



Delivering the
Grid of the Future

How Markets Support Climate & Policy Goals

Our proven 20 year history of reliability,
innovation, and reduced emissions

The essential role of the NYISO markets

The principles that shaped this innovative market design from the start remain essential today

Effective and competitive wholesale electricity markets:

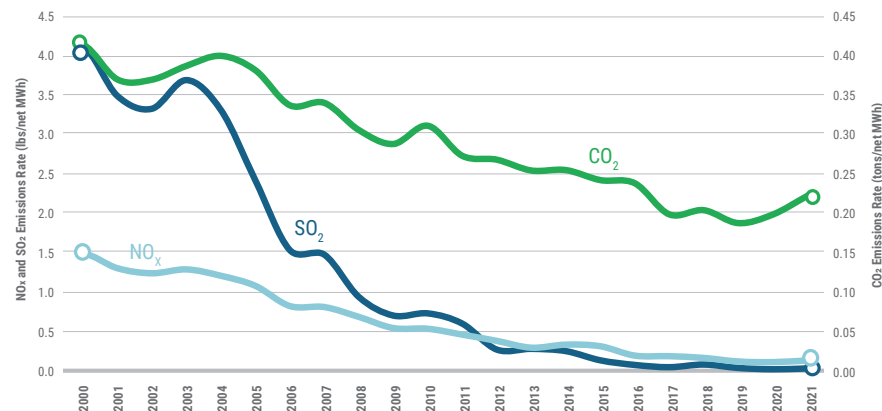
Align investment signals with system needs

Support and enhance grid reliability

Create a cleaner, more cost-efficient grid

Drive needed energy infrastructure investment to achieve the CLCPA goals

Emissions rates from electric generation in New York: 2000-2021



Sources: U.S. EPA, U.S. EIA, RGGI

New York power sector emissions reductions



46%



Carbon Dioxide
CO₂



92%



Nitrogen Oxide
NO_x



99%



Sulfur Dioxide
SO₂

Source: US EPA Air Markets Program data since NYISO launched competitive markets



Markets balance supply with demand

Market signals reflect the needs of the system and promote reliability

ELECTRICITY MARKETS



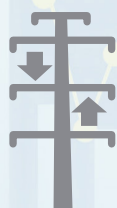
Energy is bought and sold to meet day-ahead & real-time commitments

CAPACITY MARKETS



Maintain enough generation to meet demand & encourage investment in new technology

DEMAND RESPONSE



Reduce consumption in response to changing system needs

ANCILLARY SERVICES



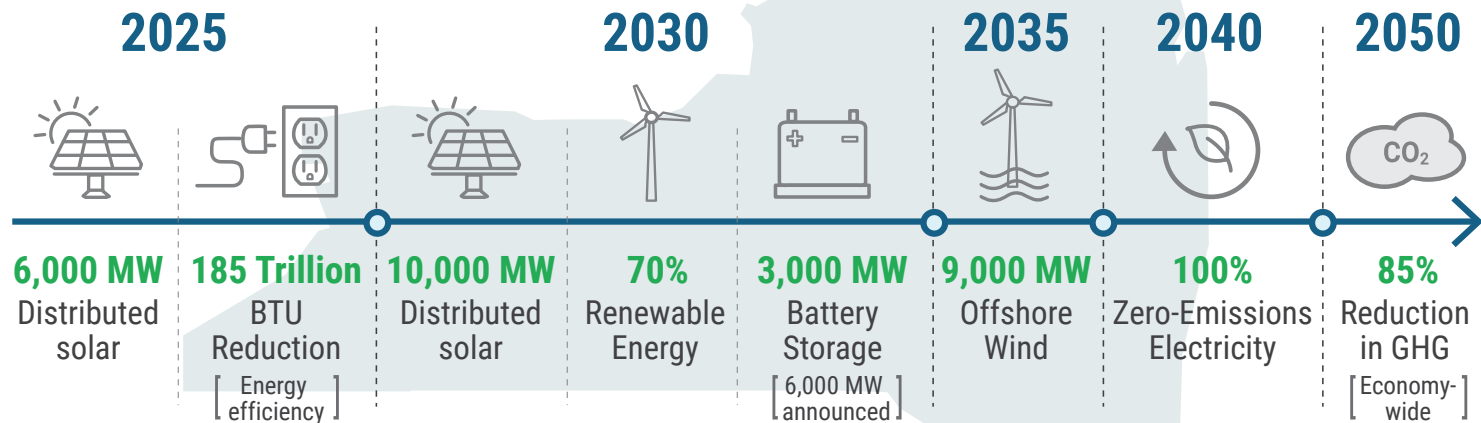
Encourage suppliers to provide an array of supporting services to maintain grid operations



Meeting policy & climate goals

The CLCPA mandates a zero-emission electric system by 2040

Wholesale markets have had a role in reducing emissions over the past 20 years. They also provide an important benefit by shifting the financial risk away from consumers to the owners and investors of generation and other resources.



“As Washington and Albany move forward, we must remember the degree to which **system reliability, economic efficiency, and environmental benefits are interlinked.**”

RICH DEWEY President & CEO, New York ISO

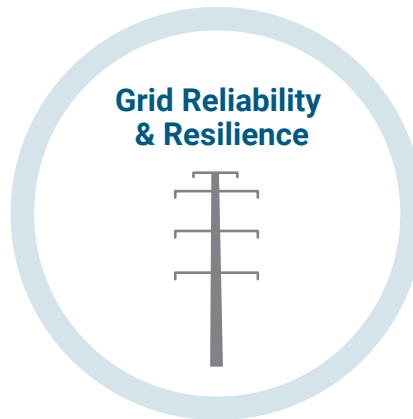
Delivering the Grid of the Future

Markets are the most powerful means to drive needed energy infrastructure investment

Attracting investment
in cutting edge
carbon-free resources



**Rewarding flexibility and
responsiveness** which balance
the availability of wind and solar



**Ensuring that
a greener grid is
also a reliable grid**



“ The NYISO is mapping out strategies for the rapidly changing energy landscape. **This critical work is protecting the state’s grid as we transition to renewables.** ”

MICHAEL CUSICK

Chairman of the New York State Assembly Energy Committee



Market solutions for a greener grid of the future

Resources must be valued based on their contribution to reliability

Examples of our market rule enhancements for a cleaner grid:

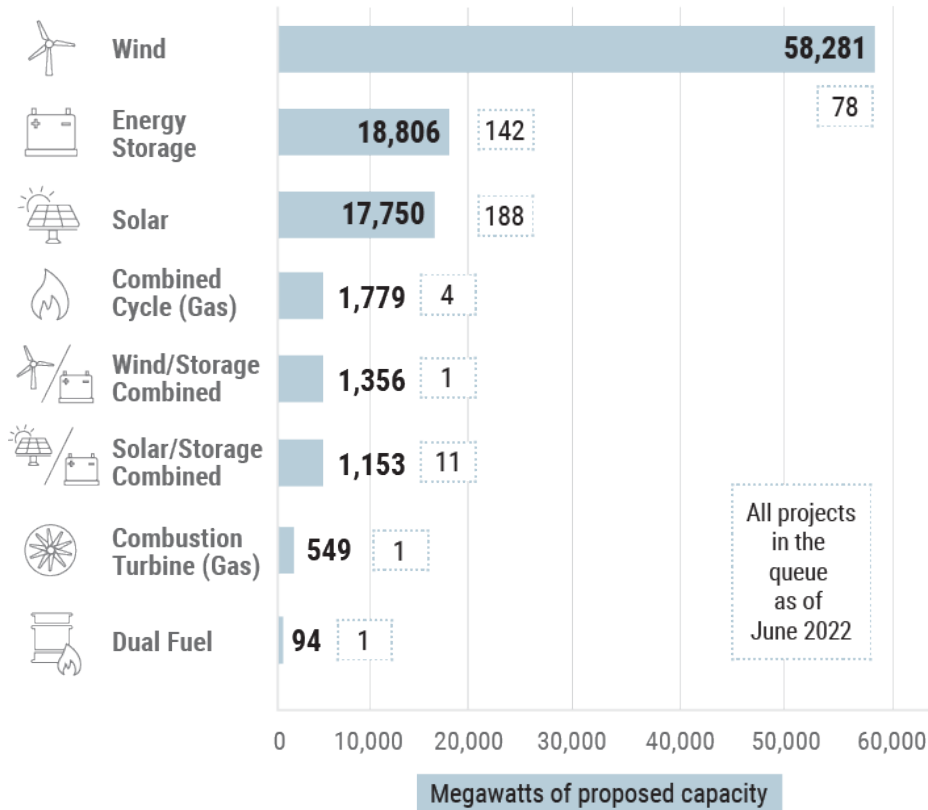
- 1. First-in-nation Market Participation Modeling Rules** expand the ability of renewables to power the grid and increase flexibility:
 - » **Energy Storage Resources (ESRs)** such as batteries
 - » **Distributed Energy Resources (DERs)** such as behind-the-meter wind & solar
 - » **Hybrid Co-Located Storage** such as batteries co-located with renewables; increasing efficiency
 - » **Solar on Dispatch** helps to ensure the critical balance of supply and demand
- 2. Comprehensive Mitigation Review** is underway with our stakeholders to analyze rules that support entry of renewables into the capacity market while maintaining competitive price signals.
- 3. Evaluating Record Number of Projects in Interconnection Queue**, primarily renewables, to establish the viability of proposed projects and identify reliability impacts.



Markets spur green growth

The queue of projects seeking to connect to the grid reflects a historic influx of renewables. We evaluate these projects for viability and impacts on grid reliability

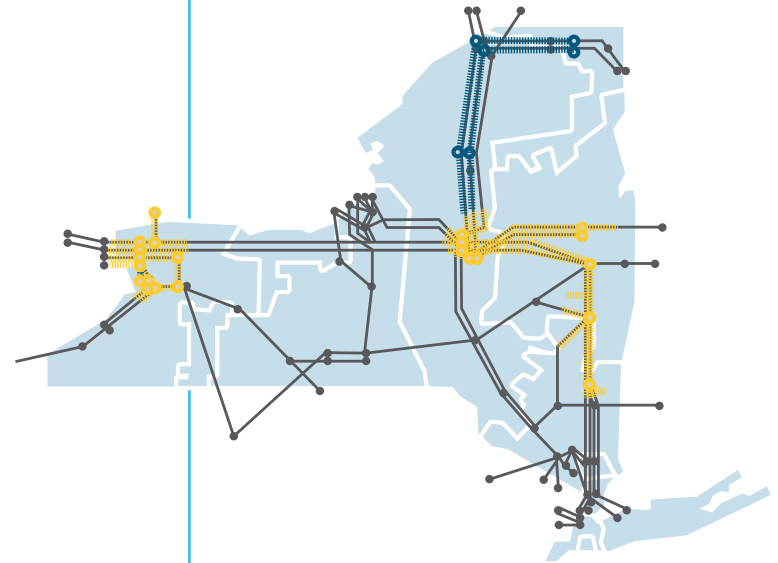
Most recent project queue "class year"



The critical role of transmission in meeting CLCPA mandates

70% by 2030

In addition to historic upgrades now underway, further investment will be required to achieve CLCPA objectives.



“Independent” is literally our middle name

Our independence from any single interest enables cooperation and collaboration

Our shared governance process, by which changes to the markets are made, is robust and transparent. It includes representation from a wide array of interests including industry, government, environmental, consumer and environmental justice interests.



58%

of voting stakeholders must approve items before moving forward



“ It’s a carefully-balanced construct based on trust. The idea was to construct an open and transparent marketplace that establishes fair prices and does so without any undue influence of one set of interest over another. ”

RAY STALTER Director of Regulatory Affairs, New York ISO

The strictest standards in the nation

New York ISO energy markets operate under the strictest reliability rules in the nation and are a proven tool for helping to achieve public policy goals

FERC

Federal Energy
Regulatory
Commission

NERC

North American
Reliability
Corporation

PSC

New York State
Public Service
Commission

NYSRC

New York State
Reliability
Council

NPCC

Northeast Power
Coordinating
Council



Delivering the #gridofthefuture

We are engineers, operators, analysts, economists and technologists dedicated to a reliable & sustainable power grid

570+

Dedicated
employees

20.2M

New Yorkers
served

760

Power generation
units

1 of 9

ISO/RTOs in
North America

435

Wholesale
energy market
participants

11,000

Circuit miles of
transmission managed
and monitored

151,978 GWh

Delivered to
New York
consumers in 2021

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