



NEW YORK
STATE OF
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NYSERDA



Large-Scale Renewables Spring 2020 Update & Informational Webinar

April 3, 2020

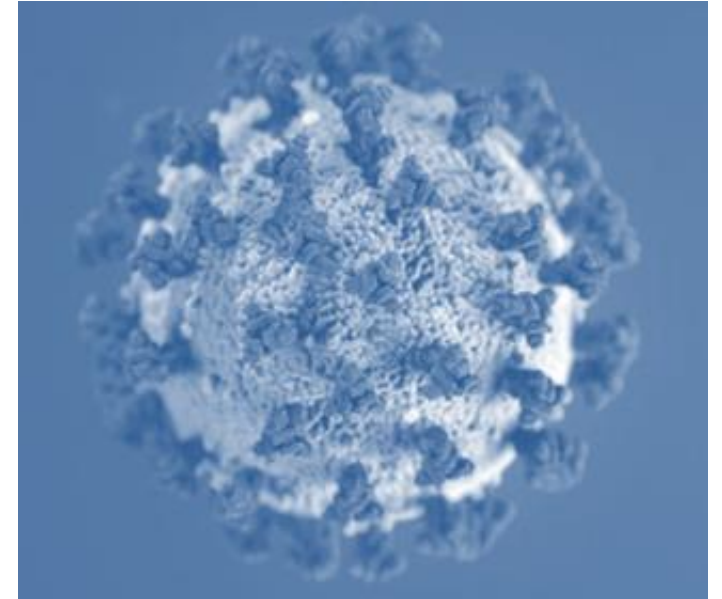
Agenda

11:00-11:05 am	Welcome and Agenda Overview
11:05-11:10am	Introductory Remarks from NYSERDA's President & CEO
11:10-11:15 am	New York State Novel Coronavirus (COVID-19) Update
11:15-11:20 am	New York Energy Agency Status
11:20-11:25 am	New York's Clean Energy Industry Status
11:25-11:50 am	2020 Large-Scale Renewable Priorities and Updates
11:50-12 noon	Questions for Large-Scale Renewables Industry and Next Steps

President's Remarks

New York State Response to Novel Coronavirus (COVID-19)

<https://coronavirus.health.ny.gov/home>



New York State “on Pause”: Industry Guidance

- **March 20: Governor Andrew M. Cuomo issued his “New York State on PAUSE” Executive Order, effectively halting all non-essential services.**
- **March 30: Governor Cuomo issued Executive Order 202.13 and the Essential Construction Guidance clarifying that all program activity requiring in-person presence at a project site that is not defined as either essential or emergency-related shall pause until April 15, unless extended by future Executive Orders.**
 - **March 31: Empire State Development issued updated guidance to clarify essential and non-essential activities including construction work specific to the renewable energy sector. See:**
https://esd.ny.gov/sites/default/files/ESD_EssentialEmployerFAQ_033120.pdf
 - **March 31: NYSERDA issued updated guidance to its contractors applicable to ALL NYSERDA programs, effective immediately and continuing to April 15.**

Large-Scale Renewable Industry Status

BNEF predicts slow-down in clean energy economy due to Covid-19

March 13, 2020 · 0

Solar projects put on hold amid COVID-19 pandemic

Coronavirus Delays Public Hearings

-8%

Change in BNEF's midpoint estimate of solar build in 2020 since Covid-19 went pandemic

'An immediate and dramatic business concern': How COVID-19 is disrupting the energy sector

The industry could face declines in demand, distracted regulators and disrupted supply chains, according to experts.

-44%

Change in vehicle sales in China year-on-year, by data so far

Senate Strikes Deal on Coronavirus Stimulus Package That Excludes Help for Renewables

Senate's \$2 trillion rescue package won't extend tax credits

-4%

Optimistic estimate of Covid-19's impact on battery demand in GWh in 2020

SUSTAINABLE BUSINESS MARCH 17, 2020 / 12:11 AM / UPDATED 8 HOURS AGO

Coronavirus creating solar industry 'crisis': U.S. trade group

New York State Agency Status



New York State Clean Energy Industry Status

NYSERDA has initiated training programs that will benefit more than 40,000* New Yorkers

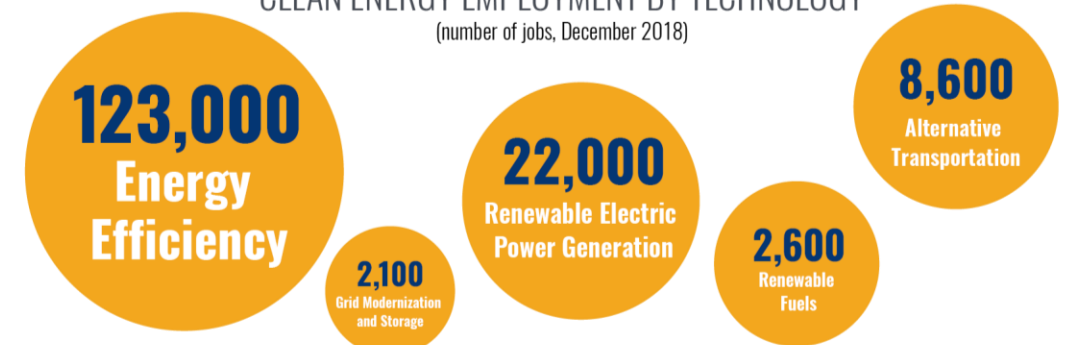
- > Energy Efficiency & Clean Technology Training
26,000 to be trained
- > Building Operations & Maintenance
5,000 to be trained
- > Energy Efficiency & Clean Technology On-the-Job Training
171 hired/trained
- > Clean Energy Internship Program
160 interns hired/supported

* The numbers reflected above represent data through 1/16/20. Actual numbers subject to change based on the finalization of contracts and final training delivery.

nearly
159k clean energy jobs in 2018
across New York State

7.2k new clean energy jobs in 2018
employers expect to hire 12,000 more in 2019

CLEAN ENERGY EMPLOYMENT BY TECHNOLOGY (number of jobs, December 2018)



Climate Leadership and Community Protection Act



70%
renewable
energy by
2030

Governor Cuomo: "We have made remarkable progress on a large number of pressing issues. But the matter we discuss today, and the action we take, may indeed be the most consequential. The environment and climate change are the most critically important policy priorities we face. They literally will determine the future or the lack thereof."

Accelerated Renewable Energy Growth and Community Benefit Act



This comprehensive legislation includes
four major components:

**Office of
Renewable
Energy Siting**

**Clean Energy
Resources
Development
and Incentives
Program**

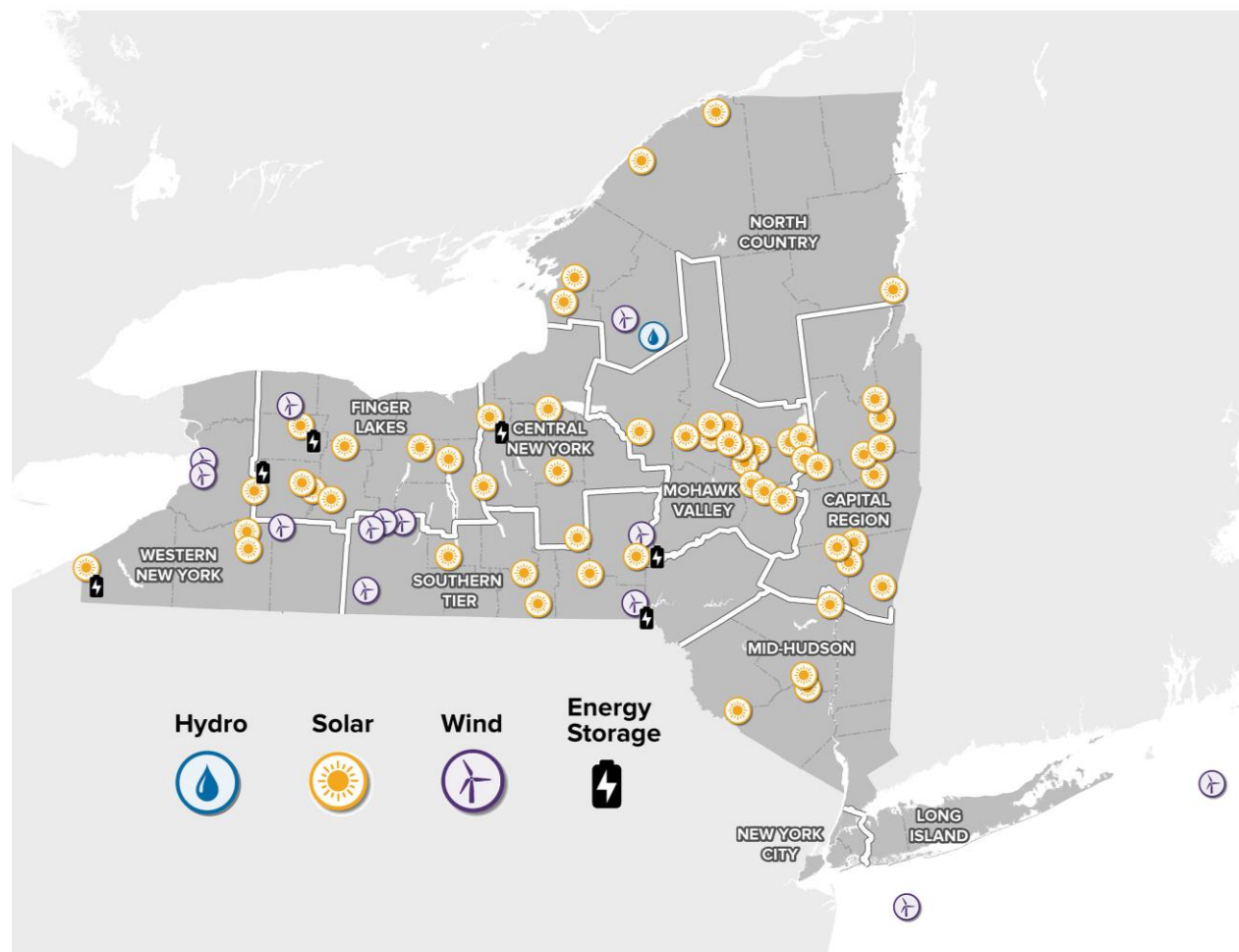
**Host
Communities
Benefit
Program**

**State Power
Grid Study
and Program**



NYSERDA

A Globally Significant Renewable Ramp-Up



Since 2017,
69 projects
6,000+ MW

Includes newly announced **21** large-scale solar, wind, and energy storage projects across upstate New York, totaling **1,278 MW** of renewable capacity and **40 MW** of energy storage capacity

2020 Large-Scale Renewable Priorities

- **Continue to support the thriving renewable energy development industry in New York State, while responding to the near-term needs of the industry's COVID-19-related impacts**
- **Advance the new strategies and programs established by the Accelerated Renewable Energy Growth and Community Benefit Act**
- **Launch and execute the 2020 Renewable Energy Standard (RES) solicitation, maintaining the state's predictable cadence of renewable procurements**
- **Successfully implement the Index REC offer structure into the 2020 RES solicitation**
- **Provide technical support to local governments working to permit large-scale renewable projects and align local laws with new renewable technologies and project types**

pV magazine

How New York awarded more solar than 34 states have installed

THE WALL STREET JOURNAL.

BUSINESS

Wind, Solar Farms Are Seen as Havens in Coronavirus Storm

Steady returns in renewable energy attract investors, even as new projects likely face finance hurdles

2020 Large-Scale Renewable Priorities

Index REC for Tier 1 Procurements

- **January 2020: Index REC Structure approved by the Public Service Commission**
January 16, 2020: [Order Modifying Tier 1 Renewable Procurements](#)

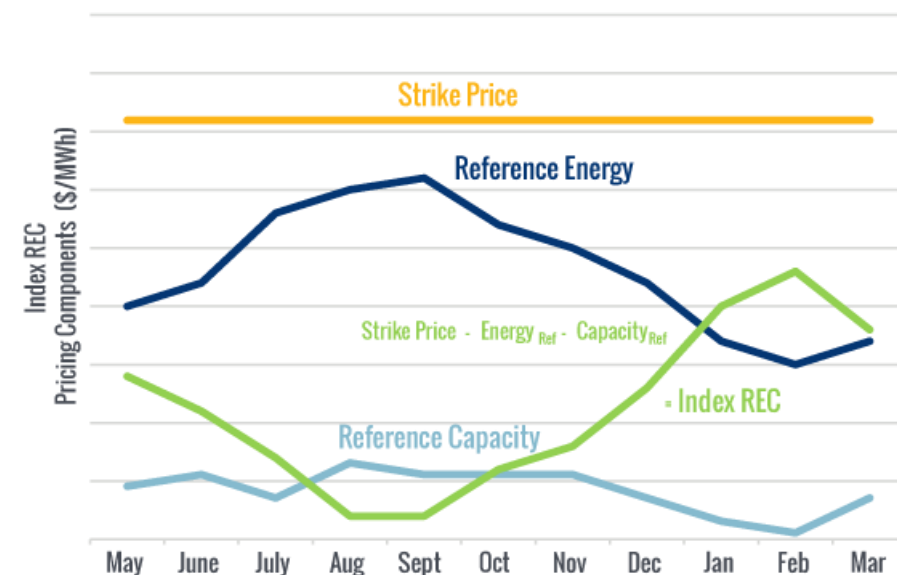
PSC Further Strengthens and Encourages Development of Renewable Energy Projects

Decreased Capital Costs for Developers Will Advance More Clean Energy Projects and Will Save Consumers \$4.6 Billion

2020 Large-Scale Renewable Priorities

Index REC Structure

- **Optionality for Fixed or Index Renewable Energy Certificate (REC) (“Bidder’s Choice”)**
- **Regardless of choice, Fixed REC Price or Index REC Strike Price will be uniform for the entire contract tenor**
- **Calculation of Reference Prices (Energy & Capacity) to reflect project point of interconnection**



Strike Price

Represents the all-in cost per megawatt hour to develop a large-scale renewables project competitively bid to NYSERDA.

Index REC

Payments rise and fall inversely to a composite average of New York’s energy and capacity market prices, which do not reflect actual project revenues but do provide protection for ratepayers and projects against volatility in utility bills and project revenue, respectively.

2020 Large-Scale Renewable Priorities

Index REC Payment Structure

- **Index REC Strike Price:** Proposer chooses one Strike Price for the contract tenor.
- **Reference Energy Price:** Calculated monthly based on the hourly day-ahead Locational Based Marginal Pricing (LBMP).
- **Reference Capacity Price:** Calculated monthly based on the Seller-selected fixed UCAP factor, multiplied by the MWh equivalent of the monthly ICAP spot market auction price.
- **Monthly REC Price:** Difference of Strike Price and sum of Reference Energy Price and Reference Capacity Price for each month, paid for each MWh produced by the Bid Facility in the subject month.

$$\text{Index REC Strike Price} - \left(\text{Reference Energy Price} + \text{Equiv. Reference Capacity Price} \right) = \text{Monthly REC Price (\$/MWh) Paid to Seller}$$

2020 Large-Scale Renewable Priorities

RES Agreement Updates

- **FERC Order on February 20, 2020 related to NYISO's proposed Buyer Side Mitigation exemption**
- **NYSERDA is evaluating all potential options for the capacity reference price formula to account for mitigation**
- **Fixed Price contracts will include adjustment provisions to account for the implementation of a carbon price in the future**



**Department of
Environmental
Conservation**



**Agriculture
and Markets**



**NY Power
Authority**



Agency Coordination

- **Proposal evaluation will be supported by other NYS organizations with subject matter expertise and operational advantages**



NYSERDA

2020 Large-Scale Renewable Priorities

Solicitation Non-Price Evaluation

- **Mitigation Plans and Agency Consultations**
 - **Environmental (DEC)**
 - **Agricultural (AGM)**
- **Economic Benefits alignment with the Climate Leadership and Community Protection Act (CLCPA)**
- **Increased Project Viability thresholds, two-step submission Process**
- **Continued emphasis on community outreach and active engagement**
- **Support is available, for landowners, and local governments:**

cleanenergyhelp@nyserda.ny.gov

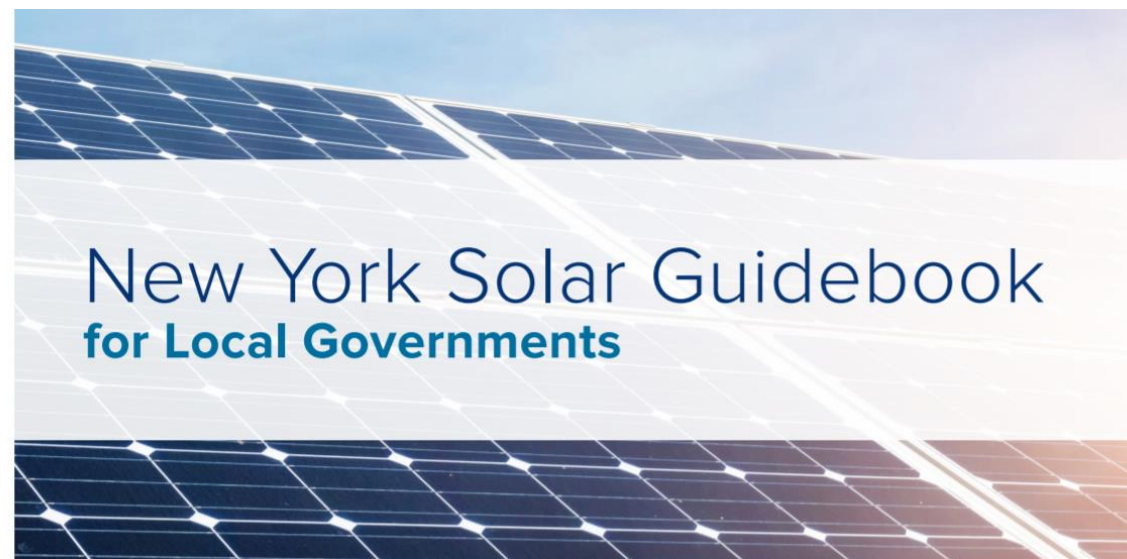
10% Project Viability
10% Economic Benefits
10% Operational Flexibility



Support for Communities and Local Governments

- **NYSERDA's Clean Energy Siting team**
- **Technical support for solar permitting and inspecting, special use permits, site plan regulations**
- **Model solar energy local laws assistance, drafting considerations for landowners, agricultural uses, and decommissioning**
- **Guidance on navigating regulatory and taxing mechanism**
 - **State Environmental Quality Review (SEQR)**
 - **NYS Real Property Tax Law § 487**
 - **Solar Payment-In-Lieu-of-Taxes (PILOT) Agreements**

cleanenergyhelp@nyserda.ny.gov



New York State Wind Energy Guidebook

Indicative Solicitation Schedule for Consideration

Date	Event
Earth Week	Solicitation Launch
Late April	Proposers' Webinar
Mid-May	Deadline – Step One Eligibility Application
Late May	NYSERDA responds with Notice of Qualification to Bid
Early July	Deadline – Step Two Bid Proposal All Bid Proposal Documents and Agency Consultations
October	NYSERDA notifies awarded Proposers

Request for Feedback

- 1. How has COVID-19 impacted your general work or development activities, supply chain, corporate status, day-to-day operations, and risk considerations? What drivers will shift this focus based on the duration of the current conditions? How might New York State be helpful in addressing these challenges?**
- 2. What would be an ideal schedule to launch NYSERDA's 2020 solicitation? Why?**
- 3. What would be an ideal date for bids to be due? Why?**
- 4. What would be an ideal date for awards to be made? Why?**
- 5. Please identify any Buyer Side Mitigation-related concerns and potential mitigation measures that NYSERDA can consider in drafting either its RFP or its Agreement.**
- 6. Please provide any other feedback regarding the content within NYSERDA's presentation or any other topics relating to its 2020 plans and RFP structure.**

Respondents are also encouraged to identify their anticipated level of involvement in the 2020 solicitation.

**Seeking written feedback by April 8, 2020,
3pm ET via email to res@nyserda.ny.gov**

Questions

Responses due Wednesday, April 8 for consideration
Please send all responses to res@nyserderda.ny.gov