

**JOINT ENVIRONMENTAL STAKEHOLDER COMMENTS
REGARDING DRAFT DATA AND ASSUMPTIONS FOR
ECONOMIC ANALYSIS, LOW CARBON FUEL STANDARD FOR
THE NORTHEAST AND MID-ATLANTIC STATES**

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The Conservation Law Foundation (CLF), Environment America, ENE (Environment Northeast), Natural Resources Defense Council (NRDC), Citizens for Pennsylvania's Future (PennFuture), Union of Concerned Scientists (UCS), and VPIRG are pleased to submit these comments regarding the draft data and assumptions for economic analysis prepared by the Northeast States for Coordinated Air Use Management (NESCAUM) in connection with the development of a Low Carbon Fuel Standard (LCFS) in the Northeast and mid-Atlantic states. Given that the draft data and assumptions released by NESCAUM and discussed during the August 12, 2010 LCFS Stakeholder Webinar overlap significantly with, and build upon, the preliminary assumptions that were the subject of our May 7, 2010 comments, the present comments briefly identify new considerations and summarize (but do not restate) the points from our earlier comments that remain relevant. We encourage NESCAUM staff to refer to our May 7 comments for a more comprehensive discussion of these key points.¹

The Draft Data and Assumptions Generally Strike a Reasonable Balance and Provide the Necessary Foundation for Moving Forward on the Core Economic Analysis Without Delay.

NESCAUM's economic analysis of the Northeast/Mid-Atlantic LCFS is expected to provide an important tool for understanding the costs and benefits of the LCFS program. The August 2010 data and assumptions, taken together with the considerations outlined below, should provide a reasonable basis for economic analysis to guide design of the regional LCFS program so as to maximize economic and environmental benefits.

We greatly appreciate NESCAUM's and the states' commitment to an open and transparent process, including opportunities such as this for stakeholder participation. This stakeholder input must be balanced against the commitment of the Northeast and mid-Atlantic states to move forward with development of a program framework over a relatively short period of time. As such, we encourage NESCAUM to maintain its commitment to undertake a sufficiently comprehensive and meaningful economic analysis at this point in time to support sound decision-making on core program design elements later this year. Recognizing that a regional LCFS is an essential component of the region's strategy to address the urgent dual imperatives of energy independence and global warming, and mindful of the importance of providing a strong foundation for the program framework to be established by early 2011 pursuant to the Governors' MOU, we urge NESCAUM to move forward with its economic analysis without delay.

¹ Our May 7, 2010 comment letter also provides brief background information regarding each of the organizational signatories to the present letter.

Recommended Considerations for Modifying NESCAUM's Data and Assumptions for the Economic Analysis of the Northeast/Mid-Atlantic LCFS Program:

Having reviewed the draft data and assumptions for the economic analysis of the Northeast/Mid-Atlantic LCFS, we encourage NESCAUM to take the following recommendations into account:

- **The range of carbon intensity values used in the economic analysis should reflect the current state of fuel production technology and include indirect impacts.** While we appreciate that there should be a significant opportunity to refine the precise carbon intensity values associated with different fuel pathways in connection with later work on LCFS program design, it is important for the carbon intensity values relied upon as part of the economic analysis to be grounded in the best available science and to fully take into account indirect land use change (ILUC) impacts of biofuels. As discussed in our comments filed on November 10, 2009 and May 7, 2010, and as acknowledged by the December 30, 2009 MOU signed by the governors, the ILUC values are essential to proper accounting for lifecycle greenhouse gas (GHG) emissions. Accordingly, the economic analysis should, at a minimum, take into account carbon intensity values that include ILUC impacts – e.g., as calculated by CARB.
- **The policy scenarios should be modified to include the impact of the LCFS on the carbon intensity of oil products delivered to the Northeast.** Depending on the structure of the policy, the adoption of a regional LCFS reasonably can be anticipated to discourage the use of high-carbon intensity petroleum feedstocks in the Northeast. The policy scenarios ought to take this important dynamic into account, and should not reflect an assumption that the baseline carbon intensity of the gasoline or diesel supply will be unaffected by the LCFS.
- **The policy scenarios should be restructured to reflect a more realistic vision of technological development by adding at least one new scenario that balances the development of all three alternative technologies considered (biofuels, electricity and CNG).** A future in which natural gas is assumed to be relatively clean and inexpensive should not be presumed to coincide with one in which biofuels are assumed to be polluting and expensive. We believe that including mid-range values for non-preferred fuels will provide a more realistic view of the impacts of the program. In addition, we continue to recommend inclusion of an additional scenario that would represent a true boundary scenario for the economic impacts of an LCFS – one that reflects a “best case” scenario for all three major fuel types that assumes simultaneous technological progress and equal distribution of compliance obligations across the fuel types. Such a scenario would avoid any perception of picking winners and provide an upper bound for the benefits the region could receive under an LCFS.

- **The economic analysis should model a 10% carbon intensity reduction for heating fuels.** We appreciate the leadership of the Northeast/mid-Atlantic states in evaluating the potential inclusion of heating fuels in the regional LCFS program in light of the tremendous overlap in the markets for transportation and heating fuels, and the risk that failure to include the heating sector could result in unintended and counter-productive shifting of “dirtier,” more carbon-intensive, fuels into the heating fuels markets. However, we continue to believe that the proposal to model *only* a 0% reduction target for the heating sector represents a lost opportunity, in that this economic modeling decision is highly likely to constrain key options for program design.² We continue to encourage NESCAUM to model both a 0% reduction target for heating fuels as well as a 10% reduction target.
- **The identified low-end value for the social cost of carbon (SCC) is too low, with an associated discount rate that is too high.** The August 2010 data and assumptions reflect no change in NESCAUM’s approach to relying on a low-end social cost of carbon of \$21.40 per ton that is far too low, at a 3% discount rate that is too high. *See* Slide 83. In order to fully calculate the economic benefits that a regional LCFS program would bring by reducing GHG emissions, we strongly recommend that NESCAUM revisit at least this low-end SCC estimate. As discussed in our May 7 comments, NESCAUM’s economic analysis should use a minimum value of at least \$56/ton.
- **The economic analysis should take into account existing state greenhouse gas reduction mandates.** The August 2010 draft data and assumptions do not reflect consideration of existing comprehensive state GHG reduction mandates in states including Massachusetts, Connecticut, New Jersey and Maryland. A regional LCFS is likely to promote the abilities of these states to achieve these existing mandates by fostering the deployment of lower carbon fuels that will compete based on their carbon reduction potential and price – thereby offering greater opportunities to meet the GHG reduction mandates through cost-effective solutions.

² Particularly with respect to bioenergy resources, there is a risk that designing the program around a carbon-intensity reduction mandate only for the transportation sector (but not the heating sector) could inappropriately skew incentives such that most environmentally and economically beneficial uses of finite resources may be discouraged while less preferable uses may be encouraged. In other words, there may be meaningful opportunity costs if the program is constrained solely to what effectively would amount to an “anti-backsliding” requirement for heating fuels. Without taking a position at this time on ultimate program design and the extent to which heating fuels should be included, we simply seek to encourage NESCAUM to model a 10% reduction scenario for the heating sector in order to provide a more robust foundation for thoughtful program design later this year.

- **The low and high-end estimates for woody biomass availability should take into account recent research and surveys.** The estimates for woody biomass availability as set forth in the draft data and assumptions appear to be incongruously high when considered in light of growing competing markets for bioenergy resources as well as the most recent studies of woody biomass carbon-intensity – particularly with respect to whole trees. We encourage NESCAUM to revisit these estimates in light of new data and analysis such as that presented in the June 2010 Manomet Report commissioned by the Massachusetts Department of Energy Resources.³

Conclusion

CLF, ENE, Environment America, NRDC, PennFuture and VPIRG appreciate the opportunity to submit these comments, and we encourage NESCAUM to take the foregoing considerations into account in order to best ensure the development of a robust economic analysis that will guide decisions on key program design elements in order to maximize the environmental and economic benefits of a regional LCFS.

We commend the continued leadership of the eleven states – Connecticut, Delaware, Maine, Maryland, Massachusetts, Pennsylvania, New Hampshire, New Jersey, New York, Rhode Island and Vermont – that have committed to develop the final framework for a regional LCFS by early 2011, consistent with the Memorandum of Understanding that was signed among the Governors on December 30, 2009. We appreciate the open and transparent public stakeholder process through which the Northeast/mid-Atlantic LCFS program is being developed, and encourage NESCAUM and the states to continue to maintain this approach as the economic analysis and associated program framework development progress.

³ The Manomet Report does not purport to address woody biomass availability throughout the Northeast/Mid-Atlantic Region, and the availability of sustainable biomass resources is believed to vary considerably throughout the region. However, the Report does set forth important new data and analysis regarding limitations on the availability of sustainable biomass for Massachusetts, and it is part of a growing body of research regarding sustainable biomass.