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## Georgia ForestWatch Biomass Statement

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Georgia ForestWatch opposes extraction of timber from national forests in Georgia for the purpose of producing biomass energy, and opposes conversion of diverse natural forests to single species plantations for any purpose.

*In furtherance of that position, the organization's board of directors has adopted the following policy:*

**“Georgia ForestWatch opposes whole tree harvesting in the national forests for any purpose because such harvesting is unsustainable and detrimental to forest soil fertility, productivity, and water quality.**

The United States uses 20% of the world's energy, annually serving 5% of global population. (2) According to the Central Intelligence Agency's World Fact Book and the U.S. Energy Information Agency the United States uses around 4,000,000,000 megawatts of electricity per year. Although varying types of wood produce different quantities of energy, generally speaking it takes 13,000 tons of green wood to produce one megawatt of electricity per year. (3)

Given the current yield of forests in Georgia, this would require logging 1,000 acres to produce one megawatt of electricity per year. If America were to generate 10 percent of its electricity by burning wood, this could result in logging 40 million acres per year. This is slightly greater than the total landmass of Georgia. Clearly, burning wood has no primary role in the energy future of America, except for small-scale projects that use existing biomass on site that would otherwise be wasted.

In addition to the effects on soil and water resources and indeed the very existence of our national forests, the use of woody biomass for energy production has other negative effects. Some of these are:

- The most efficient biomass production model would entail plantation-style harvesting systems, involving planting of rapidly growing species (pine, eucalyptus, etc.) and harvesting them every 10 to 20 years, and then replanting and harvesting again. (4) This process is no longer permitted under the current Land and Resource Management Plan for the Chattahoochee-Oconee National Forests. (5)
- Burning of wood for biomass is not “carbon neutral,” and could increase carbon dioxide emissions by as much as 50 percent more than coal on a “per megawatt basis.” (6)
- Biomass energy is inefficient, capturing only about 20-25 percent of the energy in wood. The rest is lost as heat. (7)
- Large-scale development of biomass energy has the potential to destroy forests. So-called “waste wood” is not sufficient to keep biomass plants operational, forcing dramatic

increases in harvesting levels which could include consumption of “whole trees,” not just tree tops and slash. (7)

- Biomass energy pollutes the air. (8)
- Biomass energy could lead to plantation or intensive forestry or over harvesting that would displace valuable and beneficial uses of our national forests, including carbon sequestration, clean water, fish and wildlife habitat and outdoor recreation. (9)

***For further information and sources, see:***

- (1) Minutes, Georgia ForestWatch board of directors meeting, October 19, 2009, as amended March 1, 2010.
- (2) World Population Balance website; Population and Energy Consumption:  
[http://www.worldpopulationbalance.org/population\\_energy](http://www.worldpopulationbalance.org/population_energy)
- (3) Innovative Natural Resource Solutions, 2007. Biomass Availability Analysis Report prepared for the Massachusetts Division of Energy Resources  
<http://www.mass.gov/Eoeea/docs/doer/renewables/biomass/bio-08-02-28-wmass-assess.pdf>
- (4) [http://www.gafw.org/newsletters/2008fall\\_newsletter.pdf](http://www.gafw.org/newsletters/2008fall_newsletter.pdf) (Inquiry into Biomass Utilization for Goods and Energy, by Darren Wolfgang, Georgia ForestWatch Forest Ecologist, Part 1 of 2 and [http://www.gafw.org/newsletters/2009winter\\_newsletter.pdf](http://www.gafw.org/newsletters/2009winter_newsletter.pdf) (Inquiry into Biomass Utilization for Goods and Energy, by Darren Wolfgang, Georgia ForestWatch Forest Ecologist, Part 2 of 2)
- (5) See Land and Resource Management Plan, Chattahoochee-Oconee National Forests, January 15, 2004.
- (6) <http://www.stopspewingcarbon.com/biomass-facts/56-biomass-vs-coal.html> (Stop Spewing Carbon)
- (7) Unpublished 2009 draft fact sheet on biomass, Mollie Matteson, Conservation Advocate, Center for Biological Diversity.
- (8) <http://airpermit.dnr.state.ga.us/gaairpermits/PermitPDF.aspx?id=PDF-OP-18100> Georgia Department of Natural Resources, Environmental Protection Division, Air Protection Branch, Air Quality Permit for Multi-trade Rabun Gap LLC 20 MW power plant, Rabun Gap, Georgia.
- (9) Unpublished Southern Environmental Law Center comments on Notice of Intent to prepare an Environmental Impact Statement for the National Forest System land management planning rules (February 16, 2010), addressing woody biomass and other issues.