

MINUTES OF THE CLIMATE ACTION COUNCIL MEETING
HELD ON NOVEMBER 30, 2021

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 Tuesday, November 30, 2021. The following Members attended, and a quorum was present throughout the meeting:

Council Co-Chairs

- Doreen Harris, 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, President, Viridi Parente, Inc.
- Thomas Falcone, CEO, Long Island Power Authority
- Vacant, Commissioner and President and CEO-designate of Empire State Development (Vincent Ravaschiere, Designee)
- Rose Harvey, Senior Fellow for Parks and Open Space, Regional Plan Association
- Rory Christian, Chair and CEO, New York State Public Service Commission
- Dr. Bob Howarth, Professor, Ecology and Environmental Biology at Cornell University
- Peter Iwanowicz, Executive Director, Environmental Advocates of NY
- Justin Driscoll, Interim 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
- Brendan Hughes, Interim Secretary of State, New York State Department of State (Kisha Santiago-Martinez, Designee)
- Raya Salter
- Dr. 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 (Henry Spliethoff, Designee)

Also present were Climate Action Council Executive Director Sarah Osgood, various State agency staff and members of the public. Mr. Seggos and Ms. Harris, Co-Chairs of the Council, welcomed all in attendance.

Consideration of the Minutes of the October 14, 2021 Meeting

The next item on the Agenda was to advance the minutes from the October 14, 2021 Meeting. With no changes or objections, and upon a motion duly made and seconded, the minutes were adopted.

Co-Chair Seggos thanked staff for their work on the draft Scoping Plan and encouraged Council Members to be as clear as possible in their discussions and comments to ensure clear direction leading toward a potential vote on the final Draft Scoping Plan planned for the December meeting. Co-Chair Seggos announced the addition of Haley Viccaro, Strategic Communications Director for Climate, NYS Department of Environmental Conservation. He also reported on the United Nations Climate Change Conference of the Parties (COP 26 Summit) held in Glasgow, Scotland in early November 2021, attended by himself, Co-Chair Harris, Raya Salter, Dr. Bob Howarth, and others, stating that they were honored to represent New York and left encouraged and eager to continue the work of New York toward achieving the necessary climate goals.

Co-Chair Harris highlighted the finalizing the Clean Path NY and Champlain Hudson Power Express contracts under Tier 4 of the Clean Energy Standard. These are the largest transmission projects contracted for New York in the last 50 years and are expected to reduce fossil fuel use for electricity by New York City by more than 80% by 2030, when combined with other clean energy investments.

Presentation and Discussion: Jobs Study

Carl Mas, Director, Energy and Environmental Analysis, NYSERDA presented an update on the integration analysis, clean energy industry report, and preliminary Just Transition Working Group Job Study results. He was joined by Phil Jordan, Vice President and Principal Researcher of BW Research.

Mr. Mas noted that the integration analysis resources along with key presentations from Council meetings have been updated and are available to the public on the Climate Action Council website as well as certain State agency websites. Links on the Climate Action Council website will refer users to additional websites where technical studies and other supplemental resources are located. Mr. Mas also referred to the New York Climate Change Science Clearinghouse and the NYS Climate Impacts Assessment website, which includes a breakdown of the planned activities for that project over the next two years.

Mr. Mas stated that in addition to finalizing the jobs analysis, work continues on Scenario 4 (beyond 85% reduction); sensitivity analysis for ground source and district heat pumps; additional flexible end-use electric load sensitivity analysis; additional detail on scenario development and representation of Advisory Panel Recommendations; and updates to Benefits and Cost Analysis (e.g., updated cost uncertainty analysis).

Mr. Jordan presented the 2021 New York Clean Energy Industry Report (CEIR), which measures, characterizes, and analyzes clean energy and traditional energy employment trends across technology sector. The Report showed that New York fared better than many states during the beginning of the pandemic as clean energy work continued under pandemic restriction policies. The Report explored specific sectors including offshore wind, clean and alternative transportation, supply chain potential and priority populations.

Mr. Mas discussed the directive in the Climate Act requiring the Just Transition Working Group undertake a Jobs Study that takes a forward look compared to CEIR which is backwards looking. This study is meant to measure the number of jobs created to counter climate change across a number of sectors, including energy, buildings, transportation, and working lands. It also looks to examine the projection of the inventory of jobs, skills, and training necessary to meet the demand of jobs to counter climate change, as well as the workforce disruption due to community transitions to a low carbon economy. The directive also calls for advising the Council on issues and opportunities for workforce development and training related to energy efficiency measures, renewable energy and other clean energy technologies with a specific focus on training and workforce opportunity for disadvantaged and underrepresented communities.

The sectors and subsectors in the Jobs Study include: Energy Supply (electricity, 11 sub-sectors and fuel supply, 5 sub-sectors); and Energy Demand (buildings, 6 sub-sectors and transportation, 5 sub-sectors). Mr. Mas stated that this work leveraged a parallel project by the U.S. Climate Alliance, an economic analysis of afforestation, reforestation, and manure methane capture in the State.

Mr. Mas reviewed a summary of the Integration Analysis Scenarios that were examined by the Jobs Study, previously presented at several past Council meetings, highlighting again the descriptions of the scenarios, with specific focus on Scenarios 2 (Strategic Use of Low Carbon Fuels) and 3 (Accelerate Transition Away from Combustion).

Mr. Jordan outlined the methodology used in the Jobs Study: to translate climate-related activities and policies into societal investments across scenarios; to generate assumptions on local content; to calculate job and other economic indicators related to the direct investments, local supply chains, and ripple effects of local investments; and to identify jobs that will grow, decline, or change across industries and occupations over time.

The preliminary Jobs Study findings include:

- employment growth in sub-sectors by at least 211,000 new jobs by 2030, and 346,000 new jobs by 2050. This represents a growth rate more than double that recorded from 2016 – 2019;
- over half of the new jobs will be in the buildings sub-sectors, including residential shell and HVAC, under both Scenarios 2 and 3. Offshore wind also represents one of the largest sectors of job growth;
- Job decreases are expected to be approximately 22,000 by 2030, and 77,000 by 2050. However, for each job lost, 10 new jobs are created, and the study estimates that there will be one worker lost for every seven currently working. However many of these lost jobs could be retiring workers and job transitions.
- Between one-third and one-half of jobs lost under scenarios 2 and 3 are in conventional fueling stations. The majority of those jobs are related to retail sales that occur within a gas station, such as fast food and drink purchases. There is uncertainty surrounding what electric vehicle (EV) charging stations will look like in the future, and whether the retail aspects will remain, which could impact job loss estimates in this sub-sector.

In exploring the job sector changes more granularly, Mr. Jordan reported that electricity sector job changes under both Scenarios 2 and 3 will see electrical distribution and solar increase substantially, with off-shore wind seeing the largest proportional increase. Energy storage will also increase dramatically. Building sector job changes under Scenarios 2 and 3 are expected to experience the most substantial increase in residential shell and commercial and residential HVAC, which includes heat pumps. Each of the four sectors: electricity, fuels, building, and transportation, will grow faster annually through 2030 than they did from 2016 – 2020. On net, overall employment in the four sectors will grow by at least 189,000 jobs by 2030, a 30% increase over the 2019 workforce. Employment will continue to grow in all sectors by at least 268,000 jobs through 2050.

Mr. Jordan presented the upcoming model sensitivities that examine how any in-state manufacturing increases in the relevant sub-sectors would impact employment and the economy; and will describe the key assumptions done for gas station closings and how changes to those assumptions would impact the model outcomes. These will be followed by workforce analyses sensitivities, which include:

- describing impact on employment and the economic landscape statewide and in the 5 economic development regions;
- providing a qualitative assessment of how those in declining industries and occupations transition to growing or emerging industries, and what those transitions look like;
- evaluating how the model findings impact sustainable wages and complete a secondary analysis that examines how a prevailing wage policy could impact these findings;
- describing how employment opportunities for underserved populations will be impacted under each scenario; and
- examining how occupational pathways could change the demand for skill, certificates, education, experience, apprentice-able standards, and other workforce requirements based on industry and occupational employment changes.

Next steps include soliciting feedback from the Just Transition Working Group, completing the model sensitivities and workforce analyses and publishing the 2021 Just Transition Working Group Jobs Study Report.

In response to an inquiry from Dr. Howarth as to why the job growth between 2030 and 2050 was not higher, Mr. Mas stated that the rapid increase in jobs by 2030 is a reflection of the enormous investment necessary to meet the Climate Act goals, and the slower increase between 2030 and 2050 is due to the smaller scale of change that will be occurring year over year during

that period. Mr. Jordan clarified the ways in which the jobs (jobs years) data is configured in this analysis and how it differs from other analytical approaches.

In response to Dr. Howarth's concern regarding the timeliness of the sensitivity analyses on heat pumps when thinking about the December meeting, Mr. Mas stated that the Team will endeavor to provide information as soon as possible.

In response to an inquiry and statement from Mr. Elsenbeck regarding the number of new jobs created in manufacturing (versus service) and the potential value proposition they would provide for disadvantaged communities, and that more granular data is necessary to ensure an informed opinion regarding the study and its outcomes, Mr. Mas stated that over 200 slides were presented to the Just Transition Working Group that underlie this information, including a breakdown of the information into the fifteen subsectors and they have been provided on the website. The information presented to the Council today was intended to be an overview of that information. What the Jobs Study does not currently assess is the global opportunity space for New York to become an export leader.

In response to concerns of Mr. Elsenbeck that electrical distribution growth might be substantial, Mr. Mas responded that the distribution sector is already a very large employer, Statewide, and the job growth in that sector is likely to continue being filled by local employees who will assist in updating and maintaining the new grid.

In response to inquiries from Mr. Donohue regarding the potential for non-energy manufacturing job loss as a result of increased energy costs and the nuclear-related job losses reported, Mr. Mas responded that the data regarding nuclear jobs lost was because 2019 served as the base year and the jobs lost are associated with the closing of the Indian Point Nuclear Facility, rather than a transition away from nuclear energy in future years. In the interest of time, Mr. Mas stated he will get back to Mr. Donohue on his inquiry regarding job losses in other sectors and stated that the references to investments directly relate to the levels of investment from the integration analysis scenarios.

In response to inquiries from Ms. Salter regarding whether gender (or gender expression) is a focus in the Jobs Study and whether the Council can ensure that this information is reflected in the final plan, Mr. Jordan responded that the data presented was from employers, rather than

individuals, so there is difficulty given that it requires an assumption on the part of the employer rather than data received directly from an individual. Mr. Jordan does anticipate refining this approach going forward. Additionally, when collecting data on disadvantaged communities, the data collected is on the community as a whole and where the occupational needs are in that community, rather than focusing on gender. In response to Ms. Salter's inquiry as to whether women and girls were considered a priority population for the purposes of the Jobs Study given her belief that they are disproportionately impacted by climate change, Mr. Mas responded that he would provide the CEIR and was willing to follow up with a future discussion.

Presentation and Discussion: Development of draft Scoping Plan

Co-Chair Harris stated that she finds the initial draft Scoping Plan to be an impressive piece of work and thanked the Advisory Panels, the Climate Justice Working Group, the Staff and Council Members for all of the contributions.

Sarah Osgood, Executive Director, NYS Climate Action Council, began the presentation on the initial draft Scoping Plan and discussion and feedback for additional consideration by outlining the requirements of the Climate Act regarding the release of a draft Scoping Plan for public comment. This release is planned for December 2021, noting that voting to put forth the draft Scoping Plan for public comment at the December meeting does not indicate an endorsement of all of the information contained within the plan by each Council Member.

Ms. Osgood explained that during this portion of the presentation, member feedback received on specific portions of the initial draft Scoping Plan will be explained and identified as either resolved feedback to be included in the updated draft Scoping Plan, or unresolved feedback that will require additional discussion after each portion has been presented.

Ms. Osgood presented general feedback received as:

- a suggestion to better explain New York State's climate leadership, as well as to provide more State specific examples on the need to take action;
- represent workforce development and job creation more strongly within the Pillars of the Scoping Plan;
- provide additional clarity on the process used that resulted in this version of the draft Scoping Plan, including the source of strategies, rationale for the multiple scenarios in the Integration Analysis, and how input from various groups has been incorporated, as well as the process moving forward;

- integrate the value of economic development opportunities and actions and the global climate market, so that broader perspectives as to why investing in climate change positions the State as a green energy supply chain destination and potential leader;
- include COP 26 and recent state actions;
- include the Jobs Study information; and
- add a distilled summary of key information and priority recommendations.

Ms. Osgood next presented the following unresolved issues and proposed solutions:

- to follow up with the Council to better integrate Climate Justice Working Group feedback to address the suggestion that some recommendations may need to be rejected and that more robust plans and efforts in transportation and waste may also be necessary;
- in addressing the request for analysis on energy affordability and impacts to consumer pricing as part of the scenarios, clarify that the Integration Analysis does not make assumptions regarding “who” pays, but ratepayer cost impact analysis is expected in a subsequent implementation process;
- regarding statements in support or rejection of specific strategies or actions (such as hydrogen and carbon taxes), to clarify that the Draft Scoping Plan will not include a firm position on some specific strategies or actions, however Council members may make statements about their positions, and work toward consensus positions for the final Scoping Plan; and
- clarify that analysis on the amount of renewable energy capacity and storage required for ground source and air source heat pumps is being examined as a sensitivity in the Integration Analysis, with the results to be included in the draft Scoping Plan.

Executive Director Osgood presented feedback on the Gas System Transition Chapter, stating that the Advisory Panel recommendations and Integration Analysis indicate that the natural gas system will be vastly different in 2050, requiring a well-planned transition of the system to ensure that the switch is equitable and cost effective, without compromising reliability and safety. While several Advisory Panels made recommendations that could inform this transition, no one Panel covered the entirety of this Chapter. The gas system transition will be an economy-wide consideration as it requires coordination across multiple sectors, and key feedback to incorporation into the draft Scoping Plan:

- include more information on what existing law requires, as it may limit what regulators can do and may be in contrast with the Climate Act;
- include power plant owners as key stakeholders;
- make stronger ties to the criticality of new building codes to limit gas and provide a better sense of the scale and scope of building conversions required to meet Climate Act goals; and
- ensure the gas system is included in the Reliability Needs Assessment.

Unresolved issues are how to appropriately balance decommissioning, leak detection, and decarbonization within the Scoping Plan and the gas sector. The proposal is to emphasize the need for a well-planned and strategic decommissioning to protect consumers and address resiliency concerns which is ripe for continued discussion in 2022.

Regarding the Electricity Chapter, Ms. Osgood stated that key points to incorporate into the Draft Scoping Plan centered around:

- additional clarity regarding the firm and dispatchable generation resources needed for reliability;
- the need to better explain how existing renewable generation fits into the State's future generation mix;
- explaining how the State will address compliance with Section 7 of the Climate Act prior to regulations in 2024;
- explaining the estimate of 60-85% load growth by 2050;
- providing greater emphasis on the need to build renewable projects quickly and the associated challenges;
- further addressing consumer energy reliability concerns and preparedness of electricity generation and transmission;
- expanding battery storage to energy storage to include other forms of electrical and thermal storage; and
- indicating that point of use energy storage could be used to manage load utilization and mitigate distribution system upgrades.

Unresolved issues in this area include: the treatment of nuclear facilities, including what the support for nuclear facilities would look like; the treatment of hydrogen; consider recommending a mandate that renewable gas be used in non-distributed, non-combustion end-uses only (such as fuel cell energy generation); and consider including dual-fuel heating solutions that will combine gas and electrical heating sources as a possible solution to mitigate winter peak demand impacts. It was recommended that a clarification be provided that the Integration Analysis does include the relicensing of nuclear facilities as part of its total resource cost assessment, as well as a sensitivity where the facilities are not relicensed. Further research will be needed to analyze and assess future policy options and implementation pertaining to nuclear facilities. The remaining issues were deemed ripe for continued Council discussion during 2022.

Vanessa Ulmer, Senior Advisory Policy Development, NYSERDA, presented the key points for incorporation for the Buildings Chapter as:

- increasing emphasis on how decarbonization activities and innovations lead to jobs;
- increasing emphasis on resiliency, particularly related to heating;
- increasing attention to community-scale district thermal solutions to capture economies of scale with managed transition of the gas system;

- explaining how information regarding how any prohibition by the NYS Public Service Commission preventing the installation of new gas lines would be provided to municipalities;
- expanding the discussion of different funding options to scale up public financial incentives; and
- adding a recommendation that the State should establish a building-specific 2030 target to ensure CLCPA goals are met;
- explaining the composition of fossil fuels used in buildings that account for the sector's combustion emissions;
- recommending the expansion of building codes to increase levels of battery storage;
- providing more specifics on how to electrify large buildings;
- addressing whether district steam systems are part of the solution, or warrant phasing out; and
- including a citation for statement that “using combustion appliances . . . particularly fossil gas for cooking – has negative impacts on indoor quality and . . . health.”

Unresolved issues were identified as:

- a lack of emphasis on a dual fuel path, using hybrid heating systems and existing gas infrastructure. Staff proposes to continue discussions on this issue during 2022, but suggests clarifying that the scope of renewable natural gas is limited throughout all sectors, while the highest-value allocation of hydrogen is limited mostly to transportation, industrial purposes, and electric reliability;
- a need to address that air source heat pumps are less efficient in the winter when cold air is being heated. Staff proposes to include that a ground source and district heat pump sensitivity analysis is being performed, although it is likely that a mix of heat pump solutions will be necessary; and
- the need for increased consideration for distribution and the demand side in ensuring affordability and package solutions that require minimal infrastructure upgrades. Staff clarified that the importance of a flexible grid is included under a strategy to Support Innovation.

Jared Snyder, Deputy Commissioner for Air Resources, Climate Change and Energy, NYS Department of Environmental Conservation, presented the feedback on the Transportation Chapter. Key points for incorporation:

- add a recommendation that the State fleet should commit to a 100% electrified fleet ; New York made a commitment at the COP 26 conference for a 100% light duty fleet by 2035 and medium, heavy-duty for appropriate uses by 2040;
- a greater emphasis on off-road vehicles;
- increased emphasis on educating the public about electric vehicles, including how they work, the role they play related to storage, and how they could be part of the larger grid;
- specifying the need for particular types of charging infrastructure, including highway based fast-charging and charging in multifamily homes and urban areas; and
- updating the language surrounding zero-emission vehicle (ZEV) cost-effectiveness.

Key unresolved issues identified included the role of low carbon fuels for hard to electrify vehicle and equipment uses; and whether utilities should own distributed charging stations as an extension of metered services. As to the first, Staff will seek direction from the Members regarding the potential multiple scenarios for public comment. As to the second, the NYS Public Service Commission is planning to review this matter in its 2023 midterm review of the Make Ready Program.

Vincent Ravaschiere, Senior Vice President for Energy and Incentives, Empire State Development presented feedback on the Industry Chapter. Key points to incorporate included:

- identifying key stakeholders, consistent with format used in other chapters;
- providing additional emphasis on the need to focus investments and their benefits in disadvantaged communities;
- highlighting the retention of existing industries, as well as emphasizing clean energy industries;
- recommending adding guidelines on how certain lower emission technologies should be pursued or incentivized;
- clarifying recommended uses for carbon capture and storage as it pertains to cement manufacturing; and
- addressing issues arising from cryptocurrency mining and similar, emerging large-emitting or large energy-using activities.

Two unresolved issues included:

- addressing whether the NYS Department of Environmental Conservation should exercise the alternative compliance option under the Climate Act for particular industries to achieve local emissions reductions through offsets. Staff proposes to revise the Vision for 2050 paragraph to include additional language stating that: “in some limited instances, industrial sources might be able to qualify for the use of an alternative compliance mechanism if the NYS Department of Environmental Conservation has established such a mechanism and if the source can meet the stringent requirements set out in the Climate Act to govern its use;” and
- ensuring that the Industry Chapter addresses concerns of local manufacturing companies that rely on fossil fuels to ensure they will continue to invest in the State. Staff emphasized that there are specific strategies set out in the chapter, including the possible use of low carbon fuels, carbon capture and incentive-based strategies that should provide such comfort to manufacturing companies.

Brian Steinmuller, Assistant Director, Land and Water Resources, NYS Department of Agriculture and Markets and Bryan Ellis, Supervising Forester, Division of Lands and Forests, NYS Department of Environmental Conservation, presented the Agriculture and Forestry Chapter. Key points to incorporate were:

- note that emissions from agricultural equipment, i.e. tractors, are covered in Transportation Chapter under non-road vehicles;
- ensure consistent treatment of biofuel combustion across all Chapters;
- given that many strategies are already underway in the State, add specificity about the scale of change needed to make greater carbon sequestration impacts and funding sources;
- include a recommendation to expand forest management programs eligibility to smaller holdings while shifting focus from lumber management to forest sequestration; and
- emphasize the link between nutrient management and water quality, particularly the impact of nitrogen pollution on New York watersheds.

The single unresolved issue is a suggestion to include a recommendation to provide funding for measuring methane emissions from New York State farms. Staff clarified that there are several references to funding, incentives, and providing greater technical and financial assistance to New York farms within the chapter. Specifically, the first component of Monitor and Benchmark Agriculture Greenhouse Gas Emissions Strategy states that the State should establish funding for an agricultural benchmarking and monitoring program.

Jared Snyder presented the draft Economywide Strategies Chapter that is underway, based on feedback from Council Members, stating that the roles of the Economywide Strategies is to:

- ensure compliance with the Statewide greenhouse gas emissions limits;
- establish a source of funding to implement other policies identified in the Climate Act; and
- provide a market signal what will yield additional emissions reductions as individuals and businesses make decisions that reduce their own emissions.

Potential economywide approaches are: (1) carbon tax or fee; (2) cap and invest; and (3) clean energy supply standard. Each of these approaches will be assessed against specific policy considerations, such as compliance with the Climate Act emissions limits, market certainty, prioritization of emission reduction in disadvantaged communities, affordability, sufficiency and funding, leakage considerations, economic development and innovation stimulation, adoption economywide or for specific sectors, interaction with regulatory standards, equity, and integration with multistate regional policies.

Sarah Crowell, Director, Office of Planning, Development & Community Infrastructure, NYS Department of State, presented feedback on the Land Use Chapter. Key points to incorporate included to more fully discuss the specifics for the scale of investment needed

beyond the status quo, and use “wind, solar, storage, and electric vehicle charging” when discussing land use and renewable energy use.

Unresolved issues identified included:

- adding language stating that incentives should be based on proximity of generation to current load centers or economic development sites that could combine infrastructure planning to incorporate renewable energy, storage, increase electric capacity or need for infrastructure to both achieve Climate Act goals and to ensure site readiness of select locations for economic growth and additional language will be added;
- adding a recommendation placing a moratorium on deforestation for the purposes of renewable energy or reject State subsidy, tax credits, renewable energy credits, etc. for projects involving deforestation at any level. Council clarifies that there is already a recommendation to mitigate the impact from renewable energy projects on forests, as banning deforestation completely could pose challenges for meeting the Climate Act goals. A proposed solution would be to include modified language to address this; and
- considering whether the Scoping Plan should encourage cities to adopt moratoriums while they adopt comprehensive plans and zoning updates that are consistent with the Climate Act. A proposed resolution is to add language under Direct Planning, Zoning, and Pre-Development Grants related to providing guidance and assistance to municipalities to adopt moratoriums. The strategy will also be revised and broadened by replacing “grants” with “assistance” to be more inclusive of technical assistance and grants; and
- expanding funding to allow for the critical mass of smart growth comprehensive plans and zoning to truly impact development patterns and land use and transportation-based greenhouse gas emissions, for which clarifying language will be added.

Ms. Crowell presented the Local Government Chapter, for which no key issues for incorporation were noted. However, unresolved issues were identified as:

- including examples of several small towns and cities, such as the City of Ithaca, that have voted to electrify their buildings or fleets to support and demonstrate how the State will fund replication of these efforts;
- Consider using the State’s permitting and registration powers to avoid fossil fuel development while cities and local governments update their comprehensive plans. A proposed resolution is to recommend guidance on local government moratoriums is expanded to reference fossil fuel infrastructure, as the State permitting laws cannot anticipate local government action; and
- Expanding local government strategies to prioritize methane recovery from wastewater treatment and landfills beyond on-site energy production. It was proposed that direction should be sought from the Council Members regarding multiple use scenarios for public comment and ensure consistency with the Waste Chapter recommendations.

Jared Snyder presented the Waste Chapter. A key point to incorporate was to review the language and tone of the section to encourage the continued use of recycling programs and recognize the limitations of individuals and ongoing success of individual efforts. Unresolved issues included:

- Consideration of whether the Climate Act bans the use of waste combustion as a market player or disposal technique, as it is unclear how incinerators remain in operation after 2040 for electricity generation. This issue will be addressed by the New York State Public Service Commission.
- Clarify how to address the treatment of the remaining waste for disposal after existing recommendations are adopted. The NYS Department of Environmental Conservation will track technology developments to inform further evaluation by the Council in the future Scoping Plan review; and
- prioritize regular measurement and monitoring of methane emissions from landfills. The NYS Department of Environmental Conservation will track developments associated with monitoring landfill emissions and require that new technology has been used.

Maureen Leddy, Director, Office of Climate Change, NYS Department of Environmental Conservation, presented feedback on the Climate Justice Chapter. Key points for incorporation included:

- adding stronger statements on the definition of disadvantaged communities definition and associated 40% of benefits and what they mean for State decision-making and the Scoping Plan;
- emphasizing a “whole government approach” with interagency coordination on the approach to climate justice in a way that solves problems;
- increasing emphasis on prioritizing reduction of co-pollutants; and
- emphasize avoiding disproportionate burdens

Unresolved issues included the need for guidance for agencies to prioritize emissions reductions and prevention of additional burdens within disadvantaged communities and remaining consistent with greenhouse gas emissions reduction goals. As proposed resolutions, the NYS Department of Environmental Conservation is developing draft guidance for public comment with input from environmental justice community representatives to serve as a model for other agencies and a specific discussion on gender and climate and the need to include a gender lens for women, femmes, and girls on the front line of the climate crisis could be added consistent with any Council discussions.

John Williams, Vice President for Policy and Regulatory Affairs, NYSERDA presented feedback on the Just Transition Chapter, stating that the key points to incorporate were:

- stating how the just transition work will be implemented with the final Scoping Plan;
- taking a more forward view on future job types that is illustrative of the new economy; and
- adding specificity to the recommendations to move beyond examining and studying.

Unresolved issues included:

- increasing focus on economic development opportunities and the potential to solve multiple challenges at once, such as retaining and adding new economic growth. A proposed resolution is to include information from the Jobs Study to identify specific sub-sectors and portions of the supply chain particularly ripe for growth within the State;
- rectifying the broad information on evaluation of labor standards and strengthening the statement on equal pay standards. A proposed resolution is to refine the language to strengthen the embrace of labor standards, such as prevailing wage and project labor agreements, in sectors and use-cases that are appropriate and practicable;
- engaging the business community to bring forward additional creative solutions that benefit businesses that have replicable attributes and global implications. A proposed solution is for State agency staff to work with the members of the Just Transition Working Group to refine language to address these suggestions.
- Prioritize communities with prior plant closures ahead of natural gas plant closures given the greater environmental impact and legacy. A proposed resolution is to incorporate a general, illustrative list of factors that should be considered.

Henry Spliethoff, Research Scientist, NYS Department of Health, presented feedback on the Health Chapter, specifically providing one overarching comment received that the public health story is a very important pillar of the Scoping Plan that bears greater attention. He stated that the key points to incorporate included the following and all are fairly easily addressed in the draft Scoping Plan:

- highlighting the volume of information learned about the health effects of climate change and the benefits from mitigation efforts;
- better highlighting the challenges faced by disadvantaged communities and how the Scoping Plan will address them;
- highlighting the use of parks and green spaces for reducing stress, storm and heat island mitigation to revitalize and improve health outcomes in disadvantaged communities;
- highlighting the COVID link between impaired air quality and community health disparities and addressing the mental and physical health effects of super storms that have affected the State, such as Hurricane Ida in addition to Superstorm Sandy;
- expanding the discussion of health issues relevant to rural areas, such as wood burning;
- better identifying the benefits of electrification and emphasizing that air quality impacts occur near the source of pollution;
- ensuring consistent treatment of biofuel combustion across Chapters; and

- including the health benefits of energy system reliability and potential impacts of disruptions.

Mark Lowery, Assistant Director, Office of Climate Change, NYS Department of Environmental Conservation, presented feedback on the Adaptation and Resilience Chapter. He also stated that adaptation and resilience strategies will require significant funding. Key points to incorporate included the following that will be included in the next draft:

- enhancing inter-governmental coordination regarding installation of infrastructure in disadvantaged communities, particularly of water and sewer infrastructure;
- expanding flood insurance, particularly for renters;
- acknowledging the disproportional effect of high insurance premiums in disadvantaged communities and how the Scoping Plan will address it;
- emphasizing the need for a managed-retreat strategy;
- emphasizing the need for green infrastructure strategy; and
- creating a Chief State Resilience Officer that should consider regional needs and coordinate with other disaster response agencies.

In addressing the topic of the Gas System Transition Chapter, Raya Salter acknowledged that perhaps there was a minority position regarding concern around decommissioning.

Dr. Howarth noted appreciation for the amount of work involved and expressed concern, stating that he did not feel the Gas System Transition Chapter was responsive to work of most of the Advisory Panels. He is particularly concerned about the proposed use of existing and updated natural gas infrastructure for renewable natural gas, green hydrogen, etc. given that the most generous estimates suggest that capture of renewable natural gas from agricultural uses and waste recapture converted into it would equal, at most, 2.5% - 3% of the current natural gas consumption. He suggested that the proposal could be misleading. As for the proposal to use hydrogen in this infrastructure, Dr. Howarth stated that the New York natural gas infrastructure is not designed to handle hydrogen, and there is no guarantee it would work. Additionally, to meet energy needs, the State would need to import “green” hydrogen from out of state, with no way to ensure the hydrogen was truly green. Finally, Dr. Howarth disagrees with continuing to use natural gas in a dual fuel solution to meet peak heating demands during the cold winter months. Overall, he strongly believes that the Council should commit to decommissioning the natural gas system in a very organized way.

Gavin Donohue expressed concern over the existing natural gas infrastructure and believes the New York State Independent System Operator should be more involved in the decision-making process. Despite some strong sections of the Scoping Plan, he also expressed concern over the lack of detail in the Scoping Plan about how the State will pay for the investments contained therein, as well as a lack of attention to issues of affordability and future reliability of the system. He believes that the Council should identify a strategy for addressing what he believes to be large deficiencies in the Scoping Plan.

Peter Iwanowicz expressed his understanding that potential strategies regarding funding and how to pay for some of the recommendations may be answered in the next iteration of the Scoping Plan and that area is very important, and that he agrees with Dr. Howarth's comments regarding gas system transition.

Donna DeCarolis expressed concern for rapid decommissioning of the gas system, and to do so without cost impacts does not seem fair or responsible. She suggests assessing the decommissioning very carefully to ensure that the approximately 60% of State residents who rely on natural gas for heat do not suffer from reliability issues and implications for consumers. She also suggested that perspectives from other states may have value.

Anne Reynolds finds Dr. Howarth's remarks compelling, but also agrees that what is being suggested is a major undertaking and that the Scoping Plan should be very clear in acknowledging these sentiments. She suggested that a comprehensive assessment may be necessary to further understand how New Yorkers currently use natural gas and what the best uses of it and its infrastructure would be prior to full decommissioning. Ms. Reynolds addressed the lack of cost analysis, stating that she believes it would be impossible to provide the level of detail being requested at this stage in the plan, as the draft Scoping Plan is still relatively general in nature.

Sarah Osgood clarified that it was the intention of the Gas Transition Chapter to recommend maintaining use of a small portion of the gas system moving forward and the decommissioning should be very strategic, and that there is room to clarify these intentions within the draft.

Anne Reynolds suggested in an aside that perhaps some part of the final Scoping Plan could list or highlight all of the studies and analyses that the Council is recommending that the State embark on in the near-term in recognition that there is more to learn and explore further.

CEO Falcone recommended that the Council focus on the key actions and deliverables needed in the next five years to address the Climate Act goals, rather than to attempt to predict the future and anticipate which technologies or fuel systems may or may not be viable in 2040 or 2050, as those technologies are changing so rapidly. Attempting to predict the future will not result in a successful debate. In an aside, Dr. Howarth agreed with CEO Falcone.

Dennis Elsenbeck prefers to keep the impact on businesses that may be directly impacted by these transitions at top of mind, and not be removed from the real world effects.

Dr. Paul Shepson stated his belief that a choice between decommissioning the natural gas system and having reliable cold weather heating and electricity is a false choice, as what is needed is an orderly transition. His concern is how this will be financed, he looks forward to the additional information on costs and is supportive of Dr. Howarth's comments.

Concurrent to the above discussions, Mr. Elsenbeck, Dr. Shepson, Mr. Iwanowicz and CEO Falcone, engaged in a discussion regarding the applicability of green hydrogen combustion under the Climate Act, expressing various views regarding whether it is combusted (or not) and how that may fit under the definition of a "renewable" energy source under the law. A discussion also ensued with regard to batteries as a storage option for excess renewable electricity and how much would be needed to meet the needs of the electrical grid. In this discussion CEO Falcone reiterated his position that attempting to predict the future of technology will not be helpful in reaching a conclusion on the actions needed within the next 5 years.

Ms. Salter expressed concern that there was insufficient time to discuss all the topics, inquiring as to the path forward, and restated her belief that the lack of a gender lens in the study was an oversight, rather than a controversy.

Ms. Osgood reiterated the clarifications to be provided that had been discussed during the meeting, particularly surrounding natural gas decommissioning. In a concurrent discussion, Ms. DeCarolis stated her belief that the Climate Act goals can be met without “decommissioning” the system, and that decommissioning without sufficient analysis of the effects is premature.

Ms. Osgood reviewed the anticipated next steps for advancing the draft Scoping Plan, stating that on December 10, a revised draft would be distributed to Council members and a vote was anticipated at the December 20 meeting, in anticipation of the statutory deadline for release of a draft Scoping Plan, to be followed by a public comment period of not less than 120 days, along with public hearings.

Co-Chair Harris suggested options for moving forward with the final decision made to continue the verbal discussion at a new date in the near future, a suggestion preferred by both Co-Chair Seggos and Rose Harvey.

Rose Harvey also supported an orderly natural gas transition and acknowledged the issue requires more time and additional involvement beyond the Council.

Co-Chair Harris addressed Ms. Salter’s earlier concerns, explaining that the goal of the draft Scoping Plan is not intended to be “final” in the traditional sense, and that the Council will continue to discuss the full gamut of issues during 2022.

December 6, 2021 Reconvening of the November 30, 2021 Meeting

Sarah Osgood, Executive Director, Climate Action Council, resumed the November 30, 2021 meeting and a quorum was present throughout. After Co-Chair Harris reviewed the Agenda and topics for this portion of the meeting, which was based upon outstanding discussion items from November 30, Co-Chair Seggos provided some related updates regarding forthcoming documents from the NYS Department of Environmental Conservation, including a revision to Commissioner’s Policy 49, and a new set of documents from the Division of Air Policy, to ensure consistency with the Climate Act.

Ms. Osgood began the discussion with the topic of affordability and consumer pricing impacts, noting that ratepayer impacts would require a separate, more detailed analysis that would be developed as part of any subsequent implementation processes.

Donna DeCarolis stated her belief that waiting until implementation to analyze cost impacts is too late and suggested that scenario analysis be conducted in the next few months in an attempt to assess this sooner. Mr. Donohue stated his support for this position and believes that where costs to the consumer are known, they should be articulated in the report.

Ms. Salter also voiced her support of a quick analysis to be performed to the extent it can be done and included in the draft Scoping Plan that is released for public comment, and for a deeper analysis to be conducted by the NYS Public Service Commission focused on affordability and macro level costs to consumers. She also requested an updated definition of disadvantaged communities from the Climate Justice Working Group, perhaps at the December meeting. Ms. Osgood and Co-Chair Harris confirmed that an update on the definition is expected to be addressed at the December meeting.

Co-Chair Harris addressed the issue of ratepayer costs, stating that although it is unclear who will pay for some of the initiatives and policy changes and at what allocations, the entire cost is unlikely to fall to New York ratepayers and taxpayers, as there will be private market and federal contributions. Mr. Mas agreed with Co-Chair Harris and reiterated her points.

Ms. Reynolds expressed her understanding of why specific ratepayer costs are not available at this stage of the process and recommended strengthening the language to state that when a particular recommendation is being considered to become a policy by a particular agency or entity, then a specific ratepayer assessment would be performed at that time. Raya Salter was supportive of these comments.

Ms. DeCarolis stated that she believes everyone is in agreement that more specificity is needed surrounding ratepayers costs, even if providing a range of costs, and that the cost of transition needs a more consumer-focused analysis.

Ms. Osgood suggested that the updated proposed revisions for consumer rate impacts would be to state that every implemented policy should have an assessment of ratepayer or consumer impacts at that point in time, and that the Council will endeavor to include more material in the Final Scoping Plan, through available options such as cost studies.

Dr. Shepson expressed his opinion that the updated proposed resolution should state definitively that, once policies are identified, a complete cost benefit analysis will be incorporated, as opposed to focusing exclusively on ratepayer costs.

Mr. Donohue stated he will reserve judgement on the cost portion until the new proposal is drafted and sent to the Council. Ms. DeCarolis agreed, also stating that the exact language will be important.

Mr. Iwanowicz voiced support of the comments made by Dr. Shepson and suggested that economic benefits to consumers, as well as the costs, will be significant, citing the example of gas powered cars versus electric vehicles. Dr. Shepson agreed with the clarification and supported this suggestion. Ms. Salter stated her interest in seeing how the analysis is constructed to capture macro efficiencies.

CEO Falcone described his experience working on electrification on Long Island, including offering rebates for ground source heat pumps for more than 20 years and has observed that, in general, consumer electric bills go up but their heating prices decrease because they are no longer using fossil fuel sources. He stated that as the electrical grid is used more efficiently, and the cost of electrification could pay for itself without putting upward pressure on rates. This process also assumes a range of policies, and he stated that, while this experience is limited to Long Island, electrification has been beneficial to consumers and systems given the current natural gas and other fossil fuel costs, and the avoided infrastructure costs. He supports looking at both the costs and the benefits.

Dr. Howarth provided his own personal experience with installing a ground source heat pump, the investment in which will be shortly be paid for in seven years, adding that same retrofit today would be significantly less expensive making the economics quite substantial.

Mr. Donohue agreed with both CEO Falcone and Dr. Howarth and reiterated his concern that this good information is not being entertained by the report. CEO Falcone stated that the information he provided is public information. Ms. DeCarolis added her support of the discussion and supports analysis that focuses on different regions of the state that have different energy usage needs, noting that specific studies are necessary to ensure accurate information is gathered and provided.

Ms. Leddy addressed the open climate justice issue stating that, absent objection and based upon previous discussion, the intention is to add a gender lens discussion to the Climate Justice Chapter. Ms. Salter and Dr. Shepson voiced their support for this approach and there were no objections.

Regarding the outstanding land use items, Ms. Crowell stated that the first item was the suggestion to request municipalities introduce moratoria while updating their comprehensive zoning plans and the second is a statement suggesting a rejection of state subsidies, renewable energy credits and tax credits where deforestation occurs for the purposes of renewable energy.

Ms. Reynolds suggested a statement be included that while there may be some incompatible land uses for renewable energy, there must be a balance between preservation and necessary renewable energy construction to meet Climate Act goals, and that this should continue to be addressed by the State Environmental Quality Review Act or the Office of Renewable Energy Siting. Ms. Crowell believes Ms. Reynolds suggestion is consistent with the suggested revisions.

Dr. Howarth stated his support of the municipal moratoria and added that clarifying language that it should apply to fossil fuel infrastructure is also needed.

In response to Ms. Salter's request for an update on the Power Generation Advisory Panel recommendation on the establishment of enforceable emissions reductions from power plants, Director Osgood stated there is no recommendation in the current draft for a moratorium, but for a process for DEC to establish regulations on emissions.

In response to an inquiry by Ms. DeCarolis as to why a municipal moratorium was necessary when the Climate Act requires agencies to consider consistency with the Climate Act when issuing permits, Ms. Crowell stated that the recommendation is specifically directed at municipalities rather than State agencies, and might align municipal actions and afford an opportunity to get ahead of potentially conflicting permit requests while attempting to update regulations to be consistent with the Climate Act.

Dr. Howarth stated that several members of the public involved in local planning and zoning boards have mentioned to him that current State Environmental Quality Review Act regulations do not reference the Climate Act and encouraged an update.

Mr. Donohue suggested further clarification regarding the municipal moratorium issue, perhaps making a better nexus with State permitting, and is satisfied with where the issue resolved regarding no recommendation for the electricity sector.

CEO Falcone cautioned against language that is so strict that it would discourage the construction of renewable energy on appropriate sites where, perhaps, a small number of trees would need to be removed for access to transmission lines, suggesting a balanced approach.

Mr. Iwanowicz recommended the draft Scoping Plan include that the State will continue to be very proactive in working to meet the Climate Act goals, and a municipal moratorium will assist the achievement of those goals by helping municipalities to manage zoning and permitting that occurs at a local level.

Ms. Koepnick, Senior Vice President and Chief Strategy Officer for Portfolio Preservation, NYS Homes and Community Renewal, sought clarification on what infrastructure would be included in the municipal moratorium, and whether it would include extending new gas lines to newly constructed housing. Ms. Crowell clarified that it would include any infrastructure that would fall under the purview of local governmental land use decisions. Ms. Koepnick urged caution, as the moratorium could be used by municipalities looking for ways to thwart certain types of construction, such as affordable housing.

In the discussion regarding transportation, Mr. Iwanowicz requested the inclusion of a commitment by the State to electrify the entire State fleet, and an explanation of the types of and length of time the State anticipates using biofuels, as he believes that the Transportation Climate Initiative is no longer a viable path forward. Mr. Snyder clarified that there is no recommendation to join the Transportation Climate Initiative and it was deferred to the forthcoming Economywide Chapter.

In response to a request by Dr. Howarth about whether Staff could commit to providing an analysis of ground source and air source heat pumps before the December 20, 2021 meeting, Mr. Mas stated that the team will do its best.

In response to an inquiry by Raya Salter regarding next steps, Co-Chair Harris stated that none of the dates previously presented at the November 30 meeting had changed. She added that representatives from the Climate Justice Working Group and a report out on the final Jobs Study will be added to the December 20, 2021 meeting.

In response to an inquiry by Ms. Reynolds as to whether comments or edits on the draft Scoping Plan would be accepted between December 10 and December 20, 2021, Ms. Osgood replied that there will be new information provided to the Council by December 10, 2021, including the Economywide Chapter, and that anyone with questions or comments can reach out, with the hope that all Members can come to an agreement on the draft Scoping Plan at the December meeting.

In response to an inquiry from Donna DeCarolis regarding an update on the anticipated steps for 2022, Ms. Osgood stated it is a little early for specifics, however a minimum public comment period of 120 days, with hearings happening concurrent to the public comment period are in the planning stages. There is also the possibility of a speaker series and a continuation of conversations regarding specific topics if Council Members would find it helpful.

Ms. Salter expressed her excitement and interest in helping engage stakeholders in 2022 and inquired as to whether the 120 day comment period was the maximum time allowed, or if the comment period could be extended. Ms. Osgood stated that she is unaware of any limitation on the length of the comment period and that the Council could ultimately decide the duration. However, it is important to remember that all public comments will need to be processed prior to

the issuance of the final Scoping Plan at the end of 2022. Ms. Reynolds voiced her agreement with Ms. Salter, stating that six months for public comment and six months to respond might be viable.

With that, the meetings of the Climate Action Council of November 30, 2021 and December 6, 2021, were adjourned.



Climate Action Council

KATHY HOCHUL
GOVERNOR

DOREEN HARRIS
CO-CHAIR

BASIL SEGGOS
CO-CHAIR

Meeting Agenda

November 30, 2021

- Welcome
- Consideration of October 14, 2021 Minutes
- Presentation and Discussion: Jobs Study
- Presentation and Discussion: Development of draft Scoping Plan
- Next Steps