



JANET T. MILLS  
GOVERNOR

STATE OF MAINE  
DEPARTMENT OF ENVIRONMENTAL PROTECTION



MELANIE LOYZIM  
COMMISSIONER

TESTIMONY OF  
JEFFREY CRAWFORD, DIRECTOR, BUREAU OF AIR QUALITY  
MAINE DEPARTMENT OF ENVIRONMENTAL PROTECTION

SPEAKING IN SUPPORT OF L.D. 2037  
AN ACT TO UPDATE THE REGIONAL GREENHOUSE GAS INITIATIVE  
ALLOWANCES

PRESENTED BY REP. KESSLER

BEFORE THE JOINT STANDING COMMITTEE  
ON  
ENVIRONMENT AND NATURAL RESOURCES

DATE OF HEARING:

January 21, 2026

Senator Tepler, Representative Doudera, and members of the Committee, I am Jeffrey Crawford, Director of the Bureau of Air Quality at the DEP, testifying in support of L.D. 2037.

This bill proposes to update the existing statute to allow Maine's continued participation in the Regional Greenhouse Gas Initiative through at least the year 2037. The changes include provisions in support of continued CO<sub>2</sub> emission reductions from fossil fuel-fired

AUGUSTA  
17 STATE HOUSE STATION  
AUGUSTA, MAINE 04333-0017  
(207) 287-7688 FAX: (207) 287-7826

BANGOR  
106 HOGAN ROAD, SUITE 6  
BANGOR, MAINE 04401  
(207) 941-4570 FAX: (207) 941-4584

PORTLAND  
312 CANCO ROAD  
PORTLAND, MAINE 04103  
(207) 822-6300 FAX: (207) 822-6303

PRESQUE ISLE  
1235 CENTRAL DRIVE, SKYWAY PARK  
PRESQUE ISLE, MAINE 04769  
(207) 764-0477 FAX: (207) 760-3143

power plants using the same mechanisms under which the program has operated since 2008.

The Regional Greenhouse Gas Initiative (RGGI) is a cooperative effort among ten Northeastern states to cap and reduce CO<sub>2</sub> emissions from the power sector through an emissions allowance trading program. Those states include all of the New England states that operate within the ISO New England system, plus several states that operate in other power markets.

In states that participate in RGGI, the operator of any fossil fuel fired unit that serves a generator of 25 megawatts or greater must have an allowance for each ton of CO<sub>2</sub> emitted by the unit. There are currently five facilities operating in Maine that are subject to the program:

- FPL Wyman Energy, Yarmouth (oil)
- Bucksport Generation, Bucksport (natural gas)
- Maine Independence Station, Veazie (natural gas)
- Westbrook Energy Center, Westbrook (natural gas)
- Rumford Power, Rumford (natural gas)

Allowances can be purchased at auction, with the total number of new allowances available for purchase set by consensus agreement of the RGGI Board members and adjusted over time through a formal Program Review process.

According to modeling and analysis conducted for RGGI in 2025 by The Analysis Group, participation in RGGI currently accounts for approximately 2% of the average electric bill in Maine. The updates to the program are projected to have no effect on rates generally, and in some cases may even reduce rates for consumers. For New England states like Maine, electricity customers will experience the cost impacts of the program regardless of whether Maine's facilities are required to purchase emission allowances, since Maine's power is purchased through the regional market. By

participating in RGGI and requiring Maine's five facilities to purchase those allowances, Maine receives revenues from the program that exceed the costs to Maine facilities and are distributed as directed by the Legislature to energy efficiency investments.

The RGGI states have seen a reduction of over 50% in CO<sub>2</sub> emissions from the power sector since the program went into effect in 2008, when compared to the 2000-2005 baseline period. RGGI's trading program creates a market for CO<sub>2</sub> emission allowances that may be purchased by fossil fuel-burning power plants to compensate for their emissions, or that may be purchased by anyone else

RGGI is composed of individual CO<sub>2</sub> Budget Trading Programs in each participating state. Through independent regulations based on the RGGI Model Rule, each state's CO<sub>2</sub> Budget Trading Program effectively limits emissions of CO<sub>2</sub> from fossil fuel-fired power plants by issuing CO<sub>2</sub> allowances through participation in regional CO<sub>2</sub> allowance auctions. As of December 2025, Maine has received over \$290 million in RGGI auction proceeds, which has been returned to Maine electricity consumers in the form of energy efficiency project funding, subsidization of high-efficiency products such as rebates for air-to-air heat pumps, heat pump water heaters, energy audits, and other cost-effective energy-saving options through the Efficiency Maine program.

In July of 2025, the RGGI states completed the third regional Program Review. This was a multi-year effort during which the RGGI states gathered input from stakeholders and experts relating to the program's design and operation. The review resulted in an updated 2025 Model Rule, which incorporates a modified cap reduction trajectory and removes offset allowances from the program. This legislation represents the first step in Maine's process to bring these changes into effect.

This bill contains provisions that establish Maine's base budget for CO<sub>2</sub> allowances through 2037, and that remove the requirements to provide for the seldom-used offset categories and allowance provisions. Once these statutory changes are made, the

LD 2037 An Act to Update the Regional Greenhouse Gas Initiative Allowances

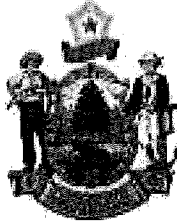
Written Testimony of: Jeffrey Crawford/DEP

Public Hearing: January 21, 2026

Page 4 of 4

Department will proceed with rulemaking to adopt these changes in RGGI's Model Rule, which will allow Maine's continued participation in the program.

I appreciate the opportunity to provide you with these comments, and I will be happy to answer any questions you may have, either here or at the work session.



State of Maine  
Janet T. Mills  
Governor

March 12, 2025

Senator Denise Tepler, Chair  
Representative Vicki Doudera, Chair  
Members of the Joint Standing Committee on Environment and Natural Resources  
100 State House Station  
Augusta, ME 04333-0100

Senator Mark W. Lawrence, Chair  
Representative Melanie F. Sachs, Chair  
Members of the Joint Standing Committee on Energy, Utilities and Technology  
100 State House Station  
Augusta, ME 04333-0100

RE: Regional Greenhouse Gas Initiative (RGGI) 2024 Annual Report

Dear Senator Tepler, Senator Lawrence, Representative Doudera, Representative Sachs,  
Members of the Joint Standing Committee on Environment and Natural Resources, and  
Members of the Joint Standing Committee on Energy, Utilities and Technology:

The Regional Greenhouse Gas Initiative (RGGI) is a cooperative, market-based effort among the states of Connecticut, Delaware, Maine, Maryland, Massachusetts, New Hampshire, New Jersey, New York, Rhode Island, Vermont, and Virginia (Virginia participated from 2021 through 2023) to cap and reduce carbon dioxide (CO<sub>2</sub>) emissions from the power sector. RGGI represents the first cap-and-invest regional initiative implemented in the United States.

Title 38 Maine Revised Statutes (M.R.S.) §580-B, sub-§10, established by Public Law, Chapter 317 of the 123<sup>rd</sup> Legislature and amended by Public Laws, Chapter 372 of the 124<sup>th</sup> Legislature and Chapter 369 of the 126<sup>th</sup> Legislature, directs the Department of Environmental Protection (Department), the Public Utilities Commission (Commission), and the trustees of the Efficiency Maine Trust (the “Trust” or “Efficiency Maine”) to submit a joint report to the joint standing committees of the Legislature having jurisdiction over natural resource matters and utilities and energy matters by March 15<sup>th</sup> annually, regarding items related to implementation of the RGGI. This letter serves as the annual report and addresses the seven items listed in the statute. This letter also provides an update on the appropriateness of the number of allowances reserved in accordance with the voluntary renewable energy set-aside provisions.

**A. The reductions of greenhouse gas emissions from carbon dioxide budget units, conservation programs funded by the Regional Greenhouse Gas Trust Fund pursuant to Title 35-A, section 10109, and carbon dioxide emissions offset projects.**

**Reductions of greenhouse gas emissions from carbon dioxide (CO<sub>2</sub>) budget units.** As a group, CO<sub>2</sub> budget units (RGGI units) located in Maine and throughout the RGGI region have experienced significant reductions in CO<sub>2</sub> emissions from the baseline period (2000 to 2005) both prior to and since the program began with the first auctions in 2008 (see Tables 1 and 2, below). Compared to an average over the three most recent years, annual CO<sub>2</sub> emissions from RGGI units within the State of Maine have decreased by more than 60% from levels emitted during the baseline period and annual CO<sub>2</sub> emissions from RGGI units within all RGGI participating states have decreased by over 50% from levels emitted during the baseline period.

The RGGI program was originally designed to stabilize CO<sub>2</sub> emissions from RGGI units in the region for the period from 2009 through 2014. Subsequently, beginning in 2015 and extending to 2018, the annual cap on emissions was to have been reduced by 2.5% per year to achieve a 10% reduction in emissions from baseline levels. Due to the achievement of greater reductions in CO<sub>2</sub> emissions from RGGI units than originally anticipated, the State of Maine, along with the other RGGI participating states, made program changes to adjust the annual cap downward in 2014 and beyond, to build on these significant emission reduction achievements. For the calendar year 2014, the annual cap for the region was reduced from 165 million allowances to 91 million allowances, representing a 45% reduction in the cap. Maine's share of the adjusted regional annual cap was 3.6%, which represented approximately 3.3 million allowances in 2014. The 91 million allowance annual cap was further adjusted to address a surplus of unused allowances remaining in the secondary market following the first and second three-year compliance periods, which closed at the end of 2011 and at the end of 2014, respectively. The adjusted cap continued to be reduced at the rate of 2.5% per year between 2015 and 2020. The RGGI participating states completed a second program review in 2017, which resulted in agreement by the participating states to make further changes to the program, including extending the regional cap reduction period from 2020 through 2030 and reducing the regional annual cap by a fixed amount of 2,275,000 allowances per year (representing 2.5% of the 2014 regional cap).

Following adjustments made to the regional cap and other changes to the program as a result of the 2017 program review, the RGGI expanded with New Jersey rejoining the program beginning in 2020 and Virginia joining the program beginning in 2021. With the addition of New Jersey and Virginia to the program, the regional cap was increased by 18 million allowances in 2020 to account for New Jersey rejoining, and by approximately 27.2 million allowances in 2021, to account for Virginia joining. The cap was readjusted in 2024 following the withdrawal of Virginia from the program at the end of 2023.

Table 1, on the following page, shows annual CO<sub>2</sub> emissions data from Maine's RGGI units from 2000 through 2024. Maine's RGGI units consist of the following facilities:

- FPL Energy Wyman, an 850 MW oil-fired power plant owned and operated by NextEra Energy Resources and located on Cousins Island in Yarmouth, Maine. This facility is currently functioning as a peaking unit that operates during times of high electricity demand when called on by ISO-New England.
- Androscoggin Energy, a 164 MW combined cycle natural gas-fired cogeneration power plant recently purchased, along with the associated paper mill, from Pixelle Androscoggin LLC by JGT2 Redevelopment. The facility is located adjacent to the former Pixelle Androscoggin paper mill in Jay, Maine, but ceased operations when the paper mill ceased operations in March of 2023. How or whether this facility will be operated in the future are uncertain at this time.
- Bucksport Generation, a 187 MW combined cycle/simple cycle natural gas-fired power plant owned and operated by Bucksport Generation LLC and located at the former Verso Bucksport paper mill site in Bucksport, Maine. This facility is currently functioning as a simple cycle peaking unit that operates during times of high electricity demand when called upon by ISO-New England.
- Maine Independence Station, a 550 MW combined cycle natural gas-fired power plant owned and operated by Casco Bay Energy Company LLC and located in Veazie, Maine.
- Westbrook Energy Center, a 565 MW combined cycle natural gas-fired power plant owned and operated by Calpine Corporation and located in Westbrook, Maine.
- Rumford Power, a 275 MW combined cycle natural gas-fired power plant owned and operated by Revere Power LLC and located in Rumford, Maine.

Since the early 2000s, combined emissions from the RGGI units in Maine have generally decreased by a significant amount. After a relatively low emission period between 2017 and 2020, emissions increased slightly in 2021 and 2022, and decreased slightly in 2023, before increasing in 2024. Emissions for 2024 are projected to be approximately 22% higher than emissions in 2022; however, 2024 emissions data will not be quality-assured until the second quarter of 2025, so they are included only as projected numbers in Table 1 and its associated Bar Chart, below. The recent overall increase in emissions from Maine RGGI units can be explained by a combination of factors, including the variability in the number and length of hot and cold weather events from season to season and year to year, the overall variability in electricity demand, the variability in the supply of natural gas in Maine, the variability in natural gas prices, the variability in economic conditions, recovery from the COVID-19 pandemic, the operating status of other electric generation facilities in the region, and electric grid conditions. The CO<sub>2</sub> emissions data in Table 1 comes from the Environmental Protection Agency's Air Markets Program Data website: <https://campd.epa.gov> and is supplemented by CO<sub>2</sub> emissions data from emission reports contained in RGGI's CO<sub>2</sub> Allowance Tracking System (COATS): [www.rggi.org](http://www.rggi.org).

**Table 1 and Bar Chart**

Maine RGGI Source Annual CO <sub>2</sub> Emissions (U.S. Tons)							
Year	FPL Energy Wyman	Androscoggin Energy	Bucksport Generation	Maine Independence Station	Westbrook Energy Center	Rumford Power	Annual Totals
2000	1,731,846	519,770	0	744,689	0	153,306	3,149,611
2001	1,010,729	565,951	731,450	1,402,914	1,042,637	762,634	5,516,315
2002	397,062	608,960	829,490	1,582,011	1,580,945	782,900	5,781,368
2003	1,119,510	571,181	778,527	1,025,612	1,358,157	661,740	5,514,727
2004	616,030	472,481	810,749	1,178,901	1,412,282	701,496	5,191,939
2005	788,209	1,019	792,796	1,153,173	1,419,619	432,298	4,587,114
2006	70,853	24,826	780,609	946,041	1,341,636	207,857	3,371,822
2007	357,638	349,532	708,412	831,251	991,719	294,645	3,533,197
2008	185,915	481,163	796,139	730,736	1,090,087	407,238	3,691,278
2009	242,371	357,730	809,077	995,235	1,015,132	223,948	3,643,493
2010	198,691	489,273	813,064	1,130,402	1,079,445	232,583	3,943,458
2011	107,642	416,387	766,548	778,158	1,081,176	187,549	3,337,460
2012	77,825	357,371	787,071	532,676	1,018,917	166,212	2,940,072
2013	211,641	352,862	793,406	161,783	1,011,082	81,649	2,612,423
2014	232,538	318,997	259,499	485,857	775,593	182,988	2,255,472
2015	434,966	248,856	40,954	147,372	778,410	127,963	1,778,521
2016	93,552	114,878	6,323	247,610	916,993	183,510	1,562,866
2017	103,597	136,614	5,092	147,329	572,160	104,859	1,069,651
2018	151,727	232,300	8,940	104,306	616,175	69,767	1,183,215
2019	10,136	248,036	1,313	125,099	390,823	29,423	804,830
2020	16,456	277,735	2,987	81,955	413,691	74,515	867,339
2021	9,298	300,774	4,364	235,978	771,010	145,038	1,466,462
2022	218,462	314,284	7,243	293,754	1,012,112	189,862	2,035,717
2023	44,176	62,396	10,048	415,088	956,831	175,962	1,664,501
2024 (projected)	35,191	0	9,966	1,088,905	1,208,306	273,966	2,616,334

### Maine RGGI Source Annual CO<sub>2</sub> Emissions

U.S. (Short) Tons of CO<sub>2</sub>

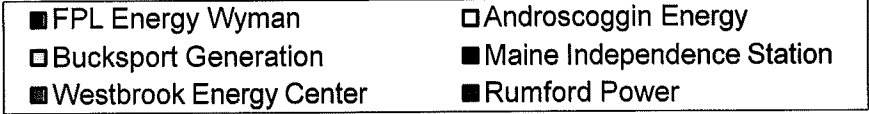
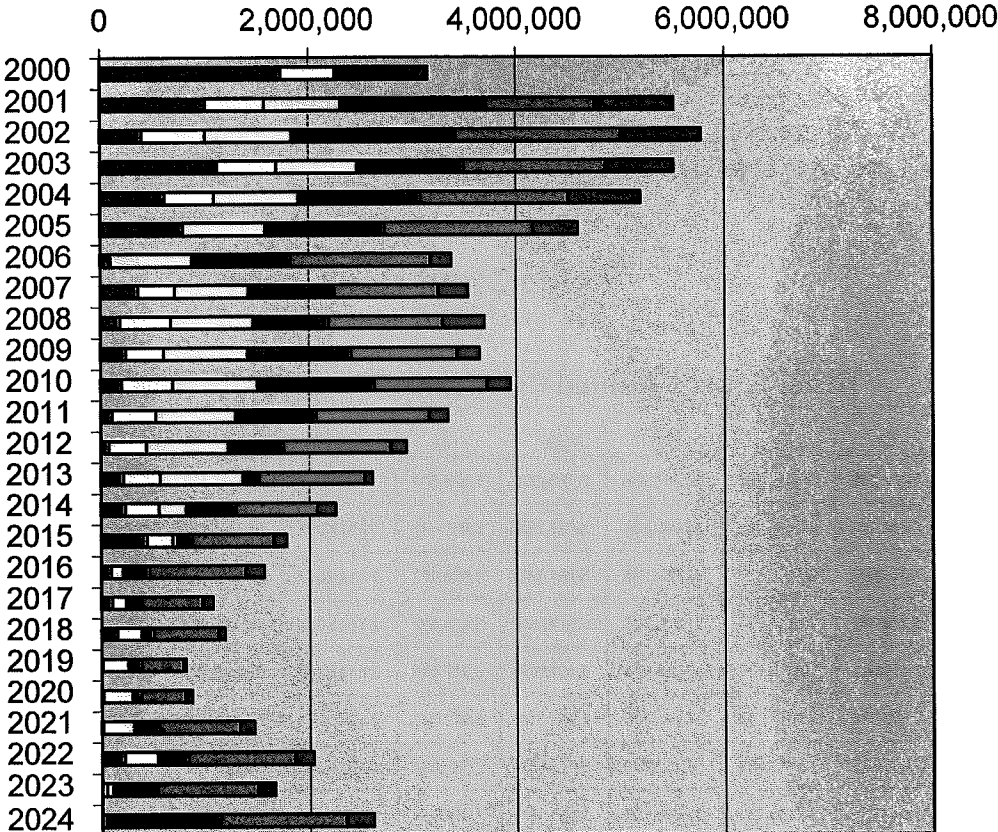


Table 2 shows annual CO<sub>2</sub> emissions data from all RGGI units in the region, by state, from 2000 through 2024. RGGI units in Maine accounted for approximately 3 percent of all CO<sub>2</sub> emissions from RGGI units in 2024. Emissions data for 2024 will not be quality-assured until the second quarter of 2025, so they are included only as projected numbers in Table 2 and its associated Bar Chart, below. The CO<sub>2</sub> emissions data in Table 2 comes from the Environmental Protection Agency’s Air Markets Program Data website: <https://campd.epa.gov> and is supplemented by CO<sub>2</sub> emissions data from emission reports contained in RGGI’s CO<sub>2</sub> Allowance Tracking System (COATS): [www.rggi.org](http://www.rggi.org). Numbers in this report may differ from numbers in previous reports due to adjustments made by individual states based on certain CO<sub>2</sub> emissions being eligible for exemption because of individual state set-aside programs, eligible biomass related emissions, or eligible combined heat and power thermal output related emissions.

**Table 2 and Bar Chart**

RGGI Source Annual CO <sub>2</sub> Emissions by State (U.S. Tons)												
Year	CT	DE	MA	MD	ME	NH	NJ	NY	RI	VT	VA	ANNUAL TOTALS
2000	11,977,434	7,308,248	25,452,680	38,446,856	3,156,292	5,178,731	21,954,959	69,809,356	2,959,594	24,914	**	186,269,063
2001	11,005,310	7,612,366	25,400,430	36,980,555	5,517,285	4,862,445	20,177,621	65,553,672	1,782,110	22,015	**	178,913,809
2002	9,842,414	7,616,896	25,278,273	37,084,544	5,784,563	5,556,992	21,145,667	61,367,406	3,254,015	5,171	**	176,935,941
2003	9,273,759	7,628,367	27,218,204	37,064,738	5,515,325	8,478,382	20,543,331	62,129,292	2,668,990	12,094	**	180,532,482
2004	9,989,119	7,884,001	26,369,630	36,281,466	5,191,939	8,812,538	21,133,145	62,612,353	2,219,100	14,779	**	180,508,070
2005	11,323,844	8,300,628	26,640,945	37,263,686	4,587,114	8,972,027	21,937,521	62,718,683	2,692,228	7,781	**	184,444,457
2006	10,761,759	7,561,295	23,449,199	35,233,070	3,371,822	7,568,884	20,224,255	53,638,129	2,625,422	6,337	**	164,440,172
2007	10,052,782	8,744,154	25,366,733	35,700,194	3,533,197	7,314,954	21,515,622	55,717,151	3,161,200	6,112	**	171,112,099
2008	8,988,858	7,615,966	21,438,041	32,383,517	3,691,278	7,095,147	20,601,805	48,348,177	3,292,517	2,559	**	153,457,865
2009	7,322,364	3,708,331	18,661,076	25,572,943	3,643,493	5,769,881	16,359,443	37,861,408	3,416,783	1,965	**	122,317,687
2010	8,527,102	4,299,269	19,804,384	27,958,958	3,943,458	5,899,447	19,681,308	42,113,171	3,504,392	3,756	**	135,735,245
2011	7,148,159	4,150,396	15,634,925	24,699,638	3,337,460	5,525,389	17,117,779	37,148,379	3,946,582	6,537	**	118,715,224
2012	7,117,572	4,839,522	13,218,526	20,596,979	2,940,072	4,642,898	*	35,640,442	3,735,785	2,319	**	92,734,115
2013	7,456,580	4,285,050	13,677,462	18,683,424	2,812,423	3,653,195	*	33,476,561	2,771,105	2,761	**	86,618,561
2014	7,271,363	3,922,999	11,795,107	20,903,449	2,255,472	3,573,178	*	34,028,752	2,767,290	2,708	**	86,530,318
2015	8,154,364	3,519,097	12,039,394	18,050,117	1,778,521	3,818,378	*	32,550,962	3,075,646	1,216	**	82,987,695
2016	7,681,343	4,042,227	11,389,968	18,332,243	1,562,866	2,546,809	*	30,666,015	2,829,861	2,678	**	79,054,010
2017	6,832,734	3,244,029	10,888,903	12,678,303	1,069,651	1,982,047	*	24,577,905	3,213,211	4,349	**	64,491,132
2018	8,743,239	2,716,368	8,107,721	17,203,574	1,183,215	2,297,766	*	27,215,742	3,539,026	2,072	**	71,008,723
2019	8,107,905	2,024,610	6,436,139	12,925,318	804,829	1,994,454	*	24,408,013	3,151,489	546	**	59,853,303

2020	9,432,967	2,018,528	6,109,756	10,160,365	867,339	1,722,230	13,548,775	26,217,597	3,580,279	1,085	**	73,658,921
2021	9,971,233	1,856,439	6,456,382	13,123,694	1,466,462	2,291,357	13,232,337	27,897,486	3,781,117	3,059	26,566,278	106,645,844
2022	9,891,466	2,212,130	7,090,568	11,666,095	2,035,717	2,598,834	15,681,373	30,182,493	3,068,849	3,903	25,175,110	109,606,538
2023	9,909,670	1,819,126	6,203,020	9,079,162	1,664,501	2,044,023	13,381,089	28,569,831	4,271,126	2,066	23,461,035	100,404,649
2024 (projected)	10,220,567	2,067,037	6,927,552	9,485,928	2,616,334	2,272,396	13,333,271	30,965,543	3,919,724	2,018	**	81,810,370

*\* New Jersey's emissions from 2012 through 2019 are not included in Table 2 since New Jersey ended its participation in RGGI at the end of 2011. Beginning January 1, 2020, New Jersey resumed participation in RGGI, so emissions from New Jersey are again included, beginning with calendar year 2020.*

*\*\* Virginia did not begin participation in RGGI until January 1, 2021, so emissions data for Virginia are not included in this table until calendar year 2021. Virginia stopped participation in RGGI at the end of 2023.*



**Reductions of greenhouse gas emissions from conservation programs funded by the Regional Greenhouse Gas Initiative Trust Fund.**

The RGGI Trust Fund is administered by the Efficiency Maine Trust (the Trust). To date, the cumulative carbon dioxide savings over the life of the measures installed through the Trust's RGGI-funded conservation programs is estimated at 5,814,587 tons. These savings can be attributed to both direct fossil fuel reductions and changes in electricity use.

In June 2013, the Maine Legislature passed LD 1559, An Act to Reduce Energy Costs, Increase Energy Efficiency, Promote Electric System Reliability and Protect the Environment, also referred to as the Omnibus Energy Bill (Public Law 2013, Chapter 369). The Omnibus Energy Bill authorized the Trust to use RGGI funds for projects that save greenhouse gases by, among other things, reducing demand for heating fuels, including heating oil.

The objectives currently set in Maine statute for the Trust's use of RGGI funds are to support the goals and implementation of the carbon dioxide cap-and-trade program established under Title 38, section 580-B, and to promote measures that reduce electricity consumption, increase energy efficiency or reduce greenhouse gas emissions and lower energy costs at commercial or industrial facilities, or lower residential heating demand and reduce greenhouse gas emissions from Maine homes.

**Reductions of greenhouse gas emissions from offset projects.**

The offset project certification and application process was implemented in June of 2009. Independent third-party verifier status has been approved for private entities in several of the RGGI participating states. Maine has received and approved applications from two entities for providing independent third-party verification services; however, to date, Maine has received no applications for RGGI offset projects located within the state. There has only been one project that has completed the application process in the entire RGGI region. It is possible the demand for offset projects and their associated allowances may increase if allowance prices continue to increase to a point where offset projects become more economically competitive with allowances that can be purchased at auction or within the secondary market.

**B. The improvements in overall carbon dioxide emissions and energy efficiency from sources that emit greenhouse gases, including electrical generation and fossil fuel-fired units.**

The yearly totals displayed in Table 3 and its associated Bar Chart show the improvements in CO<sub>2</sub> emissions from source sectors within Maine that emit greenhouse gases. The CO<sub>2</sub> emissions data in Table 3 is based on data from the *Tenth Biennial Report on Progress toward Greenhouse Gas Reduction Goals*: [www.maine.gov/dep/publications/reports](http://www.maine.gov/dep/publications/reports) and updated with data from the Environmental Protection Agency's State Implementation Tool (SIT) for 2022.

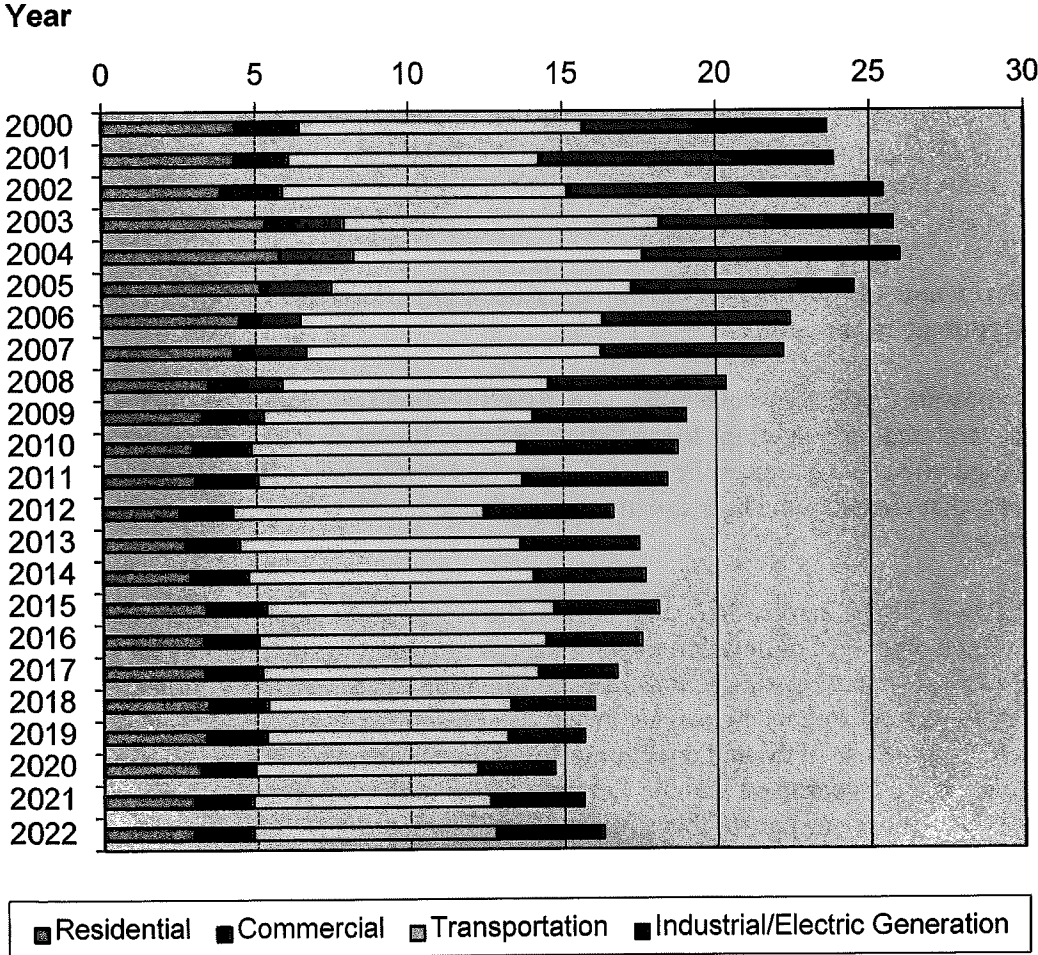
**Table 3 and Bar Chart**

<b>Maine Annual CO<sub>2</sub> Emissions from Fossil Fuel Combustion (In Millions of U.S. Tons)</b>					
<b>Year</b>	<b>Residential</b>	<b>Commercial</b>	<b>Transportation</b>	<b>Industrial/Electric Generation</b>	<b>Total</b>
2000	4.34	2.10	9.23	7.96	23.63
2001	4.31	1.77	8.15	9.61	23.84
2002	3.88	2.01	9.26	10.29	25.44
2003	5.32	2.57	10.27	7.59	25.75
2004	5.78	2.42	9.41	8.36	25.97
2005	5.15	2.33	9.77	7.22	24.47
2006	4.46	2.00	9.83	6.12	22.41
2007	4.25	2.40	9.59	5.94	22.18
2008	3.44	2.41	8.66	5.80	20.31
2009	3.24	2.01	8.75	5.01	19.01
2010	2.94	1.89	8.66	5.24	18.73
2011	3.01	2.05	8.60	4.75	18.40
2012	2.48	1.75	8.16	4.23	16.62
2013	2.66	1.79	9.14	3.89	17.47
2014	2.84	1.89	9.28	3.67	17.67
2015	3.36	1.96	9.36	3.43	18.10
2016	3.26	1.79	9.36	3.13	17.54
2017	3.30	1.87	8.98	2.58	16.73
2018	3.44	1.92	7.89	2.73	15.98
2019	3.34	1.96	7.86	2.49	15.65
2020	3.16	1.78	7.24	2.50	14.68
2021	2.94	1.93	7.71	3.05	15.63
2022	2.93	1.94	7.89	3.51	16.27

*Note: Emissions data for calendar years 2023 and 2024 are not yet available.*

### Maine Annual CO2 Emissions from Fossil Fuel Combustion

US Short Tons of CO2



**C. The maximization of savings through systemic energy improvements statewide.**

The Trust's programs are described in more detail in section E. A review of the Trust's FY 2024 annual report<sup>1</sup> illustrates a comprehensive suite of cost-effective statewide programs, operating under the brand of "Efficiency Maine," made possible through effective marketing and vendor partnerships. This has allowed the Trust to develop a robust, low-cost infrastructure for delivering conservation programs to Maine's energy consumers.

By using RGGI funds to provide technical assistance and financial incentives, the Trust's programs have succeeded in helping Maine's residential, institutional, commercial, and larger industrial energy customers invest in their energy infrastructure. Leveraging RGGI funds, these customers have installed such upgrades as home insulation, new heating systems, and improved industrial processes that otherwise would not have occurred. Directing RGGI funds to be invested through the Trust's programs is helping Maine's energy consumers make a transition to a higher level of energy efficiency and reduced reliance on fossil fuels, while enjoying lower greenhouse gas emissions and operating costs.

**D. Research and support of new carbon dioxide offset allowance categories for development in the State.**

CO<sub>2</sub> allowance prices associated with the RGGI program auctions have increased over the last several quarterly auctions to the \$20 to \$25 per allowance range, however to date, these increased prices have not resulted in any increased demand for offset allowances or the projects that create them. This situation may change if CO<sub>2</sub> allowance prices continue to increase.

Public Law 2013, Chapter 369, section D-8, the Omnibus Energy Bill, directs the Department and the Commission to work together to develop and promote for recognition by the other states participating in RGGI, a modification of the existing end-use energy efficiency offset category to provide incentives for industrial and residential consumers to switch from the use of oil and coal to fuels with lower greenhouse gas emissions. The law also directs the Department and the Commission to report progress on the development of this offset category as part of this annual report. To date, the Department and Commission have conferred and exchanged ideas on how best to move forward with this directive. However, considering the current lack of demand for offset allowances; the fact that many residential, commercial, and industrial customers have already switched to natural gas for economic reasons alone; and issues associated with the "maximum market penetration rate" concept, the Department and Commission have determined that expending time and effort on developing this offset project category is not a cost-effective use of resources at this time.

The "maximum market penetration rate" concept means that if offset projects within a specific category have already penetrated the market at a rate of 5% or more, offset projects in that category no longer qualify for offset allowances under the program. The Department and Commission will continue to monitor the level of demand for offset allowances, and if things change, will re-evaluate the situation.

---

<sup>1</sup> Efficiency Maine Trust, Efficiency Maine Trust, FY2024 Annual Report, November 26, 2024.

**E. Management and cost-effectiveness of the State's energy conservation and carbon reduction programs and efforts funded by the RGGI Trust Fund through Efficiency Maine established pursuant to Title 35-A, section 10109.**

Table 4 shows how the Trust expended RGGI funds in FY 2024.

**Table 4: FY 2024 RGGI Funding**

<b>Expenditure Category</b>	<b>FY 2024 Funds</b>
Commercial & Industrial Custom Program	\$ 1,763,363
Commercial & Industrial Prescriptive Initiatives	\$ 2,842,752
Home Energy Savings Program	\$ 11,740,412
Low-Income Initiatives	\$ 12,581,768
High-Performance Affordable Housing Pilot	\$ 417,454
Efficiency Maine Green Bank	\$ 23,784
Strategic Initiatives (Metrics, Evaluation, Pilots, etc.)	\$ 251,128
Administration	\$ 846,714
Inter-Agency Transfers	\$ 81,824
RGGI Inc. Payment	\$ 29,684
<b>Total</b>	<b>\$ 30,578,885</b>

Table 5 shows savings of electricity (kWh), heating and process fuels (MMBtu), and greenhouse gases (GHG) attributable to the investment of RGGI funds.

**Table 5: Results Attributable to FY 2024 RGGI Investment**

Expenditure Category	FY 2024 Funds	Annual kWh Savings	Annual MMBtu Savings	Annual GHG Savings (Tons CO <sub>2</sub> )
Commercial & Industrial Custom Program	\$ 1,763,363	0	533	43
Commercial & Industrial Prescriptive Program	\$ 2,842,752	1,762,050	27,987	2,967
Home Energy Savings Program	\$ 11,740,412	(7,856,818)	130,570	7,588
Low-Income Initiatives	\$ 12,581,768	(11,524,621)	127,736	5,931
High-Performance Affordable Housing Pilot	\$ 417,454	N/A	N/A	N/A
Efficiency Maine Green Bank	\$ 23,784			
Strategic Initiatives (Metrics, Evaluation, Pilots, etc.)	\$ 251,128			
Administration	\$ 846,714			
Inter-Agency Transfers	\$ 81,824			
Rate Relief Fund	\$ -			
RGGI Inc. Payment	\$ 29,684			
<b>Total</b>	<b>\$ 30,578,885</b>			

Notes on Tables 4 and 5:

- (1) These tables are limited to expenditures from RGGI. They do not reflect the Trust’s use of other sources of funds – including the Electric Efficiency Procurement, the Natural Gas Efficiency Procurement, the Forward Capacity Market, federal grant funds, the Maine Power Reliability Program Settlement, the New England Clean Energy Connect Settlement, the Volkswagen Settlement Funds, and the State General Fund – which were variously used to fund additional expenditures in the categories shown in the tables. The comprehensive expenditures of the Trust are published in the Trust’s FY 2024 Annual Report.
- (2) Commercial & Industrial Custom Program results only reflect energy upgrades that were *completed* in FY 2024, as well as any ongoing program delivery costs. Some RGGI funds were allocated in FY 2024 to projects that will be completed in future years. The spending and savings associated with those projects will be reflected in future RGGI annual reports.
- (3) Negative kWh savings are attributable to the increase in beneficial electrification projects involving a switch away from a fossil fuel end use (e.g., heat pumps). Though these measures require increased electricity consumption, they significantly displace, and therefore reduce, MMBtu consumption of high-carbon fuels.

*Commercial & Industrial Custom Program*

The Trust’s Commercial & Industrial (C&I) Custom Program incentivizes tailored energy projects that require unique engineering analyses and/or projects with energy conservation measures that are not covered by the prescriptive incentive program. The C&I Custom Program is designed to overcome the barriers that confront Maine’s larger businesses and institutions when making investments in complex energy efficiency and distributed generation projects. These projects represent important facility improvements that keep operating costs down for Maine’s largest energy users.

The Trust completed 19 custom projects in FY 2024, 2 of which were fully or partially funded using RGGI funds. The RGGI portion of this investment will save an estimated 43

tons of CO<sub>2</sub> annually. The program also used RGGI funds to support program delivery, developing a number of projects that will come to fruition in future fiscal years. Overall, the C&I Custom Program invested \$1,763,363 of RGGI funds, comprising approximately 36.6% of the program's overall expenditures in FY2024.

#### Commercial & Industrial Prescriptive Initiatives

The Trust's Commercial & Industrial Prescriptive Initiatives (CIPI) offer fixed-price financial incentives for a predefined list of widely available "off-the-shelf" efficiency measures. Typical measures promoted through this program include heating, ventilation and air conditioning (HVAC) systems; LED lighting fixtures; and sector-specific solutions such as commercial kitchen and agricultural equipment. These measures have practical applications across the state in commercial, industrial, nonprofit, government, and institutional settings. The menu of fixed incentives is used to overcome the barrier represented by the incremental cost of high-efficiency equipment. The program encourages businesses to install more energy-efficient models than they would have otherwise.

In FY 2024, CIPI invested \$2,842,552 of RGGI funds to support incentives for high-efficiency heating systems and ancillary equipment (with a particular focus on expanding the promotion of variable refrigerant flow [VRF] heat pump technology); commercial water heating; and weatherization of multifamily buildings. This investment comprised approximately 14.9% of the program's overall expenditures. The efficiency projects made possible by these RGGI funds will save an estimated 2,967 tons of CO<sub>2</sub> annually.

#### Home Energy Savings Program

The Trust's Home Energy Savings Program (HESP) drives market-based home weatherization and installation of efficient heating systems by offering rebates, providing customer and vendor education, and developing and maintaining a vendor network. HESP encourages energy efficiency upgrades in single-family homes, duplexes, and condominiums.

HESP invested \$11,740,412 of RGGI funds in FY 2024. While the program continued to leverage these funds to support incentives for biomass boilers, biomass furnaces, and geothermal heating systems, the primary focus was on heat pump systems and weatherization. Indeed, RGGI funds were instrumental in supporting the Trust's heat pump program design shift limiting eligibility for rebates to heat pump systems serving a whole home's heating needs. Overall, RGGI investment accounted for approximately 56.2% of the program's total expenditures. The efficiency projects made possible through these RGGI funds will save an estimated 7,588 tons of CO<sub>2</sub> annually.

#### Low-Income Initiatives

The Trust delivers energy-efficiency benefits to low- and moderate-income households through a portfolio of initiatives within three distinct channels: market-based initiatives, targeted initiatives, and direct-mail campaigns. This blend of approaches is designed to

overcome the main obstacles faced by low- and moderate-income Mainers seeking to pursue cost-effective energy efficiency improvements.

The Trust's Low-Income Initiatives invested \$12,581,768 in RGGI funds in FY 2024 – almost 3.5 times the program's FY 2023 investment. The majority of these funds were used to support rebates for heat pump systems serving a home's whole heating needs. The program also leveraged these funds to support the installation of heat pump water heaters to replace systems that pull domestic hot water off the boiler (i.e., tankless coil water heating). Overall, RGGI investment accounted for approximately 49.8% of the program's total expenditures. The efficiency projects made possible through these RGGI funds will save an estimated 5,931 tons of CO<sub>2</sub> annually.

**F. The extent to which funds from the Regional Greenhouse Gas Initiative Trust Fund established pursuant to Title 35-A, section 10109 serve customers from all classes of the State's transmission and distribution utilities.**

Funding from the Trust was used to provide programs for residential (including low-income), commercial and industrial customer classes, including very large customers who receive electricity at the transmission and sub-transmission level, as set forth in previous sections of this report.

**G. The revenues and expenditures of the Regional Greenhouse Gas Initiative Trust Fund, established pursuant to Title 35-A, section 10109.**

Revenues from the sale of Maine's allowances under RGGI have totaled over \$246 million as of the end of calendar year 2024 (\$5.6 million in 2008, \$9.6 million in 2009, \$8.3 million in 2010, \$5.2 million in 2011, \$5.5 million in 2012, \$14.1 million in 2013, \$11.4 million in 2014, \$15 million in 2015, \$8.9 million in 2016, \$8.3 million in 2017, \$9.0 million in 2018, \$10.4 million in 2019, \$11.5 million in 2020, \$20.5 million in 2021, \$26.8 million in 2022, \$29.5 million in 2023, and \$46.5 million in 2024). Expenditures of the Regional Greenhouse Gas Initiative Trust Fund are described in section E of this report.

**Voluntary Renewable Energy Set-aside**

The number of allowances withheld from auction for use in the Voluntary Renewable Energy set-aside program are sufficient to adequately cover the number of claims, therefore the Department recommends maintaining the amount of the set-aside at the current level of 2% of Maine's annual CO<sub>2</sub> allowance budget.

Letter to ENR and EUT Committees

March 5, 2024

Page 17 of 17

### **Recommendations**

The statutory reporting requirement also provides for the Department, the Commission, and Efficiency Maine to propose improvements to the program for the committee to consider.

Although the Department, the Commission, and Efficiency Maine do not recommend any changes to the program at this time, a regional program review was initiated in late 2021 and will continue into 2025. The conclusions of this program review may result in recommendations for changes to the program. The committees will be made aware of any recommendations that arise from this process.

The Department, the Commission, and Efficiency Maine are available to present this report, and answer any questions you may have.

Respectively submitted,



Melanie Loyzim, Commissioner  
Maine Department of Environmental Protection



Philip Bartlett (Mar 12, 2025 16:49 EDT)

Philip L. Bartlett II, Chairman  
Maine Public Utilities Commission



Michael D. Stoddard (Mar 12, 2025 15:38 EDT)

Michael Stoddard, Executive Director  
Efficiency Maine Trust

# The Regional Greenhouse Gas Initiative

an initiative of Eastern States of the US

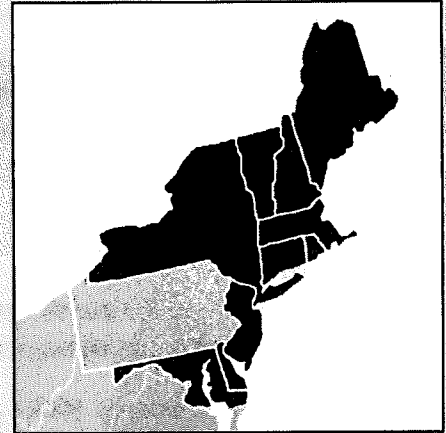
## About the Regional Greenhouse Gas Initiative

The **Regional Greenhouse Gas Initiative (RGGI)** is a cooperative effort among Eastern states to reduce carbon dioxide (CO<sub>2</sub>) emissions from power plants within each participating state.

Together, the participating states have established a **regional cap** on CO<sub>2</sub> emissions, which sets a limit on the emissions from regulated power plants within the RGGI states. Over time, the regional cap declines, so that CO<sub>2</sub> emissions decrease in a planned and predictable way. Since 2005, the RGGI states have reduced annual power sector emissions 50%, and have so far raised over \$10 billion to invest into local communities.<sup>1</sup>

### How Does RGGI Work?

Every year, each RGGI state originates a certain number of **RGGI CO<sub>2</sub> allowances** in proportion to its share of the annual regional cap. To comply with their state's regulations, fossil fuel-fired power plants sized 25 megawatts<sup>2</sup> or greater must acquire enough allowances to cover their emissions, with one allowance covering one short ton of CO<sub>2</sub> emissions. See **Tracking and Compliance** on page 2 for more details.



*Who are the RGGI states? The participating RGGI states include Connecticut, Delaware, Maine, Maryland, Massachusetts, New Hampshire, New Jersey, New York, Rhode Island, and Vermont.*

The RGGI states distribute allowances primarily through quarterly auctions, where they can be purchased by power plants and other entities. Some states hold a limited number of allowances in set-aside accounts to sell at a fixed price or otherwise distribute outside of the auction process. Once an allowance is distributed, it can be held and traded, which creates a secondary market for allowances.

### Updates to RGGI Design

The RGGI states work together to develop a Model Rule, which acts as a template for each state to shape its own **CO<sub>2</sub> budget trading program**. Once a state has implemented its program it is able to participate in RGGI auctions and access other shared aspects of this regional effort. The RGGI states periodically conduct **Program Review** to examine the successes, impacts, and design of their CO<sub>2</sub> budget trading programs, and to consider updates to the Model Rule and their individual state programs. The RGGI states recently completed the Third Program Review and announced updates to RGGI design, which will go into effect beginning in 2027. Details regarding these updates can be found on the Program Review page of the RGGI website.



*Photo courtesy of the Rhode Island Office of Energy Resources*

### **Investing in a Clean and Equitable Future**

*The RGGI states receive the proceeds from selling RGGI allowances, and each state has discretion over how to best use their proceeds. Most of the proceeds have been invested by states back into their communities, including funding of clean energy programs, energy efficiency, and bill assistance to local businesses and communities. View the Investment of RGGI Proceeds page of the RGGI website for more information.*

<sup>1</sup> Data is from the U.S. Energy Information Administration electricity sector CO<sub>2</sub> emissions data for 2024.

<sup>2</sup> In New York, power plants sized 15 megawatts or greater are regulated under RGGI.

# The Regional Greenhouse Gas Initiative

an initiative of Eastern States of the US

## About RGGI Auctions and Allowance Tracking

Auctions are the primary way that the RGGI states distribute CO<sub>2</sub> allowances. Auctioning allowances ensures all parties have access to allowances under uniform terms, helps establish a market-based value for the price of CO<sub>2</sub> allowances, avoids windfall profits for power plant owners, and supports investments in a clean and equitable future. The RGGI states have established multiple ways to enhance the stability of the market for RGGI allowances, described in **Auction Mechanisms** below. An independent market monitor provides oversight of the auctions, as well as activity on the secondary market, to ensure integrity of, and confidence in, the market. You can learn more and view the [Market Monitor reports](#) on the RGGI website.

### Auction Mechanisms

The RGGI auction mechanisms are designed to provide some measure of stability to the market. The **Minimum Reserve Price** is the minimum price that allowances can be sold for at an auction. In 2026, the reserve price is \$2.69 per allowance.

The **Cost Containment Reserve (CCR)** and **Emissions Containment Reserve (ECR)** are reserves of allowances that help provide market stability if the cost of reducing emissions is higher or lower than expected. CCR allowances are made available for sale at an auction if the allowance price would otherwise exceed a set trigger price. Conversely, ECR allowances are withheld from sale at an auction, if the price would otherwise fall below a set trigger price. In 2026, the CCR trigger price is \$18.22 and the ECR trigger price is \$8.41. For more information about auction mechanisms, visit the [Elements of RGGI](#) page of the RGGI website. Beginning in 2027, the ECR will be replaced by an increased Minimum Reserve Price. In addition, each year a second tier of CCR allowances will be made available at a higher trigger price, to ensure availability of allowances to meet energy demand.

### *Setting the Auction Clearing Price*

*All the allowances sold at any one auction are sold at the same price. The price for an allowance is set at the value where demand for allowances equals the available supply. To find this price, allowances are awarded starting with the highest bid and proceeding lower until no allowances remain. The price of the lowest bid to be matched to an allowance becomes the **auction clearing price** and is the value at which all allowances are sold for that auction. View the [Auction Tutorial](#) for more details about auction price setting.*

### Tracking & Compliance

The [RGGI CO<sub>2</sub> Allowance Tracking System \(RGGI COATS\)](#) is the platform that is used for acquiring, transferring, retiring, and surrendering RGGI allowances. Any individual who sets up a RGGI COATS login and creates a RGGI COATS account can receive, transfer, and hold RGGI allowances within the RGGI COATS platform.

RGGI uses three-year control periods for compliance. In each of the first two years of a control period, regulated power plants must surrender allowances equal to one half of their CO<sub>2</sub> emissions for that year. In the third year, power plants must surrender allowances for all emissions from year three, plus all remaining emissions from years one and two. The three-year control periods provide power plants flexibility for covering their emissions. More information on compliance is available in the [Compliance](#) section of the RGGI website.

### Offset Allowances

Beginning in 2027, the RGGI states will no longer award offset allowances. Previously awarded allowances will still be usable up to existing compliance limits. Historically, certain projects that reduce greenhouse have been eligible for awards of RGGI **CO<sub>2</sub> offset allowances** in certain states. Information on the types of projects eligible for offset allowances, and which states have awarded offset allowances, can be found in the [Offsets](#) section of the RGGI website. Offset allowances are transferable and may be used by regulated power plants to meet up to 3.3% of their compliance obligations.

**To learn more about RGGI, please visit the [RGGI website](#) or send a message to [info@rggi.org](mailto:info@rggi.org).**