

May 11, 2022

Climate Leadership and Community Protection Act (CLCPA)
Climate Action Council
Draft Scoping Plan Comments on GHG Accounting Methodology

These comments are submitted on behalf of Clean Fuels Alliance America (Clean Fuels), formerly the National Biodiesel Board. Our name change reflects our embrace of all the products our members and the U.S. industry are producing, which include biodiesel, renewable diesel, sustainable aviation fuel, Bioheat ® fuel for thermal space heating and maritime and railroad fuels. Clean Fuels members play an important role in displacing petroleum, improving public health, and protecting the environment. Many members are members of environmental organizations and are supportive of state and local initiatives to achieve a sustainable energy future.

Globally, national and subnational jurisdictions such as the United States, California, and New York report emissions inventories to establish, measure, and report carbon emissions and reductions. Unlike New York, however, the GHG reporting programs managed by the U.S. Environmental Protection Agency (EPA) and the California Air Resources Board (CARB) align with the approach recommended by the United Nations International Panel on Climate Change (IPCC)¹. These reporting standards are governed under 40 CFR Part 98² and California title 17, CCR, sections 95100-95163³ respectively.

New York's GHG Accounting Is Inconsistent with Other Jurisdictions and Counterproductive to Aggressive Climate Strategies

We believe New York should aim for consistency with other major jurisdictions for purposes of reporting GHG emissions and that the Climate Leadership and Community Protection Act (CLCPA) statute allows for consistency with the established IPCC and EPA protocols. And consistency with such protocols facilitates linkage to the carbon programs in other states and jurisdictions, which New York may want to pursue if the state is not already planning for that. However, the current CLCPA interpretation by the Department of Environmental Conservation (DEC) creates a framework that is inconsistent in its treatment of biomass with currently accepted global reporting of biogenic emissions. More importantly, that inconsistency creates a strong disincentive to the use of biofuels, which as states like California continues to show, have provided the single largest source of GHG reductions in their respective clean fuels programs.

Missouri Headquarters 605 Clark Ave. PO Box 104898 Jefferson City, MO 65110 Washington, D.C. Office 1331 Pennsylvania Ave. NW Suite 505 Washington, DC 20004 California Office 1415 L Street Suite 460 Sacramento, CA 95814

Massachusetts Office 36 Jonspin Road Suite 235 Wilmington, MA 01887

800.841.5849 888.246.3437 916.760.8870 978.267.3020

¹ Intergovernmental Panel on Climate Change, "Fourth Assessment Report," 2007. [Online]. Available: https://www.ipcc.ch/assessment-report/ar4/

² EPA Part 98 Regulation [Online]. Available https://www.ecfr.gov/cgi-bin/text-idx?tpl=/ecfrbrowse/Title40/40cfr98_main_02.tpl

³ Mandatory Reporting of Greenhouse Gas Emissions [Online]. Available: https://www.arb.ca.gov/cc/reporting/ghg-rep/regulation/mrr-2018-unofficial-2019-4-3.pdf?_ga=2.203910677.460042764.1628878821-66156672.1626817246

⁴ https://earthobservatory.nasa.gov/features/CarbonCycle

<u>Drop-in Biofuels Provide Immediate GHG Reductions and Are the Single Largest Source of Carbon Reductions in Climate Progressive States like California</u>

Through their clean fuels programs, California and Oregon have been leading the way since 2011 and 2016, respectively, in substantially reducing GHG reductions from the transportation sector, which is responsible for about half the GHG emissions in those states and others. In California alone, the Low Carbon Fuel Standard (LCFS) has reduced emissions since 2011 by about 98 million metric tons, with 80% of those reductions (78 million metric tons) coming from biofuels (about 41 million metric tons from biodiesel and renewable diesel). The GHG reductions from biofuels are immediate and far outstrip the reductions from other decarbonization strategies like electrification and hydrogen, which is important to consider since GHG reductions from biofuels will continue to benefit the environment for the many years it will take for states like New York to deploy electrification on a much broader scale. Thus, it is imperative that the GHG accounting employed by New York is structured to leverage, not disincentivize, the immediate benefits that are provided by biofuels, which are a key part of the climate programs in other states like California.

New York's Accounting Approach Seems Based on a Misunderstanding of the CLCPA

DEC's interpretation may be due to conflation of the terms "carbon capture and sequestration," which is listed as a "greenhouse gas emissions offset" under the CLCPA, and the "carbon cycle," which is neither mentioned nor defined in statute. The carbon cycle, and more specifically the "fast carbon cycle," is the exchange of atmospheric carbon in the form of CO2 with the terrestrial biosphere through photosynthesis⁵.

This process is similar to, but distinct from, sequestration primarily in temporal terms, or length of storage. This is especially true for biomass that is produced on an annual basis like soybean oil or animal fat from livestock, where the carbon cycle happens annually. This is different than harvested wood products which may take years to amass the carbon in the form of trees, which may then be rereleased as CO2 from combustion. Trees, unlike annual crops, takes years and maybe decades to recapture this CO2 through subsequent tree growth. The raw materials used to produce biodiesel and renewable diesel are primarily drawn from annual (or more frequent) growth and harvest cycles.

The word sequestration when used in conjunction with carbon in a scientific context is typically used to denote a permanent or long-term (>100 years) storage of carbon dioxide. For example, CARB broadly describes "carbon sequestration" as: "This [carbon sequestration] refers to the capture of CO2 from the atmosphere and its long-term storage in oceans (oceanic carbon sequestration), in biomass and soils (terrestrial carbon sequestration) or in underground reservoirs (geologic carbon sequestration)."⁶

More specifically, CARB describes "carbon capture and sequestration" as follows: "[Carbon capture and sequestration (CCS)] means the process of concentrating CO2 present in flue and/or exhaust gases, or

⁴ LCFS Quarterly Data Spreadsheet, v. 04/30/2022, https://ww2.arb.ca.gov/sites/default/files/2022-05/quarterlysummary 043022.xlsx.

⁵ https://earthobservatory.nasa.gov/features/CarbonCycle

⁶ https://ww2.arb.ca.gov/ghg-inventory-glossary

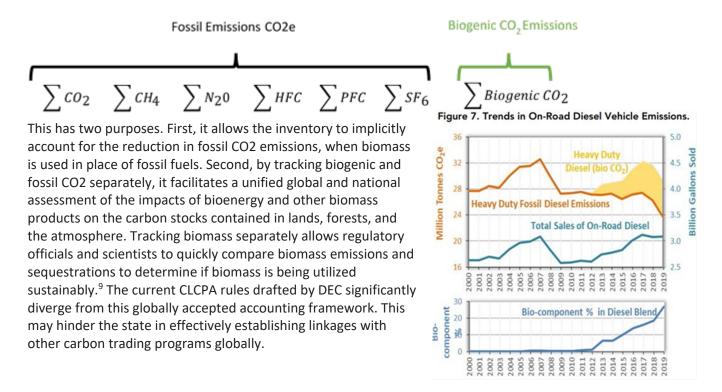
air, via chemical and/or physical separation methods, transporting the CO2 to an injection site, and injecting and permanently sequestering the captured CO2."

EPA defines carbon capture in its Program for Carbon Dioxide (CO2) Geologic Sequestration (GS) Well as Carbon Capture and Storage (CCS), "The process of capturing CO2 from an emission source, (typically) converting it to a supercritical state, transporting it to an injection site, and injecting it into deep subsurface rock formations for long-term storage."

Furthermore, the primary incentive for this activity under federal law, the 45Q tax credit has a 17 year post-well closure recapture requirement in the event of a leak, further reinforcing the long-term nature of carbon sequestration. In other words, regulators across the US have drawn a clear distinction between the fast carbon cycle and long-term carbon storage as it relates to the use of the term "carbon sequestration."

In our view, DEC's interpretation of the statutory term "carbon capture and sequestration" is so broad that it includes processes that typically are not associated with it in legal, regulatory, or scientific contexts. Finally, the term "offset" also often implies some length of long-term storage. For example, under the California Cap and Trade regulation, offsets generated from U.S. forests are required to stand for 100 years.⁸

Setting aside legal issues, IPCC, U.S. EPA, and CARB all explicitly state that CO2 emissions arising from the combustion of biogenic emissions should be reported separately from fossil CO2 emissions.



⁷ https://us.eversheds-sutherland.com/portalresource/GuideSection45QProposedRegulations.pdf

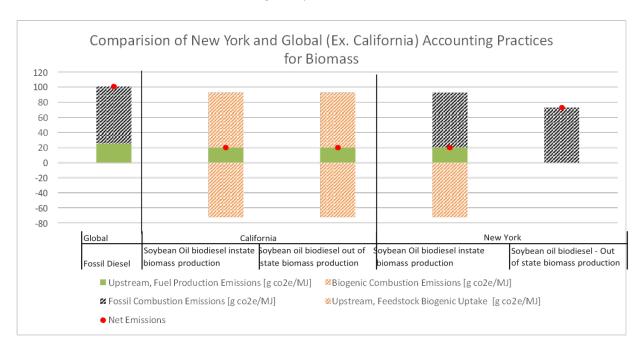
https://ww2.arb.ca.gov/sites/default/files/classic/cc/capandtrade/protocols/usforest/forestprotocol2015.pdf

⁹ Shown graphically (Figure 7) Source: California GHG Inventory https://ww3.arb.ca.gov/cc/inventory/pubs/reports/2000_2019/ghg_inventory_trends_00-19.pdf

The separate tracking of biomass emissions has two key caveats. Non-CO2 GHG emissions from biomass such as from fugitive biogas, biomass decomposition, or other sources must be accounted for as fossil emissions. This allows for the climatic models to account for the radiative forcing effect of these gases prior to their breakdown to CO2, at which that time it can be exchanged with the terrestrial biosphere or other carbon sink. Additionally, IPCC recommends that emissions arising from direct land use change, such as peat land conversion, also be accounted for as a fossil emission since action represents a long carbon cycle release, rather than a short carbon cycle (since there is no corresponding growth cycle to recapture the CO2 from the peat conversion).¹⁰

As shown below, DEC intends to report biogenic combustion emissions in the same total as fossil emissions. In and of itself, this approach is not fatal for biofuels because a complete inventory covering biomass production would offset those biogenic combustion emissions. However, the current Part 496 Rulemaking by the state, which excluded biogenic uptake as it relates to out-of-state biomass, would put New York at odds with global reporting standards and disadvantage biomass as a carbon reduction strategy.

The figure below illustrates how New York's accounting framework would result in inconsistent treatment of in-state and out-of-state biomass in addition to being inconsistent with leading state, national, and international reporting protocols. This inconsistency creates a strong disincentive to the use of biofuels since it substantially devalues the immediate carbon reductions drop-in biofuels provide. In this example, New York's approach would only credit soy biodiesel produced outside the state with about a 20% reduction in GHG (relative to fossil diesel), while scoring the exact same biodiesel produced within the state with an 80% reduction in GHG, even though the atmosphere would see the same 80% reduction from both scenarios (GHGs are global pollutants).



 $^{^{10}\} https://ww2.arb.ca.gov/sites/default/files/classic/cc/capandtrade/protocols/usforest/forestprotocol2015.pdf$

_

In conclusion, we see no legal or technical reason why New York should depart so markedly from widely accepted IPCC accounting protocols for greenhouse gases. The currently proposed methodology would place New York out of step with all other jurisdictions and would actually complicate global GHG accounting since New York would be highly inconsistent with globally accepted methods. This approach would also make the goals of the CLCPA artificially more difficult to attain and make very challenging any linkage the state may be planning to carbon programs in other jurisdictions. Most importantly, New York's approach is likely to hamper significantly the use of biofuels, which other leading states like California have shown to play a critical role in their climate programs.

Sincerely,

Floyd M. Vergara, Esq. PE

Hogt Vym

Director of State Governmental Affairs

Clean Fuels Alliance America