On the state of protection of atmospheric air in the Republic of Kazakhstan in 2024

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1. Key indicators

In 2024, emissions of pollutants into the atmospheric air from stationary sources amounted to 2,271.4 thousand tons, and their level increased by 0.6% compared to the previous year.

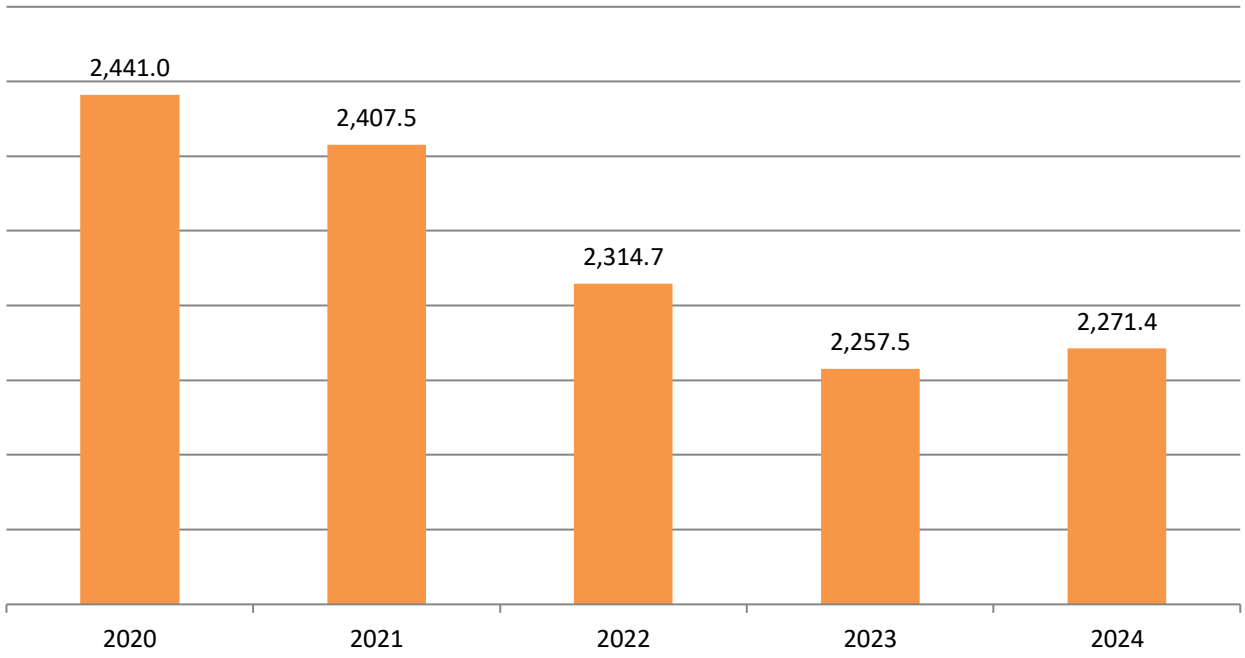
Out of the total volume of pollutants emitted into the atmospheric air, 80.4% were gaseous and liquid substances, while 19.6% were solid substances.

In 2024, 93.4% of pollutants from the total amount of pollutants emitted by all stationary sources of pollution were captured and neutralized by enterprises of the republic.

2. Dynamics of pollutant emissions

Emissions of pollutants into the atmosphere

in thousands of tons



The largest volumes of pollutants are recorded in the territories of Pavlodar (694.2 thousand tons) and Karaganda (455 thousand tons) regions, where an annual decrease in atmospheric pollutant emissions is observed.

Emissions of pollutants by region

in thousands of tons

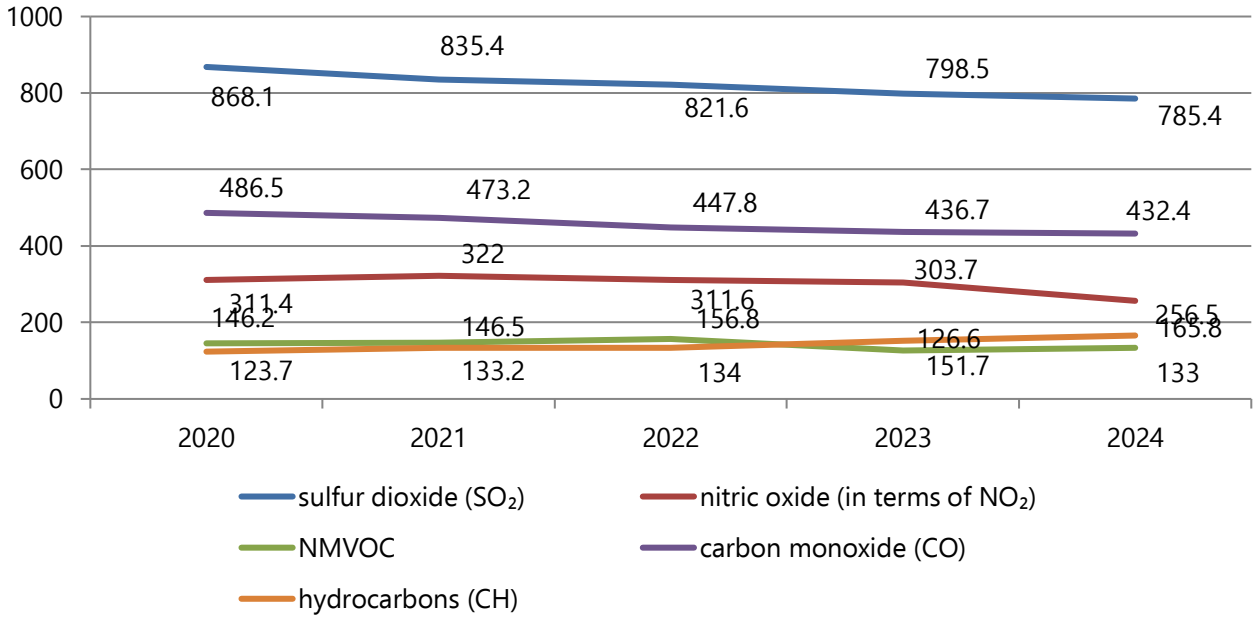
	2020	2021	2022	2023	2024
Republic of Kazakhstan	2441,0	2407,5	2314,7	2257,5	2271,4
Abay	40,7	40,9	39,0	38,5	36,8
Akmola	77,2	77,3	69,5	69,8	68,4
Aktobe	135,1	137,4	136,5	112,1	126
Almaty	26,3	30,3	28,8	28,4	29,6
Atyrau	153,9	160,3	132,1	140,1	152,8
Batys Kazakhstan	30,8	26,0	25,8	34,4	31,2
Zhambyl	55,0	55,8	52,9	51,2	50,9
Zhetisu	19,9	17,7	13,1	14,8	15,4
Karagandy	519,0	488,0	469,0	455,0	445,3
Kostanay	123,4	137,9	121,4	118,3	111,6

Kyzylorda	28,3	29,2	23,4	25,3	24,9
Mangystau	72,5	75,2	78,7	86,2	105,5
Pavlodar	723,0	736,1	724,2	694,2	687,8
Soltustik Kazakhstan	76,0	61,2	52,7	58,9	59,5
Turkistan	28,1	29,0	25,2	26,7	26,3
Ulytau	108,7	81,7	105,1	103,1	97,7
Shygys Kazakhstan	86,5	87,2	83,3	80,9	80,9
Astana city	62,4	62,2	57,7	46,4	49,1
Almaty city	44,5	40,8	41,4	44,0	43,3
Shymkent city	29,6	33,2	34,9	29,3	28,3

3. Dynamics of emissions of the main specific pollutants

Emissions of specific pollutants into the atmosphere in the years 2020-2024

in thousands of tons



In 2024, the republic's air basin received such specific pollutants as lead and its compounds in the amount of 221.4 tons, manganese and its compounds – 86.0 tons, copper oxide – 110.0 tons, sulfuric acid – 400.0 tons, chlorine – 42.0 tons, mercury – 725 kilograms. The actual release of these substances did not exceed the volume of the established maximum permissible emissions (MPI).

Spreadsheets:

On the state of protection of atmospheric airin the Republic of Kazakhstan

4. Glossary

Emissions of pollutants into the atmosphere – the entry into the atmospheric air of pollutants (having an adverse effect on the health or activity of the population, on the environment) from stationary sources of emissions (organized and unorganized). Stationary organized sources include mobile sources from which pollutants enter through gas and air outlet systems (chimneys, aeration lights, ventilation shafts, etc.).

5. Methodological notes

To form an indicator of emissions of pollutants into the atmosphere from stationary sources, data from the annual national statistical observation on atmospheric air protection are used.

Data on the amount of substances leaving with gases used in technological processes of production of products as raw materials or semi-finished products are not included in the total volume of emissions of pollutants into the atmo-sphere. In particular, substances formed and disposed of during the purification of gases leaving the reactors during the production of soot at carbon black plants, the purification of gases leaving the ore-thermal furnaces during the production of yellow phosphorus at phosphorus plants, the purification of gases leaving the furnaces of the "fluidized bed" in the production of sulfuric acid are not taken into account. at chemical plants. At ferrous metallurgy enterprises, carbon monoxide contained in blast furnace gas, which is used as a process fuel, is not taken into account. The substances captured by installations and systems of "double adsorption" and double contacting, which serve to produce products from waste gases of non-ferrous and ferrous metallurgy, chemistry, petrochemistry plants, are not taken into account. Only pollutants entering the atmosphere as a result of incomplete capture and gas leaks due to non-tightness of technological equipment are subject to accounting.

Additionally, a methodological explanation is available at the following link:

Methodology for the formation of environmental statistics indicators

6. Links to related publications

Statistical compilation «Environmental protection in the Republic of Kazakhstan»

7. Useful links

Statistical forms«Report on the protection of atmospheric air» (index 2-TP (air), annual)

Information and analytical system "Taldau"/Главная/Разделы statistics/Environmental statistics/Atmospheric air

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