EPA Power Plant Data Highlights
2022 Data

SO_2
Down ⬇ 10% vs. 2021

NO_x
Down ⬇ 4% vs. 2021

Ozone Season NO_x
Down ⬇ 10% vs. 2021

Hg
Down ⬇ 3% vs. 2021

Electricity Generation
Up 3% vs. 2021*

CO_2
Down ⬇ 1% vs. 2021

Electricity Generation from Coal
Down 6% vs. 2021

Electricity Generation from Gas
Up 7% vs. 2021

Electricity Generation from Renewables
Up 13% vs. 2021*

EPA 2022 power plant data show that emissions of nitrogen oxides (NO_x), sulfur dioxide (SO_2), carbon dioxide (CO_2), and mercury (Hg) decreased from 2021 levels.

*Based on EIA data for the first 11 months of 2022

epa.gov/airmarkets/power-plant-emission-trends

Emissions and Electricity Generation Data

Emissions	2017	2018	2019	2020	2021	2022	2017 to 2022 Change
Annual SO_2 (million tons)	1.34	1.26	0.97	0.79	0.94	0.85	-36%
Annual NO_X (million tons)	1.07	1.03	0.88	0.74	0.78	0.75	-29%
Ozone Season NO_X (million tons)	0.47	0.45	0.39	0.34	0.36	0.32	-30%
Annual Hg (tons)	4.2	3.7	3.2	2.6	3.0	2.9	-31%
Annual CO_2 (billion tons)	1.92	1.93	1.77	1.59	1.70	1.70	-12%

Generation (billion MWh)	2017	2018	2019	2020	2021	2022	2017 to 2022 Change
Coal Generation	1.29	1.23	1.04	0.84	0.96	0.92	-29%
Gas Generation	1.41	1.58	1.67	1.68	1.47	1.75	+24%
Renewable Generation*	0.69	0.71	0.73	0.78	0.83	*	+33%*
Gross Generation*	4.03	4.18	4.13	4.01	4.12	*	+6%*

*Based on EIA data for the first 11 months of 2022

EPA's Clean Air Markets Division (CAMD) collects detailed emissions data and other operating information from power plants across the country under the Acid Rain Program (ARP), the Cross-State Air Pollution Rule (CSAPR), the CSAPR update, the Revised CSAPR Update and the Mercury and Air Toxics Standards (MATS). CAMD updates summary emissions data every quarter and offers interactive tools to provide the public with access to high quality, relevant information.

Data Tools and Resources

Trends in Power Plant Emissions

Power Generation Data

Hourly Power Plant Data

Local Fuel Mix and Emission Rates