

Prague is indisputably a beautiful city. The location on the hillsides of the Vltava River's basin gives her a special charm, which cities laying on flat ground usually lack. The dark side of this position is, however, the poor ventilation of a large part of the city, especially the historic center. The prevailing westerly wind courses across the valley of the Vltava and only partially washes injurious matter from human activities into the atmosphere.

Prague's development is not respecting much the specifics given her by natural conditions. In the consumption of fuel and energy in Prague solid fuels still amount to 36.2%, from which sulfuric, dusty brown coal creates more than two-thirds. Liquid fuel (light and heavy heating oil, from the burning of which is emitted into the air the compounds of sulphur and vanadium) amounts to 17-18% of the city's energy balance, gas fuel amounts to 34.8% and electrical energy for 13.6%. Refined ecologically clean forms of energy (electrical energy, natural gas, and coal gas) are used in pronounced measures in the outlying parts of the city for the heating of the housing estates located in a lump on the plateaus lining the Vltava valley, where the dispersion of injurious matter is better than at the bottom. Further, the housing estates on the north face (Bohnice, Dáblice, and Prosek) create an almost total barrier, essentially impairing the cleansing of the Prague basin by wind coming from the North.

In the central part of the city the share of solid fuels is unbearably high (Prague 1: 45.8%; Prague 2: 34.9%; Prague 3: 39.8%; and so on). Coal, coke and briquettes are burned here exclusively in stoves and small furnaces without the removal of flue-ash and without contrivances for removal of sulfur and nitrate; the toxic products of combustion then, as adverse meteorological conditions, fall directly to the street. (At least large furnaces are altogether fitted with filters for ash and tall chimneys, which make it easier to dilute combustion products in the air.) [...]

On the whole in 1985 in the territory of Prague there was emitted from stable sources around 25,000 tons of ash, 66,000 tons of sulfur dioxide (SO<sub>2</sub>), 19,300 tons of nitrous oxide (NO<sub>2</sub>), 29,000 tons of carbon monoxide, and 6,800 tons of various hydrocarbons. Compared to 1984 the total emission of harmful substances increased about 3 to 3.5% as a result of the higher consumption of fuel and energy and the worsening of the quality of coal; and this trend is continuing.

The average emissions of harmful substances from stable sources are many times (or extraordinarily) higher than in other parts of the Czechoslovak Socialist Republic. Only the average emission of sulfur dioxide in northern Bohemia [in the Black Triangle region]...approaches the average in Prague.

The second most significant factor directly contributing to the pollution of Prague's air is her transportation system. The Metro does constitute the backbone of the city's combined transportation. Still, buses, personal cars, and freight trucks remain responsible for a large part of the carrying of people, and they disturb the environment with gas fumes and noise. Annually they release into Prague's air 56,000 tons of carbon monoxide, of which 3,200 tons of this significant amount comes from oil. The amount of the emissions results not only from the density of automobile transport, but also from an array of unresolved technical problems. Our automobiles are not equipped with catalytic converters, which make possible the orderly reduction by a few levels of harmful substances into the air. Nor is there sufficient gasoline with reduced amounts of oil, since only a few pumps in Prague and central Bohemia are supplied with it.... The majority of highways run through the center of the city (including the connection between Vienna and Berlin, which runs past the National Museum, the Parliament Building and the Smetana Theatre), where there is the greatest intensity of traffic. [...]

[...] The level of lasting pollution in Prague's air is the highest level in Czechoslovakia (see the table.

Table  
Average Annual Concentration of Sulfur Dioxide in Selected Regions of Czechoslovakia ( $\mu\text{g m}^{-3}$ )

	1970	1975	1980	1985
Chomutovsko	53	71	94	126
Mostecko	57	80	102	132
Teplicko	51	77	93	110
Ostravsko	51	36	46	55
Brněnsko	48	29	37	42
Prague	100	100	128	155
Bratislava	49	67	55	60
Košice	27	18	25	28