

May 19, 2022

NYSERDA

17 Columbia Circle

Albany, NY 12203-6399

Submitted via email: [scopingplan@nyserda.ny.gov](mailto:scopingplan@nyserda.ny.gov)

**RE: Climate Action Council Draft Scoping Plan**

Dear Sir/Madam:

On behalf of SUNY College of Environmental Science and Forestry, we are submitting comments in response to the Climate Action Council Draft Scoping Plan published on January 1, 2022 to inform the Council of additional research regarding forecasting clean energy job growth.

**Chapter 7: Just Transition**

*Section 7.6: Jobs Study*

1. As indicated on page 49, the Climate Act requires a study on “the number of jobs created to counter climate change, which shall include but not be limited to the energy sector, building sector, transportation sector, and working lands sector.” The Draft Scoping Plan provides a summary of the results from the Just Transition Working Group 2021 Jobs Study (“Jobs Study”). However, the Jobs Study classifies Agriculture and Working Lands as a secondary sector and therefore is not included in the modeling as the project only models the primary sectors (pg. 158 of the Jobs Study). **We recommend that the Draft Scoping Plan include a summary of the observations and findings regarding the number of potential jobs created in the working lands sector from the Economic Impacts of Investing in Climate Mitigation in New York Forests and Agriculture<sup>1</sup> study.**
2. As indicated on page 74 of the Jobs Study, it is estimated that the bioenergy sector will grow a total of 2,799 jobs between 2019 and 2050. **We recommend that the Renewable Fuels Roadmap<sup>2</sup> produced by the New York State Energy Research and Development Authority (NYSERDA) be reviewed, specifically the Biofuel Industry Economic Impacts and Analysis (Appendix I).** NYSERDA estimates that the three scenarios addressed by the Renewable Fuel Roadmap would result in approximately 3,800 to 14,200

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<sup>1</sup> United States Climate Alliance and RTI International. 2021. Economic Impacts of Investing in Climate Mitigation in New York Forests and Agriculture: Afforestation, Reforestation, and Manure Methane Capture. Available at: <https://climate.ny.gov/Climate-Resources>

<sup>2</sup> NYSERDA. 2010. The Renewable Fuels Roadmap. Available at: <https://www.nyserda.ny.gov/About/Publications/Research-and-Development-Technical-Reports/Biomass-Reports/Renewable-Fuels-Roadmap>

new jobs over a ten year period. Most of these jobs are anticipated to be supply chain based (e.g., crop-based, forestry-based, and transportation). Additionally, the Potential Economic Impact of Renewable Fuels and Sustainable Biomass Feedstock for Pennsylvania<sup>3</sup> provides information regarding the potential economic gains from advanced biofuels production. Any updates to the results of the Jobs Study should be carried over to the Draft Scoping Plan.

3. The Economic Impacts of Investing in Climate Mitigation in New York Forests and Agriculture Study does not include an assessment of the job creation associated with the bioeconomy supply chain that will supply feedstock for hard to decarbonize sectors of the economy (e.g., sustainable aviation fuels, heavy duty trucking, and marine transportation). These are potential long term, good paying jobs, that will be present in the economy for decades and not only associated with one-time activities such as tree planting during afforestation or construction jobs at biorefineries. **We recommend that the greater job impact associated with the development of this sector of the bioeconomy should be accounted for in the analysis.** The Renewable Fuels Roadmap produced by NYSERDA, as well as the Potential Economic Impact of Renewable Fuels and Sustainable Biomass Feedstock for Pennsylvania should be used as a guide. Any updates to the results of the Economic Impacts of Investing in Climate Mitigation in New York Forests and Agriculture Study should be carried over to the Draft Scoping Plan.
4. **We recommend the Jobs Study clarify the unit of measurement for the employment outputs.** The Jobs and Economic Development Impacts (JEDI) model calculates jobs as full-time equivalent for a period of one year (1 FTE= 2,080 hours). Any clarifications should be carried over to the Draft Scoping Plan.
5. As indicated on page 32 of the Jobs Study, the solar subsector includes both photovoltaic (PV) and concentrating solar technologies. The National Renewable Energy Laboratory (NREL) has the Concentrating Solar Power Model available for public download on their website. This model should only be utilized to calculate the potential jobs from the development of concentrated solar facilities. It is our understanding NREL has a separate Photovoltaic JEDI Model that can be made available upon request. **We recommend that the Jobs Study confirm the correct JEDI models are used in its calculation of the solar subsector job estimates.**
6. Information regarding recommendations to achieve a “just transition” is included starting on page 22 of the Jobs Study. The National Association of State Energy Officials (NASEO)

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<sup>3</sup> D. Swenson, E. O’Coonahern, and T. Kelsey. 2016. The Potential Economic Impact of Renewable Fuels and Sustainable Biomass Feedstock for Pennsylvania. Available at: <https://aese.psu.edu/research/centers/cecd/publications/economic-impact/potential-economic-impact-of-renewable-fuels-and-sustainable-biomass-feedstock-in-pennsylvania>

report on Diversity in the U.S. Energy Workforce<sup>4</sup> provides a baseline of the energy workforce diversity by technology and energy source sector. Additionally the NASEO report on Energy Sector Workforce Diversity, Access, Inclusion, and the Policy Case for Investment<sup>5</sup> provides information on workforce policy and program strategies. Data suggests that the workforce growth in the sustainable energy sector has not been equitable. **We recommend the inclusion of existing diversity information in the Jobs Study as it would provide insight on the current disparities and therefore allow more specific policy improvements and solutions to be suggested.**

Thank you for the opportunity to comment on Climate Action Council Draft Scoping Plan. Please take this research into consideration when constructing adjustments for the final scoping plan.

Sincerely,

Jessica Howe  
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Dr. Timothy Volk  
Professor and Associate Chair

Dr. Robert Malmshemer  
Professor and Associate Chair

Dr. Danielle Kloster  
Lecturer

Alexandra Dill  
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<sup>4</sup> NASEO. 2021. The National Association of State Energy Officials (NASEO)<sup>4</sup> report on Diversity in the U.S. Energy Workforce: Data Findings to Inform State Energy, Climate, and Workforce Development Policies and Program. Available at: <https://www.naseo.org/publications>

<sup>5</sup> NASEO. 2021. Energy Sector Workforce Diversity, Access, Inclusion, and the Policy Case for Investment: Recommendations for State Energy Office Action. Available at: <https://www.naseo.org/publications>