



Biomass Thermal Energy Council

1211 Connecticut Ave NW, Suite 600 • Washington, DC 20036-2701
202-596-3974 tel • 202-223-5537 fax • www.biomassthermal.org

Comments on Greenhouse Gas Emissions Associated with Bioenergy and Other Biogenic
Sources

The Environmental Protection Agency
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Prepared by
The Biomass Thermal Energy Council
1211 Connecticut Ave NW, Suite 600
Washington, DC 20036

Opening Remarks

The Biomass Thermal Energy Council (BTEC) and its membership appreciate the opportunity to submit comments on the Environmental Protection Agency's (EPA) call for information on "Greenhouse Gas Emissions Associated with Bioenergy and Other Biogenic Sources Draft Guidance" under the Prevention of Significant Deterioration (PSD) (Docket ID. No: EPA-HQ-OAR-2010-0560). BTEC is a nationwide industry association dedicated to advancing the use of biomass for heat and other thermal energy applications. We represent the views of biomass feedstock producers, fuel refiners, appliance manufacturers, vendors, non-profits, and end users invested in the biomass thermal industry.

Biomass thermal energy is a growing industry. Roughly one million American businesses, citizens, and institutions use sustainable and renewable biomass to meet their space heating, cooling, process heat, or combined heat and power (CHP) needs. Biomass thermal technologies are being chosen over competing fossil fuel sources and other renewable pathways for many reasons, including economic, efficiency, resource management, and environmental benefits. However, EPA—through its PSD action—could revoke one of the primary environmental benefits of biomass fuel: its carbon neutrality.

On June 3, 2010, EPA published its PSD and Title V Greenhouse Gas Tailoring Rule ("Tailoring Rule") that, among other actions, did not take action differentiating biogenic greenhouse gas (GHG) emissions from fossil fuel combustion. Since then, EPA has solicited additional information from biomass stakeholders and experts regarding the treatment of GHG emissions from biogenic sources in comparison to fossil fuels. The Tailoring Rule was designed to guide the regulation and reduction of harmful GHG emissions, a worthy goal that BTEC would readily support if it were not for the uncertain treatment of biogenic emissions.

Supporting Standards

EPA's uncertain treatment of emissions from biogenic sources is in stark contrast to established federal, state, climate framework, and scientific consensus on the renewable nature and carbon neutrality of biomass fuels. Recent actions in these arenas support the position of biomass as an alternative to fossil fuels and a practical solution to reducing GHG emissions.

The federal government has endorsed the carbon benefits of biomass fuel through the Council on Environmental Quality's recent guidance on how federal agencies should report GHG emissions.¹ Numerous biomass supply and grant programs like the Rural Energy for America Program and Biomass Crop Assistance Program are expanding the use of renewable biomass. Furthermore, nearly two months ago, a bipartisan collection of U.S. Representatives presented their support for the continued recognition of biomass carbon neutrality to EPA Administrator Lisa Jackson.² These federal level actions are emblematic of the established treatment of biogenic emissions as distinct from fossil fuel emissions.

Additionally, state governments have recognized the carbon benefit of displacing fossil fuels with renewable biomass. As of September 2010, 29 states plus Washington, DC, and Puerto Rico have enacted Renewable Portfolio Standards (RPS) that drive development and implementation of renewable energy generation.³ Many of these state RPSs explicitly recognize biomass thermal and biomass-fueled combined heat and power (CHP) generation as renewable energy generation technologies that can assist in reaching specific GHG reduction efforts. Categorizing biomass emissions with fossil fuel emissions could undermine confidence and progress of biomass renewable energy development made at the state level.

Biomass carbon neutrality is an important component of several notable climate accounting structures. The Regional Greenhouse Gas Initiative (RGGI), which consists of 10 Northeastern U.S. states, permits CO₂ emissions from eligible biomass to be deducted from a regulated entity's compliance limit.⁴ On the international level, the United Nations Framework Convention on Climate Change (UNFCCC) recognizes the carbon neutrality of biomass, a position that EPA has previously endorsed.⁵ Although state-compacts and international agreements can be superseded by federal authority, RGGI and UNFCCC's explicit recognition of biomass carbon neutrality cannot, nor should be, easily dismissed.

Significant scientific opinion also recognizes the position of biomass carbon neutrality. On July 20, 2010, a collection of over 100 scientists outlined their support for biomass carbon neutrality and the consequences of reversing this established interpretation. Referring to the difference between biogenic emissions and fossil fuel emissions, the letter clearly stated that, "This cycle [of biomass combustion] releases no new carbon dioxide into the atmosphere, which is why it is termed 'carbon neutral'... It is unrelated to the GHG emissions produced from extracting and burning fossil fuels."⁶ Because biomass fuels are often sourced from industrial and forest residues and wastes, they divert these materials from landfills and prevent decomposition and the release of methane, which has a Global Warming Potential (GWP) of 21 times that of CO₂.⁷

¹ Biomass Thermal Energy Council, "Comments on CEQ Draft Guidance," 1 September, 2010, http://biomassthermal.com/pdf/BTEC_CEQ_Carbon_Comments_09.01.2010.pdf.

² Rep. DeFazio, et al., "Letter to EPA Administrator Lisa Jackson," 16 June, 2010, <http://nafoalliance.org/wp-content/uploads/house-letter-tailoring-rule-06-16-10.pdf>.

³ Database of State Incentives for Renewables and Efficiency, "Summary Map – RPS Policies," Sept. 2010, http://www.dsireusa.org/documents/summarymaps/RPS_map.pptx

⁴ Regional Greenhouse Gas Initiative, "Program Summary," Oct. 2007, pg. 2. http://rggi.org/docs/program_summary_10_07.pdf.

⁵ Environmental Protection Agency, "Combined Heat and Power Partnership Catalogue of Technologies: Appendix A," Sept. 2007, pg. 96, http://www.epa.gov/chp/documents/biomass_chp_catalog_part8.pdf

⁶ Bruce Lipke, et al., "Letter to Rep. Henry Waxman," National Association of State Foresters, 20 July, 2010, http://www.safnet.org/documents/biomass_science_letter_HOUSE7-20-10.PDF.

⁷ United Nations Framework Convention on Climate Change, "Table – Global Warming Potentials," pg. 22, http://unfccc.int/ghg_data/items/3825.php.

Combined with regrowth and forest management strategies, biomass fuels can reduce overall GHG emissions.

Although it originally gained visibility for its biomass-to-coal comparison, the Manomet Center for Conservation Science's "Biomass Sustainability and Carbon Policy Study" introduced a new comprehensive framework for accounting for greenhouse gas emissions from biomass energy. This framework—which incorporated complex carbon modeling factors of biomass energy and is included in EPA's docket—raised important questions regarding traditional thinking about the carbon neutrality of biomass energy. In the report, biomass-fueled thermal technologies like CHP were credited for significantly reducing GHG emissions by 25% compared to heating oil within a 40 year window.⁸ However, despite this favorable conclusion, BTEC believes that it is premature to reverse biomass carbon neutrality conclusions based on this new accounting methodology which requires adequate review.

Concluding Remarks

Indeed there are processing, harvesting, and transportation factors that can modify the carbon equation for biomass, and these factors certainly warrant continued research and analysis. However, by essentially equating biomass fuel use with fossil fuels, EPA's Tailoring Rule is upending established state and federal biomass policy.

The consequences of this action are real. Future investment in and adoption of efficient biomass thermal systems and their feedstocks could decrease under burdensome regulatory requirements. The irony of EPA's Tailoring Rule is jarring. Equating biomass emissions with fossil fuel emissions will counteract the very development of renewable energy options necessary to reduce GHG emissions nationwide. BTEC recommends a return to the accepted, established, and consistent federal interpretation of biomass carbon neutrality. Doing so will enable invaluable progress on renewable fuels and thermal conversion technologies that are so desperately needed to address climate concerns, job creation, and economic security.

⁸ Thomas Walker, et al., "Biomass Sustainability and Carbon Policy Study," Manomet Center for Conservation Sciences, June 2010, pg. 7, <http://www.manomet.org/node/322>.