

Suggested Reframing of the Scope of the Biomass Task Group

Foundational Statement: There are many pieces of information that are necessary in order to learn, and have a common basis for potential policy paths. This information should be gathered, shared, and understood first, before debating or making judgments on potential policies. The Task Group should develop the list of questions necessary that need to be answered and develop the work plan as to how they might go about answering them.

Working Definition: The term “biomass” means material from trees, woody plants, or grasses, including limbs, tops, needles, leaves, and other woody parts, grown in a forest, woodland, farm, rangeland, or wildland-urban environment that is the product of forest management, land clearing, ecosystem restoration, or hazardous fuel reduction treatment (from Biomass Energy Developing Working Group, Final Report, Vermont Legislative Council, January 2012)

For Discussion: Highlighted **Red** = Delete based on Priority Recommendations in CAP
 Highlighted **Yellow** = Within scope for Life-cycle Analysis Task Group
 Highlighted **Blue** = Within scope of Biomass Task Group

Comments to Consider as you review proposal:

- Clean Heat Standard is a primary policy recommendation in the CAP and includes wood heat as a clean heat measure. In addition, if the CHS passes this session, the CHS Technical Advisory Group will evaluate the life-cycle GHG benefits of biomass heat along with issues of sustainability.
- The PUC’s North Springfield decision may be relevant here as well and we should review it as a group.
- Constitutional issues may likely prevent us from excluding wood from other states as we consider procurement.
- Development of considerations for management practices is in scope and should be discussed. However, at present, the biomass task group doesn’t include anyone with expertise in pellet production, so it’s unclear what the impacts of these proposals are. In addition, management practices would likely include more than pellets for consideration.

Tabled Actions

1. **Address the use of biomass for appropriately scaled institutional and residential thermal heat generation** for climate mitigation, co-benefits, and impacts while **preventing the expansion of biomass for industrial-scale commercial electricity production.**
 - a. Prohibit the expansion of current, and/or construction of any new, large-scale, industrial electric generation biomass facilities in the State of Vermont. Existing facilities shall:
 - a. Set GHG emissions reduction targets, to be incorporated into operations license(s).
 - b. Remediate negative impacts to surrounding communities, cultural/historical/archeological sites and/or resources, and to the State of the Vermont's residents, air quality, and natural resources.
 - c. Source material from within the state of Vermont, ensuring appropriate oversight of harvest activities for all wood products procured for use.
 - d. If such facilities operations cannot be sufficiently improved to address the above, then the facilities be closed should and job transition assistance provided to employees.
 - e. Expansion is defined as an increase in the physical footprint, emissions, or any increased impact on adjacent communities and natural and cultural resources. Improvements without expansion may include changes that result in increased efficiency with no increase in footprint, reductions in GHG emissions, other air pollutants or impacts to the community.
 - b. Utilize existing research (*such as Buchholz, T., Gunn, J.S. and Saah, D.S., 2017. Greenhouse gas emissions of local wood pellet heat from northeastern US forests. Energy, 141, pp.483-491*) to inform if and under what conditions biomass in institutional or residential applications for thermal or combined heat/power applications could provide for a transition away from fossil fuel use, reduce GHG emissions, and have not net impact on Vermont's forests for storage and sequestration.
 - c. The following GHG impacts should be accounted for when developing policy and/or associated regulations for biomass:

- a. all greenhouse gas emissions associated with producing the fuel (including extraction or harvesting, manufacturing, or processing, transportation)
 - b. greenhouse gases emitted by the fuel when used
 - c. efficiency of the heat generation system being used
 - d. carbon stocks in the forest
- d. The following considerations should be accounted for if permitting any new pellet producing facility(s) in the state:
- a. Pellet production must be from combined sawmill residue (i.e., sawdust) or other byproducts of forest product manufacturing (i.e., cants, bark, etc.) and biomass—generally produced as a byproduct of harvesting associated forest products. Sourcing criteria should be established restricting biomass to a maximum percentage that is effectively monitored and enforced [*see Buchholz, Gunn, Saah in Energy, December 2017*].
 - b. Monitoring and enforcement must ensure that harvest levels are maintained, with no net increase resulting in an increased demand for pellet fiber (increased demand in pellet fiber is offset by reductions in other markets); shifting existing harvest of pulpwood volume to pellets. Procurement standards ensuring sustainable forest management which protect ecosystem integrity should be developed, applied, and monitored
- e. Regulate, including preventing, if necessary, flow of wood pellets or similar commercial scale wood-derived energy products based on research in “b” above to ensure sustainable harvesting of “net GHG-reducing” pellets (i.e., composition, source wood, etc.).
- f. In addition, develop a program of education and outreach, as well as technical assistance, to encourage appropriate methods and practices when using wood heat, while also ensuring oversight and regulation of those appropriate methods and practices.