



New York
Biomass Energy
Alliance

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SEP Comments
NYSERDA
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Subject: Comments on the Draft New York State Energy Plan

The New York Biomass Energy Alliance is a coalition of businesses, non-profit organizations, research institutions, and individuals engaged in developing and deploying biomass energy technologies across New York State.

We would first like to compliment the authors of this report for producing an extremely clear and well-written document, organized in such a way that it is easy to locate what is being proposed both by objective and by sector. The effort put into the presentation of the plan will certainly contribute to its impact in shaping New York's energy future, as it has to facilitating our review of its analysis and recommendations from the perspectives of our diverse membership.

While we strongly agree with each of the draft energy plan's policy objectives, we note that, in the document's current form, attention given to biomass-based energy options is not in proportion to their potential to contribute to the state's energy goals. Biomass energy can help reduce greenhouse gas emissions, enhance the reliability in the electricity grid, save consumers money (particularly in thermal applications), meet the highest environmental standards with conversion technologies that are already commercially available, and – most importantly – advance the state's energy independence while making use of under-utilized or idle land, forest, and residual biogenic resources.

Our specific suggestions are organized under three of the six major goals laid out in the plan:

PRODUCE, DELIVER, AND USE ENERGY MORE EFFICIENTLY

The draft plan notes that the state already uses 94 TBtu of wood and 3 TBtu of biogenic waste to make energy, and that these numbers could at least triple during the next decade. Much of the wood is being used for residential heating, where it replaces fuel oil in a state which, by a wide margin, is the largest consumer of home heating oil in the nation. Many of the existing furnaces used to burn wood (approximately 1 million cords in "stick wood" form alone) are relatively inefficient from an energy conversion perspective. Fortunately, superior combustion technology is already available, with the chief

barrier to replacing the “clunkers” now in use being the initial investment by the homeowner or small business owner in a clean, efficient burner.

Recommendations:

- Expand funding for research, development, and manufacturing of improved appliances for residential, agricultural, and small industrial customers that convert wood, grass, and other forms of biomass at efficiency levels comparable to those already achieved in the highly-developed European thermal biomass market.
- Offer state tax credits and other targeted incentives for the deployment of clean-burning, efficient biomass furnaces in residential, agricultural, commercial and industrial settings.

There appears to be a preference for solar and wind energy in much of the State’s energy planning. While these are certainly attractive options from a number of angles, both fail the test of dispatchability, which is important from the perspective of maintaining a reliable power grid. The Northeast is dotted with idle or decommissioned peak power facilities that are already connected to the grid and could be utilized to balance demand in ways that are not possible with wind and PV power. Locally produced agricultural and forest biomass and the biogenic portion of the State’s enormous solid waste stream could meet a much larger share of peak power needs in an policy environment supportive of biomass-based power generation.

Recommendation:

- Provide positive incentives for construction, conversion, and repowering of electricity generation facilities to utilize biomass for some or all of their fuel requirements.

SUPPORT DEVELOPMENT OF IN-STATE ENERGY SUPPLIES

Nowhere in the report does the draft plan explicitly acknowledge the state’s generous endowment of private forest land and idle farm land as a potential source of renewable energy, though it does mention the ongoing effort to evaluate those resources through the state Biofuels Road Map exercise. We anticipate that the Roadmap will provide a useful perspective on the potential for expanding biofuels, as well as thoughtful estimates of how much biomass may be available under various assumptions. However, we are distressed that, two years after this effort was launched, New York State seems to have its investment in bioenergy largely on hold, with the need to complete this particular analysis given as the reason for inaction. While this delay may be justified in relation to the transportation fuels that are the main focus of the Roadmap analysis, liquid fuels represent only one of a wide range of ways that biomass can supply energy. Meanwhile we see the development of cutting edge biomass energy systems in Tennessee, Pennsylvania, Kansas, Georgia and Florida, to name a few states, with hundreds of millions of federal dollars flowing to these projects in no small part because of support, funding and encouragement for biomass energy development received from their respective state governments.

In contrast, since making an initial investment in two pilot cellulosic ethanol projects, policymakers in New York appears to have been mesmerized by concerns about the long-term viability of one corner of the bioenergy sphere – the production of ethanol from corn – to the detriment of all of the other biomass energy options on the table. Anyone who has tracked the almost daily announcements of bioenergy grants from the Federal Departments of Energy and Agriculture over the past six months is painfully aware of how rarely a New York project or firm shows up on the list of grant recipients. Biomass-based technologies being developed by New York scientists and entrepreneurs frequently see their first commercial-scale application outside New York State. The New York State permitting process may be part of the problem, but the lack of a policy environment that treats relatively inexpensive biomass-based energy options (e.g. co-firing for electricity generation, power from biogenic residual materials) less favorably than more expensive alternatives is also a concern.

In this regard, we note that the vast majority of public resources spent through the Main Tier of the RPS have gone to wind energy. This is reportedly the least expensive way to purchase renewable attributes, and it has made New York a leader in wind development. However, as the interim report on the RPS pointed out last March, an allocation formula that gave a higher priority to economic development impacts would lend a greater balance to the state’s renewable energy development. In particular, it would give a wider opportunity for biomass energy because it offers more long-term local economic impact than wind turbines, which are generally installed by out-of-state construction crews from components heretofore largely manufactured overseas, and which do not require significant amounts of local labor and locally-produced inputs to continue operating.

Almost every mention of bioenergy in the draft plan places the phrase “sustainably produced and harvested” in front of the word biomass. Everyone working in the biomass energy field recognizes that not every field should be growing switchgrass and that wood harvesting needs to be carried on with a view to the long-term health of the forest resource. We would assume that those who develop hydropower are aware that they cannot tap any water resource they find without regard to impact on stream flow and the riparian ecology, and that those developing wind understand the need to deal with siting issues. Yet we do not invariably append the phrase “appropriately sited” or “adequately evaluated” before every reference to hydropower and wind. It would appear that there is some inherent skepticism about bioenergy threaded through the plan’s consideration of renewable energy alternatives.

The fact is that there is a large body of knowledge of sustainable land and forest management, already incorporated into current industry best-practices and government regulations in both the agricultural and forestry sectors. The planting of new grass species and the development of new uses for wood pulp and forest wood residues are not “game changers” from the point of view of resource management – the players are the same, and the underlying regulatory structure and environmental protection rules are unchanged. While there is certainly a need to continue to review and improve the State’s land and forest management practices and guidelines, it is absurd to assume that development of new markets for biomass will suddenly create a reversion to the land and forest management practices of the early 19th century.

Recommendations:

- Revise the RPS evaluation formula, giving sufficient weight to local economic impacts that innovative biomass-based power projects have a reasonable opportunity to compete with other renewables.
- Establish ambitious targets for the development of biomass in the areas of thermal energy and power generation in addition to those being developed for transportation fuels in the biofuels Roadmap. Once the Roadmap has been completed and there has been a suitable opportunity for public comment on its conclusions, establish targets and put policies in place to support the development of bio-based transportation fuels as well.
- Address the question of “sustainability” by encouraging local governments to follow consistent, State-promulgated guidelines in determining what are environmentally sound forest harvest and agricultural practices, rather than attempting to address these issues either top down through energy policy, or bottom up through a patchwork of local codes and regulations.
- Encourage government agencies to explore biomass energy as a source of distributed heat in such facilities as colleges, government building complexes and prisons, and to utilize biomass boilers to heat smaller government facilities.

ENGAGE OTHERS IN ACHIEVING THE STATE’S POLICY OBJECTIVES

An existing recommendation suggests the expansion of “Climate Smart Communities” as a way to meet the State’s renewable energy goals. The current Climate Smart Communities guide says next to nothing about biomass energy development, although small- and medium-scale biomass energy projects can contribute more to long-term economic development, open land protection, and energy self-sufficiency goals than any other type of renewable energy investment.

Recommendation:

- Expand the Climate Smart Communities guide to include thorough treatment of biomass energy as an opportunity for communities to increase their energy self-sufficiency, reduce dependence on fossil fuels, and expand income and employment in their local forestry, agricultural, and transportation sectors.