Testimony of Andrianna Natsoulas, Executive Director, NOFA-NY  
To the Public hearing on the Climate & Community Protection Act  
New Paltz, New York, Friday March 1, 2019

The Northeast Organic Farming Association – New York is pleased to have this opportunity to provide testimony in support of the Climate & Community Protection Act (CCPA). We would like to thank Senators Metzger and Skoufis for the invitation, and for holding this hearing.

Founded in 1983, NOFA-NY is the premier statewide organization growing a strong organic and sustainable agriculture movement in New York State and is part of a regional network of seven Northeast Organic Farming Associations. NOFA-NY provides education and assistance to local organic and sustainable farmers; connects consumers with organic and sustainable farmers; advocates policies that support a sustainable food and farm system at both the state and federal levels; and, is the largest USDA-accredited organic certifier in New York, certifying over 1,000 organic operations in the state.

The CCPA is a comprehensive bill that begins to address issues around climate change in New York. As such, NOFA-NY would like to encourage the framers of this legislation to consider it additionally as an opportunity to support land use practices, specifically in agriculture, that provide both energy efficiency and the sequestration of large amounts of carbon.

Worldwide, organic, regenerative agriculture has been documented to mitigate climate change, as well as to provide land and farmers with the ability to adapt to climate change.

**ORGANIC AGRICULTURE MITIGATES CLIMATE CHANGE BY:**

1. Reducing greenhouse gases, especially nitrous oxide, since no chemical nitrogen fertilizers are used, and nutrient losses are minimized.

2. Storing large amounts of carbon in soil and plant biomass by building organic matter, encouraging agro-forestry and forbidding the clearance of primary ecosystems.

3. Minimizing energy consumption by 30-70% per unit of land by eliminating the energy required to manufacture synthetic fertilizers, and by using internal farm inputs, thus reducing fuel used for transportation.

**ORGANIC AGRICULTURE HELPS TO ADAPT TO CLIMATE CHANGE:**

1. Through practices of building the health of the soil. Organic soils are more resilient to floods, droughts and land degradation processes.

2. By preserving seed and crop diversity. Crops are more able to resist pests and disease.
while not using fossil-fuel-based pesticides. Building diversity also helps farmers evolve new cropping systems to adapt to climatic changes.

3. Minimizes risk as a result of stable yields, and lower production costs.

A 2014 Rodale Institute study\(^1\) noted that "We could sequester more than 100% of current annual CO2 emissions with a switch to widely available and inexpensive organic management practices."

A major 2015 NOFA Massachusetts report\(^2\) found that “Greenhouse gases have long half-lives and will remain active, unless removed. “To avoid that we need to return much of the carbon that we have taken from the soil.” The simplest and most effective method is to use the biological process of photosynthesis by which plants use sunlight to break apart carbon dioxide and water, recombining them to form carbohydrates and oxygen. Some of those carbohydrates are exuded by plant roots into the soil and drive an underground ecology that both strengthens plants and sequesters carbon.

Organics International/ IFOAM encourages 3 Principles of Soil Carbon Sequestration to be instituted by all farmers throughout the world:

1. Minimize soil ecosystem disturbance by reducing or eliminating chemical inputs and tillage

2. Promote biodiversity above ground and below ground through inoculation, cover crop diversity, crop rotation, and the integration of perennials, annuals, and livestock whenever possible.

3. Keep living roots in the soil for as much of the year as possible.

**WHAT WE ASK THE CCPA TO DO:**

The CCPA refers generally to ‘sustainable practices. NOFA-NY would like to see this bill include agriculture and land-use practices, using organic, regenerative practices, which build soil that sequesters carbon, reduces fossil fuel inputs, and generally values the contributions of agriculture to climate change mitigation.

1. Support agricultural practices that are part of the solution: that is, organic regenerative practices that actually sequester large amounts of carbon – rather than incentivizing the continuation of some of the more polluting agricultural systems that create methane into a supposed ‘renewable’ energy source.

2. As we move towards 100% renewable energy and the siting of solar installations, New York must make sure that our best agricultural lands are incentivized to remain in agriculture and food production, while still preserving the right for our farmers to supplement their income with solar and wind installations on their lower quality land, rooftops, and along road margins.

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\(^1\) [https://rodaleinstitute.org/reversing-climate-change-achievable-by-farming-organically/](https://rodaleinstitute.org/reversing-climate-change-achievable-by-farming-organically/)

\(^2\) [https://thenaturalfarmer.org/issue/winter-2016-17-carbon-farming/](https://thenaturalfarmer.org/issue/winter-2016-17-carbon-farming/)
3. Sequester more carbon through organic regenerative practices on both agricultural land and large parklands rather than supporting the development of carbon trading which doesn’t support the solution, but does continue the practice of allowing air polluting industry, often in low income neighborhoods.

4. Finally, organic farmers support community control of energy sources, rather than leaving solar and wind development solely to big corporations.

Thank you again for the opportunity to provide testimony.

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