

## NY Under 2 MOU Appendix

### **Overview**

New York is the USA's fourth most populous state, its third largest economy and. New York has already been heavily impacted by climate change. Over the past four years, Superstorm Sandy, Hurricane Irene and Tropical Storm Lee all struck New York's communities, leaving destruction and heartbreak in their wake and exposing infrastructure vulnerabilities to the new normal of extreme weather. These storms alone cost U.S. taxpayers over \$237 billion.<sup>1</sup> Since then, New York has endured unprecedented flooding and record-breaking snowfall.

In light of these trends, 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.

Regionally, New York participates in the country's only regional cap and trade system, the Regional Greenhouse Gas Initiative (RGGI), and is leading a multi-state effort to develop Offshore Wind at scale. And within New York, the State has already reduced greenhouse gas emissions from power plants by 45 percent while growing the economy by eight percent, received recognition as the most energy-efficient state in the US, and witnessed a 300% growth in solar since 2011, twice the national average. And as of 2014, 25% of New York's electricity came from renewable sources.

To ensure continued progress towards the State's 80-by-50 emission target, the 2015 State Energy Plan established a 40-by-30 interim emissions reduction target for the energy sector and identified a suite of new clean energy initiatives to ensure progress toward that goal.

### **Actions and Commitments**

Greenhouse gas emission and clean energy targets: In addition to the 80-by-50 economy-wide target, New York's 2015 State Energy Plan includes three 2030 interim clean energy goals for the energy sector: reducing emissions by 40%, ensuring 50% of electricity generation comes from renewables, and achieving a 23% increase in statewide energy efficiency. These goals are an integral component of the Reforming the Energy Vision (REV) strategy, which will seek clean energy outcomes through reformed industry regulations and clean energy programs that are designed to animate the marketplace for clean energy.

Cleaner electricity: Under REV, New York is pursuing a number of strategies to advance clean energy deployment. These include groundbreaking regulatory action, innovative

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<sup>1</sup> Cost of the 4 storms: 2014 NOAA Billion Dollar Disasters <https://www.ncdc.noaa.gov/billions/events>

clean energy programs, and infrastructure investments that lead by example in the transition to a clean energy future.

Relevant regulatory policies include RGGI, which will reduce regional power plant emissions 50% from 2005 levels by 2020, the REV proceeding to integrate clean energy into the core of the utility system and energy business model, and state emission standards that require all new power plants to be low-emitting. Innovative programs include the \$1 billion NY-Sun initiative to support a 3 GW self-sustaining solar market in New York by 2023, the Renewable Portfolio Standard Main Tier auctions to support large-scale renewable resources like wind and hydro-electric power, and Renewable Heat NY to advance cleaner thermal technologies throughout the State. Furthermore, New York is leading by example by deploying renewable energy on public property – including at the largest state-run university system in the United States – and by helping public schools go solar through the State’s K-Solar program.

More efficient energy use: Reducing energy consumption is a key piece of the State Energy Plan and REV, with a goal of reducing all building energy consumption 23% from 2012 levels by 2030. State agencies are leading by example as a part of Governor Andrew Cuomo’s 2012 Executive Order 88, BuildSmart NY, to reduce the average energy use intensity of State-owned and managed buildings by at least 20% from a 2010 baseline by 2020. This program has already saved taxpayers over \$100 million in energy costs. Furthermore, by adopting the most progressive national building energy codes and through additional programs targeting homes, businesses, farms, low-to-moderate income communities, and municipal operations, the State is ensuring that all New Yorkers enjoy the benefits of greater energy efficiency.

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. New initiatives include the nation’s largest green bank, a \$1 billion investment fund that partners with private banks and project developers to accelerate deployment of clean energy, and redesigned programs that leverage greater private investment.

Reduced transportation emissions: New York State’s high ranking for energy efficiency is in part due to being the most transportation fuel-efficient state in the US. New York has made great strides toward building the clean transportation system of the future, going from less than a dozen EV charging stations in 2010 to over 1,200 today, and seeing a 10-fold rise in registered EVs in just the last two years. Looking forward, the ChargeNY initiative aims to accommodate more than 30,000 plug-in electric vehicles by 2018 and 1 million by 2025. New York is one of eight states that have jointly committed to having at least 3.3 million ZEVs operating on their roadways by 2025.

New York also participates in the Transportation Climate Initiative (TCI), which provides policy analysis to guide the transition to clean transportation, and New York is working with other states in the region to develop - regional market-based solutions for cutting

carbon from transportation. As part of its broader climate and energy efforts, the State is developing data on fuel carbon intensity to inform new policies aimed at driving down fossil fuel consumption in vehicles and capturing the economic benefits of reduced reliance on petroleum.

Community empowerment: Communities are the heart of New York and will play a central role in the REV strategy by serving as entry points for widespread adoption of clean energy. Since 2009, more than 160 municipal governments in New York, covering 6.4 million residents, have voluntarily joined Climate Smart Communities, a program that helps municipalities reduce greenhouse gas emissions and prepare for climate change. A complementary program, the Five Cities Energy Plans, aims to reduce energy consumption in the State's major metropolitan areas outside of New York City.

Through the Governor's Cleaner Greener Communities program, \$100 million has been made available on a competitive basis to local governments to plan for and implement projects that reduce emissions and grow the clean energy economy, including energy efficiency, renewables, and clean transportation projects. Going forward, REV will maintain New York's emphasis on communities and local governments by encouraging them to enact smart and cost-effective clean energy policies, for instance by providing them with tools to implement benchmarking programs, green municipal fleets, or convert streetlights to high-efficiency LEDs.

Natural resources and waste: The Climate Resilient Farms 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. The State's Open Space Conservation, Wildlife Action, and Forest Action Plans all incorporate climate change into the State's strategic planning for natural resources and conservation. New York was also one of the earliest adopters of recycling legislation in 1988. The State has built on this record with measures to reduce plastic bag waste and hazardous industrial waste. The Electronic Equipment Recycling and Reuse Act requires manufacturers to take responsibility for the recycling and safe disposal of their products.

Resilience: The Community Risk and Resiliency Act, enacted in 2014, calls for the adoption of official sea level rise projections and consideration of sea level rise, storm surge, and flooding in certain state permitting and funding programs, including the State's Smart Growth Public Infrastructure Policy Act. In 2015, Governor Cuomo introduced the NY Responds emergency preparedness initiative and committed state agencies to conduct vulnerability assessments of their assets and services. Lastly, the NY Prize initiative has awarded over 80 feasibility studies to communities seeking to install community-based microgrids that would serve critical facilities and enhance local resiliency during extreme weather events.