Selected Information 2023

Prague Environment

https://portalzp.praha.eu/rocenkyzp

Selected Information from the Prague Environment Report

Prague Environmental Information System (IOŽIP)

IOŽIP
Informační systém o životním prostředí v Praze

PRAHA
PRAGUE
PRAGA
PRAG

City of Prague Climate Change Adaptation Strategy

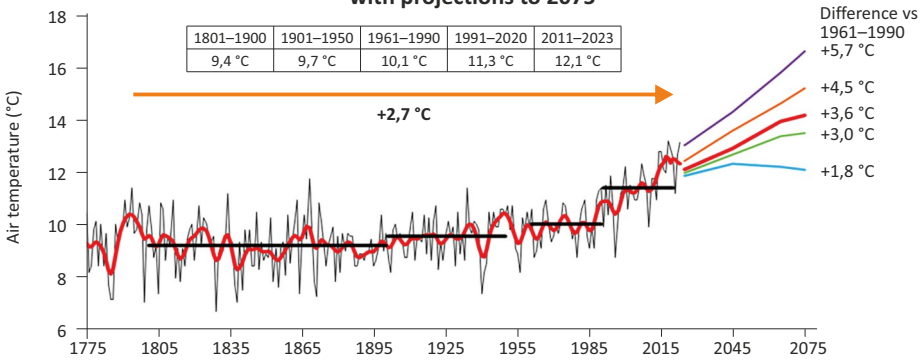
Highest temperatures in Czech Republic felt in centre of Prague

In 2024, the Prague City Hall Environmental Protection Department updated the trends and data on climate change in Prague as part of implementation of the City of Prague Climate Change Adaptation Strategy. In this publication you will find the most important facts on current climate developments in the capital. It also now includes information on trends in spring frosts and temperature projections, as well as precipitation patterns and the number of "tropical" days (≥ 30 °C) and nights (≥ 20 °C).

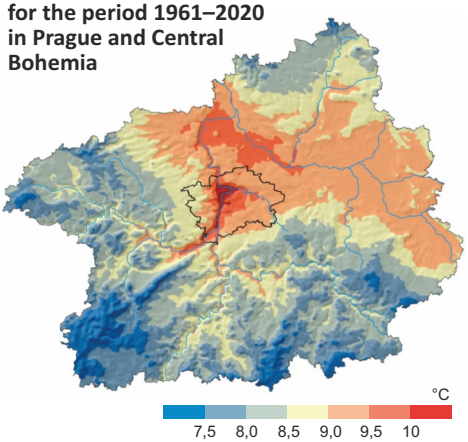
A few interesting facts from the brochure:

- The average air temperature in the centre of Prague is about 3 °C higher than the national average, ranking it among the hottest places in the country.
- It rains in the centre of Prague as little as in the Žatec or Znojmo regions.
- The number of tropical days and nights is on the rise. In 2011–2013, there was an average of 22 tropical days in the centre of Prague. After 2030 there will likely be over 30.

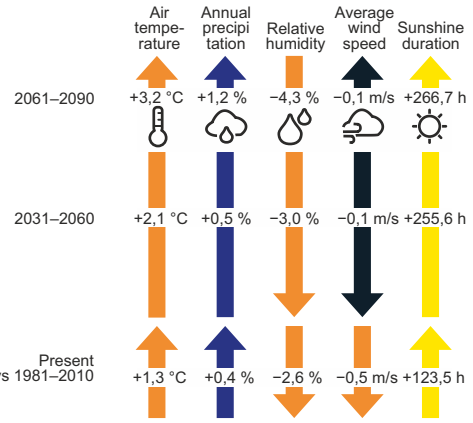
Average annual air temperature at Prague–Klementinum in the years 1775–2023 with projections to 2075



Average daily air temperature for the period 1961–2020 in Prague and Central Bohemia



Climate change in Prague (centre)



For more information, see the City of Prague website: **City of Prague Climate Change Adaptation Strategy**
https://adaptacepraha.cz/

PRAGUE'S PRIORITIES IN THE ENVIRONMENTAL FIELD

Prague is the capital of the Czech Republic, at the same time its largest city (496 km^2) and population (1.385 million as of December 31st, 2023). In terms of the quality of the environment, Prague must address issue similar to those of other large cities worldwide. These are mainly the impact of car traffic, noise, water and energy management, waste management, but also sustainable land use, care for cleanliness, greenery and valuable natural sites in the city.

Climate action is currently a top priority. The core strategy in this area is the ***Prague Climate Plan 2030***, adopted in May 2021.

The section "**SUSTAINABLE PRAGUE – the Environment and Climate Plan**" in the **Prague City Council Programme Statement for the 2023–2026** Electoral Term states, among other things:

We want Prague to be one of the greenest cities in Europe – one where people can live comfortably all year round. We also want it to be a responsible and environmentally friendly metropolis. We will continue in implementing the Prague Climate Plan 2030, which the city developed and launched in the previous term, and manage the city's resources in an environmentally responsible manner, in line with the principles of circular economy and nature-based solutions.

Cooling Prague: We will work to cool Prague and improve quality of life for residents in the face of ongoing climate change. We will support the revitalisation of public spaces. We will expand green spaces, continuing to plant trees, rows of trees and orchards. We will invest in both parks within the city and nature parks, promote organic farming and sustainable forestry, and take care of protected areas. We will continue to support alternative green spaces, such as green roofs. In addition, we will increase funding allocated to purchasing land for existing and planned green space.

Responsible resource management: We will manage the city's operations in an environmentally responsible manner in accordance with the principles of the circular economy. We will continue to implement the principles of Circular Prague 2030.

Reducing carbon footprint and limiting pollution: We will continue to replace coal-fired heat production with renewable and secondary energy and combined electricity and heat production from natural gas, the goal of which is to reduce the carbon footprint of district heating. We will support the deployment of comprehensive energy savings in public-sector buildings and public infrastructure owned by the City of Prague.

Promoting environmentally responsible behaviour: We will continuously and systematically communicate the need for environmentally responsible behaviour and embed circular economy principles into the city's operations.

Prague – Basic Characteristics

Area [km^2]	496,2
Administrative division	
number of City Districts	57
number of Cadastral Districts	112
Location (City centre)	
geographical latitude	50°4'53.193" N
geographical longitude)	14°25'38.39" E
Altitude [m n. m.]	
maximum (Zličín)	399
minimum (Suchdol a Praha 8)	177
Climate Praha - Karlov (2022)	
annual air temperature [°C]	12.1
annual rainfall [mm]	448.9
Vltava River (2022)	
length [km]	30
Average flow rate in Malá Chuchle [m^3.s^{-1}]	134

Types of land [ha] at 31st December	
agricultural land	19 410
forest land	5 284
water bodie	1 101
developed areas	5 110
other areas	18 717
Population – number of inhabitants	1 384 732
– females	714 052
– males	670 680
average population	1 374 334
population density per 1 sq. km	2 790,6
Houses, apartments (2021)	
Apartments started	5 720
Completed apartments	6 410
Living space per 1 completed apartment in m^2	58.5
Of which are in family houses	107.5
Gross domestic produkt per capita	
– CZK	1 493 235
– EURO	62 208
Share of unemployed persons [%] *	2.80

* Proportion of achieved job seekers aged 15–64

Source: ČSÚ, ČHMÚ, ČÚZK, MPSV

CLIMATE SYSTEM

Evaluation of meteorological factors for 2023 from Prague stations

Compared to **the norm of 1991–2020**, the temperaure in Prague for the **year 2023** can be considered well above average, with a deviation of +1.4 °C and an **average annual temperature** at Prague-Ruzyně of +10.4 °C, ranking it behind 2018 as the second-hottest year not only in the past decade, but also in the whole history of measurement at the Ruzyně station dating back to 1946. The month of April was (as in 2021 and 2022) well below average (deviation of -2.3 °C), with the winter months of January and February above average in terms of temperature (deviation of +3.4 and +2.6 °C) along with July (deviation of +1.2 °C). The month of October was well above average with a temperature deviation of +3.2 °C and September was exceptionally above average with a deviation of +3.9 °C, making it the second warmest on record after September of 1947. In the remaining months, the average temperature was within the norm.

The highest maximum daytime temperature in 2023 was reached in Prague on 15 July, when all stations measured a very hot day (maximum temperature ≥ 35 °C), with Komořany station measuring an extreme of +38.2 °C in Prague 4, +37.6 °C being measured at the Klementinum in the centre and +37.1 °C in Vinohrady. All stations measured their annual maximum average daytime temperature on 15 July, with the highest being the Klementinum with +30.1 °C and Komořany with +29.8 °C. The lowest daytime temperature of -13.0 °C was measured 4 December at Kbely station during the very cold start of December, with daytime averages below zero in Prague (except the Klementinum) starting 1 December and two to six freezing days (days where temperature did not rise above zero, centre vs outskirts of Prague). The warmest Prague station remained the Klementinum in 2023 with an annual average temperature of +12.8 °C, with Ruzyně the coldest with an annual mean of +10.4 °C.

There were five marked heat waves within Prague in 2023 – 20 to 22 June with three hot (tropical) days (high ≥ 30 °C) along with one tropical night (temperature does not fall below 20 °C) on 21 June; 8 to 12 July with five hot, one very hot (high ≥ 35 °C) and two tropical nights (at Klementinum); an episode with a very hot day and annual highs all around Prague 15 to 17 August with two tropical nights (at Klementinum); 12 to 16 August with four hot days and tropical nights; and 19 to 25 August with six hot days and five tropical nights. In contrast, cold snaps with freezing days with a daytime maximum below zero came 21 January, 27 to 29 January, 29 November and 1 to 4 December with an arctic day (daytime high ≤ - 10 °C) on 4 December. The Klementinum's series of all-time extremes of daytime max temperatures (measured since 1775) was surpassed ten times in 2023, once in July, twice in January and September and five times in October. No all-time minimum temperatures were surpassed at Klementinum this year.

The trend of warming and the **impact of the city's heat island** can be seen in the graphs comparing the changes in the annual **number of characteristic days** among the stations between the outskirts of Prague (Ruzyně station) and the centre (Klementinum station). The number of hot (tropical) days (high ≥ 30 °C) of 16 at Ruzyně was above average in 2023, while in the centre there were the most at Klementinum with 27. There was one very hot day (high ≥ 35 °C) at both Ruzyně and Klementinum, with two at Komořany (aside from 15 July, also 9 July).

The **annual precipitation** of 531.4 mm measured at Prague-Ruzyně in 2023 represents 107.3% of the long-term norm for 1991–2020. The month of December was exceptionally above average, not just at Ruzyně (264% of the norm), but also over almost all of Prague, while November was also well above average (193% of the norm), as were the spring months of March and April (187 and 189% respectively). Extended dry spells occurred in May and September in 2023 with exceptionally low totals (22 and 19% of the norm respectively), while January was below average (55%) and precipitation in the remaining months was within the norm. The heavy short-term rainfall during the storm of 16 August, with as much as 19.9 mm falling in a ten-minute period in the centre of Prague, was classified as a catastrophic downpour. This was also the day with the highest daily rainfall within Prague, with 56.9 mm being measured at Stodůlky, over 45 mm falling in Bubeneč, and more than 30 mm at Karlov and Vinohrady. The highest monthly precipitation in Prague was 131.3 mm, measured at Střešovice station in August. A monthly total of over 100 mm was recorded at 13 Prague stations in August. The highest annual rainfall in Prague was the 590.1 mm recorded at Suchdol.

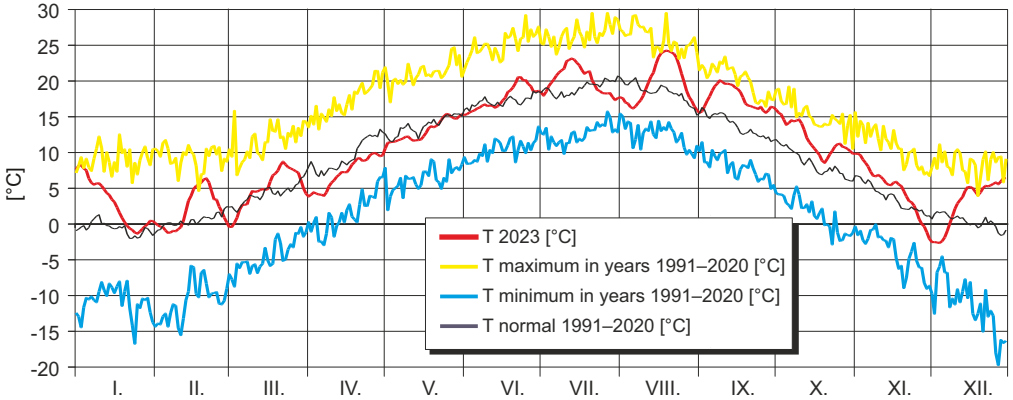
The mean **wind speed** of 4.1 $m.s^{-1}$ at Prague-Ruzyně in 2023 was well above average. The strongest winds occurred during the winter months (above average in December with a mean speed of 5.5 $m.s^{-1}$. The year's peak wind gust in Prague of 24.7 $m.s^{-1}$ was recorded 18 February at Karlov, with gusts exceeding 21 $m.s^{-1}$ also observed at at least two Prague stations on 12 July, 16 August and 21 and 22 December.

The total annual **sunshine** of 1787 was average, with above-average hours of sunlight recorded at Ruzyně in September (145% of the norm), and the least sunshine compared to the norm in April and January (63 and 67%).

The mean annual **cloud cover** in Prague was within normal limits. Storm activity at the majority of Prague's stations was below average. The most frequent storms were in July and June. The most days with a storm observed (nearby or distant) was 21 at Kbely station. **Hail** was observed the most times of Prague stations twice (10 June, 5 July) at Ruzyně, in the centre (Karlov and Vinohrady) once 16 August, and at Zadní Kopanina once (25 April). According to the total new snow height at Ruzyně of 52 cm (daily new snowfall), 2023 was average in terms of snow conditions, with 34 days with snow cover (a mere 13 days of continuous **snow cover** between 28 November and 10 December). The maximum snow cover height of 20 cm in Prague in 2023 was measured 3 December at Kbely station.

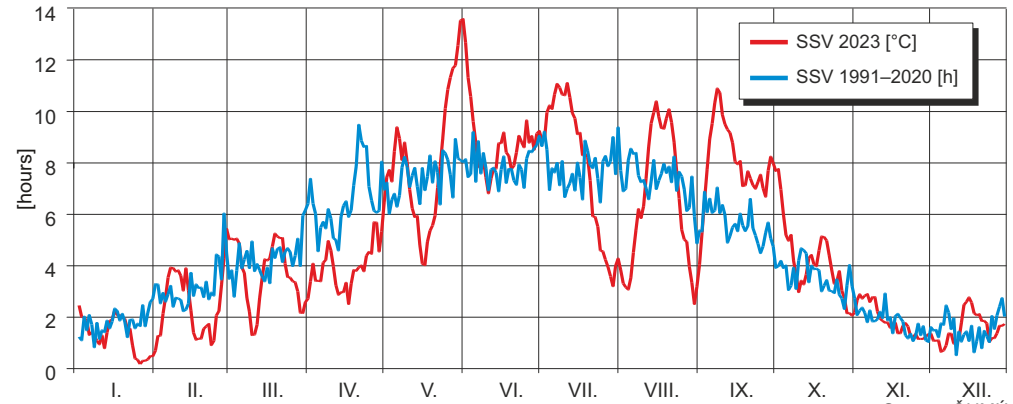
CLIMATE SYSTEM

Average daytime air temperature T, 10-day rolling average, Prague-Ruzyně, comparison of 2023 and norm for 1991–2020



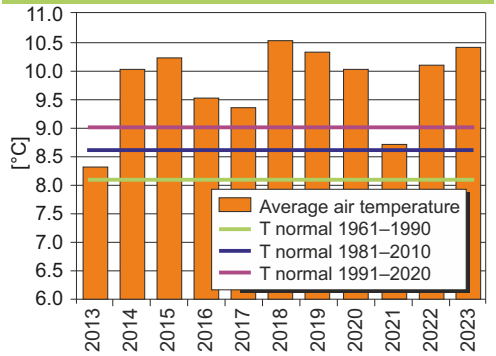
Source: ČHMÚ

Daily duration of sunshine, 10-day rolling average, Prague-Ruzyně, comparison of 2023 and norm for 1991–2020

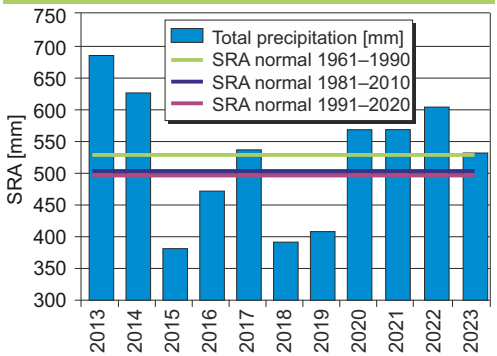


Source: ČHMÚ

Average air temperature, 2013–2023, Prague-Ruzyně

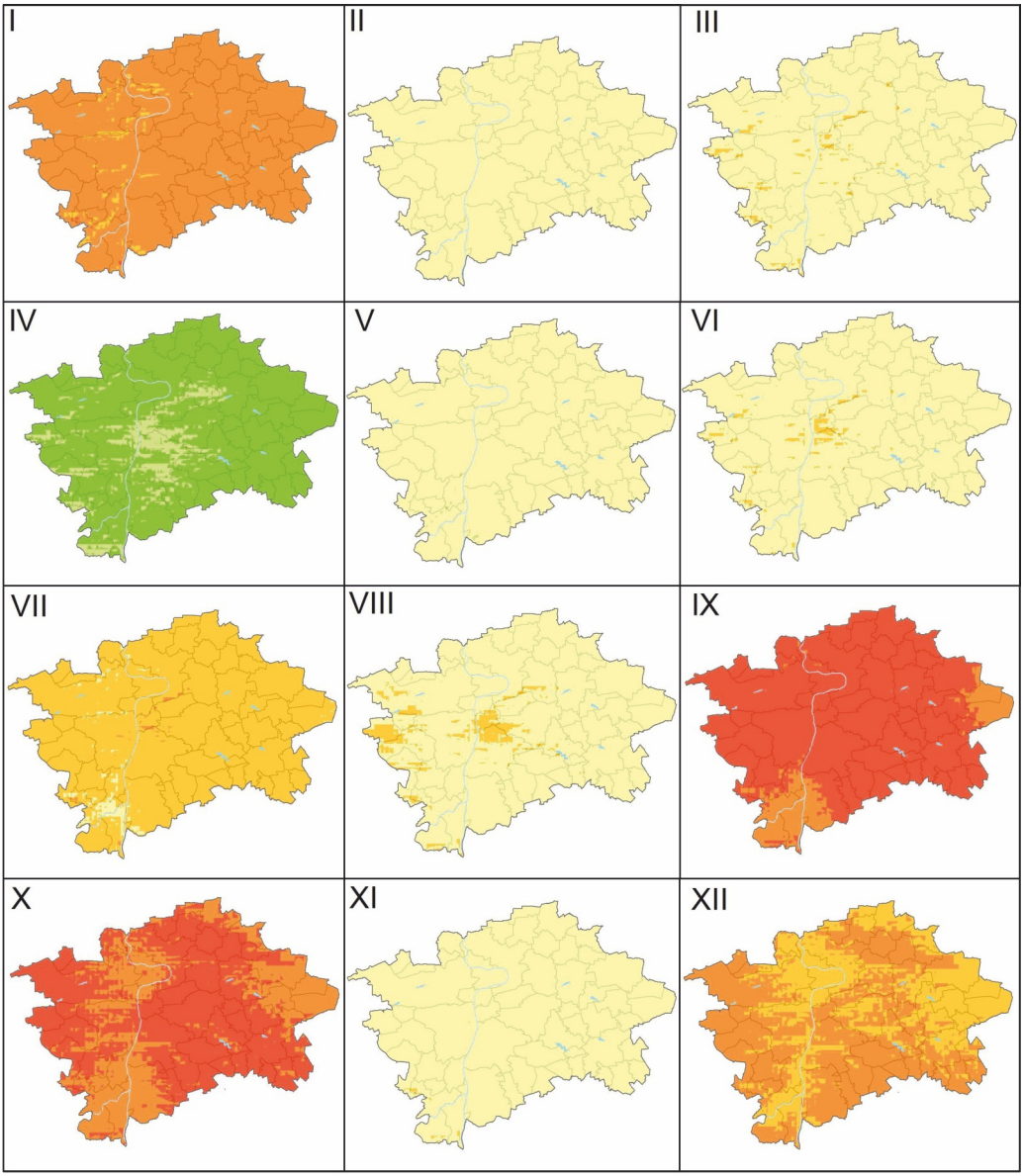


Total precipitation, 2013–2023, Prague-Ruzyně



CLIMATE SYSTEM

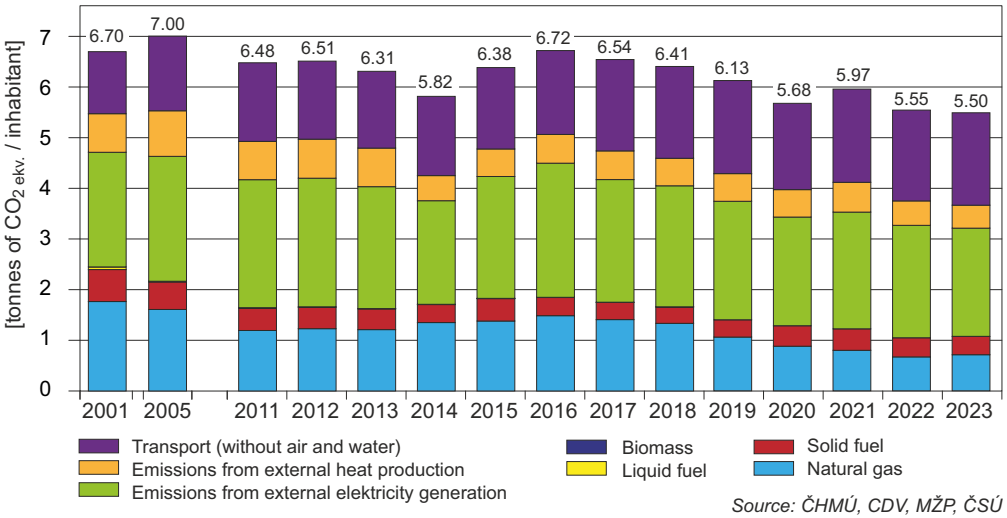
Evaluation of abnormality of the 2023 monthly average temperature compared to the norm for 1991–2020



Source: ČHMÚ

CLIMATE PROTECTION AND ADAPTATION TO CLIMATE CHANGE

Specific emissions of greenhouse gases in the Capital City of Prague territory, 2001, 2005, 2011–2023



Source: ČHMÚ, CDV, MŽP, ČSÚ

Overview of supported municipal district projects, 2023

(Prague City Council Resolution No. 2334 of 23 October 2023)

MČ Praha 4	*Halasova inner courtyard (CZK 2 mil.)*	vegetation, grass cover, green roofs on utility shelters, compacted dirt paths, water feature
MČ Praha 7	*Tree planting Ortenovo náměstí (CZK 1.8 mil.)*	6 trees using blue-green infrastructure principles, cultivation measures
MČ Praha 13	*Revitalisation of inner courtyards at Nové Butovice housing estate (CZK 0.5 mil.)*	revitalisation of Petržílkova – Nušlova inner courtyard, removal of asphalt, laying of lawns, tree planting
MČ Praha 19	*Conversion of parking area to permeable surface (CZK 2 mil.)*	
MČ Praha 20	*Restoration of Nolčův Park and Chvaly Park (CZK 2 mil.)*	restoration of two parks – trees and greenery, construction work
MČ Praha 21	*Dubinská cycle path (CZK 1 mil.)*	repairs to pedestrian path along with expansion to allow for bicycle traffic
MČ Praha - Čakovice	*Revitalisation of Mratín Stream bank (CZK 0.6 mil.)*	revitalisation of row of poplars, new tree and shrub planting
MČ Praha – Dolní Chabry	*Revitalisation of former cherry orchard (CZK 2 mil.)*	project documentation and complete transformation of Třešňovka orchard
MČ Praha - Křeslice	*Central Area of Křeslice Square (CZK 0.3 mil.)*	removal of panels from Central Area and creation of compacted dirt space and paths for pedestrians – conceptual study
MČ Praha - Libuš	*Windbreak with pedestrian and cyclist route (CZK 3 mil.)*	restoration of field access road to Na Musil forest park, biodiversity, planting of windbreak
	Historic wells owned by municipal district (CZK 0.5 mil.)	
MČ Praha - Satalice	*Establishment of flower bed K Radonicům (CZK 0.2 mil.)*	
MČ Praha - Vinoř	*Rehabilitation of Vinoř Cemetery forecourt (CZK 4 mil.)*	complete park landscaping, path network, street furniture, water element, vegetation

Zdroj: OCP MHMP

AIR

The City of Prague has long been marked by a high level of air pollution, largely driven by traffic and local heating. Atmospheric dispersion conditions were predominantly favourable in 2023, with good dispersion conditions recorded on 318 days, representing 87% of the year. **No ambient air quality limit values** for monitored pollutants **were exceeded in 2023** within Prague.

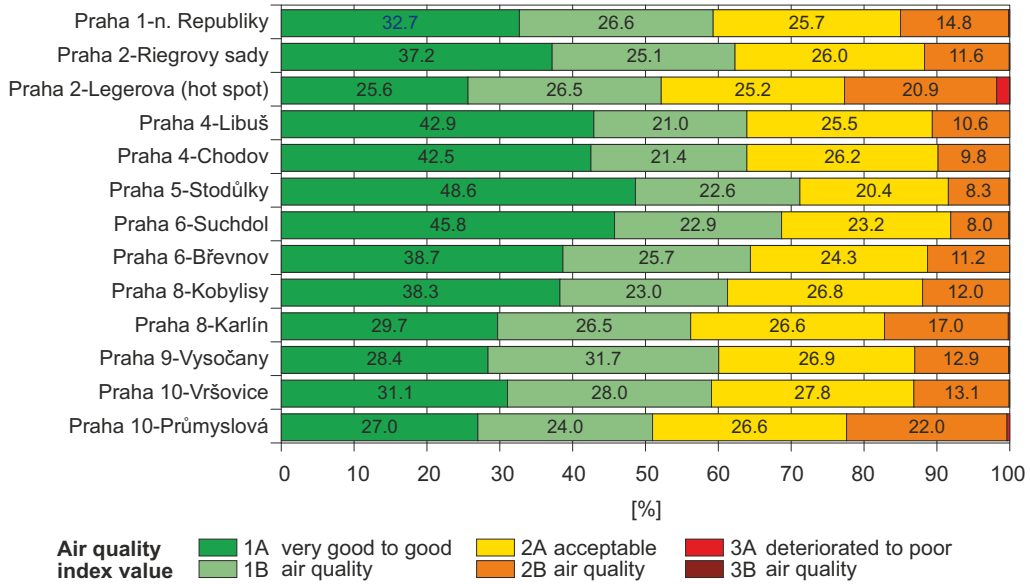
Neither the short-term nor the annual limit values for **PM_{10}** and **$PM_{2.5}$** suspended particulate matter were exceeded at any station. The highest PM_{10} levels were measured at the traffic monitoring stations Prague 10-Průmyslová and Prague 7-Holešovice (21.8 and 21.7 $\mu g \cdot m^{-3}$ respectively), with the highest annual concentration of $PM_{2.5}$ at the station Prague 10-Šrobárova (14.5 $\mu g \cdot^{-3}$). Against the ten-year average, concentrations of PM_{10} had fallen by 24–28% and $PM_{2.5}$ by 33–35%. The highest concentrations of particular matter were recorded in the cold months, especially in February, with the lowest being recorded in November.

The emission limit value for **nitrogen dioxide** was not exceeded for the fourth year in a row, nor was the hourly limit exceeded at any location. As is typically the case, the highest concentrations of NO_2 were measured at the parts of the city with the most traffic (Prague 2-Legerova and Prague 9-Vysočany). 2023 saw the lowest NO_2 levels in the past decade, which stems both from the meteorological conditions and reduced traffic emissions.

The concentration of **benzo[*a*]pyrene** also did not exceed the emission limit and measured values were approximately half the ten-year mean. The emission limit for ground-level ozone was not exceeded at any station (on average for the years 2021–2023), nor was the smog threshold.

The **air quality index** (AQI) was assessed at 13 measuring stations in 2023. The **first AQI level** (very good to good air quality) predominated at all of them. Very good to good air quality occurred most frequently at the urban background station Prague 5-Stodůlky (71%), and least frequently at the traffic monitoring station Prague 10-Průmyslová (51%). The **second AQI level** (acceptable air quality) occurred most frequently at the Prague 10-Průmyslová station (48%) in 2023. the **third level of AQI** (degraded to poor air quality) was recorded at all evaluated stations with the exception of the Prague 4-Chodov urban background station and the suburban background stations (Prague 4-Libuš and Prague 8-Kobylisy).

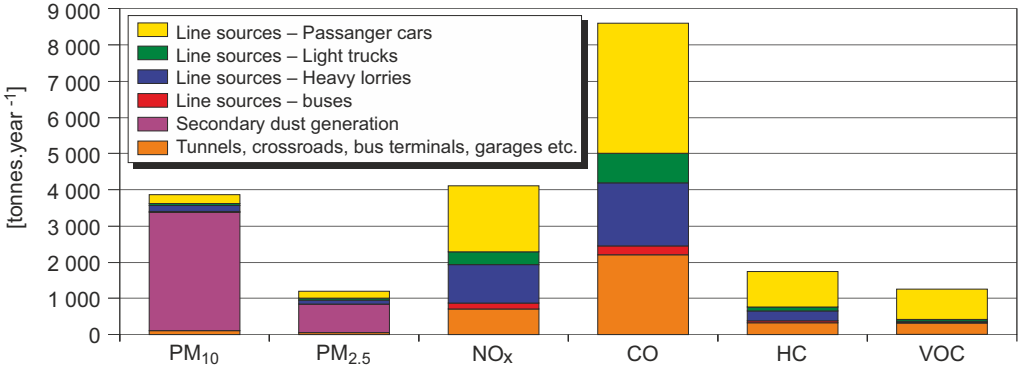
Total index of air quality (IKO) at the stations in the Prague agglomeration in 2023 – representation of individual index values



Source: ČHMÚ

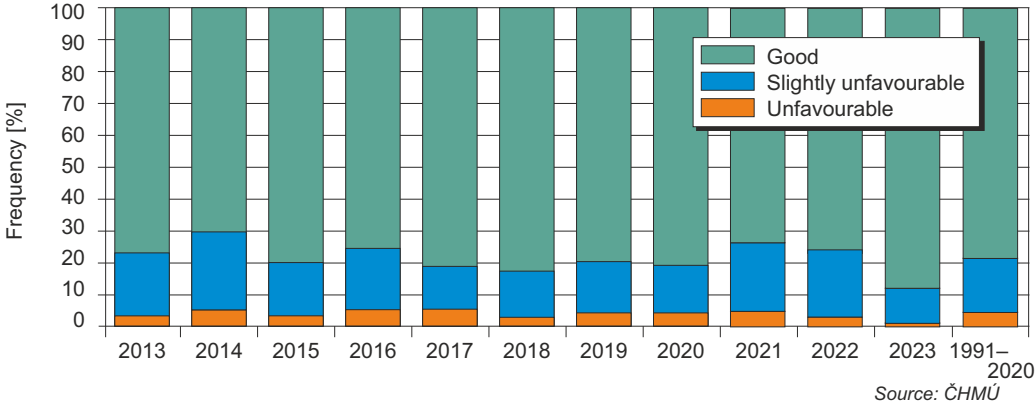
AIR

Traffic emissions – selected pollutants, 2023



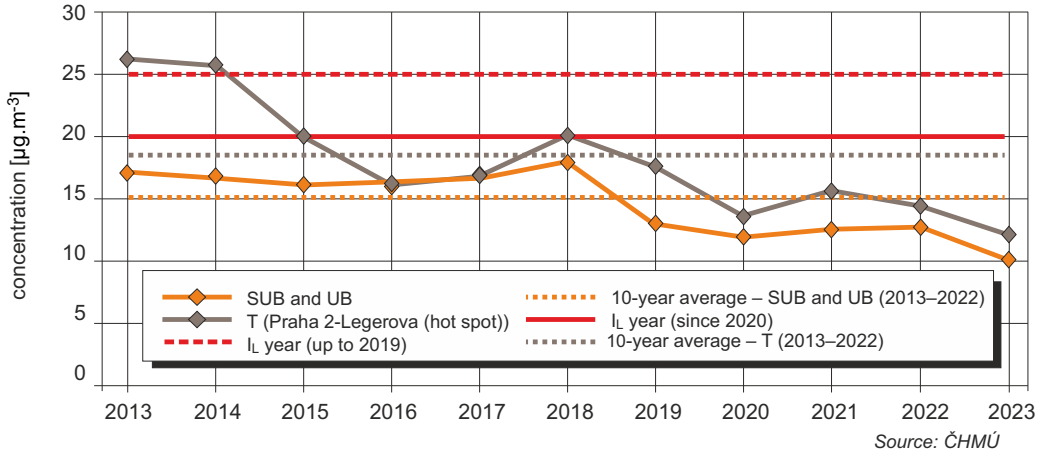
Source: IPR Praha / ATEM – Ateliér ekologických modelů, s.r.o.

Frequency of dispersion conditions, Prague, 2013–2023



Source: ČHMÚ

Annual average concentrations $PM_{2.5}$, 2013–2023



Source: ČHMÚ

WATER

The water quality in the Vltava and Berounka Rivers has been monitored on 4 profiles in Prague and its surroundings for a long time. For the majority of monitored indicators in the period 2022–2023, water on these profiles were classified by the first and second (partially third) grades of the rating scale, except for microbiological and biological indicators classified by grades 1 to 5, in total assessment (resulting quality grades) 1 profile was classified with grade 4 and 3 profiles with grade 5.

For the purposes of this publication, **water quality in small watercourses** was assessed based on the proportion of measurements falling within individual water-quality classes, comparing the two-year period of 2022–2023 to the period 2020–2021 (measurement has long been carried out at 38 sampling sites on 16 watercourses). When comparing the number of values falling into water quality Class I or II and those falling into Class IV or V for the two periods, the number of sites showing an improvement was approximately the same as the number showing a decline (improvement and decline at 12 sites each in 2022–2023 and improvement at 11 and decline at 12 for 2020–2021).

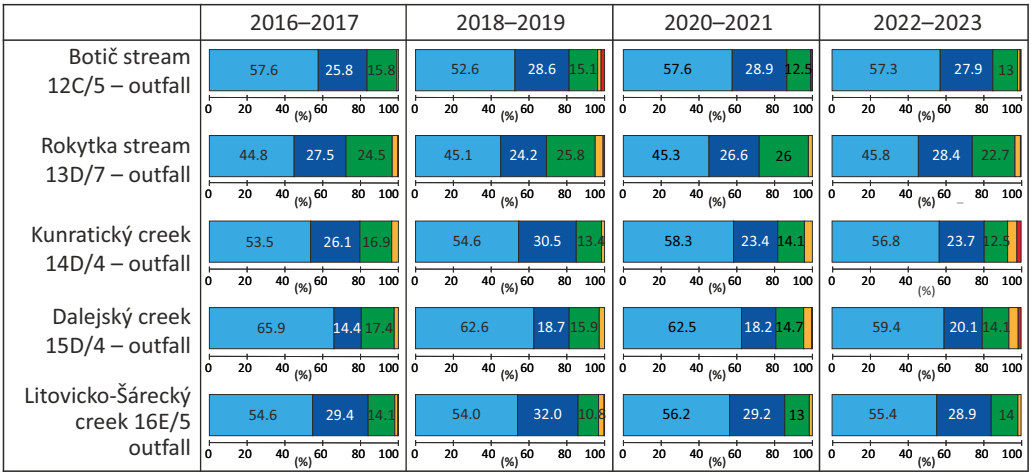
Supply of potable water to citizens is kept on high level permanently. Water works Želivka, from which the water is supplied to Prague by a 52 km long adit supply conduit, represents a valuable source of water for the capital city. The water source Želivka represented 64.4 % on the total volume of 114,785 mil. m^3 of potable water produced in 2023. Almost each household is connected to a public water supply network.

Drinking water consumption in households from the public water supply network has been decreasing in the long term with some fluctuations – in 2023 it was about 103 l/per person/per day, in 2022 about 111 l/per person/per day. Loss of water from network leaks were reduced from 46% in 1996 to values below 20% since 2014 – in 2023 losses amounted to approximately 16%. **Drinking water quality is regularly monitored** and complies with domestic and European standards.

Ca 99% of households are connected to the water supply system. In 2023 ca 118.8 mil. m^3 of wastewater was treated (100% of wastewater), while 92.4% was treated at the central wastewater treatment facility (ÚČOV) and the residual wastewater at auxiliary facilities in suburban parts of the city. The volume of pollutants dispersed into groundwater complies with a pre-set limit and is being reduced for a long time.

Since 2005, **flood protection** of the inner city has been in place, as well as a full flood protection line in the outer parts of the city since 2015 (in connection with the ring road). In 2023, preparations for increasing flood protection in the Old Town continued, as did preparations for supplementing and expanding flood protection on the basis of experience from the 2013 flood. Furthermore, expansion of the flood protection line below the Zbraslav Chateau was completed.

Evaluation of water quality in selected profiles of small water streams – Ratios of classification into classes of water quality for the given periods

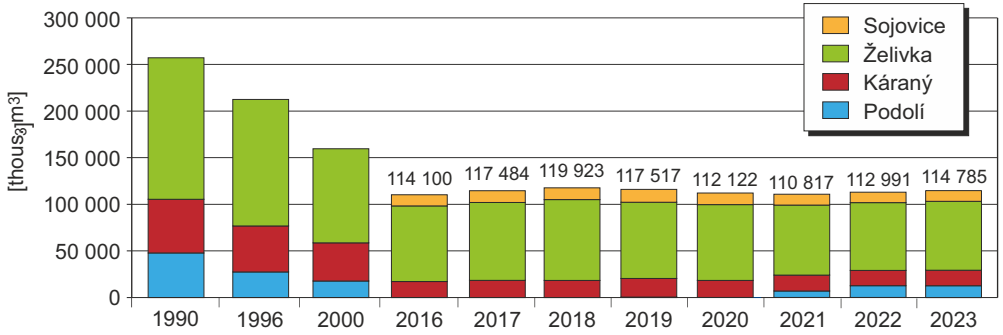


Water quality classes: 1 – Unpolluted water; 2 – Slightly polluted water; 3 – Polluted water; 4 – Heavily polluted water; 5 – Very heavily polluted water

Source: OCP MHMP

WATER

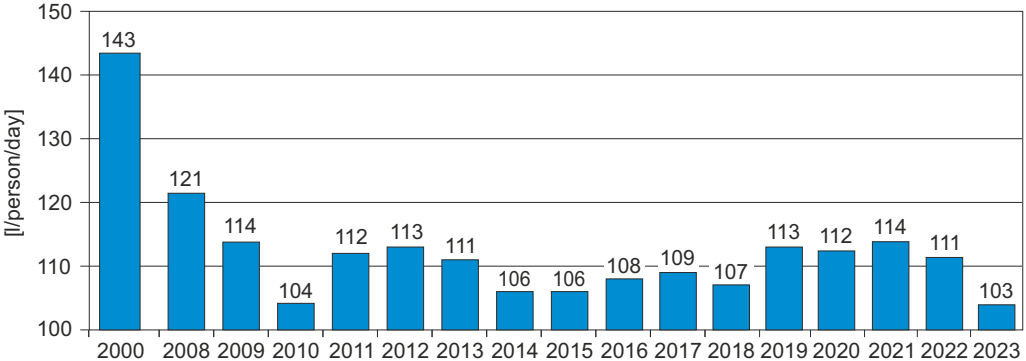
Evolution of manufacturing drinking water in individual waterworks from 1990 to 2023



Note: In connection with the change in ownership at the end of 2013, the values for the Sojovice water preparation plant are presented individually from 2014

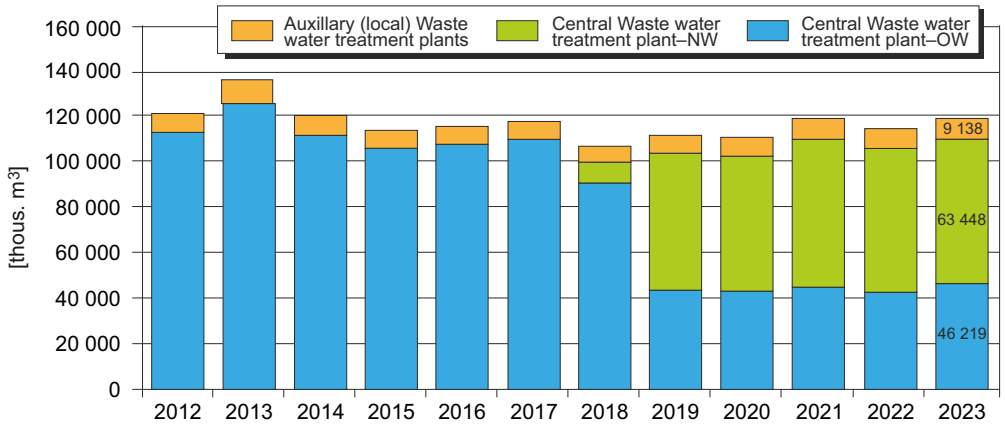
Source: PVK, a. s.

Evolution of the specific consumption of drinking water in households in Prague, 2000, 2008–2023



Source: PVK, a. s.

Amount of cleaned wastewater at the Central waste water cleaning facility (ÚČOV) and wastewater cleaning branches (ČOV), 2012–2023



Note.: NW – New waterline, OW – Old waterline

Source: PVK, a. s.

LANDSCAPE, NATURE AND GREENERY

The balance of areas according to the ČÚZK records for Prague in 2023 shows a further increase (11 ha) of the total built-up area compared to the previous year (these made up approx. 10.3% of the city's total land area at the end of 2023, which is however an increase of 843 ha since 1990). At the same time, a significant rise in the acreage of "other areas" has also been recorded, by 38 ha compared to 2022. The acreage of agricultural land fell year-on-year by an additional 63 ha.

Sustainable land use is systematically taken into account in the city's development plans, including the use of old unused buildings or areas, usually of industrial development (known as brownfields). A positive aspect in the city is that almost every year, the area of land designated to fulfil the function of woodlands, i.e. wooded areas, increases. In 2023, the increase reached 14 ha compared to 2022 and 426 ha in total since 1990.

Within the territory of Prague, there is a relatively large number of valuable natural locations protected by law within different protective grades. City focused on the management and maintenance intensively. On December 31, 2023, legal protection of **93 low-area specially protected lands** (including 8 national natural landmarks, 69 natural landmarks and 16 national reservations) was secured within the city territory. This is an extensive variety of lands from geological and paleontological locations through botanic, zoological, entomological to even wooden locations of a **total size of 2.428,6 ha** (ca 4.9% of the entire city area).

Within the **Natura 2000** system formation, 11 important European locations were approved by governmental regulations within the city territory in total. Furthermore, in the capital city area, there were 12 natural parks formed. At the same time, 26 important landmarks and 201 trees received protection as commemorative trees.

The city cares about the nature, country and greenery systematically also by the plantation of tree avenues, parks in the historical part of the city and woods (with recreational function) found predominantly in the suburban parts. The objective is to avoid any reduction of greenery in the city, but to increase it.

Thanks to the planting of new forest stands, the area of forests has increased by 426 ha (by about 8%) since 1990.

An important part of Prague country are also water streams and reservoirs. City takes care of the projects for their revitalisation (**projects Renewal and Revitalisation of Prague Reservoirs and Streams for Life**) on a regular basis.

Total levels of types of land, as at 31st December 2023 [ha]

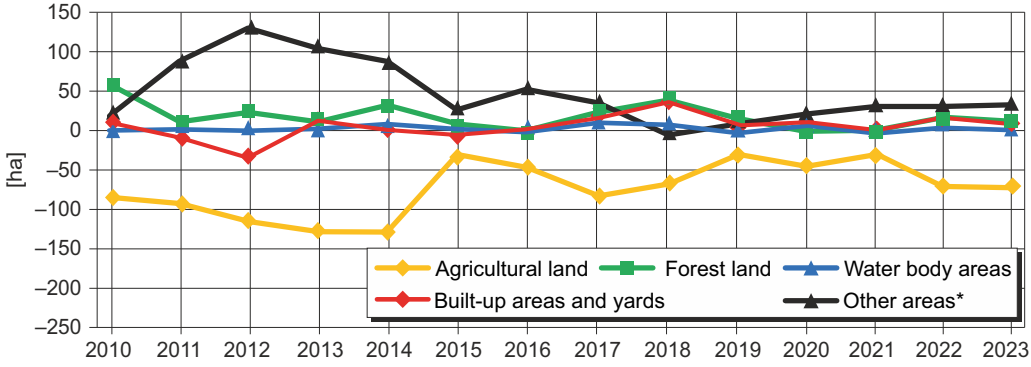
Aggregate areas of land types	Code	2018	2019	2020	2021	2022	2023
Agriculture land	02–07	19 649	19 617	19 573	19 543	19 473	19 410
– Arable land	02	14 139	14 084	14 030	13 978	13 708	13 585
– Hop garden	03	0	0	0	0	0	0
– Vineyards	04	12	12	12	15	15	16
– Gardens	05	3 954	3 965	3 971	3 986	4 001	4 051
– Orchards	06	599	591	590	585	580	569
– Permanent Grassland	07	945	964	970	978	1 168	1 188
Forest land	10	5 233	5 249	5 251	5 251	5 270	5 284
Water areas	11	1 096	1 094	1 101	1 097	1 101	1 101
Built-up areas	13	5 057	5 066	5 080	5 082	5 099	5 110
Other areas*	14	18 586	18 595	18 616	18 647	18 678	18 717
Total area		**49 621**	**49 621**	**49 621**	**49 621**	**49 621**	**49 621**

Note:
* other areas include building sites

Source: ČÚZK

LANDSCAPE, NATURE AND GREENERY

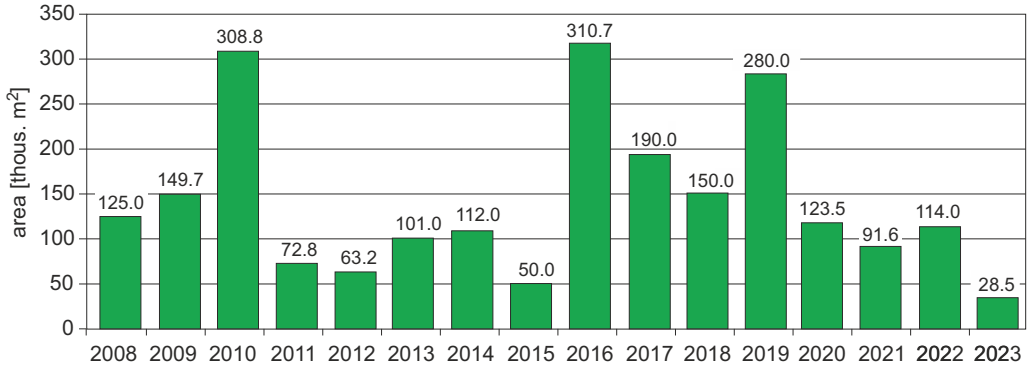
The decline and growth of areas based on type of land, 2010–2023



* Other areas also include construction sites

Source: ČÚZK

Newly forested areas, 2008–2023



The level of KES (coefficient of ecological stability) in cadastral areas of the Capital City of Prague

Source: ČÚZK / MHMP

WASTE

Annual waste production in Prague has long ranged between 4 and 5 million tonnes depending on the level of construction activity. In 2023, 4.61 million tonnes of waste was generated within the city (5.01 million tonnes in 2022, 5.07 million tonnes in 2021). Of the total amount of waste generated, approximately 36.4% was recovered within the City of Prague, of which 22.9% was used for energy and 55% recycled. Waste disposal by landfilling within the city was terminated in 2020 (closing of the Ďáblice landfill). Waste incineration without energy use has long made up for less than a tenth of a percent of the total amount produced. The majority of waste generated is disposed of outside the City of Prague.

The **amount of waste produced by citizens** in 2023 reached approximately **459.3 thousand tonnes**, which amounts to **334.2 kg per person**. The comprehensive **municipal waste management system** in Prague continued to be expanded. The percentage of waste passed along for material or energy recovery was 89.8% in 2023, with energy recovery accounting for 58.5%. The **volume of recyclable waste collected in street and home receptacles** (paper, glass, plastics, beverage cartons, etc.) **increased once again** – the total amount was approx. 65.3 thousand tonnes (in 2022 it was 63.7 thousand tonnes, in 2021 61.9 thousand tonnes). Collection of hazardous municipal waste continues to be provided for (collection yards, stable hazardous waste collection points and mobile collection).

At the end of 2023, there were **20 City of Prague collection yards** in operation. The number of recyclable waste collection points within buildings in the Prague Heritage Reservation and, on a pilot basis, in other municipal districts increased (3 332 compared to 3 056 in 2022), while there were also 3 498 public collection stations available. **Biowaste collection** also continued to play an important role in the system (seasonally through large-scale containers, as well as through the stable biowaste collection point in Prague 10 – Malešice, City of Prague collection yards and the **first City of Prague municipal composting plant in Slivenec**, plus starting 1 January 2020, city-wide bin collection has been operated) – the total production of biowaste in 2023 totalled 23.7 thousand tonnes, with the amount obtained through home bins totalling 15.3 thousand tonnes.

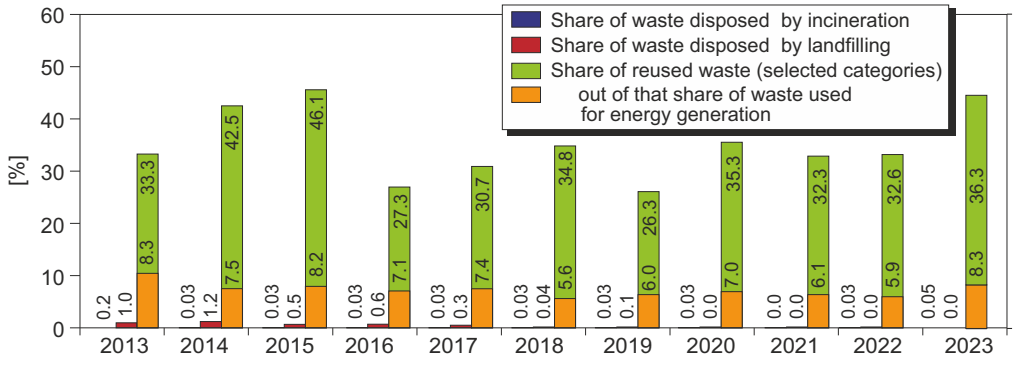
The **collection of bulky waste** continues to play a significant role, also taking place through City of Prague collection yards and large-scale containers set up on the streets of Prague. As of the end of 2023, citizens also had receptacles for the collection of edible oils and fats at their disposal at 936 stations, as well as 8 re-use points at City of Prague collection yards.

Production of waste in the territory of the Capital City of Prague, 2015–2023 [thous. tonnes]

		2015	2016	2017	2018	2019	2020	2021	2022	2023
Total		4 161	4 602	4 517	5 187	5 080	4 451	5 072	5 005	4 614
Out of that category	Hazardous	71	58	64	99	124	98	97	83	121
	Others	4 090	4 544	4 453	5 087	4 956	4 353	4 974	4 922	4 492

Source: OCP MHMP

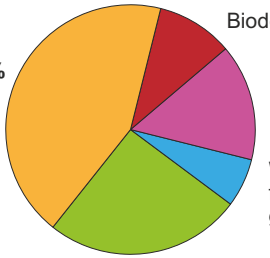
Ratios of waste from the total used and eliminated waste in the territory of the Capital City of Prague (selected methods of use), 2013–2023



Source: OCP MHMP

WASTE

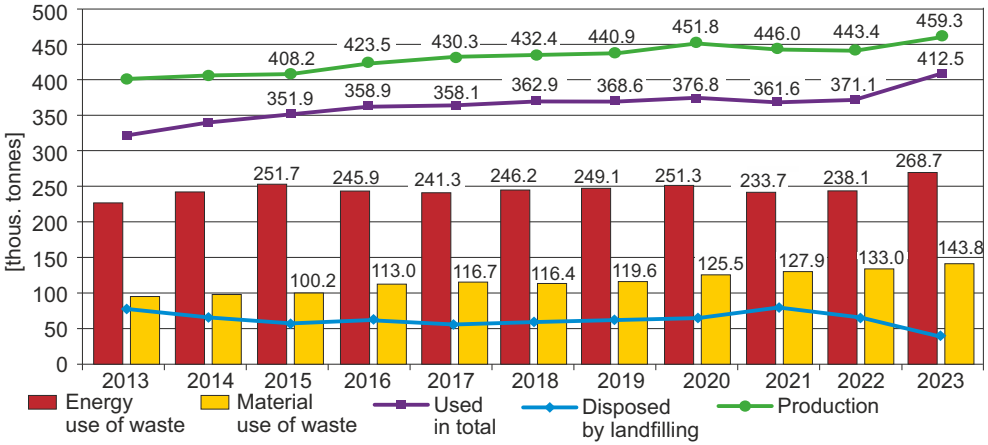
Selected methods of waste recovery and disposal, 2023



*) *Note: This figure represents the combined total of construction and demolition waste, calculated according to the methodology of the "Waste Management Indicator System of the Czech Republic" published by the Ministry of the Environment in October 2024.*

Source: OCP MHMP

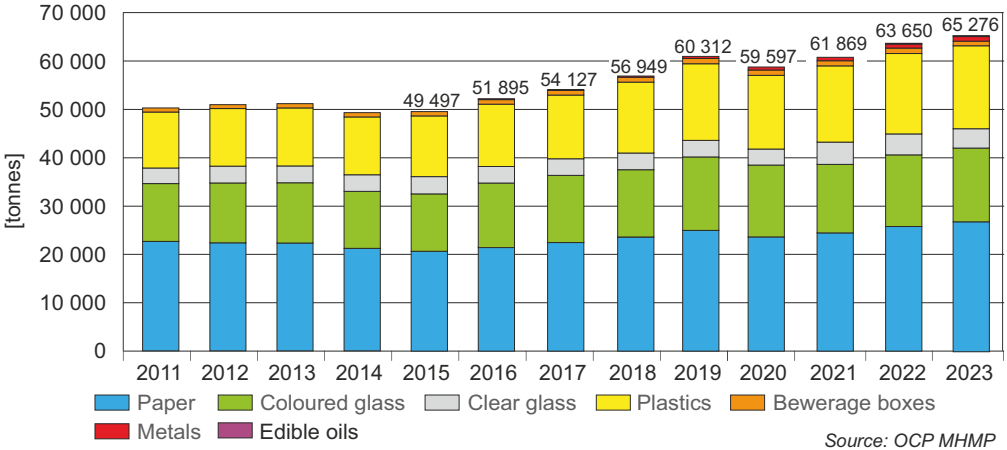
Evolution of the production and treatment of household waste, 2013–2023



Due to a fire at ZEVO Malešice in 2021, operations were limited and some of the mixed municipal waste that would have been used for energy there had to be landfilled.

Source: OCP MHMP

The amount of separated waste in street and house equipment, 2011–2023



Source: OCP MHMP

NOISE

An important issue for the city remains the noise outside. The predominant source of noise is the automobile traffic.

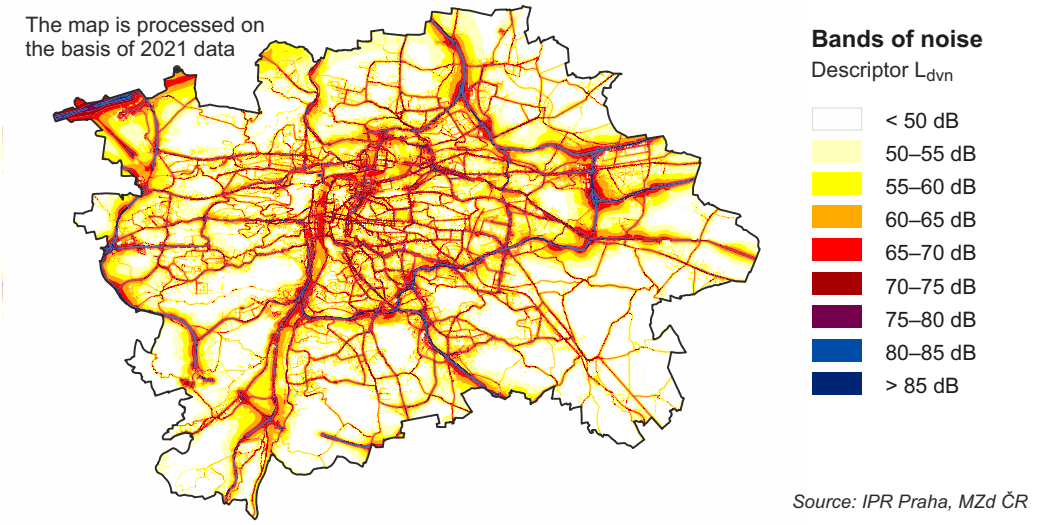
Following the calculations within the Strategic Noise Map 2022 for Prague agglomeration (data from 2021), ca 66% of population was impacted by noise L (dvn) exceeding 55 dB.

On the basis of strategic noise maps, critical places are **identified the primary attention in planning** and execution of anti-noise measures is focused on. Such measures include the construction of anti-noise barriers, replacements of surfaces at selected roads, reconstruction of tram routes, modernisation of vehicle part of the mass transit etc.

The selection of possible anti-noise measures is focused on the **Action Plan for Noise Reduction**, which follows the development of the strategic noise map. The valid action plan in 2022 was **the 2019 action plan based on the third round of strategic noise mapping**.

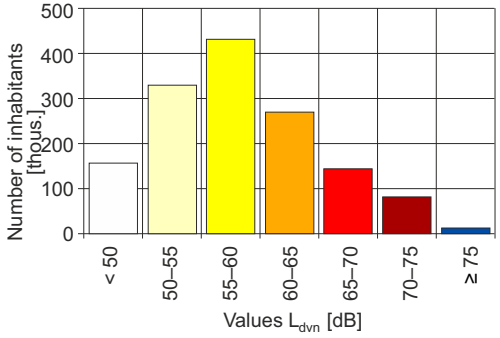
In 2023 as well as in the previous years, the antinoise measures were executed also in the airport Praha/ Ruzyně. Besides standard operational, technical and economic measures for the reduction of noise from air traffic, it's necessary to implement limitations of night operation – flights of airplanes during night hours.

Strategic map of the noise situation, 2022



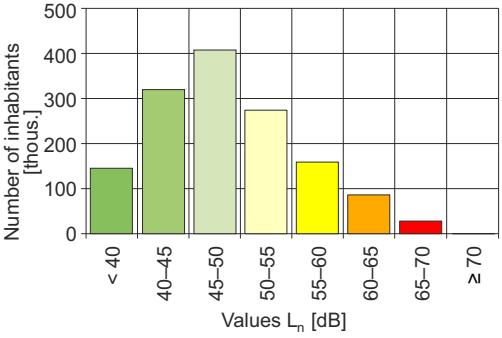
Source: IPR Praha, MZd ČR

Number of citizens impacted by noise from all sources – descriptor L_{dvn} [dB], 2021



Source: MZd ČR

Number of citizens impacted by noise from all sources – descriptor L_n [dB], 2021



Source: MZd ČR

NOISE

Noise barriers installed in the years 2016–2023 and further planned measures

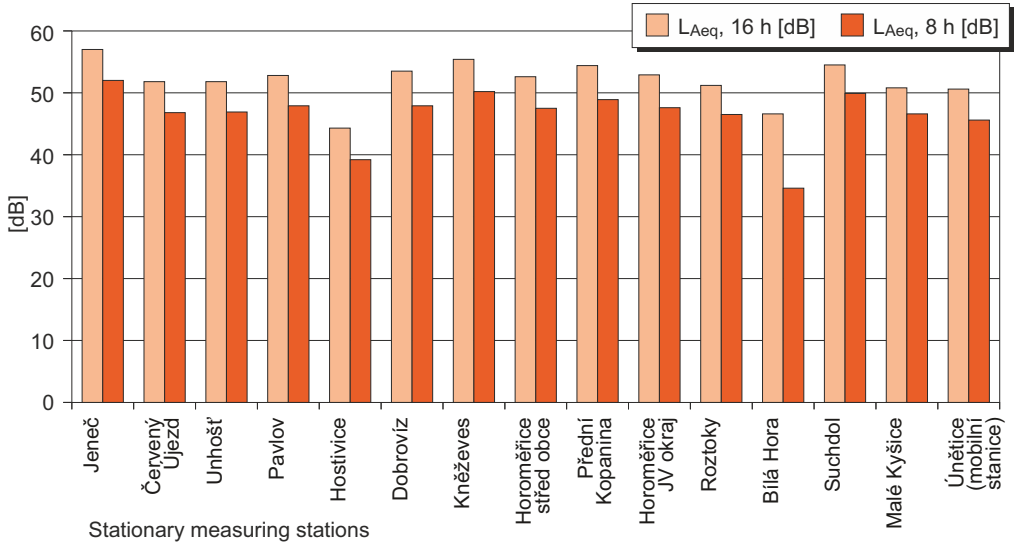
Street	PHC number	Height [m]	Lenght [m]	Cadastral district
Průmyslová	1000043	3	307	směr Poděbradská
Průmyslová	1000173	3	490	Hloubětín, směr Českobrodská
Jižní spojka	1000032	3	41	Zábělhlická – ČSPH, směr Švehlova
		3	241	ČSPH – V Korytech, směr Švehlova
		3	346	V Korytech - Švehlova, směr Švehlova
Jižní spojka – val, PHC	999407	6	340	Spořilovský plácek
Jižní spojka	999429/2	5	611	Na Strži – 5. května
Jižní spojka	999063	7	753	Spořilov I; Sliačská - Spořilovská, směr Spořilovská
Štěrboholská spojka	999325	4	632	Národních hrdinů), směr DC
		2 to 5	1346	Národních hrdinů - ČSPH, směr ZC
5. května	211/999091	7	523	Vyskočilova - Jihlavská, směr ZC
		7	157	Jihlavská - Michelská, směr ZC
5. května – MPHC	999418, 1000161	5	495	2 MPHS, Michelská-Vyskočilova, směr DC
Cínovecká – val, PHC	999341	8	605	Březiněves
Slánská	1000236	6	36	Makovského - Bazovského, směr Karlovarská
Slánská	999062	5	172	Makovského - Bazovského, směr Karlovarská
		5	170	Makovského - Bazovského, střední PHS
		5	56	Makovského - Bazovského, směr Makovského
		5	116	Makovského - Bazovského, směr Makovského
		5	111	Bazovského - Opuková, směr Karlovarská
		5	164	Bazovského - Opuková, střední PHS
		5	175	Bazovského - Opuková, směr Makovského
Bělohorská	44159	3	252	Za Oborou – supermarket Kaufland
Strakonická	999423	4	116	Strakonická x Dostihová, směr ZC
		2,6	72	
		3,6	137	
Kbelská	1000003	4	432	PHS Kbelská, Letňany, směr ZC
		4	903	PHS Kbelská, Prosek, směr DC
Brněnská		3	882	PHS Šeberov, směr ZC
Brněnská		3	906	MPHS Formanská (Újezd), směr DC
Brněnská	PHS 803	7	612	PHS + val Kateřinky, směr DC
Horoměřická	PHS 744	2	113	Želivka - V Šáreckém údolí, směr ZC
Evropská	1000101	3	194	Vokovická - Ke Dvoru, směr ZC
Československého exilu	PHS 733	3	66	Československého exilu x Generála Šišky

PHC realized in 2023

Noise barriers under construction in 2023 or planned for installation in 2023

Source: MHMP

Equivalent levels of acoustic pressure $L_{Aeq,T}$ for day and night related to the conditions of a characteristic flight day in 2023



Stationary measuring stations

Note: Limit value for L_{Aeq},16 h = 60 dB, for L_{Aeq}, 8 h = 50 dB

Source: Letiště Praha, a. s.

TRAFFIC

Transport is a factor that considerably influences the quality of the environment in Prague. The demands for mobility are balanced by efforts to minimise its negative impact. A characteristic aspect of traffic volume since 2019 has been a gradual decline in the central parts of the city (with oscillating values previously 2015–2020) and predominantly steady growth in the city's outer zone (with the exception of 2015 and 2022 and the COVID year of 2020). In 2023, traffic volume rose compared to 2022 and 2021. The number of passenger vehicles on record in Prague also increased, as in previous years.

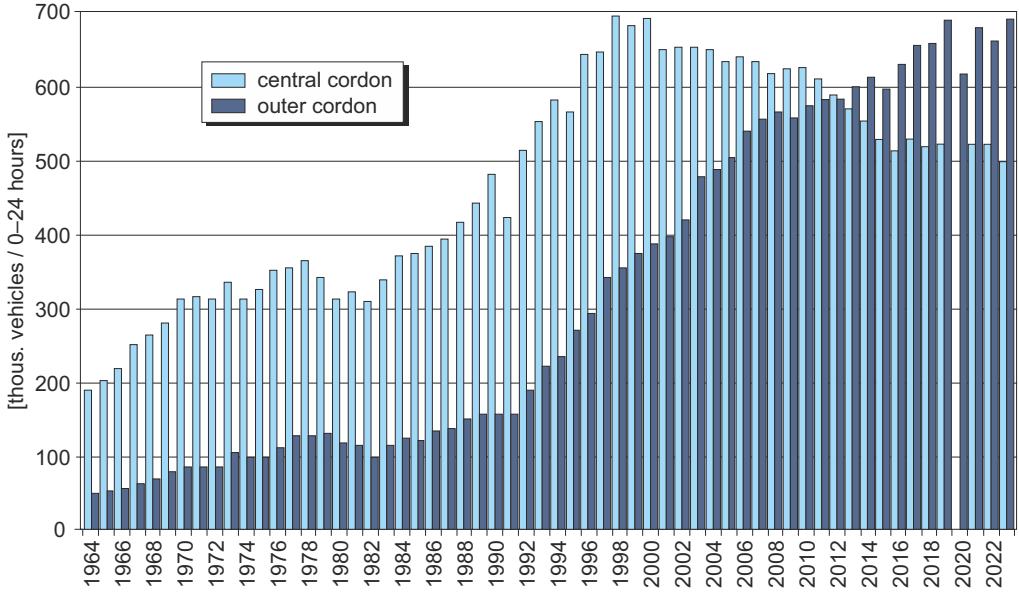
As part of sustainable transport development, the city is expanding public transport, striving to complete the ring road, supporting reduction of fuel and energy consumption in transport, reducing transport's impact on air quality (including the use of CNG vehicles and supporting electromobility) and noise pollution, and supporting bicycle and pedestrian transport to the extent economically possible.

From the end of 2019, the city has been governed by the newly adopted Sustainable Mobility Plan in this area.

The priority of developing public transport is one of the pillars of the city's transport policy principles. In Prague and its surroundings, **mass transit is provided for by the system of Prague Integrated Public Transport (PID)**, which includes the metro, trams, urban and suburban buses, railway, and also the funicular to Petřín and the ferries. At the end of 2023, there were 3 metro lines, 26 day and 9 night trams, **178 bus and trolleybus lines and 130 suburban bus lines**, 39 railway lines with S and R designations, 7 ferry lines and 1 funicular in service under PID. Roughly 1 087.3 million passengers were transported as part of the Prague Integrated Public Transport system in 2023 (an increase over 2022 and gradual return to pre-COVID levels). The largest share was covered by the metro (33.2%) and trams (31.9%). The modal share of public transport was 37% (by foot 35%, bicycle transport 1%, automobile transport 25% (combination of mass and car transport 2%)).

The **building of cycling infrastructure** continued. At the end of 2023, approx. 549 km of cycle routes were marked with directional signage under the network of bicycle infrastructure. Of this network, approx. 248 km were protected marked and recommended routes and 225,4 km made use of integration measures (272 km if contraflow bicycle lanes are included). Approximately 11.6 km of new bicycle lanes were installed in 2023 (12.5 including shared lanes), as were 3.5 km of contraflow lanes, plus for example 16 bicycle crossings. The share of bicycle traffic in 2023 totalled roughly 1% of all trips in the city.

Traffic intensity in the central and outer cordon, 1964–2023

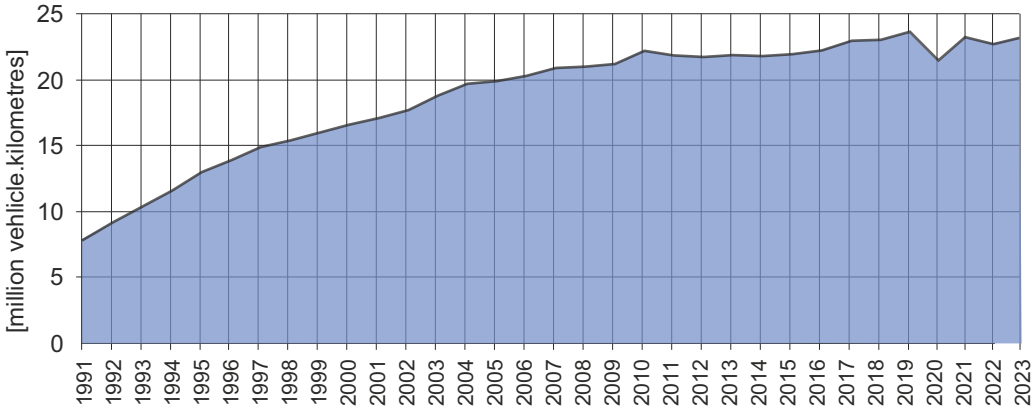


Note: Due to the pandemic only a third of the usual number of locations were counted in 2020 and thus cannot be compared year-on-year

Source: TSK – ÚDI

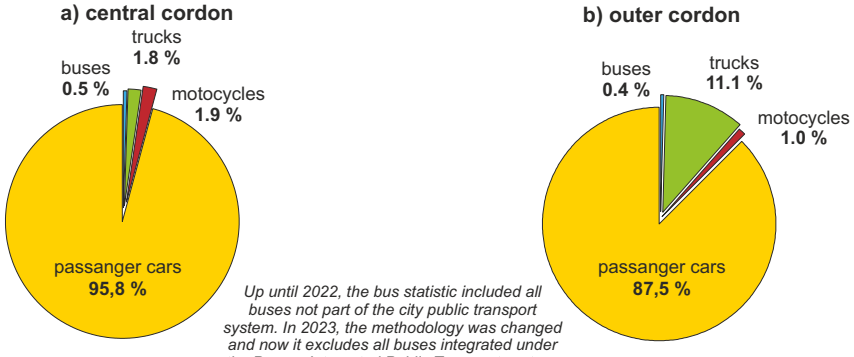
TRAFFIC

Traffic performance of automotive transportation for an average workday, 1991–2023



Source: TSK – ÚDI

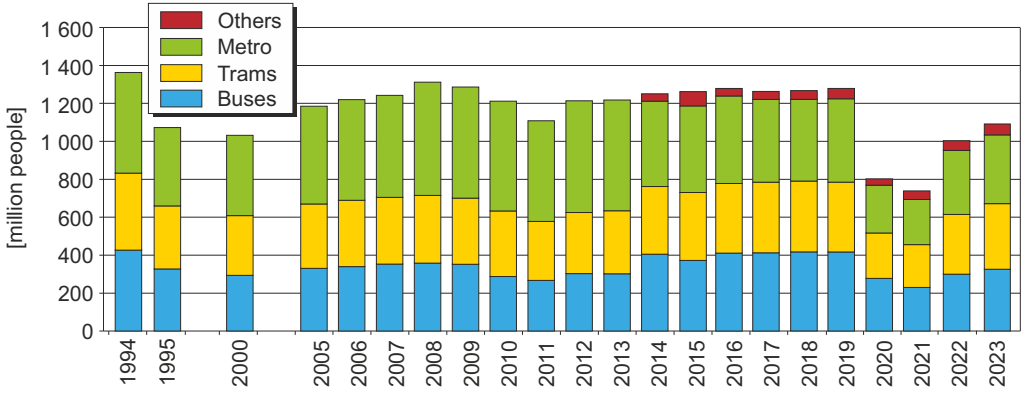
Composition of the traffic stream, 2023



Up until 2022, the bus statistic included all buses not part of the city public transport system. In 2023, the methodology was changed and now it excludes all buses integrated under the Prague Integrated Public Transport system.

Source: TSK – ÚDI

Public mass transportation – annual number of transported people, 1994, 1995, 2005–2023

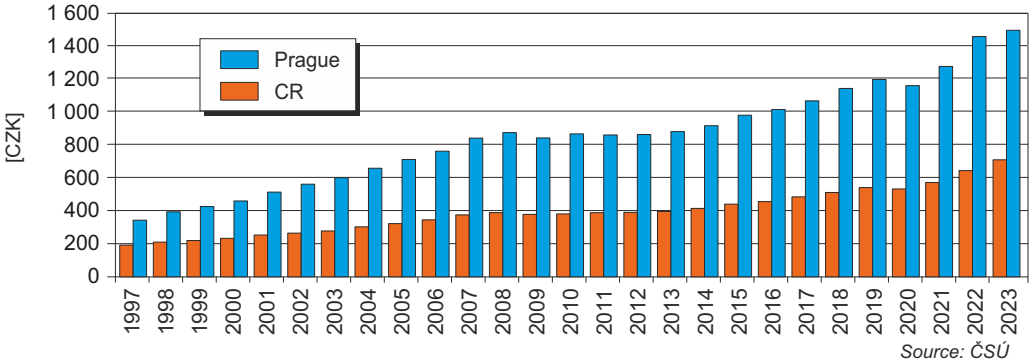


Note: Data for 2020 and 2021 were significantly influenced by the COVID-19 pandemic.

Source: TSK – ÚDI

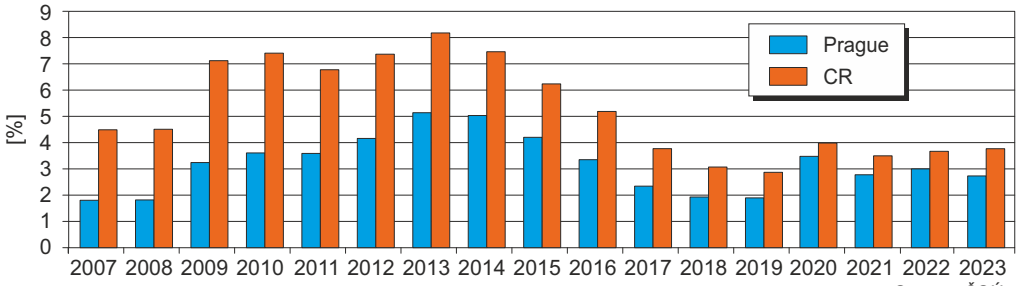
ECONOMY

Gross domestic product per capita, 1997–2023



Source: ČSÚ

Ratio of unemployed people, 2007–2023 (as at 31st December)



Source: ČSÚ

Basic economic data on evolution in Prague – macroeconomic indicators, 2021–2023

	2021	2022	2023
Gross value added in total (CZK million)	1 558 633	1 777 175	1 884 394
Gross national product at current prices			
– CZK million	1 710 117	1 952 106	2 052 203
– EUR million	66 697	79 464	85 494
– PPS million[1)]	86 836	95 788	101 045
Share of the region in the CR GPD as % (CR = 100)	106.4	103.9	97.7
GDP development at fixed prices. previous year = 100	27.1	27.7	26.9
Gross national product per capita			
– CZK	1 349 553	1 458 395	1 493 235
– EUR	52 635	59 366	62 208
– PPS[1)]	68 527	71 562	73 523
– EU27[2)] average in PPS[1)] = 100	206.5	198.9	192.8
Gross national product per 1 employee (CZK)	1 822 779	2 063 256	2 083 781
– CR = 100 %	152.6	156.1	147.4
Creation of gross fixed capital (CZK million)			
– CZK million	492 890	560 716	575 813
– Per 1 inhabitant (CZK)	388 968	418 904	418 976
– Share of the total THFK in the CR [%]	29.8	28.7	27.7
– Per 1 inhabitant CR = 100 %	246.8	230.9	219.1

[1)] PPS – purchasing power standard
[2)] EU27 – 27 Member States of the EU

Source: ČSÚ

ENERGETICS

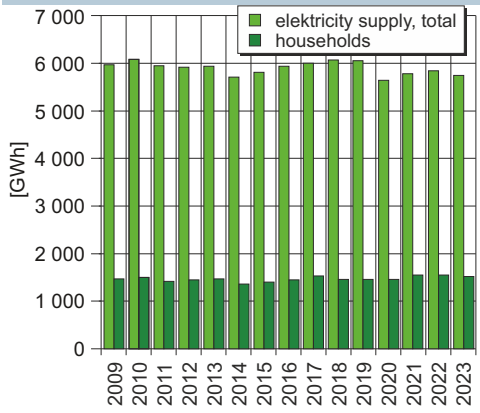
In the context of the sustainable development of the city, Prague also deals with energy management. In accordance with the Municipal Energy Strategy, the city implements numerous activities in the field of energy savings. Based on energy audits, measures to reduce the energy consumption of buildings are taken, especially those buildings owned and used by the city (bureaus, schools, social institutes).

By the end of 2022, a total of **514 measures** had been implemented worth **CZK 1.720 billion**. Insulation of buildings achieves energy savings of as much as 50%.

The subsidy programme "**Clean Energy Prague**" in support of converting heating systems to ecological media and utilising renewable resources in residential buildings continued in 2023 (now restructured as a two-year programme for the period 2022–2023). In total, 498 applications were approved (for 2412 flats) for a total amount of CZK 50,126,200.

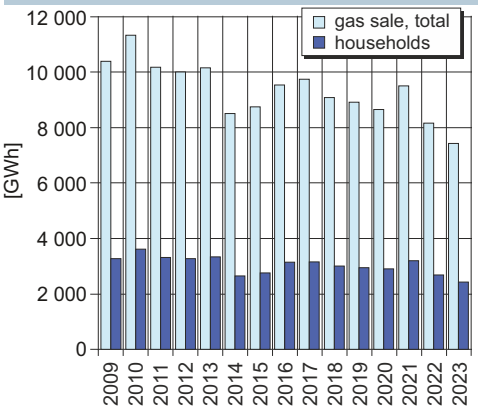
The **Boiler Subsidies** also continued (paid from the Operational Programme Environment, Priority Axis 2, Specific Objective 2.1), with the aim of reducing emissions from solid fuel space heating in single-family homes, which expose the population to above-limit concentrations of pollutants, by replacing them with heat sources that meet the emission limits of Class 3 or better. In 2023, a subsidy programme "**Improving the Air Quality in the City of Prague – Acquisition of Ecological Household Heating IV**" was declared, intended for low-income households. CZK 7.1 million was paid out to 53 applicants in 2023.

Evolution of the consumption of electricity, 2009–2023



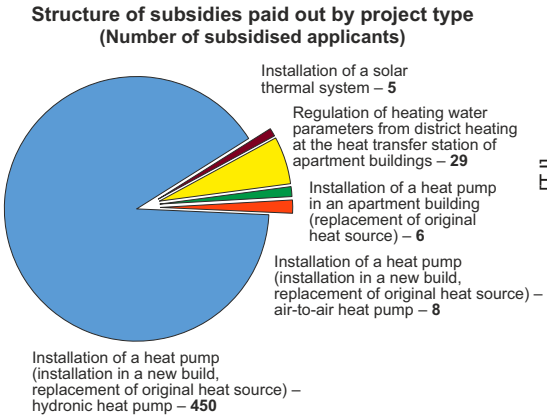
Source: PREdistribuce, a.s. (2009–2023), ERÚ (2018–2023)

Evolution of gas consumption, 2009–2023

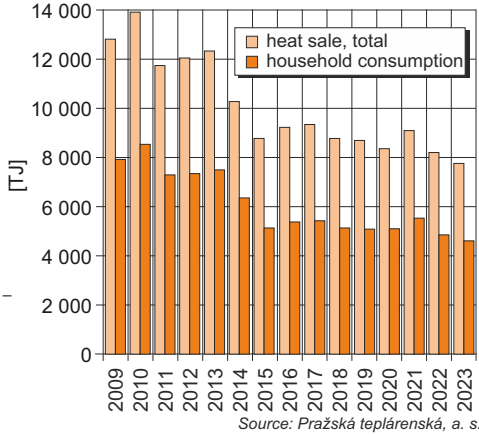


Source: PPDi, a.s. (2009–2023), ERÚ (2018–2023)

Structure of subsidies paid out by project type under the 2022–2023 Programme



Evolution of heat consumption, 2009–2023



Source: Pražská teplárenská, a. s.

ENVIRONMENTAL TOOLS AND POLICIES

When it comes to managing environmental protection, the City of Prague makes use of the tools available to it as both a city and a region. The traditional instruments include measures and processes stemming from the legislation – **Environmental Impact Assessments (EIA), Integrated Pollution Prevention and Control (IPPC), strategic and urban planning documents** (City of Prague Strategic Plan, Land Use Plan for the Settlement Area of the City of Prague, Territorial Analytical Materials) and **economic instruments**, from which Prague for example implements subsidy programmes in the field of the environment and energy use (Subsidy for Support of Projects Improving the State of the Environment of the City of Prague (since 1996), subsidy programme Clean Energy Prague (since 1994).

Some of the modern tools supporting environmental protection that the city itself implements or that it supports in some way include **Environmental Education, Training and Awareness (EETA), Local Agenda 21, international projects, and the provision of information**. Numerous municipal districts are active in volunteer programmes, especially in the implementation of Local Agenda 21, or in the implementation of individual environmental protection measures as part of Green Government actions. At the all-Prague level, projects of international partnerships are realised. The municipal informational support for experts and the general public is primarily ensured by the Prague Environmental Information System (IOŽIP) and the Regional Information System (ISU).

Long-term strategic plans in the field of protection and care for Prague's environment have been formulated in the City of Prague Strategic Plan, and since 2017 in the adopted **Climate Change Adaptation Strategy** and the **follow-up implementation plans for sub-periods**, and newly since 2021 in the adopted Prague Climate Plan 2030.

In 2023 Prague had at its disposal conceptual documents, action programmes and plans for environmental sub-sections that further elaborated in detail the aforementioned strategic objectives and plans.

EIA & SEA

In 2023, the **Prague City Hall Environmental Protection Department** (OCC MHMP) received 24 notifications of project plans as the competent authority (hereinafter the "EIA process"). Following the screening decision, 4 EIA processes found that the project was subject to assessment under the law in 2023, while in 17 cases the screening procedure concluded that the project was not subject to assessment under the law. 6 EIA processes were terminated at the request of the notifier (investor) and one process was terminated by the competent authority.

The OCP MHMP also issued 22 positive binding opinions under the provisions of Section 9a (6) of the Environmental Impact Assessment Act (verification opinions).

In 2023, the **Ministry of the Environment**, as the competent authority, received 2 notifications of project plans concerning the territory of Prague. In the monitored period, 1 plan was found to not be subject to assessment and a plan was subject to assessment.

The **Regional Authority for the Central Bohemian Region**, as the competent authority, did not receive any notification of a project plan with impact on the City of Prague in the monitored period.

From the perspective of **Strategic Environmental Assessment** ("SEA"), the OCP MHMP issued 17 opinions on the proposed content of a change to the Land Use Plan for the Settlement Area of the City of Prague under Section 50 (5) of Act No. 183/2006 Coll., on Spatial Planning and the Building Code (the Building Act), as amended, and Section 10g and 10i of Act No. 100/2001 Coll., on Environmental Impact Assessment.

Announcements deposited in the respective offices of the Department of Environmental Protection of the Prague City Administration in 2023 (sorted by administrative units)

Administrative district / Number of projects:

Praha 4 / 4, Praha 6 / 1, Praha 8 / 2, Praha 10 / 1, Praha 13 / 1, Praha 14 / 3, Praha 15 / 4, Praha 16 / 2, Praha 18 / 1, Praha 19 / 1, Praha 20 / 1, Praha 22 / 2, other administrative districts / 0 projects.

Actions influencing more administrative units: 1.

Total number of intentions: 24.

Source: OCP MHMP

ENVIRONMENTAL TOOLS AND POLICIES

IPPC

In the Capital City of Prague, **37 legally valid integrated** permits were issued and **386 were amended** in the period from when the Act came into effect until the end of 2022. Of these, a total of 14 integrated permits were abolished: 9 facilities discontinued operations, and 5 facilities were exempted from the Act of Integrated Prevention.

By the end of 2023, a total of 23 facilities with valid integrated permits were registered.

Category	Unit / Operator	Category	Unit / Operator
1.1.	Teplárna Michle / Pražská teplárenská, a.s.	4.5.	INTERPHARMA PRAHA / Interpharma Praha a.s.
1.1.	Teplárna Malešice / Pražská teplárenská, a.s.	4.5.	Výroba účinných látek (API) v areálu Zentiva, k.s. / Zentiva k. s.
1.1.	Výtopna Třeboradice / Energotrans, a.s.	5.1. b)	Deemulgační stanice Dolní Měcholupy / Purum s.r.o.
1.1.	Teplárna Veleslavín / Veolia Energie Praha, a.s.	5.1. b)	Neutralizační stanice Letňany / Purum s.r.o.
1.1.	Výtopna Krč / Pražská teplárenská, a.s.	5.2. a)	ZEVO Praha Malešice / Pražské služby, a.s.
1.1.	Teplárna Holešovice / Pražská teplárenská, a.s.	5.2. b)	Spalovna nebezpečných odpadů v areálu FN Motol / Fakultní nemocnice v Motole
2.6.	Zařízení na povrchovou úpravu kovů a plastů s použitím elektrolytických nebo chemických postupů / LATECOERE Czech Republic s.r.o.	5.4.	Skládka odpadů S-OO3 se sektorem S-OO1 Ďáblice / FCC Česká republika, s.r.o.
2.6.	Povrchové úpravy galvanickým pokovováním a lakováním / TK Galvanoservis s.r.o.	6.4. b) 2	Výroba nápojů / KMV BEV CZ s.r.o.
2.6.	Povrchové úpravy pro generální opravy podvozků / Czech Airlines Technics, a.s.	6.4. b), bod 2	Závod na výrobu nealkoholických nápojů Kyje / Coca-Cola HBC, Česko a Slovensko, s.r.o.
3.1. a)	Zařízení na výrobu cementového slínku v rotačních pecích o výrobní kapacitě větší než 500 t denně / Českomoravský cement, a.s.	6.4. b), bod 2	Pivovar Staropramen / Pivovary Staropramen s.r.o.
3.5.	Cihelna Štěrboholy / Jan Fiala - cihelna Štěrboholy	6.4. c)	Mlékárna Pragolaktos Kyje / Mlékárna Pragolaktos, a.s.
4.1 a)	Výrobna acetylenu / Linde Gas a.s.		

Overview of conceptual documents for the environment and related fields

Documents adopted in 2023:

- City of Prague Drought and Water Shortage Management Plan
- Prague Active Mobility Strategy

Documents in the state of preparations in 2023:

- Action Plan for Circular Prague 2030 Strategy
- Sustainable Mobility Action Plan for 2024–2026

Other selected valid documents adopted in 2023:

- Climate plan of the capital City of Prague until 2030 / Sustainable Energy and Climate Action Plan (SECAP);
- Climate commitment of the Capital city of Prague;
- The Capital City of Prague Climate Change Adaptation Strategy;
- Implementation plan for the Climate Change Adaptation Strategy of the Capital City of Prague for 2020–2024;
- Circular Prague 2030 Strategy;
- Regional Concept for Environmental Education and Awareness within the City of Prague for the period 2016–2025;
- City of Prague Action Plan for Regional EETA Concept for 2022–2025;
- Air quality improvement program – Prague agglomeration CZ01 (*document prepared under the auspices of the Ministry of the Environment*);
- Action Plan of Prague Agglomeration Air Quality Improvement Programme CZ 01 2020+ (PZKO 2020+), part two – support measures;
- Action Plan of Prague Agglomeration Air Quality Improvement Programme CZ 01 2020+ (PZKO 2020+), Prague Agglomeration CZ01;
- General Drainage Plan of the Capital City of Prague;
- General Water Supply Plan of the Capital City of Prague;
- General Water Mains Development and Sewage Plan, as amended;
- City of Prague Waste Management Plan (as a waste originator – municipality);
- City of Prague Regional Waste Management Plan;
- Noise reduction action plan for the Prague agglomeration 2019;
- Sustainable transport plan for Prague and its surroundings and the follow-up implementation plan for the period until 2023;
- Principles of Developing Pedestrian Traffic in the Capital City of Prague.

ENVIRONMENTAL TOOLS AND POLICIES

Environmental education, training and awareness (EVVO)

The Capital City of Prague develops activities within environmental education, training and awareness (hereinafter EVVO) in connection with valid state legislation and conceptual documents, as well as international documents.

The basic regional strategic document for EVVO on the regional level **in 2023** was the **Regional Concept of Environmental Education, Training and Awareness in the Territory of the City of Prague for 2016–2025**. This conception is continued by the **action plans for the regional concepts of EVVO** for individual years or longer periods. Among the pillars of EVVO in Prague are schools and school facilities and non-governmental organizations, which mainly include centres of environmental education.

In 2023, 7 organizations were members of SSEV Pavučina. The realization of environmental education at schools is part of the framework educational programs and other documents and respective methodologies at all levels of the educational system.

Financing EVVO in the Capital City of Prague from the 2023 Budget of the Capital City of Prague

Action Plan KK EVVO Total		**48 145 218 Kč**
including	Administration and maintenance of centres of environmental education – SEV Toulcův dvůr	3 500 000 Kč
	Administration and maintenance of centres of environmental education – SEV of the Forests of the City of Prague	6 524 400 Kč
	Programme Supporting Environmental Improvement Projects in the City of Prague – EVVO (Environmental Education, Training and Awareness; grant spheres IV + VI and other selected projects)*	28 382 500 Kč
	Other activities and projects AP KK EVVO covered from the budget of the Department of Environmental Protection of Prague City Administration	9 738 318 Kč
Information technology for the environment in relation to EVVO (overall publication Prague Environment, content development of the Prague Environment portal etc. /budget of the Department of Environmental Protection of the Prague City Administration/)		**305 510 Kč**
All-Prague programs of support for education on the territory of the Capital City of Prague (sphere EVVO*) *Note: additional funding for EVVO was allocated under Citywide Programmes – Supporting Leisure-Time Activities*		**96 000 Kč**
TOTAL		**48 546 728 Kč**

* Segmentation of projects to projects in EVVO sphere and other is indicative.

Source: OCP MHMP, SML MHMP, SVC MHMP

Local Agenda 21 in Prague, 2023

The Local Agenda 21 and local Actions 21 (LA 21) are volunteer programmes and projects for the sustainable development of towns, cities and regions. The coordinator in the Czech Republic for these issues is the workplace for the Local Agenda 21 CENIA, the Czech Environmental Information Agency. Among other things, this agency manages a database of subjects involved in LA 21 (*ma21.cenia.cz*). In 2013, the Capital City of Prague as a region officially adhered to the principles of the local Agenda 21 by joining the association National Network of Healthy Cities of the Czech Republic, and by approving the Declaration of the project "Healthy Capital City of Prague".

In 2023, LA21 projects continued at the level of individual municipal districts. For this year there are a total of **9 municipal districts**, of those 1 in Category A, 2 in Category B, 5 in Category C, 1 in Category D and 2 in the category of Interested Parties.

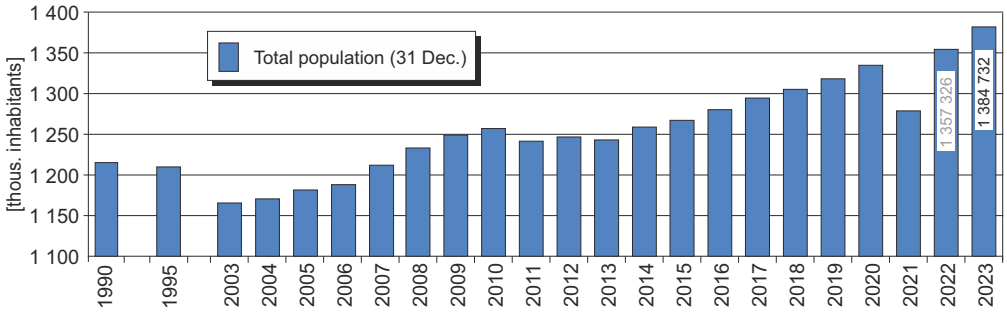
Category	City Districts
A	MČ Praha 14
B	MČ Praha 10, MČ Praha 12
C	MČ Praha 13, MČ Praha 18, MČ Praha-Kolovraty
D	MČ Praha 15,
Applicants	MČ Praha 7, MČ Praha-Troja

Source: CENIA

POPULATION AND HEALTH

The number of people born fell year-on-year between 2022 and 2023, as did the number of live births per 1000 inhabitants and the total number of deaths per 1000 inhabitants. The standardised mortality rate in Prague is lower than that in the Czech Republic for both sexes, and decreased in 2023 for both sexes. The most common causes of death are cardiovascular disease and neoplasms. The number of deaths from neoplasms per 100 000 inhabitants is gradually decreasing.

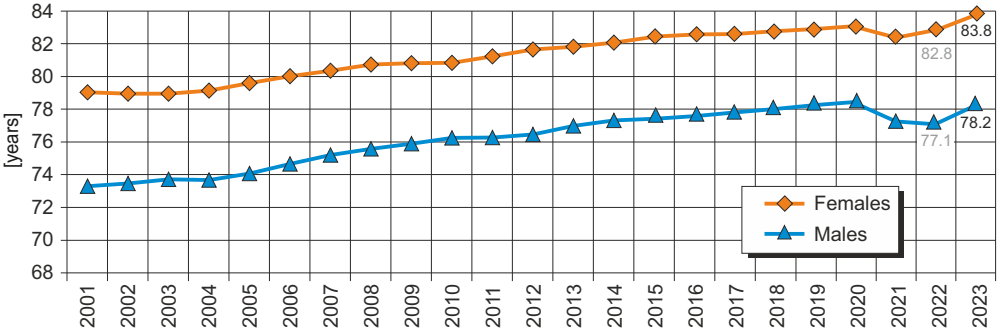
Number of citizens in Prague, 1990, 1995, 2003–2023



Note: The number of citizens since 31st December 2021, 2002 and 2023 has been connected to the 2021 census results and is not comparable to previous years.

Source: ČSÚ

Life expectancy in Prague, 2001–2023



Source: ČSÚ

Evaluation of water quality in Prague natural outdoor swimming pools, 2023

Natural swimming pool	Week of the year 2023																	
	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37
Motol		🙂		🙂		🙂		🙂		🙂		😐		😐		🙂		
Džbán		😐		😐		😐		😐		😐		😐		😐		😐		
Hostivař		😐		🙂		😐		😐		😐	😐	😐		😐		😐		
Šeberák		😐		😐		😐		😐		😐		😟		😐		☹		
Divoká Šárka		🙂				🙂				🙂				🙂		🙂		
biotop Radotín				😐		🙂		🙂		🙂		🙂	🙂		🙂		🙂	
biotop Lhotka		🙂		🙂		🙂		zákaz koupání								🙂		🙂

🙂 Water suitable for bathing
😐 Water suitable for bathing with sensorially noticeable Deteriorated properties
😟 Deteriorated water quality
☹ Water non-suitable for bathing
☠ Water dangerous for bathing

Source: SZÚ

Indicator	Unit	2015	2016	2017	2018	2019	2020	2021	2022	2023	Source
Specific emissions of greenhouse gases	t $CO_{2\ ekv.}$/ capita	6.38	6.72	6.54	6.41	6.13	5.68	5.97	5.55	5.50	ČHMÚ, ČSÚ (Re-counted values, 2019)
Annual elektricity consumption per capita	kWh/capita/ year	1112.1	1131.3	1181.6	1131.9	1121.2	1117.7	1231.1	1160.3	1110.8	ČSÚ
Annual vehlicle-kilometers travelled per capita	thousand vehlicle-km/ capita/year	5.52	5.50	5.67	5.53	5.63	5.12	5.68	5.38	5.31	TSK-ÚDI, compiled MHMP
Total number of vehlicles per capita	numb./cap.	0.74	0.78	0.818	0.844	0.86	0.87	0.965	0.927	0.940	TSK-ÚDI
Length of selected bicycle routes											Prague Transportation Yearbook (TSK Praha)
– Marked bicycle routes, total	km	454	472	477	500.3	515	520	531	543	549	
– Protected cycle routes (bicycle paths	km	167	173	178	186.5	194	200	215	233	248	
– Integration measures (bicycle lanes etc.)	km	98.5	102	106.9	117.3	126.9	159.8	193.0	219.2	225.4	
Air emissions of NO_x	kg/cap./year	5.6	5.8	5.7	5.7	4.8	4.8	4.7	4.2	4.1	ČHMÚ, ATEM, compiled MHMP
Air emissions of SO_2	kg/cap./year	0.1	0.2	0.2	0.2	0.2	0.21	0.11	0.12	0.11	
Quality of local air – number of exceedances of the PM_{10} limit value											ČHMÚ, compiled MHMP
– traffic station	number	0 Vršo-vice	0 Vršo-vice	13 Vršo-vice	18 Vršo-vice	0 Vršo-vice	0 Průmy-slová	0 Vršo-vice	0 Kar-lín	0 Průmy-slová	
– background station	number	0 Such-dol	0 nám. Repu-bliky	0 nám. Repu-bliky	3 nám. Repu-bliky	0 nám. Repu-bliky	0 nám. Repu-bliky	0 nám. Repu-bliky	0 Šrobá-rova	0 Šrobá-rova	
Average household water consumption	l/day/ capita	106	108	109	107	113	112	114	111	104	PVK
Area of protected areas as percentage of the City total area	%	4.7	4.7	4.7	4.8	4.8	4.9	4.9	4.9	4.8	MHMP
Waste production per capita - household waste	t/capita/ year	0.325	0.333	0.335	0.333	0.335	0.340	0.352	0.331	0.334	MHMP
The number of respiratory diseases as hospital admissions	Number per 1,000 inhab.	9.9	13.1	12.6	11.3	9.9.	9.1	13.1	11.1	10.8	ÚZIS, Czech National Registry of Hospitalized Patients

City of Prague Climate Change Adaptation Strategy
Selected projects

Smetanovo nábřeží, planting of 17 Japanese pagoda trees in rootable planting space
IPR Praha, MHMP, TSK Praha a.s.

Memorial site on Branišovská, landscaping
MČ Praha 12

New water line for Prague Central Wastewater Treatment Plan, Císařský ostrov, MHMP, PVS, a.s.

Climbing plants on a trellis, Za Žižkovskou vozovnou,
MČ Praha 3

Revitalisation of bailey at Vinoř Chateau
MČ Praha- Vinoř

Fire hydrant, project for underwater rainwater storage tanks in Královka Park, MČ Praha 6

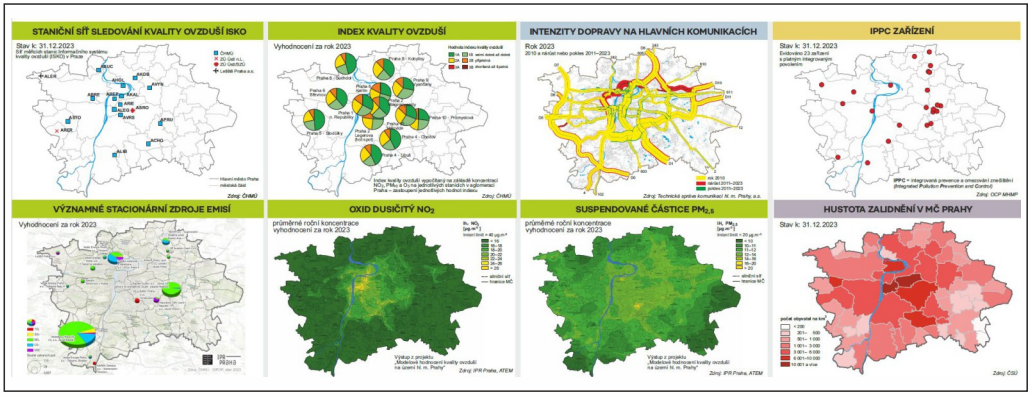
More detailed information
https://adaptacepraha.cz/databaze-projektu/

STRATEGIE ADAPTACE
HL. M. PRAHY NA ZMĚNU KLIMATU

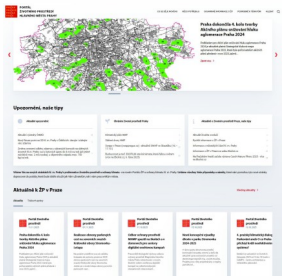
PRA HA
PRA GUE
PRA GA
PRA G

You can find selected map information in the information materials of the set "**Green Maps of Prague**" and selected thematic maps, as well as on the city web

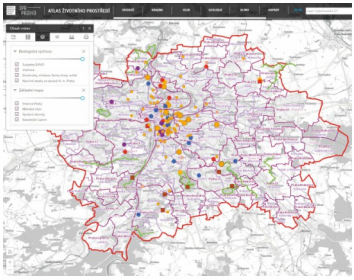
Prague Environment – Selected information 2023, maps
portalzp.praha.eu/rocenkyzp



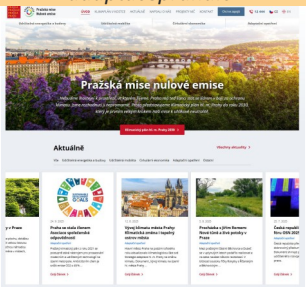
Prague Environmental Portal
portalzp.praha.eu



Atlas of the Environment in Prague
www.geoportalpraha.cz



Prague Climate
klima.praha.eu
adaptacepraha.cz



Contact details of selected organizations

Organization, Address	Office, Head	Phone, fax, e-mail
Prague City Hall Mariánské nám. 2, Praha 1, 110 01 Jungmannova 35/29, Praha 1, 110 00	Environmental Protection Department (OCP MHMP) Štěpán Kyjovský, Department Director	tel.: +420 236 00 4296, 4246 e-mail: stepan.kyjovsky@praha.eu ocp@praha.eu
Hygiene Institute of the Capital City of Prague Rytířská 404/12, p.s. 203, Praha 1, 110 01	JUDr. Mgr. Vladimír Možíšek, LL.M. Head of the service office – Director	tel.: +420 296 336 711, podatelna@hygpraha.cz, IDDS: zpqai2i http://www.hygpraha.cz
Czech Environmental Inspection Na Břehu 267/1a, Praha 9, 190 00	Regional Inspectorate Prague Wolkerova 40/11, 160 00 Praha 6-Dejvice	tel.: +420 233 066 111 ph.podatelna@cizp.cz IDDS: 4dkdzty http://www.cizp.cz

More detailed information you can find on Prague Environmental Portal (in Czech)

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Jungmannova 35/29, 110 00 Praha 1, Czech Republic

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Photo on front cover – window of the Old Wastewater Treatment Plant in Prague-Bubeneč

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