

The Path Forward to Decarbonization

Donna L. DeCarolis

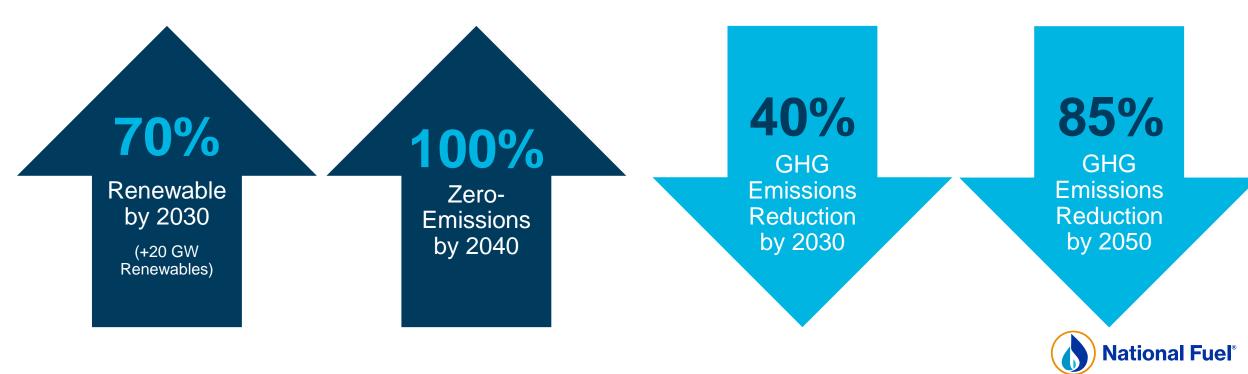
President, National Fuel Gas Distribution Corporation

Climate Leadership & Community Protection Act

July 2019

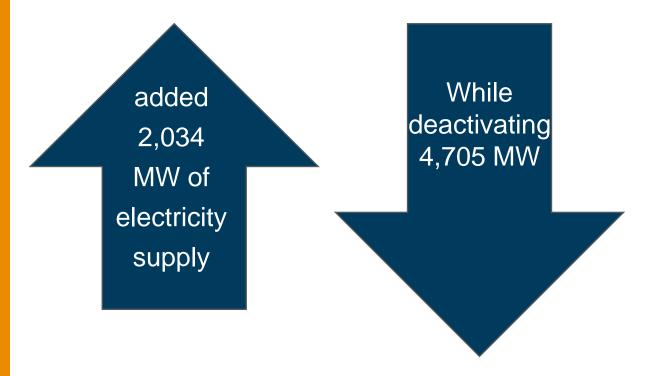
Electricity Power Generation:

Economy-Wide:



Keep Energy Affordable and Reliable

Since passing the CLCPA, New York has only:





72%

of New York's electricity comes from natural gas and nuclear

New York needs to

triple

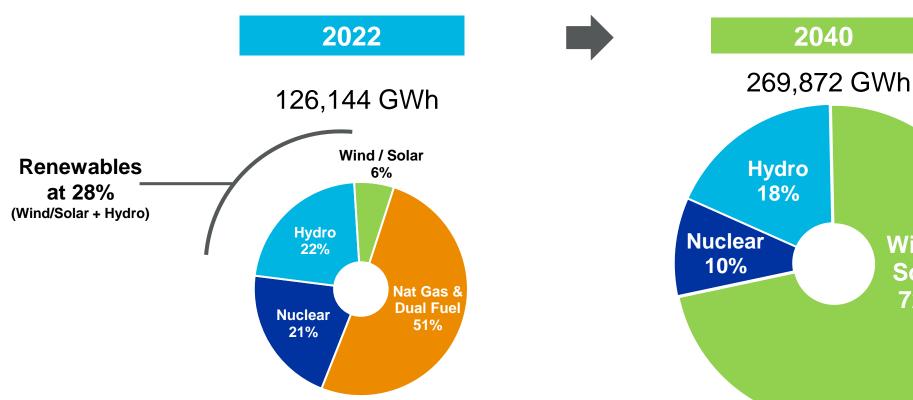
its electric generating capacity by 2040 to meet CLCPA goals and peak demands

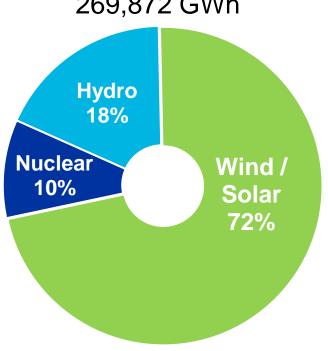


Will New York's Electric Grid Be Ready?

Today, wind and solar power generation is a small piece of the overall fuel mix.

New York State Annual Power Generation Fuel Mix



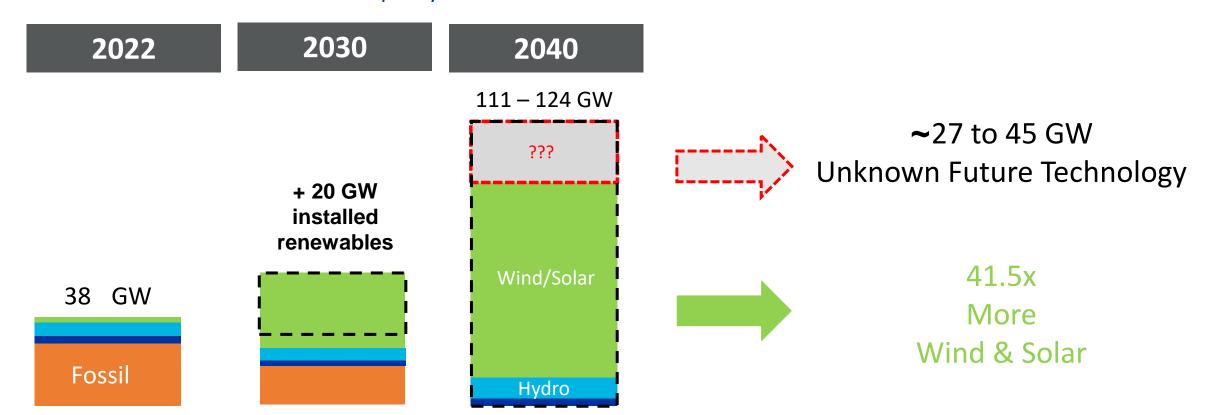




Does New York's Plan Ensure Grid Reliability?

Need 3x generating capacity by 2040

New York State
Installed Generation Capacity Needs





Some say abandoning natural gas in favor of electrifying homes is the best path forward, but there are steep challenges:



Costly home capital improvements

- Interior electric panel and wiring upgrades to convert to an electric heating system, plus weatherization & duct work installation.
- Appliances like heat pumps, water heaters, dryers, stoves, and ovens.
- Estimates in New York on average of \$20,000 \$50,000 per household.



Power grid buildout

- Must add 20 GW to reach 70% by 2030 (6 years).
- By 2040 all electricity generation must be zero emissions.
- NYISO, New York grid operator, states at least 95 GW of new generation must be developed to make up for generation plant retirements and increased electrical demand.
- Unrealistic and unachievable the state only added 12.9 GW over the last 25 years. Highly unlikely 95 GW of new generation capacity will be added in 17 years.



Less energy efficient homes

 Most homes in moderate- or low-income neighborhoods are not energy efficient, making it significantly more costly to retrofit.



Shifting costs to low-income households as wealthy leave gas system

 Concerns about wealthy affording to transition to electric-only, as the gas system operational costs increasingly fall to those who can least afford increases.



What made it into the 2024 NYS Budget

Key Energy & Climate Measures in Hochul's NYS FY24 Budget

Cap-and-Invest

- Establishes "guardrails" for allocation of program revenue
- Requires a "climate affordability study"
- Another tax to pay
- Bans proposed for existing buildings starting in
 2030 Did not pass
- All Electric New Buildings Act Passed

Bans natural gas hookups in all new buildings requiring all-electric appliances for heating, cooling, cooking and hot water

- December 31, 2025: Buildings 7 stories or less
- December 31, 2028: Buildings over 7 stories
- Carve-outs/exemptions for critical businesses/services and electric grid reliability

New Construction Gas Ban: Exemptions / Carve-outs

Critical Businesses / Services

- Emergency back-up power & standby power systems
- Manufacturing
- Manufactured homes
- Hospitals and other medical facilities
- Restaurants
- Car washes
- Laundromats
- Wastewater treatment facilities
- Agriculture buildings
- Crematoriums
- Critical emergency infrastructure

Electric Grid Reliability

- When electric service cannot be "reasonably provided"
- To be determined by NY PSC

Cap-and-Invest

New York's Cap-and-Invest Program – How it Works Cap-and-Invest sets an Large-scale greenhouse annual limit on the gas emissions sources and amount of greenhouse distributors of heating and **GHGs** gas emissions emitted transportation fuels will be in New York. Every year, required to purchase or the cap will be set lower obtain allowances for to reduce greenhouse emissions associated with their activities. gas emissions. The Program will prioritize frontline Proceeds will minimize potential consumer costs while supporting disadvantaged communities that have suffered from pollution critical investments in focus areas as a result of environmental such as climate mitigation, injustice and will ensure energy efficiency, and emissions reductions. clean transportation.

· Creating jobs

and preserving

competitiveness

· Investing in

disadvantaged

communities

· Funding a

future

sustainable

Affordability

leadership

Climate

- Well-intended BUT it is another tax for NYS businesses. Cost will be passed through to consumers to pay.
- Specifics on the program and costs still in development. Precise detail unknown.
- Major businesses will be required to purchase emissions allowances in State-run auctions where price is unknown.
 - If located in a "disadvantaged community," may expose business to even harsher financial penalties
- Major businesses will be required to measure and report emissions.
- Exemptions may apply, but it is unclear yet who will qualify



Cap-and-Invest

Guiding Principles:

Cap-and-Invest: Sticker Shock

NY Gov. Hochul Projections Average New York Household

Source: Politico "Weekly NY & NJ Energy" April 3, 2023 Assumes Washington State \$48.50 /MT C&I Tax and 20-year GWP

Gasoline (Transport)



\$0.63 Per gallon

Natural Gas (Heat)



\$595
Annual
Residential Bill

Heating Oil



\$605 Annual Residential Bill

~\$750/year

Average 2-car household that drives 15,000 miles/yr and gets 25 miles/gallon

National Fuel's Projections
Average NFGDC NY Customer

Assumes \$50/MT C&I Tax

Residential



\$532

Annual impact for an average NFGDC customer using 106 Mcf/yr

Commercial



\$1,487

Annual impact for an average NFGDC customer using 303 Mcf/yr

\$1 million to \$5 million

Potential annual impact for <u>each</u> of National Fuel's <u>largest industrial customers</u>



Outlook for NYS 2025 Budget Proposals

Affordable Gas Transition Act (\$8308/A8808 Part P)

Governor Hochul presented this as part of the Executive Budget Proposal for NYS FY 2025.

NY Heat Act (Home Energy Affordable Transition Act) [S2016-B/A4592-B]

Sponsored by Liz Krueger (D) 28th Senate District & Patricia Fahy (D) 109th Assembly District



What does AGT and NY HEAT include?

- The natural gas delivery system must be discontinued to meet the emissions targets with CLCPA
 - The all-options pathway that doubles down on energy efficiency and includes low-carbon fuels can meet the emissions targets.
 - No where in the CLCPA is it stated that natural gas use must be discontinued.
- Both provide the Public Service Commission the authority to discontinue natural gas to existing customers of the natural gas delivery system (and end legal obligation for customers to receive service)
 - An executive overreach as there are current 5 gas proceedings in play at the Public Service Commissions to study the natural gas transition.
 - Completely eliminates consumer energy choice.
 - Could very likely result in shifting entire neighborhoods off the natural gas delivery system



What does AGT and NY HEAT include?

- Neither include consideration of cost implications for forced electrification.
 - Who will pay for electrification upgrades, stranded assets of the gas delivery system, compensate homeowners for the useful life remaining on gas appliances?
 - NY HEAT caps energy burdens at 6% for low-to-moderate income households, with cost overruns presumably to be socialized onto other customers.
- Both end incentives for new gas customers
 - Removes the 100 ft. rule requiring utilities to connect new customers without charge depending on proximity to existing main line.
 - Another overreach as the All-Electric New Buildings law goes into effect on 12.31.2025
 - Both end utility "obligation to serve" natural gas customers



Multiple Ongoing Energy Regulatory Proceedings

Gas Ban Legislation leapfrogs current NYS PSC proceedings underway
Let the Utility Regulators Complete these before advancing legislation

- 1.) NYS PSC Gas Planning Proceeding
- 2. Climate Change Vulnerability Study
- (3.) Gas Depreciation Studies
- (4.) CLCPA Studies
- 5. Net Zero Proceeding



What we need/want to see in near-term

Policy

- Reject the Affordable Gas Transition Act and NY HEAT Act, which would give the NYS PSC the authority to decommission the natural gas distribution system in NYS.
- Allow the regulatory process to proceed without legislative interference.

All-of-the-Above Approach

 Adopt an all-of-the-above energy sourcing approach leveraging NYS's existing assets, creating reliable renewable energy, utilizing alternative fuels, and avoiding unnecessary cost increases.

Leverage Existing Infrastructure

 Utilize NYS's extensive and reliable natural gas infrastructure to transport alternative, low-and no-carbon fuels.



What we need/want to see in near-term

Build Renewable Capacity

- Demonstrate that the state's electric grid can meet consumer demand, with no loss in reliability or resiliency, as a necessary prerequisite to electrification mandates.
- Development of renewable energy generation and transmission infrastructure to meet the state's 70% by 2030 goal while insulating consumers from associated costs.
- Planning and construction of necessary electric infrastructure to support the charging needs of passenger, medium-, and heavy-duty vehicles.
- Must support electric vehicle mandates:
 - All new light-duty passenger sales in NYS must be electric by 2035, medium- and heavy-duty by 2045
 - All school buses sold in NYS must be electric by 2027, entire fleet must be electrified by 2035.
 - An electric bus costs \$300,000-\$400,000, compared to \$125,000-\$150,000 for diesel.
 - There are over 50,000 school buses operating in New York State.
 - Will require massive electric grid capacity buildout to support school districts' new load.



How can you become involved?

Encourage your family, friends and personal networks to speak up now.

- OPPOSE dangerous natural gas bans.
- REJECT any plan that fails to ensure energy reliability, affordability and safety.
- SHARE any of NFG's social media posts to your own networks.
- TAKE ACTION with easy online emails to elected officials through BetterPlanNoBans.com, launching next week.



