

Meeting Minutes
Wednesday, July 26, 2023

Carbon Life-Cycle Analysis (CLCA)
House Bill (HB) 2026
Virginia Department of Forestry (DOF) Board Room

Stakeholder in Attendance: Rob Farrell (DOF); Ron Jenkins (VA Loggers); David Carr (SELC); Martha Moore (VAFB); Corey Conners (VA Forestry); Kyle Shreve (VFA/Advantus Strategies); Nikki Rovner (TNC); Judy Dunscomb (TNC); Leslie Mosley (VFPA); Ember Jenison (DOF); Jennifer Leach (DOF)

Others in Attendance: Brad Coppenhaver, Virginia AgriBusiness Council

Stakeholder Representative Virtual Attendees: Tom Ballou (DEQ); Brent Hughes (DOE); Larry Corkey (DOE); Terry Lasher (DOF); Mike Davis (NOVEC); Liz Willoughby (Dominion Energy); Ed Cronin (DOE)

Other Virtual Attendees: Teri Ramey (DOF COVES Fellow); Puneet Dwivedi, Univ. of Georgia (Speaker)

The meeting convened at 9:00 AM and adjourned at 12:00 PM

• **Welcome and Review of Agenda**

Rob Farrell (State Forester, DOF) welcomed the stakeholders back for the second Carbon Life-Cycle Analysis (CLCA) meeting. He let everyone in attendance introduce themselves and gave opening remarks and reviewed the agenda; he then opened the floor up for concerns or additions to the agenda.

Initial Meeting Content and Outcomes

Members raised the questions as to whether the focus is on life-cycle analysis (LCA) or best management practices (BMPs) and what the BMPs cover as sustainable harvesting of biomass. State Forester, Rob Farrell, stated the focus is on the LCA and BMPs and the LCA is intended to support the BMPs. A member stated that what was discussed in the session and what HB2026-A1 defines sustainable harvesting of biomass is “forest-related materials including mill residues, logging residues, forest thinnings, slash, brush, low-commercial value materials or undesirable species, and woody material harvested for the purpose of forest fire fuel reduction or forest health and watershed improvement”. It includes mill residuals as well. You can harvest a whole tree if it is taken out because there is something wrong with it for forest health of thinning, under those circumstances, that is up to the forester and this group as to what those circumstances are.

Rob Farrell, indicated to the group that he had visited five loggers on site with the Virginia Loggers Association (VLA) and saw five different timber harvesting operations. They discussed what material goes to the biomass plants and what conceivably might happen to that material if it did not go to one of the Dominion biomass plants. Rob and VLA discussed surveying specific loggers that supply Dominion biomass plants to find out what type of timber harvests they do, and what proportion of the biomass they send to Dominion comes from each type of timber harvest. There are five categories of harvesting: pine clear cut; pine thinning; hardwood clearcut; hardwood thinning; hardwood stand with no market value but for biomass or pulpwood, Virginia pine, native pine. Rob and VLA talked about sending a survey to the mills that currently provide Dominion with biomass materials. This survey will tell the group what proportion of the material comes from the various harvests. This outreach is currently being pursued:

- ♦ Loggers are providing a list they think are the main suppliers to Dominion.
- ♦ Create a simple survey of what type of harvests generate material is sent to Dominion.
- ♦ The survey will not capture the income stream and the differential to the landowner. The group will have to determine how to incorporate this into the LCA and BMPs.
- ♦ The stakeholders can look at the survey before it goes out if they would like.
- ♦ State Forester, Rob Farrell, will send out a letter, recognizing the VLA, along with the survey to the list of loggers provided.

A member raised the question as to why the CLCA and the groups conversations continue to be focused on Dominion plants because the CLCA is asking for all carbon emissions and there are more biomass resources in the state that are generating electricity. Rob Farrell indicated this would be one of the questions the group would have to work out. A member also raised concerns of whether or not loggers who are contracted to do procurement for Dominion, or anybody, are able to share such information or if that is proprietary. Rob said that they had that discussion with the loggers, and this is information the loggers feel comfortable sharing.

- **Virtual Presentation:** *Life Cycle of Wood-based Bioenergy Products & Services*
Puneet Dwivedi, Ph.D., Associate Professor (Sustainability Sciences), Warnell School of Forestry and Natural Resources, University of Georgia

Open Discussion

Rob proposed that the groups' objective is to look at the carbon emissions difference that results from the legislation specifically. HB 2026 and the corresponding Senate bill, based on their passage, there will be some change in carbon emissions and this analysis/assessment is to measure/estimate what that change would be. What is being looked at is whatever changes result from the legislation. The difference in the carbon emissions based on those changes is what the group is assessing/analyzing.

- ♦ Biomass is now included in the renewable energy portfolio standard (RPS) in a greater scale in terms of what is able to qualify and be utilized.
- ♦ BMPs are not voluntary, they are required, and companies have to comply in order to get Renewable Energy Credits (RECs).
- ♦ Group has to come up with the best LCA in time to incorporate them into the BMP by December 1st.

A member stated the big change in the statute is that biomass plants will get Tier 1 RECs under the Virginia Clean Economy Act. Before Dominion was projecting even without the Clean Economy Act that these plants would go offline. Dominion's IRP now is saying that these Dominion plants will continue throughout the term of their IRP. So, the RECs are providing a subsidy or incentive for Dominion to continue running these plants. If Dominion wants to RECs, they have to comply with the BMP.

Rob suggested that the group was now talking about the scope and the key difference with or without this legislation is the three Dominion plants. The core difference is with or without the specific legislation; however, there are other related factors, and the group needs to figure out how to identify how far out to go.

One member suggested the group follow clause three of the bill "...best management practices for the sustainable harvesting of biomass... the best management practices shall include a life-cycle carbon analysis...". The focus is and should be limited to sustainable harvesting of biomass and the life-cycle analysis that is included here. Another member thought one of the things in that description is "foregone sequestration". That is pretty broad and those were the two words that he keyed in on that gives the group some flexibility to debate this, whether it is within or limited or maybe larger scope.

Rob said in the third clause it states "...for biomass-fired electric generating units that are subject to the provisions of...", and asked which facilities is that? A member stated it is the Dominion plants as the West Rock plant was already getting RECs under the Clean Economy Act. The change is that the Dominion plants are now getting addressed. The big change is the Dominion plants are going to get RECs.

A member asked what is the net effect of the life cycle analysis that the group is doing other than the fact that it is in the legislation? Rob said it is to inform the best management practices related to biomass harvest.

{DID NOT COVER THIS PORTION OF THE AGENDA}

- **Opening Discussion of Scenarios** – questions to be answered
 - ♦ With H 2026 versus Without H 2026
 - ♦ Significant differences included in legislation that need to be accounted for
 - ♦ Annual accounting
 - ♦ Duration / End date for analysis
 - ♦ Significant milestones

Opening Discussion of BMPs for the Sustainable Harvesting of Biomass:

- ♦ What elements would be addressed?

Discussion was brought up about water quality being included in BMPs. A member thought the group was focused on CO2 emissions but asked if BMPs would address water quality, forest health, forest value chain, loss of forest limit, or if the focus is really just about the carbon impacts. Rob does not think the group is limited to the carbon impacts. It is sustainable harvesting of biomass, so sustainable is a pretty big umbrella.

Rob described to the group the five harvesting categories from the loggers he visited. Some part of these trees or this stand was being harvested because of other, more valuable markets. These materials had no value in those other markets, and they were going to Dominion because they had no other home. The five categories are: 1) *Pine plantation clear cut*: the vast majority of a pine trunk has value. They grow really small, saw timber, chip and saw, pulpwood gets most of a plantation planted pine tree somewhere. A really small amount comes out for biomass and that is the very smallest tops and the limbs. It is a very small amount of material that comes off each acre that gets into the chipper from a pine plantation clearcut; 2) *A pine plantation thinning*: some of that material goes to chip and saw, which is you make a board out of the middle, and you chip up the rest and it goes to pulpwood. The majority of it goes to pulpwood, which is turned into fiber, and the limbs and the smallest tops go into the chip truck. Material that these trees were going to be thinned out of the forest as part of the thinning rotation, the leftovers go to Dominion. 3) *Hardwood clear cut*: nicest trunks go to saw timber, less nice trunks go to pallets, other smaller, less low-quality hardwood, but sawed uses. Material that you cannot make a board out of go to hardwood pulpwood. What you cannot pick up very well and put on the pulpwood truck gets chipped up and goes to Dominion. There may be hardwood in wood for chipping. 4) *Hardwood thinnings*: same thing, it is just less wood coming out of the forest. So, you have less biomass. 5) *Last category*: hardwood stand that has been high graded multiple times in its life and there is no market value left in the stand except for Dominion Energy, and the bulk of that stand, what could not go to hardwood pulpwood would go to energy chips. We also have some native pine stands remaining, old field Virginia pine stands again. Virginia pine Less efficient to utilize for saw, timber and even for chips, so more of a native pine stand would go to Dominion Energy. It would also have a lot more undesirable hardwoods mixed in it, and that would go into wood chips. There are some stands that probably would not be harvested if it were not for the Dominion biomass power plants. Everything that is going to the Dominion biomass power plants has no other use within our current markets.

Rob sees the BMPs continuing to utilize this material that would otherwise be cut and left on site, and we identify some sites that we would not cut the material from to utilize for biomass. The concern there is if we did not cut this stuff and use it for biomass, it would have no value to the landowner and that land would be at an extreme risk for conversion or, the stand would be a degradation, decadent stand, and at some risk of fire. But also, these stands are going to, decline sequestration will slow significantly and then they will be storing carbon as long as they live.

Rob thinks the group can find studies that others have done that will say what proportion of harvest residuals go in the air and what proportion of it, if you left everything, some proportion of it would go back into the ground. Not all of it would escape into the atmosphere and what the group needs to think about and figure out is if we did not take it to Dominion and left it on site, the vast majority of it would get into the atmosphere somehow.

One member mention there is no biomass market in Southwest Virginia for the Dominion plants and the group could possibly scale down the scope and any BMPs created and to be mindful of the area that makes sense around the radius of the Dominion plants. The market in Southwest Virginia is biochar and the member is concerned that the BMPs could restrict this market if the group starts putting limitations on the amount of material that is able to be removed from a logging operation, even though it is not going to a biomass plant. The group needs to make sure that power generation stays the priority and not necessarily other biomass opportunities. Rob thinks the members concern would be taken care of because the BMPs would be for someone who wants to sell RECs; however, someone who does not want to sell RECs would not have to comply with these BMPs.

A couple of members indicated there are some examples of BMPs of leaving course woody debris on site and guidelines on carbon and wildlife impacts. These members will be sharing some links with the group.

Rob brought up the discussion of qualitative versus quantitative again and asked if anyone had any other thoughts on what the group could do for BMPs or sustainability of biomass harvesting without paying someone to do in depth calculations.

- ♦ Proposing the group do some qualitative work to generate the BMPs which guides logging. That would give the group a year to do the real quantitative assessment.
- ♦ Proposing the group do a higher-level life cycle analysis utilizing accessible information. If another group has done an LCA that looks at biomass coming out of a pine clear cut in the eastern U.S. Piedmont, the information may serve the groups purposes for the meantime.

Rob's next steps:

- ♦ Get with appropriate folks at Dominion to request information.
- ♦ Create logger survey to have a better handle on where the woods residuals are coming from.

Closing Remarks

Rob requested each of the stakeholder organizations to come back to the next meeting or share beforehand, what they believe are the changes that result from HP 2026.

Ember Jenison will create a Teams Group that everyone will have access to and will be able to share documents.

Meeting adjourned