Save the Sound®
Action for our region's environment.

Comments of Save the Sound

In response to

Notice of Opportunity for Public Comment and Public Meeting Regarding Accounting for Greenhouse Gas Emissions from the Consumption of Electricity

November 24, 2021

Introduction

Save the sound is pleased to have the opportunity to submit these comments in response to the *Notice of Opportunity for Public Comment and Public Meeting Regarding Accounting for Greenhouse Gas Emissions from the Consumption of Electricity* (Notice) issued by the Connecticut Department of Energy and Environmental Protection (DEEP) on October 7, 2020 and revised on November 9, 2021. In that Notice. DEEP proposed changes to the accounting methodology it currently employs to inform its regularly published Connecticut Greenhouse Gas Inventory (Inventory).

Following a 2016 recommendation by the Governor's Council on Climate Change (GC3), DEEP began providing consumption-based greenhouse gas (GHG) emissions for the electricity sector, in addition to the generation-based GHG emissions provided in prior Inventory reports.[1] As set forth in the Notice, DEEP proposes the following updated methodology to its GHG accounting:

1. Credit Connecticut with electricity from RECs retired in Connecticut and count associated non-biogenic emissions against Connecticut's GWSA targets.
2. Using appropriate emission factors, determine the carbon dioxide equivalent (CO2e) from electricity generated from all non-biogenic fuels consumed within the ISO-NE region and from electricity imported into ISO-NE.
3. Determine the CO2e associated with emission of methane (CH4) and nitrous oxide (N2O) associated with biogenic fuels used to generate electricity and add this to the regional total, in line with international protocols.

[1] Notice of Opportunity for Public Comment and Public Meeting Regarding Accounting for Greenhouse Gas Emissions from the Consumption of Electricity (October 7, 2021).

4. Determine CO2e emissions associated with RECs retired in Connecticut and subtract the emissions and electricity from the ISO-NE regional mix.
5. Credit Connecticut with its share of electricity and associated environmental attributes generated at the Millstone facility.
6. For Connecticut's remaining electricity consumption, determine the associated emissions via a calculated regional emission factor.

Proposed Greenhouse Gas Accounting Methodologies

At the outset we note that the appropriateness of a given greenhouse accounting methodology must be judged on both the integrity of the accounting method and the policy goals supporting its use.

We recognize the merit in attributing emissions associated with Renewable Energy Credits (RECs) to the individual states in which such RECs are retired, in addition to attributing the electricity provided by such REC generating projects to the state's electricity load. This methodology should, in theory, provide additional incentives for state-level investment in renewable energy technologies as the states making the investments to support clean energy will also be deriving the emissions credit for such investments.

As noted in the proposal, however, as a result of crediting REC emissions directly to an individual state, those emissions would need to then be subtracted from the regional ISO-NE emissions mix when calculating the emissions associated with imported electricity. This would result in a higher regional emissions factor attributable to imported electricity. If this methodology is not followed by all of the states in the ISO-NE generation region it would result in inconsistent inventories and the double-counting of emissions benefits from RECs being attributed to both the Connecticut and regional emissions profiles. We recommend that efforts be made to coordinate and harmonize the GHG accounting methodologies of all of the states in the IS0-NE region in order to incentivize additional investment in renewable energy sources and to avoid the unintended consequences of double-counting emissions credits.

Treatment of Biomass as a Carbon Neutral Generation Resource

With respect to biomass, we question the assumptions behind the proposal to count biomass as a "zero carbon" resource. We believe that this approach is scientifically unfounded and is contrary to our greenhouse gas reduction goals, as well as the complementary clean air policies of the state of the Connecticut. Accordingly, we recommend that biomass not be treated as a carbon neutral generation resource, and that the actual emissions from biomass facilities be accounted for in both our state-level greenhouse gas inventory and the regional emissions factor.

The carbon neutrality of using biomass as an energy source is disputed by scientists.[2] Burning biomass for energy releases large amounts of carbon into the atmosphere very quickly.[3] While that carbon may eventually be absorbed by trees, "forests can take decades or even a century to draw the same amount of carbon back out of the air."[4] This creates an imbalance in the carbon cycle, resulting in a net increase in carbon emissions.[5] While, as noted by DEEP, many jurisdictions do currently treat biomass as a carbon-neutral energy resource,[6] that approach threatens to add to overall emissions, with potentially catastrophic results for greenhouse gas reduction efforts.[7]

Treating biomass as a "zero carbon" resource is also contrary to Connecticut's policy to reduce our reliance on biomass.[8] Treating biomass as carbon neutral will encourage the use of more biomass resources at the same time that Connecticut is attempting to phase-down the inclusion of biomass within our Renewable Portfolio Standard (RPS).[9] Despite Connecticut's current policy to phase-down the value of biomass RECs within the RPS, biomass still represents a larger share of Connecticut-retired RECs than any other Class I technology.[10]

Continued reliance on biomass will result in poor air quality and adverse public health outcomes, particularly for overburdened and vulnerable communities. Greenhouse gas emission reduction strategies from the electric sector must be harmonized with other important policy objectives, such as lowering in-state air emissions and protecting public health.[11] Burning biomass results in emissions of harmful air pollution which disproportionately impacts vulnerable communities. "Burning biomass fuel also releases toxins and particulates damaging to public health. . . . Biomass facilities are often located in close proximity to vulnerable populations

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[2] Chelsea Harvey and Niina Heikkinen, "Congress Says Biomass Is Carbon-Neutral, but Scientists Disagree", E&E News (March 23, 2018). https://www.scientificamerican.com/article/congress-says-biomass-is-carbon-neutral-but-scientists-disagree/

[3] Id; Governor's Council on Climate Change, Natural and Working Lands Working Group, Forests Sub-Group Final Report at 2 (November 6, 2020). https://portal.ct.gov/-/media/DEEP/climatechange/GC3/GC3-working-group-reports/GC3_WNL_Forests_Final_Report_110620.pdf.

[4] Harvey, et al.

[5] "Biomass energy, particularly wood biomass, emits more CO2/Btu than coal, and most biomass fuels are not renewable on the time scales that matter for meeting the Paris Agreement goals." Governor's Council on Climate Change, Science and Technology Working Group Final Phase I Report at 40 (November 19, 2020). https://portal.ct.gov/-/media/DEEP/climatechange/GC3/GC3-working-group-reports/GC3-Science-and-Technology-Working-Group-Final-Report-11-19-20.pdf.

[6] *See* Connecticut Department of Energy and Environmental Protection, "Proposed Methodology for Electricity-Sector GHG Accounting" presentation (October 26, 2021). https://portal.ct.gov/-/media/DEEP/climatechange/2018_GHG_Inventory/ElectricSectorPublicMeetingPresentation-2021-1026-finalc.pdf

[7] Harvey, et al.

[8] Public Act 13-03, Section 5; Connecticut Department of Energy and Environmental Protection, 2020 Integrated Resources Plan at 163-167 (October 2021).

[9] "Consistent with recommendations in the 2018 Comprehensive Energy Strategy, this IRP calls for phasing down the value of biomass RECS eligible for Connecticut's Class I RPS in order to increase participation from other eligible, zero-carbon resources." 2020 Integrated Resources Plan at 167.

[10] "Even as the costs of zero-carbon resources continue to decline, resources like biomass are often lower-cost than other Class I eligible technologies, and RECs from biomass is therefore selected by energy suppliers to meet compliance first. . . . The most recent PURA RPS decision for compliance year 2017 showed that biomass facilities currently account for approximately 45 percent of Connecticut's RPS, still more than any other technology." 2020 Integrated Resources Plan at 164.

[11] *See* id. at 158.

and create inequities in public health due to particulate and toxic emissions."[12] A greenhouse accounting method which provides a favored status to biomass-generated energy as a "zero-carbon" resource is contrary to the climate, environmental, and public health polices of the state of Connecticut.

Accounting for Millstone's Energy and Environmental Attributes

Finally, the proposed treatment of the electricity and environmental attributes generated by Millstone raises a question as to what percentage of Millstone's output would be credited solely to Connecticut and removed from the regional accounting. As set forth in bullet #6, DEEP's proposed methodology would credit Connecticut with "its share of electricity and associated environmental attributes generated at the Millstone facility." We assume, though it is not stated, that by "its share" DEEP is referring to the required purchase by the state's electric distribution companies of fifty percent of Millstone's output pursuant to legislation passed in 2017 and the power purchase agreements executed pursuant to that legislation. We assume that any electricity and associated zero-carbon environmental attributes generated by Millstone that is not subject to a Connecticut power purchase agreement would be included within the *regional* accounting mix.

Conclusion

Save the Sound thanks DEEP for the opportunity to submit these comments, and looks forward to continued engagement with DEEP and other stakeholders to ensure that Connecticut meets its greenhouse gas reduction obligations in a manner that advances our clean energy goals and protects the health of our communities.

Respectfully submitted,

Charles J. Rothenberger
Climate & Energy Attorney
Save the Sound
crothenberger@savethesound.org

[12] Governor's Council on Climate Change, Science and Technology Working Group, Final Phase I Report at 40.