

ALDER FUELS

June 29, 2022

Ms. Doreen Harris
President and CEO
New York State Energy Research and Development Authority

Mr. Basil Seggos
Commissioner
New York State Department of Environmental Conservation

c/o NYSERDA
17 Columbia Circle
Albany, NY 12203-6399

RE: Alder Fuels' Comments on the New York State Climate Action Council's Draft Scoping Plan

Dear Climate Action Council Co-Chairs and Council Members,

I write on behalf of Alder Fuels to share our appreciation for the work the New York State Climate Action Council is doing to identify and advance pathways to enable the State to meet the requirements of the statewide greenhouse gas (GHG) emission limits and achieve net-zero emissions in accordance with the schedule established by the Climate Leadership and Community Protection Act. With specific respect to the Draft Scoping Plan, as discussed in greater detail below, we note our support for the Draft Plan's recognition of the potential for low-carbon transportation fuels produced from sustainable biomass, including sustainable aviation fuels (SAF), to be a significant contributor to meeting the State's goals, and we urge the Climate Action Council to advance proposals to further incentivize such fuels.

By way of background, Alder Fuels is a process technology and project development company in the advanced, low-carbon transportation fuels industry. Our proprietary technology uniquely enables the efficient conversion of abundant, sustainable biomass residues and regenerative grasses into a carbon negative "green" biocrude oil, suitable for conversion into drop-in SAF, diesel, and naphtha by existing refineries using their current equipment and infrastructure. Our team has a proven record for development and commercial deployment of novel technology, including having founded AltAir Fuels, which developed the world's first refinery designed for the production of SAF and military-grade fuels. That facility, in Paramount, California, has maintained continuous production since 2016. In 2020, subsequent to the successful transfer of operations of the Paramount facility to World Energy, the AltAir leadership team founded Alder Fuels.

Today, Alder Fuels is focused on the conversion of sustainable biomass, including wood and forest residues, crop residues, and regenerative species like miscanthus, into biocrude and the production of SAF. Because electrification of commercial aircraft is decades away, SAF is critical to meaningful reduction of aviation sector emissions in support of New York State, federal, and industry climate goals. SAF can reduce GHG emissions by up to 80 percent, and

Alder Fuels is working on processes that make our biocrude carbon negative, enabling extremely low-carbon and carbon-negative SAF. SAF also greatly reduces emissions that impact local air quality, reducing sulfur oxides (SOx) from jet fuel combustion by nearly 100 percent and particulate matter (PM) by approximately 50 percent, reductions that are especially impactful in communities around airports.

Turning to the Draft Scoping Plan, Alder Fuels adds its express support for the Agricultural and Forestry Strategy Recommendation 20 (AF20), for the State to “Develop a Sustainable Biomass Feedstock Action Plan and Expand the Use of Bioenergy Products.” As recognized in the Draft Plan, use of “bioenergy products can reduce GHG emissions from long distance transportation and fossil fuel combustion and improve environmental quality—especially if bioenergy products are developed from wood residues, waste materials, and processing.” (Draft Scoping Plan, at 227). Alder Fuels is committed to ensuring that the wood and agricultural residues we will use to produce biocrude that is converted into SAF and other transportation fuels meet best-practices sustainability criteria, consistent with the strategy outlined by the Climate Action Council. Having the State take action to incentivize residue feedstock use for biofuels as detailed in the Draft Plan will not only result in significant GHG savings relative to the fossil fuel that otherwise would be used but will bring economic benefits to those providing the residues and support important goals like healthy forest management to reduce wildfire risk. As the Climate Action Council recognizes, the use of sustainable biomass for “hard to decarbonize” sectors like aviation can be particularly impactful, and we support the proposal for various New York agencies and universities to work to “incentivize appropriate bioenergy development (feedstock supply chain, conversion systems, and end use markets)” for “high-quality distillate jet fuels” (i.e., SAF). Draft Scoping Plan, at 228.

In reviewing the Draft Scoping Plan, we also see that the Climate Action Council has included in the Draft Plan a recommendation that the State adopt a Clean Fuel Standard (CFS) as a market-based solution. Given that federal law preempts states from regulating jet fuel, Alder Fuels supports the Climate Action Council’s recommendation for allowing alternative jet fuel, i.e., SAF, to opt-in to such a CFS on a voluntary basis should the State adopt one.¹ Indeed, this is the approach that the State of California has successfully taken. The aviation industry has set forth goals to achieve net-zero carbon emissions by 2050 and is eager to utilize SAF to meet its environmental goals and reduce aviation emissions, but there is not enough supply of SAF to meet demand. In 2021, virtually the entire supply of SAF in the United States was utilized in California due to the beneficial impact of the clean fuels program in California, with its voluntary opt-in for SAF. The State of New York should take a similar approach should it adopt a CFS.

By taking the above-noted actions to incentivize and support the use of sustainable biomass as feedstock for SAF and other low-carbon transportation fuels, the State of New York can greatly enhance biofuels production and use in the State, thereby advancing the State’s climate goals and providing revenues to support jobs and sustainable management of agricultural and woody residues and other biomass in the State. Alder Fuels stands ready to contribute to these efforts.

¹ As noted in the Draft Scoping Plan, “[l]egislation could be structured to allow aviation fuels to voluntarily opt into the program, reducing emissions in this difficult-to-electrify subsector. Decisions regarding the carbon intensity of alternative fuels will provide market signals that promote the use of those fuels that have a lower fuel cycle carbon intensity.” Draft Scoping Plan, at 118.

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Thank you for your consideration.

Sincerely,

A handwritten signature in black ink that reads "Nancy N. Young" with a checkmark at the end.

Nancy N. Young
Chief Sustainability Officer
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