The Honorable Kevin Brady – Chair
The Honorable Mike Thompson – Vice Chair
Energy Tax Reform Working Group
House Committee on Ways & Means
U.S. House of Representatives
Washington, D.C. 20515

Energy Working Group Chair Brady, Vice Chair Thompson and members of the Committee:

On behalf of our more than 40 members across the country, and the over 15,500 employees in the biomass to electricity sector, the Biomass Power Association would like to share with the Committee the industry's perspectives on necessary reforms to the federal tax laws relating to the promotion of renewable energy.

Biomass power is a $1 billion industry that uses wood residue – often materials that would otherwise end up in landfills – to generate electricity. Our industry has more than 100 facilities in 20 states. Biomass plants are predominantly located in rural communities, creating thousands of jobs and producing millions in revenue for small towns. Biomass power is a clean and abundant source of electricity that allows states to pursue even more aggressive goals for increasing their use of renewable energy in the future.

BPA welcomes the Committee's desire to ask hard questions and promote a candid discussion around renewable energy tax reform. That said, the association believes that thoughtful reform of the Internal Revenue Code's energy tax provisions cannot occur absent adoption of a clear set of national energy policy goals. For example, if the Congress determined that the sole objective of national energy policy is to promote the cheapest form of energy as dictated by free market forces, then all forms of energy specific tax credits and deductions (for both fossil and non-fossil derived energy sources) should be eliminated. However, as we all know, objectives other than simply cost must be considered: promoting energy diversity, reducing carbon emissions, elimination of wastes, and, in the case of biomass, the promotion of healthy forests. These benefits will not be realized absent federal government intervention. For that reason, we believe that, unless Congress enacts a regulatory mechanism that places a "price" on carbon, renewable energy tax incentives should continue to play a key role in promoting a diversified mix of renewable energy resources.

As discussed in greater detail below, renewable energy policy should adhere to the following fundamental principles—

1. Renewable electricity tax incentives should be made permanent.

2. The credit rate should be harmonized for all technologies under Section 45.

3. Congress should recognize the value of existing biomass facilities by extending their current credit period from five to ten years.

4. Finally, the Code needs to be modernized to promote the refurbishment of obsolescent facilities and to acknowledge the value of co-firing of biomass with fossil fuels.

The Biomass Industry: At a Glance

The production of electricity and steam from biomass (organic material comprised of forestry debris, so-called "urban wood," and agricultural residues) represents nearly 30% of the nation's non-hydroelectric renewable energy supply. While biomass power has been used by U.S. manufacturers (mainly pulp/paper) for over a century, it was not until 1978 – with the enactment of the federal Public Utility Regulatory Policy Act (PURPA) – that so-called "Independent Power Producers" (IPPs) started developing dedicated, grid-connected open-loop biomass power facilities.

- These facilities are generally small in size—ranging from 10 to 100 MW.
- Open-loop biomass electricity facilities can be found throughout the country (from the Northeast to the Pacific Northwest), they complement many industries (forestry, wood products, pulp and paper) and agricultural sectors (sugar, rice, among others), and are an important rural employer.
- Unlike some other renewable technologies, biomass plants are designed to both solve a local waste problem and promote healthy forests.
- Biomass is the only form of renewable power that pays for its fuel. And it is that rural fuel procurement and transportation infrastructure that both increases the cost of the electricity and also accounts for the significant amount of economic activity and rural employment.
- Unlike intermittent forms of renewable energy, biomass is not just about "green power." It provides numerous benefits to state air resource boards (by avoiding open burning in states like California), federal land managers (by creating markets for residues that contribute to forest fires), and rural communities. And because biomass provides constant electricity independent of weather conditions, it can be used as a substitute for dispatchable natural gas and thus serves as a hedge against commodity risk.

- Historically, biomass has not received benefits proportionate to other Section 45 technologies. Wind energy, that does not provide the baseload attribute of biomass, receives twice the value of the tax credits. The result is that, when biomass competes with wind and other sources in competitive RFPs, biomass typically loses out because of the unequal tax benefits, and state utilities are left with a disproportionate amount of intermittent power at the expense of renewable baseload power. In essence, the Section 45 production tax credit is effectively a wind credit.

Open-Loop Biomass and the Federal Tax Code

The following are some specific problems:

- Tax incentives for generating electricity from open-loop biomass have only been available since 2004, when Congress provided *both existing and new* facilities a production tax credit – but only for a 5-year term and only at 50% of the rate of wind. One year later, Congress lengthened the tax credit period from five years to ten years (for new facilities, while retaining the 5-year period for existing facilities), but retained the 50% credit rate reduction. The credit period for existing facilities expired in 2009, leaving many of the facilities at risk of closure. The PTC placed in service date window for new facilities expires at the end of 2013.

- Because of the short-term nature of Congressional extensions of Section 45, far fewer open-loop biomass facilities have been developed. Intermittent technologies like wind have shorter development schedules, resulting in far more wind being deployed than any other PTC-eligible technology, including biomass. To remedy this, Congress should permanently extend Section 45. Without this permanent extension, the full potential of biomass (and the attendant public economic and environmental benefits) will not be realized. Congress should also extend the PTC for existing facilities for the full 10 years.

- The establishment of different credit amounts within Section 45 favors intermittent sources of power at the expense of baseload power (see attached summary in **Appendix B**). Congress should harmonize the tax credit rates for all eligible technologies so as to make the credit technology neutral.

- The Code needs to be modernized to more unambiguously support the co-firing biomass with fossil fuels, and the co-firing of open-loop and closed-loop biomass feedstocks.

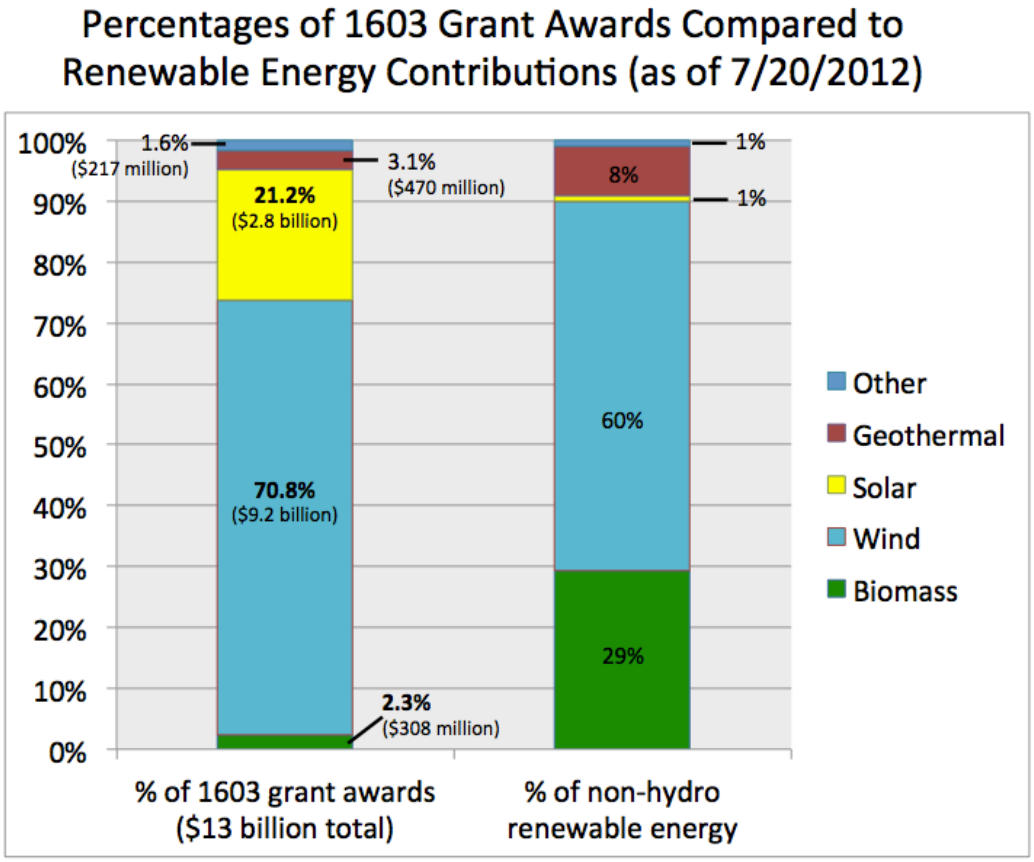
- Finally, the Code should encourage the modernization/refurbishment of older open-loop biomass facilities, and the re-purposing of retired coal facilities to burn open-loop biomass. Developers report that the IRS's traditional rule

used to define new facilities is quirky to apply and should be replaced with a simpler rule such as requiring at least fifty percent of the value of a new project to be attributable to new equipment.

If properly implemented, tax policy can play an important role in the promotion of a diverse renewable energy policy without causing market distortions. We look forward to working with the Committee to reach that goal, and stand by to serve as a resource in your ongoing work.

Appendix A:

The Department of the Treasury's 1603 Grant Program awarded biomass approximately 2% of all grants awarded to renewable technologies – despite its producing nearly 30% of non-hydro renewable power. One of the reasons for this disparity is that it was very difficult for open-loop biomass facility developers to plan and finance prospective new facilities within the begin construction/placed in service date windows.



Appendix B:

The establishment of different credit amounts within Section 45 favors intermittent sources of power (like wind) at the expense of baseload power.

Unequal Tax Treatment

Comparison of Selected Energy Production Tax Credits

	Statutory Credit	*Credit Amount
Cellulosic Ethanol	$1.01 per gallon	$13.29
Biodiesel	$1.00 per gallon	$8.45
Wind	2.1 cents per kwh	$6.15
Geothermal	2.1 cents per kwh	$6.15
Ethanol	$0.45 per gallon	$5.92
Advanced Nuclear Power	1.8 cents per kwh	$5.28
Open Loop Biomass	1 cent per kwh	$2.93

* Credit Amount Stated in Dollars per million British Thermal Units (BTUS) of Heat Energy

Notes:
1. Source is "Tax Expenditures for Energy Production and Conservation," Joint Committee on Taxation, April 21, 2009. (JCT's calculations on the value of electrical production on a BTU basis appear incorrect and due to a mathematical error that we corrected.)
2. Cellulosic ethanol is assumed to be same value as ethanol.
3. 1 Gallon of ethanol = 76,000 Btu's (LHV)
   1 Gallon of biodiesel = 118,296 Btu's (LHV)