

Environmental

Advocates

NY



**Position Paper on the Agriculture and Forestry Advisory Panel's
Recommendations to the Climate Action Council**

Environmental Advocates NY

October 2021

Acknowledgements

Environmental Advocates NY thanks the Ida and Robert Gordon Family Foundation, New York Community Trust, The Morton K. and Jane Blaustein Foundation, and the Tortuga Foundation.

About Environmental Advocates

Environmental Advocates NY fights for policies that will restore and protect New York's environment, support healthy, vibrant communities, and secure benefits and outcomes for all within and beyond the state through education, partnerships and advocacy.

Executive Summary

In June of 2019, New York State passed the most ambitious climate law in the country, the Climate Leadership and Community Protection Act (CLCPA). The CLCPA mandates an 85% reduction in greenhouse gas (GHG) emissions by 2050, with a series of interim targets along the way, including a 40% reduction in emissions by 2030 and 100% zero-emission electricity by 2040. The law charges the Climate Action Council (CAC), a 22-member appointed body, with developing a scoping plan that will outline the government actions necessary to attain these objectives. Over the past year, the CAC has received input from working groups and advisory panels with expertise in the fields and sectors relevant to New York's climate impact, from climate justice to power generation. The input of these groups has the power to shape the draft scoping plan, which will be complete and open for public comment by the first of the new year (2022). This paper concerns the recommendations made by the advisory panel on agriculture and forestry.

This position paper outlines the perspective of Environmental Advocates NY (EANY), a 50+-year-old New York State based environmental policy nonprofit and government watchdog whose staff had a meaningful role in developing and advocating for New York's climate law (the CLCPA).

The recommendations submitted to the CAC by the Agriculture and Forestry Advisory Panel fall drastically short of the emissions reductions required by the CLCPA. EANY recommends that the CAC's final scoping plan make the following high-level changes to the Agriculture and Forestry Advisory Panel's recommendations: Support smaller producers in adopting climate-smart practices, regulate and penalize major emitters, and take greater caution regarding bioenergy.

Introduction

In June of 2019, New York State passed the most ambitious climate law in the country, the Climate Leadership and Community Protection Act. The CLCPA mandates an 85% reduction in greenhouse gas (GHG) emissions by 2050, with a series of interim targets along the way, including a 40% reduction in emissions by 2030 and 100% zero-emission electricity by 2040. The law charges the Climate Action Council, a 22-member appointed body, with developing a scoping plan that will outline the government actions necessary to attain these objectives. Over the past year, the Climate Action Council has received input from working groups and advisory panels with expertise in the fields and sectors relevant to New York's climate impact, from climate justice to power generation. The input of these groups has the power to shape the draft scoping plan, which will be complete and open for public comment by the first of the new year. This paper concerns the recommendations made by the advisory panel on agriculture and forestry.

Agriculture and forestry occupy a unique position in New York's plans for a low-emissions, climate-resilient future. Properly managed, farms and forests have the

potential to durably sequester carbon, in addition to providing a host of other environmental benefits. Managed poorly, they emit potent GHGs and squander the earth's natural carbon-storage capacity. The carbon costs and benefits of farms and forests are complex and often difficult to measure. For that reason, one critical aspect of CLCPA implementation will be fostering research and developing metrics to provide a more accurate picture of forest and farm emissions and the efficacy of particular sequestration practices.

While further research is needed to fine-tune policies around particular practices, however, the major directives of the scoping plan are perfectly clear. It must zero in on policies that preserve and protect New York's forests, rigorously curtail emissions from New York's highest-polluting agricultural operations, and aggressively promote climate-smart practices on New York's farms. The results of these efforts will be a more resilient and hospitable statewide environment and a more resilient and equitable farming industry. The failure of these efforts will mean the failure of the CLCPA. The strength or weakness of New York's policy recommendations will also have consequences on a national and even a global scale as federal lawmakers look to New York as a model for nationwide climate legislation.

In March of 2021, Environmental Advocates NY convened a roundtable of farmers and leaders of environmental and agricultural organizations to discuss solutions to minimize GHG and co-pollutant emissions from agriculture and forestry in New York. This roundtable was the beginning of a process to raise under-represented voices in the agriculture and forestry conversation, and the recommendations offered in this paper reflect the concerns and expert guidance of many of the participants, focusing on agriculture in particular.

The recommendations delivered to the Climate Action Council by the Agriculture and Forestry Advisory Panel, as currently formulated, are insufficient to meet the goals of the CLCPA. While they include an impressive wealth of policies to support crucial mitigation and sequestration strategies, they do not take the degree of decisive action that is needed to draw down emissions. New York's farmers are vital to the future of the state, serving as stewards of the land, sustainers of local communities, and pillars of state and local economies. New York's farms are also exceedingly vulnerable, both to economic pressures and to the increasing challenges of climate change, from more intense rain events to the altered distribution of insects and pathogens.¹ The policies endorsed by the scoping plan must perform the delicate task of enabling farmers to continue their work and expand their capacity to sequester carbon while at the same time demanding

¹ NYSEDA, Responding to Climate Change in New York State (Nov. 2011), 221-225.
<https://www.nyserda.ny.gov/-/media/Files/Publications/Research/Environmental/EMEP/climaid/ClimAID-Agriculture.pdf>

rigorous cuts in emissions of GHGs. The most just and efficient way for New York to achieve this balance is to provide ample funding and support for climate-smart practices on small and mid-size farms while setting emissions limits and exacting penalties from major polluters to finance the expensive work of transforming the agricultural sector from a carbon source into a carbon sink.

Aiming for the right targets

The recommendations submitted to the Climate Action Council by the Agriculture and Forestry Advisory Panel fall drastically short of the emissions reductions required by the CLCPA. The CLCPA places a firm limit on NY State GHG emissions: by 2030, they must total no more than 60% of 1990 levels. By 2050, that limit drops to 15%. With the 1990 baseline established at 409.78 MMtCO_{2e}, that means that New York's emissions, in less than ten years, will be capped at 245.87 MMtCO_{2e} – for the entire economy.² In 2050, they will be capped at just 61.47 MMtCO_{2e}. For comparison, agriculture alone was responsible for 17.13 MMtCO_{2e} in 1990, and its impact has only increased since then.³

These targets do not leave room for moderate ambitions. Meeting them will require every sector of the economy to exact the deepest possible emissions reductions they are capable of. By contrast, the reductions proposed by the Agriculture and Forestry Advisory Panel are startlingly incremental. The panel projects that its recommendations will cut emissions from agriculture and forestry by 15% *from current levels* by 2030 and only *return* to 1990 levels by 2050, with the additional goal, at a stretch, of a further 15% reduction. Reductions at these levels would have the perverse effect of making other industries and sectors, whose emissions-reduction challenges are arguably greater than those faced by agriculture, responsible for exacting even deeper cuts to compensate for the modesty of the agriculture sector's reductions.

One unique feature of the Agriculture and Forestry Advisory Panel, which might appear to justify its modest emissions reduction targets, is that there is a negative side to its balance sheet, as well as a positive one. The Advisory Panel dedicated much of its work, rightly, to recommending policies that will increase the amount of carbon sequestered by New York's forests and agricultural lands. These "negative emissions" are essential to climate change mitigation and resilience. It must be emphasized, however, that the CLCPA does not permit them to "zero out" the positive emissions of the agriculture and forestry sectors – or, indeed, of the economy as a whole. The only possible role for those negative emissions in reaching CLCPA targets is in the context of the last 15%: the emissions that remain *after* the 85% direct reduction has been achieved. For those applications that are hardest to

² NY State Dept. of Environmental Conservation, Revised Regulatory Impact Statement, 6 NYCRR Part 496, 12. https://www.dec.ny.gov/docs/administration_pdf/revisedris496.pdf

³ Revised Regulatory Impact Statement, 6 NYCRR Part 496, 28.

decarbonize, the CLCPA reserves the possibility of an alternative compliance mechanism; these mechanisms are tightly regulated and not to exceed 15% of statewide GHG emissions estimated as a percentage of 1990 levels.

The Agriculture and Forestry Advisory Panel recommendations, therefore, must spell out a pathway not to carbon neutrality, but to zero, or near-zero, emissions. This challenge may be even greater than it first appears, for at least two reasons. First, because agricultural emissions contain a high proportion of methane, which warms the atmosphere more quickly than carbon dioxide, they increase considerably under the updated CLCPA accounting, which shifts from a 100-year to a 20-year GWP.⁴ Second, calculations of agricultural emissions do not include energy use. Farms consume energy both directly – for example, through diesel-powered equipment or electricity-powered irrigation systems – and indirectly, largely through the natural gas required to produce fertilizers and pesticides.⁵ The U.S. Energy Information Administration (EIA) estimates that in 2020, agriculture was responsible for 5% of U.S. industrial energy consumption.⁶ Yet in many GHG accounting frameworks, including the one used by the State of New York, the emissions associated with this energy consumption are counted not under agriculture, but as industrial, power, or transportation emissions, instead.⁷ The Agriculture and Forestry Advisory Panel recommendations to the Climate Action Council contain no mention whatsoever of agricultural energy use.

To reach the targets laid out by the CLCPA, the scoping plan must be based on a complete and honest reckoning of agricultural sector emissions, including upstream and energy-related emissions, and it must outline a path to significantly deeper reductions than the Advisory Panel’s recommendations have done.

Support Smaller Producers in Adopting Climate-Smart Practices

Aside from energy use, which comprises a relatively small proportion of agriculture’s carbon footprint, there are three main sources of agricultural GHG emissions: crops and fertilizers, which can generate nitrous oxide emissions from agricultural soils; livestock manure, which produces methane and nitrous oxide; and livestock itself, which emits methane directly through the process of enteric fermentation. To a significant degree, these emissions are not inevitable, and can be greatly reduced

⁴ Revised Regulatory Impact Statement, 6 NYCRR Part 496, 4.

⁵ U. S. Dept. of Agriculture Economic Research Service, Trends in U.S. Agriculture’s Consumption and Production of Energy: Renewable Power, Shale Energy, and Cellulosic Biomass, Claudia Hitaj and Shellye Suttles, Economic Information Bulletin 159 (August 2016), 4.

https://www.ers.usda.gov/webdocs/publications/74658/60128_eib159.pdf?v=0

⁶ “Use of energy explained: Energy use in industry,” U.S. Energy Information Administration, August 2, 2021. <https://www.eia.gov/energyexplained/use-of-energy/industry.php>

⁷ NYSERDA, New York State Greenhouse Gas Inventory: 1990–2016 (July 2019), 32.

<https://www.nyserda.ny.gov/-/media/Files/EDPPP/Energy-Prices/Energy-Statistics/greenhouse-gas-inventory.pdf>

through better management practices.⁸ The Climate Action Council must give top priority to the policies that will most effectively curtail these emissions.

The policies recommended by the Advisory Panel rely on voluntary measures and financial support. This strategy has the potential to be highly successful at enabling smaller, less resourced farms to adopt climate-smart practices. In particular, the panel's recommendations include an impressive suite of programs and expanded funding to promote the kinds of practices collectively known as "regenerative agriculture" or sometimes "carbon farming."⁹ Focused on building soil health and minimizing GHG-intensive and environmentally harmful inputs, these practices can not only mitigate emissions, but also improve the economic outlook for farms by boosting productivity and resiliency to climate-related disruptions.¹⁰ If enacted, the panel's recommendations would reinforce the Soil Health and Climate Resiliency Act, which was passed by the State Legislature in June and awaits the Governor's signature.

The Advisory Panel recommends expanding and building equity concerns into existing state programs like the Agricultural Environmental Management (AEM) Base Program, the Climate Resilient Farming Program, and the Agricultural Non-Point Source Abatement and Control (AgNPS) Program, as well as introducing new programs, like one that pays farmers for ecosystem services. If they are well designed and executed, these programs will transform the agricultural landscape of New York. By increasing access to public and private funds, planning services, and technical assistance, they will remove barriers that prevent under-resourced and financially vulnerable farms from assuming the risk, effort, and upfront costs associated with adopting climate-smart management practices. New York's farm-adjacent communities – both rural and urban – could reap the benefits of those investments in the form of greater food security, economic resilience, and, through improved air and water quality, improve human health.

The success of these programs will depend on their transparency, fairness, and efficiency. They must be designed and executed to inspire confidence and ensure that public dollars are directed toward the most meaningful actions. Programs offering payment for ecosystem services (PES), for example, must be coupled with support for research into the benefits of particular practices and the development of metrics to gauge their success, to ensure that farmers are being paid for real and permanent services to the environment. Under the expanded program, AEM plans, which are largely confidential, should be made publicly available, to enable more

⁸ Peter Lehner and Nathan A. Rosenberg, "Legal Pathways to Carbon-Neutral Agriculture," *Environmental Law Reporter* 47, No. 10 (2017): 10857.

⁹ Lehner and Rosenberg, "Legal Pathways to Carbon-Neutral Agriculture," 10845.

¹⁰ Lehner and Rosenberg, "Legal Pathways to Carbon-Neutral Agriculture," 10845.

open assessment and collaborative planning. The Climate Action Council can maximize the impact of public dollars by making some grants – supporting alternative manure management systems, for example – contingent upon deployment of a set of basic sustainability practices. And because the Advisory Panel recommendations stress farmer-to-farmer education as the most effective way to promulgate climate-friendly practices, state programs should compensate farmers not only for the ecosystem services they deliver on their own farms, but for the lessons, training, and information they provide to others in the field.

In addition to support for sharing knowledge and experience, the Climate Action Council should consider establishing a program for sharing clean-running equipment. Emissions from fossil fuel-powered farm equipment are easy to overlook because they are not counted as agricultural emissions in most GHG accounting frameworks. Still, no sector is better suited to address on-farm fuel consumption than the agricultural sector itself. The transition to electric farm equipment is limited by the cost and availability of appropriate replacements for gasoline- and diesel-powered machines.¹¹ Farmers who participated in EANY’s roundtable stressed that it could take years to pay off loans for existing equipment; for most small, climate-friendly farms, purchasing expensive new machinery is out of the question. By piloting a rental program for electric farm equipment, New York State would stimulate the development of technology and markets that is necessary to make clean machinery more widely accessible. It would also represent a victory for environmental justice by diminishing a major source of co-pollutants that can contribute to respiratory illness among farmworkers,¹² many of whom are migrant and/or undocumented people of color.¹³

Support for regenerative practices and beneficial electrification are essential components of any forward-looking agricultural policy. Soil health in particular is a critical policy objective: 45% of New York’s agricultural GHG emissions come from the management of agricultural soils,¹⁴ and healthy soils provide a panoply of benefits that extend beyond mitigation to water quality and climate resilience. However, meeting the terms of the CLCPA will also require better policies to confront the other 55% percent of agricultural emissions, which come from

¹¹ Lindsay Campbell, “Going Green: Can Electric Tractors Overtake Diesel?” *Modern Farmer*, March 28, 2020.

<https://modernfarmer.com/2020/03/going-green-can-electric-tractors-override-diesel/>

¹² Jean-François Sauvé et. al., “Diesel Exhaust Exposure during Farming Activities: Statistical Modeling of Continuous Black Carbon Concentrations,” *Annals of Work Exposures and Health* 64, No. 5 (2020): 504. <https://doi.org/10.1093/annweh/wxaa032>

¹³ Richard Stup, Jennifer Ifft, and Thomas Maloney. “The State of the Agricultural Workforce in New York,” *Extension Bulletin* 2019-01, Dyson School of Applied Economics and Management, March 2019, 9.

<https://dyson.cornell.edu/wp-content/uploads/sites/5/2019/03/Cornell-Dyson-eb1901.pdf>

¹⁴ These percentages may shift under the new accounting framework. NYSERDA, *New York State Greenhouse Gas Inventory: 1990–2016*, 35.

livestock – from both manure management and enteric fermentation. In New York, the lion’s share of these emissions comes from a small number of large farms. In fact, these large farms are also responsible for a considerable share of agricultural soil emissions, since feeding livestock requires vast amounts of crop- and pastureland.¹⁵

The Climate Action Council has a responsibility to prioritize policies that address GHG emissions and co-pollutants from these major sources. Whereas the voluntary, incentive-based programs proposed by the Advisory Panel are appropriate for enabling New York’s smaller, less resourced farms to curb their emissions and increase their sequestration potential, curtailing emissions from these major polluters requires a different set of policy tools.

Regulate and Penalize Major Emitters

In New York State, 85% of beef cattle, dairy cows, swine, and poultry are produced by just 3% of the almost 20,000 farms that raise animals.¹⁶ Dairies comprise the majority of New York’s CAFOs (Concentrated Animal Feeding Organizations),¹⁷ and within the dairy industry, 56% of cows are in herds of more than 500 and concentrated on just 6% of dairy farms.¹⁸ That means that New York can achieve major GHG reductions by focusing on this small number of high-impact farms.

The impact of these large farms is severe. A 1000-cow dairy farm produces about 9,300 MtCO₂e per year¹⁹ – equivalent to the annual GHG emissions of more than 2,000 cars. Those emissions consist largely of methane, which powerfully accelerates warming in the near term, and nitrous oxide, which has almost 300 times the warming potential of carbon dioxide. New Yorkers cannot afford to ask emitters of this magnitude to voluntarily bring down their emissions – they must demand it.

Established technologies and practices can reduce the carbon footprints of these farms by around 40% while also decreasing nutrient pollution and increasing

¹⁵ Lehner and Rosenberg, “Legal Pathways to Carbon-Neutral Agriculture,” 10847.

¹⁶ Peter Lehner and Elizabeth Henderson, “Soil Health Initiatives in New York: Building Momentum,” Earthjustice, January 5, 2019.

https://earthjustice.org/sites/default/files/files/NOFA-Soil-Health-Initiatives-in-NY_2019-01.pdf

¹⁷ “Concentrated Animal Feeding Organizations,” NY State Dept. of Environmental Conservation, accessed August 1, 2021. <https://www.dec.ny.gov/permits/6285.html>

¹⁸ U. S. Dept. of Agriculture, 2017 Census of Agriculture: New York State and County Data, April 2019, Table 17.

https://www.nass.usda.gov/Publications/AgCensus/2017/Full_Report/Volume_1_Chapter_1_State_Level/New_York/nyv1.pdf

¹⁹ C. Alan Rotz, “Symposium review: Modeling greenhouse gas emissions from dairy farms,” Journal of Dairy Science 101, No. 7 (2018): 6685. <https://doi.org/10.3168/jds.2017-13272>

productivity, if they are combined in a whole-farm, coordinated approach.²⁰ These established measures include covering and flaring manure storage lagoons, implementing precision feed and forage strategies, and using soil conservation practices in feed production, among others; the optimal combination of measures will vary according to the particular farm. To tackle the remaining 60% of emissions, new technologies may be required, along with more radical ways of reimagining the way we raise animals. In the former category, research into methane-reducing feed additives has shown promise and continues to develop. The latter might include agroforestry systems that integrate livestock into carbon-sequestering crop and forest land.²¹

To reach the emissions limits set by the CLCPA, large and small farms alike must act quickly to curtail their emissions to the greatest extent possible. But adopting mitigation measures poses a major challenge to New York's small and mid-size farms, which stand at risk of shuttering even without the added expense of new machinery and protocols.²² Emissions from vulnerable smaller farms will require substantial government assistance to address. At the same time, the large CAFOs responsible for the greatest share of emissions are also the most able to absorb the costs of implementing existing solutions and developing new ones. Studies suggest that existing beneficial management practices are not only technologically but also financially feasible for larger producers.²³ Regulating emissions from these farms would drive the rapid adoption and ongoing innovation that are necessary to confront the climate impact of New York agriculture. Penalizing these farms for excessive emissions would help to finance the research and public assistance programs that are needed to transform the climate impact of the sector as a whole.

Cautions Regarding Bioenergy

Finally, we would like to address one further aspect of the Agriculture and Forestry Advisory Panel's recommendations to the Climate Action Council. Several of those recommendations refer to the possibility of coupling GHG mitigation with renewable energy production, whether by converting animal manure into biogas or harvesting crops and forests for bioenergy feedstock. We caution that any consideration of these recommendations must be based on a rigorous, data-driven analysis of the

²⁰ Karin Veltman et. al., "A quantitative assessment of Beneficial Management Practices to reduce carbon and reactive nitrogen footprints and phosphorus losses on dairy farms in the US Great Lakes region," *Agricultural Systems* 166 (2018): 22. <https://doi.org/10.1016/j.agsy.2018.07.005>

²¹ See Susanne Wiesner, Alison J. Duff, Ankur R. Desai, and Kevin Panke-Buisse, "Increasing Dairy Sustainability with Integrated Crop-Livestock Farming," *Sustainability* 12, no. 3: 765. <https://doi.org/10.3390/su12030765>

²² Lela Nargi, "What's Behind the Crippling Dairy Crisis? Family Farmers Speak Out," *Civil Eats*, Nov. 5, 2018. <https://civileats.com/2018/11/05/whats-behind-the-crippling-dairy-crisis-family-farmers-speak-out/>

²³ Jenifer L. Wightman and Peter B. Woodbury, "New York Dairy Manure Management Greenhouse Gas Emissions and Mitigation Costs (1992-2022)," *Journal of Environmental Quality* 45, No. 1 (January 2016), 273. <https://doi.org/10.2134/jeq2014.06.0269>

costs and benefits. Bioenergy is rife with serious risks and drawbacks. We highlight some of the most concerning.

The first concern is statutory. The CLCPA stipulates that by 2040, the statewide electrical demand system will be zero emissions. Bioenergy counts as renewable by some definitions, but most forms of it rely on combustion and are therefore not emissions-free. While the law leaves open some possibilities for bioenergy, combustion from bioenergy sources cannot legally contribute to statewide power generation after 2040.

Even if it were legal, it would likely not be feasible to substitute renewable natural gas for the fossil gas that currently generates more than 40% of New York's electricity.²⁴ Climate Action Council member and climate scientist Robert Howarth casts doubt on whether there is enough biomass feedstock available to meaningfully replace fossil gas as a power source. According to Howarth's calculations, if all the manure in the state were converted to methane at maximum efficiency, it would total less than one percent of the methane consumed as natural gas in New York in 2016.²⁵ The Pathways report prepared for NYSERDA to aid the work of the Climate Action Council cites the limited supply of sustainable biomass feedstock as a major constraint on the role that bioenergy can play in New York's decarbonization strategy.²⁶ These limitations – set by the language of the CLCPA and the availability of sustainable feedstock – should disqualify any policies that involve building pipelines or power plants intended for renewable natural gas. Those investments will become an excuse for returning to fossil gas, or turning to unsustainable biomass sources, when the sustainable gas supply inevitably runs short.

The CLCPA precludes the use of bioenergy for grid-level power supply after 2040. It may hold promise for more limited applications on farms when it can offer the dual benefit of producing energy for on-farm use and reducing methane emissions from agricultural waste products like animal manure. Anaerobic digesters, which convert manure and other organic wastes into biogas that can be combusted to generate heat and power, have been touted for their climate benefits and the multiple advantages they can provide to farms, including energy savings and odor

²⁴ "New York State Energy Profile," U.S. Energy Information Administration, Sept. 17, 2020. <https://www.eia.gov/state/print.php?sid=NY>

²⁵ Robert Howarth, "Methane ('Biogas') Potential from Agriculture in New York State," presentation to the agriculture and forestry advisory panel, Dec. 16, 2020.

²⁶ Zachary Subin, Gerrit De Moor, Aryeh Gold-Parker, Rawley Loken, Clea Kolster, Sharad Bharadwaj, and Tory Clark, Pathways to Deep Decarbonization in New York State, Appendix B: Literature Review of Economy-Wide Deep Decarbonization and Highly Renewable Energy Systems, June 24, 2020, 15. <https://climate.ny.gov/-/media/CLCPA/Files/2020-06-24-NYS-Decarbonization-Pathways-App-B.pdf>

reduction.²⁷ The Agriculture and Forestry Advisory Panel lists anaerobic digesters as a potential solution to methane emissions from manure management. However, there are several reasons why this recommendation warrants careful scrutiny.

Anaerobic digesters typically utilize internal combustion engines to generate energy from biogas, which is an inherently dirty, inefficient process. Their advantage is in averting methane emissions, but they still emit substantial quantities of carbon dioxide and harmful co-pollutants.²⁸ If the methane emissions can be mitigated by other means, that climate benefit disappears. In the case of animal manure, methane emissions are largely a result of storage in lagoons and can be mitigated by implementing cover-and-flare systems or shifting to pasture-based management. Moreover, Robert Howarth's research suggests that in practice, the rate of methane leakage from anaerobic digesters may be high enough to outweigh the climate benefits of capturing methane for energy use.²⁹

Anaerobic digesters also raise environmental justice concerns. Because the CLCPA specifically charges the Climate Action Council with maximizing reductions of GHG emissions and co-pollutants in disadvantaged communities, special care must be taken to determine whether farmworkers and adjacent communities affected by both manure and digester emissions fall under the definition of disadvantaged communities that is being developed by the Climate Justice Working Group. Across the country, farmworkers and farm communities already labor under a heightened burden of air pollution.³⁰ The Climate Action Council has the mandate to reduce that burden, rather than supporting policies that could exacerbate it.

Environmental Advocates NY urges the Climate Action Council to revisit the recommendations of the Agriculture and Forestry Advisory Panel and carefully weigh the climate and community benefits of the proposed solutions. The scoping plan will guide the future of farming in New York and across the nation. Only a carefully crafted network of policies can achieve the difficult task of transforming

²⁷ "The Benefits of Anaerobic Digestion," U.S. Environmental Protection Agency, Accessed August 1, 2021. <https://www.epa.gov/agstar/benefits-anaerobic-digestion>

²⁸ "Anaerobic Digesters," Vermont Department of Environmental Conservation, Accessed August 1, 2021. <https://dec.vermont.gov/air-quality/permits/source-categories/anaerobic-digesters>

²⁹ Robert Howarth, "Methane ('Biogas') Potential from Agriculture in New York State," presentation to the agriculture and forestry advisory panel, Dec. 16, 2020.

³⁰ Kayan Clark, Andres Manrique, Tara Sabo-Attwood, and Eric S. Coker, "A Narrative Review of Occupational Air Pollution and Respiratory Health in Farmworkers," *International Journal of Environmental Research and Public Health* 18, no. 8 (2021): 4097; "The air we breathe: Studying the impact of air pollution in rural environments," Michigan State University AgBioResearch, January 21, 2016.

https://www.canr.msu.edu/news/the_air_we_breathe_studying_the_impact_of_air_pollution_in_rural_environment

agriculture from a carbon source into a carbon sink. As leaders in the fight against climate change, the Climate Action Council has an obligation to get the details right.