

RGGI 12-State EPA Clean Air Markets Division All Program Annual Emissions Data by Primary Fuel Type

Year	Coal				Residual Oil				Natural Gas				Diesel and Other Oil				Other Fuels			
	Heat input	SO2 Mass	NOX Mass	CO2 Mass	Heat input	SO2 Mass	NOX Mass	CO2 Mass	Heat input	SO2 Mass	NOX Mass	CO2 Mass	Heat input	SO2 Mass	NOX Mass	CO2 Mass	Heat input	SO2 Mass	NOX Mass	CO2 Mass
2005	2,591,609,588	1,777,033	393,935	244,859,963	524,392,628	170,442	55,506	40,954,555	1,065,497,196	8,306	23,878	51,184,971	72,935,416	6,313	9,528	4,218,925	8,613,780	19	616	745,479
2006	2,552,124,920	1,641,781	382,253	241,313,279	216,216,702	36,529	17,229	14,965,882	1,071,421,811	3,563	17,660	53,224,644	40,685,222	1,260	3,662	2,070,328	10,005,429	24	711	891,130
2007	2,588,808,996	1,677,426	376,052	245,049,636	253,433,471	52,865	21,879	18,112,642	1,239,053,983	4,200	20,740	62,407,792	46,979,597	1,929	4,454	2,572,312	15,703,733	12	958	1,472,188
2008	2,452,707,700	1,414,978	342,624	227,706,492	176,126,320	26,671	12,530	11,841,259	1,165,308,550	1,699	18,186	59,476,160	41,827,086	554	3,622	2,151,264	21,037,093	931	1,183	1,868,231
2009	2,020,680,945	1,035,900	208,245	196,922,259	126,850,991	17,593	9,430	8,303,297	1,259,272,334	1,742	16,084	70,930,657	30,200,640	653	2,251	1,894,686	18,230,508	531	619	1,552,754
2010	2,146,255,433	691,552	239,443	213,421,689	169,892,918	13,719	11,109	10,799,282	1,513,043,862	1,710	20,745	86,705,643	26,954,921	773	2,245	1,673,375	17,864,260	234	572	1,498,815
2011	1,762,401,061	535,450	232,979	175,739,695	104,718,040	6,793	6,414	6,470,985	1,639,860,426	925	20,232	93,713,474	26,514,452	459	1,503	1,618,083	15,390,185	77	463	1,239,008
2012	1,421,868,638	340,483	182,614	140,354,983	141,387,950	3,854	8,236	8,516,925	1,879,201,840	697	23,136	106,789,831	33,491,874	390	1,320	2,065,592	17,779,815	434	645	1,486,396
2013	1,571,372,219	351,684	193,793	157,632,696	96,230,349	4,934	5,328	5,888,982	1,710,596,517	1,799	22,154	97,379,291	28,281,015	494	1,574	1,720,695	19,856,577	126	698	1,714,525
2014	1,430,294,778	344,191	175,343	143,954,370	108,918,369	9,683	7,194	7,139,026	1,763,249,603	3,045	25,404	100,500,122	27,403,782	954	2,205	1,803,725	46,571,429	666	2,245	4,597,909
2015	1,161,047,643	238,095	130,695	118,056,505	140,400,169	12,722	9,758	9,202,933	2,059,372,490	2,258	26,108	117,274,721	27,803,503	565	1,459	1,761,013	50,507,868	334	2,348	4,979,222
2016	1,036,242,419	120,610	103,824	105,276,463	92,656,942	3,131	6,412	5,748,211	2,222,984,966	2,349	26,680	127,109,891	25,110,234	350	1,082	1,588,080	55,850,214	180	2,521	5,566,968
2017	742,350,735	72,629	44,121	74,465,869	34,275,872	1,747	2,253	2,197,810	1,937,908,584	1,715	20,593	113,797,977	19,869,579	129	682	1,218,932	38,192,177	135	1,758	3,652,388
2018	681,072,942	76,577	43,189	68,741,081	44,168,341	3,895	2,850	2,997,281	2,102,672,886	2,937	22,602	124,774,466	19,383,521	391	1,343	1,204,938	38,676,131	131	1,826	3,767,680
2019	516,946,735	51,839	34,074	52,369,668	21,036,916	760	891	1,311,889	2,238,428,020	1,235	18,793	132,382,712	9,436,672	72	428	589,996	36,998,691	135	1,660	3,603,871

Percentage Reduction Since 2006-2008 baseline

Year	Coal				Residual Oil				Natural Gas				Diesel and Other Oil				Other Fuels			
	Heat input	SO2 Mass	NOX Mass	CO2 Mass	Heat input	SO2 Mass	NOX Mass	CO2 Mass	Heat input	SO2 Mass	NOX Mass	CO2 Mass	Heat input	SO2 Mass	NOX Mass	CO2 Mass	Heat input	SO2 Mass	NOX Mass	CO2 Mass
Base	2,531,213,872	1,578,062	366,976	238,023,136	215,258,831	38,688	17,213	14,973,261	1,158,594,781	3,154	18,862	58,369,532	43,163,968	1,248	3,913	2,264,635	15,582,085	322	951	1,410,516
2010	-15.2%	-56.2%	-34.8%	-10.3%	-21.1%	-64.5%	-35.5%	-27.9%	30.6%	-45.8%	10.0%	48.5%	-37.6%	-38.0%	-42.6%	-26.1%	14.6%	-27.4%	-39.8%	6.3%
2011	-30.4%	-66.1%	-36.5%	-26.2%	-51.4%	-82.4%	-62.7%	-56.8%	41.5%	-70.7%	7.3%	60.6%	-38.6%	-63.2%	-61.6%	-28.5%	-1.2%	-76.0%	-51.3%	-12.2%
2012	-43.8%	-78.4%	-50.2%	-41.0%	-34.3%	-90.0%	-52.2%	-43.1%	62.2%	-77.9%	22.7%	83.0%	-22.4%	-68.7%	-66.3%	-8.8%	14.1%	34.8%	-32.2%	5.4%
2013	-37.9%	-77.7%	-47.2%	-33.8%	-55.3%	-87.2%	-69.0%	-60.7%	47.6%	-43.0%	17.5%	66.8%	-34.5%	-60.4%	-59.8%	-24.0%	27.4%	-60.8%	-26.6%	21.6%
2014	-43.5%	-78.2%	-52.2%	-39.5%	-49.4%	-75.0%	-58.2%	-52.3%	52.2%	-3.5%	34.7%	72.2%	-36.5%	-23.5%	-43.6%	-20.4%	198.9%	106.7%	136.1%	226.0%
2015	-54.1%	-84.9%	-64.4%	-50.4%	-34.8%	-67.1%	-43.3%	-38.5%	77.7%	-28.4%	38.4%	100.9%	-35.6%	-54.7%	-62.7%	-22.2%	224.1%	3.6%	146.9%	253.0%
2016	-59.1%	-92.4%	-71.7%	-55.8%	-57.0%	-91.9%	-62.7%	-61.6%	91.9%	-25.5%	41.5%	117.8%	-41.8%	-72.0%	-72.4%	-29.9%	258.4%	-44.1%	165.2%	294.7%
2017	-70.7%	-95.4%	-88.0%	-68.7%	-84.1%	-95.5%	-86.9%	-85.3%	67.3%	-45.6%	9.2%	95.0%	-54.0%	-89.7%	-82.6%	-46.2%	145.1%	-58.2%	85.0%	158.9%
2018	-73.1%	-95.1%	-88.2%	-71.1%	-79.5%	-89.9%	-83.4%	-80.0%	81.5%	-6.9%	19.8%	113.8%	-55.1%	-68.7%	-65.7%	-46.8%	148.2%	-59.5%	92.1%	167.1%
2019	-79.6%	-96.7%	-90.7%	-78.0%	-90.2%	-98.0%	-94.8%	-91.2%	93.2%	-60.9%	-0.4%	126.8%	-78.1%	-94.2%	-89.1%	-73.9%	137.4%	-58.2%	74.6%	155.5%