New York State Climate Action Council

Agriculture and Forestry Advisory Panel: Public Engagement Meeting

February 4, 2021



Climate Leadership and Community Protection Act (CLCPA) – Overview

Carbon neutral economy, mandating at least an 85% reduction in emissions below 1990 levels

40% reduction in emissions by 2030
100% zero-carbon electricity by 2040
70% renewable electricity by 2030
9,000 MW of offshore wind by 2035
6,000 MW of distributed solar by 2025
3,000 MW of energy storage by 2030
185 TBtu on-site energy savings by 2025

Commitments to climate justice and just transition

Agriculture and Forestry Advisory Panel Timeline of Activities

- > September 2020
 - Panel convened
- > October
 - Work Plan Approved
 - Subgroups formed, recommendations development begins
- > November
 - Progress Report presented to the CAC
- > December
 - Subgroups continue recommendation development, subgroup progress reported to Panel
 - Initial engagement with the Climate Justice Working Group
- > January 2021
 - Recommendations development continue; subgroup progress reported to Panel

- > February 2021
 - Recommendations development continue; public forum
 - Continued engagement with Climate Justice Working Group
- > March
 - · Refinement and finalization of recommendations
- > April
 - Mitigation recommendations presented to CAC
- > May July
 - Adaptation and Resilience recommendations presented to CAC
 - Recommendation refinements as needed (CAC feedback and Integration Analysis)
- > January 1, 2022
 - Draft Scoping Plan released for public comment
- > Early 2022
 - Public hearing on draft plan

Past Meeting Materials available on climate.ny.gov

Procedures for public comments

- After each topic, indicate your interest in speaking by entering your name (first & last) in the Q&A
- Discussion questions:
 - Which recommendations do you strongly support?
 - What refinements or additions would you suggest?
- Please limit your comments to 2 min. to allow as many speakers as possible
- Use the chat to indicate your agreement with speakers or shorter comments, chat will be saved as part of the record of this meeting
- Longer comments should be submitted via email

Agriculture and Forestry Panel: Subgroups and Strategies

Livestock/Dairy Management

- > Alternative Manure Management
- > Precision Feed Management

Soil Health and Nutrient Management

- > Nutrient (Fertilizer) Management
- > Soil Carbon Sequestration

Agroforestry

Silvopasture, Alley Cropping, and Riparian Forest Buffers

Land Conversions

- > Agricultural Protection and Access
- > Keeping forests as forests

Forestry:

- > Urban Forestry
- > Statewide Afforestation/Reforestation Efforts
- > Improved Forest Management
- Increase Manufacture and Use of Harvested Wood Products

Bioeconomy

> Advance the production of sustainable, renewable bio-based products as a substitute for fossil fuel-based products

Agriculture and Forestry Considerations: Livestock/Dairy Management

- > Manure Management Reduce methane emissions by implementing cover and flare systems, anaerobic digesters and other systems that abate, collect, capture and mitigate methane from manure storages.
 - Increase focus for methane reduction through the State's Climate Resilient Farming Program and other state programs while seeking pathways for additional private sector financing of on-farm systems.
- > **Feed Management -** Reduce methane emissions by increasing precision feed management (PFM) planning and implementation, conducting/reviewing research on novel approaches (e.g. feed additives), advancing information, training, outreach and technical assistance to livestock producers at various scales.
 - Seek opportunities for incentives to farms with long records of PFM adoption as well as farms in early adoption stages.

Agriculture and Forestry Considerations: Agroforestry

- > **Forested Buffers-** An area of predominantly trees and/or shrubs located adjacent to and upgradient from watercourses or waterbodies, or planted as shelterbelts or windbreaks.
 - Increase implementation and establishment through existing programs: AgNPS, Climate Resilient Farming, Source Water Buffer Program
 - Explore new incentive structures to increase income for maintaining systems long term
- > **Silvopasture -** Silvopasture is the practice of integrating trees, forage, and the grazing of domesticated animals in a mutually beneficial way.
 - Build on Intensively Managed Rotational Grazing momentum
 - Site and species considerations, increased education and technical assistance
- > **Alleycropping -** Carbon sequestration gained by planting wide rows of trees with a companion crop grown in the alleyways between the rows
 - Relatively unknown practice in NYS
 - Requires education, outreach, technical assistance, field trials, market analysis

Agriculture and Forestry Considerations: Nutrient Management

- > **Nutrient Management -** Reduce N2O emissions while achieving desired crop yield and quality through continued and expanded nutrient management planning and implementation on crop fields, hay fields, pastures, orchards, vineyards, and other agricultural lands receiving nutrients.
 - More farmers operating more acres with soil health and nutrient management plans improving soil carbon, 4Rs of nutrient management, and crop yield and quality.
 - Increase cost-share support for technical assistance (planning) and SH/NM practice implementation through the State's AEM Programs, such as the Climate Resilient Farming Program.
 - Expand cost-share eligibility in AEM Programs, such as the Climate Resilient Farming Program, for equipment needed by farms to implement more advanced soil health and nutrient management practices.

Agriculture and Forestry Considerations: Soil Health



- > Increase carbon sequestration with the adoption of soil health management practices.
 - Cover and Double Crops
 - Conservation Tillage
 - Managed Grazing
- > Panel focused on increasing current efforts and exploring innovative incentive options to increase adoption.
 - Increased technical assistance and outreach
 - Flexible Soil Health Program Policies that encourage stacking of practices
 - Payment for Ecosystem Service Practices (outcome based)
 - Support for Equipment
 - Measurement and quantification
 - Advance research for perennial agriculture

Agriculture and Forestry Considerations: Fossil Fuel Reduction

> Energy Efficiency and Fossil Fuel Reduction — Capitalize on fossil fuel and electricity reductions realized through conservation system efficiencies and continue to reduce fossil fuel use through on-farm renewable energy systems, beneficial electrification.

Agriculture and Forestry Considerations: Initiatives Supporting the Strategies

- > **Increasing technical assistance** Expand technical service capacity to aid farm planning, implementation and operation of practices.
- > AEM Planning for Climate Change Mitigation/Adaptation As with other AEM conservation plans, this allows farmers to analyze the balance between greenhouse gas emissions and carbon sequestration progressively at the management area scale or include all management areas, resulting in an estimated whole farm "carbon" footprint.
- > Research and Outreach Implement/expand research and outreach to guide current and emerging practices toward highest possible impact.
- > Payments for Ecosystem Services Incentive payments based on continual high level of management, performance and outcomes rather than specific practices

Agriculture and Forestry Considerations: Forests and Forestry Management

- > **Keep Forests as Forests** Avoid conversion
 - NY has 18.6 million acres of forests slight decrease since 2000
- > Improve forest management on existing forest land
- > Plant more trees rural and urban

Agriculture and Forestry Considerations: Forests and Forest Management

- Improved Forest Management Practices to increase forest sequestration on existing forest lands
 - Improve Forest Regeneration Control invasive species and deer browsing by providing incentives for private forest landowners through the expansion of existing program or creation of new ones
 - Encourage Sound Forestry- Cutting only the best trees (high grading) results in less forest carbon compared to scientifically sound forestry practices
- > Panel discussion policies to scale up improved forest management
 - Focused on private forest
 - Develop a carbon option or track for 480c Incentives
 - Allowing both no harvest and harvest scenarios
 - Separate track
 - Forest Carbon Option for AEM
 - Expanded Regenerate NY
 - Carbon Certification for foresters
 - Forest Certification for incentives to small forest landowners
 - Massive expansion of outreach efforts to landowner
 - Discussions around additionality, carbon offset programs, and double counting.

Agriculture and Forestry Considerations: Forests and Forestry Management

> Reforestation and Afforestation

- Increase the number of forested acres
- Increase the stocking in understocked stands (Improved Forest Management)
- Estimated maximum of 1.7 to 2.4 million acres
- Incentives for establishing forest marginal, underutilized agricultural land and other rural lands

> Increase tree canopy in cities and villages

- Urban and community forest management plans
- Plant street and park trees
- Improve maintenance of tree resource
- Target heat islands and under served/disadvantaged communities

Agriculture and Forestry Considerations: Forests and Forestry Management

- > Harvested Wood Products Discussion in Bioeconomy
 - Store carbon
 - Maintain forest industry
 - Substitution benefit of HWP in comparison to carbon intensive material

Agriculture and Forestry Considerations: Avoided Conversions

> Increase incentives for landowners to conserve forests

- Modify Real Property Tax Law, 480a
- Create a new 480c focus on Carbon
- Investigate tax credit for forest landowners

> Conserve agricultural and forestland

- Conservation easements State, municipal, non-profits
- Fee Acquisition State, municipal, non-profits

Agriculture and Forestry Advisory Panel Bioeconomy Subgroup

- > Climate-focused Bioeconomy definition the portion of an economy that produces sustainable, renewable bio-based feedstocks, rather than fossil fuel-based feedstocks, to produce products that achieve the climate and social justice goals of the CLCPA.
 - Focused on building a long-term bioeconomy supply chain in NYS that can serve multiple future markets
 - Assessing potential policies that achieve CLCPA requirements as a foundation for building out this market sector
 - Start with an assessment of existing policies and programs that support the bioeconomy of today
 - Consult with EJ groups throughout
 - Enhance the public's understanding of the Bioeconomy and its role in implementing the CLCPA
 - Three main categories of focus for the bioeconomy of the future: Substitution, Bioenergy, Biorefining

Agriculture and Forestry Advisory Panel Bioeconomy Subgroup

- > Substitution of bio-based products for fossil based, strategies under consideration:
 - Increase use of wood products in buildings
 - Increase use of bio-plastics
 - Sequestration potential through a low-carbon marketplace for NYS products
- > Bioenergy
 - Assess in-state feedstock potential and emissions reduction opportunities
 - Working with other panels on highest and best end use
 - Co-pollutant and land use considerations
- > Biorefining
 - Future-looking to use bio feedstocks to replace petrochemicals, pharmaceuticals, etc
 - R&D investment to advance cellulosic nanotechnology
- > Preserve and enhance NYS supply chain to meet future market opportunities

Next Panel Meeting Dates

March 2nd, 2021 March 16th, 2021 (1pm start)

Thank you

Further comments through:

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