New York State Climate Action Council

Agriculture and Forestry Advisory Panel

October 19, 2020 Meeting 3



Agenda

- > Welcome
- > Roll Call
- > Final Workplan review
- > Recommendations
 - Agricultural
 - Forestry
 - Overlapping Topics
- > Cross-cutting and panel topics
- > Meeting Schedule: next meeting

Final Workplan

- Section 1 Identification of Panel Members
- Section 2 Roles and Responsibilities of Chair, Panel members and agency staff
- Section 3 Goals for the Agriculture and Forestry Sector
- Section 4 Scope of Work
- Section 5 Plans for Public Participation
- Section 6 Timeline

Recommendation Contents

- Mitigation Strategies including actions that directly reduce emissions, create or increase sequestration
- Actionable steps for implementation
- Include but not limited to: policies, incentives, new programs, modification to existing programs, planning, research and development activities
- Recognition of co-benefits, increasing resiliency, avoiding leakage, fostering just transitions
- Cross-sector recommendations should be advanced only after consultation with the appropriate panels

- Agricultural Emission reductions/sequestration (methane, nitrous oxide, soil carbon)
- Forestry forest protection and management for increased sequestration
- Both afforestation/forest and woodland management
- Cross-cutting recommendations to be made in consultation with other panels
- Bioeconomy advancement

Agricultural – Livestock Management

Enteric Fermentation: 12.46 mmt CO2e/yr

Mitigation Strategy: Feed Management – Manipulating and controlling the quantity and quality of available nutrients, feedstuffs, or additives, fed to livestock and poultry to reduce enteric emissions of CH4 and reduce the Volatile Solid (VS) and nitrogen (N) available in manure so to reduce CH4 and N2O production in manure management systems.

Estimated Full Emission Reduction Potential: - 2.1 mmt CO2e/yr

Action Steps: Increase AEM feed management planning, conduct/review research on novel approaches (e.g. feed additives), advance information, training, outreach to livestock producers at various scales. Increase technical assistance to farms. Provide financial incentives to farms for making management changes and to support applicable feed infrastructure, Others?

Agricultural – Livestock Management

Manure Management: 7.65 mmt CO2e/yr

Mitigation Strategy: Manure storage cover and flare. Retrofitting manure storages with covers and flares so that methane produced is captured and combusted.

Estimated Full Emission Reduction Potential: - 4.33 mmt CO2e/yr

Action Steps: Increase funding for the Climate Resilient Farming (CRF) Program and associated programs to incentivize implementation through public cost-share. Partner with NYSERDA, DEC, and others to assist farms to enhance these projects with anaerobic digestions systems and renewable natural gas opportunities to improve the economics of the system and replace fossil fuel emissions. Encourage new manure storages funded through the AgNPS Program to incorporate methane abatement strategies including retrofit capacity. Others?

Agricultural – Soil Management

Nitrogen and Fertilizer N2O: 2.93 mmt CO2e/yr

Mitigation Strategy: Crop Nutrient Management (N fertilizer reductions). Avoided N2O emissions due to more efficient use of nitrogen and avoided upstream emissions of from energy intensive synthetic fertilizer manufacture.

Estimated Full Emission Reduction Potential: - .2 mmt CO2e/yr

<u>Action Steps</u>: Increase Agricultural Environmental Management (AEM) nutrient management Planning. Increase technical and financial assistance to farms. Make nutrient management tools accessible and available to farms through education, financial incentives, and technical assistance **Others?**

Agricultural - Soil Management

Soil Carbon Management (including soil health and other regenerative practices): Increasing sequestration not emission reduction

Mitigation Strategy: 1. Cover crop <u>adoption</u> (including double cropping) by planting grasses, legumes, and forbs in the fallow season between main crops increasing the <u>overall vegetative</u> cover with potential soil carbon sequestration and other benefits.

2. Replacing annuals crops with perennial crops

Estimated Full Sequestration Potential: - 1.47 mmt CO2e/yr (includes soil carbon increases from cover crop and replacing annual with perennial production)

Action Steps: Increase reimbursement rates and access to the CRF and AgNPS Programs, increase technical assistance, advance quantification and measurement tools for verification of benefits, advance research in perennial grain production, convert annual cropland to perennial pasture, Others?

Subgroups

Agricultural

Forestry

Cross-Cutting Topics

- Costs and innovative financing, including markets, government and private financing
- Bioeconomy including energy crops, forest products, mass timber
- Energy siting, emissions, production and distribution, food waste and waste based fuel production
- Land use and local government issues
- Wetlands

Meeting Schedule: November 2nd, 2020