

















UCG Principles

- 1. Utilities are supportive of the Climate Leadership & Community Protection Act's (CLCPA) goals and the decarbonization of the electric and gas energy systems.
- Customers will continue to value reliability, resiliency, and safety of the energy system during and after decarbonization. Reliability becomes even more critical as our state economy is increasingly electrified over time.
- 3. Technology development and diversity of clean resources are essential for long term success.
- 4. Pursue cost-effective solutions to support an affordable clean energy transition for all New Yorkers; including smart deployment of transmission & distribution system upgrades.
- 5. Regional strategies can help ensure environmental and economic justice.

Zero-Emission Electric Sector Targets











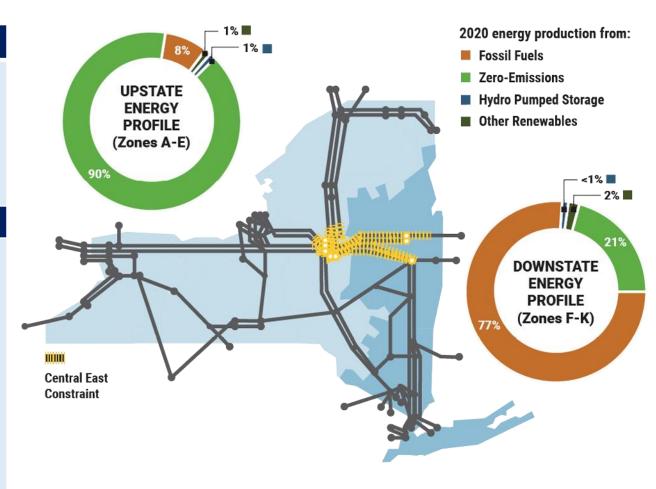
Power Generation

The UCG Believes:

- Customers require energy supply that is reliable, resilient and cybersecure;
- Transmission and distribution system upgrades are needed to accommodate zero emissions resource buildout in the power generation, transportation and building sectors.

The UCG Supports:

- Proactive planning and expedited approval for infrastructure needed to deliver renewable energy and meet targets;
- Analyzing market mechanisms, such as carbon pricing and valuing of environmental attributes;
- Advancing Research and Development into biofuels, hydrogen, CCS and long duration energy storage;
- Opening a pathway for direct advancement of renewable generation by the State's utilities.



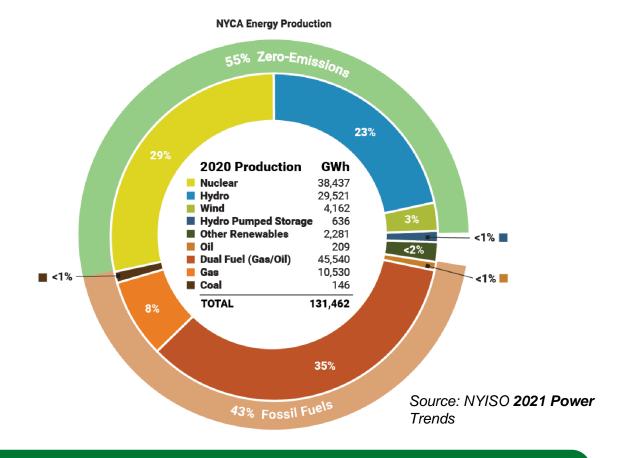
Source: NYISO 2021 Power

Trends

Power Generation

The UCG Does Not Support:

- Any moratorium on new and repowered fossil-fueled facilities operation without additional analysis.
 A moratorium:
 - Takes potential cost-effective pathway options off the table;
 - Doesn't adequately address peak/off-peak, monthly, seasonal or annual reliability concerns. Additional studies are required to determine if non-fossil fuel facilities will be able to compensate for renewable intermittency when coupled with batteries during different periods of the year.



To maintain reliability, bulk power system operators will require a full portfolio of resources that can be dispatched in response to any change in real-time operating conditions. The ability to dispatch resources to reliably meet ever-changing grid conditions and serve New York's electric consumers will always be paramount.

- NYISO 2021 Power Trends

Transportation

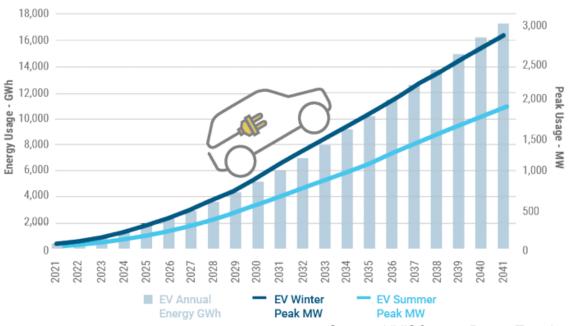
The UCG Supports:

- Efforts to address the transportation sector emissions. Utilities are providing significant contributions to this effort by enabling the installation of 54,000 medium-speed and 1,500 fast-speed electric vehicle chargers by 2025;
- Developing EV incentive programs that can advance charger deployment while still encouraging efficient and equitable use of the grid;
- Recommendations to prioritize access to the benefits of clean transportation to disadvantaged communities;
- Transportation solutions that take into account the State's regional differences and encourage regional transportation planning;
- Initiatives to begin decarbonizing other transportation sectors, including micro-modal travel, aviation and marine.
- Consideration of the use of Bio fuels/Hydrogen for heavy duty/hard to electrify segments.

The UCG Does Not Support:

 New electric rates for commercial EV charging which will unnecessarily shift costs from charger operators to other customers.

Electric Vehicle Energy & Peak Impacts - Baseline Forecast



Source: NYISO 2021 Power Trends

Electric Vehicle Emissions



60%-85% less than gasoline-powered vehicles*

*based on current power generation

Energy Efficiency & Housing

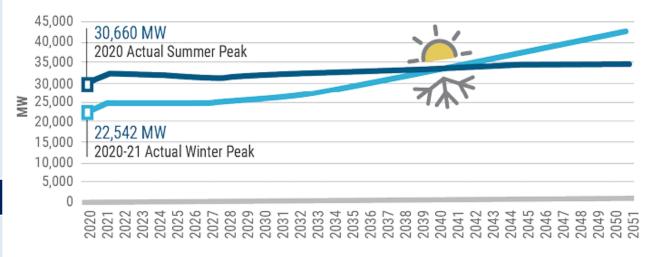
The UCG Believes:

- The existing gas transmission and distribution system is a valuable asset that can help provide a reliable and resilient energy pathway to decarbonization of the building sector. This infrastructure can potentially accommodate the use of RNG or hydrogen and enable hybrid high efficiency gas furnace/electric air source heat pump systems;
- Research & Development to further reduce greenhouse gas emissions from buildings should include projects that could leverage the gas system;
- An "electrify-everything" policy has the potential to drive up demand. This would require both additional sources of power generation and new transmission and distribution infrastructure and energy storage to support system reliability.

The UCG Supports:

- A gas and electric planning study to determine how best to manage the coordination of new and existing technologies, with emphasis on low-tomoderate income customers, safety, reliability and affordability. Material constraints on natural gas use should be paused until the results of the study are available;
- Steps to lower the near-term adoption cost of deep energy retrofits, including air source heat pumps, hybrid heating systems and other lowand no-carbon measures.

Electric Summer & Winter Peak Forecast – Actual & Forecast



Source: NYISO 2021 Power Trends

Energy-Intensive & Trade-Exposed Industries

The UCG Believes:

- This sector contains many varied industries and is complex and very costsensitive due to competition. Not all industries are readily electrifiable, and some will require a longer transition to decarbonization as compared to other sectors;
- The economic contributions this sector provides the State must be considered in light of CLCPA implementation.

The UCG Supports:

- The recommendation to focus on energy efficiency which can costeffectively help industrial customers control costs and reduce usage;
- Research into multiple decarbonization pathways and initiatives that will facilitate this sector's contribution to the CLCPA's goals in a way that is economically viable to participants in order to avoid economic leakage;
- Allocating research funds to study and provide regulatory options for adoption of clean energy emerging technologies. Technology will evolve and this industry sector is ideal for the application of emerging clean solutions, such as hydrogen, RNG, and carbon capture / utilization / storage (CCUS).
- Focus on clean energy workforce development to maintain good-paying
 jobs, tax revenues and support to local communities, while adding new green
 jobs to the New York economy, benefitting all including disadvantaged
 communities.



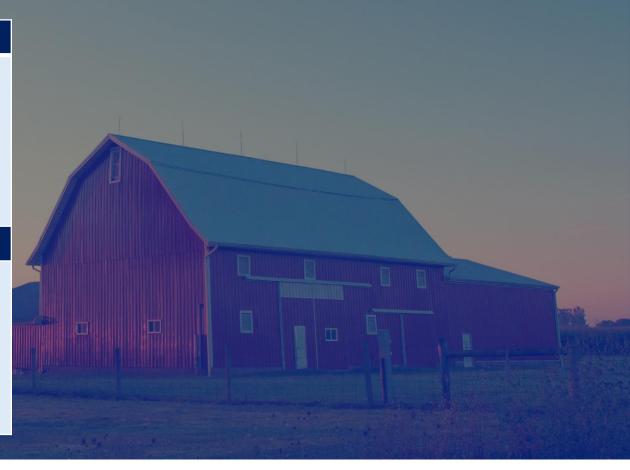
Agriculture & Forestry

The UCG Believes:

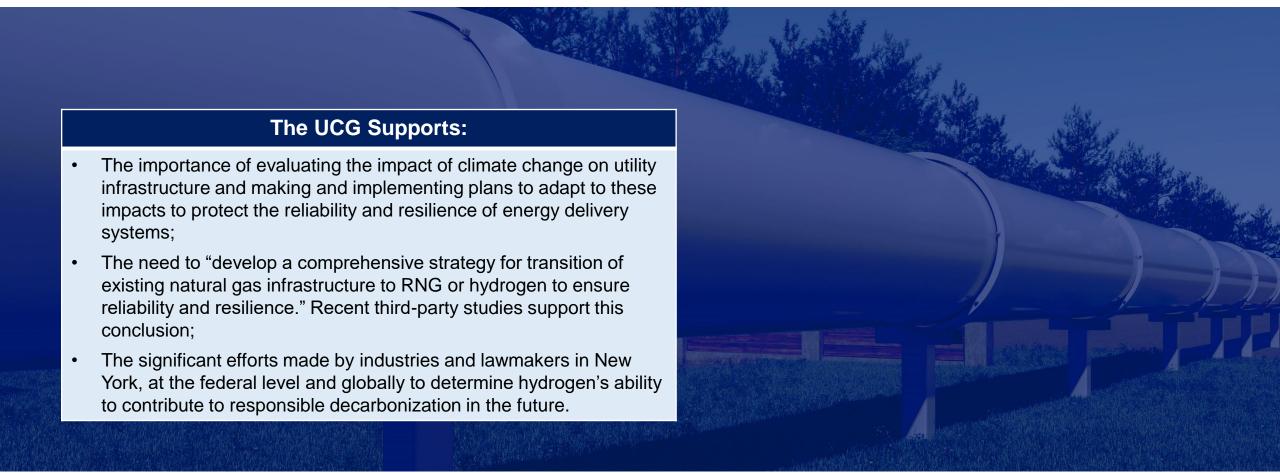
- The council should recommend a framework (e.g., analogous to electric renewable energy credits) by which customers can access RNG, other biobased low carbon fuels and hydrogen;
- Investment in robust research and development programs can spur economic development opportunities.

The UCG Supports:

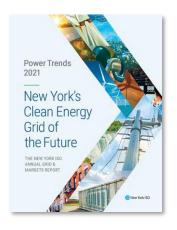
- The development of biomass resources and biobased low-carbon fuels that will enable innovative decarbonization solutions like hybrid high efficiency gas furnace and electric air source heat pump systems;
- Consideration of biofuels due to their ability to balance the intermittency of renewable resources like solar and wind;
- Measures that advance carbon capture and carbon sequestration.



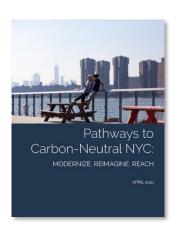
Adaptation & Resilience



Appendix/Resource List



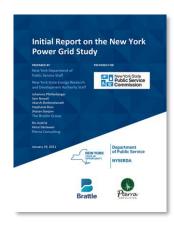




April 2021



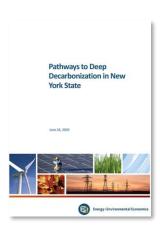
April 2021



January 2021



December 2020



June 2020 (download)

UCG Advisory Panel Comment Filings

- Power Generation Advisory Panel
- Transportation Advisory Panel
- Energy Efficiency & Housing Advisory Panel

- Energy Intensive Trade Exposed Industries Advisory Panel
- Agriculture & Forestry Advisory Panel
- Adaptation & Resilience Working Group