### **NYSERDA**

# 21 NYCRR Part 507, CO<sub>2</sub> Allowance Auction Program

## Regulatory Impact Statement

## INTRODUCTION

The Regional Greenhouse Gas Initiative (RGGI) is a cooperative, historic effort among New York and nine Participating States<sup>1</sup> and is the first mandatory, market-based carbon dioxide (CO<sub>2</sub>) emissions reduction program in the United States. Since its inception in 2008, RGGI has utilized a market-based mechanism to cap and cost-effectively reduce emissions that cause climate change. Recently, New York along with the Participating States completed a comprehensive program review and announced a proposal to lower the regional emissions cap established under RGGI to approximately 75 million tons in 2021, declining 3.0 percent a year through 2030.<sup>2</sup> Accordingly, New York and the then-Participating States committed to propose revisions, pursuant to state-specific regulatory processes, to their respective CO<sub>2</sub> Budget Trading Programs to further reduce CO<sub>2</sub> emissions from power plants in the region. To implement the updated RGGI program in New York State, the New York State Energy Research and Development Authority ("NYSERDA" or the "Authority") propose revisions to the CO<sub>2</sub> Allowance Auction Program as set forth in Part 507, which are designed to complement revisions proposed by the Department of Environmental Conservation (Department) to 6 NYCRR Part 242, CO<sub>2</sub> Budget Trading Program (the Program) and 6 NYCRR Part 200, General Provisions.

The CO<sub>2</sub> Budget Trading Program is designed to allocate CO<sub>2</sub> emissions allowances ("Allowances") to an Energy Efficiency and Clean Energy Technology Account ("Account"), which has been established and is administered by the Authority under this Part 507. The Program revisions proposed by the Department include

<sup>&</sup>lt;sup>1</sup> In addition to New York, the RGGI Participating States include: Connecticut, Delaware, Maine, Maryland, Massachusetts, New Hampshire, New Jersey, Rhode Island, and Vermont. As discussed further below, additional states, including Pennsylvania and Virginia, have expressed interest in potentially becoming RGGI Participating States.

<sup>&</sup>lt;sup>2</sup> The Participating States released the Updated Model Rule on August 23, 2017. The Participating States also released Principles to Accompany Model Rule Amendments on December 19, 2017.

revisions that will modify the functions of the CO<sub>2</sub> Allowance Auction Program. In order to continue its role in complementing the Program, the Authority proposes revisions to Part 507 to incorporate the relevant proposed changes to the Program.

Specifically, the Authority proposes the addition of sections 507.2(f), (g) and (n), and 507.6(g) to provide for the Authority's implementation of the CO<sub>2</sub> Allowance Auction Program, by incorporating a revised version of the Cost Containment Reserve ("CCR") as proposed by the Department, in a manner that will complement the revised Program.

Additionally, NYSERDA proposes the addition of sections 507.2(h) and (i), and 507.6(h) to provide for the Authority's implementation of the revised Program, which includes the Emissions Containment Reserve (ECR), a tool that will help secure additional emissions reductions if prices fall below established ECR trigger prices. The ECR will only be triggered, and allowances withheld from auctions, if CO<sub>2</sub> emission reduction costs are lower than projected. The states implementing the ECR will withhold up to 10 percent of their respective annual base budgets per year. The ECR trigger price will start at \$6.00 in 2021 and will increase by seven percent each year thereafter.

New York intends to continue to participate in uniform regional auctions for the allowances that it will be offering for sale. As part of the regional auction process, New York and the Participating States will continue to follow specific design elements for: reserve price; auction structure and format; allowance sale schedule; level of participation; treatment of unsold allowances; notice of auctions; monitoring; and auction results. Additional details and rules for each regional CO<sub>2</sub> allowance auction are provided in the Auction Notice issued by New York and the Participating States for each auction.

The recently-enacted Climate Leadership and Community Protection Act (Climate Act)<sup>3</sup> establishes Statewide GHG emission reduction requirements and renewable and clean energy generation targets. In particular, Environmental Conservation Law (ECL) Section 75-0107, which was added by the Climate Act, requires a 40

<sup>&</sup>lt;sup>3</sup> Chapter 106 of the Laws of 2019.

percent reduction in Statewide GHG emissions from 1990 levels by 2030, and an 85 percent reduction by 2050. Moreover, Public Service Law Section 66-p, which was also added by the Climate Act, establishes a target to generate 70 percent of the State's electricity from renewable energy sources by 2030, and to generate 100 percent of the State's electricity from carbon-free sources by 2040. The proposed revisions to the Program, including the additional reduction in the RGGI CO<sub>2</sub> emissions cap and the establishment of the ECR, further the objectives of the Climate Act. Finally, the Climate Act also includes multiple provisions that recognize that historically disadvantaged communities often suffer disproportionate and inequitable impacts from climate change. The proposed revisions to the Program to expand its applicability to include certain smaller sources, many of which are located in such communities, are consistent with these provisions of the Climate Act.

Auction proceeds will continue to support additional GHG emission reductions through investments in energy efficiency, renewable and clean energy and innovative carbon-abatement technologies, as guided by the RGGI Operating Plan.<sup>4</sup> The Authority's regulations established the Advisory Group of stakeholders, which will continue to represent a broad array of energy and environmental interests, to provide advice on how best to utilize auction proceeds to implement the goals of the Program of reducing CO<sub>2</sub> emissions in the most economically-efficient manner with the least cost to electricity consumers. The Operating Plan will continue to be reviewed and revised on an annual basis and the Advisory Group will convene to provide input.

The Authority therefore proposes a revision to 21 NYCRR 507.4(d) to incorporate the directives of the Climate Act into the definition of the Account, to allow the Authority to use the proceeds of the CO<sub>2</sub> Allowance Auctions to fund and promote programs that are consistent with the Climate Act, including a goal for disadvantaged communities to receive 40%, and no less than 35%, of the overall benefits from the investment of the proceeds.

The proposed revisions to the CO<sub>2</sub> Allowance Auction Program also include minor revisions and updates

<sup>&</sup>lt;sup>4</sup> New York State Energy and Research Development Authority (NYSERDA). New York State's Regional Greenhouse Gas Initiative Investment Plan. 2018 Operating Plan. Final Report' December 2018. <a href="https://www.nyserda.ny.gov/-/media/Files/EE/RGGI/2018-rggi-operating-plan.pdf">https://www.nyserda.ny.gov/-/media/Files/EE/RGGI/2018-rggi-operating-plan.pdf</a>

to all references.

## STATUTORY AUTHORITY

The statutory authority to revise the CO<sub>2</sub> Allowance Auction Program to add a revised cost containment reserve, an emissions containment reserve, and to revise the purposes for which the Authority may use proceeds from the CO<sub>2</sub> Allowance Auction Program springs from Title 9 of article 8 of the Public Authorities Law ("PAL"), and from the newly enacted Climate Act.

Public Authorities Law (PAL). The proposed revisions to the CO<sub>2</sub> Allowance Auction Program are designed to allocate the CO<sub>2</sub> allowances (including CCR allowances) to the Energy Efficiency and Clean Energy Technology (EE&CET) Account, which was created and will continue to be administered by the Authority. The Authority will continue to administer the EE&CET Account so that CO<sub>2</sub> allowances will be sold in a transparent allowance auction or auctions and the proceeds of the auction or auctions will be used to promote and reward investments in energy efficiency, renewable or non-carbon emitting technologies, and/or innovative carbon emissions abatement technologies with significant carbon reducing potential. These investments will continue to be designed to further the GHG emission reduction objectives of the Program.

The proposed Program revisions will retain the CCR which will help provide additional flexibility and cost containment. The Authority will ensure that the CCR allowances will be released at auctions if the CCR price is triggered. The CCR trigger price is \$10.77 in 2020 and increases to \$13.00 beginning in 2021. Each year after 2021 the CCR trigger price will increase by seven percent. If the trigger price is reached, up to 10 million additional CCR allowances will be available for purchase at auction in 2020. Beginning in 2021, instead of the 10 million additional CCR allowances, the maximum amount of allowances available under the CCR will be reduced, so that up to 10 percent of the regional base budgets of additional CCR allowances will be available for purchase at auction if the CCR trigger price is reached. The proposed Program revisions will also create the ECR, which will help provide additional market stability and further CO<sub>2</sub> emission reductions if emission reduction costs are lower than projected. The Authority will withhold up to 10 percent of New York's annual base budget

per year if the ECR is triggered. The ECR trigger price will start at \$6.00 in 2021 and will increase by seven percent each year thereafter.

The Authority currently administers energy efficiency and clean technology programs funded by the EE&CET allocation pursuant to its authority under PAL Section 1854 and Title 9-A of Article 8 of the PAL, and will continue to do so under the proposed revisions to the Program. Section 1854 states that "the purposes of NYSERDA shall be to develop and implement new energy technologies consistent with economic, social and environmental objectives, to develop and encourage energy conservation technologies."

Title 9-A establishes the green jobs - green New York program for the purposes of promoting energy efficiency, energy conservation and the installation of clean energy technologies; reducing GHG emissions; supporting sustainable community development; creating green job opportunities, including opportunities for new entrants into the State's workforce, the long-term unemployed and displaced workers; and using innovative financing mechanisms to finance energy efficiency improvements through energy cost savings. The green jobs – green New York program is funded through appropriation from the RGGI allowance auction proceeds.

"Energy conservation technologies" are defined in PAL Section 1851(11) as "all methods of conserving energy, of improving the efficiency of energy utilization and of preserving and protecting the environment...in connection with the use of energy." PAL Section 1891(12) defines "qualified energy efficiency services" and provides a list of qualified measures that are eligible for funding under the Program.

NYSERDA's authority under PAL Section 1854 includes the following:

"1. Research, development and demonstration. To conduct, sponsor, assist and foster programs of research, development and demonstration in new energy technologies including but not limited to: energy conservation; production of power from new sources with emphasis on renewable energy sources such as solar, wind, bioconversion and solid waste; storage of energy with emphasis on inertial and battery storage; conversion

and/or technological improvement of facilities now utilizing nuclear fission energy and fossil fuel energy technologies; transmission and distribution of power; and conversion of energy and improvements of efficiencies of such conversion, including the power after assessing and taking into account environmental considerations thereof, to establish, acquire, operate, develop and manage facilities therefor."

- "2. The provision of services. To provide services required for the development and use of new energy technologies and related methods by the industrial, commercial, medical, scientific, public interest, educational and governmental organizations within the state, including the power to establish, acquire and develop facilities therefore not otherwise available within the state, and to operate and manage such facilities."
- "11. To advise and assist the governor and legislature in the development and implementation of state policies relating to energy and energy resources."
- "18. To provide for the deposit of all or a portion of the proceeds collected by the authority from the auction or sale of emissions allowances allocated by the department of environmental conservation to the authority pursuant to regulations adopted by the department of environmental conservation to a green jobs-green New York fund to be established in the custody of the commissioner of taxation and finance. The monies in such fund shall be available for the green jobs-green New York program pursuant to title nine-A of article eight of this chapter."

This authority allows NYSERDA to continue to administer the EE&CET Account so that the proceeds of the auctions can be used to promote and reward investments in energy efficiency, renewable or non-carbon-emitting technologies, and/or innovative carbon emissions abatement technologies with significant carbon reduction potential and similar energy conservation technologies. The stated purposes of the EE&CET Account are consistent with NYSERDA's authority to conduct, sponsor and assist programs related to new energy technologies and qualified energy efficiency services and to provide services related to their development.

PAL Section 1855. The general powers that are relevant to NYSERDA's authority to administer the EE&CET Account to promote and reward investments in energy efficiency, renewable or non-carbon-emitting

technologies, and/or innovative carbon emissions abatement technologies with significant carbon reduction potential, and to sell allowances (including CCR allowances) in a transparent auction are also set forth in PAL Section 1855. NYSERDA's authority under Sections 1854 and 1855 enables it to accept and sell the allowances and utilize the proceeds to promote and reward investments related to energy conservation technologies similar to the stated purposes of the EE&CET Account. NYSERDA's authority to auction the CO<sub>2</sub> allowances and CCR allowances, as well as to withhold ECR allowances if the ECR is triggered, is enumerated in their powers:

"10. To enter into any contracts and to execute all instruments necessary or convenient for the exercise of its corporate powers and the fulfillment of its corporate purposes under this title."

"14. To accept any gifts or grants or loans of funds or property or financial or other aid in any form from the federal government or any agency or instrumentality thereof or from the state or from any other source and to comply, subject to the provisions of this title, with the terms and conditions thereof."

"17. To do all things necessary or convenient to carry out its corporate purposes and exercise the powers given and granted by this title."

In addition, the Climate Act names the Authority as a member and co-chair of the Climate Action Council, which is to develop a scoping plan designed to ensure the attainment of the greenhouse gas emissions limits imposed by the Climate Plan.

#### LEGISLATIVE OBJECTIVES

The legislation in place, including both the PAL and the Climate Act, make clear that the proposed revisions are well within the Authority's statutory objectives. The regulatory flexibility provided under the revisions to the Program and revisions to the CO<sub>2</sub> Budget Trading Program, including the CCR and Offset provisions, helps to ensure continued reliability and adequacy of the State's electricity supply, assists in the furtherance of public health, and is necessary for continued industrial development and preservation of physical property.

## Stakeholder Outreach

The Participating States initiated the most recent program review in the fall of 2015, with the announcement of the first stakeholder meeting and concluded the process in August 2017. The Participating States and RGGI Incorporated (RGGI, Inc.)<sup>5</sup> conducted more than a dozen stakeholder meetings and webinars during this period, during which they obtained public input on a number of program elements. Prior to each stakeholder meeting, agency staff and RGGI, Inc. distributed pertinent written material to the over 250 participants on the list serve and posted meeting documents on the RGGI, Inc. website. The stakeholder meetings were open to the public and all interested parties were encouraged to provide comment. All stakeholder comments were ultimately considered in the development of the Draft Updated Model Rule, which contained detailed model regulatory text, and was released to the stakeholders for comment on August 23, 2017. On December 19, 2017, the Participating States released the final version of the Updated Model Rule, which contained additional updates based on stakeholder feedback received on the Draft Updated Model Rule.

New York conducted an in-state stakeholder process designed to provide updates on the status of the regional process and to afford additional opportunity for New York's stakeholders to provide comment. The Department held stakeholder meetings and sent list-serve notices to New York stakeholders announcing regional meetings and webinars. The input provided by stakeholders during both the regional and in-state processes have been considered and incorporated by the Department in developing the proposed revisions to the Program.

#### **NEEDS AND BENEFITS**

## Introduction

Mitigating the impacts of a changing climate represents one of the most pressing environmental challenges for the State, the nation and the world. Extensive scientific data demonstrates the need for immediate worldwide action to reduce emissions from burning fossil fuels and supports the conclusion that great benefits will accrue if

<sup>&</sup>lt;sup>5</sup> RGGI, Inc. is a 501(c)(3) non-profit corporation created to provide technical and administrative services to the Participating States.

fossil fuel-fired emissions are reduced through programs like RGGI.

There is clear scientific consensus that anthropogenic emissions of CO<sub>2</sub> are contributing to the observed warming of the planet as presented in the Fifth Assessment Report of the Intergovernmental Panel on Climate Change. The large and persuasive body of research demonstrates through unequivocal evidence that the Earth's lower atmosphere, oceans, and land surfaces are warming; sea level is rising; and snow cover, mountain glaciers, and Greenland and Antarctic ice sheets are shrinking. The Earth's climate is changing, with adverse consequences already well documented across the globe, in our nation and in the State. Extreme heat events are increasing and intense storms are occurring with greater frequency. Many of the observed climate changes are beyond what can be explained by natural variability of the climate. The series of the climate of the climate of the climate.

The New York climate has already begun to change, gradually taking on the characteristics of the climate formerly found in locations south of New York. The need for the reduction of CO<sub>2</sub> emissions, including through the reduced emissions cap, budget adjustment, and establishment of the ECR, is clearly supported by numerous direct impacts that have been observed in New York State and presented in the 2011 New York State ClimAID assessment<sup>9</sup> and the 2014 update to ClimAID.<sup>10</sup>

The 2011 New York State ClimAid assessment and 2014 update also examined how sea level rise, changes in precipitation patterns, and more frequent severe weather conditions will affect New York's economy, environment, community life and human health. Predictions of these future impacts associated with emissions in New York further support the need for continued administration of the CO<sub>2</sub> Budget Trading Program and the EE&CET Account, the proceeds of which will be used for programs designed to reduce GHG emissions, increase

<sup>&</sup>lt;sup>6</sup> IPCC WGI Fifth Assessment Report, Climate Change 2013: The Physical Science Basis, September 2013, and available at: <a href="http://www.ipcc.ch">http://www.ipcc.ch</a>.

<sup>&</sup>lt;sup>7</sup> Ibid.

<sup>&</sup>lt;sup>8</sup> Ibid.

<sup>&</sup>lt;sup>9</sup> Rosenzweig, C., W. Solecki, A. DeGaetano, M. O'Grady, S. Hassol, P. Grabhorn (Eds.) 2011. 'Responding to Climate Change in New York State: The ClimAID Integrated Assessment for Effective Climate Change Adaptation'. New York State Energy Research and Development Authority (NYSERDA). <a href="http://www.nyserda.ny.gov/climaid">http://www.nyserda.ny.gov/climaid</a>

<sup>&</sup>lt;sup>10</sup> Horton, R., D. Bader, C. Rosenzweig, A. DeGaetano, and W. Solecki. 2014. Climate Change in New York State; Updating the 2011 ClimAID Climate Risk Information, New York State Energy Research and Development Authority (NYSERDA), Albany, New York.

renewable energy resources, and assist historically disadvantaged communities disproportionately affected by climate change.

The Authority will continue to prepare quarterly status reports that will include: a summary of program activities and implementation; an estimate of program benefits; and an accounting of program costs and expenditures associated with the actual receipt of proceeds through that point in time. The last quarterly progress report of the year also serves as an annual evaluation and status report. The annual report will also provide information on the geographic distribution of Program funding and benefits across the State.

The report for the quarter ending December 31, 2018 reflects benefits associated with spending through that date. The table below illustrates the estimated cumulative annual benefits (as of December 2018) at the portfolio and program levels from all currently operational projects installed since the start of the existing Program. These metrics, prepared by the Authority's Program evaluation and implementation staff, represent the State's best estimate of Program benefits to date and are adjusted over time as individual programs are evaluated and results are adjusted based on those evaluation studies.

Summary of Cumulative Annualized Portfolio Benefits through December 31, 2018<sup>11</sup>

Benefits	Results through December 2018
Net Greenhouse Gas Emission Savings <sup>1</sup> (Annual Tons	1,054,532
$CO_{2e}^2$ )	
Net Electricity Savings (Annual MWh)	1,283,897
Renewable Energy Generation (Annual MWh)	318,680
Net Natural Gas Savings (Annual MMBtu)	(474,794)
Net Fuel Oil Savings (Annual MMBtu)	1,607,010
Net Propane Savings (Annual MMBtu)	33,353

<sup>&</sup>lt;sup>11</sup> New York State Energy and Research Authority, "New York State Regional Greenhouse Gas Initiative-Funded Programs Status Report," Quarter Ending December 31, 2018. <a href="https://www.nyserda.ny.gov/About/Publications/Program-Planning-Status-and-Evaluation-Reports/RGGI-Reports">https://www.nyserda.ny.gov/About/Publications/Program-Planning-Status-and-Evaluation-Reports/RGGI-Reports</a>

Net Steam Savings (Annual MMBtu)	21,813
Net Wood Savings (Annual MMBtu)	13,557
Net Kerosene Savings (Annual MMBtu)	9,053
Net Gasoline Savings (Annual MMBtu)	118,428
Net Residual Oil Savings (Annual MMBtu)	1,501,789
Net Diesel Savings (Annual MMBtu)	-
Net Coal Savings (Annual MMBtu)	234,940
Total Fuel Savings (Annual MMBtu)	3,065,149
Annual Energy Bill Savings to Participating Customers	
(\$ Million)	293

These emission reductions are associated with both electric and fossil-fuel saving measures. Under a cap-and-trade system, the total number of emission allowances is determined by regulation. Regulated entities can purchase allowances and collectively emit up to the cap that is currently in place. Therefore, in the near term, electric efficiency projects may not decrease the overall amount of emissions going into the atmosphere. However, electric efficiency projects will reduce end users' responsibility or footprint associated with emissions from electricity production.

NYSERDA projects the lifetime savings of the cumulative values in the table to result in expected fuel savings of 62,466,470 MMBtu; electricity savings of 17,446,470 MWh; bill savings of \$6,062.6 million; and Page 11 of 12

<sup>&</sup>lt;sup>2</sup> CO<sub>2</sub>e stands for carbon dioxide equivalent and describes the amount of CO<sub>2</sub> that would have the same global warming potential as a given mixture of gases based on factors published by the Intergovernmental Panel on Climate Change.

CO<sub>2e</sub> emission reductions of 20,762,489 tons. The annual values were converted to lifetime savings by including all operational projects, projects under a signed contract, and projects with an application received that are not yet operational. The Program portfolio also results in non-energy benefits. For instance: Program funds have been used since March 2017 to issue over 12,000 rebates to consumers who purchased a qualify electric vehicle.

COSTS The costs to regulated parties and to the Authority are not expected to rise due to the proposed revisions to the CO<sub>2</sub> Budget Trading Program. The revisions will be incorporated into the current auction process without difficulty, will not require increases to staffing levels, and will not create administrative costs for auction participants.

## LOCAL GOVERNMENT MANDATES

This is not a mandate on local governments. The revised Program will continue to apply equally to any entity that owns or operates a subject source.