

## Buckeye Forest Council Biomass Fact Sheet

***Ohio forests are facing a new, terrible threat*** — Driven by state and federal tax subsidies for "renewable" energy, Ohio coal-burning power plants and electric suppliers are setting their sights on burning trees to generate electricity. While other states are currently considering approval of biomass-to-energy plants in the 20-50 megawatt (MW) range, Ohio's Public Utilities Commission (PUCO) is considering permitting power plants in the 100-600 MW range, totaling up to 2100 MW of power



***The scale of potential logging and burning is staggering*** — For the proposed plants to generate 2100 MW from wood, 42 tons would need to be burned every minute or **26,280,000 tons of wood per year**. Wood products, including saw logs and pulp, now involve cutting 2 million tons from Ohio forests. To supply this much wood, all large and medium sized trees from one-tenth of Ohio's public and private forest would need to be harvested each year just for burning. This would obviously be neither sustainable nor renewable.

***What is biomass?*** According to the Ohio Administrative Code (OAC), "biomass" fuels consist of plant-based materials available on a "renewable" basis.<sup>1</sup> Native Ohio forests are of course not renewable in a time frame that will offset the vast amounts of CO<sub>2</sub> released by logging and burning them. Nevertheless, power companies appear to be trying to capitalize on the fact that the OAC states that "tree crops" can, if only in certain instances, fall under its definition of biomass.

***Why are whole trees the likely fuel source for power plant conversions?*** The alkalinity and chlorine content often found in agricultural crops can cause firing problems in plant boilers, such as slagging, fouling and rusting.<sup>2</sup> Bark-free, woody biomass is low in alkalinity and chlorine compared to agricultural biomass and energy crops. Some energy companies in Ohio appear more interested in burning wood than in retrofitting their equipment to better handle agricultural crops. Unfortunately, there are not nearly enough forestry byproducts to fuel these giant burners.

Woody Biomass supporters may say they will only use "logging residues" and "waste wood" as fuel, but that's impossible: the US Forest Service Inventory states that only 550,000 dry tons of forest residues exist in Ohio. Furthermore, at least half of these residues should be left for forest regeneration and for supplying nutrients to the forest web of life.

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<sup>1</sup> O.A.C. 4901:1-40-01(E).

<sup>2</sup> North American Wood Pellet Sector US Forest Service, Forest Service Laboratory 2009.

***Carbon emissions from biomass-burning plants in Ohio will be significant:*** 26.3 million tons of wood per year, when burned, will emit **48 million tons of CO<sub>2</sub>**. This doesn't include fuel transportation emissions, emissions from soil disturbance, and lost soil carbon storage potential. Nonetheless, this figure represents more CO<sub>2</sub> than is generated by three-fourths of the world's nations.

It is important to know that **per unit of power generated, biomass emits up to half again more CO<sub>2</sub> than coal** (as well as high levels of particulates and other toxics). **And this is at a time when we must be reducing emissions rather than subsidizing their increase.**

Even with "sustainable" harvesting (harvesting that isn't repeated until the forest has completely regrown), it takes many decades for mature trees to grow. **Even 25 years after cutting, carbon stocks in a forest are less than half what was there before logging.** Logging also causes large and long-lived CO<sub>2</sub> emissions from soil disturbance,<sup>3</sup> and cutting doesn't have to be frequent before a forest becomes incapable of re-sequestering the amount of carbon that's been released from cutting and soil disturbance.

***Forests in Ohio provide more than carbon storage.*** They provide places to take our families hiking, biking, and camping, and they provide essential ecosystem services, including air and water purification, temperature regulation, soil retention, and biodiversity itself. **Exploiting our forests for biomass threatens all of these.**

**Ratepayers shouldn't pay a premium – as they will to subsidize utility companies' burning of tree biomass – unless the alternative energy is truly green and carbon neutral. Burning our forests is neither!**

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<sup>3</sup> 2008 Center for Biological Diversity's Comments to the California Department of Forestry and Fire Protection re: Timber Harvesting Plan: Swamped (4-08-020-CAL).