty, carbon-belching, forest-degrading biomass incinerators, for minimal amounts of power that we don't need, just to further enrich already wealthy out-of-state investors.

These policies will lead to increased clear-cutting, air pollution and greenhouse gas emissions while simultaneously draining our public coffers -- the exact opposite of what we need to do right now. "Green" tax-payer subsidies and other incentives should only be directed toward genuinely green technologies that produce clean, non-carbon-emitting energy and local jobs.

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