

# 2020 Regional Greenhouse Gas Initiative Annual Report

---

## Report to the Legislature from the Public Service Department

January 15, 2021

This Report was prepared pursuant to 30 V.S.A. § 255(e) which states:

On or before January 15 of each year, commencing in 2007, the Department of Public Service in consultation with the Agency of Natural Resources and the Public Utility Commission shall provide to the House Committees on Commerce and Economic Development, on Energy and Technology, and on Natural Resources, Fish, and Wildlife and the Senate Committees on Finance and on Natural Resources and Energy a report detailing the implementation and operation of RGGI and the revenues collected and the expenditures made under this section, together with recommended principles to be followed in the allocation of funds.

### Background & Overview of the Regional Greenhouse Gas Initiative

The Regional Greenhouse Gas Initiative (RGGI) is a cooperative effort by ten Northeastern and Mid-Atlantic states (Connecticut, Delaware, Maine, Maryland, Massachusetts, New Hampshire, New Jersey, New York, Rhode Island, and Vermont) to reduce carbon dioxide emissions – a greenhouse gas that contributes to global climate change – from electricity generation. Central to this initiative is the implementation of a multi-state cap-and-trade program with a market-based emissions trading system. The RGGI program requires fossil fuel fired electric generating units with a nameplate capacity of 25 MW or larger to purchase and retire allowances equal to the amount of CO<sub>2</sub> emitted by the unit. Regionally, RGGI-affected units account for approximately 95% of the CO<sub>2</sub> emissions from in-region fossil fuel generation. The RGGI “CO<sub>2</sub> Emissions from Electricity Generation and Imports in the Regional Greenhouse Gas Initiative: 2017 Monitoring Report<sup>a</sup>” shows that in 2017, CO<sub>2</sub> emissions from RGGI affected units accounted for 94.7% of emissions from all RGGI region fossil generation. In 2015 it was 96%, and in 2016 it was 95.7%. In Vermont, there are two facilities subject to this program – the City of Burlington Electric Department’s Lake Street/Penny Lane facility, and Green Mountain Power Corporation’s Berlin 5 facility.

Vermont committed to participate in RGGI in 2007 when then Governor Douglas signed the RGGI Memorandum of Understanding (MOU) along with the governors of the other participating states. The Vermont Legislature then enacted statutory provisions to implement the RGGI program in Vermont. Both 30 V.S.A. § 255 and the RGGI MOU directed the

---

<sup>a</sup> [https://www.rggi.org/sites/default/files/Uploads/Electricity-Monitoring-Reports/2017\\_Elec\\_Monitoring\\_Report.pdf](https://www.rggi.org/sites/default/files/Uploads/Electricity-Monitoring-Reports/2017_Elec_Monitoring_Report.pdf)

Public Utilities Commission (PUC) and the Agency of Natural Resources (ANR) to participate in the RGGI program.

The RGGI states individually decide how to distribute CO<sub>2</sub> allowances, with most of the allowances sold through the quarterly centralized auctions. Vermont sells nearly all its allotment of allowances through the auction and allocates the net proceeds from the sale of allowances to fund Vermont programs that promote thermal energy and process fuels efficiency services. Proceeds from the sale of allowances are deposited into the Electrical Efficiency Fund pursuant to 30 V.S.A. § 209(e)(1)(B).

## Auction Results for 2020

### CO<sub>2</sub> Allowance Auction Results - All Participating States, 2020

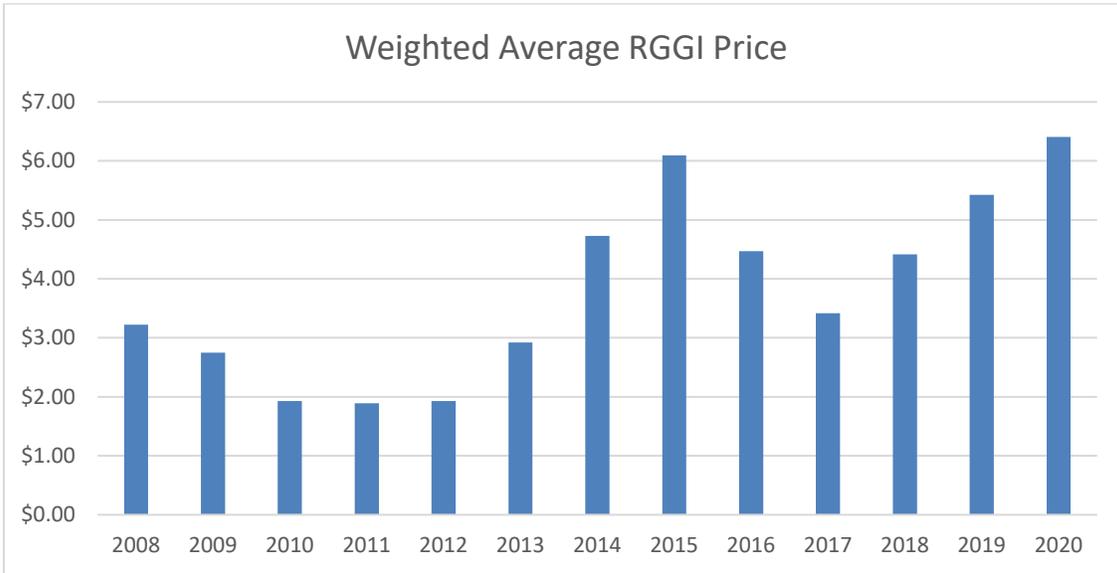
Auction Number	Auction Format	Quantity Offered	Quantity Sold	Clearing Price
47	Sealed Bid - Uniform Price	16,208,347	16,208,347	\$5.65
48	Sealed Bid - Uniform Price	16,336,298	16,336,298	\$5.75
49	Sealed Bid - Uniform Price	16,192,785	16,192,785	\$6.82
50	Sealed Bid - Uniform Price	16,237,495	16,237,495	\$7.41
Total				\$6.41 <sup>[1]</sup>
<sup>[1]</sup> Weighted Average Price				

### CO<sub>2</sub> Allowance Auction Results - Vermont, 2020<sup>b</sup>

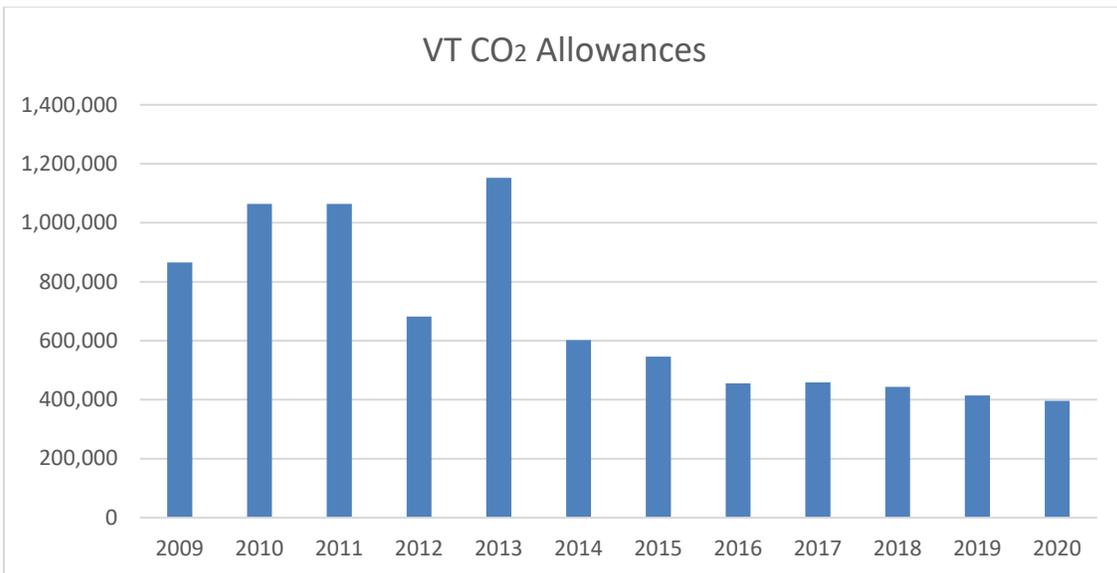
Auction Number	Quantity Sold	Clearing Price	Total Proceeds
47	99,127	\$5.65	\$560,068
48	99,126	\$5.75	\$569,975
49	99,126	\$6.82	\$676,039
50	99,126	\$7.41	\$734,524
Total		\$6.41 <sup>[1]</sup>	\$2,540,605
<sup>[1]</sup> Weighted Average Price			

<sup>b</sup> Detailed auction results <https://www.rggi.org/Auctions/Auction-Results/Prices-Volumes>

In sum, Vermont participated in four market-based auctions for carbon allowances in 2020 and sold almost 397,000 allowances for a total of more than \$2.54 million.



The weighted average price of the allowances in 2019 was \$5.43, in 2020 the price was \$6.41, this resulted in a \$289,529 increase in revenue from 2019 to 2020 despite a slightly lower number of Vermont allocations being offered in the market.



As described in previous reports the RGGI market was redesigned, in part, to reduce the total number of allowances in circulation, which resulted in an increase in the individual

allowance price. This caused a spike in revenue in 2015 which has since corrected to the current levels, averaging approximately \$2.0 million per year for the past three years.

### Disbursement of Vermont 2020 RGGI Proceeds

Total Proceeds	\$2,540,605
Administrative Costs	\$20,282.37 <sup>c</sup>
Trustee Costs	\$4,000
<hr/>	
Net Proceeds	\$2,516,322.63

Pursuant to statute and the PUC’s January 10, 2019, Order<sup>d</sup>, ANR and the Department of Public Service (“Department”) can request that appropriate and reasonable administrative costs associated with their administration of RGGI be paid from the auction proceeds. In addition, ANR and the Department may request funds to “stimulate or support investment in the development of innovative carbon emissions abatement technologies that have significant carbon reduction potential.”

To date, ANR has requested and received PUC approval for reimbursement for administrative costs directly related to RGGI participation, including staff time and travel, totaling \$20,282.37 from auctions 47 through 49. No request has yet been made for reimbursement from auction 50; however, the Department understands that a request of less than \$3,000 (based on prior requests) will be forthcoming from ANR. The remaining balance of approximately \$2.51 million will be deposited into the Electrical Efficiency Fund from the 2020 auctions. No changes are recommended at this time in the allocation of funds.

### Voluntary Renewable Set-aside Program

The PUC’s January 10, 2019, Order<sup>e</sup> governs the Vermont voluntary renewable set-aside program for RGGI. The set-aside for voluntary renewable programs is available to programs offered by Vermont electric utilities and other qualifying entities that purchase and retire renewable energy credits (RECs) on behalf of Vermont customers. An applicant may submit a written request to the PUC to retire a specified number of CO<sub>2</sub> allowances in the voluntary purchase set-aside account.

The PUC did not receive any requests to retire allowances in 2020.

---

<sup>c</sup> Represents only administrative costs for auctions 43 through 45.

<sup>d</sup> 2018 updates to the Regional Greenhouse Gas Initiative auction procedures for Vermont, Case No. 18-4145-INV, Order of 1/10/19. The PUC’s Order updated the State’s procedures for RGGI auctions consistent with RGGI’s 2017 Model Rule.

<sup>e</sup> *Id.*

## **Program Review and New Participating States**

The nine states participating in RGGI during the last comprehensive program review completed that review in late 2017 and released a revised Model Rule in early 2018. The Emissions Containment Reserve, a mechanism to automatically reduce the number of allowances offered at auction if allowance prices are low, was incorporated into the revised Model Rule and becomes effective in the March 2021 auction. The participating states agreed to initiate the next comprehensive program review in 2021.

Regarding new participating states, New Jersey re-established their RGGI program and participated in all four 2020 auctions. Additionally, Virginia has completed promulgation of their regulation and will participate in the auctions starting in March 2021. Finally, Pennsylvania Governor Wolf issued an executive order in October 2019 directing development of draft RGGI-compatible carbon trading regulations for the state by July 2020. Pennsylvania is in the process of promulgating their regulation and anticipates commencing their participation in 2022.

The upward trend in auction clearing prices in 2020 indicates that the cumulative impact of these changes should result in an overall increase in regional revenue and resultant revenue associated with Vermont's allowances. The electricity market in general and the RGGI allowance market in particular have remained relatively stable through the COVID-19 pandemic, unlike other energy markets such as those for transportation fuels. However, as this is a market-based program, revenues could vary either up or down as a result of factors outside of the control of RGGI.