



NYSERDA

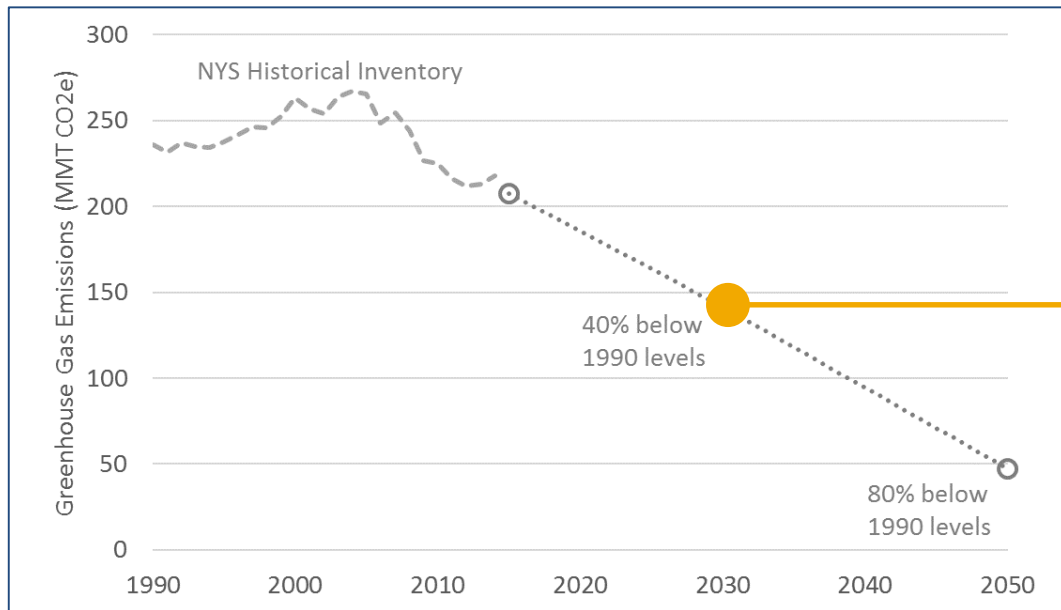
Transition to 2030

The Future of New York's Energy System




Alicia Barton
President and CEO, NYSERDA

New York is Committed to Deep Decarbonization

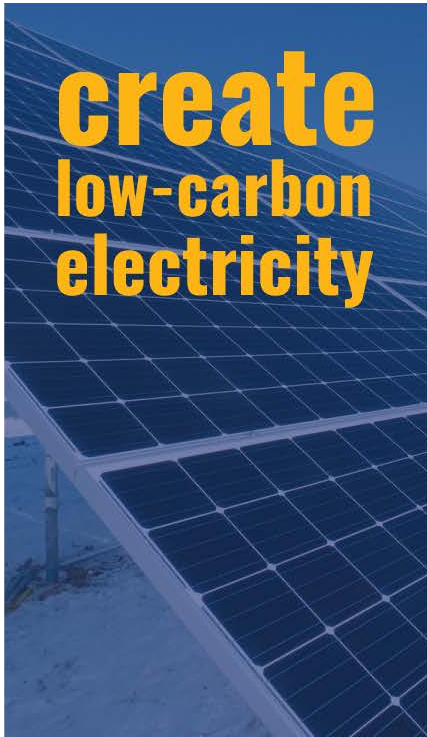


GHG
emissions
40%
BELOW
1990 levels

A Three-Part Strategy to Combat Emissions



**energy
efficiency**
across all sectors



**create
low-carbon
electricity**



**move
away from
fossil fuels**

Transitioning
New York's
energy system
is ambitious
but feasible



NYSERDA

The Electricity Sector is Leading the Way

New York solar grows more than 10-fold in six years

- PV Magazine

Solar power increases 1,000% in New York in six years because of pro-renewables government

- Solar Power World

New York Is Moving Aggressively To Harvest Its Offshore Wind

- Forbes

New York Announces Nation-Leading \$1.4B Investment in Renewables

- EcoWatch

NY Takes Historic Step Toward Renewable Energy Future

- Public News Service

New York awards \$1.4 billion to 26 renewable energy projects

- S&P Global

The New York electric grid has already cut emissions in half since 1990

By 2030 the grid will be at least 50% renewable energy

New York is taking major steps today to ensure we hit the target

Renewables Moving Offshore Benefits the System

2,400
MEGAWATTS
by **2030**

Massive resource potential
High capacity factor
Proximity to Load
Greater peak coincidence



NYSERDA

Energy Storage is a Key Ingredient

The Best News Yet for Energy Storage in New York

- Greentech Media

New York could be headed for the country's most ambitious energy storage goal

- Utility DIVE

Industry reacts positively to New York's 1,500 MW energy storage target

- Energy Storage

New York pushes energy storage to solve renewable power's biggest problem

- The Washington Examiner

New York Steps Up Energy Storage Investment, Sets 1,500 MW Storage Goal

- Renewable Energy World

New York Opens the Year with a Triple Boost for Energy Storage

- Microgrid Knowledge

As the New York grid moves to **high renewable penetration**, advanced energy storage will deliver firming, flexibility, and reduced capital costs

New York will deploy
1,500 MW **2025** and more
 of advanced energy storage by **2030**



NYSERDA

Energy Efficiency is a Cornerstone...

at a dramatically accelerated pace

Clean Energy Fund (CEF)

10 YEARS | **\$2** BILLION

for **energy efficiency**
by **2025**

Meeting our goals could require at least a **50% increase** in annual uptake of energy efficiency **between 2020-2030** compared to historical uptake

Building Electrification Must Be a Focus



Electric Heat Pumps deliver **greater efficiency** and **emission reduction** as electricity becomes cleaner

Deployment must **scale aggressively** to provide these benefits

Technology and business model **innovations** will be key to cost reduction

Transportation Emissions Reductions Will Require Transformation of Fuels and Vehicles



Zero emission vehicles must take over new vehicle sales

Reduced VMTs for medium and heavy duty

Biofuels will also be needed

Continuous Energy Innovation Needed

Ongoing support of innovation and investment in low-carbon technologies across all sectors to:

Maintain a steady **decline in technology cost**

Maximize value to the State's energy and transportation systems

Develop **new technology options** for emissions reduction

Enable communities and energy consumers to realize their own environmental and economic ambitions

Grow the New York clean energy economy

Thank You

Join the Conversation about New York's Energy Future



nyserda.ny.gov
#NYSERDA

rev.ny.gov
#REV4NY