New York State Climate Action Council

June 24, 2020

2nd Meeting

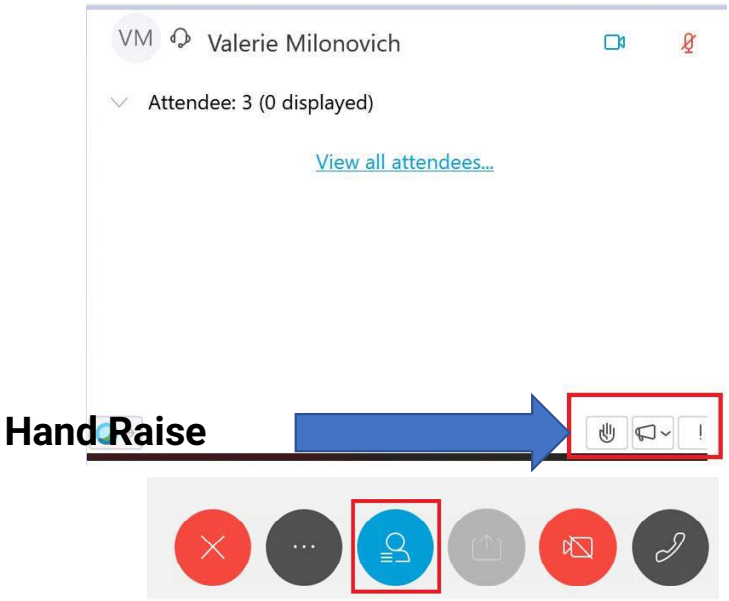
NEW YORK STATE OF OPPORTUNITY. | Climate Action Council

Meeting Procedures

Before beginning, a few reminders to ensure a smooth discussion:

- CAC Members should be on mute if not speaking.
  - If using phone for audio, please tap the phone mute button.
  - If using computer for audio, please click the mute button on the computer screen (1st visual).
- Video is encouraged for CAC members, in particular when speaking.
- In the event of a question or comment, please use the hand raise function (2nd visual). You can get to the hand raise button by clicking the participant panel button (3rd visual). The co-chairs will call on members individually, at which time please unmute.
- If technical problems arise, please contact Karen Fusco at karen.fusco@nyserda.ny.gov

You'll see when your microphone is muted



Agenda

- Consideration of Minutes
- Co-Chair Reflections and Remarks
- Presentation by Consultants: Emissions Reduction Pathways Analysis, *Energy and Environmental Economics, Inc.*
- Discussion of Working Groups and Scopes of Work for Advisory Panels
- Updates on NYS Implementation from DEC: Greenhouse Gas Emission Limits, Value of Carbon Reduction
- Next Steps

Consideration of March 3, 2020 Minutes

Co-Chair Reflections and Remarks

The Last Four Months

The earth has shifted under our feet since our last council meeting

- **COVID-19 Pandemic & Economic Fallout**
- **Widespread Call to Action and Protests for Social Justice**

Coronavirus Pandemic

New York State mounted an unprecedented response

"Through hell and back."- Gov. Cuomo

389,666 positive cases; 24,782 fatalities

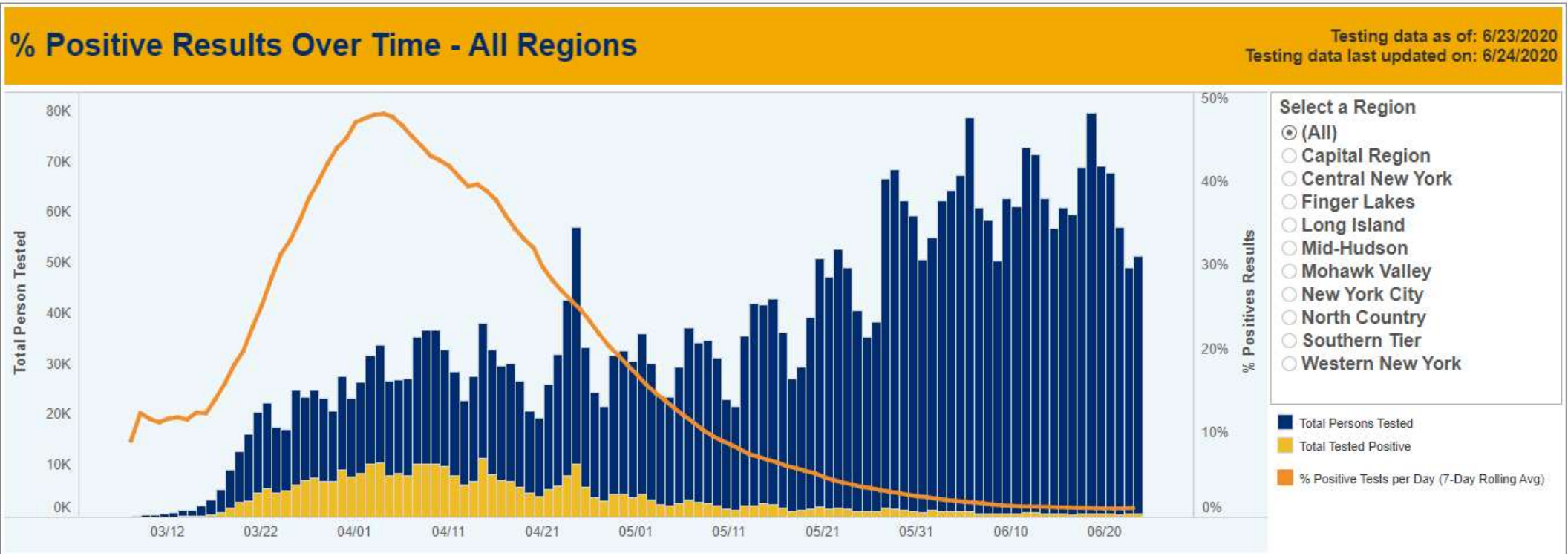
~2.5 million filed initial unemployment claims in NYS

$13.3 billion budget shortfall (14%) as of late April

New York on Pause – slowed the spread and saved lives

New York Forward – careful reopening in phases

“We flattened the curve.”- Gov. Cuomo



COVID's Disparate Impacts

Communities of color and low-income communities hardest hit by the COVID crisis

> Air pollution exacerbates impacts of COVID-19

> These same communities are among most vulnerable to climate change

HARVARD T.H. CHAN SCHOOL OF PUBLIC HEALTH

Air pollution linked with higher COVID-19 death rates

People with COVID-19 who live in U.S. regions with high levels of air pollution are more likely to die from the disease than people who live in less polluted areas, according to a new nationwide study from Harvard T.H. Chan School of Public Health.

The New York Times

June 18, 2020

Climate Change Tied to Pregnancy Risks, Affecting Black Mothers Most

Women exposed to high temperatures or air pollution are more likely to have premature, underweight or stillborn babies, a look at 32 million U.S. births found.

Murder of George Floyd

National reckoning with the reality of systemic racism.

Each of us must ask ourselves: are we doing all we can?

A rare opportunity: twin crises have prepared us to address climate crisis.

Government matters. Science matters.

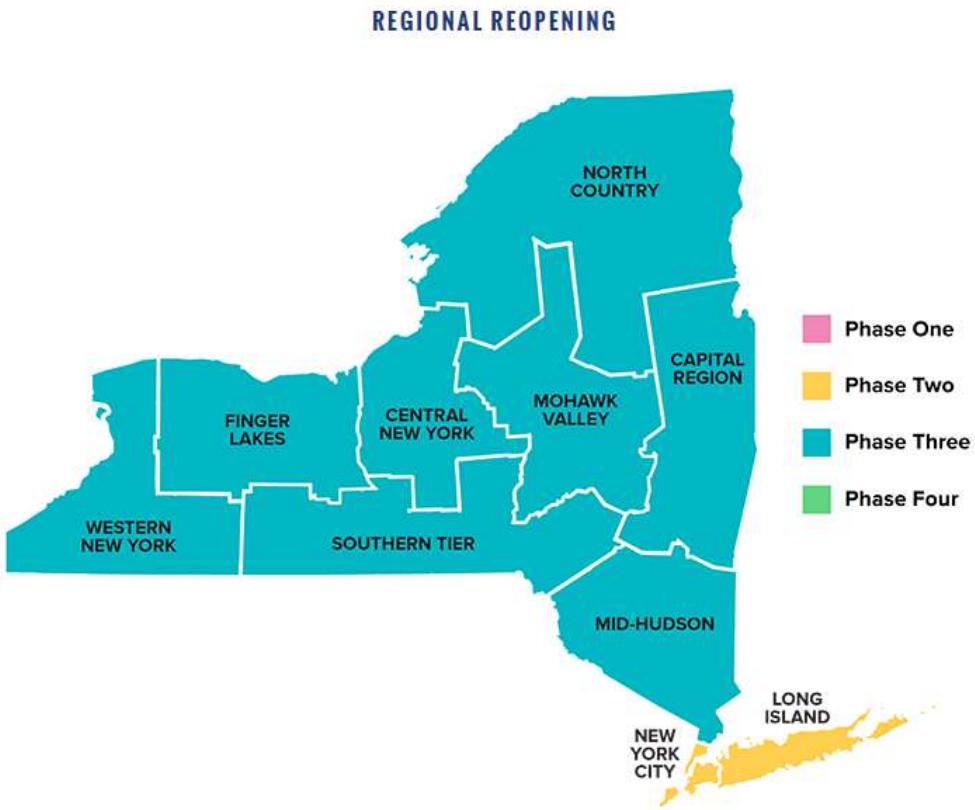
More public support for changing how we generate energy, build our cities, travel, grow our food, and more?

Cannot be accomplished without Environmental and Climate Justice.

Clean Energy to Lead the Economic Recovery

What New York State is Doing to Keep Clean Energy Progress on Track

- > Clean energy work was paused for almost 2 months under NY Pause, but has now followed the regional reopening process under NY Forward
- > Clean energy is getting back to work, but safely
- > Agencies have helped industry ensure full adherence to NYS Department of Health (DOH) construction guidance and other NY Forward protocols for covered industries
- > Agencies have also acted quickly to provide flexibility and relief for program participants:
  - Extending project deadlines, adding interim milestones, modifying/accelerating incentives
  - Waived project completion documentation
  - 0% loan offering under GJGNY
  - And more…



But Clean Energy Hit Hard by COVID Fallout

The job impacts have been severe, but may be leveling off: federal labor data suggests New York lost 20,000+ clean energy jobs in March, April, and May; almost 625,000 nation-wide

By Industry Job Losses, May 2020

Sector	March Claims (adj)	April Claims (adj)	May Claims	Total
Energy Efficiency	103,298	309,584	18,880	431,762
Renewables	23,739	71,705	4,272	99,717
Clean Vehicles	11,399	35,070	2,059	48,528
Grid & Storage	6,517	19,666	1,166	27,349
Clean Fuels	2,186	10,390	657	13,233
TOTAL	147,139	446,416	27,035	620,590

State With Most Job Losses, May 2020

State	March Claims (adj)	April Claims (adj)	May Claims	Total Claims
US TOTAL	147,139	446,416	27,035	620,590
California	27,583	77,815	4,313	109,712
Texas	5,965	25,170	1,709	32,844
Florida	3,963	25,949	2,563	32,475
Michigan	7,867	22,245	1,012	31,124
Georgia	1,909	25,282	1,741	28,932
North Carolina	9,124	17,138	955	27,217
Pennsylvania	8,283	12,780	571	21,634
Washington	5,646	14,433	1,163	21,242
New York	6,006	13,868	848	20,722
Ohio	6,929	12,879	612	20,420

Setting the New Standard: Updated CES Framework Charts Course for 70% by 2030

Filed by DPS and NYSERDA on June 18, CES White Paper is key implementing step for the CLCPA guiding power sector decarbonization

> Expanded Clean Energy Standard will:
  - Accelerate renewable energy development in New York
  - Create thousands of good-paying clean energy jobs for New Yorkers
  - Advance environmental justice for communities and workers historically neglected in and actively disadvantaged by energy policy planning
  - Reduce emissions to combat climate change.

> Building on the Accelerated Renewable Energy Growth and Community Benefit Act, clean energy will provide a springboard for economic activity, positioning New York as a leading national market with the right conditions to foster rapid recovery and growth

> We can rebuild our economy sustainably: we can put thousands of people back to work building a cleaner and more resilient future.

Affordable Solar Energy for Disadvantaged Communities

Making critical new resources available to help underserved New Yorkers access clean, affordable, and reliable solar energy

- On June 23, NYSERDA announced **more than $10.6m in funding** to address multiple market barriers hindering PV and energy storage development in low-to-moderate income (LMI) communities
- Comes after NY-Sun's $573m program expansion approved in May, with **$200m total** focused on LMI, affordable housing, environmental justice, and disadvantaged communities
- Community organizations & affordable housing providers will be critical partners in developing locally driven solutions, achieving equitable access to benefits of solar
- Funding aims to provide these on-the-ground allies with resources to get solar and storage projects off the ground, deliver clean power where it matters most

Achieving Climate Justice

Climate Justice Working Group

Eddie Bautista, NYC Environmental Justice Alliance

Jerrod Bley, Adirondack North Country Association

Dr. Donathan Brown, Adirondack Diversity Solutions

Cecil Corbin-Mark, WE ACT for Environmental Justice

Rahwa Ghirmatzion, PUSH Buffalo

Amy Klein, Capital Roots

Mary Beth McEwen, Cornell Cooperative Extension Of Oneida and Madison Counties

Abigail McHugh-Grifa, Rochester People's Climate Coalition

Elizabeth Yeampierre, UPROSE

Rosa Mendez, DEC

Neil Muscatiello, DOH

Joseph McNearney, DOL

Christopher Coll, NYSERDA

Achieving Climate Justice

Council Scoping Plan to prioritize disadvantaged communities

- Identify measures to reduce emissions of co-pollutants.
- Consult with Climate Justice Working Group and Environmental Justice Advisory Group.

DEC rulemakings to implement the Council recommendations

- Ensure no increase in co-pollutant emissions or disproportionate burden on disadvantaged communities.
- Prioritize measures to reduce emissions in disadvantaged communities.

DEC to implement community air monitoring

- In coordination with the Climate Justice Working Group, DEC shall establish a community air monitoring pilot program in at least 4 disadvantaged communities by October 2022.
- By June 2024, DEC shall prepare a strategy to reduce emissions in disadvantaged communities with a disproportionate pollution burden.

Investing in Climate Justice

Invest or direct resources with a goal that disadvantaged communities receive 40% of overall benefits of spending on:

- Clean energy and energy efficiency programs
- Projects or investments in the areas of housing, workforce development, pollution reduction, low-income energy assistance, energy, transportation, and economic development
- *40% goal is not a ceiling*

Prioritizing Climate Justice

The Climate Justice Working Group and Environmental Justice Advisory Group play essential roles in achieving climate justice

Climate Justice Working Group

Scope:

- Develop criteria for and list of disadvantaged communities
- Coordinate with agencies for report on barriers and opportunities for clean energy
- Coordinate with Council and each Advisory Panel

Permanent Environmental Justice Advisory Group

Scope:

- Develop model Environmental Justice policy
- Coordinate with Council and each Advisory Panel

Presentation: Emissions Reduction Pathways Analysis

Emissions Reduction Pathways Analysis

Illustrative pathways to help us think through the scale, speed of the transition ahead

- It is intended to serve as a starting point to inform the work of the Council and its advisory panels in their deliberations
- Pathways does not measure or recommend any policy or programmatic approaches to emissions reduction achievement in any sector
- The Council will ultimately recommend the strategies and pathways that will be needed to achieve the goals of the statute

Further Work Ahead

- The current analysis will be further advanced to reflect the emissions accounting methodology of the Climate Act
- As the advisory panels advance their work, the Pathways analysis will be updated to reflect new assumptions and the interactions across sectors

Discussion: Working Groups and Scopes of Work for Advisory Panels

Advisory Panels and Working Groups

Council convenes panels and working groups requiring special expertise

Purpose is to provide recommendations to the Council on specific topics as the Council prepares the Scoping Plan

Advisory Panels

- Transportation
- Land Use and Local Government
- Housing and Energy Efficiency
- Energy Intensive Industries
- Power Generation
- Agriculture and Forestry

Just Transition Working Group

- Convened by CAC
- 13-17 members, co-chaired by NYSERDA and DOL

Climate Justice Working Group

- Convened by DEC
- DEC (chair), NYSERDA, DOL, DOH, and 9 EJ representatives (NYC, upstate urban, rural)

Environmental Justice Advisory Group

- Appointed by Legislature and Governor
- 16 members

Recommended Advisory Panel Structure

Advisory Panel

> Chaired by relevant agency head(s), up to 5 voting members, selected by Council, represent individuals with direct involvement or expertise

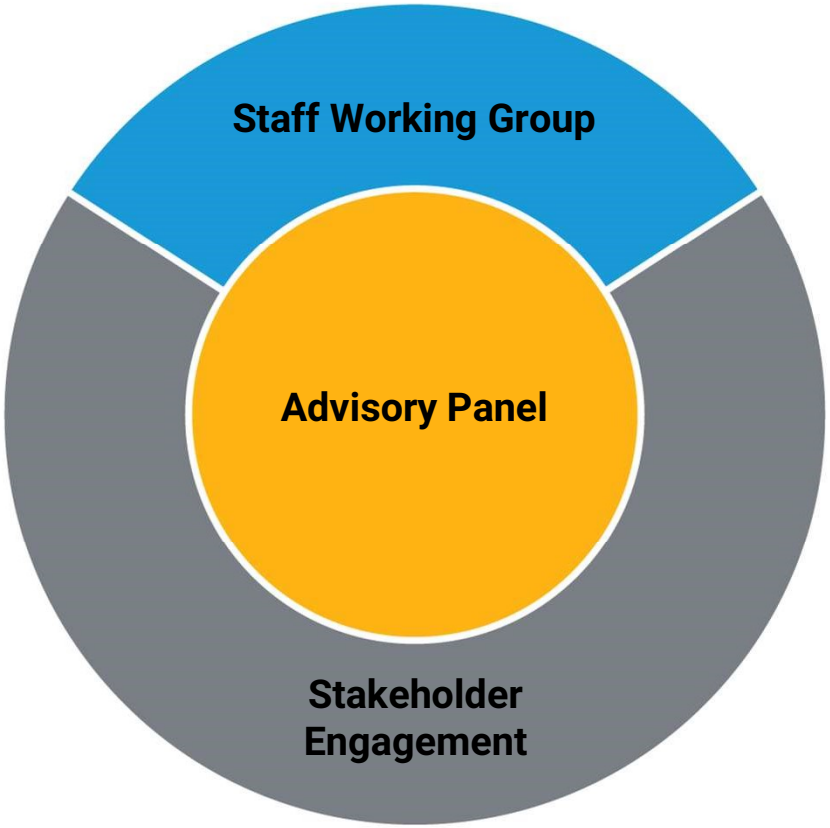
> Work directly with the Council on preparation of the Scoping Plan, coordinating with Environmental Justice Advisory Group and Climate Justice Working Group

Stakeholders

> Staff to assist with managing the engagement process with stakeholder community

Staff Working Group

> Agency staff to support work of the Advisory Panel



Advisory Panel Process

Each advisory panel should:

> Consult with the Climate Justice and Just Transition working groups to inform its recommendations for the Climate Action Council.

> Seek public input at the appropriate times to inform the development of recommendations to the Council for consideration.
  - Seek input from a broad base of stakeholders
  - Hold at least one forum that is open to the public

> Provide regular updates to the Council on the development of recommendations.
  - Present interim findings at Council meetings
  - Provide final recommendations six months prior to the Council's release of the draft Scoping Plan

> Information regarding advisory panel public meetings and comment opportunities, and a contact for the advisory panel shall be available on the climate webpage.

Discussion of Advisory Panels

To guide the selection and work of each panel, consider:

- Scope: what topics and subsectors
- Direction provided by Pathways: numerical goals indicate magnitude of transformation that is needed
- Strategies and technologies to be evaluated
- Cross-sectoral collaboration with other Panels
  - Each Panel will coordinate with Climate Justice Working Group and Permanent Environmental Justice Advisory Group

Transportation Advisory Panel

Develop sector-specific strategies to achieve 31-33% reduction from 2016 level by 2030 (86-97% by 2050)

- Scope may include: modes/vehicles, fuels, system efficiency, and feasibility/supply chain availability
- Technologies/strategies to consider:
  - Light duty ZEVs (60-70% of sales by 2030)
  - Zero emission buses (60-70% sales by 2030) and trucks (35-50% sales by 2030)
  - Cleaner fuels: e.g. 40% renewable diesel and 100% RNG by 2030
  - Reduce the growth in VMT (3% by 2030): strategies include transit service expansion and micro-transit, enhanced longer distance passenger rail service, active transportation and others
- Cross-sectoral coordination: power generation; land use and local government; and agriculture and forestry

Power Generation Advisory Panel

Develop sector-specific strategies to achieve 53-56% reduction from 2016 level by 2030 (100% by 2050)

- Separately advancing: PSC proceeding to achieve 70% renewable by 2030 and 100% zero emissions by 2040
- Scope may include:
  - system transitions needed to achieve renewable/emissions-free electricity
  - natural gas transmission and distribution, including renewable natural gas
  - role of other zero-emission technologies
  - load management to support beneficial electrification
  - strategies to facilitate energy infrastructure siting
- Cross-sectoral collaboration: beneficial electrification with Transportation and Energy Efficiency/Housing

Housing and Energy Efficiency Advisory Panel

Develop sector-specific strategies to achieve 31-39% emission reduction from 2016 level by 2030 (85-93% by 2050)

- Scope may include: residential, commercial and government buildings; electricity and fuel efficiency; affordability
- Technologies/strategies to consider:
  - energy efficiency (85% efficient shell sales by 2030)
  - end use electrification (50-70% heat pump sales by 2030)
  - carbon neutral buildings, climate smart affordable housing, climate friendly refrigerants, distributed renewables
  - greater outcomes through operations staff training and resident engagement
- Cross-sectoral collaboration: Power Generation; Land Use and Local Government

Energy Intensive and Trade Exposed Industries Advisory Panel

Develop sector-specific strategies to achieve 6% emission reduction from 2016 level by 2030 (81-82% by 2050)

- Scope may include: energy use, process emissions, and non-combustion sources of GHGs
- Technologies/strategies to consider:
  - energy efficiency
  - low-carbon thermal solutions, cleaner fuels, electrification
  - carbon capture utilization and storage, innovation
- Addressing competitiveness and leakage may include:
  - rate design; low-cost power programs
  - market preference for goods produced with minimal greenhouse gas emissions
  - opportunities to support clean technology supply chains
- Cross-sectoral collaboration: Just Transition Working Group

Agriculture and Forestry Advisory Panel

Develop sector-specific strategies to increase annual sequestration from 22.5 MMT to 25.5-32.5 MMT by 2050

Scope may include: reducing emissions from agriculture and forestry operations; developing sustainable biofuels; and carbon sequestration measures in land management practices

- Strategies to consider:
  - forest and agricultural best management practices for carbon sequestration
  - increasing sequestration by supporting markets for the use of wood for building materials and other uses.
  - support forest growth and sequestration through increased access to low grade markets
  - development of bioenergy and methods to accurately measure net emissions
  - non-regulatory methods for reducing greenhouse gas emissions from livestock operations
  - creating opportunities for renewable natural gas development that align with organic waste management
- Cross-sectoral collaboration: Power Generation and Transportation on bioenergy/biofuels; Land Use and Local Government on natural and working lands

Land Use and Local Government Advisory Panel

Possible sector-specific topics

- Scope may include: providing local perspective to other advisory panels, aligning land use strategies and local government policies
- Strategies to consider:
  - comprehensive plans for greenhouse gas reduction
  - climate smart affordable housing policies
  - transit-oriented development
  - expanding green spaces for cooling and sequestration
  - stretch codes
  - community distributed generation and community choice aggregation
  - education and capacity building at the local level
- Cross-sectoral collaboration: Transportation; Energy Efficiency/Housing; Agriculture and Forestry

Just Transition Working Group

Possible topics

- Scope:
  - workforce development and training, including for disadvantaged communities and underrepresented populations (veterans, women, formerly incarcerated persons)
  - impacts to current New York State workforce and avenues to maximize their skills and expertise in the clean energy economy
  - impacts of closing electric generating facilities and issues and opportunities presented by reuse of these sites
  - reducing carbon leakage risk and anti-competitiveness impacts (in collaboration with Energy Intensive and Trade Exposed Industries)
- Study the job opportunities created by transitioning to a low carbon economy and the skills necessary for those jobs

Updates on NYS Implementation from DEC: Greenhouse Gas Emission Limits, Value of Carbon Reduction

Emission Limits Rulemaking

DEC is required to undertake a rulemaking to establish statewide emission limits for 2030 and 2050

- Rule will convert 40% and 85% reduction requirements into statewide emission limits, measured in tons of CO2e
- Methodology: DEC and NYSERDA are developing a revised 1990 baseline per CLCPA requirements
  - Include upstream fossil fuel emissions
  - Use 20 year Global Warming Potential for non-CO2 pollutants
- Use of statewide emission limits:
  - Scoping Plan must be designed to meet the limits and achieve “net zero emissions”
  - DEC is required to establish regulations that ensure limits are met
- Progress will be tracked through annual inventories

Emission Limits Rulemaking

Target timeline of milestones to meet CLCPA deadline

Milestone	Date
Pre-Proposal public webinars	February 2020
Proposal released for public comment	August 2020
End of public comment period	October 2020
Rule Effective (CLCPA requirement)	January 1, 2021
First annual inventory under CLCPA	January 1, 2022

Value of Carbon Reduction

Requires DEC, in coordination with NYSERDA, to establish a Value of Carbon as an evaluation tool for agency decision making

- Describe damages and marginal abatement cost approaches
- Consider a range of discount rates, including zero
- Consider the social cost of carbon in other jurisdictions
- Provide values for non-CO_2 greenhouse gases

Target timeline of milestones to meet CLCPA deadline

Milestone	Date
Stakeholder conference	July 2020
Public comment period	August-September 2020
Final released (CLCPA requirement)	January 1, 2021

Next Steps