

# New York State Climate Action Council

August 23, 2022  
Meeting 23



**Climate Action  
Council**

# Meeting Procedures

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

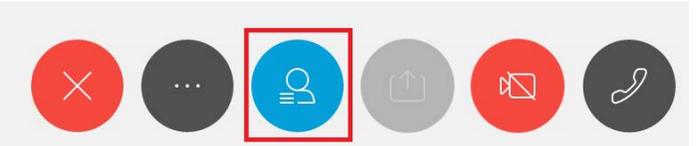
- > CAC Members should be on mute if not speaking.
  - > If using phone for audio, please tap the phone mute button.
  - > If using computer for audio, please click the mute button on the computer screen (1<sup>st</sup> visual).
- > Video is encouraged for CAC members, in particular when speaking.
- > In the event of a question or comment, please use the hand raise function (2<sup>nd</sup> visual). You can find the hand raise button by clicking the participant panel button (3<sup>rd</sup> visual). The co-chairs will call on members individually, at which time please unmute.
- > If technical problems arise, please contact [NYS.CAC@cadmusgroup.com](mailto:NYS.CAC@cadmusgroup.com).



**You'll see  when your microphone is muted**



**Hand Raise**



# Agenda

- > Welcome and Roll Call
- > Consideration of July 11, 2022, Minutes
- > Co-Chair Remarks and Reflections
- > Subgroup Progress Reports
- > Integration Analysis Updates
- > Public Comments Summary and Proposed Process for Integration
- > Proposed Process for CJWG Feedback
- > Proposed Process for Barriers Report Integration
- > Next Steps

# **Consideration of July 11, 2022, Minutes**

# **Co-Chair Remarks and Reflections**

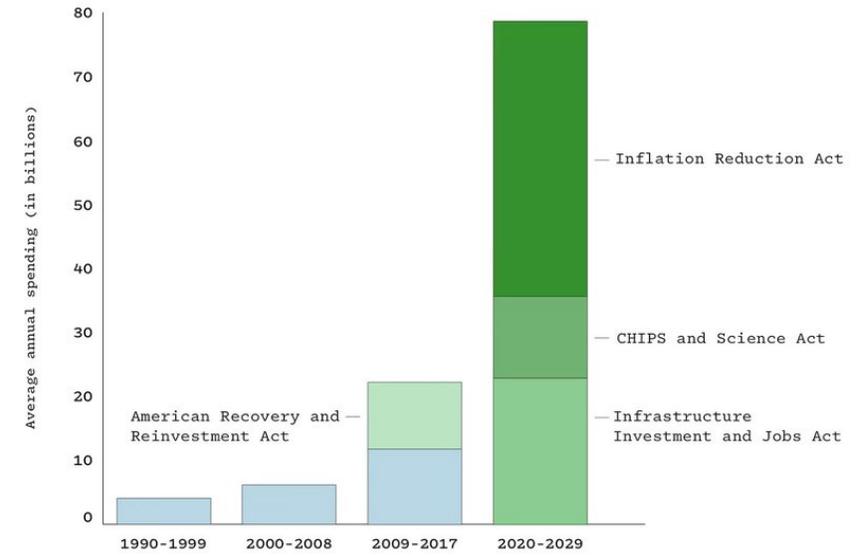
# Historic federal climate action

## Landmark legislative activity by Congress and Biden Admin. directs game-changing investment

- > ***Inflation Reduction Act (IRA) of 2022 signed into law by President Biden on August 16<sup>th</sup>***
- > ***Sectors that will benefit (see bottom right):***
  - *Renewable and zero-emission electricity*
  - *Electric vehicles and clean transportation*
  - *Efficient, electrified homes and buildings*
  - *Clean energy manufacturing and supply chains*
  - *Green hydrogen and industrial decarbonization*
  - *And much, much more*
- > ***Environmental justice and disadvantaged community priorities***
- > ***Not to be overlooked – federal Chips and Science Act also directs substantial funding and focus into zero-emission technology R&D (see top right)***

### A \$500 Billion Investment in a Green Economy

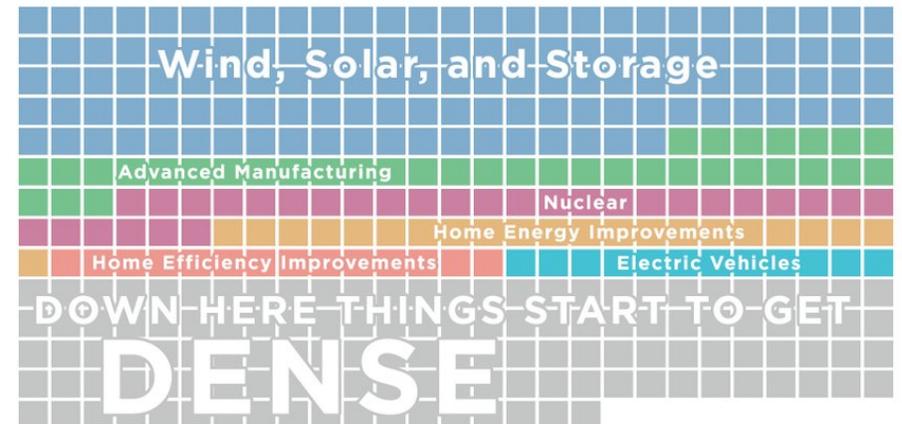
*The federal government's average annual climate spending is poised to triple this decade.*



Source: RMI

### IRA Climate Spending

every block is a billion dollars



Source: Hank Green, Twitter (@hankgreen)

# Major Highlights from Inflation Reduction Act by Sector

## Breaking down notable elements of the recently passed legislation

Stated Goal: 40% Emissions Reductions by 2030 (economy-wide)			
Electricity	Buildings	Transportation	Other Elements
Tax credits for clean sources of electricity (solar, wind, nuclear, etc.)	\$9 billion LMI consumer home energy rebate programs (electric appliances and EE retrofits); incl. \$8k for LMI HPs	EVs: \$4k for used vehicles; \$7.5k for new (w/ income, MSRP caps)	Clean Hydrogen PTC/ITC of up to \$3/kg for low lifecycle emissions and labor rules met
Standalone storage ITC; Interconnection upgrades eligible for tax credit up to 5 MW	10 years of consumer tax credits for heat pumps, rooftop solar, electric HVAC, and water heaters (new and extended), w/ direct pay provisions	EV charging station tax credit, extended and increased through 2032 (up to \$100k)	\$60b to on-shore clean energy manufacturing in the U.S. across full supply chain of clean energy and transportation technologies
\$30b in targeted grant and loan programs for states and electric utilities to clean electric supply	\$1b grant program to improve EE and climate resiliency in affordable housing	Commercial Clean Vehicles Credit; \$1b for ZEV trucks and buses	Up to \$60b in EJ priorities to drive investments into DAC
Provisions for direct pay and transferability of tax credits; many adders re: labor, location/community, domestic content, etc.	Thermal energy storage eligible for ITC	Dedicated clean vehicle manufacturing facility support, both new and re-tooled (see right)	Green Bank - \$27 billion clean energy technology accelerator (at EPA) to support deployment of technologies to reduce emissions
\$350b - expanded DOE LPO financing authority for existing loan programs & new loan guarantees, incl. repurposing projects	\$1b for zero energy codes	More: USPS electrification, ports decarb., renewable fuels credits	More: methane fee; SAF \$; extension of CCS credit; \$5.7B in low-CO2 procurement; >\$25b ag/lands

# Inflation Reduction Act: What Comes Next

## Planning, analysis, organization, and collaboration to benefit New York

- > ***Modeling and analysis – better understanding how the IRA will affect and inform our Integration Analysis***
  - Will hear from staff team later this meeting, with a deeper report-out planned for future meetings
- > ***Identifying key state roles and responses to mobilize around the IRA***
  - Aligning on primary and supporting agency leads; adapting existing programming where necessary
- > ***Input and assistance from members of the Council and stakeholders/members of the public***
  - Many have already reached out to provide assistance and get involved (thank you!); we will need everyone's assistance to help maximize the benefits that New York is able to realize
- > ***Planning ahead based on what we know about the timing and nature of the various funding streams***
  - Cataloguing: what funds will start to flow sooner than later; which programs are competitive vs. formula-based; differential impacts of tax credits vs. new grant program funding; one-time vs. multi-year disbursements; and the like.

# Recent Announcements

## Progress forges ahead in parallel at the state level

- > **08/17/2022** [NYSERDA Announces Up to \\$30 Million in Funding for Third Round of Future Grid Challenge to Identify Solutions to Technical Challenges of Renewable Power Integration](#) - Up To \$3 Million Per Project Now Available to Study, Develop, or Demonstrate New Technologies that Support Transmission and Distribution
- > **08/16/2022** [DEC Announces \\$3.1 Million in Environmental Justice Community Impact Grant Awards](#)
- > **08/11/2022** [State Department of Transportation Announces Plan for Expansion of New York's Electric Vehicle Infrastructure Now Available Online](#) - Public Feedback Will Help State Department of Transportation Finalize Plans for Buildout of Fast Charging Infrastructure Along Designated EV Alternative Fuel Corridors
- > **08/02/2022** [Governor Hochul and Mayor Adams Announce \\$70 Million Initial Investment to Decarbonize NYCHA Buildings as Part of Clean Heat for All Challenge](#) - Midea America and Gradient Selected by NYPA to Develop New Heat Pump Technology and Produce 30,000 Initial Units
- > **07/27/2022** [Governor Hochul Announces New York's Third Offshore Wind Solicitation to Accelerate Clean Energy Development](#) - Seeks to Procure at Least 2,000 Megawatts of Renewable Energy, Enough to Power 1.5 Million Homes
- > **07/23/2022** [Governor Hochul Announces Interagency Efforts to Help Protect New Yorkers From Extreme Heat Risks](#) - Advances Governor's State of the State Directive to Develop Statewide Extreme Heat Action Plan

# Subgroup Progress Reports

# Gas System Transition

Planned Meeting Dates	Tentative Agenda	Status
Meeting 1 – June 2	<ul style="list-style-type: none"> <li>• Workplan development</li> <li>• NYS gas system, end uses, regulatory framework, current gas transition efforts, and statutory provisions</li> </ul>	✓
Meeting 2 – June 23	<ul style="list-style-type: none"> <li>• Development of matrix of key considerations for framework</li> </ul>	✓
Meeting 3 – July 6	<ul style="list-style-type: none"> <li>• Affordability, safety, reliability, &amp; just transition considerations</li> <li>• Presentation from Utility Consultation Group</li> </ul>	✓
CAC Meeting – July 11	<ul style="list-style-type: none"> <li>• <i>Provide progress report and seek feedback</i></li> </ul>	✓
Meeting 4 – August 3	<ul style="list-style-type: none"> <li>• Electric system expansion, alignment with gas system transition</li> </ul>	✓
CAC Meeting – August	<ul style="list-style-type: none"> <li>• <i>Provide progress report and seek feedback</i></li> </ul>	✓
Meeting 5 – August 17	<ul style="list-style-type: none"> <li>• Equity and affordability criteria</li> <li>• Continue discussions on framework</li> </ul>	✓
Meeting 6 – August 31	<ul style="list-style-type: none"> <li>• Policy and program barriers for implementation</li> <li>• Role of alternative fuels in gas system planning</li> </ul>	
Meeting 7 – Sept. (TBD)	<ul style="list-style-type: none"> <li>• Review public comments and CJWG feedback and consider revisions to framework and Gas System Transition chapter of draft Scoping Plan</li> </ul>	
CAC Meeting – Sept.	<ul style="list-style-type: none"> <li>• <i>Present framework for Council consideration</i></li> </ul>	
Meeting 8 – Sept. (TBD)	<ul style="list-style-type: none"> <li>• Review and finalize recommended framework for Council consideration</li> </ul>	

## Progress

- > Reviewed the subgroup charge/scope and workplan
- > Developed matrix of key considerations for framework
- > Created an inventory of resources on what other states and jurisdictions are doing on gas transition
- > Discussions on the framework's key considerations including safety, reliability, affordability, equity and just transition
- > Upcoming meetings will be focused on finalizing the recommended framework and key considerations

# Gas System Transition – Draft Framework

Key Considerations	Guidance
<b>Ensure gas transition plan meets greenhouse gas (GHG) emission reduction targets</b>	<ul style="list-style-type: none"> <li>• Include a consideration for use of alternative fuels to assist with the decarbonization of the gas system</li> <li>• Include potential for thermal loops and community district energy systems</li> </ul>
<b>Reduce energy burdens and ensure energy affordability</b>	<ul style="list-style-type: none"> <li>• Identify ways to mitigate impacts on remaining gas customers as customers transition to electrification and away from use of the gas distribution system</li> <li>• Include a review of costs and benefits associated with adoption of alternative fuels (RNG, hydrogen) to evaluate the impact on overall affordability (avoided electrification costs, system investments, appliance modifications, and fuel production costs)</li> <li>• Include a review of electric grid and related electric transmission and delivery system buildout costs, as well as costs at the homeowner/business level to show the costs and benefits associated with both the transition to electrification and potential use of alternative fuels to decarbonize the gas system</li> <li>• Consider prioritization and targeting of energy efficiency initiatives for distressed housing, disadvantaged communities, and other subsets of NY’s building stock that will be unaffordable to electrify or where electrification is not yet possible</li> <li>• Include a detailed definition of energy affordability</li> </ul>
<b>Consider health benefits and cumulative impacts, including historical burdens</b>	<ul style="list-style-type: none"> <li>• Include analysis to determine the feasibility, climate impacts, and health impacts of current infrastructure, new technologies, and alternative fuels prior to infrastructure investment.</li> <li>• Coordinate with NYS Department of Health on data for health impacts</li> </ul>

# Gas System Transition – Draft Framework

Key Considerations	Guidance
<b>Prioritize continued and improved safety and reliability</b>	<ul style="list-style-type: none"><li>• Require greater scrutiny of investments in infrastructure that will be necessary to maintain reliability and safety for remaining customers of the existing gas delivery system, to ensure they do not result in stranded assets from infrastructure and make it more expensive to decarbonize the gas distribution system. This scrutiny should include a determination of the need for the project to ensure safe and reliable service, cost impacts of additional investments to stranded asset costs, compliance with CLCPA, and the technical feasibility of the investment.</li><li>• Include an analysis on what technologies will be necessary to maintain the safety and reliability of the energy systems as we transition the gas system including renewable, zero-emission dispatchable generation.</li><li>• Ensure both energy supply and demand are thought about in parallel.</li><li>• Ensure the buildout of the electric system can accommodate additional electrification needs but that this should be done in a way that ensures energy affordability and considers regional differences.</li></ul>
<b>Consider role of alternative fuels and technologies in future gas system planning</b>	<ul style="list-style-type: none"><li>• Strategic use of alternative fuels to meet customer needs for space heating or process use where electrification is not yet possible or to decarbonize the gas system as it transitions</li><li>• Any alternative fuel use should ensure that it does not take away from the overarching goals of CLCPA or recommendations of the Scoping Plan on the need to significantly decarbonize the building sector.</li><li>• Consider use of non-wire alternatives and demand management and reduction for customer space heating and electricity needs to reduce current and future constraints on the electric grid as the State makes significant upgrades to the electric generation and distribution system.</li><li>• If alternative fuels are used strategically to decarbonize the existing gas system as it transitions, include updated rules and regulations for use of such alternative fuels.</li></ul>

# Gas System Transition – Draft Framework

Key Considerations	Guidance
<b>Ensure close coordination with electric system expansion</b>	<ul style="list-style-type: none"><li>• To ensure grid reliability needs are met, ensure the transition is completed in parallel with the NYISO’s Reliability Needs Assessment. Ensure that the analysis informs a detailed, strategic and coordinated approach to optimization of the electric and gas systems, and any contracting of the distribution system while considering end-use customers who are highly reliant on gas and consider the economic impacts, feasible alternatives, and growth in the power generation sector with electrification.</li><li>• Coordinate the statewide gas reliability planning process with the electric system planning processes at the NYISO to ensure grid readiness for electrification efforts in a given region or area of the gas distribution system.</li><li>• Include a review of different regions, timeframes, existing headroom and capacity issues (coordinating with other transmission and distribution level proceedings), and utility investments needed to transition customers from gas to electric heating. Review local distribution capacity and supply both in terms of meeting CLCPA goals, supporting economic development, and other key considerations.</li><li>• Include a focus on innovation, including pilots with industry necessary to transform the electric grid alongside the transition of the gas system.</li></ul>
<b>Ensure equitable access to alternative heating options in Disadvantaged Communities</b>	<ul style="list-style-type: none"><li>• Prioritize technical and financial assistance to enable these households in communities that the CLCPA acknowledges were historically underinvested in to make energy efficiency upgrades and electrify affordably.</li><li>• Ensure that as new technologies, including in energy efficiency, and funding opportunities become available, benefits to and suitable programs for disadvantaged communities are prioritized.</li><li>• Address the concern on investments in energy efficiency having a negative impact on the rental cost of housing, particularly for low-income customers and Disadvantaged Communities.</li></ul>

# Gas System Transition – Draft Framework

Key Considerations	Guidance
<b>Ensure a just transition for gas industry workforce</b>	<ul style="list-style-type: none"><li>• Include a clear plan for the just transition of the gas industry workforce including what the current workforce can expect as part of the transition and the opportunities associated with it</li><li>• Include consideration of leveraging gas utility workers’ skillsets for the decarbonization and operation of the gas delivery system with alternative fuels, buildout and operation of district thermal energy systems and for support of dual or hybrid heating pathways</li><li>• Ensure that the workforce is there to meet the demand of the future heating industry including a focus on career pathways, workforce development and training including for individuals in Disadvantaged Communities</li><li>• Include development of health and safety standards and protocols both for the decarbonization of the existing system and with respect to how to adapt to use of new technologies</li><li>• Ensure strong communication with labor and employers as new technologies are adopted or considered.</li></ul>
<b>Prioritize emissions and co-pollutant reductions in Disadvantaged Communities and ensure no disproportionate burden</b>	<ul style="list-style-type: none"><li>• Ensure that GHG emissions reductions and co-pollutant reductions are prioritized in Disadvantaged Communities.</li><li>• Ensure no disproportionate burden for Disadvantaged Communities including when considering infrastructure project locations and emissions and co-pollutant impacts.</li><li>• Utilize the statewide GHG inventory data on emissions and co-pollutant reductions, the Disadvantaged Communities criteria analysis, air monitoring data and other research to be able to track progress towards reducing those emissions and co-pollutants.</li><li>• Include a review of how this data can inform current GHG emissions levels and how this fits in with the enforcement of the GHG emissions limits.</li></ul>

# Gas System Transition – Draft Framework

Key Considerations	Guidance
Consider use of existing gas infrastructure	<ul style="list-style-type: none"> <li>Investments in traditional infrastructure will still be necessary to maintain reliability and safety and to achieve emissions reduction targets using a decarbonized gas system, but greater scrutiny of such investment is warranted pursuant to NY PSC processes or proceedings.</li> </ul>
Identify needed changes to laws & regulations for alignment with Climate Act	<ul style="list-style-type: none"> <li>Review statutory or regulatory changes needed to accomplish the decarbonization of the gas system and potential use of alternative fuels like renewable natural gas and hydrogen.</li> </ul>
Identify additional analyses needed	<ul style="list-style-type: none"> <li>Analysis of costs and affordability should include a comprehensive evaluation of practical cost impacts of the implementation of the State's energy transformation on individuals, businesses, and industries in New York.</li> <li>Analysis on hydrogen use in pipeline network (GHG emissions, safety considerations, and potential for continued reliance on gas)</li> </ul>
Include a communications strategy and customer education plan	<ul style="list-style-type: none"> <li>Include a communication strategy of benefits and associated costs (inclusive of societal cost impacts, health impacts and benefits, etc.) from transitioning away from use of fossil gas to customers.</li> <li>Include a detailed strategy to educate the workforce on the benefits of transition to cleaner alternatives and job opportunities associated with it</li> <li>Include opportunities for significant public comment and engagement in development of the gas transition plan.</li> <li>Include a review of current policies to ensure better public engagement.</li> </ul>
Include a detailed timeline for transition	<ul style="list-style-type: none"> <li>Include a clear timeline for the gas transition considerations that align with the Scoping Plan's recommendations while assuring grid and energy delivery reliability is met.</li> <li>Timeline should include information for labor, local governments, utilities, power producers, community groups, Disadvantaged Communities, etc. on what this transition means and when.</li> </ul>

# Alternative Fuels

## Workplan

Planned Meeting Dates	Tentative Agenda
Meeting 1 – June 1	Workplan development, Summary presentation on alternative fuels in the Draft Scoping Plan
Meeting 2 – June 17	Develop definitions of alternative fuels
Meeting 3 – June 29	Health, co-pollutant, and equity considerations, Develop assessment criteria
<i>CAC Meeting – July 11</i>	<i>Provide progress report and seek feedback</i>
Meeting 4 – July 13	Discussion on GHG emissions reductions and accounting
Meeting 5 – July 27	Discussion on policy consideration to address potential GHG emissions sources, Finalize assessment criteria
Meeting 6 – August 10	Review and propose revisions, if appropriate, to alternative fuels strategies in the draft scoping plan using assessment criteria.
<i>CAC Meeting – August 23</i>	<i>Provide progress report and seek feedback</i>
Meeting 7 – August 24	Review and propose revisions, if appropriate, to alternative fuels strategies in the draft scoping plan using assessment criteria. Discussion on public comments on alternative fuels
Meeting 8 – September 7	Review and propose revisions, if appropriate, to alternative fuels strategies in the draft scoping plan using assessment criteria, Finalize recommended revisions for Council consideration
Meeting 9 – September 9 (if needed)	Finalize recommended revisions for Council consideration
<i>September CAC Meeting (anticipated)</i>	<i>Present recommended revisions for Council consideration</i>

# Alternative Fuels Assessment Criteria

Simplified Threshold Assessment Criteria	More complex Assessment Criteria
Does this use existing fossil fuel infrastructure?	If so, how could this use affect safety, reliability, resilience, and affordability of the gas system?
As this sector transitions to electrification, can this reduce GHG emissions/fossil fuel use during the equipment's remaining useful life?	Does this allow for the use of existing end-user appliances without significant modifications?
	Does the potential scale relative to the specific need(s)/use(s) being addressed make this worthwhile?
Does this address electric system transmission & distribution capacity constraints?	Could using this fuel (in this application) provide more electric system capacity for the least-cost electrification applications?
	Could using this fuel (in this application) mitigate peak load issues?
Would this reduce GHG emissions from reference case?	What is the likely timeframe this fuel and use will be commercially available at a scale needed to achieve significant GHG emissions reductions?
	What is the scale of the GHG emission reduction in the context of the specific need(s)/use(s) being addressed?
	Can this build markets in the Agriculture and Forestry sectors that support emission reduction from increasing carbon sequestration in New York's land and forests?

# Alternative Fuels Assessment Criteria (cont.)

Simplified Threshold Assessment Criteria	More complex Assessment Criteria
<p>Would this reduce the intensity, or volume of co-pollutants from reference case?</p>	<p>Based on IA modelling, will this lead to the use of less fossil fuel than other future scenarios?</p> <p>What is the scale of the co-pollutant reduction in the context of the specific need(s)/use(s) being addressed?</p>
<p>Could this reduce the use of fossil fuels, emissions of GHGs, and/or the intensity or volume co-pollutants in DACs?</p>	<p>Is this a priority or preference for DACs or CJWG?</p> <p>How can this be structured to assure the greatest potential for emissions reductions and co-pollutant reductions in DACs?</p> <p>Can it serve to prioritize emissions reductions (via electrification, alternative fuels, etc.) in DACs?</p>
<p>Does this address a challenging-to-electrify or a strategic use?</p>	<p>Will this benefit in-state economic development?</p> <p>Does this strategic use address a cost barrier for this application?</p> <p>Does this help us use our zero emission electricity in the most efficient manner?</p> <p>Can this reduce GHG emissions/fossil fuel use while technology advancement and cost declines bring more alternatives to commercialization?</p>
<p>Does this address the need for ~10% dispatchable zero-emissions generating capacity?</p>	<p>Does it help reduce/avoid costly electric distribution system upgrades, mitigate peak load, reduce cost to achieve emissions reductions, or reduce cost of retrofits?</p>

# Economywide Policies

## Workplan

Planned Meeting Date	Tentative Agenda
Meeting 1 – June 27	Setting the Table for the Work Ahead/Refining and Prioritizing Criteria
Meeting 2 – June 29	RFF Presentation/Identifying Further Clarity Needed
Meeting 3 – July 20	Rationale Discussion/Finalizing & Applying Criteria
Meeting 4 – July 25	Applying Criteria
Meeting 5 – August 8	Applying Criteria
Meeting 6 – August 22	Setting priorities for Economywide Policy/Summarize Public Comment
Meeting 7 – August 29	Considering Public Comment/Comparing and Contrasting Potential Approaches
Meeting 8 – September 12	Finalizing Recommendations

## Progress

- ✓ > Reviewed the subgroup charge/scope and workplan.
- ✓ > Reviewed the three economywide policies in the draft Scoping Plan.
- ✓ > Reviewed and revised the criteria.
- ✓ > Resources for the Future (RFF) covered lessons learned on carbon pricing from literature review and policy design experience.
- ✓ > Identified priorities for an economywide policy
- > Upcoming meetings will be focused on developing one or more approaches that reflect those priorities.

# Setting Priorities for an Economywide Policy Recommendation

- Emissions
  - Certainty of emission reductions to comply with state limit
  - Potential for minimizing carbon price and/or maximizing abatement/\$
  - Application economy wide or to specific sectors
  - Reduction of co-pollutant emissions
- Economic
  - Price certainty
  - Mitigating risk of leakage
  - Supporting economic development and innovation
  - Maintaining affordability for consumers/businesses
  - Regional equity
- Equity
  - Prioritizing emissions and pollutant reductions in DACs/avoiding hotspots
  - Affordability and avoiding regressive impacts
- Programmatic
  - Certainty and sufficiency of funding and use of proceeds
  - Incorporating multi-jurisdictional programs
  - Consistency with other regulatory programs
  - Maintaining administrative simplicity

# Setting Priorities for an Economywide Policy Recommendation

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  - **Certainty of emission reductions to comply with state limit**
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- Equity
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  - **Affordability and avoiding regressive impacts**
- Programmatic
  - Certainty and sufficiency of funding and use of proceeds
  - Incorporating multi-jurisdictional programs
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# Integration Analysis Updates

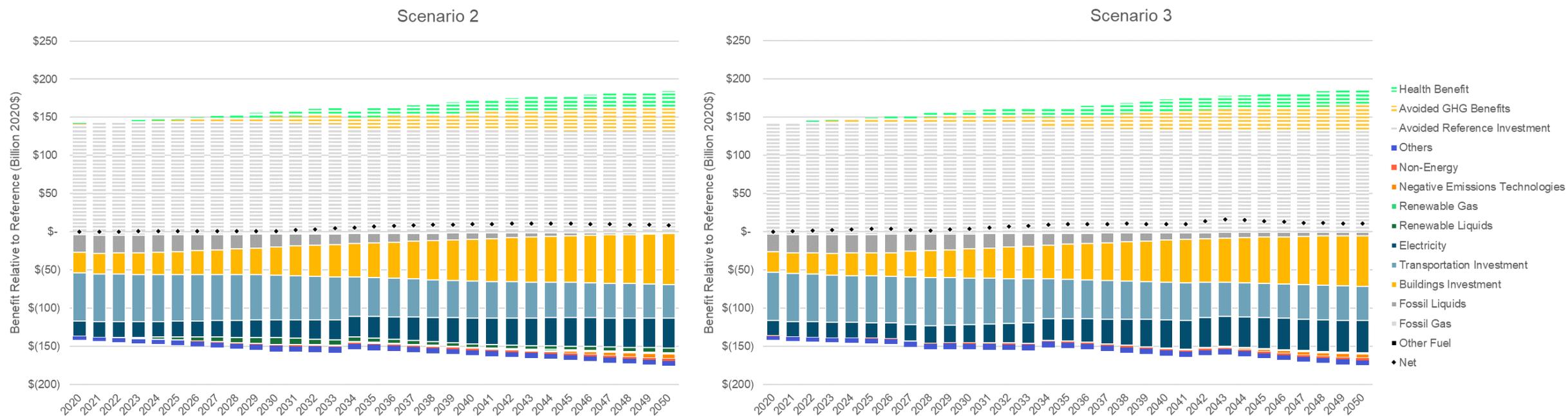
# Integration Analysis Update

1. Additional cost data to be added to Annex 2
2. Updated 2022 Vintage
  - What is the 2022 vintage
  - Top line narrative
  - Key updates
3. Next steps

# Data Update: additional cost data will be added to Annex 2

- > Stakeholders have requested additional insight into annual sector costs (Draft includes 2030 and 2050 annual snapshot)
- > For long-term decarbonization studies, an NPV approach is most appropriate
  - Comparing costs against a reference case incorporates costs that would otherwise be incurred, e.g. heating unit and vehicle turnover
  - Incorporating relative benefits, i.e. health and GHG, reflects value streams unlocked from investment
  - Discounting is needed to reflect the time value of money
- > Evaluating costs on NPV basis (instead of simple sum) is standard accounting in scientific, business and utility settings

# Scenario 2 and 3 Additional Cost Data



> For all scenarios, net benefits are positive in each year

# Integration Analysis Update

1. Additional cost data to be added to Annex 2

## **2. Updated 2022 Vintage**

- What is the 2022 vintage
- Top line narrative
- Key updates

3. Next steps

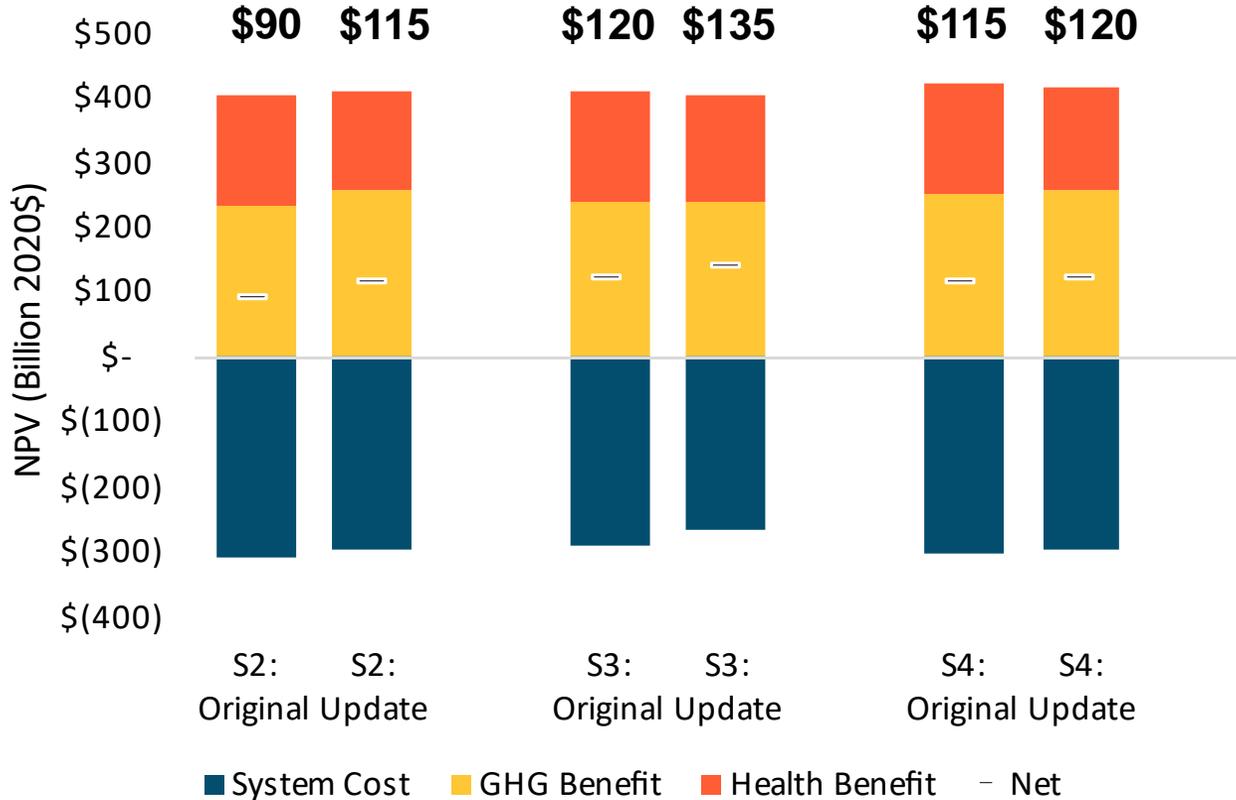
# What is the 2022 Integration Analysis Vintage?

- > 2022 Vintage is a refresh of the Integration Analysis to align with latest information available, including:
  - Re-benchmark to latest Statewide Inventory and GHG accounting methodology
  - Incorporate updated input data where available
  - General cleanup of 2021 vintage
- > Does not change modeling structure or key adoption and performance variables, e.g.:
  - Pathway themes
  - Adoption rates of key technologies, e.g. electric vehicles and heat pumps
  - Performance of key technologies e.g. electric vehicles and heat pumps
  - 70X30 and 100X40 requirements
  - Emissions limits
- > Currently exploring how to incorporate Inflation Reduction Act into Integration Analysis

# Notable Changes

- > Updated inputs where available reflect higher near-term fuel and electricity storage prices due to global supply chain disruptions but also long-term declines in technology costs, reflecting additional technology progress
- > Updated accounting led original Pathways to exceed net neutrality, reducing the need for other expensive mitigation measures like Direct Air Capture that were required to meet 2050 net neutral target
- > Improvements to storage treatment and incorporation of latest expected Tier 4 delivery quantities reduced demand for zero emission firm resources and offshore wind respectively in the mitigation scenarios
- > Refined characterization of fugitive emissions mitigation measures in NYS oil and gas systems
- > Health analysis refines geographic allocation of industrial wood emissions toward the areas where combustion occurs
- > Note: many of these changes reflect feedback received from the public comments

# Updated results reinforce last year's findings



- > Cost of inaction greatly exceeds cost of action (by over \$100 billion)
- > System costs across all scenarios are in the same range given uncertainty
- > The range of net benefits across the scenarios narrows (from \$90-120B to \$115-\$135B)
- > Therefore, it remains important to develop insights across multiple factors, including technology readiness and consumer acceptance

# Integration Analysis Update

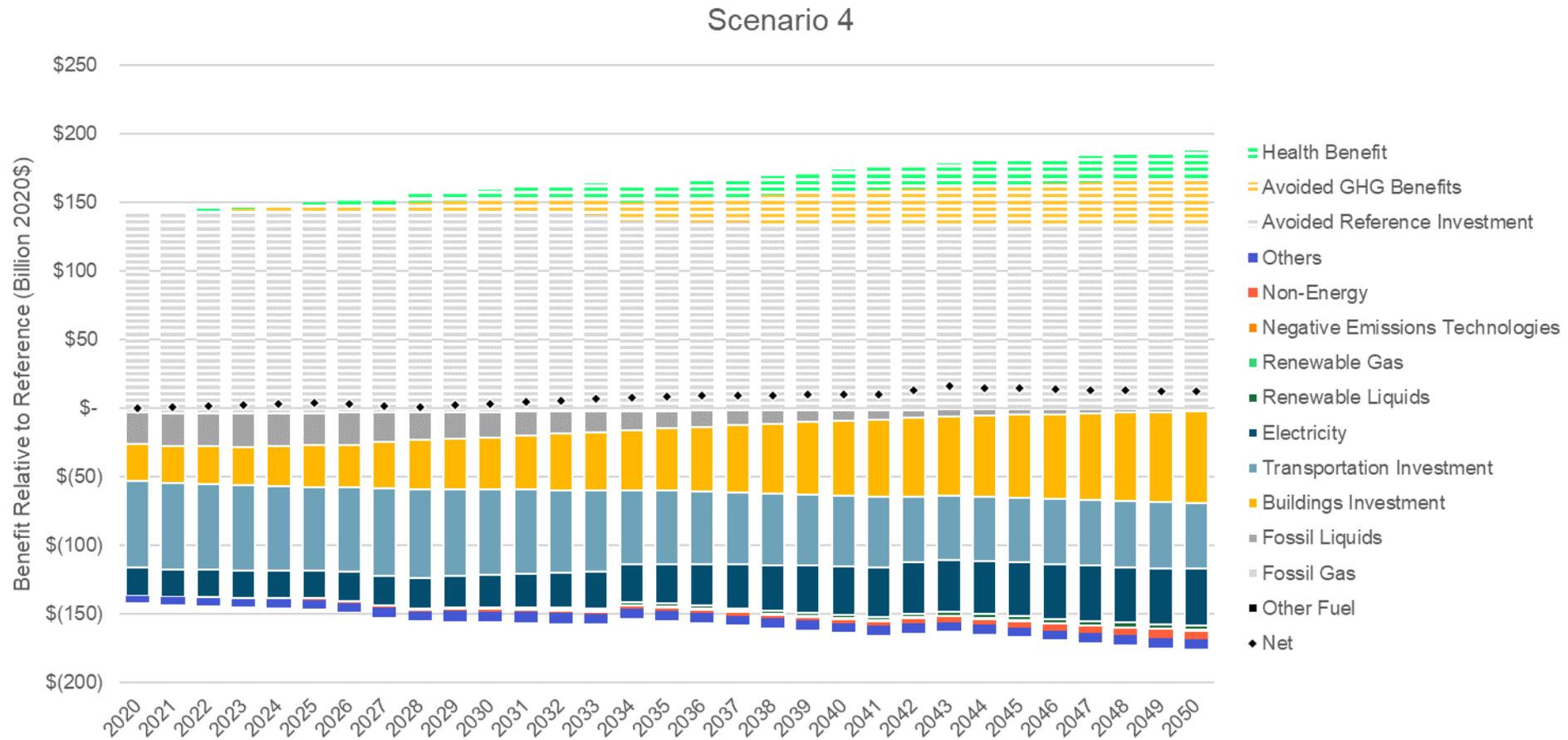
1. Additional cost data to be added to Annex 2
2. Updated 2022 Vintage
  - What is the 2022 vintage
  - Top line narrative
  - Key updates
3. **Next steps**

# Next steps:

- > Inflation Reduction Act Assessment
  - Model the potential reduction in Pathways costs from anticipated implementation of IRA programs
  - Run new electric system model to reflect ITC / PTC changes
  - Present a range of outcomes to reflect uncertainty around the impacts of key program provisions, e.g. "bonuses" for domestic content, income cutoffs, grants to State energy offices
  
- > Areas of potential inquiry to support Final Scoping Plan process in the 2022 Vintage
  - Revisit uncertainty range in fuel price forecasts
  - Assess impacts of electrification, heating system configuration, and magnitude of building shell efficiency investment on key output metrics (e.g., system peak, cost)
  - Explore impacts of expanded uncertainty range of electric distribution system cost
  
- > Develop updated public materials in line with Final Scoping Plan publication process

# Appendix

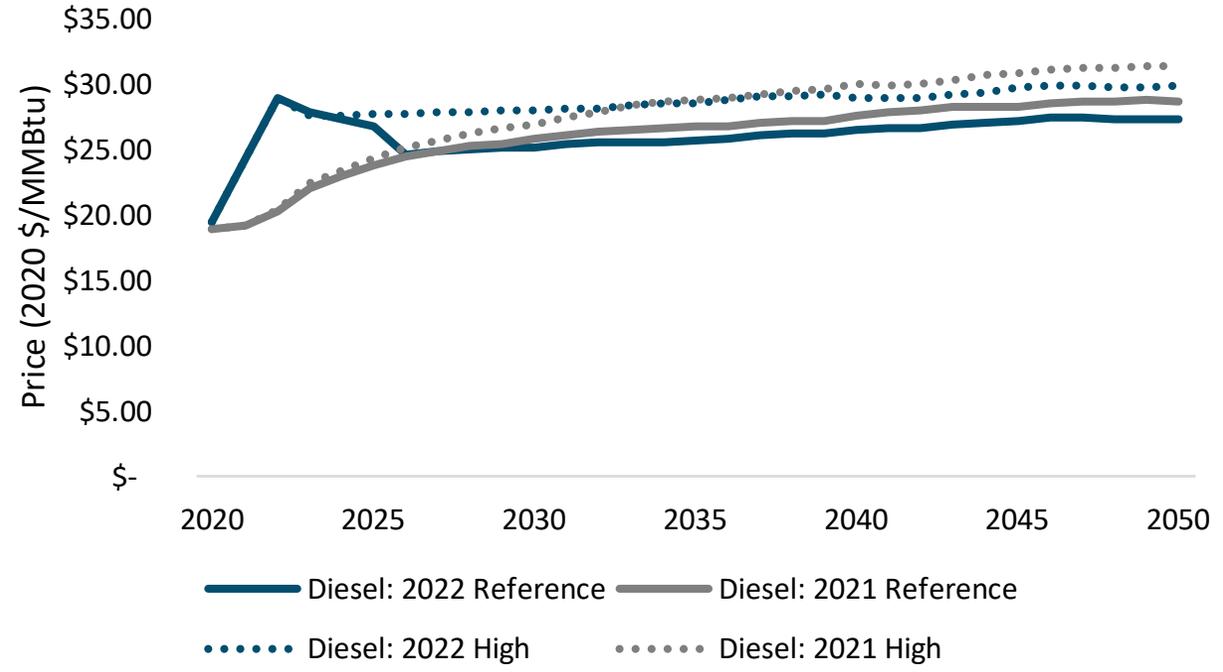
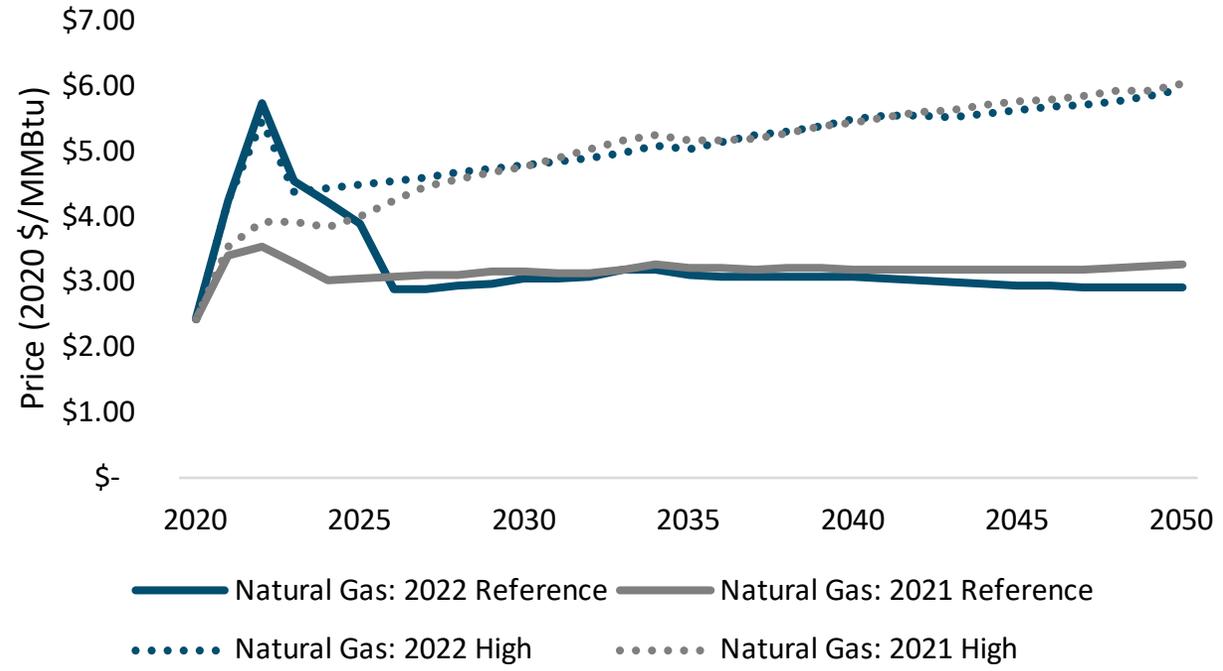
# Scenario 4 Additional Cost Data



# Updated BCA figures

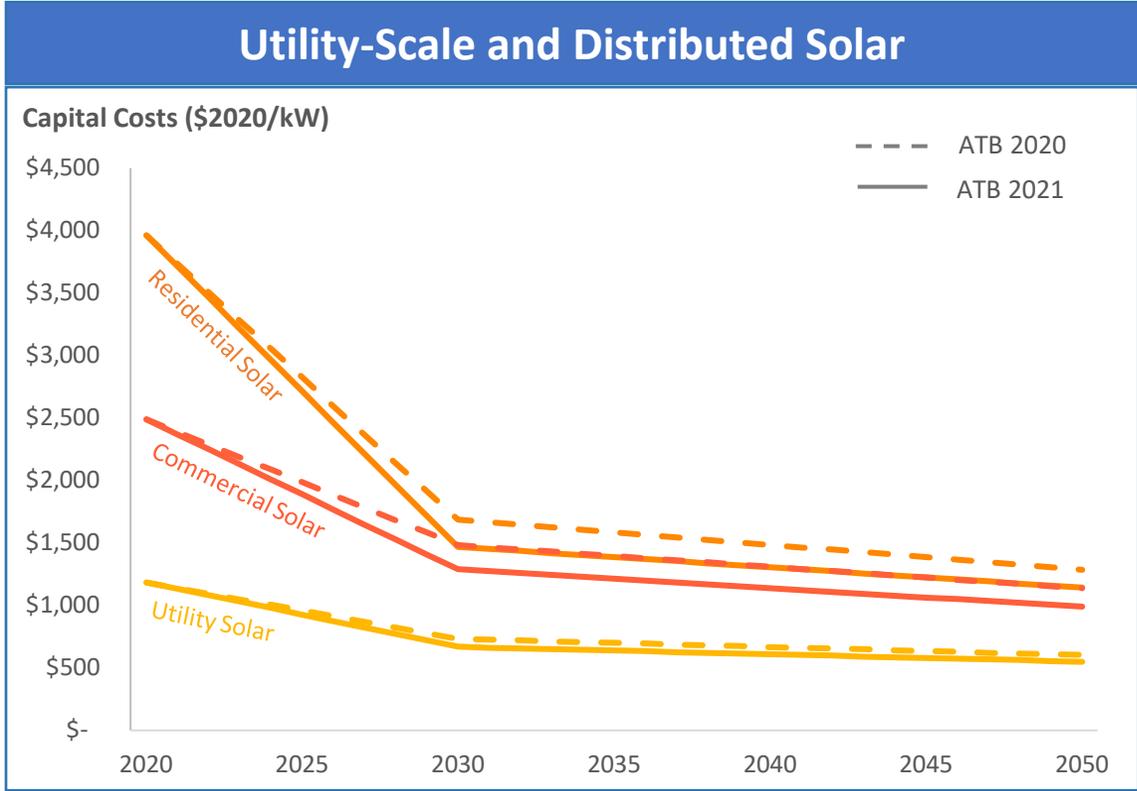
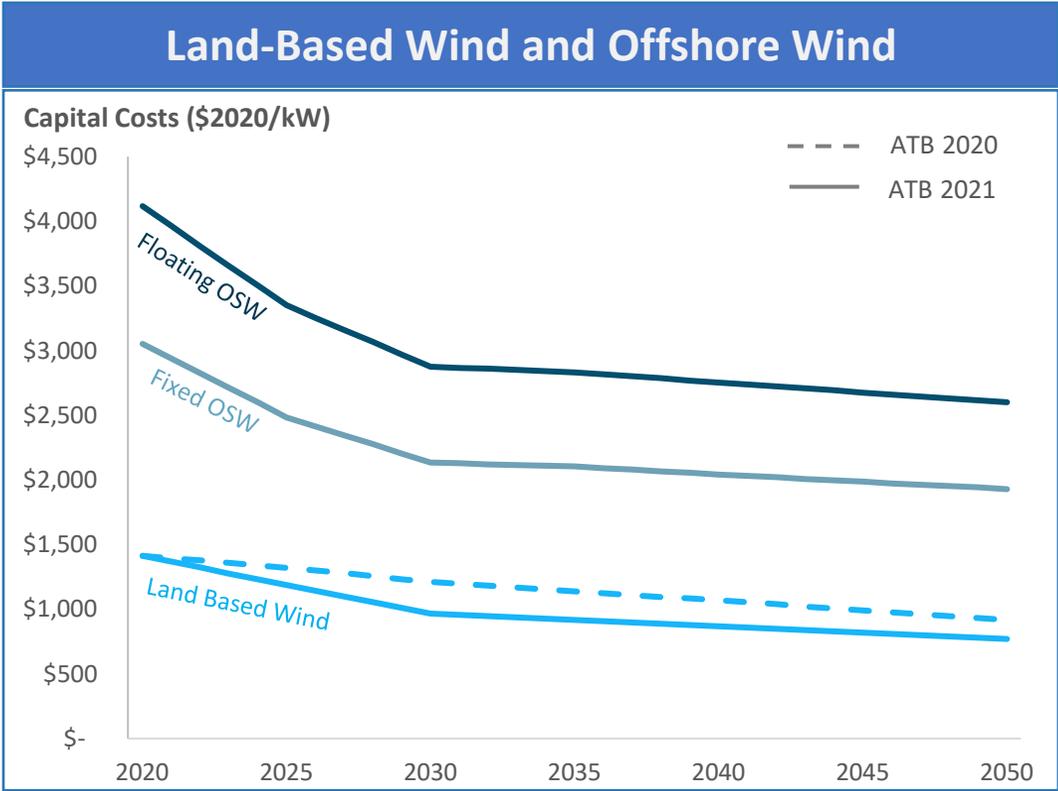
	<b>System Cost</b>	<b>GHG Benefit</b>	<b>Health Benefit</b>	<b>Net</b>
S2: Original	\$(310)	\$235	\$165	<b>\$90</b>
S2: Update	\$(295)	\$255	\$155	<b>\$115</b>
S3: Original	\$(290)	\$240	\$170	<b>\$120</b>
S3: Update	\$(265)	\$240	\$160	<b>\$135</b>
S4: Original	\$(305)	\$250	\$170	<b>\$115</b>
S4: Update	\$(295)	\$255	\$160	<b>\$120</b>

# Fuel price update

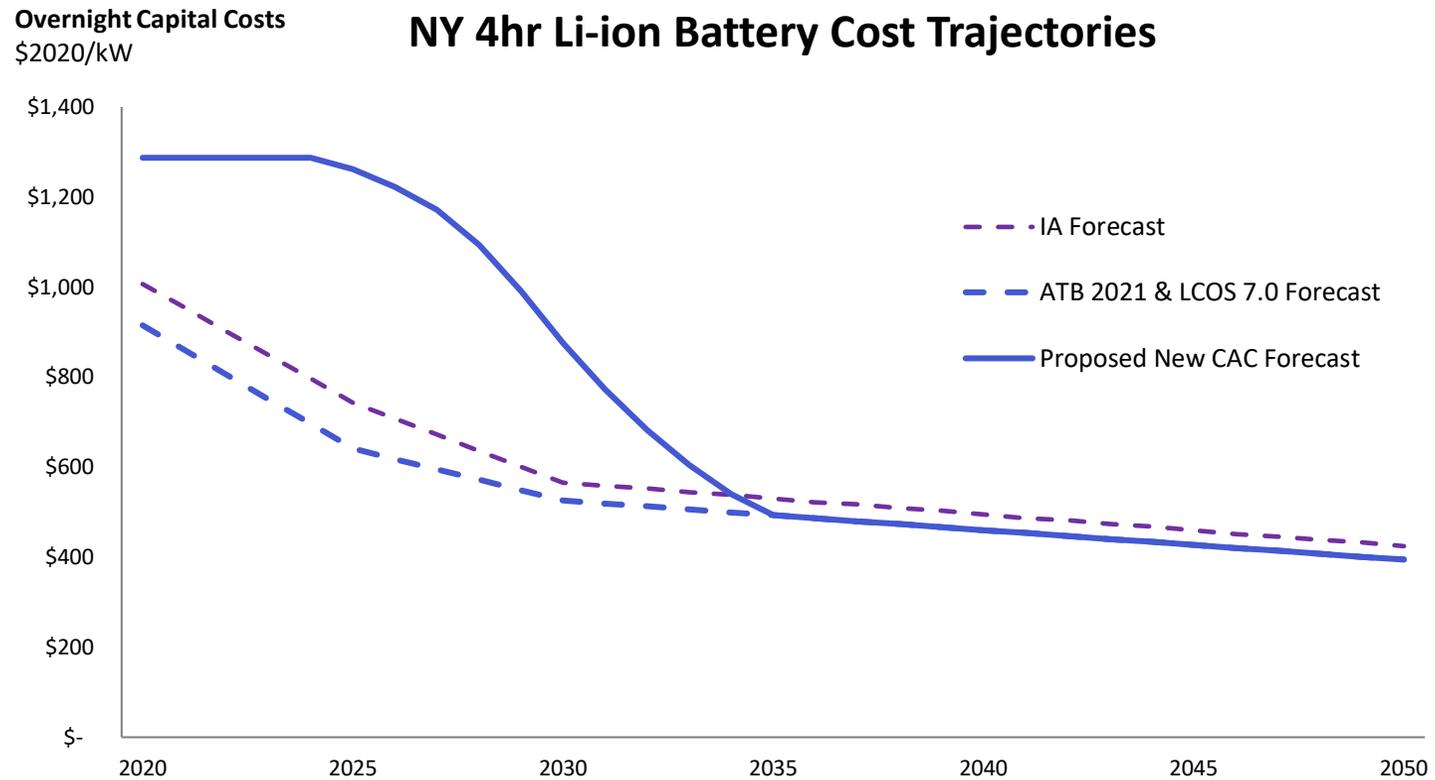


> Solid blue line is used in 2022 vintage core cases

# Updated wind and solar costs



# Updated storage costs



# Electric sector changes (S2)

2022 Vintage			
Installed Capacity (MW)	Scenario 2: Strategic Use of Low Carbon Fuels		
Scenario	2030	2040	2050
Technology			
Nuclear	3,355	3,355	2,135
Gas & FO	21,718	0	0
Zero-Carbon Firm Resource	0	17,992	17,726
Biomass	327	0	0
In-State Hydro	4,262	4,612	4,612
Hydro Imports (Existing)	1,485	1,485	1,485
Hydro Imports (New)	1,250	1,250	1,250
Wind	5,519	7,419	10,894
Wind Imports	2,116	6,397	6,397
Wind_Offshore	6,200	12,678	14,731
Solar	18,491	43,069	64,875
Battery Storage	3,000	12,858	19,820
Pumped Storage	1,435	1,435	1,435

2021 Vintage			
Installed Capacity (MW)	Scenario 2: Strategic Use of Low Carbon Fuels		
Scenario	2030	2040	2050
Technology			
Nuclear	3,355	3,355	2,135
Gas & FO	21,579	0	0
Zero-Carbon Firm Resource	0	21,015	21,290
Biomass	327	327	178
In-State Hydro	4,610	4,613	4,613
Hydro Imports (Existing)	1,485	1,485	1,485
Hydro Imports (New)	1,250	1,250	1,250
Wind	3,814	5,845	9,445
Wind Imports	1,760	6,397	6,397
Wind_Offshore	6,200	14,364	16,393
Solar	18,852	43,432	64,621
Battery Storage	3,000	10,713	21,465
Pumped Storage	1,435	1,435	1,435

2022 Vintage Less 2021 Vintage			
Installed Capacity (MW)	Scenario 2: Strategic Use of Low Carbon Fuels		
Scenario	2030	2040	2050
Technology			
Nuclear	0	0	0
Gas & FO	139	0	0
Zero-Carbon Firm Resource	0	-3,024	-3,564
Biomass	0	-327	-178
In-State Hydro	-348	-1	-1
Hydro Imports (Existing)	0	0	0
Hydro Imports (New)	0	0	0
Wind	1,705	1,574	1,449
Wind Imports	356	0	0
Wind_Offshore	0	-1,686	-1,661
Solar	-361	-363	254
Battery Storage	0	2,145	-1,645
Pumped Storage	0	0	0

# Additional Changes

- > Updated biogenic fuel supply curve to refine catchment area and supply sources and refined blend levels over the study period
- > Updated RGGI allowance price and coverage reflects latest program developments
- > Value of Direct Air Capture included in Avoided GHG Benefits
- > Improved modeling of the impact of increasing Cooling Degree Days on currently deployed Air Conditioners leads to higher summer loads and peaks
- > Improved representation of MDV / HDV vehicle stock in health analysis

# **Public Comments Summary and Proposed Process for Integration**

# Overview of Comments

- > ~35,000 comments received
  - ~28,500 “form letters” from ~45 email campaigns (some very similar)
  - Over 900 comments with attachments (some still being reviewed and summarized)
  - ~5,500 individual comments
  
- > Key topics of general feedback:
  - Cost impacts
  - Capacity, reliability, and security of the electrical grid
  - Rural and Upstate community needs
  - Jobs and the New York economy
  - Alternative fuels
  - Scoping Plan goals, timeline, and process
  - Renewable energy technologies
  - Climate justice and equity
  - Perceived ban on wood burning
  - Economy-wide strategies
  
- > Key topics of email campaigns
  - Gas System Transition
  - Climate and Environmental Justice
  - Multi-topic
  - Green Hydrogen
  - Agriculture and Forestry
  - Wood burning
  - Nuclear energy
  - Waste incineration
  - Legislation

# General Feedback

## > *Cost Impacts*

- Some commenters expressed **belief that the benefits of the transition will outweigh the potential costs of delayed action**; however, many commenters expressed concern about the potential cost impacts of the Plan.
- Commenters were specifically **concerned with the cost of the renewable energy transition**, noting the high cost of transitioning to alternative technologies and disproportionate impacts on Low- and Moderate-Income (LMI) households, Disadvantaged Communities (DACs), and those who are on a fixed income (e.g., retired individuals).
- They cited expected costs up to \$25,000-\$50,000 to upgrade their homes with alternative technologies in accordance with the Plan and were specifically concerned about heat pump retrofits and electric vehicles (EVs), as they are believed to be prohibitively expensive with limited available incentives or subsidies.
- Commenters also expressed **concern about increasing electricity costs**, emphasizing their belief that increasing demand for electricity through electrification will cause electricity prices to rise.
- They also expressed concern that electric companies could raise prices when homes would have no alternative energy source. Commenters listed natural gas, propane, and wood as the most affordable heating fuels and insisted that electricity is more expensive, especially for heating homes in cold climates.
- Commenters expressed **concern that the Plan will increase taxes and place a financial burden on New Yorkers**, citing the already high cost of living in the State which has been exacerbated by COVID-19 and inflation and warned that cost of living increases will drive people and businesses out of New York.

# General Feedback

## > ***Capacity, Reliability, and Security of the Electrical Grid***

- Commenters **questioned the reliability of the current grid infrastructure and its ability to handle increased load.**
- Many commenters have experienced power outages in their homes and have relied on their gas appliances, highlighting that an all-electric home would be unable to function in these cases.
- Commenters were also worried about more frequent power outages and pointed to Texas and California's outages to illustrate their fears.
- Commenters expressed **concern around the intermittency of renewables**, especially as a sole energy source, and the potential public health risks of power outages and unreliable electricity supply.
- Residents were **concerned about New York's energy security**, emphasizing that full electrification would leave the State especially vulnerable to attacks on the grid.
- These commenters generally **prioritized energy independence** and suggested that meeting the State's electric demand without fossil fuels would require purchasing renewables from other countries and states.

# General Feedback

## > ***Rural and Upstate Community Needs***

- Some commenters felt the **unique needs of rural and upstate communities were not adequately considered in the Plan.**
- Commenters emphasized concerns that **electrifying homes and transportation is not technologically viable in all regions.**
- Commenters emphasized that rural communities are dependent on personal vehicles because public transportation is not as readily available and doubt the feasibility of EVs due to limited charging infrastructure, insufficient range, and reduced battery performance in cold temperatures.
- Commenters were also concerned that electric trucks and farming equipment are not technologically viable and/or prohibitively expensive.
- Commenters had similar concerns about building electrification, **citing that rural households depend on natural gas and propane for heating/cooking** due to fuel reliability and existing infrastructure.
- Commenters also questioned the reliability of heat pumps in very cold temperatures. They expressed belief and concerns that the Scoping Plan will implement an outright ban on wood; noting that households in upstate New York rely heavily on wood stoves.

# General Feedback

## > *Jobs and the New York Economy*

- Numerous commenters **praised that the proposed transition would create well-paying jobs** and expressed their appreciation for the Plan's efforts to mitigate negative workforce impacts.
- Conversely, other commenters were **concerned about potential widespread job loss** for electricians, local appliance distributors/manufacturers, natural gas/propane distributors, utility employees, and others within the fossil fuel industry.
- Commenters were concerned about how the existing workforce and local businesses would be impacted by the energy transition and **stressed the importance of preparing for the shift.**

## > *Alternative Fuels*

- Commenters were generally **divided in their opinions towards the inclusion of alternative fuels** (e.g., renewable natural gas, green hydrogen, and biofuels) in the Plan.
- Some commenters were **supportive of the inclusion of these solutions while others framed these as “false solutions”**.
- Commenters opposed to the inclusion of alternative fuels emphasized that it would be a better use of resources to bolster trusted zero-emissions fuels, such as solar PV, wind, and hydroelectricity.
- In a number of cases, **commenters expressed preference for Scenario 3**, as compared to the other scenarios, given its limited focus on alternative fuels

# General Feedback

## > *Scoping Plan Goals, Timeline, & Process*

- Many commenters **expressed significant concern about climate change and its impacts**, emphasized the need to transition away from fossil fuels as soon as possible and praised New York's leadership on climate action.
- However, **commenters were divided on the Plan's timeline**.
- Commenters in support of climate action expressed concern that the proposed **timeline is not ambitious enough given the urgency of climate change**.
- Conversely, other commenters felt **the Plan's timeline is too rapid**.
- These commenters cited concerns about the grid's ability to support rapid electrification goals and concerns about the viability and reliability of renewable energy technologies.
- Additionally, many of these commenters were worried that access to fossil fuels would be eliminated immediately and suggested a more gradual transition.
- Some commenters expressed **concern about the public's lack of awareness of the Plan's existence** and requested extensions to the public comment period, noting that some groups like Indigenous communities had not been appropriately engaged in the development of the Plan.

# General Feedback

## > *Renewable Energy Technologies*

- Many commenters were **supportive of a transition to clean energy** and in some cases, shared their positive experiences with renewable energy technologies (e.g., rooftop solar).
- They were also supportive of the expansion of both small- and large-scale renewable energy installations, especially community solar opportunities.
- However, some commenters felt the **Plan did not adequately address the environmental impacts of developing and disposing of renewable energy technologies and batteries.**
- They expressed concern about sourcing unsustainable materials and its impact on countries where component materials are made; they requested additional clarity on the end-of-life recycling processes.
- Commenters were also **concerned about siting large-scale renewable energy on arable land**, as well as the potential long-term impacts on soil quality and negative impacts on wildlife.

# General Feedback

## > *Climate Justice & Equity*

- Many commenters expressed their **appreciation for the Scoping Plan’s focus on equity and its inclusion and consideration of DACs.**
- However, a number of commenters also emphasized the extent to which DACs and LMI households have been disproportionately impacted by exposure to co-pollutants and other public health risks.
- Many of these commenters expressed opinions that the **Plan does not adequately address emissions reductions in these communities**, especially those that are located near waste incineration sites, high-traffic areas, and other high-emitting infrastructure.
- Some commenters opposed the term “climate justice” as they felt that rural communities were not emphasized enough.

## > *Perceived Ban on Wood Burning*

- Commenters were divided on the topic of wood burning and were reacting based on their perceived belief that the Plan would ban wood burning.
- In some cases, commenters were **supportive of a ban like this**, citing the public health concerns like asthma and other negative health effects from exposure to co-pollutants.
- Conversely, many commenters were **strongly opposed to a theoretical ban on wood burning**, citing concerns about the cost and reliability of other options.

# General Feedback

## > *Economy-Wide Strategies*

- Several commenters recommended implementing a program that establishes a **price on carbon across all sectors**, especially if the proceeds are redistributed to DACs or LMI households.
- Commenters generally did not provide specific details on the mechanism for how a carbon price could be implemented and there was **limited feedback regarding the specific economy-wide strategies highlighted in the Plan.**

## > *Sector-Specific Feedback*

- In addition to the specific topics described above, commenters also highlighted sector-specific strategies they are supportive of.
- In the transportation sector, commenters expressed their **appreciation for the proposed investment in public transportation and smart growth** to reduce personal vehicle usage.
- For the buildings sector, commenters were generally **supportive of a transition away from hydrofluorocarbons.**
- Related to waste, commenters were generally **supportive of strategies to reduce waste, divert waste from landfills, and use more sustainable materials in packaging.**
- Specifically, they were in support of reducing waste from demolition and construction projects through reuse, as well as measures that would alleviate greenhouse gas leakage from landfills and anaerobic digesters, especially from those located in DACs.

# General Feedback

## > *Climate Change Denial and Skepticism of Climate Action*

- A number of commenters **do not believe that climate change is an urgent issue** and/or did not believe that humans have control over the climate.
- These commenters therefore disagreed with investing in climate action and suggested redirecting climate funding towards other more pressing State issues.
- Other commenters argued that **New York's climate goals would be insignificant** if other high-polluting countries and states do not take similar actions.

## > *Opposition to Government Control*

- Some commenters expressed concern that this Plan exemplifies government overreach and is indicative of New York's tendency to overstep when implementing regulations.
- These commenters expressed **opposition towards mandates for adopting specific technologies and showed preference for the ability to choose** between different energy sources.

# Summary of Email Campaigns

## > Gas System Transition

- Largely expressing concern with the effective elimination of natural gas and other fuel use in NY due to:
  - Potential cost impact to consumers
  - Elimination of energy choices
  - Electric grid reliability, resiliency, and ability to quickly recover from weather events
  - Concern that expensive and unreliable power will disproportionately impact elderly and low-income NYers
- Several campaigns specific to Bioheat fuel, suggesting it offers an immediate solution for decarbonizing heating and transportation at no extra cost to consumers and urging a more widespread adoption of low carbon liquid fuels
- Several campaigns from business owners expressing support for climate action and climate justice but don't want to jeopardize reliability and safety and suggest an "all of the above" approach that includes natural gas, renewable natural gas, solar, wind, nuclear, and emerging technologies
- Restaurant owners expressing concern with "forced transition" from gas to electric; urging economic impact study, consideration of lack of availability of alternatives, and exempting commercial kitchens as NYC did in their version of electrification legislation

# Summary of Email Campaigns

## > Climate and Environmental Justice

- Supportive of strong action, stating climate and environmental justice must be the driver of outcomes of the Scoping Plan
- Largely organized by chapter/topic
  - Electricity: Need stronger commitments; plan to phase out existing fossil fuel plant; moratorium on new fossil fuel plants; annual targets for renewable deployment; cannot rely on hydrogen, RNG, or CCS;
  - Indigenous Sovereignty: Indigenous communities must be consulted and provided decision-making power; sovereign status must be upheld in transition as distinct from other stakeholders; do not prolong the use of aging nuclear reactors without a viable plan for handling of spent fuel rods; need to overcome grid interconnection issues; support Indigenous-led climate solutions; address impacts of large-scale renewable energy development on Indigenous cultural resources by requiring consultation in permitting process
  - Transportation: Deemphasize vehicle electrification that fails to address single occupancy vehicles; finance needs to cover the full cost of electric vehicles; conduct detailed cost-benefit study of high-speed rail options; enforce accountability measures and goals related to benefits and investments; provide incentives to capture refrigerant gases; need clearer explanations to describe the policies and their implications

# Summary of Email Campaigns

## > Climate and Environmental Justice (cont'd)

- Largely organized by chapter/topic (cont'd)
  - Just Transition: Need much stronger language on supporting labor standards; require prevailing wage and benefits, project labor agreements, benchmarks for local hire, and community benefit agreements; leverage the State's purchasing power and prioritize companies and contractors that support just transition principles; provide funding and support for workers and communities affected by transition from fossil fuel use; targeted workforce efforts should include groups who have been traditionally excluded such as women and the formerly incarcerated
  - Buildings: Fails to align strategies that prioritize investments in DACs; create Retrofit and Electrification Readiness Fund to provide targeted direct investments to DACs and the affordable housing sector; include CJWG recommendations of: a utility customer bill of rights, safety net guarantee of affordable renewable energy to every household; public education on the energy system, and clawback provisions around public subsidies to private landlords as an anti-displacement strategy to mitigate rent increases and evictions
  - Industry: Clarify that the objective is to promote climate and environmental justice, not business development; involve BIPOC communities in creating workforce development programs; omit any reliance on CCS; call for a moratorium on "proof of work" cryptocurrency mining until full environmental impact statement completed; industrial heat should be electrified wherever feasible and reliance on green hydrogen must be limited

# Summary of Email Campaigns

## > Climate and Environmental Justice (cont'd)

- Largely organized by chapter/topic (cont'd)
  - Waste: Empower community-led solutions to waste-management, include zero-waste strategies to reduce landfilling; end dependence on plastic; call for elimination of incineration; expand local-scale composting and recycling in equitably geographically distributed facilities; agrees with CJWG in its opposition of strategies relating to expansion of biogas use and industrial anaerobic digestion
  - Agriculture & Forestry: Concern with recommendations that are opposed by CJWG, including establishing carbon markets and building markets for bioenergy and biofuels; increase efforts to raise public investment in land access and resources for historically underserved and underrepresented communities; support land managers who regenerate soil while producing food, fiber, building materials, and medicine; prioritize afforestation and forest preservation efforts; include regulatory options for reducing methane
  - Land Use & Local Government: TOD/e-TOD approaches need to include preparing communities for a Just transition rather than simply striving for development and growth; must acknowledge difference in needs between rural, suburban, and urban areas; increase partnerships with local community-based organizations; prioritize frontline communities
  - Public Health: Need outline for detailed public health guidelines to track and measure improvements in health outcomes; need to outline plan to bring clean air into homes and ensure green space in Disadvantaged Communities

# Summary of Email Campaigns

## > Multi-topic

- Handful of multi-topic email campaigns supporting climate action and reflecting comments similar to Climate and Environmental Justice campaign themes
- One concerned that Plan would harm Upstate: Increasing costs associated with retrofitting homes for electrification; that a carbon pricing system or emissions cap would add significant cost to businesses without making meaningful changes to emissions; enacting an Extended Producer Responsibility system would add a significant cost for businesses; must strike right balance of protecting planet and safeguarding the economy
- One supportive of climate action and suggesting the need for more interim goals, stronger financial support for electrification, and forest policies that protect intact forests and provide support for landowners to manage their lands for long term carbon storage

# Summary of Email Campaigns

## > Green Hydrogen

- Concern over claims of hydrogen being a climate-friendly solution when it produces more NOx pollution when burned and increases the risk of explosions
- Green hydrogen should only be used as a last resort for decarbonization, serving as a zero-emissions replacement for some electricity and building heating applications but not considered a fully reliant solution for decarbonizing NY

# Summary of Email Campaigns

## > Agriculture and Forestry

- Not enough attention being given in Scoping Plan to how the forests, forest products, and ultimately bioenergy can provide a positive impact on climate change
- Largely organized by chapter/topic:
  - Industry: Include consideration for the paper and wood products industry use of manufacturing process residuals both in thermal and electric generation processes of manufacturing and in the production of densified wood pellets; needs more information on what the state will do to minimize the risk of leakage and retain good paying wood product jobs throughout the sector and its supply chain
  - Buildings: Fails to acknowledge the value of embodied carbon in natural building material supplies; wood provides the highest rates of carbon offsets of all building materials yet the use of wood to reduce embodied carbon in buildings was completely overlooked
  - Agriculture and Forestry: Needs to more boldly recognize the private forest owner; sustainable forest management requires using all parts of the tree and low-grade biomass and manufacturing residuals provide an excellent stock for low carbon energy resources and to minimize forest decay and use of landfills; need to recognize these markets for their products, economic benefits, and role in inducing sustainable forest management; must recognize the level of outreach education and technical assistance to forest land owners that will be necessary
  - Land Use: Plan must be cognizant of property rights; Plan focused heavily on preservation not conservation which includes the use of resources while maintaining the resources; must acknowledge land use pressures as land use change is an important driver of climate change; Plan is naive when it comes to NY's rural economies based on farms, forests, and open spaces
  - EITE: Concern with the omission of the wood products manufacturing sector in the energy intensive and trade exposed section; need to develop sector specific, and in some cases mill specific, strategies; suggest adding hardwood and softwood sawmills, densified wood pellet mills, and pallet manufacturing facilities to EITE; acknowledge interstate and international trade exposure
  - Transportation: Plan does not acknowledge the lack of ZEV technology for medium- and heavy-duty vehicles which are essential in many industries; concern there is no provision for allowing use of other renewable energy, such as wood, renewable natural gas, or renewable biofuels which could provide for both transition fuels and permanent substitution fuels going forward; support establishment of a clean fuels standard

# Summary of Email Campaigns

## > Wood burning

- Burning wood and other organic products adds to GHG and collective emissions
- Must be expressly stated that further steps must be enacted to stop incentivizing the burning of forests in the name of renewable energy
- Must address the fundamental benefits of leaving forests intact
- Must remove AF20 as a strategy for NY's bioeconomy because it calls for an expansion of biomass and bioenergy

# Summary of Email Campaigns

## > Nuclear energy

- Supportive of nuclear energy and note its critical role in achieving the State's climate goals
- Suggest maintaining nuclear energy is essential to meeting the emissions goals at the lowest cost to consumers
- Upstate nuclear facility operations avoid 16 million tons of carbon emissions annually, provide thousands of highly skilled jobs and millions in taxes, and are one of Upstate's largest employers
- Request Council's commitment to safe, reliable, clean nuclear generation by formally recommending an extension of the Zero Emissions Credit program

# Summary of Email Campaigns

## > Waste Incineration

- Disappointed that Plan doesn't call for an end to trash incineration and a rapid transition to Zero Waste statewide
- Plan must prioritize ending waste incineration, call for closure of the 10 municipal solid waste incinerators, and recommend that no new incinerators (or gasification or pyrolysis facilities) be permitted in the State
- Transition NY to a Zero Waste system that is protective as possible of public health, environmental justice, climate, and the environment generally

# Summary of Email Campaigns

## > Legislation

- Are in a critical stage of the climate crisis and at the very least must stop the expansion of fossil fuels
- Urges the co-sponsoring of the Renewable Heat Now package of bills for a just and affordable transition of buildings from fossil fuels:
  - All-Electric Building Act, S6843B/A8431A
  - Gas Transition and Affordable Energy Act, S8198/A9329
  - Advanced Building, Appliance and Equipment Standards Act, S7176/A8143
  - Fossil-Free Heating Tax Credit and Sales Tax Exemption, S3864/A7493 and S642A/A8147

# Proposed Process for Integration

- > Feedback on subgroup topics
  - Staff continue summarizing themes and actionable recommendations for subgroup topics
  - Subgroups to consider and address feedback, to the extent practicable, as they finalize recommendations to the Council
  - Feedback not fully considered by subgroup can be considered by full Council after subgroup final report outs
- > Feedback on non-subgroup topics
  - Staff continue summarizing themes and actionable recommendations for non-subgroup topics
  - Council to work through feedback received by topical area/chapter at Council meetings in September and October

# Proposed Process for CJWG Feedback

# Proposed Process for Integration

- > Follow similar approach to considering public input
- > Feedback on subgroup topics
  - Staff has already provided relevant CJWG feedback to subgroups for consideration
  - Final subgroup recommendations to the Council will have considered this feedback
- > Feedback on non-subgroup topics
  - As public comment feedback is discussed and considered by topical area/chapter at Council meetings in September and October, so too would CJWG feedback

# Proposed Process for DAC Barriers and Opportunities Report Integration

# Report Study Areas

## Section 6 of Climate Leadership and Community Protection Act

Report on barriers to, and opportunities for, access to and community ownership of the following services and commodities, in disadvantaged communities:

- Distributed renewable energy generation
- Energy efficiency and weatherization investments
- Zero- and low- emission transportation options
- Adaptation measures to improve the resilience of homes and infrastructure
- Other services and infrastructure to reduce risks associated with climate change related hazards

# High-Level Recommendations of Barriers-Opportunities Report

Theme	Recommendations
<b>Ensure Inclusive Processes</b>	<ol style="list-style-type: none"><li data-bbox="774 505 2514 568">1. Co-design programs with communities and other stakeholders</li><li data-bbox="774 575 2514 696">2. Provide meaningful opportunities for public input in government processes and proceedings</li><li data-bbox="774 704 2514 766">3. Work across intersecting issues and interests to address needs holistically</li></ol>
<b>Streamline Program Access</b>	<ol style="list-style-type: none"><li data-bbox="774 819 2514 882">4. Transition to program models that require little to no effort to participate and benefit</li><li data-bbox="774 889 2514 1011">5. Establish people-centered policies, programs, and funding across local, state, and federal governments</li><li data-bbox="774 1018 2514 1080">6. Find and support resource-constrained local governments</li></ol>
<b>Address Emerging Issues</b>	<ol style="list-style-type: none"><li data-bbox="774 1148 2514 1210">7. Mobilize citizen participation and action</li><li data-bbox="774 1218 2514 1280">8. Improve housing conditions and adherence to local building codes</li></ol>

# Proposal to Amend Scoping Plan

- Embed high-level recommendations in the Climate Justice Chapter, and as part of actualizing them.
- Include specific opportunities identified in the report as recommendations in sectoral chapters where relevant.
- A coordination plan to implement this work is being developed.

# Next Steps

# Next Steps

## Council Meetings

- > Moving to 2 meetings per month starting in September
- > Tentative Schedule:
  - Tuesday, September 13, 9 am to noon
  - Thursday, September 29, 1 – 4 pm
  - Thursday, October 13, 2 – 5 pm
  - Tuesday, October 25, 2 – 5 pm
  - Monday, November 7, 2 – 5 pm
  - Monday, November 21, 9 am to noon
  - Monday, December 5, 2 – 5 pm
  - Monday, December 19, 2 – 5 pm
- > Meetings through October will include final subgroup report outs, Integration Analysis updates, and addressing public feedback and CJWG comments
- > November meetings for Council feedback on revised Scoping Plan
- > December meetings for final Scoping Plan review and vote

# **Appendix: Summarized Email Campaigns**

# Email Campaigns: Gas System Transition

## > Campaign A, ~11,000 submissions

- Support efforts to fight climate change, but concerned with potential cost impact to consumers (upfront costs and electricity rates) and resulting reliability of the electric system
- Should not ban fuels like natural gas, propane, and biofuel heating oil which have the potential to become increasing renewable
- Impact on global emissions will be negligible, but cost and disruption to NYers great

## > Campaign I, ~800 submissions

- Support the goals of the CLCPA but have serious concerns that heating electrification could inadvertently lead to higher home energy costs, more frequent wintertime power outages, and greater dependence on fossil gas to support increasing demand for electricity
- Bioheat fuel offers an immediate solution for decarbonizing heating; local heating providers are already delivering blends of up to 50% biodiesel which can reduce carbon emissions by 40%
- Support raising requirement to a net-zero fuel by 2050 which would help consumers reduce their carbon footprint at no added cost
- Encourages more widespread adoption of low-carbon liquid fuels rather than the existing recommendation to retrofit existing buildings with electric heat pumps

# Email Campaigns: Gas System Transition

## > Campaign AF, ~50 submissions

- Concern that the scoping plan will recommend policies that will significantly restrict choices and increase the cost related to home heating and transportation needs
- exclusion of renewable fuels would lead to greater costs, remove consumer energy choices, create security and reliability issues, and intensify the demand on the electric grid that would increase the risk of power outages
- Bioheat fuel offers an immediate solution for decarbonizing heating; local heating providers are already delivering blends of up to 50% biodiesel which can reduce carbon emissions by 40%
- Support raising requirement to a net-zero fuel by 2050 which would help consumers reduce their carbon footprint at no added cost
- Recommends a more widespread adoption of low carbon liquid fuels use in both the building and transportation sectors
- Reject recommendations that mandate all existing buildings be retrofitted with electric heat pumps and that new construction be all electric as they limit choices and increase costs

# Email Campaigns: Gas System Transition

## > Campaign J, ~800 submissions

- Concerned with recommendations to essentially eliminate natural gas as an energy option in NY due to the costs associated with:
  - Massive renewable energy development and power grid expansion
  - Unknown costs to consumers
  - Unspecified projections in rising consumer costs from supply and demand issues
- Believe relying on one energy system for everything is too risky

## > Campaign AH, ~50 submissions

- Concerned with the Plan's proposal to essentially eliminate natural gas as an energy option in the state
- Believe relying on one energy system for everything is too risky when there is an increasing need for energy system reliability, resilience, and quicker recovery from more frequent and significant weather events
- Costs to consumers will be high

# Email Campaigns: Gas System Transition

## > Campaign V, ~450 submissions

- Concern with elimination of energy choices and likely increase in overall energy costs
- All electric building code mandate for new construction is a threat to their business and availability of cheap, reliable energy
- Strongly support climate action and climate justice but we cannot jeopardize reliability and safety
- The State should not be able to impose undue cost burdens on consumers, residents, and businesses
- Concern that expensive and unreliable power will disproportionately affect elderly and low income NYers
- Should reach the goals by using assets and infrastructure that already exist and an “all of the above” approach that includes natural gas, renewable natural gas, solar, wind, nuclear, and emerging technologies
- Strongly consider an alternative proposal that strives to give consumers options

## > Campaign AC, ~100 submissions

- The restaurant industry is especially concerned about the cost associated with a forced transition from gas to electric
- It is critical to have an economic impact study done to understand the costs and the State must not place the economic burden squarely on the shoulders of struggling restaurants
- Concerned about the capacity of the electric grid especially when cooking appliances allow us to feed the most vulnerable in times of natural disaster and power outages
- Ignores the potential for other clean substitutes for natural gas and ignores the reality that some commercial gas appliances simply do not have electric counterparts on the market
- New York City exempted commercial kitchens when they passed their version of electrification legislation; We implore you to do the same statewide

# Email Campaigns: Gas System Transition

## > Campaign AG, ~50 submissions

- Concerned that the plan which significantly harm New York small business owners as the cost to retrofit for a gas free future would be high and reliability could suffer
- A carbon pricing system or an emissions cap would add significant cost to businesses without making any meaningful changes to those businesses emissions
- Address the electric grid's limited capacity to ensure reliability, and guarantee that transitioning to a sustainable future does not come at higher prices or at the expense of small business owners that drive the economy of the state

# Email Campaigns: Climate & Environmental Justice

- > Campaign E, ~850 submissions
  - Climate and environmental justice must be the driver of the outcomes of the Scoping Plan
  - Need a bolder hand and stronger commitments in the **electricity** sector
  - Make plans to phase out existing fossil fuel plants
  - Institute a moratorium on fossil fuel power plants and focused deployment of proven renewable technologies and storage
  - Cannot rely on hydrogen, renewable natural gas, and carbon capture and storage
  - Provide funding and support for workers affected by this transition and the communities around the fossil fuel plants
  - Set year-by-year targets for permitting new wind, solar, and battery storage
  - Fully leverage tools such as community workforce agreements, community benefit agreements, first-source hiring, and project labor agreements to increase access to jobs for disadvantaged communities
  - Work with the capacity of people and develop agreements in partnership with frontline communities, industry, and organized labor
  - Further emphasize green worker-owned cooperatives
  - Engage with Indigenous Nations
  - Deploy a comprehensive public education and information push on the benefits of and opportunities of clean energy
  - Provide additional emphasis on energy democracy

# Email Campaigns: Climate & Environmental Justice

- > Campaign F, ~850 submissions
  - Climate and environmental justice must be the driver of the outcomes of the Scoping Plan
  - Indigenous communities must be properly consulted and given decision-making power around the process taking place at the CAC
  - The sovereign status of Indigenous Peoples must be upheld in the climate transition as distinct from other stakeholders
  - Prolonging the use of aging nuclear reactors without a viable plan for the handling of spent fuel rods at the expense of the ratepayers is not an acceptable solution
  - Need to overcome grid interconnection issues faced by Indigenous Nations with their local utility around interconnection and service line agreements without signing away their sovereign immunity
  - More should be included to support Indigenous-led climate solutions
  - Empower community-led solutions to waste management, mention zero waste strategies to reduce waste that include the practice of landfilling, end our dependence on toxic plastic and call for the elimination of incineration
  - Address the impacts of large-scale renewable energy development on Indigenous cultural resources by requiring consultation early in the pre-application process and throughout permitting; hire a Native Nations liaison to facilitate consultation, and enact the Unmarked Burial Site Protection Act to regulate the discovery of burial grounds, human remains, and funerary objects

# Email Campaigns: Climate & Environmental Justice

- > Campaign G, ~850 submissions
  - Climate and environmental justice must be the driver of the outcomes of the Scoping Plan
  - Supports CJWG recommendation to deemphasize vehicle electrification that fails to address single occupancy vehicle issues
  - Finance needs to be available to cover the full cost of new and second-hand electric cars
  - Before 2030, prioritize the creation and completion of a detailed cost-benefit study comparing high speed rail transport and very high-speed rail for a line from Buffalo to Montauk with an Albany to Montreal branch
  - Consider enforcing accountability measures and goals to guide how benefits/investments will be defined, measured, tracked, and shared
  - Provide large financial incentives to capture refrigerant gases from cooling systems to prevent the release of super-pollutants at the end of a product's useful life
  - Need clearer explanations of existing language within Transportation chapter; language needs to be presented in a way that explains what the policy is, and the ideal - as well as the less than ideal - implications

# Email Campaigns: Climate & Environmental Justice

- > Campaign H, ~800 submissions
  - Climate and environmental justice must be the driver of the outcomes of the Scoping Plan
  - Need much stronger language on supporting labor standards
  - Lay out policies requiring prevailing wage and benefits, project labor agreements, benchmarks for local hire on any projects that use State funds or take place on State property, and encourage community benefits agreements
  - Advance Buy NY and Best Value Procurement policies to leverage the State's purchasing power and prioritize companies and contractors that support just transition principles
  - Support the values-based purchasing standards of the Good Food Purchasing Program
  - Establish a Worker and Community Assurance Fund to provide direct support to workers in fossil-fuel dependent industries and expanded funding for lost tax base to local governments and school districts
  - Ensure the use of a Workforce Assessment Plan where fossil fuel plants are decommissioned
  - Incorporate language around including not only displaced workers and disadvantaged communities in the reshaping of a green economy workforce, but also groups who have been traditionally excluded such as women and the formerly incarcerated

# Email Campaigns: Climate & Environmental Justice

- > Campaign K, ~750 submissions
  - Climate and environmental justice must be the driver of the outcomes of the Scoping Plan
  - Fails to align strategies that prioritize investments in DACs with the proposed timelines for adoption of new codes and standards – these strategies must move in lockstep to create the conditions for a Just Transition
  - The new Retrofit and Electrification readiness Fund should be created ASAP and capitalized at a minimum of \$1B per year to provide targeted direct investments to DACs and the affordable housing sector
  - Should include CJWG recommendations of:
    - Utility customer bill of rights
    - Safety net guarantee of affordable renewable energy to every household
    - Public education on the energy system
    - Clawback provisions around public subsidies to private landlords as an anti-displacement strategy to mitigate rent increases and evictions

# Email Campaigns: Climate & Environmental Justice

## > Campaign L, ~750 submissions

- Climate and environmental justice must be the driver of the outcomes of the Scoping Plan
- Clarify that the Industry Chapter's objective is to promote climate and environmental justice, not business development
- BIPOC communities must be involved in creating workforce development programs
- There must be support and leverage of public procurement to promote low-carbon materials
- Must omit any reliance on carbon capture and storage since it is not a true zero-emission measure
- Call for a moratorium on “proof of work” cryptocurrency mining until a full environmental impact statement can be completed
- Industrial heat should be electrified wherever feasible and reliance on green hydrogen must be limited, especially where hydrogen combustion would overburden disadvantaged communities

# Email Campaigns: Climate & Environmental Justice

- > Campaign M, ~700 submissions
  - Climate and environmental justice must be the driver of the outcomes of the Scoping Plan
  - Concern that 10 municipal waste incinerators are operating in NYS, with 5 of them concentrated downstate and overlapping with already overburdened disadvantaged communities
  - Recommend decommissioning in state incinerators and ending contracts with out-of-state incinerators by 2030, as well as removing subsidies and rejecting permits for new incinerators
  - Ban organics to landfills and incinerators, with a goal of ending the shipment of all waste to landfills and incinerators by 2050 and converting these facilities to sustainable uses
  - Expand local-scale composting and recycling in equitably geographically distributed, well-run sites and facilities
  - Waste section must include zero waste strategies to address the waste crisis in communities overburdened by waste transfer stations, incinerators, and landfills
  - Explicitly state that the use of anaerobic digestion includes the pre-condition that, to the greatest degree possible, the energy generated be used on-site and must not lead to the construction of new pipelines that could become part of the fossil fuel distribution infrastructure

# Email Campaigns: Climate & Environmental Justice

## > Campaign N, ~700 submissions

- Climate and environmental justice must be the driver of the outcomes of the Scoping Plan
- Concern that the Waste Chapter promotes strategies opposed by the CJWG, including capturing and beneficially reusing fugitive biogas, creating markets for biogas utilization, and increasing utilization of biogas via large-scale, industrial anaerobic digestion
- Reduction and increased management of waste in disadvantaged and environmental justice communities is key in reducing disproportionate exposure to emissions and other safety risks
- A combination of incentives and legislation, such as Extended Polluter Responsibility, should be used to address food scraps and prevent them from going to landfills where they contribute to emissions
- Redesigning waste systems is vital to the transformation and waste reduction and local scale diversion practices must meet the greater ambition in reducing emissions
- Promote well-paying, safe, and green jobs in waste management, with a specific focus on the employment of members of marginalized communities

# Email Campaigns: Climate & Environmental Justice

- > Campaign O, ~650 submissions
  - Climate and environmental justice must be the driver of the outcomes of the Scoping Plan
  - Concern with recommendations in Agriculture and Forestry Chapter that work against recommendations of CJWG, including establishing carbon markets and building the market for bioenergy and biofuels
  - Must provide significant public investment in land access and resources for members of BIPOC, women-led, LGBTQIA+, low income, veteran, and new farmer communities, including undocumented farmworkers
  - Increase efforts to raise public investment in land access and resources for historically underserved and underrepresented communities
  - Provide a base income to land managers who regenerate soil while producing food, fiber, building materials, and medicine
  - Prioritize afforestation and forest preservation efforts that provide maximum climate benefit over strategies designed to profit the forest industry
  - Ensure that forest and farming land management projects using public funds employ soil health practices to maximize climate benefits, improve equity, ensure accountability, and reduce pesticide use
  - Cease public investments in technologies that enable the accelerating concentration of livestock farms and include regulatory options for reducing methane emissions
  - Consider splitting chapter in two to dedicate separate discussions for Agriculture and Forestry to allow for a deeper analysis and set of recommendations

# Email Campaigns: Climate & Environmental Justice

## > Campaign P, ~650 submissions

- Climate and environmental justice must be the driver of the outcomes of the Scoping Plan
- Local governance structures and appointments to the Regional Economic Development Councils need to be reformed to diversify these bodies to adequately represent the DACs that will be affected by their decisions
- The definition of TOD/e-TOD needs to include preparing communities for a Just Transition rather than simply striving for development and growth
- Mitigation strategies should equally balance multiple priorities to address the need for pollution prevention, green infrastructure, open spaces, and other environmental improvements to reduce co-pollutants in disadvantaged communities
- Must recognize and acknowledge the differences in needs between rural, suburban, and urban areas, and TOD solutions need to be contextual
- State agencies should give increased importance to partnering with local community-based organizations to uplift the needs/requirements of local communities
- Must be more focused efforts towards addressing:
  - Resilient infrastructure fund needs to prioritize frontline communities
  - Maintaining an ongoing analysis of health implications of new climate projections on heat increases
  - Directly funded efforts to build and maintain nature-based infrastructure and natural areas
  - Adopting explicit land use strategies to reduce GHG emissions and co-pollutants in disadvantaged communities
  - Increasing concentrated efforts to avoid burdening disadvantaged communities in prioritizing conservation areas and degrowth of high climate risk and ecologically sensitive areas

# Email Campaigns: Climate & Environmental Justice

## > Campaign Q, ~650 submissions

- Climate and environmental justice must be the driver of the outcomes of the Scoping Plan
- Establish a system to fund reductions in GHG emissions and co-pollutants, as well as the transition to a renewable-energy economy
- Specify the level and timeline of mandated reductions in GHG emissions and co-pollutants for each industry sector through 2050
- Include detailed recommended regulations for each sector of the economy
- Do not rely on “negative emissions” technologies
- Provide more clarity on each agency’s obligations in regard to climate and equity mandates in sections 7(1), 7(2), and 7(3) in Article 75 of the Environmental Conservation Law
- Establish a process to ensure the achievement of the CLCPA investment mandate and provide formal guidance to state agencies that are subject to the mandate as to how to modify budgeting, contracting, grant-making, and other procedures

# Email Campaigns: Climate & Environmental Justice

- > Campaign T, ~550 submissions
  - Climate and environmental justice must be the driver of the outcomes of the Scoping Plan
  - Green hydrogen and carbon capture technologies are false solutions that must be rejected
  - There is no outline for detailed public health guidelines to track or measure improvements in health outcomes that occur over the next 20-30 years
  - Should be steps laid out in energy efficiency programs to allow the state to take action to address inefficient or polluted home environments
  - State should outline a plan to bring clean air into homes, particularly those of DAC and low-to-moderate income residents, including designation of minimum land-use plans to ensure green space in DAC
  - Further integration of CJWG recommendations pertaining to DAC and low-to-moderate income homes would strengthen the strategies

# Email Campaigns: Multi-topic

## > Campaign B, ~1,200 submissions

- Clean electricity: prioritize emissions-free, renewable energy, and energy storage technologies over false solutions of renewable natural gas and hydrogen; set enforceable interim targets for retiring existing fossil fuel plants; enforce year-over-year emissions reductions from burning fossil fuels; place a moratorium on new fossil fuel plants; provide meaningful consultation with indigenous nations
- Clean transportation: include a more detailed roadmap to a fully electrified transportation sector with clear roles and responsibilities for agencies; identify a suite of policies for reducing vehicle miles traveled
- Waste: Include a robust Extended Producer Responsibility program; highlight and align with the goals of DEC's Solid Waste Management Plan
- Lands and Forests: Lean more towards official protections and regulations and away from voluntary incentives
- Buildings and Gas: Stop the expansion of gas distribution infrastructure; push a planned phase out of existing gas in buildings; require the PSC to begin a proceeding to plan for this transition safely and affordably

# Email Campaigns: Multi-topic

## > Campaign D, ~1,000 submissions

- Need to further reduce emissions from controlled animal feeding operations and supports CJWG recommendation of favoring imposition of regulation over reliance on voluntary programs
- Include CJWG recommendation of a fertilizer fee to reduce NOx emissions
- Include payments for ecosystem services and soil health to support capital and on-going expense of more renewable agriculture
- Prioritize the use of on-site biogas over strategies the use anaerobic digesters for biogas or biomass for energy
- Set goals for decommissioning in state incinerators and ending contracts with out-of-state incinerators; do not allow any subsidies for nor permit new incinerators, including those using pyrolysis and gasification
- Make efficiency and electrification incentive programs more accessible and require an energy audit, basic weatherization, and electrical service upgrades before a home can be sold
- Strong concern about emerging technologies mentioned in Electricity section, as well as waste-to-energy and bioenergy as they can lead to production of more GHG emissions and/or co-pollutants
- Target policies to electrify facilities with large volumes of truck traffic
- Replace fossil generation with renewables and spread the costs of decommissioning the gas system equitably

# Email Campaigns: Multi-topic

## > Campaign U, ~500 submissions

- Concern with the cost of retrofitting upstate NY for a gas-free future when gas infrastructure exists and is reliable
- A carbon pricing system or an emissions cap would add a significant cost increase to businesses, causing economic damage without making any meaningful changes to those businesses emissions
- Enacting an Extended Producer Responsibility system would make manufacturing more expensive and also increase the cost of consumer goods
- Must strike the right balance between protecting our planet and safeguarding our economy

## > Campaign W, ~350 submissions

- Supports scenario 3
- Supports a polluter pays (carbon pricing) model
- Does not support maintaining the same amount of waste incineration or waste to energy, nor continued combustion of fuels like hydrogen, biogas, or fossil gas
- Would like to see the comments, concerns, and ideas of CJWG fully integrated into the Scoping Plan

# Email Campaigns: Multi-topic

- > Campaign AB, ~100 submissions
  - Support timeline laid out for building decarbonization via efficient electrification
  - Equity and affordability must be central to the transition from fossil fuels
  - Must call for oversight and consumer protection measures to be put into place
  - Renewable natural gas and hydrogen are risky, expensive, false solutions that are wholly unsuitable for use in buildings
  - A just transition plan for gas utility workers to build thermal energy networks should be put into place

# Email Campaigns: Multi-topic

## > Campaign AD, ~100 submissions

- Prohibit new fossil fuel plants and infrastructure buildout; Establish emissions reduction target timetables for existing facilities
- Match New York City electric buildings law; Prioritize replacing heating systems with electric heat pumps in at least 2 million homes by 2030
- End the practice of giving taxpayer subsidies to the fossil fuel industry
- Require the state and utilities to create real time dashboards and annual climate report cards on progress meeting key metrics of the climate act by sector
- Adequate state funding for climate action is needed; Must invest in infrastructure, like electric buses, charging stations, and offer financial support to people to accelerate a transition to electric vehicles and electric by their homes
- Make electric vehicle charging stations universally accept accessible across the state; Allow electric vehicle makers to sell directly to consumers
- Prohibit the conversion of power plants to facilities that primarily engage in excessively high energy consumption cryptocurrency mining operations
- Be skeptical about green hydrogen and renewable natural gas as part of the state's energy future; should be left off the table until they passed a rigorous climate, public health, and safety review
- Fund research and development of short term and longer term battery storage and support the acquisition of batteries
- Prioritize solid waste reduction to reduce greenhouse gases; Manufacturers must be required to reduce waste; Must ban trash incineration and reject false and hazardous solutions like chemical recycling

# Email Campaigns: Multi-topic

## > Campaign AJ, ~50 submissions

- Plan needs short term goals set for 2 years and 4 years after the final Plan is issued
- NYPA authority should be expanded to develop wind and solar
- Should set a goal of rooftop solar on 2 million homes and businesses and provide stronger financial incentives to do so
- Plan needs stronger financial support programs for building electrification
- Plan needs programs for “variable pricing and parking policies” or higher registration fees for carbon intensive vehicles, mileage-based user fees, and other special assessments to finance transportation sector improvements
- Need better and higher incentives to increase ZEV adoption, as well as a sales tax waiver for all ZEVs purchased by NY residents
- Need new programs for forever wild easements on privately owned forests and a literature review of long-term carbon storage to help formulate new forest policies
- Actively invest in land acquisition to protect intact forests and in programs to reforest 2 million acres
- Forestry section needs to include a bibliography of papers that detail the role of mature and old-growth forests in long-term carbon storage
- Need to set a goal to help private forestland owners protect 5 million acres in forever wild easements managed for long term carbon storage
- Leave programs that provide incentives for land owners to manage their lands for long term carbon storage
- need to prioritize incentives for force management were harvested trees are used for wood products that provide long term carbon storage
- craft new statutory language to amend state laws to require that climate change impact must be evaluated and considered by state agencies and their work

# Email Campaigns: Multi-topic

- > Campaign AP, <50 submissions
  - Scoping Plan is a strong starting point
  - Supports scenario 3 and suggests avoiding false solutions that further tie us to carbon-emitting power production
  - We must act to realize the benefits of new jobs, cleaner air and water, healthier communities, and a more just and equitable future
  - Must commit to fighting the crisis together; there should be no sacrifice zones, no communities left behind
  - Must fully fund solutions and ensure that at least 40% of the funding is invested in Disadvantaged Communities

# Email Campaigns: Multi-topic

## > Campaign AR, <50 submissions

- Appreciates the Scoping Plan's recommendations to accelerate deployment of large-scale renewable energy systems; must be accompanied by significant investment and technical support for Disadvantaged Communities to develop energy storage and microgrids to reduce grid strain and increase resiliency and affordability
- Supports strategies to facilitate the retirement of all fossil fuel-fired generation facilities; recommends the Council take the additional step of placing a moratorium on the permitting of new fossil fuel plants
- Supports growing local supply chains and creating jobs in clean energy businesses that serve Disadvantaged Communities, as well as providing dedicated support to people of color- and women-owned enterprises to innovate and actively participate in the electrification of the buildings sector
- Strongly urge Council to more fully address climate resiliency in the Final Scoping Plan through additional specific recommendations, evaluation of NYS' current resiliency status and policies; and meaningful consultation with agencies, communities already facing climate impacts, and nongovernmental entities experience in on-the-ground resilience and adaptation

# Email Campaigns: Green Hydrogen

- > Campaign C, ~1,000 submissions
  - Concern over claims of hydrogen being a climate-friendly solution when it produces more NOx pollution when burned and increases the risk of explosions
  - Green hydrogen should only be used as a last resort for decarbonization, serving as a zero-emissions replacement for some electricity and building heating applications but not considered a fully reliant solution for decarbonizing NY

# Email Campaigns: Agriculture and Forestry

## > Campaign R, ~600 submissions

- Not enough attention being given to how the forests, forest products, and ultimately bioenergy can provide a positive impact on climate change
- Industry Chapter doesn't recognize the role that paper and wood product markets have in encouraging and supporting forest management, forest carbon sequestration, and adding sequestration in durable harvested wood products
- Include consideration for the paper and wood products industry use of manufacturing process residuals both in thermal and electric generation processes of manufacturing and in the production of densified wood pellets
- Must be more in the Scoping Plan on what the State will do to minimize the risk of "leakage" and retain good paying wood product jobs throughout the sector and its supply chain
- Any plan to enhance the environment must not harm the industry which keeps that environment healthy
- Must consider the forests, wood products as additional carbon storage and substitution benefits for other fossil fuel derived products, the role of markets in keeping forests as forests, the sensitivity of wood products leakage, forests as a low carbon energy resource, and the overall costs of the Plan

# Email Campaigns: Agriculture and Forestry

- > Campaign Z, ~150 submissions
  - Fails to acknowledge the value of embodied carbon in natural building material supplies
  - Concern with the Plan's advanced building and energy codes encouraging all-electric buildings and not providing an exception for renewable wood heat and use of wood residuals in manufacturing processes
  - Any plan to enhance the environment must not harm the industry which keeps that environment healthy
  - Must consider the forests, wood products as additional carbon storage and substitution benefits for other fossil fuel derived products, the role of markets in keeping forests as forests, the sensitivity of wood products leakage, forests as a low carbon energy resource, and the overall costs of the Plan

# Email Campaigns: Agriculture and Forestry

## > Campaign AA, ~100 submissions

- Need to more boldly recognize the NYS private forest owner and benefits of a healthy, working forest in the fight against climate change
- Any plan to enhance the environment must not harm the industry which keeps that environment healthy
- Must consider the forests, wood products as additional carbon storage and substitution benefits for other fossil fuel derived products, the role of markets in keeping forests as forests, the sensitivity of wood products leakage, forests as a low carbon energy resource, and the overall costs of the Plan
- Sustainable forest management requires using all parts of the tree; Low grade biomass and manufacturing residuals provide an excellent stock for low carbon energy resources and minimize force decay and use of landfills
- Need to recognize these markets for their products and economic benefits, as well as the role that private markets play in inducing sustainable forest management and keeping our forests as forests
- Need to recognize the level of outreach, education, and technical assistance to forest landowners that will be necessary in advancing forest management on private forest lands; Need a Forest Environmental Management effort similar to Agriculture Environmental Management

# Email Campaigns: Agriculture and Forestry

## > Campaign AE, ~50 submissions

- Plan must be cognizant of property rights; asks the council to view private landowners as partners who can and will work with policymakers when decisions are based on science and facts
- Current scoping plan is focused heavily on preservation, not conservation; Ignoring the needs of society from the forest only shifts the use of lands from New York to other states or countries who do not hold their forest practices to the high standards of our industry in New York
- Must acknowledge land use pressures as land use change is an important driver of climate change
- Scoping plan is naive when it comes to New York rural economies based on farms, forests, and open spaces that support working lands and tourism destinations
- Recognize and value the conservation, climate and economic benefits private landowners bring to all NYers; it's more than preservation, it's a viable way of life that supports food, fiber, and timber along with recreation and tourism and manufacturing associated to our working lands
- Any plan to enhance the environment must not harm the industry which keeps that environment healthy
- Must consider the forests, wood products as additional carbon storage and substitution benefits for other fossil fuel derived products, the role of markets in keeping forests as forests, the sensitivity of wood products leakage, forests as a low carbon energy resource, and the overall costs of the Plan

# Email Campaigns: Agriculture and Forestry

## > Campaign AK, <50 submissions

- Important for the state to support the rich bio economy that exists in upstate
- Policy decisions must be supported by science and availability of technology; Electrification of large farm equipment is not readily available in the market
- Does not support blanket adoption of the federal agriculture resilience act
- Opposes efforts to ban synthetic fertilizers
- State should not prefer one cropping method over the other but rather address individual strategies in reducing greenhouse gas emissions
- Continued concerns with the goals to transition to electric vehicles, specifically in medium- and heavy-duty trucks due to lack of charging infrastructure, increased costs and dependability
- Must support systems for methane and nitrous oxide reductions specifically planned and designed for each farm
- Support strategies that are incentive based rather than regulatory mandates
- All strategies must be widely available and address equity considerations in the agricultural sector

# Email Campaigns: Agriculture and Forestry

- > Campaign AN, <50 submissions
  - Concern with the complete omission of the wood products manufacturing sector in the energy intensive and trade exposed section
  - Asks the CAC to be cognizant of the industry specific issues and provide a section for the forest products industry
  - Recommend adding to the energy intensive industries the hardwood and softwood sawmills, densified wood pellet mills and pallet manufacturing facilities throughout New York
  - Plan does not acknowledge Interstate or international trade exposure; Concern that plan will put New York companies at a significant economic disadvantage
  - Need to develop sector specific, and in some instances mill specific, strategies to achieve climate goals and ensure that forest related manufacturing is protected from leakage
  - Any plan to enhance the environment must not harm the industry which keeps that environment healthy
  - Must consider the forests, wood products as additional carbon storage and substitution benefits for other fossil fuel derived products, the role of markets in keeping forests as forests, the sensitivity of wood products leakage, forests as a low carbon energy resource, and the overall costs of the Plan

# Email Campaigns: Agriculture and Forestry

## > Campaign AO, <50 submissions

- The Scoping Plan does not acknowledge the lack of any ZEV technology for medium- and heavy-duty vehicles which are essential in many sectors, including forestry, across the state; current infrastructure cannot support such regulations
- Concern there is no provision for allowing the use of other renewable energy systems such as wood, renewable natural gas, or renewable biofuels all of which could provide for both transition fuels and permanent substitution fuels going forward
- Plan acknowledges the limitations of heat pumps in extreme cold conditions and the need for secondary heating systems, but there is no similar rationale provided for medium- and heavy-duty vehicle use with equally significant needs
- Support establishment of a clean fuels standard to foster investment, facilitate transition, and provide a range of technology alternatives in the clean fuel economy, including renewable liquid fuels for difficult to decarbonize transportation sectors
- Must consider the forests, wood products as additional carbon storage and substitution benefits for other fossil fuel derived products, the role of markets in keeping forests as forests, the sensitivity of wood products leakage, forests as a low carbon energy resource, and the overall costs of the Plan

# Email Campaigns: Wood Burning

- > Campaign S, ~600 submissions
  - Burning wood and other organic products adds to GHG emissions and adds to collective emissions
  - Must be expressly stated that further steps must be enacted to stop incentivizing the burning of forests in the name of renewable energy
  - Must address the fundamental benefits of leaving forests intact
  - Must remove AF20 as a strategy for NY's bioeconomy because it calls for an expansion of biomass and bioenergy

# Email Campaigns: Nuclear Energy

## > Campaign X, ~300 submissions

- Support for nuclear energy's critical role in achieving clean energy goals
- Encourages the Council to continue its recognition of the value NY's upstate nuclear assets provide for our clean energy future
- Maintaining New York's existing nuclear power stations is the most economical way to achieve the state's decarbonization goals
- Request Council's commitment to safe, reliable, clean nuclear generation by formally recommending an extension of the ZEC program

## > Campaign AI, ~50 submissions

- Union carpenter expressing support for nuclear energy; maintaining nuclear energy is essential to meeting emissions goals at the lowest cost to consumers
- Upstate nuclear facility operations avoid 16 million tons of carbon emissions annually, provide thousands of highly skilled jobs, and are one of Upstate's largest employers
- Timely action is required to ensure these facilities remain operational beyond the expiration of the existing Zero Emissions Credit (ZEC) program in 2029
- Urge the Council to remain steadfast in its commitment to safe, reliable, and clean nuclear power generation

# Email Campaigns: Nuclear Energy

## > Campaign AM, <50 submissions

- Member of the Carpenters local 277 and Carpenters local 276 expressing support for upstate nuclear power facilities as they are safe reliable exceptionally maintained and instrumental to achieving states decarbonization goals
- Also provide thousands of jobs and millions in taxes that are critical to the up state and local communities
- Strongly encourage the Council to formally recommend extension of the ZEC program beyond its expiration in 2029

# Email Campaigns: Waste Incineration

## > Campaign Y, ~200 submissions

- Urges Council to revise Waste Chapter consistent with comments of Energy Justice Network, Clean Air Action Network of Glens Falls, Grassroots Environmental Education, and Westchester Alliance for Sustainable Solutions
- Plan must prioritize ending waste incineration which is classified as “unacceptable” in a zero-waste system
- Transition NY to a Zero Waste system that is as protective as possible of public health, environmental justice, climate, and the environment generally

## > Campaign AL, <50 submissions

- Resident of Westchester County where their trash is burned in the EJ community of Peekskill
- Disappointed that Plan doesn't call for an end to trash incineration and a rapid transition to Zero Waste statewide
- Must call for closure of all 10 municipal solid waste incinerators in NY and recommend that no new incinerators (or gasification or pyrolysis facilities) be permitted in the State

# Email Campaigns: Legislation

## > Campaign AS, <50 submissions

- Are in a critical stage of the climate crisis and at the very least must stop the expansion of fossil fuels
- Urges the co-sponsoring of the Renewable Heat Now package of bills for a just and affordable transition of buildings from fossil fuels:
  - All-Electric Building Act, S6843B/A8431A
  - Gas Transition and Affordable Energy Act, S8198/A9329
  - Advanced Building, Appliance and Equipment Standards Act, S7176/A8143
  - Fossil-Free Heating Tax Credit and Sales Tax Exemption, S3864/A7493 and S642A/A8147