What is the Clean Energy Standard? What is the Renewable Energy Standard?

New York State is undertaking significant changes in how it generates and delivers energy. Governor Andrew M. Cuomo’s proposed Green New Deal, a nation-leading clean energy and jobs agenda, is creating a next-generation energy system that is clean, resilient, and affordable for all New Yorkers. The Clean Energy Standard, a critical component of the State’s energy goals, mandated that New York get 50 percent of its electricity from renewable sources. With the overwhelmingly positive reaction from markets and developers to REV and the CES, Governor Cuomo has proposed expanding the CES to ensure that 70 percent of the State’s electricity come from renewable sources by 2030.

The Renewable Energy Standard (RES) is one component of the CES. Through the RES, the State is working to grow the proportion of electricity that comes from renewable generation. The RES includes an obligation on retail electricity suppliers such as energy service companies (ESCOs) to purchase increasing amounts of renewable energy to supply their customers and a requirement that the New York State Energy Research and Development Authority (NYSERDA) support the development of new large-scale renewable energy projects needed to meet the retail electricity supplier obligation.

What is NYSERDA’s role in large-scale renewable projects?

NYSERDA was designated by the New York Public Service Commission as the central procurement entity for the RES. Through a competitive selection process which occurs at least annually, NYSERDA awards long-term contracts to developers of new renewable energy projects. The RES solicitations seek to procure renewable energy resources that are eligible under Tier 1 of the RES. The renewable technologies eligible to participate in a RES solicitation include Biogas, Biomass, Liquid Biofuels, Fuel Cell, Hydroelectric, Solar, Tidal/Ocean, and Wind. To be eligible, generation projects must have commenced operation on or after January 1, 2015. More information on RES Tier 1 eligibility can be found at nyserda.ny.gov/RES-tier-1.

How much funding has New York State awarded under the Clean Energy Standard?

NYSERDA conducted the first RES procurement in 2017 which resulted in a record-breaking commitment by the state of $1.4 billion for 26 renewable energy projects. The results of the 2018 solicitation were just as impressive, with $1.5 billion awarded to 20 new renewable energy projects. In the 2017 solicitation, one awarded project incorporated energy storage, in 2018 three projects awarded include energy storage. Incorporating energy storage into renewable energy generation projects provides flexibility to deliver energy when the grid needs it most.

Once operational, the 46 projects awarded through these RES solicitations are expected to generate more than 71 million MWhs annually, which is enough clean, renewable energy to power more than 1 million homes each year and reduce carbon emissions by nearly 4.2 million tons, the equivalent to taking nearly 810,000 cars off the road annually.

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When will the projects be constructed/operational?

Large-scale renewable energy project development timelines vary depending upon the size and complexity of the project. These projects are large capital investment projects that take years to plan, permit, and build. Projects selected through the 2018 RES solicitation have a target commercial operation date of late 2022. Some projects may be completed sooner or later depending upon the specifications for each project.

How will these projects benefit New York State? Will this bring jobs to my community?

Significant economic benefits of the large-scale renewable energy industry include payments to local landowners, short- and long-term job creation, payments to host communities including school districts, and spending on goods and services in supporting industries. The construction phase usually brings many short-term jobs; increases in hotel and restaurant use by non-local workers; purchase of materials, including cement and gravel; and services, such as equipment rental. Some long-term jobs
may be created during the operation and maintenance of the facility, with routine spending on everything from equipment maintenance to plowing access roads in winter. The *New York Clean Energy Industry Report* found renewable electric power generation firms employ just over 22,000 clean energy workers across the State, with a projected 6.3% increase in 2018.

In 2013, NYSERDA released the *Renewable Portfolio Standard Main Tier 2013 Program Review* that analyzed three years of spending from 18 renewable energy facilities under contract with NYSERDA (including two biomass facilities, eight hydroelectric facility upgrades, and eight wind farms) and estimated total direct investment over each project’s life-cycle. The research examined verified spending from each project, including long-term and short-term jobs, payments to public entities, in-state purchases, and land leases for these facilities from development and construction through the first three years of operation. The study found that every 1 megawatt-hour (MWh) of renewable energy generated under these contracts resulted in approximately $27 of direct investment in the local community or other New York regions.

**Who oversees siting and permitting of the project? What role does local government play in this process?**

Major electric generating facilities with capacities equal to or larger than 25 megawatts are sited according to New York State’s *Article 10 law*. This comprehensive law provides guidance to the New York State Board on Electric Generation Siting and the Environment (Siting Board) about authorizing construction and operation of major electric generating facilities, including renewable generators. The Article 10 law streamlines the application process for developers, while providing a rigorous process for local input and ensuring environmental and public health laws are followed.

Projects with capacities less than 25 megawatts are subject to local land-use regulations as well as the State Environmental Quality Review Act (SEQR) process. The lead agency authority under SEQR (the agency or board leading the SEQR review) is most often assumed by the local planning board.

**How much renewable energy development should we expect in the State over the coming years?**

Growth in renewable energy development is based on a number of factors, such as electricity prices, equipment costs, state and federal policies, and energy infrastructure development. Depending on its generation profile, New York will need thousands of megawatts (MW) of new renewable projects to meet its clean energy goals.

These results will build on the State’s strong foundation of renewable projects. Through the former Renewable Portfolio Standard and NY-Sun, New York has supported a total capacity of 7,500 megawatts of new wind, solar, hydropower, and biomass energy projects. This is equivalent to powering more than 2.1 million homes each year. The new projects awarded through the RES will complement previous investments and help move New York closer to its clean energy goals.

In addition to issuing annual solicitations for large-scale renewables, new renewable capacity will be added through other channels, such as the continued progress of the NY-Sun program and the development of offshore wind resources. Increased application of energy efficiency will also offset some of the new renewable capacity needed to meet New York’s goals.

**How can communities engage in the process? How can NYSERDA help?**

NYSERDA offers resources to help local governments manage responsible clean energy development in their communities. These resources include guidebooks with step-by-step instructions and tools to guide the implementation of clean energy, technical assistance to help implement the policies and practices, and workshops to help manage clean energy development responsibly.

Pertinent information can be found in NYSERDA’s *Wind Energy Guide* found at nyserda.ny.gov/wind-energy-guide and the *New York State Solar Guidebook* found at nyserda.ny.gov/solar-guidebook. NYSERDA offers free technical assistance to help municipalities implement the policies and practices for becoming solar-ready communities.

Please contact NYSERDA at cleanenergyhelp@nyserda.ny.gov for more information.