

# Massachusetts Environmental Energy Alliance

May 8th, 2009

The Honorable Edward Markey  
2108 Rayburn House Office Building  
Washington, D.C. 20515

The Honorable Henry Waxman  
2204 Rayburn House Office Building  
Washington, D.C. 20515

Dear Congressman Markey and Congressman Waxman:

There is much to commend in the Clean Energy legislation now being considered, and we congratulate you for your bold and comprehensive effort. Nevertheless, we must urgently draw your attention to a seemingly small issue which if not addressed, could very likely open the door to massive exploitation of native forests such as has not occurred since the 19<sup>th</sup> century. We speak of the granting of renewable energy credits to woody biomass burning for energy generation.

It is widely recognized that international biomass burning represents one of the major sources of greenhouse gasses in the atmosphere. Similarly, burning trees for energy generation here in the US is not carbon neutral on a timescale meaningful to addressing climate change. Cutting and burning trees from native forests, as is already occurring on our private and state-held lands, provides a pulse of carbon emissions that will not be re-sequestered until the full amount of biomass represented by those trees is re-grown (including belowground biomass, which typically equals about 30% of aboveground biomass). For Northeastern forests, it will take on average 75 – 100 years following cutting for carbon sequestration to equal that of extant forests. Far from being carbon sinks, forests populated by saplings actually represent carbon sources for a number of years following disturbance by logging, and it is decades before a young growing forest approaches the carbon sequestration capacity of a mature undisturbed forest.

Scientists tell us we only have a few years – not even a decade – in which to reduce our greenhouse gas emissions. We can not wait 75 years for the carbon released by biomass burning to be re-sequestered, and we can not tolerate the massive increases in forest cutting and disturbance that will occur if large-scale biomass plants are incentivized and built. Numbers from a Massachusetts report on biomass availability show that over 11,000 acres will have to be heavily cut each year to supply wood for just one 50-megawatt (MW) plant – and there are plans for four large plants in the western part of Massachusetts alone, three of which are in the permitting process. We note that the Clean Energy bill dictates that new coal plants permitted after 2009 will have emissions capped at 1,100 pounds per MW-hour, and contrast this with a typical 50-MW biomass plant,

which emits nearly 3,000 pounds of carbon dioxide per MW-hour – all of this carbon dioxide “invisible” to the regulatory process and in fact rewarded with the granting of renewable energy credits.

The protections included in Clean Energy Act against the use of old growth and mature forests for biomass fuel demonstrate your awareness of the importance of native forest preservation, and we thank you for them. Nonetheless, we fear these measures will not survive the legislative process, and if they do, that they will not be sufficient to protect forests from exploitation. Here in Massachusetts logging occurs for commercial timber extraction, firewood, and also under the rubric of “forest health”. Wood not desired for lumber use is labeled “forestry residue”, which is now being defined by biomass developers as including not only the material typically left in the forest after a logging operation, but also “undesirable, diseased, or invasive species cut as part of timber stand improvement”, a definition that leaves the door open to using almost any tree for fuel. Existing biomass plants in Massachusetts already burn whole trees and proposed plants have whole tree burning provisions written into their permitting documents. There is no doubt that large-scale biomass development will cause trees to be cut that would not otherwise be cut.

We propose two provisions to address this potential disaster for forests. First, subject biomass burning for energy generation to the same kind of life-cycle scrutiny that transportation biofuels receive under the Clean Energy bill, so that all emissions associated with biomass harvest, transport, and ecosystem disturbance are taken into account. Second, require that the assumption of carbon neutrality of biomass be qualified to more rigorously reflect the time required to re-sequester carbon released by burning, and use this ranking to modify the degree to which biomass is incentivized. This very reasonable provision would provide a second line of defense against exploitation of mature native forests if other forest protection provisions in the bill are weakened or subverted. Under such accounting, agricultural residues that are generated on a yearly basis would look relatively carbon-neutral; trees grown in plantations with harvest cycles of a few years would be somewhat less so; and harvest and burning of mature trees in native forests would be acknowledged as not only representing a net source of atmospheric carbon dioxide over a decadal timeframe, but also as degrading the vital carbon sequestration function that native forests provide.

It would be a profound irony if passage of the Clean Energy Act came to be seen as the turning point when cutting and burning of native forests for energy generation became widespread, thus not only increasing atmospheric carbon dioxide levels, but degrading forests’ ability to withstand climate change impacts just when their carbon-absorbing, water purifying, and habitat-providing functions are most vitally needed. Please consider inserting these common sense and practical suggestions into the bill to allow “clean” energy development to acknowledge the real consequences of forest biomass burning for energy generation.

Sincerely,

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