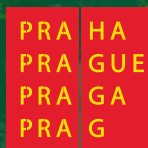




# Prague Environment Selected Information 2022

Selected Information  
from the Prague Environment Report

Prague Environmental  
Information System (IOŽIP)  
THE CAPITAL CITY OF PRAGUE



# City of Prague Climate Change Adaptation Strategy

## CLIMATE ASSESSMENT

In order to more effectively monitor the results achieved in Prague's adaptation to climate change, the city makes use of the **KLIMASKEN instrument**. Klimasken is a tool that evaluates the contribution of (not just) cities to climate change and adaptation to its impact. The instrument is composed of **63 indicators**.

The result of the assessment is the "**city climate label**".



**STRATEGIE  
ADAPTAČE**  
HL. M. PRAHY NA  
ZMĚNU KLIMATU

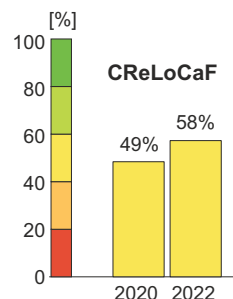
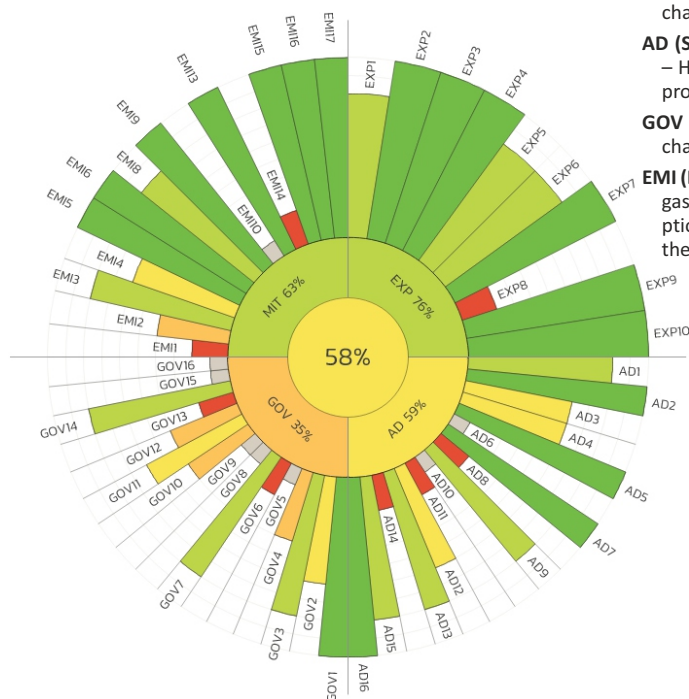
The climate label consists of 4 areas:

**EXP (EXPOSURE)** – How much is climate change already being felt in the city?

**AD (SENSITIVITY AND ADAPTIVE CAPACITY)** – How prepared is the city and how can it protect itself?

**GOV (PREPAREDNESS)** – How is the city changing what it can?

**EMI (EMISSIONS)** – What are the greenhouse gas emissions like from energy consumption, transport and waste production in the city?



Prague's label uses **5 colours** (red, orange, yellow, light green and dark green), which express the **negative** (red) or **positive** (dark green) **state or development of the phenomenon in question**.

One label can be used to evaluate the state and development of the individual indicators, 4 sub-areas, and the **overall status of the system** (this is **expressed by a value called CReLoCaF** –ClimateResilientLowCarbonFactor – expressed in a %). 0% means the worst possible indicator values are reported in the given area (or whole system). **100%** on the other hand **means that all the indicators show the best possible values**.

It can be said that the **resulting value indicates how far along the city is on the path to climate friendliness and resilience** within the scope of current knowledge.

The **CReLoCaF** value for the year **2022** was calculated at **58%**, for **2020** it was **49%**.

# PRAGUE'S PRIORITIES IN THE ENVIRONMENTAL FIELD

Prague is the capital of the Czech Republic, at the same time its largest city (496 km<sup>2</sup>) and population (1.357 million as of December 31<sup>st</sup>, 2022). In terms of the quality of the environment, Prague must address issues 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.

At present, climate protection is a key priority. The basic strategy in this area is the City of Prague **Climate Plan until 2030** adopted in May 2021.

In its *Programme Statement for the 2019–2022 election period*, the Prague City Council identified a healthy environment as one of the basic preconditions for people's quality of life and simultaneously builds environmental policy on natural motivation, respect and public participation.

One of the main intentions of Prague in environmental field in this election period is fulfilling the adopted **Strategy of Adaptation of the Capital City of Prague on climate change**. Specifically, it is in relation to increasing the amount of greenery in the streets, revitalising courtyards, adding water elements to the streets and also creating an action plan for planting trees with the long-term intention to plant up to one million new trees in Prague. Farmers' markets with local products were supported. In the area of greenery, the areas of parks, forests, forest

parks and other recreational areas in Prague were being expanded and revitalised. Acquisition of green areas into the ownership of the city continued. As part of the care of city parks and greenery, their biodiversity was increasing. Community gardens and gardening colonies were supported. In terms of water, the revitalisation of Prague's streams and water bodies continued, new lakes, and ponds were created. Rainwater priority was seepage at or near the point of impact. The use of rainwater in the city was supported, for example, for irrigating greenery.

In the **municipal waste management** field, the city follows the sequence: 1. prevention, 2. minimisation, 3. recycling, 4. energy recovery, 5. landfilling. It supports the collection of bio-waste and improves the network for the collection of sorted waste.

In the field of **responsible development of Prague**, the priority is the territorial development of the city, which minimises the traffic demands of the inhabitants and offers enough goals in easily accessible distances.

In the **transport** field, public transport is being further improved and developed, among others, in the form of tramlines, railway stops or the preparation of metro D. Bicycle transport and the construction of new cycle routes is supported. The aim is to significantly improve the conditions for pedestrians and all other users of non-motorised transport.

## Prague – Basic Characteristics

Area [km <sup>2</sup> ]	496.2	Types of land [ha] at 31 <sup>st</sup> December	
Administrative division		agricultural land	19 473
number of City Districts	57	forest land	5 270
number of Cadastral Districts	112	water bodies	1 101
Location (City centre)		developed areas	5 099
geographical latitude	50°4'53.193" N	other areas	18 678
geographical longitude)	14°25'38.39" E	Population – number of inhabitants	1 357 326
Altitude [m n. m.]		– females	656 382
maximum (Zličín)	399	– males	700 944
minimum (Suchdol a Praha 8)	177	average population	1 338 530
Climate Praha - Karlov (2022)		population density per 1 sq. km	2 735.4
annual air temperature [°C]	11.5	Houses, apartments (2021) *	
annual rainfall [mm]	544.9	Apartments started	6 490
Vltava River (2022)		Completed apartments	5 575
length [km]	30	Living space per 1 completed apartment in m <sup>2</sup>	57.2
Average flow rate in Malá Chuchle [m <sup>3</sup> .s <sup>-1</sup> ]	106	Of which are in family houses	109.1
		Gross domestic produkt per capita*	
		– CZK	1 453 579
		– EURO	59 170
		Share of unemployed persons [%] **	3.04

\* Data as of January 13<sup>th</sup>, 2021

\*\* Proportion of achieved job seekers aged 15–64

Source: ČSÚ, ČHMÚ, ČÚZK, MPSV

# CLIMATE SYSTEM

## Evaluation of meteorological factors for 2022 from Prague stations

Compared to **the norm of 1991–2020**, the temperature in Prague for the **year 2022** can be considered strongly above-normal, with a deviation of +1.1 °C and an **average annual temperature** at Prague-Ruzyně of +10.1 °C, ranking it behind 2018, 2019 and 2015 as the fourth-hottest year in the past decade, but also the whole history of measurement at the Ruzyně station since 1946. The month of April (much like in 2021) was strongly sub-normal (deviation of -2.1 °C), with the winter months of January and February above-normal in terms of temperature (deviation of +2.3 and +3.4 °C), as were May and August (deviation of +1.7 and +1.6 °C), and June and October numbered among the highly above-normal months, both with a deviation of +2.6 °C. In the other months, the average temperature was within the norm.

**The highest maximum daytime temperature in 2022** was reached in Prague on 19 June, when all stations measured a very hot day (maximum temperature equal to or over 35 °C), with the hottest being in Prague's south-east, where extremes were measured by the stations Komořany at +37.9 °C and Libuš at +37.3 °C. All stations also recorded the year's maximum average daytime temperature on 19 June as well, with the highest value of +30.2 °C at the Klementinum and Vinohrady stations in the centre of Prague. **The lowest minimum daytime temperature** of -13.9 °C was measured 14 December by the Kbely station during the very cold middle of December, with daytime average temperatures in Prague below zero and the occurrence of 3 to 9 freezing days (centre vs periphery of Prague, temperature did not rise above zero). The warmest Prague station remained Klementinum in 2022 with an annual average temperature of +12.4 °C, with Ruzyně the coldest with an annual average of +10.1 °C. There were four marked heat waves within Prague in 2022, 18 to 20 June with two hot and one very hot day as well as a tropical night (temperature does not fall below 20 °C), 19 to 26 July with five hot and one very hot day and as many as three (Klementinum) tropical nights, and 3 to 5 August and 14 to 19 August with four hot days. In contrast, cold periods with freezing days with a daytime maximum below zero were 19 and 20 November and 11 to 21 December with as many as four arctic days. The Klementinum's series of long-term absolute extremes of daytime max temperatures (measured since 1775) was surpassed four times in 2022, once each in May, June, July and December.

No absolute minimum temperatures were surpassed at the Klementinum this year.

**The trend of warming and the impact of the city's heat island** can be seen in 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, when the daytime high is 30 or above, of 12 at Ruzyně was above average in 2022, while in the centre there were the most of 23 at Klementinum. There was one very hot day (daytime maximum of 35 or above) at Ruzyně and three at Klementinum.

The strongly above-average **annual rainfall** of 602.7 mm measured at Prague-Ruzyně in 2022 represents 122% of

the long-term norm for 1991–2020. The month of June was exceptionally above average, not only at Ruzyně (252% of the norm), but also all over Prague, while December was strongly above-average at Ruzyně (167% of the norm), and April and November above-average (146 and 150%).

March, May and October were below-average (53, 58 and 49% of the norm), while rainfall in the other months fell within the norm.

The significant short-term five-minute rain of 16.7 mm that fell in Komořany during a storm on 20 June was classified as a catastrophic downpour. The highest daily rainfall within Prague of 109.7 mm was measured during the high occurrence of storms on 24 June in Komořany, with more than 80 mm also falling on this day at Libuš, Zadní Kopanina and Modřany and a number of stations having a daily rainfall of more than 50 mm. The highest monthly rainfall overall in Prague was the exceptionally above-average month of June, with the highest monthly rainfall of 254.1 mm being measured at Komořany station. Over 150 mm was recorded in the month at over half of Prague's stations and, besides Komořany, over 200 mm was also measured at Libuš and Zadní Kopanina. The highest annual rainfalls in the Prague area fell primarily in the south, the most in Komořany with 716.6 mm. Heavy rainfall particularly occurred during the storms on 24 and 29 June and 29 July with a daily total often over 40 mm, and 19 and 20 August and 4 November. There was no period of long-term absence of rainfall in 2022.

The **average wind speed** of 3.3 m.s-1 in 2022 at Prague-Ruzyně was below the norm. The most wind was in the winter months (above-average in February with an average speed of 6 m.s-1) and in April. The maximum instantaneous wind speed in Prague this year of 31.6 m.s-1 was recorded during a storm 20 May at Karlov, with wind gusts higher than 21 m.s-1 at most Prague stations on 30 January, 6 February, 17, 18 and 19 February, 21 February, 7 April and 20 May.

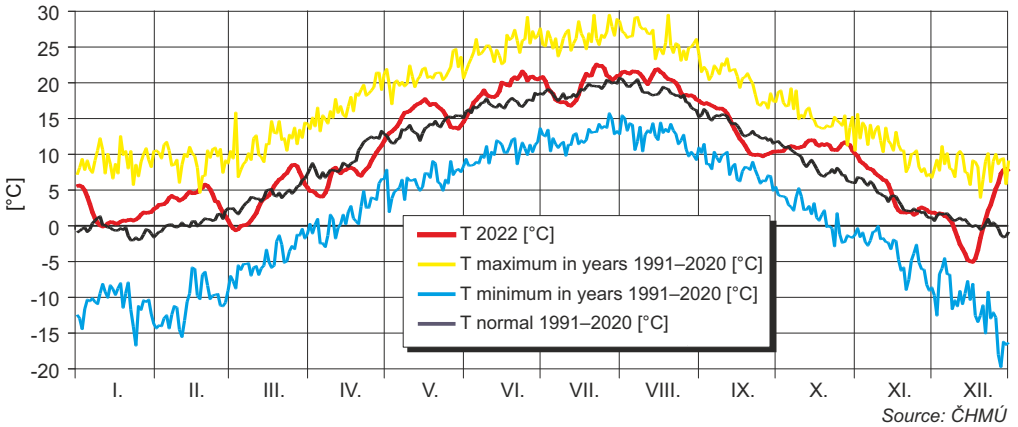
The annual total **sunshine** of 1997 h was slightly above-average, with the hours of sunlight recorded at Ruzyně in March being above the norm (170%) and the least sunshine compared to the norm in January and April (76 and 87%). The average annual cloud cover in Prague was within normal limits.

**Storm activity** at the majority of Prague's stations was below-average. The most frequent storms were in June and August.

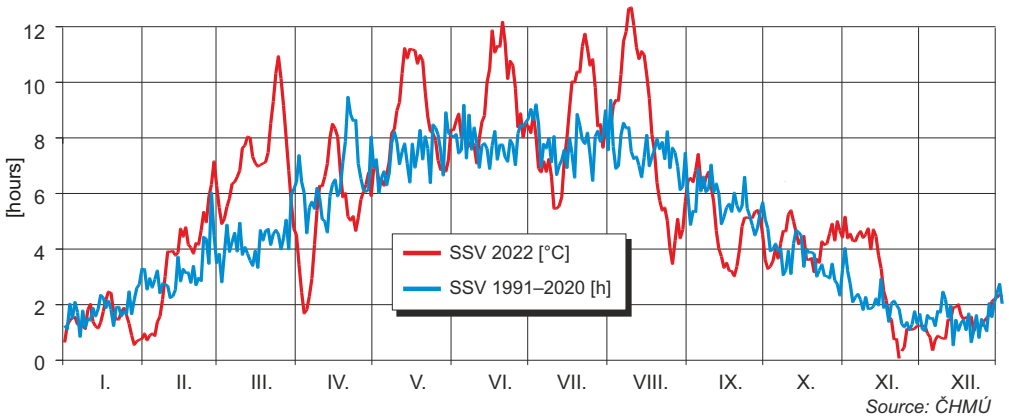
The most storm days in the year was 18, which was the same at Ruzyně, Libuš and Kbely. **Hail** was observed most frequently three times at stations in Prague in 2022 (19 April, 30 May and 23 July), specifically at Suchbátka station, and once at Zadní Kopanina (17 February). According to the sum of new snow height at Ruzyně of 37 cm (daily increase in snow height), 2022 was sub-normal for snow, with just 19 days with **snow cover** (a mere 11 days of continuous cover); snow was observed 10 days at Klementinum. The maximum snow cover height of 14 cm in Prague in 2022 was measured 17 December at Ruzyně.

# CLIMATE SYSTEM

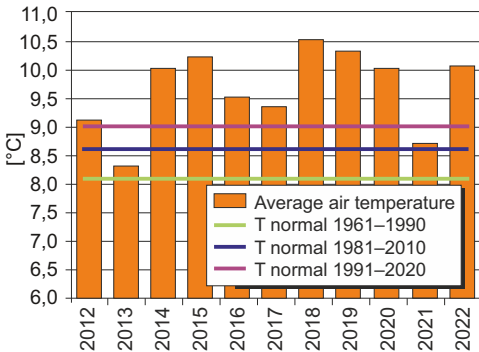
Average daytime air temperature T, 10-day rolling average, Prague-Ruzyně, comparison of 2022 and norm for 1991–2020



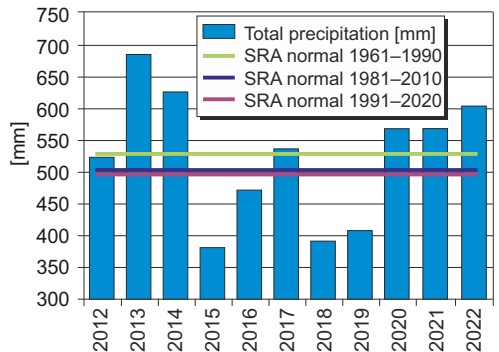
Daily duration of sunshine, 10-day rolling average, Prague-Ruzyně, comparison of 2022 and norm for 1991–2020



Average air temperature, 2012–2022, Prague-Ruzyně

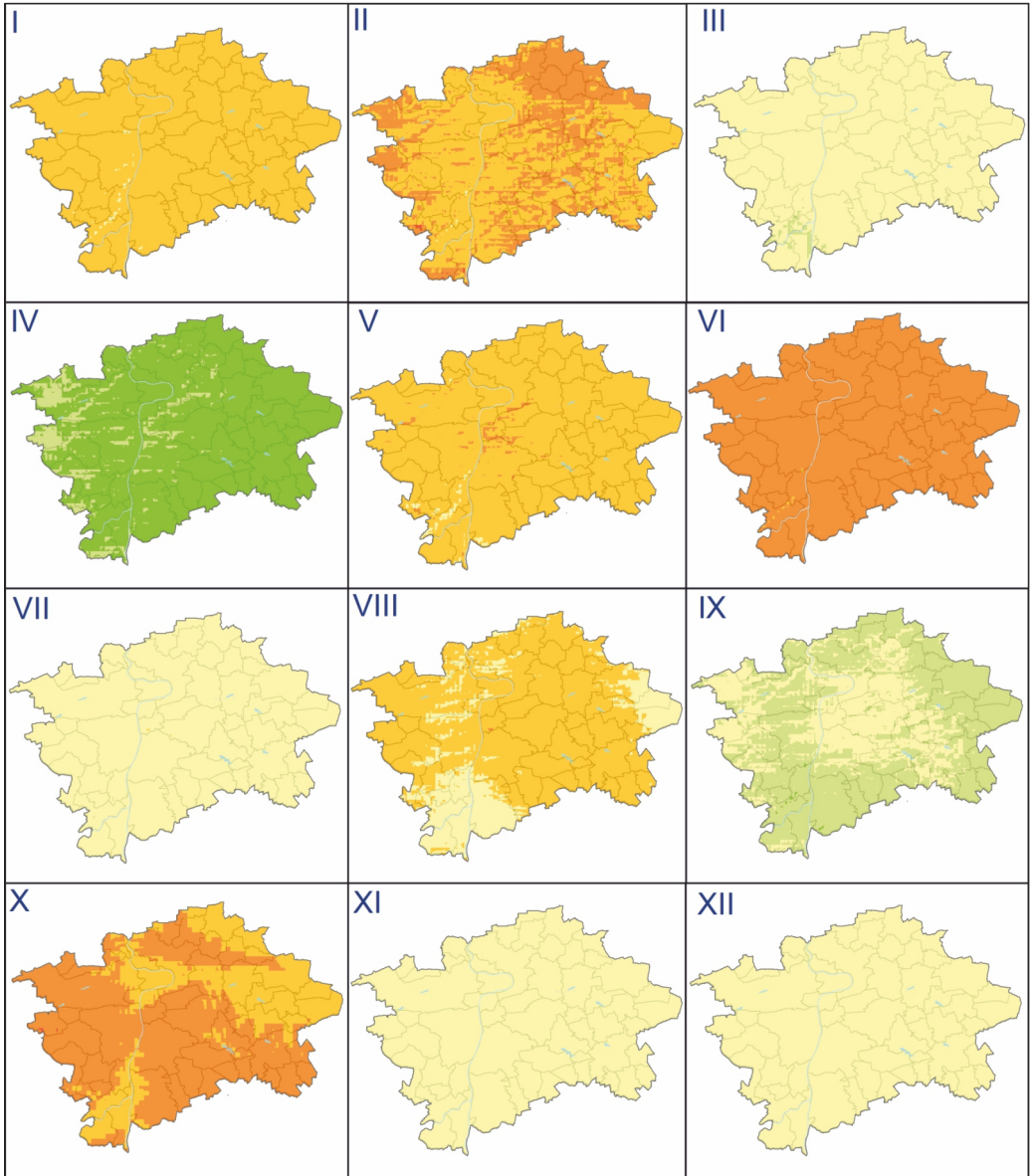


Total precipitation, 2012–2022, Prague-Ruzyně




# CLIMATE SYSTEM

Evaluation of abnormality of the 2022 monthly average temperature compared to the norm for 1991–2020




 extremely subnormal

 subnormal

 strongly above normal

 strongly subnormal

 normal

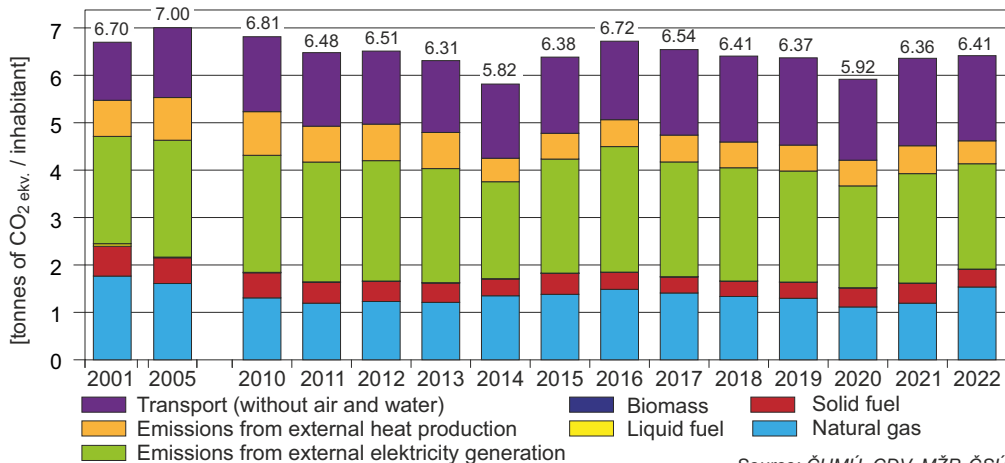
 extremely above normal

 above normal

Source: ČHMÚ

# CLIMATE PROTECTION AND ADAPTATION TO CLIMATE CHANGE

## Specific emissions of greenhouse gases in the Capital City of Prague territory, 2001, 2005, 2010–2022



Source: ČHMÚ, CDV, MŽP, ČSÚ

## Summary of selected projects carried out as part of the Implementation Plan of the City of Prague Adaptation Strategy for 2020–2024, implemented in 2022

- Gardens and cemetery by the St Wenceslas Chapel
- Realisation of semi-permeable surface at Vystaviště Prague
- Installation of 5 planters including planting of trees on the street Schnirchova
- Establishment of two flowerbeds on the street Bubenská including three years of subsequent maintenance
- Park in front of Nebužice Primary School
- Rainwater flowerbed Vokovice
- Establishment of perennial flowerbed at intersection of Na Petřínách and Na Větrníku
- Establishment of flowering pathways Patočkova
- Planting of balled trees in green spaces, Prague 6
- Establishment of flowering pathways Evropská
- Establishment of flowerbed by Parléřova Secondary School
- Insulation of Nursery School Pod Lipkami 3183/5
- Revitalisation of flowerbeds in front of T. G. Masaryk Primary School – Ruzyně
- Renovation of playground U Jezera, Prague 13
- Revitalisation of three small parks in Prague 13
- Completion of Dalejský park
- Planting along the streets Granátová and Ke Smíchovu
- Community garden project, Prague Velká Chuchle
- New planting and additional planting of trees, Prague Slivenec
- Revitalisation of municipal burial ground – park Urnový háj, Otinská Street
- Procurement of irrigation bags, Prague Lipčice
- Planting of row of trees on the street Podchyžská, Cholupice
- Planting and measures for water absorption by trees - water retention in the soil, microclimate improvement, Prague 12
- Planting of row of trees, Prague Líbuš
- Modification of green belts, Prague Líbuš
- Revitalisation of space in front of municipal authority Líbušská 35
- Planting of new green spaces including recultivation of paved areas - Na Musile forest
- Planting of new trees and health pruning of existing trees, Prague Kurnatice
- Revitalisation of small housing estate inner courtyard 40, Prague 11
- Counting of greenery in public spaces - 45 deciduous trees, Prague Újezd
- Planting of flowery meadows, Prague Nedvězí
- Revitalisation of wells, Prague Nedvězí
- Planting of flowery meadows
- Planting of habitat Novodvorská
- Revitalisation of Kunnratice Stream at km 0.8–1.6, Prague 4 – Braník
- Flood prevention measures D2 Botič
- Retention basin on street K Dubčí, Prague Koloděje
- Planting of tree alley including subsequent care for 3 years and repairs to associated pedestrian path, Prague Koloděje
- Planting of new tree alley, planting of additional trees, Prague Koloděje
- Reconstruction of historic packed-dirt footpath, Prague Koloděje
- Revitalisation of insulation greenery by Rohožník housing estate
- Revitalisation of Ježek Park, Prague 21
- Water features for playgrounds, Prague 21
- Revitalisation of Rokytka riverbed in Běchovice
- Revitalisation of row of cherry trees on street V Pátém
- Renovation of boiler room and heating system at municipal authority - heat pump, Prague Klánovice
- Integration of renewable resources FK Klánovice, water retention
- Establishment of landscape park U Čeků
- Filling in of row of oak trees, Prague Dolní Počernice
- Linden trees lining the street Vidálák
- Revitalisation of park Solidarita
- Revitalisation of fountain on Náměstí Generála Kulvašna
- Planting of trees on Jungmannovo náměstí
- Revitalisation of Čelakovského sady
- Revitalisation of part of park around St Ludmila Church on Náměstí Míru
- Revitalisation of park Riegerovy sady
- Restoration of Náměstí Jiřího z Poděbrad
- Installation of 13 AC charging stations on EVR lamps, Prague 2
- Planting of 41 trees of suitable species in the park Vrch sv. Kříže
- Restoration of trees lining the street Za žižkovskou vozovnou
- Restoration of trees lining the streets V Zeleni and V Záhradkách
- Revitalisation of the park U Kněžské louky
- Revitalisation of apple orchard Radiovka
- Realisation of well on garden grounds, Prague Satalice
- Packed-dirt path, Prague Satalice
- Establishment of meadow, Prague Satalice
- CORSO LETNANY II
- Renovation of sidewalks Ostravská
- Swaths of greenery along cycle paths in Čakovice
- Revitalisation of space by Hus Park
- Peony garden by Hus Park in Čakovice
- Revitalisation of green park by old fire station in Miškovice
- Planting of tree alley - dirt road to Třeboradice
- Planting of tree alley - dirt road to Zdíby

Source: OCP MHMP

# AIR

The City of Prague has long numbered among the areas with a high level of air pollution. The emissions burden primarily stems from the heavy traffic and the use of local furnaces in areas with predominantly older family homes.

Compared to the ten-year average for 2012–2021, Prague had considerably better dispersion conditions in 2022. **Neither the short-term nor annual emission limit for NO<sub>2</sub>** was exceeded at any location with sufficient data to be evaluated in 2022.

Aside from the positive impact of meteorological conditions, the lower NO<sub>2</sub> concentrations compared to the ten-year average were also helped by the reduction of emissions in connection with measures implemented to improve air quality (in particular fleet renewal).

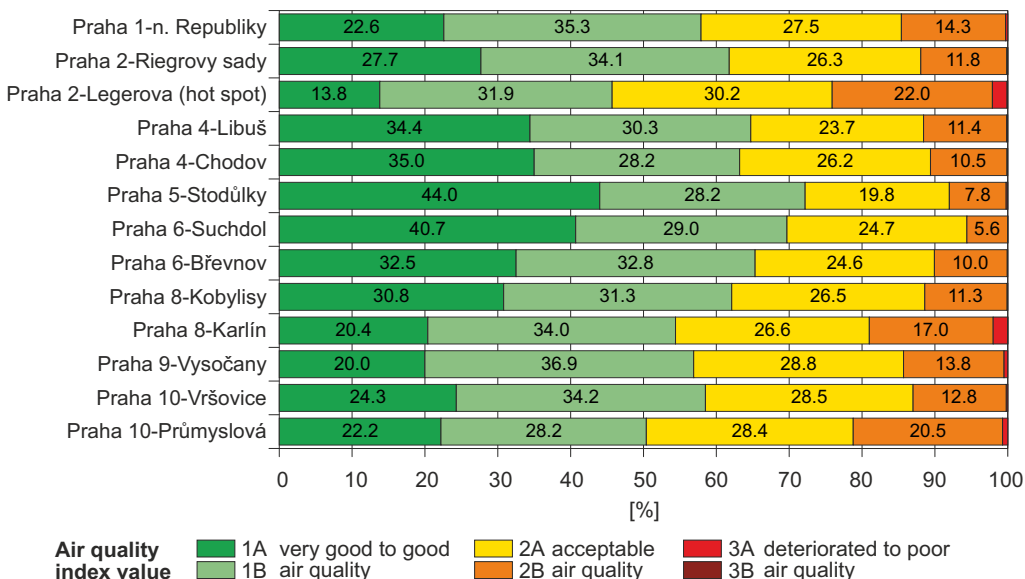
In 2022, **the emission limits for average annual concentration of PM<sub>2.5</sub> and PM<sub>10</sub> suspended particulates** were also not exceeded at any station with sufficient data to be evaluated.

In the evaluated year of 2022, the average annual concentration of benzo[a]pyrene fell slightly. Compared to the ten-year average of 2012–2021, the concentration of benzo[a]pyrene was **lower by an average of approx. 15%** in 2022.

In 2022 (on average for the years 2020–2022), the **emission limit for ground-level O<sub>3</sub>** was not exceeded at any of the seven assessed stations within the conurbation. For all other monitored pollutants, the emission limits were also met.

**At all evaluated stations, the first AQI level** (very good to good air quality) **predominated in 2022**. The second AQI level (acceptable air quality) occurred at a maximum of 52% in 2022. The third AQI level (degraded to poor air quality) was recorded at all evaluated stations, but with a low incidence rate. At two stations, the third level was recorded in more than 2% of cases, while at other stations the occurrence of level three was less than 1% of cases.

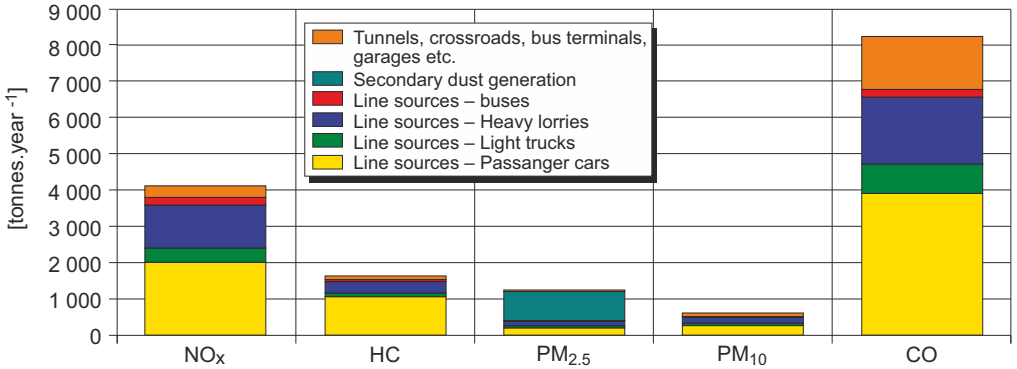
**Total index of air quality (IKO) at the stations in the Prague agglomeration in 2022 – representation of individual index values**





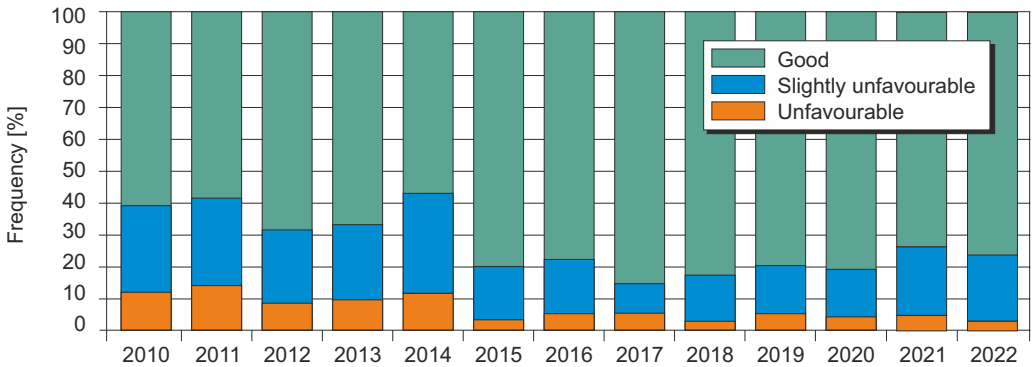
# AIR

## Traffic emissions – selected pollutants, 2022



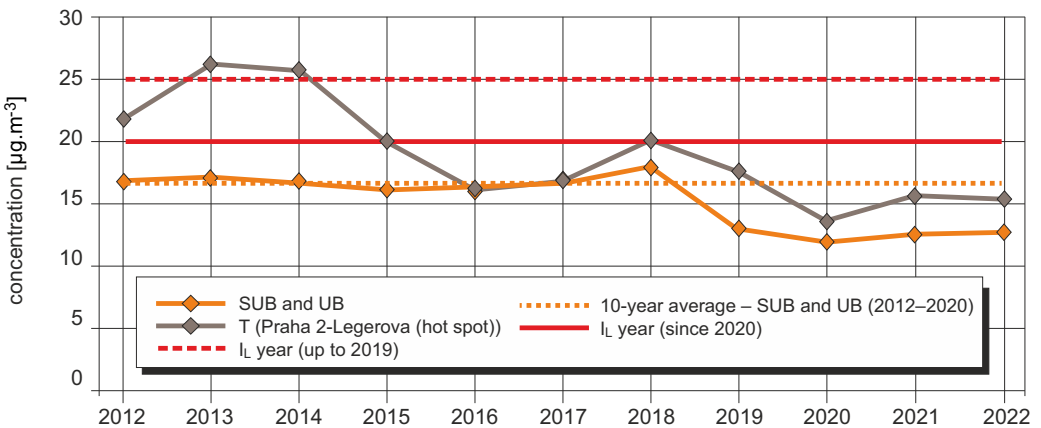
Source: IPR Praha / ATEM – Ateliér ekologických modelů, s.r.o.

## Frequency of dispersion conditions, Prague, 2010–2022



Source: ČHMÚ

## Annual average concentrations PM<sub>2.5</sub>, 2012–2022



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 2021–2022, 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.

The water quality in small watercourses was evaluated for the purposes of this publication based on the percentage of measurement results in individual water quality classes for the two-year period 2021–2022 and for 2016–2020 (long-term measurement has been taking place at 38 cross-sections on 16 watercourses). The number of values falling into Class I or II of water quality for the period 2021–2022 in comparison with the period 2016–2020 partially decreased (worse at 20 cross-sections and better at 10, for the others approximately unchanged), while for values falling into Class IV or V, there were roughly the same number of improvements (14 cross-sections) as deterioration (12 cross-sections).

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 113 mil. m<sup>3</sup> of potable water produced in 2022. 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 2022 it was about 111 l/per person/per day, in 2021 about 114 l/per person/per day. Loss of water from network leaks were reduced from 46% in 1996 to values below 20% since 2014 – in 2022 losses amounted to approximately 15.7%. Drinking water quality is regularly monitored and complies with domestic and European standards.

Ca 99% of households are connected to the water 3 supply system. In 2022 ca 114 mil. m of wastewater was treated (100% of wastewater), while 92.4% was treated at the central wastewater treatment facility (ÚCOV) 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 2022, 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, implementation of stabilisation of the DN 2000 drain in Troja was completed. Local bolstering of flood protection in Zbraslav was carried out between the streets K Přehradám and U Národní galerie and construction of flood protection below the Zbraslav chateau was commenced.

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

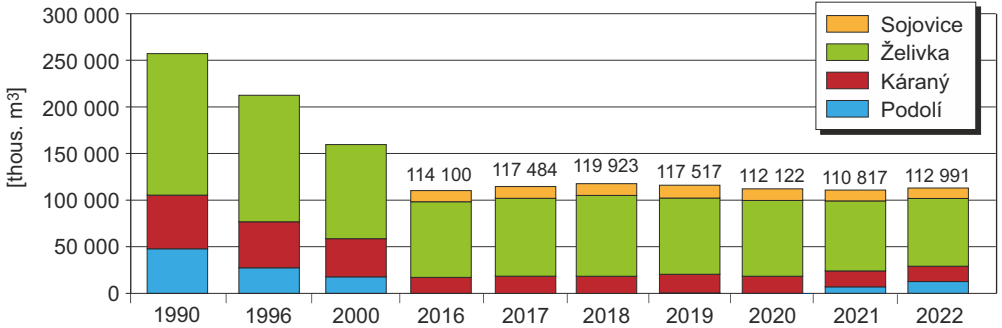


Water quality classes: 1 – Unpolluted water 2 – Slightly polluted water 3 – Polluted water 4 – Heavily polluted water 5 – Very heavily polluted water

Source: OCP MHMP

# WATER

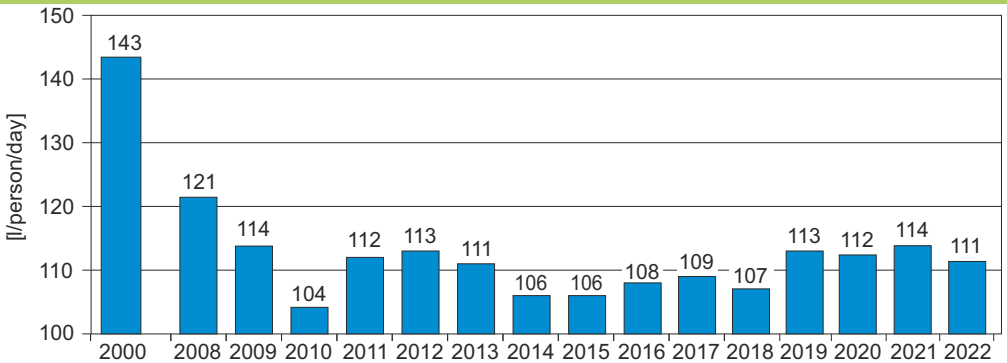
## Evolution of manufacturing drinking water in individual waterworks from 1990 to 2022



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

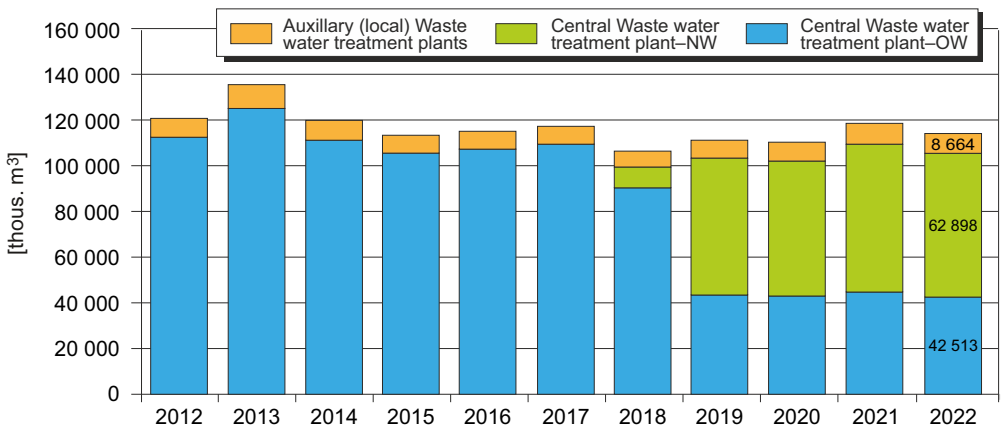
Source: PVK, a. s.

## Evolution of the specific consumption of drinking water in households in Prague, 2000, 2008–2022



Source: PVK, a. s.

## Amount of cleaned wastewater at the Central waste water cleaning facility (ÚČOV) and wastewater cleaning branches (ČOV), 2012–2022



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

Source: PVK, a. s.

# LANDSCAPE, NATURE AND GREENERY

The balance of areas according to the ČÚŽK records for Prague in 2022 shows a further increase (17 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 2022, which is however an increase of 832 ha since 1990). At the same time, a significant rise in the acreage of "other areas" has also been recorded, by 31 ha compared to 2021. The acreage of agricultural land fell year-on-year by an additional 70 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 2022, the increase reached 19 ha compared to 2021 and 412 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, 2022, 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 199 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 412 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** /90 locations already reconstructed / and Streams for Life) on a regular basis.

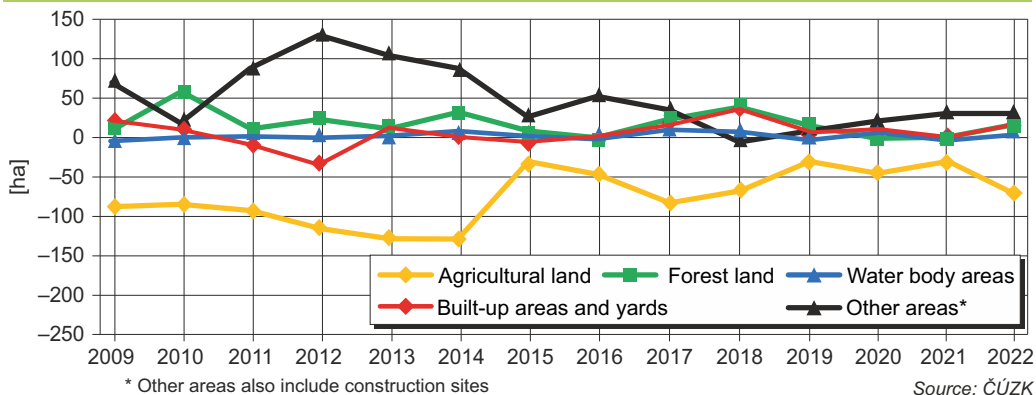
## Total levels of types of land, as at 31<sup>st</sup> December 2022 [ha]

Aggregate areas of land types	Code	2017	2018	2019	2020	2021	2022
Agriculture land	02–07	19 717	19 649	19 617	19 573	19 543	19 473
– Arable land	02	14 220	14 139	14 084	14 030	13 978	13 708
– Hop garden	03	0	0	0	0	0	0
– Vineyards	04	12	12	12	12	15	15
– Gardens	05	3 950	3 954	3 965	3 971	3 986	4 001
– Orchards	06	601	599	591	590	585	580
– Permanent Grassland	07	935	945	964	970	978	1 168
Forest land	10	5 195	5 233	5 249	5 251	5 251	5 270
Water areas	11	1 096	1 096	1 094	1 101	1 097	1 101
Built-up areas	13	5 021	5 057	5 066	5 080	5 082	5 099
Other areas**	14	18 592	18 586	18 595	18 616	18 647	18 678
Total area*		<b>49 621</b>	<b>49 621</b>	<b>49 621</b>	<b>49 621</b>	<b>49 621</b>	<b>49 621</b>

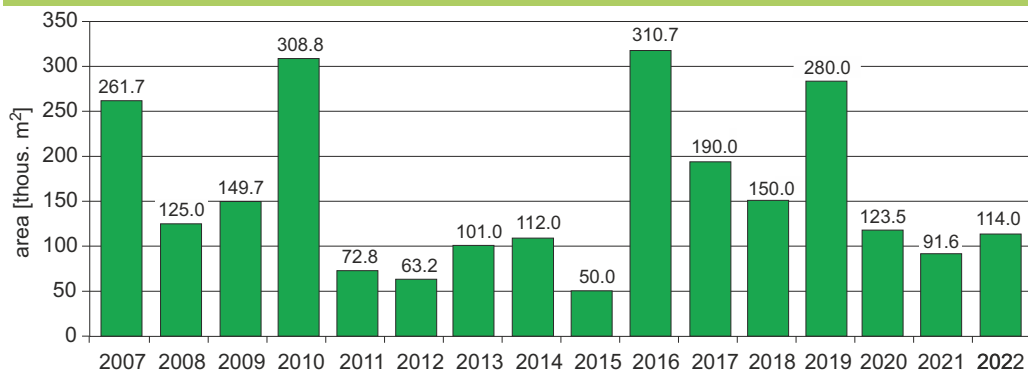
Note: \* differences in the total area are caused by rounding  
 \*\* other areas include building sites

# LANDSCAPE, NATURE AND GREENERY

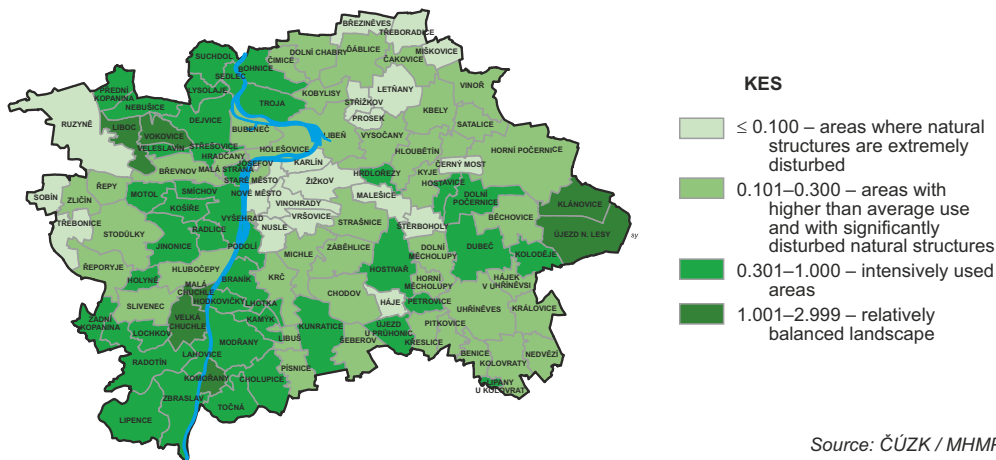
## The decline and growth of areas based on type of land, 2009–2022



## Newly forested areas, 2007–2022



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



# WASTE

For a long period of time, the annual waste production in Prague has ranged between 4 and 5 million tonnes depending on the extent of construction activity. In 2022, 5.01 mil. tonnes of waste was produced within the capital (5.07 mil. t in 2021, 4.45 mil. t in 2020).

Of the overall amount of waste produced, approx. 32.6% was utilised within the City of Prague, of which energy use made up 18.2% and 53.7% was recycled.

Waste disposal by landfilling within the city was ended in 2020 (termination of the Ďáblice landfill). Waste incineration without energy use has long made up for less than a tenth of a percent of total waste production. The largest part of waste produced is disposed of outside the City of Prague.

**The amount of waste produced by citizens in 2022 reached 443.4 thousand tonnes, which works out to approx. 331.3 kg per capita. The comprehensive Prague municipal waste management system continued to be developed.**

The portion of waste handed over for material or energy use totalled 83.7% in 2022, with 53.7% being energy use. In 2022, **the volume of recyclable waste collected in street and home receptacles** (paper, glass, plastics, beverage cartons, etc.) **increased once again** – the total amounted to approx. 63.7 thousand tonnes (in 2021 it was 61.9 thousand tonnes, in 2020 59.6 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 2022, there were **19 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 (3 056 compared to 2 652 in 2022), while there were also 3 475 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 2022 totalled 22.1 thousand tonnes, with the amount obtained through home bins totalling 13.1 thousand tonnes.

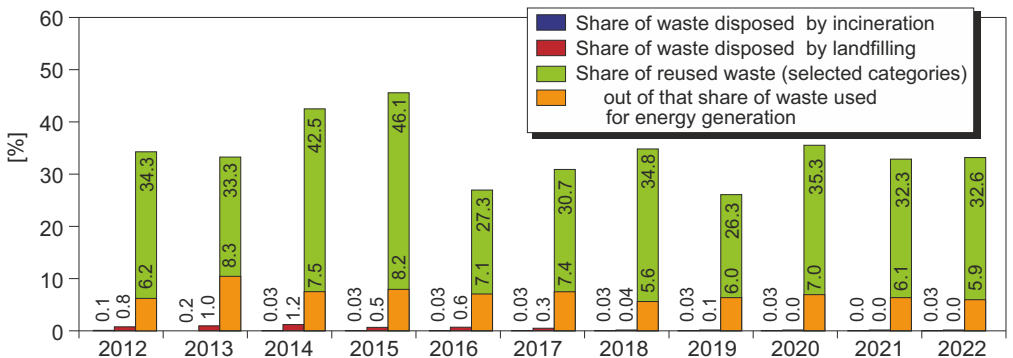
The **collection of bulky waste** continued to play a significant role, also taking place through City of Prague collection yards and large-scale containers set up on the streets of Prague. As of the end of 2022, citizens also had receptacles for the collection of edible oils and fats at their disposal at 773 stations, as well as five re-use points at City of Prague collection yards.

## Production of waste in the territory of the Capital City of Prague, 2014–2022 [thous. tonnes]

		2014	2015	2016	2017	2018	2019	2020	2021	2022
Total		4269	4161	4602	4517	5187	5080	4451	5072	5005
Out of that category	Hazardous	62	71	58	64	99	124	98	97	83
	Others	4207	4090	4544	4453	5087	4956	4353	4974	4922

Source: OCP MHMP

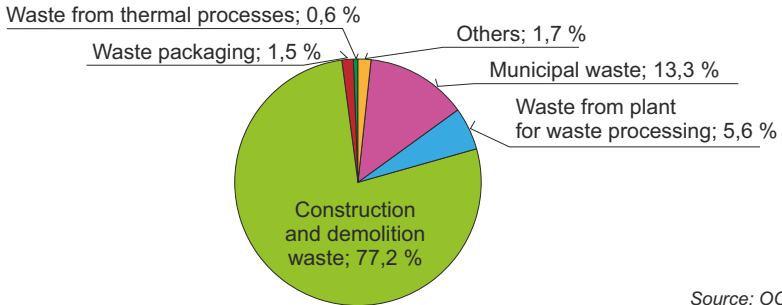
## Ratios of waste from the total used and eliminated waste in the territory of the Capital City of Prague (selected methods of use), 2012–2022



Source: OCP MHMP

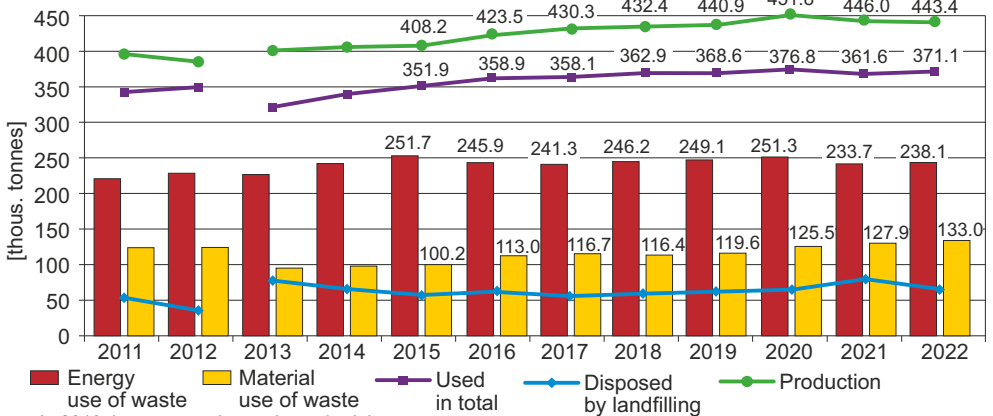
# WASTE

## Ratio of waste produced in Capital City of Prague territory based on origin, 2022



Source: OCP MHMP

## Evolution of the production and treatment of household waste, 2011–2022

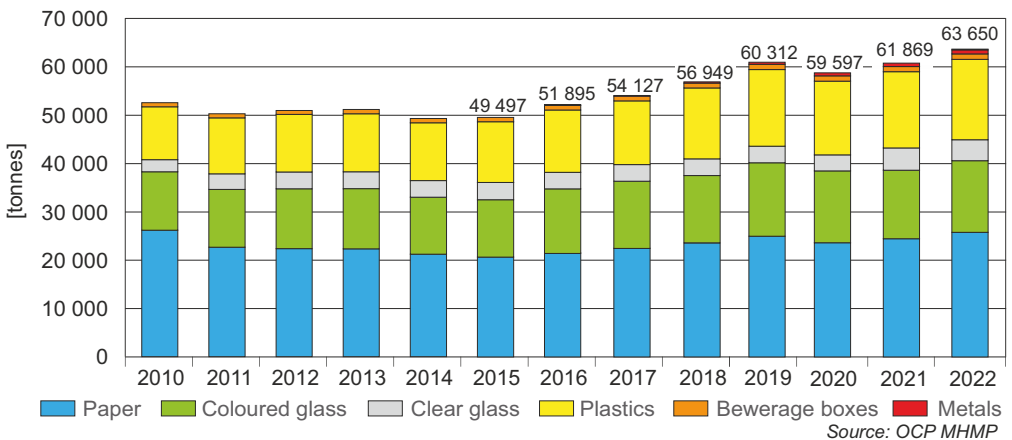


Source: OCP MHMP

In 2013 there was a change in methodology.

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.

## The amount of separated waste in street and house equipment, 2010–2022



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.

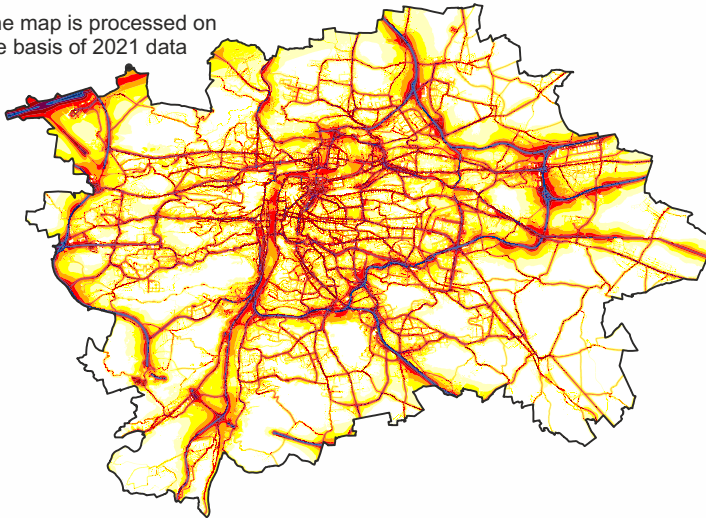
**On the basis of strategic noise maps**, critical places are **identified the primary attention in planning** and execution of anti-noise measures is focused on. Such measures include the construction of anti-noise barriers, replacements of surfaces at selected roads, reconstruction of tram routes, 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 2022 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.

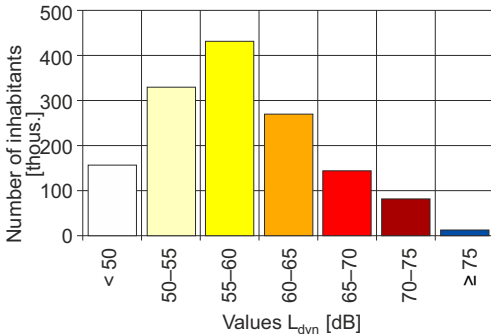
## Strategic map of the noise situation, 2022

The map is processed on the basis of 2021 data



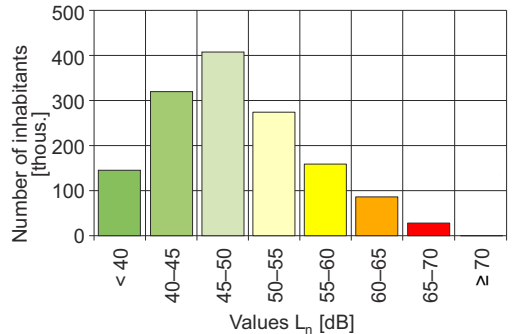
Source: IPR Praha, MZd ČR

### 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

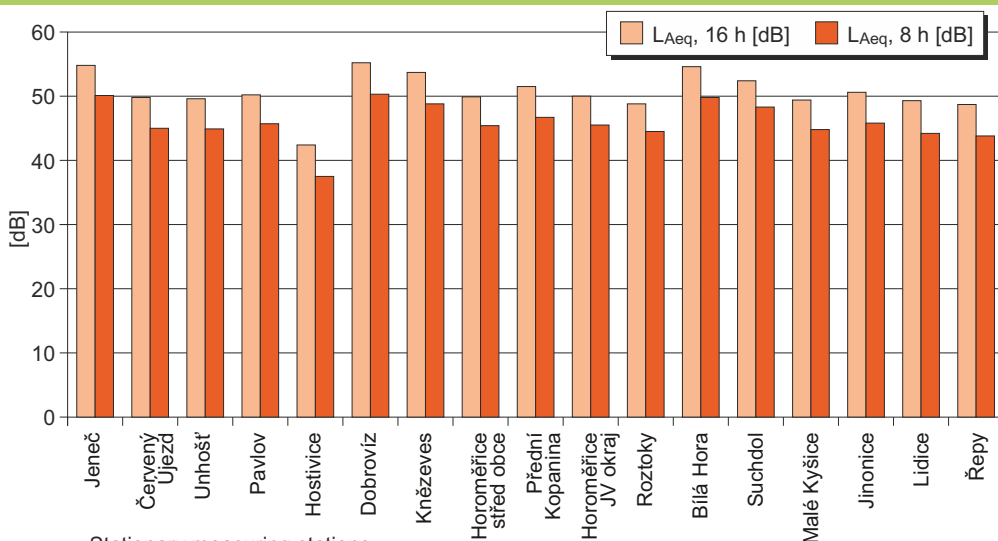
## Acoustic curtain (PHC) realized in the period 2009–2022

Street	PHC number	Height [m]	Length [m]	Cadastral district
Průmyslová	1000043	3	307	směr Poděbradská
		4	564	Rabakovská – Přetlucká, směr Švehlova
Jižní spojka	202	5	144	Přetlucká – Lanový most, směr Švehlova
		3	611	Lanový most – Klučovská, směr Průmyslová
		6	340	Spořilovský plácek
Jižní spojka – val, PHC	999407	3	136	Záběhlická – Spořilovská, směr Chodovská
Jižní spojka	212	3 až 6	571	Záběhlická – Spořilovská, směr V Korytech
Jižní spojka	999429/2	5	611	Na Strži – 5. května
Jižní spojka	999063	7	753	Spořilov I; Sliáčská – Spořilovská, směr Spořilovská
Spořilovská – MPHPC	999416	7	102	
		7	240	2 mobilní PHC
		4	632	Národních hrdinů, směr DC
Štěrboholská spojka	999325	4	72	rampa Národních hrdinů, směr DC
		2 až 4	1 049	Národních hrdinů – Nedokončená, směr DC
		2 až 5	1 346	Národních hrdinů – ČSPH, směr ZC
		7	523	Vyskočilova – Jihlavská, směr ZC
5. května	211/999091	7	157	Jihlavská – Michelská, směr ZC
5. května – MPHPC	999418, 1000161	5	495	2 MPHPC, Michelská – Vyskočilova, směr DC
Cínovecká – val, PHC	999341	8	605	Březíněves
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
		5	175	Bazovského – Opuková, směr Makovského
Bělohorská	44159	3	252	Za Oborou – supermarket Kaufland
Karlovarská	PHS 281	4	70	Drnovská – Možného
Karlovarská	PHS 275	4	184	Lišánská
Strakonická	PHS 801	4	229	Lahovská – Spodní, směr ZC
	PHS 800	4	205	Spodní – MUK, směr ZC
Kbelská	1000003	4	432	PHS Kbelská, Letňany, směr ZC
Kbelská		4	903	PHS Kbelská, Prosek, směr DC
Brměnská	PHS 803	7	612	PHS + val Kateřinky, směr DC
Jeremiášova	PHS 732	6	205	Vackova – Hábova
Horoměřická	PHS 744	2	113	Želivka – V Šarečkém údolí, směr ZC

PHC realized in 2022

Source: MHMP

## Equivalent levels of acoustic pressure $L_{Aeq,T}$ for day and night related to the conditions of a characteristic flight day in 2022



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 in the central parts of the city since 2016 has been a partial oscillating of values (previously up until 2015 there was a steady annual decline) and predominantly steady growth in the city's outer zone (with the exception of 2015 and the COVID year of 2020). In 2022, this volume fell slightly compared to 2021 and approached the level of 2018. However, the number of passenger vehicles registered in Prague increased once again, 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 pro-**

**vided 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.

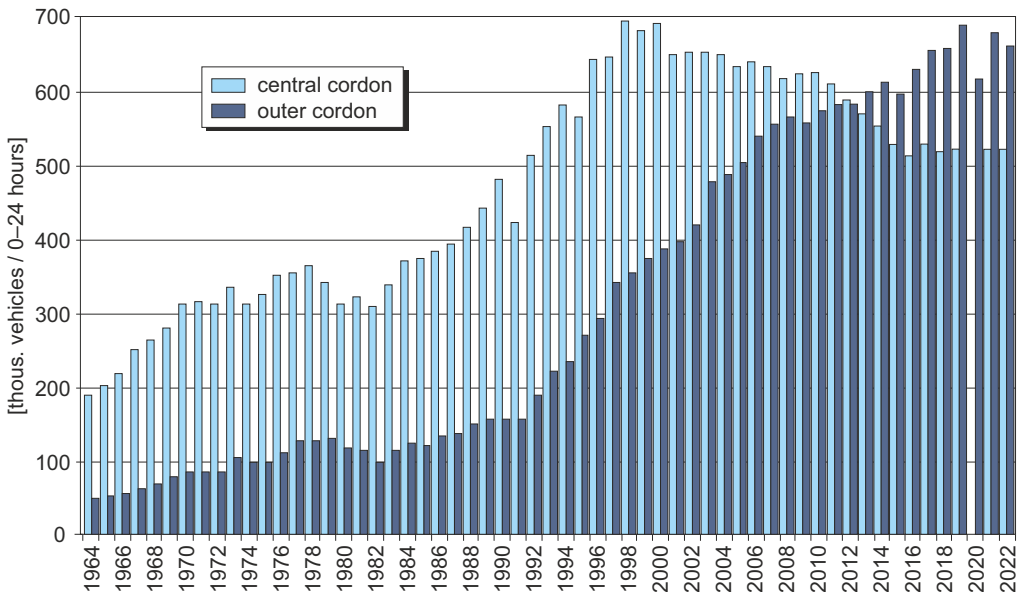
At the end of 2022, there were 3 metro lines, 26 day and 9 night trams, 177 bus and trolleybus lines and 124 suburban bus lines, 39 railway lines with S and R designations, 7 ferry lines and 1 funicular in service under PID.

Roughly 1 004.5 million passengers were transported under the PID system (an increase compared to 2021 and a gradual return to pre-COVID levels).

The largest share was covered by the metro (33.7%) and trams (31.4%). The modal share of public transport was 37% (pedestrian 35%, bicycle transport 1%, automobile transport 25%, (combination of mass and car transport 2%).

**The building of cycling infrastructure continued.** At the end of 2022, approx. 543 km of cycle routes were marked with directional signage under the network of bicycle infrastructure. Of this network, approx. 233 km were protected marked and recommended routes and 219.2 km made use of integration measures (261.2 km if contraflow bicycle lanes are included). In 2022, 2.7 km of new bike lanes were installed (15.4 including shared lanes), as were 4.7 km of contraflow lanes, plus for example 11 bicycle crossings. The share of bicycle traffic in 2022 totalled roughly 1% of all trips in the city.

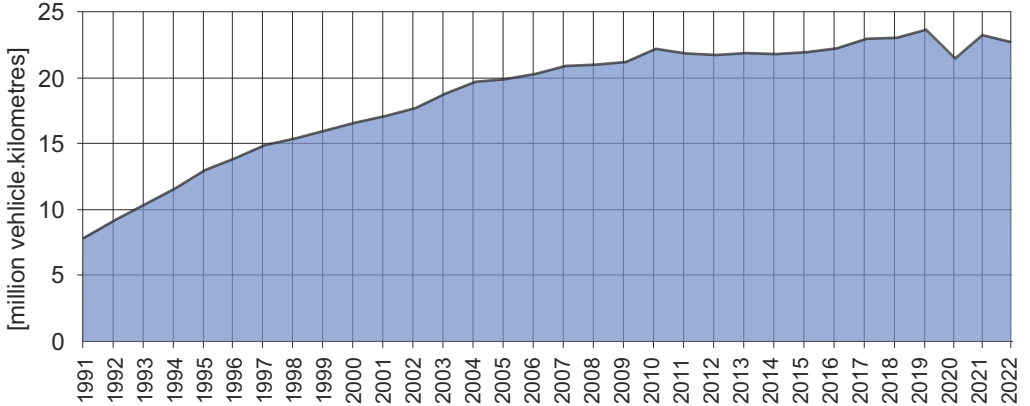
**Traffic intensity in the central and outer cordon, 1964–2022**



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

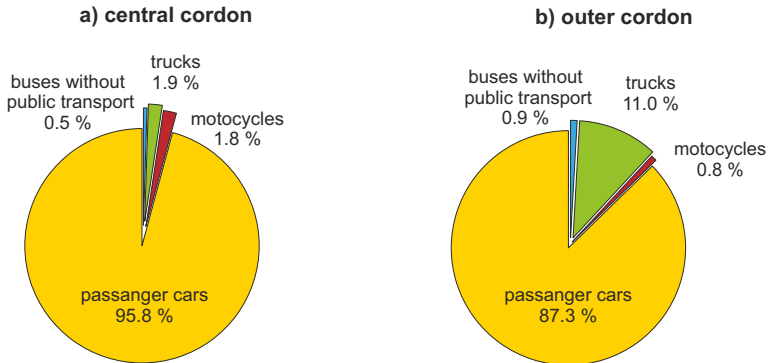
# TRAFFIC

## Traffic performance of automotive transportation for an average workday, 1991–2022



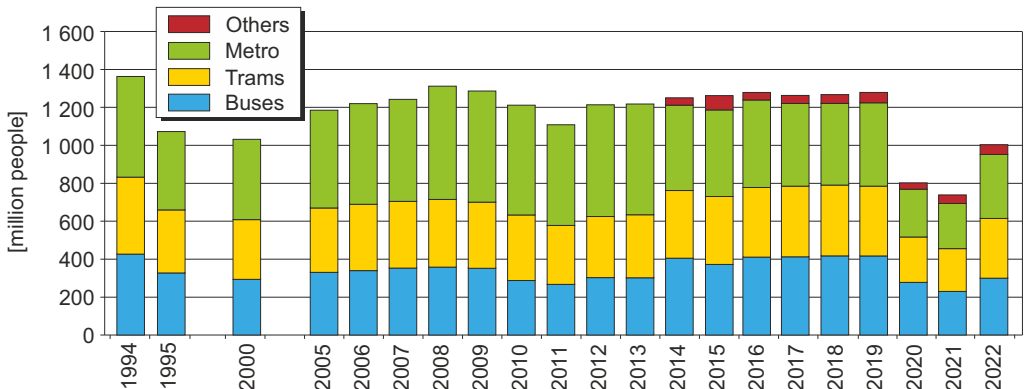
Source: TSK – ÚDI

## Composition of the traffic stream, 2022



Source: TSK – ÚDI

## Public mass transportation – annual number of transported people, 1994, 1995, 2005–2022

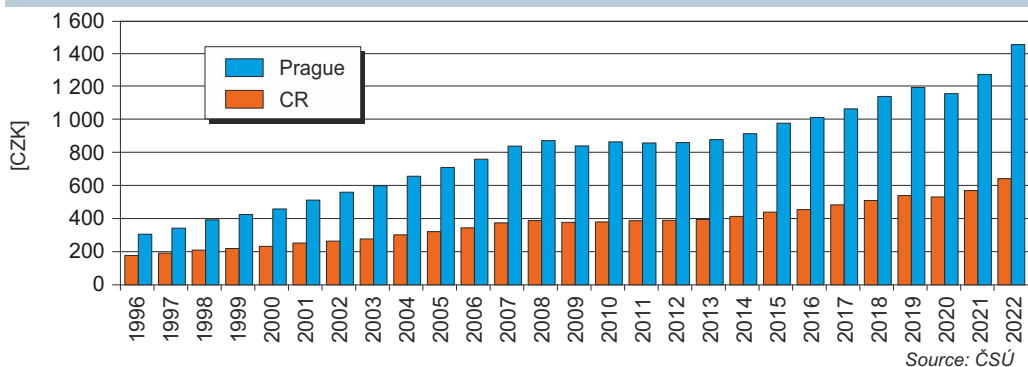


Note: Data for 2020 and 2021 were significantly influenced by the COVID-19 pandemic.

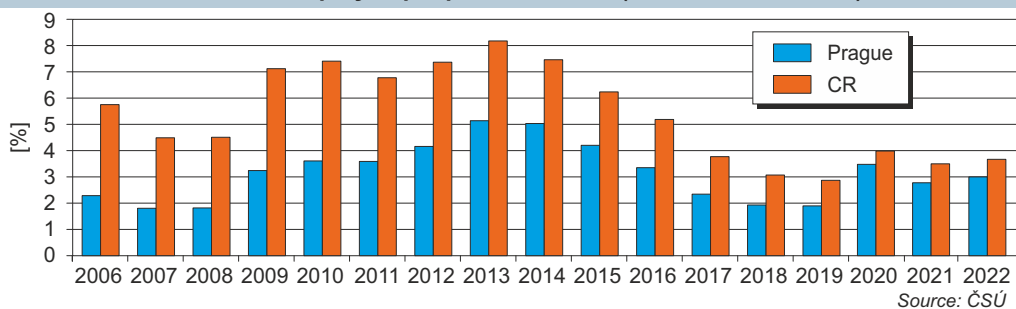
Source: TSK – ÚDI

# ECONOMY

## Gross domestic product per capita, 1996–2022



## Ratio of unemployed people, 2006–2022 (as at 31<sup>st</sup> December)



## Basic economic data on evolution in Prague – macroeconomic indicators, 2018–2022

	2018	2019	2020	2021	2022
Gross value added in total (CZK million)	1 332 879	1 428 793	1 417 019	1 560 396	1 747 010
Gross national product at current prices					
– CZK million	1 479 057	1 581 315	1 556 903	1 717 218	1 926 323
– EUR million	57 670	61 602	58 873	66 974	78 414
– PPS million <sup>1)</sup>	81 082	85 000	81 853	90 172	97 206
Share of the region in the CR GPD as % (CR = 100)	105.4	102.7	95.1	107.3	102.3
GDP development at fixed prices. previous year = 100	27.3	27.3	27.3	28.1	28.4
Gross national product per capita					
– CZK	1 136 744	1 202 237	1 173 010	1 294 631	1 453 579
– EUR	44 323	46 834	44 357	50 493	59 170
– PPS <sup>1)</sup>	62 316	64 623	61 670	67 981	73 350
– EU27 <sup>2)</sup> average in PPS <sup>1)</sup> = 100	205.7	206.4	205.2	208.0	207.0
Gross national product per 1 employee (CZK)	1 548 798	1 638 123	1 647 832	1 775 154	1 981 196
– CR = 100 %	155.1	153.6	154.0	155.7	158.7
Creation of gross fixed capital (CZK million)					
– CZK million	458 171	471 756	475 202	498 985	554 411
– Per 1 inhabitant (CZK)	352 132	358 665	358 029	376 191	418 351
– Share of the total THFK in the CR [%]	32.2	30.1	31.4	31.4	30.5
– Per 1 inhabitant CR = 100 %	263.0	244.1	252.8	253.3	245.8

<sup>1)</sup> PPS – purchasing power standard

<sup>2)</sup> EU27 – 27 Member States of the EU

# 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).

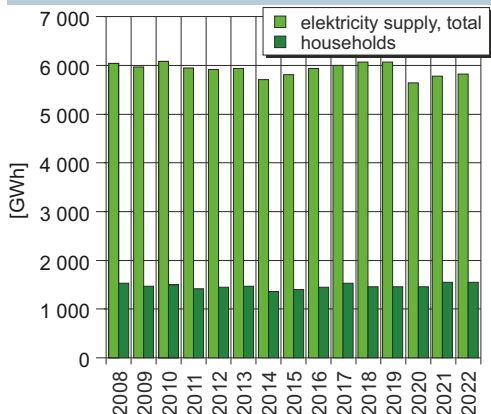
By the end of 2022, a total of **511 measures** had been implemented worth CZK **1.715 billion**. Insulation of buildings achieves energy savings of as much as 50%.

In 2022, the subsidy programme "**Clean Energy Prague Programme**" in support of converting heating systems to ecological media and utilising renewable resources in residential buildings continued, now after retooling as a two-year program-

me (2022–2023). Applications were received starting 5 September 2022, with the first approved and paid out in 2023.

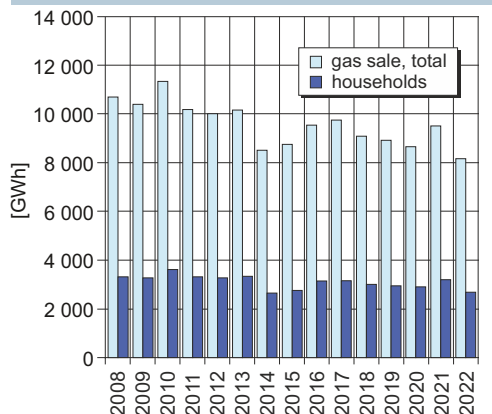
The **Boiler Subsidies** also continued (paid from the Operational Programme Environment, Priority Axis 2, Specific Objective 2.1), with the aim of reducing emissions from solid fuel space heating in single-family homes, which expose the population to above-limit concentrations of pollutants, by replacing them with heat sources that meet the emission limits of Class 3 and better. In 2022, 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, which has paid out the first 17 applications for a total of approx. CZK 2.9 million.

### Evolution of the consumption of electricity, 2008–2022



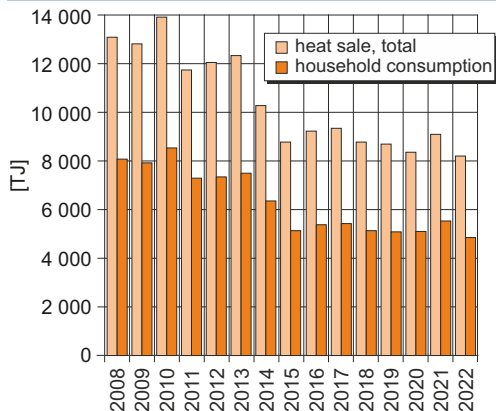
Source: PREDistribuce, a.s. (2008–2022), ERÚ (2018–2022)

### Evolution of gas consumption, 2008–2022



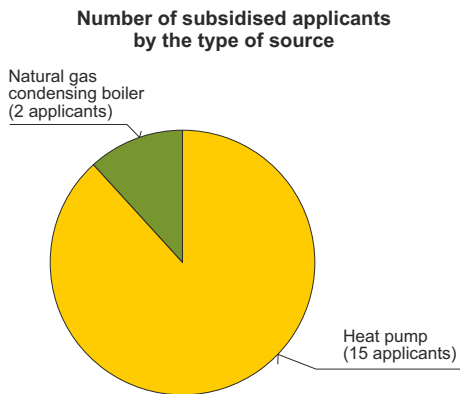
Source: PPDi, a.s. (2008–2022), ERÚ (2018–2022)

### Evolution of heat consumption, 2008–2022



Source: Pražská tepleárenska, a. s.

### Boiler subsidies in Prague, 4. request drawing structure of subsidies, 2022



Source: OCP MHMP

# 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 infor-**

**mation**. 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 2022 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 2022, the **Prague City Hall Environmental Protection Department (OCC MHMP)** received 36 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 2022, while in 16 cases the screening procedure concluded that the project was not subject to assessment under the law. Eleven 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 17 positive binding opinions under the provisions of Section 9a (6) of the Environmental Impact Assessment Act (verification opinions).

In 2022, 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 Office of the Central Bohemian Region**, as the competent authority, received 1 notification of a project plan with impact on the City of Prague. In the monitored period, this project was found to be subject to assessment under the law.

From the perspective of **Strategic Environmental Assessment ("SEA")**, the OCP MHMP issued 9 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 2022 (sorted by administrative units)

#### Administrative district / Number of projects:

Praha 4 / 3, Praha 5 / 1, Praha 6 / 2, Praha 7 / 1, Praha 8 / 2, Praha 9 / 2, Praha 10 / 2, Praha 11 / 3, Praha 12 / 1, Praha 14 / 1, Praha 15 / 3, Praha 16 / 2, Praha 17 / 1, Praha 19 / 1, Praha 20 / 2, Praha 21 / 3, other administrative districts / 0 projects.

Actions influencing more administrative units: 6.

**Total number of intentions: 36.**

# ENVIRONMENTAL TOOLS AND POLICIES

## IPPC

In the Capital City of Prague, **37 legally valid integrated permits** were issued and **372 were amended** in the period from when the Act came into effect until the end of 2022. Of these, a total of 12 integrated permits were abolished: 8 facilities

discontinued operations, and 4 facilities were exempted from the Act of Integrated Prevention.

**By the end of 2022, a total of 25 facilities with valid integrated permits were registered.**

Category	Unit / Operator	Category	Unit / Operator
–	LEMANT Finance s.r.o. / Avia motors s.r.o.	4.1 a)	Výroba acetylenu / Linde Gas a.s.
1.1.	Teplárna Michle / Pražská teplárenská, a.s.	4.5.	INTERPHARMA PRAHA / Interpharma Praha a.s.
1.1.	Teplárna Malešice / Pražská teplárenská, a.s.	5.1. b)	Deemulgační stanice Dolní Měcholupy / Purum s.r.o.
1.1.	Výtopna Třeboradice / Energotrans, a.s.	5.1. b)	Komplex zařízení určených k příjmu, skladování, úpravě a
1.1.	Teplárna Veveslavín / 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)	Spalovna tuhého komunálního odpadu Malešice (ZEVO
1.1.	Výtopna Juliska / Veolia Energie Praha, a.s.	5.2. b)	Spalovna nebezpečných odpadů v areálu FN Motol /
1.1.	Teplárna Holešovice / Pražská teplárenská, a.s.	5.4.	Skládka odpadů S-003 se sektorem S-001 Ďáblice / FCC
2.6.	Galvanovna v hale M6 /	6.4. b),	Výroba nápojů / KMV BEV CZ s.r.o.
2.6.	Povrchové úpravy galvanickým pokovováním	6.4. b),	Závod na výrobu nealkoholických nápojů / Coca-Cola HBC
2.6.	Povrchové úpravy pro generální opravy podvozků /	6.4. b),	Pivovar Staropramen / Pivovary Staropramen s.r.o.
3.1. a)	Zařízení na výrobu cementového slínku v rotačních pecích o výrobní kapacitě větší než 500 t denně /	6.4. c)	Mlékárna Pragolaktos Kyje / Mlékárna Pragolaktos, a.s.
3.5.	Cihelna Štěřboholy / Jan Fiala - cihelna Štěřboholy		

## Overview of conceptual documents for the environment and related fields

### Documents adopted in 2022:

- City of Prague Action Plan for Regional EETA Concept for 2022–2025
- Action Plan of Prague Agglomeration Air Quality Improvement Programme CZ 01 2020+ (PZKO 2020+), Prague Agglomeration CZ01
- Action Plan of Prague Agglomeration Air Quality Improvement Programme CZ 01 2020+ (PZKO 2020+), part two – support measures

### Documents in the state of preparations in 2022:

- City of Prague Drought and Water Shortage Management Plan

### Other selected valid documents adopted before 31 December 2021:

- 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
- Regional Concept for Environmental Education and Awareness within the City of Prague for the period 2016–2025;
- Air quality improvement program - Prague agglomeration CZ01 (document prepared under the auspices of the Ministry of the Environment);
- 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;
- Strategy of Greenery Maintenance in the Capital City of Prague;
- 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 2019 agglomeration;
- The Territorial Energy Concept of the Capital City of Prague for the period 2013–2033 and the follow-up Action Plan for Implementation of the City of Prague Territorial Energy Concept for 2018–2022;
- 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

## 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 2022 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 2022, 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 2022 Budget of the Capital City of Prague

Action Plan KK EVVO Total		53 699 382 CZK
including	Administration and maintenance of centres of environmental education – SEV Toulcův dvůr	3 500 000 CZK
	Administration and maintenance of centres of environmental education – SEV of the Forests of the City of Prague	7 085 600 CZK
	Grants supporting projects for improving the condition of the environment of the Capital City of Prague – area of EVVO (grant sphere IV + VI and other selected projects)	30 310 000 CZK
	Other activities and projects AP KK EVVO covered from the budget of the Department of Environmental Protection of Prague City Administration	12 803 782 CZK
<b>Information technology for the environment in relation to EVVO</b> (overall publication Prague Environment, content development of the Prague Environment portal etc. /budget of the Department of Environmental Protection of the Prague City Administration/)		<b>309 363 CZK</b>
<b>All-Prague programs of support for leisure activities of kids and youth on the territory of the Capital City of Prague</b> (sphere EVVO*)		<b>168 900 CZK</b>
<b>All-Prague programs of support for education on the territory of the Capital City of Prague</b> (sphere EVVO*)		<b>80 000 CZK</b>
<b>TOTAL</b>		<b>54 257 645 CZK</b>

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

Source: OCP MHMP, SML MHMP, SVC MHMP

### Local Agenda 21 in Prague, 2022

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](http://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 2022, LA21 projects continued at the level of individual municipal districts. For this year there are a total of **13 municipal districts**, of those 1 in Category A, 2 in Category B, 5 in Category C, 4 in Category D and 1 in the category of Interested Parties.

Category	City Districts
A	MČ Praha 14
B	MČ Praha 10, MČ Praha 12
C	MČ Praha 5, MČ Praha 13, MČ Praha 18, MČ Praha – Dolní Počernice, MČ Praha-Kolovraty
D	MČ Praha 4, MČ Praha 15, MČ Praha 21, MČ Praha-Libuš
Applicants	MČ Praha-Troja

Source: CENIA

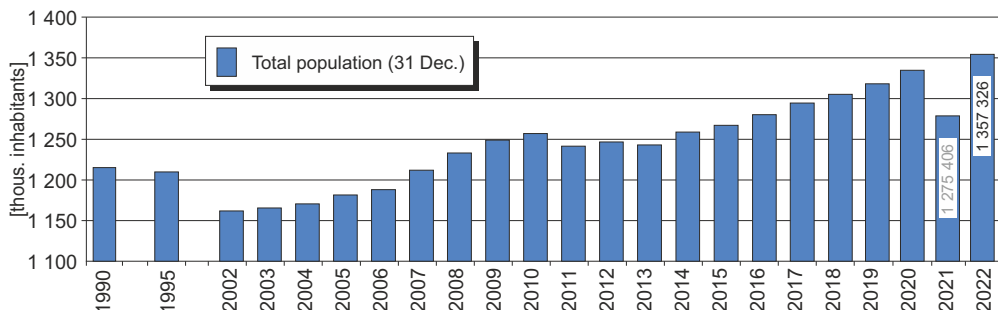


# POPULATION AND HEALTH

The number of people born fell year-on-year between 2021 and 2022, 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 2022 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.

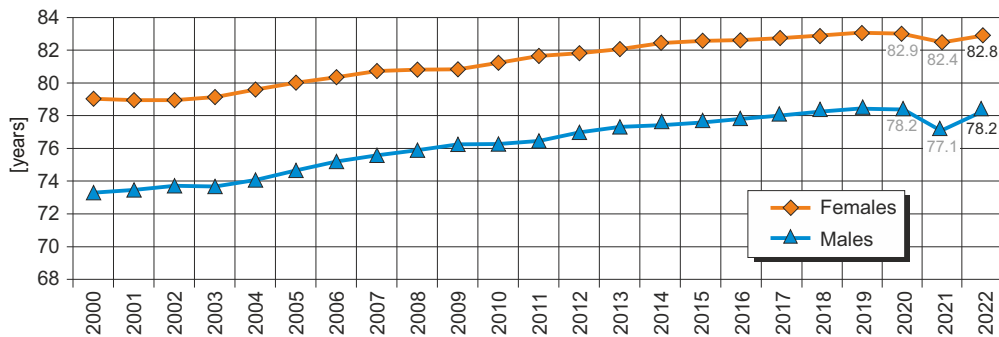
## Number of citizens in Prague, 1990, 1995, 2002–2022



Note: The number of citizens since 31<sup>st</sup> December 2021 has been connected to the 2021 census results and is not comparable to previous years..

Source: ČSÚ

## Life expectancy in Prague, 2000–2022



Note: The number of citizens since 31<sup>st</sup> December 2021 has been connected to the 2021 census results and is not comparable to previous years..

Source: ČSÚ

## Evaluation of water quality in Prague natural outdoor swimming pools, 2022

Natural swimming pool	Week of the year 2022																
	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35
Motol			😊		😊		😊		😊		😊		😊		😊		😊
Džbán			😊		😊		😊		😊		😞		😞		😞		😞
Hostivař			😊		😊		😊		😊		😊		😊		😊		😊
Šeberák			😊		😊		😊		😊		😊		😊		😊		😊
Divoká Šárka	😊				😊					😊					😊		
biotop Radotín	😊					😊			😊		😊		😊		😊		😊
biotop Lhotka		😊			😊		😊		😊		😊		😊		😊		😊

- 😊 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

# ENVIRONMENTAL INDICATORS

Indicator	Unit	2014	2015	2016	2017	2018	2019	2020	2021	2022	Source
Specific emissions of greenhouse gases	t CO <sub>2</sub> ekv./capita	5.82	6.38	6.72	6.54	6.41	6.37	5.92	6.36	6.41	ČHMÚ, ČSÚ (Re-counted values, 2019)
Annual electricity consumption per capita	kWh/capita/year	1083.1	1112.1	1131.3	1181.6	1131.9	1121.2	1117.7	1231.1	1160.3	2015–2022: ČSÚ, prev. PRE, ČSÚ/MHMP
Annual vehicle-kilometers travelled per capita	thousand vehicle-km/capita/year	5.76	5.52	5.50	5.67	5.53	5.63	5.12	5.68	5.38	TSK-ÚDI, compiled MHMP
Total number of vehicles per capita	numb./cap.	0.70	0.74	0.78	0.818	0.844	0.86	0.87	0.965	0.927	TSK-ÚDI
Length of selected bicycle routes											
– Marked bicycle routes, total	km	430	454	472	477	500.3	515	520	531	543	Prague Transportation Yearbook (TSK Praha)
– Protected cycle routes (bicycle paths)	km	163	167	173	178	186.5	194	200	215	233	
– Integration measures (bicycle lanes etc.)	km	92.1	98.5	102	106.9	117.3	126.9	159.8	193.0	219.2	
Air emissions of NO <sub>x</sub>	kg/cap./year	7.4	5.6	5.8	5.7	5.7	4.8	4.8	4.7	4.2	ČHMÚ, ATEM, compiled MHMP
Air emissions of SO <sub>2</sub>	kg/cap./year	0.2	0.1	0.2	0.2	0.2	0.2	0.21	0.11	0.12	
Quality of local air – number of exceedances of the PM <sub>10</sub> limit value											
– traffic station	number	24 Karlin	0 Vršovice	0 Vršovice	13 Vršovice	18 Vršovice	0 Vršovice	0 Průmyslová	0 Vršovice	0 Karlin	ČHMÚ, compiled MHMP
– background station	number	2 Suchbátův	0 Suchbátův	0 nám. Republiky	0 nám. Republiky	3 nám. Republiky	0 nám. Republiky	0 nám. Republiky	0 nám. Republiky	0 Šrobárova	
Average household water consumption	l/day/capita	106	106	108	109	107	113	112	114	111	PVK
Area of protected areas as percentage of the City total area	%	4.7	4.7	4.7	4.7	4.8	4.8	4.9	4.9	4.9	MHMP
Waste production per capita - household waste	t/capita/year	0.324	0.325	0.333	0.335	0.333	0.335	0.340	0.352	0.331	MHMP
The number of respiratory diseases as hospital admissions	Number per 1,000 inhab.	10.5	9.9	13.1	12.6	11.3	9.9	9.1	13.1	11.1	UZIS, Czech National Registry of Hospitalized Patients

# Circular economy

Prague supports the trend of extending the life cycle of materials and minimising waste production



## Reuse



Prague gives things a second chance

## Swap



Prague is learning more responsible habits

## Upcycling



Prague turns unneeded things into new and better ones

## Zero waste



Prague is changing its lifestyle

More detailed information: <https://klima.praha.eu/cs/cirkularni-ekonomika.html>



klima.praha.eu

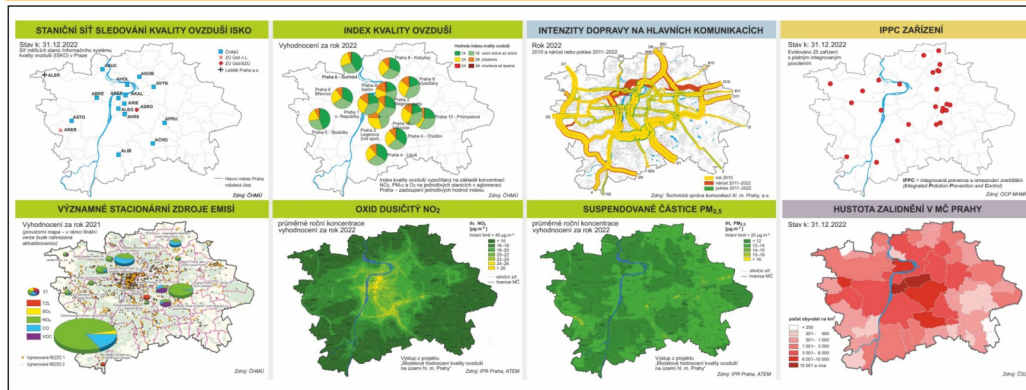
CIRKULÁRNÍ  
PRAHA

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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

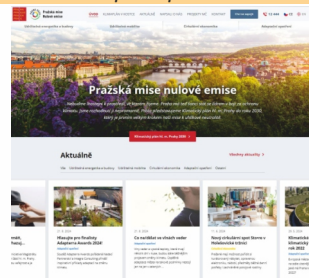
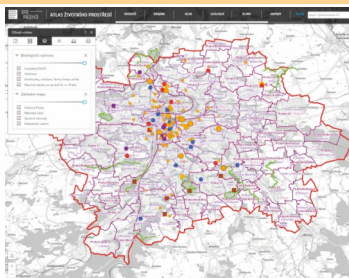
**Prague Environment – Selected information 2022, maps**  
[portalzp.praha.eu/rocnkyzp](http://portalzp.praha.eu/rocnkyzp)



**Prague Environmental Portal**  
[portalzp.praha.eu](http://portalzp.praha.eu)

**Atlas of the Environment in Prague**  
[www.geoportalpraha.cz](http://www.geoportalpraha.cz)

**Prague Climate**  
[klima.praha.eu](http://klima.praha.eu)  
[adaptacepraha.cz](http://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: <a href="mailto:stepan.kyjovsky@praha.eu">stepan.kyjovsky@praha.eu</a> <a href="mailto:ocp@praha.eu">ocp@praha.eu</a>
Hygiene Institute of the Capital City of Prague Rytířská 404/12, p.s. 203, Praha 1, 110 01	MUDr. Zdeňka Schumová Head of the service office – Director	tel.: +420 296 336 711, <a href="mailto:podatelna@hygp Praha.cz">podatelna@hygp Praha.cz</a> , IDDS: zpqaiz <a href="http://www.hygp Praha.cz">http://www.hygp Praha.cz</a>
Czech Environmental Inspection Na Břehu 267/1a, Praha 9, 190 00	Regional Inspectorate Prague Walkerova 40/11, 160 00 Praha 6-Dejvice	tel.: +420 233 066 111 <a href="mailto:ph.podatelna@cizp.cz">ph.podatelna@cizp.cz</a> IDDS: 4dkdzty <a href="http://www.cizp.cz">http://www.cizp.cz</a>

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

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