

NEW YORK

- RGGI Member
- GBN Member
- RPS: 50% by 2030
- 3.13% of US carbon emissions
- 8.0% of US GDP

New York is committed to lead on energy and climate at every level. Nationally, Governor Cuomo's energy policy, Reforming the Energy Vision (REV), sets an example for the rest of the country and the world at large by advancing an unprecedented approach to democratizing the production of power and enabling customers to harness the benefits of clean local energy.

FINANCE

- *Regional Greenhouse Gas Initiative* – Is the country's only regional cap and trade system and this multi-state group will reduce regional power plant emissions 50% from 2005 levels by 2020. The strategic goals of RGGI investment in NYS are to reduce in-State GHG emissions through energy efficiency and renewable energy projects, increase the states capacity for long term carbon reduction, empower communities to transition to cleaner energy, stimulate entrepreneurship and growth of clean energy companies in the state, and support innovative financing to increase adoption of clean energy. The states diversified approach directly supports the Governor's Reforming Energy Vision (REV) approach, which is working to build a cleaner, more resilient and affordable energy for all residents. Following a comprehensive 2012 Program Review, the RGGI states implemented a new 2014 RGGI cap of 91 million short tons. The RGGI CO2 cap then declines 2.5 percent each year from 2015 to 2020. The RGGI CO2 cap represents a regional budget for CO2 emissions from the power sector. The RGGI participating states have each chosen to auction nearly all CO2 allowances and to invest the proceeds in consumer benefit programs to build a clean energy economy. These investments reduce greenhouse gas emissions and generate important consumer benefits, including lower energy bills, greater electric system reliability, and more jobs.
- *Clean Energy Financing* – Because government cannot finance the State's energy transition alone, New York's policies are designed to animate markets and attract private capital to the clean energy economy.
 - *Clean Energy Fund (CEF)* – Invests capital to grow NY's clean energy economy, create jobs and spur growth. The CEF supports Governor Cuomo's aggressive Clean Energy Standard commitment that requires 50% of New York State's electricity come from renewable energy sources by 2030, reducing greenhouse gas emissions through increased efficiency and use of renewable energy. The CEF invests \$5 billion in state funds and leverages \$29 billion private funds for a projected \$39 billion in customer bill savings over the next 10 years. Additionally, the CEF intends to achieve 88 million MW of renewable energy and 133 million tons of CO2e reductions by 2025.
 - *NY Green Bank (NYGB)* – The NYGB is a \$1b State-sponsored finance entity accelerating clean energy deployment in New York State by working with the private sector to transform financing markets. This mission allows the organization to focus on collaborating with private sector developers, ESCOs, financiers, etc., on implementing solutions that overcome market barriers, and transforming financial markets to attract greater private sector investment in clean energy by enabling greater scale, new and expanded asset classes and increased liquidity. By addressing existing market barriers, NY Green Bank helps to ensure there is adequate, appropriately priced capital available, thereby incentivizing the wider scale deployment of clean energy projects within the State. Any transaction in which NY Green Bank is involved must result in reduced greenhouse gas emissions in the state and these efforts are publicly reported on and tracked in Transaction Profiles, Quarterly Reports and other public materials.

- *Clean Energy Standard.* – New York’s Clean Energy Standard (CES) is the most comprehensive and ambitious clean energy goal in the State’s history. The CES is designed to fight climate change, reduce harmful air pollution, and ensure a diverse and reliable low carbon energy supply. To help achieve these goals, the CES requires that 50 percent of New York’s electricity come from renewable energy sources such as solar and wind by 2030, with a progressive phase-in schedule starting in 2017. The CES creates two mechanisms to turn New York State’s ambitious clean energy goal into a reality. Together the renewable energy standard (RES) and the zero-emissions credit (ZEC) requirement will help create a low carbon energy system. The RES requires every load-serving entity (LSE) in New York State to procure renewable energy credits (RECs) associated with new renewable energy resources—known as Tier 1—for their retail customers. If LSEs cannot demonstrate they are meeting the Tier 1 obligation through the possession of RECs, they may make alternative compliance payments (ACPs). The ZEC requirement mandates the LSEs procure ZECs from NYSERDA. The number of ZECs is based on each LSE’s proportionate amount of statewide load, or energy demanded, in a given compliance year. The New York Generation Attribute Tracking System (NYGATS) will record and track information on electricity generated, imported, and consumed within New York State. Additionally, NYGATS will demonstrate LSE compliance with, and progress toward, the CES goal.
- *Offshore Wind* – Offshore wind is an essential renewable energy resource for New York State to achieve its GHG emission reduction goals under the Clean Energy Standard goal mandate that half of New York State’s electricity will come from renewable resources by 2030. New York has a goal of 2.4 GW (amounting to 1.25 million homes) of offshore wind to be installed by 2030, the largest in the nation. New York is currently developing a comprehensive state roadmap for advancing the development of offshore wind in a cost-effective and responsible manner. Targeted pre-development initiatives including in-field resource assessments, baseline environment studies, and site characterization, will reduce overall project and ratepayer costs for New York offshore wind sites. The data from this pre-development work will be disseminated to the market in order to reduce project risks and overall development costs and increase interest and competition to develop New York offshore wind sites at the lowest possible price. Initial data from this pre-development work will also be used to assist in identifying additional wind energy areas in the Offshore Wind Master Plan – these areas will not be noticeable from the shoreline. In addition to executing on the more than 20 studies and surveys, NYSERDA is reaching out to residents of Long Island and New York City, and other interested stakeholder groups to provide feedback in the development of the Master Plan. The Master Plan will recommend areas for the federal government to consider for future offshore wind development off New York’s Atlantic Coast, recommend measures that could be implemented with future offshore projects to mitigate any potential impacts, and recommend ways to purchase offshore wind energy to ensure the lowest costs to the ratepayer.
- *Renewable Heating and Cooling* – Contributes to the achievement of New York State’s greenhouse gas (GHG) emissions reduction goals targeting 40% reduction of GHG emissions by 2030, and 80% by 2050. This initiative directly begins to address the 32% of GHG emissions produced by direct thermal use. Thermal energy used in the residential and commercial sectors for space heating, hot water, and cooling accounts for 37% of net energy consumption and 32% of all combustion-based GHG emissions in the state. This first phase of Renewable Heating and Cooling initiatives will advance timely interventions focusing on reducing soft costs. This initiative will improve access to reliable information, support the development of a customer targeting tool to identify high potential sites, support local clustering of installations through community campaigns, and develop standardized contracts, data protocols and requirements, and quality assurance processes.
- *NY-Sun* – Provides long-term support to the statewide solar industry to help to create a self-sustaining solar market, and aims to help create a self-sustaining solar market in NY, adding 3,000 megawatts of solar capacity by 2023, the equivalent of serving 400,000 homes. To get there, NY-Sun has incentive programs that support solar projects for commercial and industrial companies, homes, multifamily buildings, small commercial, not-for-profit and municipal buildings. The K-Solar program helps schools install solar. The Affordable Solar program provides low-to-moderate income residents with assistance to develop solar projects. The Shared Solar program helps renters, residents who cannot put solar on their roofs, and others benefit from solar. The Solarize program helps communities buy in groups for the most competitive pricing. The State also continues to educate trainers for communities and governments and reduce “balance-of-system costs.” That includes streamlining the inspection and permitting process and reducing upfront costs of installation and equipment parts other than solar panels.

- *ChargeNY* – ChargeNY seeks to smooth the transition to a self-sustaining market for Personal Electric Vehicles (PEVs) in NYS. The program established a goal of 40,000 electric vehicles and 3,000 public charging stations by 2018. New York is offering electric car buyers the Drive Clean Rebate of up to \$2,000 for new purchases and can be combined with a Federal Tax Credit of up to \$7,500. NY also reimburses municipalities for electric vehicle purchases and investments in related infrastructure through the EPF in order to meet the ZEV MOU goal of putting 3.3m Zero Emission Vehicles on the road by 2025.
- *The Transportation and Climate Initiative (TCI)* – TCI is a regional collaboration of 11 Northeast and Mid-Atlantic states and the District of Columbia that seeks to develop the clean energy economy and reduce oil dependence and greenhouse gas emissions from the transportation sector. New York and other northeastern states working together through TCI announced they are seeking to develop a potential market-based approach for lowering carbon emissions from transportation. States have begun exploring the costs and benefits of potential emissions reduction strategies and alternative approaches to designing a market-based emissions reduction program.

- *Clean Energy Fund's Market Development Portfolio* – Seeks to reduce costs and accelerate customer demand for energy efficiency and other behind-the-meter clean energy solutions, and to increase private investment. This portfolio will provide financial support, technical knowledge, data, and education to customers and service providers to accelerate demand for clean energy solutions and will train an advanced workforce able to fill new jobs in the sector.
 - *RetrofitNY* – RetrofitNY is one example within the Market Development portfolio. Through RetrofitNY, NYSERDA seeks to develop a sustainable market for deep energy retrofits in multifamily buildings that are scalable and financeable. Starting with the affordable housing sector, NYSERDA will work with architecture and engineering firms, manufacturers, and construction entities to develop scalable technical solutions to enable the deep retrofit of occupied multifamily buildings to approach net-zero levels of energy performance. Substantially reducing the energy consumed by multifamily buildings will result in operational cost reductions for building owners, which will help preserve affordability for tenants. In addition, deep retrofits will deliver positive impacts on resiliency, tenant comfort and health. To facilitate the development and adoption of the technical solutions, NYSERDA will procure designs and test the best solutions through pilot activities, where design solutions will be refined. To enable large scale implementation of successful designs, NYSERDA will identify and address regulatory issues, facilitate the development of new private sector financing products, and work to develop the New York supply chain for high efficiency building components. RetrofitNY is funded through the CEF, with a budget of \$30 million over 10 years.
- *BuildSmart NY* – Buildsmart NY works to achieve a 20% energy efficiency improvement in State buildings by 2020. The goal is to not only save millions of dollars for taxpayers and create thousands of jobs but also reduce greenhouse gas emissions at the same time. From 2011 to 2016, it saved taxpayers \$131m and led to an 8% reduction in energy use intensity. This initiative has spurred positive, environmentally friendly changes by private sector companies across the state.

- *Methane Reduction Plan* – Methane accounts for 9% of New York State greenhouse gas emissions and is second to carbon dioxide in its contribution to climate change as a result of its high volume in the atmosphere and strong radiative effects. To reduce methane emissions, Governor Cuomo directed State agencies to develop proposals and policies to inventory emissions and identify strategies for methane capture and elimination. The Methane Reduction Plan is a framework to reduce emissions from the three sectors responsible for the majority of methane emissions as identified in the most recent New York State Greenhouse Gas Inventory: oil and gas, landfills, and agriculture. The plan contains recommendations to evaluate programs, policies, and regulatory actions for methane emission reductions throughout New York. This plan identifies ongoing work and directs new actions to reduce emissions and enhance accounting. Sector-specific actions are divided into oil and gas, landfill, and agriculture.
 - *Climate Resilient Farms Program* – The program is designed to develop strategies and support for New York farmers to improve resiliency and to incorporate GHG management—including carbon sequestration and methane reduction—as an on-farm resource objective to mitigate negative emissions impacts. Farms which use the Agricultural Environmental Management (AEM) Framework to plan and assess their environmental risks have historically only been able to receive funding through the Agricultural Non-Point Source program, for water concerns. This program fills those gaps, allowing farmers to proactively address risks due to the changing climate.

- *The Community Risk and Resiliency Act*, enacted in 2014, includes five major provisions.
 - Official Sea-Level Rise Projections requires DEC to adopt science-based sea-level rise projections into regulation.
 - Consideration of Sea-Level Rise, Storm Surge and Flooding- requires applicants for permits or specific program finding to demonstrate that future physical climate risk cause by sea-level rise, storm surge, and flooding have been considered. DEC must incorporate these factors into certain facility-siting regulations.
 - Smart Growth Public Infrastructure Policy Act Criteria- adds mitigation of risk due to sea-level rise, storm surge and flooding to the list of smart-growth criteria that must be considered by state public-infrastructure agencies.
 - Guidance on Natural Resiliency Measures- requires DEC, in consultation with DOS, to develop guidance on the use of natural resources and processes to enhance community resiliency.
 - Model local Laws Concerning Climate Risk- DOS, in conjunction with DEC, develops model of local laws that consider future risk of sea-level surge, storm surge, and/or flooding. Must be based on available data predicating likelihood of extreme weather events.
 - To meet its obligation, DEC is developing a State Flood Risk Management Guidance to inform state agencies as they develop program- specific guidelines for applicants to demonstrate consideration of sea-level rise, storm surge and flooding. Additionally, DEC hosted the first CRRRA public stakeholder update meeting in November of 2015 and these efforts have continued since. Additionally, all agencies will be producing agency-wide vulnerability assessments.