### Transition to Clean Energy: Goals and Progress

MARCH 2021



# Climate Leadership and Community Protection Act (CLCPA)

- CLCPA Passed in June 2019
- Established Nation-Leading Climate Targets for New York State
  - > 85% Reduction of GHG by 2050
  - 100% Zero-emission Electricity by 2040
  - 70% Renewable Energy by 2030
  - 9,000 MW of Offshore Wind by 2035
  - > 3,000 MW of Energy Storage by 2030
  - ➢ 6,000 MW of Solar by 2025
  - 22 Million Tons of Carbon Reduction through Energy Efficiency and Electrification



### LIPA Adding Clean Energy...

	<u>SIZE (MW)</u>	IN-SERVICE (Est.)
Solar (~ 800 MW)		
LI Solar Calverton	23	2021
Riverhead Solar II	36	2022
Behind-the-meter Solar	528 <sup>1</sup>	pre-2021
Community Solar Program	21.5	2022
Solar Purchases	181.5	2011-2021
Offshore Wind (~ 2,300 MW) <sup>2</sup>		
South Fork Wind Farm	130	2023
Sunrise Wind	880	2024
Empire Wind 2	1,260	2026
Energy Storage (~ 400 MW)		
Montauk & East Hampton Storage	10	pre-2021
TBD	175	2025
TBD	175	2030
Total	3,420	

#### Notes:

1. Long Island has added more than 80 MW per year of behind-the-meter solar in each of the last five years and the total continues to grow.

2. The State has an additional 4,500 MW of offshore wind projects to award by 2035.

3. This list shows only committed projects to date. LIPA will procure additional clean energy in the coming years to meet the State's CLCPA targets.



### ... And Reducing Dependence on Fossil Generation

Expected Near-Term Retirements	SIZE (MW)	<b>RETIREMENT DATE (Est.)</b>
Shoreham GT 1 and 2	71.5	2023
Glenwood GT 2	55	2023
Barrett Steam*	188 – 376	2024 - 2027
Port Jefferson Steam*	188 – 376	2024 - 2027
Northport Steam*	387	2024 - 2027
	~400 <b>–</b> 800 MW	
Previous Retirements	<u>SIZE (MW)</u>	<b>RETIREMENT DATE</b>
Barrett GT 7	18	2011
Far Rockaway Steam 4	100	2012
Glenwood Steam 4 and 5	228	2012
Montauk Diesels 2 to 4	6	2013
West Babylon GT 4**	52	2020
Glenwood GT 1**	<u>    16</u>	2021
	420 MW	
Expired Contracts	SIZE (MW)	
Bethpage CC	83.6	
Bethpage GT 4	60	
Nassau Energy Corp. Trigen CC	55	
NYPA Flynn CC	170	
Bayswater GT	60.5	
Jamaica Bay GT	60.5	
	490 MW	

\* Order, amount and timing of steam plant retirements to be determined based on in-service dates of clean energy additions and the relative value of their continued operation.

\*\* Demolition remains on hold pending further evaluation of the need to operate these units under emergency conditions



## Planning for the Future

### Bulk Energy Storage

- RFP is expected to be issued in April 2021
- Expecting to procure and install ~175 MW by 2025
- 2021 Integrated Resource Plan
  - Provide vision on achieving CLCPA goals in the most reliable and economic way
  - Determine sequence and timing of additional fossil unit retirements
  - Determine disposition of expiring generation and transmission contracts (i.e., restructure, partially extend, fully expire)
  - Explore potential of beneficial electrification
  - Benefit disadvantaged communities

