MINUTES OF THE CLIMATE ACTION COUNCIL MEETING HELD ON JANUARY 19, 2021

Pursuant to Notice and Agenda, a copy of which is annexed hereto, a meeting of the Climate Action Council ("Council") was convened at 3:00 p.m. on Tuesday, January 19, 2021. 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
- 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
- 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-Martinez, 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
- Howard A. Zucker, Commissioner, New York State Department of Health (Henry Spliethoff, 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 the December 15, 2020 Meeting

The next item on the Agenda was to advance the minutes from the December 15, 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 began by thanking Council members for their assistance and suggestions for refining the Council's procedures and processes. He specifically noted suggestions related to public participation in meetings, the posting of meeting notes, the advance circulation of key materials, and planning for more substantive discussions within meetings.

Co-Chair Harris updated the Council on relevant announcements from Governor Cuomo's 2021 State of the State address, including: historic large-scale renewable energy grant awards; the New York Power Authority's Community Solar for Local Governments that will result in at least forty community solar projects by 2025; the establishment of the Climate Justice Jobs Corps, which plans for 150 fellowships within disadvantaged communities; a joint NYSERDA and State University of New York solicitation for advanced technology training partners; solar and efficiency retrofits for affordable housing efforts, such as the effort between NYSERDA, New York State Homes and Community Renewal, and NY Green Bank to collaborate on the *Raise the Green Roof* initiative; and the State of New York Mortgage Agency (SONYMA) retrofits program.

Co-Chair Harris introduced New York State Public Service Commission Chair John Rhodes who provided information on a newly released study, entitled *Initial Report on the New York Power Grid Study*. The Study addresses electric transmission needs related to offshore wind, transmission needs for land-based renewables at the bulk transmission level, and transmission needs at the sub-bulk transmission level. Chair Rhodes stated that the Study provides a foundation from which to craft an appropriate transmission plan for the State and that endorses the proposals and ambitious direction that the Governor has set forth for the State. Co-Chair Harris reported on Governor Cuomo's State of the State proposals for green energy which, in total, will supply 12,400 MW of green energy to power approximately 6 million homes, create about 50,000 jobs, and encourage \$29 billion in private investment. It would also establish the largest offshore wind program in the nation. Once all projects are operating, more than half of the State's electricity would be met by renewable resources ahead of the 70% by 2030 goals. She also provided an update on offshore wind port infrastructure and noted the substantive acceleration of the large-scale renewable energy effort.

Co-Chair Seggos provided information on the decarbonization of New York's transit buses, announcing that more than \$16 million in Volkswagen settlement funds will electrify mass transit buses, with an additional \$2.5 million available to electrify school buses. An expansion of the Charge Ready NY incentives, along with other 2021 State of the State initiatives, will continue the momentum for electric vehicles and address the issue of urban street pollution. He also reported on the finalization of the NYS Department of Environmental Conservation Value of Carbon guidance and the greenhouse gas limits regulations, the first key milestones under the Climate Act.

Co-Chair Seggos introduced Gavin Donohue who summarized recent activity of the newly formed Utility Group. Mr. Donohue stated that the Group discussed opportunities to contribute to and be a resource for the Council's work and a desire to be involved in the Council recommendations prior to their finalization, so as to provide meaningful input on decarbonization, the electrification of buildings, and carbon-free resources around the State. Mr. Donohue also conveyed the Group's desire for the development of differing regional solutions throughout the State. He expressed the Group's intention to include Chair Rhodes, Co-Chair Harris and others in future meetings and to integrate the input from the Group with other Council efforts. Ms. DeCarolis added that there is substantial subject matter expertise within the Group and a willingness to engage as soon as possible with the Council's efforts. She added that the utility interface with consumers will prove important as work progresses.

Waste Panel Progress Report

Martin Brand, Deputy Commissioner for Remediation and Materials Management, NYS Department of Environmental Conservation, provided a progress report on the Waste Panel, which has held four panel meetings, created sub-panel working groups, engaged with other Advisory Panels and planned a meeting with the Climate Justice Working Group in January and public meeting for February 2021.

Mitigation strategies include maximizing local waste diversion in low-income communities; waste reduction and recycling (such as expanding the extended producer responsibility); materials exchange and repair investments to reduce waste and encourage reuse as a waste prevention and landfill diversion strategy; expanding the State's domestic markets and recycling capacity; and to expand food donation, food waste reduction and composting markets. On the facilities side, mitigation strategies include reducing methane and other fugitive emissions from landfills, other waste management facilities, and wastewater treatment plants by investing in and upgrading infrastructure; as well as recovering energy from wastewater and organic waste, including diverting organics and biosolids from landfills.

In response to inquiries by Bob Howarth regarding the detailed quantitative analysis and the calculation of emissions reductions and some concerns with certain applications, Mr. Brand noted that there are a number of models for landfills and waste emissions for use. He suggested that one key strategy could be to increase the accuracy of monitoring data collection efforts to more accurately quantify the baseline. Mr. Brand also noted the difficulty developing metrics to quantify the interplay of the components of this complex system to accurately assess emissions reductions. Mr. Brand welcomed suggestions as to additional viable methodologies for consideration.

In response to a comment by Raya Salter that the examination of emissions and co-pollutant emissions be prioritized for disadvantaged communities, Mr. Brand reinforced that this concept is integral in all Waste Panel discussions and reassured her that disadvantaged communities will be prioritized.

Building upon the points raised by Ms. Salter and Mr. Howarth, Peter Iwanowicz suggested that the Waste Panel may not want to consider certain efforts, such as the combustion of solid waste, which appear to be antithetical to the mission. Mr. Brand clarified that the panel is not focused on solid waste combustion but more on energy production through anaerobic digestion of organic wastes. Mr. Iwanowicz stated that he is very supportive of the extended producer responsibility effort.

In response to a clarifying inquiry from Anne Reynolds regarding Mr. Howarth's comments pertaining to anaerobic digestion on farms, Mr. Howarth confirmed that, in his opinion, it is a technology better suited for a municipal application or a regional facility rather than an individual farm, due to the potential for leakage if not properly designed and managed.

Integration Analysis

Co-Chair Harris described the Integration Analysis, which will use the sector-specific recommendations from the Advisory Panel proposals to provide a Statewide assessment of collective reductions that advance the Climate Act goals. The Analysis will help to evaluate the recommendations that lead to the crafting of the draft Scoping Plan. Co-Chair Harris introduced Carl Mas, Director of Energy and Environmental Analysis, NYSERDA, who described the Integration Analysis process in more detail, beginning with the statutory basis within the Climate Act that underscores the process and analytic approach being taken. Mr. Mas also presented a timeline of the Integration Analysis showing the overall work plan. He also stated that the analysis will incorporate insights and recommendations from the Advisory Panels, Working Groups, and complementary studies and will develop scenarios that incorporate recommendations across sectors and evaluate benefits and costs. Longer-term research, health co-benefits analysis and jobs analysis are also considerations for the Council and will be part of the Integration Analysis.

In describing the overall Integration Analysis framework, Mr. Mas also provided illustrative examples of recommendations integrated into a multi-model framework that capture cross-sector interaction. This approach ultimately results in a comprehensive benefit and cost analysis, as called for in the Climate Act. Elements of the Integration Analysis include developing economy-wide resource costs for the various mitigation scenarios relative to a reference scenario and outputs that are produced on an annual time scale for New York, with granularity by sector. Locational and customer class impact analyses would be developed through subsequent implementation processes. The Integration Analysis will also evaluate societal costs and benefits of greenhouse gas mitigation, relying on the Value of Carbon guidance developed by NYS Department of Environmental Conservation.

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Next steps for the Integration Analysis effort include sharing key sector-specific input assumptions with the Advisory Panels and Working Groups and integrating the feedback into the analysis and recommendation development.

In response to an inquiry by Anne Reynolds regarding clarification of societal costs versus other categories of costs, Mr. Mas explained the methodology used to derive the respective costs.

In response to an inquiry by Raya Salter regarding the level of granularity of health analysis results and whether zip code granularity could be ascertained (rather than by county), Mr. Mas stated that the tool proposed to be used is the most granular tool the team has found, but he is receptive to additional suggestions, agreeing that, perhaps, supplemental analysis may be appropriate.

In response to an inquiry by Raya Salter regarding whether the grid modernization study that is underway to capture peak shaving opportunities and large scale energy efficiency are part of this analysis, Mr. Mas confirmed that the greater level of detail and the specific tools associated with the grid modernization study will be leveraged in the Integration Analysis work.

In response to an inquiry by Donna DeCarolis regarding the level of granularity with regard to customer class impacts versus regional impacts, Mr. Mas stated that individual customer class implications will result from subsequent analysis. That subsequent analysis will result from State regulatory processes that lend themselves to more detailed policy assessments.

In response to an inquiry by Donna DeCarolis as to how subsequent analysis would help prioritize policies and pathways, Mr. Mas stated that the intention is to put forth multiple scenarios that reflect a synthesis of what the Panels advance so that the Council can assess the trade-offs of the different measures that could be implemented, the associated benefits and costs, the risks of implementation, and other factors. He provided assurances that the Integration Analysis will result in clear and monetized benefits and costs for the Council's consideration.

Peter Iwanowicz thanked Mr. Mas for the information regarding health impacts and co-pollutants and inquired as to what extent Panel Members have been informed about the Integration Analysis, as it is likely to inform some of their deliberations. For instance, he pointed out that it may be more efficient if Panels were to not focus on those policies that may clearly fail the Integration Analysis. Co-Chair Harris stated that the Advisory Panel members were made aware of today's discussion and that State staff continue to be a resource to the Panels as they move forward. Mr. Mas added that the State analytic team met with each Advisory Panel to present early findings and plan to revisit to summarize key outputs and to vet some of the overall input assumptions. Given this level of interaction, Advisory Panels should understand what is forthcoming and that it should have a direct impact on their work. Mr. Mas added that this process will be iterative, as needed, and resultant new findings will be brought back to the Council for any needed adjustments.

In response to an inquiry by Bob Howarth regarding how the timing of the final greenhouse gas emissions inventory, due December 2021, will impact the accuracy of the cost benefit analysis which is dependent upon it, Mr. Mas stated that State staff has anticipated the timing issue and plans to leverage the methods and approaches used to develop the emission limits rule, to produce draft inventory methods to use for current emissions and for forecasting. He further assured the Council that methodologies used in the Spring 2021 Integration Analysis will be absolutely consistent with the Climate Act.

Bob Howarth also commented that the State has done a great job on determining a social cost of carbon for use in cost benefit analysis, but the final costs are very dependent on agreement upon a discount rate, which the Council has yet to discuss in any detail.

Advisory Panel Recommendations Submission Process

Co-Chair Harris introduced Kara Allen, Senior Advisor for Policy and Regulatory Affairs, NYSERDA, to present information as to the expectations of Advisory Panel submissions to the Council in March 2021. Ms. Allen reviewed the guidance provided at the August 2020 Council meeting which included the following expectations for Advisory Plan work products, and which build upon the Climate Act and the Integration Analysis:

- Identification of a range of emissions reductions, consistent with analysis and in consultation with the Council, for the sector which contributes to meeting the Statewide emission limits;
- Recommendations for emissions reducing policies, programs, or actions for consideration by the Council for inclusion in the Scoping Plan; and
- Recommendations that are sector-based.

Ms. Allen provided a template example for providing a recommended Mitigation Strategy, as well as the expected elements to be provided in support including: a description, the action type, expected greenhouse gas reductions by 2030 and 2050, ease of implementation, cost and funding considerations, case studies, risks and barriers, and possible mitigants. The template will provide the Council with a means of consistently evaluating the work of the different Advisory Panels. The three types of strategies that can be provided by an Advisory Panel are: (1) a mitigation strategy; (2) an enabling strategy; and (3) adaptation and resilience strategies. Panels may not have recommendations of each of these types. The template details assist in breaking down the strategy into components required for delivery, identification of an implementation lead, a timeline, and identification of key stakeholders. A template for benefits and

impacts was also provided, specifically calling attention to disadvantaged communities, health and other co-benefits, and Just Transition impacts.

Co-Chair Seggos provided an updated timeline leading to the development of the draft Scoping Plan. Advisory Panel working group discussions are expected to continue through March 2021. The April 2021 Council meeting is intended to review and discuss the Advisory Panel recommendations. From April through June 2021, integration study analysis, topical deep dives, adaptation and resilience recommendations and consultations with the Climate Justice Working Group will ensue. Similar activities will continue during July through October 2021, including the State staff drafting of the draft Scoping Plan based on Council recommendations. October through December 2021 is earmarked for finalizing the draft Scoping Plan for release and public comment during 2022.

Agency Updates

Co-Chair Seggos introduced Maureen Leddy, Director, Office of Climate Change, NYS Department of Environmental Conservation, to provide an update on the Climate Act Emission Limit regulation, which implements the most ambitious and comprehensive greenhouse gas reduction requirements. The final rule was completed at the end of 2020, in line with the schedule outlined in the Climate Act, and work progresses to complete data for the intervening years, as required by the Climate Act. Ms. Leddy reported that public comment was supportive overall.

Jared Snyder, Deputy Commissioner for Climate, Air, and Energy, NYS Department of Environmental Conservation, provided an update on the Value of Carbon Guidance, finalized in December 2020, as required by the Climate Act. The Guidance considers a "damages approach" and a "marginal abatement cost". The marginal abatement cost is not being recommended for broad application at this point, but may be used as an additional tool, perhaps most suitably in the power sector. The focus of the Guidance is on the social cost of carbon, which evaluates and identifies the global, social, economic, and environmental impacts of the release of a ton of carbon emissions. This tool helps to evaluate the benefits of State agency decisions by providing a monetary estimate of the damages that are avoided by reducing emissions. Regarding the use of discount rates that aid in valuing future impacts (versus valuing current impacts), Mr. Snyder reported the recommendation is a 2% discount rate as the central value, which equates to a social cost of carbon of \$125 per ton of carbon dioxide (in 2020 dollars). The further recommendation is that agencies apply and publicly report discount rates in the range of 1-3% so as to evaluate the range of impacts. The guidance also addresses how to value nitrous dioxide (about \$45,000 per ton) and methane (about \$2,800 per ton) based on the U.S. Interagency Working Group approach. Finally, Mr. Snyder stressed once again that this is not a regulation, but a tool for use by agencies. It does not set a price on carbon nor does it impose any fees. The Climate Act does state that the Council should consider the value of carbon in developing its Scoping Plan.

In response to an inquiry by Peter Iwanowicz regarding how to translate a 2% discount rate to an actual cost for the better understanding by lay New Yorkers, Mr. Snyder stated that the cost of carbon is based on global impacts rather than New York-specific impacts. On a rough basis, the global impact of one year of emissions associated with New York State would be assessed by multiplying the current inventory of emissions by \$125.

Bob Howarth distinguished the impacts for methane emissions, stating that they would be more localized, appearing in ozone. The methane value provided in the guidance is a global estimate and does not addresses localized ozone impacts but the guidance advises that additional health impacts be included when they can be accurately quantified, and Mr. Snyder agreed that this warrants further discussion. In response to an inquiry by Mr. Howarth regarding the justification for use of a 2% discount rate, Mr. Snyder attributed it to a range of views of several economists and former Federal administration experts and explained that settling on 2% is a value judgement based upon advances in science since the federal IWG published its numbers. Mr. Howarth suggested that the Council should discuss and agree upon the most appropriate discount rate and which additional health benefits to consider. Mr. Snyder mentioned that the health benefit analysis Mr. Mas discussed earlier will be a part of the Council decision-making process.

In response to an inquiry by Mr. Shepson regarding the impacts and co-benefits related to New York City, specifically as it relates to NYC Local Law 97, and as to whether the Council needs to reconcile other jurisdictional carbon values, Mr. Snyder restated that this is a tool for State agency use and decision-making and that other jurisdictions, such as New York City, may use different tools or values.

In response to an inquiry by Raya Salter as to how to take the most robust look as to how copollutants are assessed and result in the best health analysis the Council can develop, Mr. Snyder and Mr. Mas stated that this would be part of the Integration Analysis.

Next Steps

In response to a request from Gavin Donohue regarding copies of the presentations discussed during the meeting, Co-Chair Harris stated that arrangements will be made to have the materials provided and publicly posted as soon as practicable.

Rose Harvey expressed her appreciation for the clarity and effort that went into presenting the future strategies.

Bob Howarth also expressed his appreciation for the acknowledgement at the beginning of the meeting that the Advisory Panel meetings should be open to the public.

Co-Chair Seggos announced that the next Council Meeting is scheduled for February 17, 2021, with the intention to have a longer meeting in April 2021, and with plans to schedule the remaining calendar 2021 meetings very soon.

With that, the meeting was adjourned.



Climate Action Council

ANDREW M. CUOMO GOVERNOR DOREEN HARRIS CO-CHAIR BASIL SEGGOS CO-CHAIR

Meeting Agenda January 19, 2021

- Welcome
- Consideration of December 15, 2020 Minutes
- Co-Chair Remarks and Reflections
- Waste Panel Progress Report
- Integration Analysis
- Recommendations Submission Process
- Agency 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