

MINUTES OF THE CLIMATE ACTION COUNCIL MEETING
HELD ON OCTOBER 8, 2020

Pursuant to Notice and Agenda, a copy of which is annexed hereto, a meeting of the Climate Action Council (“Council”) was convened at 2:00 p.m. on Thursday, October 8, 2020. The following Members attended:

Council Co-Chairs

- Doreen Harris, Acting President and CEO, New York State Energy Research and Development Authority
- Basil Seggos, Commissioner, New York State Department of Environmental Conservation

Council Members

- Richard Ball, Commissioner, New York State Department of Agriculture and Markets
- Donna L. DeCarolis, President, National Fuel Gas Distribution Corporation
- Marie Therese Dominguez, Commissioner, New York State Department of Transportation (Ron Epstein, Designee)
- Gavin Donohue, President and CEO, Independent Power Producers of New York
- Dennis Elsenbeck, Head of Energy and Sustainability, Phillips Lytle LLP
- Thomas Falcone, CEO, Long Island Power Authority
- Eric Gertler, Acting Commissioner and President and CEO-designate of Empire State Development
- Rose Harvey, Senior Fellow for Parks and Open Space, Regional Plan Association
- Bob Howarth, Professor, Ecology and Environmental Biology at Cornell University
- Peter Iwanowicz, Executive Director, Environmental Advocates of NY
- Jim Malatras, Chancellor, State University of New York
- Gil C. Quiniones, President and Chief Executive Officer, New York Power Authority
- Roberta Reardon, Commissioner, New York State Department of Labor
- Anne Reynolds, Executive Director, Alliance for Clean Energy New York
- John B. Rhodes, Chair, New York State Public Service Commission
- Rossana Rosado, Secretary of State, New York State Department of State (Kisha Santiago, Designee)
- Raya Salter
- Paul Shepson, Dean, School of Marine and Atmospheric Sciences at Stony Brook University
- RuthAnne Visnauskas, Commissioner and CEO, New York State Homes and Community Renewal (Rebecca Koepnick, Designee)
- Howard A. Zucker, Commissioner, New York State Department of Health (Gary Ginsberg, Designee)

Also present were various State agency staff and members of the public.

Ms. Harris and Mr. Seggos, Co-Chairs of the Council, welcomed all in attendance. A quorum was present throughout the meeting.

Consideration of the Minutes of August 24, 2020 Meeting

The first item on the Agenda was to advance the minutes from the August 24, 2020 meeting. Upon hearing no changes or objections, upon motion duly made and seconded, the minutes were adopted. Co-Chair Harris stated that the minutes will be posted to the Council website.

Co-Chair Remarks and Reflections

Co-Chair Seggos reported that it continues to be a busy year for climate issues and highlighted the State's contribution to fighting the record-breaking wildfires in the western states, stating that three teams of NYS Department of Environmental Conservation forest rangers, staff, and volunteers were deployed as part of the response effort.

Co-Chair Seggos also reported on the finalization of new standards to cut hydrofluorocarbons (HFCs), stating that the new rules, with prohibition dates over the next four years, are expected to reduce HFC emissions. He also highlighted NYSERDA's \$3 million Next Gen Heating, Ventilation and Air Conditioning (HVAC) Innovation Challenge designed to introduce new building technologies.

Regarding Climate Week activities, Co-Chair Harris described the range of events held across the State during the week and thanked the involved State agencies and authorities for their continued partnership. In addition to the HFC regulations mentioned by Co-Chair Seggos, she highlighted NYSERDA's Empire Building Challenge; the first community solar and storage project in Westchester County; a Memorandum of Understanding between the NYS Department of Financial Services and NYSERDA to accelerate low-carbon transition and boost climate risk cooperation and solutions among New York's financial institutions; NYPA's first EVolve NY High-Speed Electric Vehicle (EV) Charging Hub; the Port Authority of New York/New Jersey's New Clean Construction program to target greenhouse gas (GHG) and waste reduction in construction; NYS DEC's announcement of 13 new, certified Climate-Smart Communities, and NYSERDA's \$8.5 million effort for Career Pathway Training Partnerships to train 1,000 workers.

Advisory Panel and Working Group Chairs Report-out on Work Plans

Co-Chair Seggos reported that all Advisory Panels have met at least once since the Council last met and are working on respective scopes and work plans. With that, the Advisory Panel Chairs or designees were introduced in succession to provide status reports.

The Agriculture and Forestry Advisory Panel Chair Richard Ball, Commissioner of Agriculture, Department of Agriculture and Markets, reported the panel is comprised of 18 diverse experts in the field of agriculture and forestry and has met twice. The Work Plan has been developed with extensive input from the Advisory Panel members and encompasses multiple economic sectors. The Work Plan contains many goals, such as GHG emission reduction goals, carbon sequestration goals, goals to ensure the benefit of well-managed resources are maintained and addresses the global GHG reduction potential goals by substituting grown-in-New York products for fossil fuel-intensive products. Major topic areas identified to meet the Work Plan goals include: land use conversions, forestry and forest management, livestock management, agricultural soil management, as well as various cross-cutting topics. Commissioner Ball also presented a timeline of Advisory Panel meeting topics and activities and the planned external engagement activities.

In response to an inquiry by Peter Iwanowicz regarding the Agriculture Advisory Panel GHG emission reduction target, Commissioner Ball responded that the goals of 15% by 2030 and 30% by 2050, are informed by academic research. The agriculture and forestry sequestration goal is intended to achieve net zero.

In response to an inquiry by Bob Howarth regarding the role of biofuels as it relates to inadvertent land use changes, Commissioner Ball welcomed suggestions.

Commissioner Ball agreed that a suggestion by Donna DeCarolis regarding renewable natural gas and the cross-over of this issue with various Advisory Panels, specifically for the energy efficiency and housing area given developers' interests in connecting to utility systems, was worthy of pursuit.

The Land Use and Local Government Advisory Panel, chaired by Sarah Crowell, Director of the Office of Planning Development and Community Infrastructure, New York State Department of State, has met several times and is also diverse in its expertise. Ms. Crowell anticipates a broad range of issues, stating that the goal is to provide the "scaffolding" to meet the measurable goals set by other Advisory

Panels. Topic areas include smart growth, non-motorized transportation, maximizing sequestration, solar and wind zoning, energy efficiency support through local regulations and programs, reducing barriers to clean energy adoption, local government leadership, and a comprehensive set of recommendations for adaptation and resilience across all sectors. In addition, equity issues will be a focus throughout.

Ms. Crowell presented a timeline of Advisory Panel meeting topics and activities and the planned external engagement activities, as well as consultations with other Advisory Panels, all of which should result in a very robust set of recommendations that can be realistically implemented. She stressed the need for a diversity of voices and experiences given the broad scope.

In response to an inquiry by Bob Howarth regarding code issues and fossil fuel-based heating, Ms. Crowell stated that this Advisory Panel will work closely with the Energy Efficiency and Housing Panel specifically on that issue.

Dennis Elsenbeck suggested aligning smart growth and utility planning, an issue that is partly addressed by State legislation and partly by regulatory processes, to arrange preferred sites and assess the decarbonization impact at the local level.

Referencing back to a discussion during the previous panel, Raya Salter emphasized that natural gas is not considered to be a renewable fuel.

In response to a concern by Peter Iwanowicz that the lack of local government experts on the Advisory Panel is a deficiency, Ms. Crowell stated that a forthcoming roundtable of local elected officials will bring in a diverse range of local expertise and that the type of trade groups referenced by Mr. Iwanowicz will be of great value.

The activities of the Energy Efficiency and Housing Panel, chaired by RuthAnne Visnauskas, Commissioner, Homes and Community Renewal, were presented by Janet Joseph, Senior Vice President, NYSERDA. Ms. Joseph stated that the Panel will focus on activities and strategies that will drive decarbonization in all buildings, in all sectors, both new and existing. She reported that the Advisory Panel has representation from the public and private sectors, community groups, solution providers, and across all building sectors. The focus is on reducing energy demand, assessing operational issues and behavioral measures that can reduce demand, and considering codes and standards as strategies.

Ms. Joseph stated that the electrification of buildings is a critical pillar that will result in related electricity grid impacts. As such, the Advisory Panel will seek low-carbon solutions that enhance the ability to connect with the grid. Throughout, she pointed out opportunities for this Advisory Panel to consult and work with various other Advisory Panels. She identified a number of cross-cutting topics, including: resilience; embodied carbon; opportunities for workforce and labor needs; consideration of impacts to all involved in the building sector (owners, operators, tenants, disadvantaged communities, etc.); issues with respect to affordability; measures to make low-carbon projects cost-competitive; and methods and metrics for evaluating building performance.

Ms. Joseph stated that the milestones for the group include solidifying the work plan, establishing subgroups, level-setting, sharing information, and identifying barriers in October; identifying solution sets, strategies and policies in November; sizing the impacts from the strategies and prioritizing in December. In the first quarter of 2021, the Advisory Panel expects to refine quantification and implementation of different policies and continue to engage with other Advisory Panels. The sub-groups will bring in experts, stakeholders, and market participants to inform deliberations.

In response to an inquiry by Donna DeCarolis regarding assessing cost impacts, Ms. Joseph stated that this will be undertaken to the extent information is available and she expects this to be iterative work, becoming more granular as policies advance.

In response to an inquiry by Paul Shepson regarding assessment and mitigation of gas leaks in this sector, Ms. Joseph stated that although there is awareness of the issue, the Advisory Panel has yet to finalize a strategy.

In response to an inquiry by Dennis Elsenbeck regarding connectivity to the utility grid and the measurement of demand rather than consumption impact, Ms. Joseph clarified that metrics are not as simple as just measuring kilowatt hours and that there are several metrics that require tracking.

The activities of the Transportation Advisory Panel, chaired by Marie Therese Dominguez, Commissioner of the Department of Transportation, were presented by Ron Epstein, Executive Deputy Commissioner. He reported on the Advisory Panel's objectives, stating that the deliberations thus far have emphasized the need for further work toward electrification and the use of renewable technologies where

practical and feasible. Topics include: pricing incentives and rate design; supportive infrastructure; impacts on workforce development issues specific to transportation; assessing market-based strategies such as cap-and-trade, the expansion of congestion pricing, low carbon fuel standards; and environmental justice impacts. The Advisory Panel will also consider enhancements to public transportation systems; mobility on demand; micro-transit; last mile inter-modality as it relates to smart growth and land use policies; and making freight more efficient. Resilience and adaptation are also considerations. Funding and finance strategies will be key to achieving actionable goals. Mr. Epstein also reported on the Advisory Panel schedule, interaction with other Panels, and efforts to secure outside expertise.

Rose Harvey suggested that all Advisory Panels assess the cost impacts to government and consumers from all ends and all levels.

Peter Iwanowicz prefers to receive recommendations from this Advisory Panel sooner rather than later so as to continue New York's alliance with California in the area of electric vehicle adoption and to move to full electrification as soon as possible. He also discouraged consideration of a low carbon fuel standard and recommended that the Advisory Panel consider a recent statement by the Climate Justice Alliance regarding market-based strategies. Mr. Epstein stated that those conversations are already underway.

The Power Generation Panel chair John Rhodes, Chair, NYS Public Service Commission, provided a list of nearly two dozen topics in which the Advisory Panel plans to delve. He summarized them into four basic areas: new resources; equity, comprised of access to clean energy solutions and the clean energy economy, as well as affordability; technology and policy solutions of the future; and barriers to a carbon-free transition. Many cross-panel interactions are anticipated, and he reported that the Advisory Panel Members are diverse and knowledgeable. The Advisory Panel plans to tackle all identified topics simultaneously and to seek public input and feedback early, as well as late in their process. Outreach will include engaging with expert speakers and convening specific audiences.

In response to an inquiry by Bob Howarth with regard to the applicability of carbon pricing issues among all of the Advisory Panels, Chair Rhodes agreed, stating that a definitive approach to the topic deserves further thought and consideration by the Council.

In response to an inquiry by Anne Reynolds regarding the definition of “emissions free” in the context of biofuels and renewable natural gas, Chair Rhodes acknowledged that there are many views on the topic and that it is one that needs to be addressed in the pursuit of achieving the overall Climate Act goals.

In response to an inquiry by Paul Shepson regarding methane leaks that may emanate from the natural gas infrastructure, particularly in urban areas, Co-Chair Seggos suggested that each of the Advisory Panels may need to be charged with considering methane emissions in anticipation of bringing that collective input together to work through recommendations. Chair Rhodes agreed that this issue is important and that the suggested approach makes good sense.

The Energy-Intensive and Trade-Exposed Industries Panel chair Eric Gertler, Acting Commissioner and President and CEO-designate, Empire State Development, reported the panel has a very diverse range of expertise and, in addition to its early meetings, has engaged in a public presentation of the Pathways analysis for the industrial sector. He also reported on intentions to examine issues of resilience, including lending an Advisory Panel member to the Land Use and Local Government Advisory Panel. The Advisory Panel has six topic areas for its work plan, including: on-site fuel combustion and non-combustion processes; State targets for industrial emissions; strategies to reduce emissions in manufacturing, construction and mining; defining “EITE”; as well as policies to mitigate leakage and anti-competitive impacts; and measures to support environmental and climate justice recommendations.

The Advisory Panel work plan timeline targets the identification of potential strategies in the November timeframe. The Advisory Panel intends to solicit public, expert, and in-State industry input during January 2021 and finalize its recommendations and goals during February and March 2021.

In response to an inquiry from Donna DeCarolis regarding the assessment of the ability of manufacturers to continue to grow in the face of potential increased costs, Commissioner Gertler stated that it is an important consideration going forward with the work plan.

Co-Chair Harris presented on progress of the Just Transition Working Group, co-chaired by herself and Roberta Reardon, Commissioner, NYS Department of Labor. She reported that, consistent with its charge, the Working Group scope is broad and includes workforce development and training, as well as sub-groups to assess power plant inventory and reuse and business impacts, and a jobs study. The

Working Group will also focus on Just Transition Principles including a review of definitions, principles and examples of just transition efforts.

Commissioner Reardon presented the work plan and meeting structure that is the foundation of the Just Transition Working Group's activities, including a deep dive into business impacts during the month of November and power plant related inquiries during December, while also making progress on the principles. In January, the Working Group will focus on the forthcoming annual clean energy industry report from NYSERDA, begin development of preliminary recommendations, and continue interaction with other Advisory Panels and stakeholders. She also presented on plans for external engagement including targeted input from external experts and a forum planned for Fall 2020.

In response to an inquiry from Anne Reynolds regarding the distinction between the clean energy industry report and the jobs study, Co-Chair Harris explained that the former is a back-cast and the latter a much more comprehensive macroeconomic look under the Climate Act.

In response to an inquiry by Dennis Elsenbeck regarding an assessment of green energy manufacturing jobs in the context of the supply chain, Commissioner Reardon stated that the goal will be to create green jobs from across the spectrum, not just within the building and construction sectors.

In response to an inquiry by Gavin Donohue for additional details regarding the tasks of the power plant inventory and reuse sub-group, Co-Chair Harris stated that the sub-group is in its formative stage and the ultimate goal is to make faster progress for consideration by other groups. Chair Rhodes added that there is good representation on the Working Group, including representatives from the organized labor sector, which may also prove to be a good addition to the Power Generation Advisory Panel. Mr. Donohue also suggested that the addition of local government officials may be beneficial given the potentially large impacts in this area.

Discussion: Waste Advisory Panel

In recognizing that the Climate Act legislation did not anticipate an advisory panel for waste emissions and the request by several Council Members for its consideration, Co-Chair Seggos requested that Martin Brand, Deputy Commissioner, Office of Remediation and Materials Management, present the concept of a waste panel for the consideration of the Council. Mr. Brand presented a proposed scope that

includes evaluating emissions and recommending mitigation strategies for a wide range of waste generating sectors and activities. He also presented information on a broad range of constituencies and stakeholders integral to the overall effort, including: environmental justice and host communities; municipalities of all sizes; solid waste management authorities; advocacy groups and subject matter efforts; waste industry operators; and large industrial and hazardous waste generators. In presenting the proposed activities, Mr. Brand suggested that should the Council move forward with the new panel, recommendations for membership could be provided for consideration by the Council prior to its November 2020 meeting. This would enable a workplan and comprehensive scope that includes public engagement and cross-panel collaboration to be considered at the November 2020 Council meeting. The New York State Department of Environmental Conservation would chair and provide staff support to the panel and begin panel activities so as to keep progress on par with the other Advisory Panels.

Bob Howarth is supportive of the creation of the panel, calling the sector's emissions smaller than that of the fossil fuels but not trivial. However, given that about 95% of the sector emissions are methane and not carbon dioxide, he suggested that the emphasis of the panel should be on the sources of those emissions, such as landfills and wastewater treatment plants. .

Gavin Donohue called the effort well done and thanked all of the New York State Department of Environmental Conservation staff for the progress and for reaching out to local governments to help accomplish these goals.

Raya Salter thanked Co-Chair Seggos for understanding how critical this issue is for the environmental justice community and sought confirmation, which was provided by Co-Chair Seggos, that the new advisory panel would be subject to the same protocols and rules as the other panels.

Peter Iwanowicz thanked Co-Chair Seggos and his staff for reaching out on this issue. He stressed the importance of all Advisory Panels to post meetings ahead of time and stated that he is heartened by all of the hard work in soliciting public comment and engagement prior to Council recommendations.

Ron Epstein suggested further coordination with the Transportation Advisory Panel given that transporting the waste is a big factor, as well as is permitting for oversized vehicles.

Upon hearing no further comments or objections, Co-Chair Seggos called for consideration of a

Resolution to approve the creation of a Waste Emissions Advisory Panel, as presented at the meeting. Whereafter, upon motion duly made and seconded, and by unanimous voice vote, the Council approved the resolution and it was adopted.

Resolution No. 3

RESOLVED, that the decision to adopt a Climate Action Council (CAC) Waste Emissions Advisory Panel, as presented to the Members for consideration at this October 8, 2020 meeting, is adopted and approved.

Presentation: Electricity System

New York State Public Service Commission Chair John Rhodes introduced a presentation of New York's electricity system, stating that it will be meaningfully changed on both the supply and demand sides by the decarbonization of the economy. He stated that the Pathways analysis presented at a previous Council meeting identifies needs for planning and building an electric system that can maintain reliability, ensure equity and affordability, and manage consumer costs as the system changes and grows. He also stated that a number of decarbonization studies are assessing these issues and can serve to inform the discussion and to create an awareness of how to manage electrification, increase system flexibility, and to avoid overbuilding. Chair Rhodes reported that New York has a very good track record for unlocking innovation and investment, which serve to add good, low-cost resources to the electric system. He stated that the presentation today, provided by two of the State's best experts, will help to put the Council on a course of making good decisions on the types of recommendations and decisions that will need to be made.

Chair Rhodes turned the presentation over to Rich Dewey, President and CEO of the New York Independent System Operator (NYISO), who began by providing the mission of the NYISO, which includes maintaining and enhancing reliability, operating open, fair and competitive wholesale electricity markets, power system planning, and providing factual information to policymakers, stakeholders and investors in the power system. Mr. Dewey provided the NYISO's vision for a greener power grid. He described studies conducted by the NYISO to plot advancement of State goals while maintaining reliability and keeping costs low for consumers, including a Climate Change Impact and Resilience Study.

In presenting information on New York 2019 energy production, Mr. Dewey highlighted the challenge of balancing the more carbon neutral supply of upstate with the less carbon neutral supply found downstate. He also provided information showing the emission rate reductions from electric generation over the past 20 years noting that, despite the progress, there is much more work to be done in this area. The path forward includes using the NYISO's wholesale markets as a platform for achieving the State's environmental objectives, with a set of market design enhancements that work to satisfy New York's

changing grid reliability needs. Mr. Dewey further described both phases of the Climate Change Study undertaken by the NYISO, particularly the development of the long-range forecasting model used for the analysis, demand trends, electrification policies and the grid, and current system reliability needs. Phase two of the study will examine various generation scenarios that could meet policy objectives in 2040.

Mr. Dewey discussed transmission investments to increase the flow of hydroelectric and imports from Ontario and from western New York to eastern New York and to increase the flow from upstate to downstate by about 1,000 megawatts. He also presented information the NYISO is assessing on renewable generation pockets in relation to the existing transmission system and considerations underway to maximize the output of renewable resources, as a large quantity of dispatchable resources will be needed in a small number of hours, to come on-line quickly, and be flexible enough to meet rapid, steep ramping needs. Mr. Dewey stated the intermittency associated with wind and solar resources presents a fundamental challenge to relying on those resources to exclusively meet electricity demand. Battery storage resources help address variability from renewable resources, but based on current technology, periods of reduced renewable generation rapidly deplete battery storage capabilities.

Chair Rhodes introduced Tammy Mitchell, Director of the Office of Electric, Gas and Water, New York State Department of Public Service, to present on current activities regarding the electric distribution system. Ms. Mitchell explained the differences between the bulk and local distribution systems and the regulatory framework under which the utilities, regulators, and stakeholders work to establish and implement policies for maintaining the system. She also explained the components of residential utility bills and recent utility reliability performance metrics.

When reporting on activities toward Statewide efforts to achieve its clean energy goals, Ms. Mitchell discussed the integration of new resources reliably and cost-effectively, such as non-wires alternatives, distributed energy resources, including the State's solar target to install 6,000 MW by 2025 and the pursuit of 1,500 of new storage resources by 2025 (3,000 MW by 2030). The implications of the electrification of the transportation system through the use of electric vehicles and the installation of electric vehicle charging stations and the further electrification of buildings will need to be accounted for in utility system planning. The success of these efforts are facilitated by the use of a Department of Public Service staff ombudsman, interconnection working groups, and coordination between agencies.

Ms. Mitchell discussed efforts underway to meet the requirements of the Accelerated Renewable Energy Growth and Community Benefit Act through State transmission and distribution plans and the establishment of guidelines for integrating Climate Act goals in utility planning processes. A power grid study, which is underway, consists of three main components: a 100 x 2040 study focusing on land-based

resources and needed bulk transmission investments, an offshore wind study and needed upgrades to achieve the 9 GW offshore wind target, and a utility local transmission and distribution study to determine actions needed by the utilities to achieve the Climate Act targets. Initial results will be available by year's end. In early 2021, the Commission will identify bulk level and local transmission and distribution investments and will revisit the plans and progress toward the Climate Act goals by January 1, 2023 and every four years thereafter.

In acknowledging the integral role played by Chair Rhodes in the Climate Action Council process, Mr. Donohue stated that there is currently no formal role for the NYISO, which he believes should be kept very involved in Council deliberations. In response to an inquiry by Mr. Donohue regarding the need for new, innovative technologies given that the current mix of renewables is not going to get the State to its goal, Mr. Dewey stated reaching the last small percentage of the 2040 goal will require the development of newer, dispatchable, carbon free technologies and mitigates the risk to ratepayers and shifts it to investors. The NYISO approach to carbon pricing is not the only approach to bringing these technologies forward, which will need to be very flexible in their dispatchability to balance the intermittence of current renewable technologies.

In response to an inquiry by Anne Reynolds regarding the interaction of the two presentations, specifically what portion of the need that may be identified by the Commission-led effort might be met by the two transmission projects identified in the first presentation, Mr. Dewey explained that based on the assumption that what is left after the transmission projects are completed is the piece necessary to balance the gaps in availability of renewable resources.

DEC Updates

Co-Chair Seggos introduced Maureen Leddy, Climate Office Director, NYS Department of Environmental Conservation, to provide an update on certain Climate Act actions underway. These items included a joint NYS Department of Public Service and NYSERDA Technical Conference on transmission planning; the NYS Department of Environmental Conservation's proposed Part 496, Statewide GHG emission limits, public comment hearings and deadline; and, in November, public comment hearings on the Office of Renewable Energy Siting proposed rulemakings will be held.

Next Steps

Co-Chair Seggos presented the future Council meeting schedule, including meetings planned for November 24 and December 15, 2020 and January 19, February 17 and April 12, 2021.

With that, the meeting was adjourned.



Climate Action Council

ANDREW M. CUOMO
GOVERNOR

DOREEN HARRIS
CO-CHAIR

BASIL SEGGOS
CO-CHAIR

Meeting Agenda October 8, 2020

- Welcome
- Consideration of August 24, 2020 Minutes
- Co-Chair Remarks and Reflections
- Advisory Panel and Working Group Chairs Report-out on Work Plans
- Discussion: Waste Advisory Panel
- Presentation: Electricity System
- DEC Updates
- Next Steps

In keeping with measures designed to limit the spread of COVID-19, the meeting will be conducted by teleconference and members of the public will be welcomed to observe and listen to the meeting via webcast only. The webcast may be accessed by going to the Climate Action Council website: climateact.ny.gov