Yearbook 2024

366 Days Mapping Prague's Progress

smart prague index

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smart prague

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Obsah

2024

Prague jumped to 15th place out of 142 cities in the IMD Smart City Index 2024, achieving category A – the highest level of development.

Dear readers,

Every modern city faces complex challenges. The climate is changing, demands for services are growing, space is limited, and yet the population continues to increase. Prague is no exception. In just one year, 13,000 new residents moved into the city's 496 square kilometres. And the winter of 2024? It was the warmest our yearbook has ever recorded. The Smart City can therefore no longer be seen as a distant vision – it is a necessity. Without data, technology, and cooperation, Prague will not be able to respond quickly to the needs of its residents and plan effectively. It would then become increasingly difficult for Prague to remain a pleasant place to live for future generations.

However, together with our colleagues, we have helped to set a clear direction for Prague. This direction is defined by the updated Smart Prague 2030 Concept, which was approved by the City Council in 2024. It has three main objectives: improving the quality of life, increasing the efficiency of city planning and administration, and fostering urban innovation. The concept focuses on three key areas: mobility and public space; the environment; and energy and buildings. It also focuses on something less tangible but equally important: innovation culture, infrastructure, and innovationmanagement.

This year's Smart Prague Index yearbook shows that this vision is being successfully fulfilled. Prague is doing well in international comparisons: it ranked 50th out of 183 in the Cities in Motion Index 2024, becoming the leader in Eastern and Central Europe. In the IMD Smart City Index 2024, it jumped to 15th place out of 142 and achieved category A – the highest level of development. And at home, in the Czech Quality of Life Index 2024, it finished second out of 206 municipalities with extended powers.

We are also pleased with other figures for 2024. The number of registered electric vehicles continues to grow – by more than 50% year-on-year. Almost 270 new charging stations have been added to the streets. As a result, we have slightly cleaner air and fewer hazardous emissions in Prague. Electricity and gas consumption have stabilised, and the number of smart meters in the electricity distribution network has increased by more than half, year-on-year. This helps Prague to better manage its energy consumption and plan energy-saving measures.

The digitisation of services saves time and patience: the Prague Citizen Portal (Portál Pražana) had half a million more visitors than in the previous year, and the range of online forms has grown by 60%. Nearly 100,000 residents now take care of their affairs from home every month without having to wait in queues at government offices.

But the Smart Prague Index is not just a list of numbers. It is proof that urban innovation has a tangible impact. We see it in the streets, in our homes, and in the quality of the air. Thank you for joining us on this journey, and I invite you to see how Prague is gradually transforming into a modern, sustainable, and welcoming metropolis.

Petr Suška
Vice-Chairman of the OICT Board of Directors
Smart City and Innovation Unit

Smart City a Smart Prague

Smart City & Smart Prague

The term Smart City encompasses many directions that modern cities should take. In recent years, however, the greatest emphasis has been placed on sustainable urban development, which should primarily aim to improve the quality of life of its inhabitants. And that is also the goal in Prague. Our capital city uses innovative approaches and information and communication technology tools to develop as a modern city that creates the best possible environment for its residents. To achieve this, it continuously evaluates the real benefits of these innovations, with the help of the **Smart Prague Index (SPI)**, a set of more than a hundred indicators.

Thanks to these indicators, we can measure the capital's progress towards becoming a modern, sustainable metropolis that provides its citizens with an environment in which they can thrive through innovation management, culture, and infrastructure. Innovative solutions help to improve city management in everyday situations and during unexpected events. Smart city management uses a wide range of sensors, from physical detectors to the processing of images from space satellites, for more accurate weather forecasting and mapping of cities' emission and temperature loads. However, important data does not only flow from sensors installed in streets and buildings; your own vehicle or mobile phone is also an intelligent sensor.

Another example of a smart solution is a sensor network implemented using public lighting infrastructure, which, in addition to its primary function, also has the potential to provide communication services throughout the city. The sustainability of cities and their resilience to external influences also reflect their competitiveness on a local, regional, and global scale. In mid-May 2022, the Czech national government approved the "Implementation Plan for the Smart Cities Concept until 2030" which deals with the specific process of implementing innovations for cities and municipalities. The aim is to improve the quality of life for residents in individual regions through specific measures the plan offers. Similarly, since 2014, the specific conditions of the capital city have been addressed in cooperation with the Smart City Development Commission of the Prague City Council. On this basis, the Smart Prague 2030 Concept was created and is regularly updated. The latest update to the Smart Prague 2030[1] Concept was prepared at the end of 2024 and is due for approval early next year.

The main objective of the Smart Prague Concept is to improve the quality of life for residents and visitors to the city, increase the efficiency of the city's planning, management, and development systems, build an innovation culture that supports new solutions, and prioritise solutions that strengthen the sustainable development of Prague. The emphasis is on improvement in three main areas through technological innovation, data analysis, and change of the culture. These are **Mobility and Public Space, Environment, and Energy and Buildings**. Cross-cutting themes are applied across the main areas, focusing on coordination and cooperation between the actors involved in the city's development. **These themes are Innovation Culture, Innovation Management, and Innovation Infrastructure.**

You can find more on this topic on YouTube or Instagram Smart Prague.

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[1]https://smartprague.eu/files/koncepce_smartprague.pdf

Innovation Culture

Innovation culture is a set of values, expectations, and practices that actively and purposefully create an environment that supports innovation, encourages new ideas, creativity, and experimentation. An important part of this is learning from mistakes and building a knowledge base, which is facilitated by both the **Smart Prague Index (SPI)** and its methodology, as well as the developing idea of the Smart Prague Centre (SPACE), which should contribute to the development of experiential learning.

Smart Prague Index (SPI)

JWe evaluate the progress of the Smart Prague 2030 Concept on an annual basis using a series of indicators that measure Prague's progress in key areas in which it should develop as a smart city. The result of this evaluation is the **Smart Prague Index (SPI)** yearbook, which you have before you.

Now in its 8th edition, the yearbook shows how Prague fared in 2024 on its journey towards a successful and sustainable future. Methodologically, the SPI is based on the Cities in Motion Index (CIMI) developed by Ernst & Young. This index regularly provides assessments and comparisons of global cities based on hundreds of indicators aggregated into several thematic areas. The key indicators of the CIMI index are used to map Prague's progress in each of the agenda areas and in terms of the city as a whole.

Smart City indexes

Individual smart cities do not function in isolation in the world; the regional and global dimensions are also important. There are many indexes that compare cities and assess their level of development in many different areas, whether it be mobility, spatial development, the environment, the economy, or various social aspects.

CIMI index 2024

The IESE Cities in Motion Index assesses more than 180 cities around the world every year. In 2024, Prague ranked 50th out of 183 cities, scoring highest in the areas of environment and human capital, but also strong in terms of its international profile.

However, Prague is the clear leader in its region. The CIMI index places the city in the Eastern European region, in which Prague has already taken the lead several times over Warsaw, Poland, and Tallinn, Estonia. The index ranks mobility and transport among its strengths and highlights its strong position in terms of workforce quality and education.
Prague is recognised by the CIMI index as an important regional centre with international influence and high potential in the areas of urban mobility and social cohesion.

IMD Smart City Index 2024

One of the leading globally recognised indexes for evaluating smart cities is the IMD Smart City Index, created in collaboration between the Institute for Management Development (IMD) and the Singapore University of Technology and Design (SUTD). The index evaluates cities around the world based on their "smartness" which is defined as the extent to which cities use technology to improve the quality of life of their residents. The assessment is based on citizen voting and feedback and reflects how well cities meet the needs of their residents, with an emphasis on the social and environmental aspects of urban life.

In 2024, Prague ranked 15th out of 142 cities assessed. On a "letter" scale[2], where cities are evaluated against each other in individual maturity groups, it fell from AA to A, but still ranks in the highest maturity category overall. Prague's HDI index, which assesses the level of human development, increased year-on-year.

Quality of Life Index 2024

Cities are not only compared at the international level; there are also regional and local indexes. For example, the Quality of Life Index compares 206 municipalities with extended powers in the Czech Republic, including Prague, on an annual basis. Cities are assessed on the basis of 29 indicators in three thematic areas: health and the environment, material security and education, relationships and services. In 2024, Prague, as usual, ranked second.

Prague Innovation Marathon Nakopni Prahu (Kickstart Prague)

Every year, cities are not only compared based on indexes with predefined criteria, but sharing best practices is also an important part of the process. There are countless competitions that evaluate innovative ideas and smart city projects and reward the most inspiring examples. This allows others to draw inspiration for their own Smart City projects. One example is the Prague Innovation Marathon Nakopni Prahu, a competition in which the public comes up with their own innovative ideas aimed at improving the lives of Prague residents.

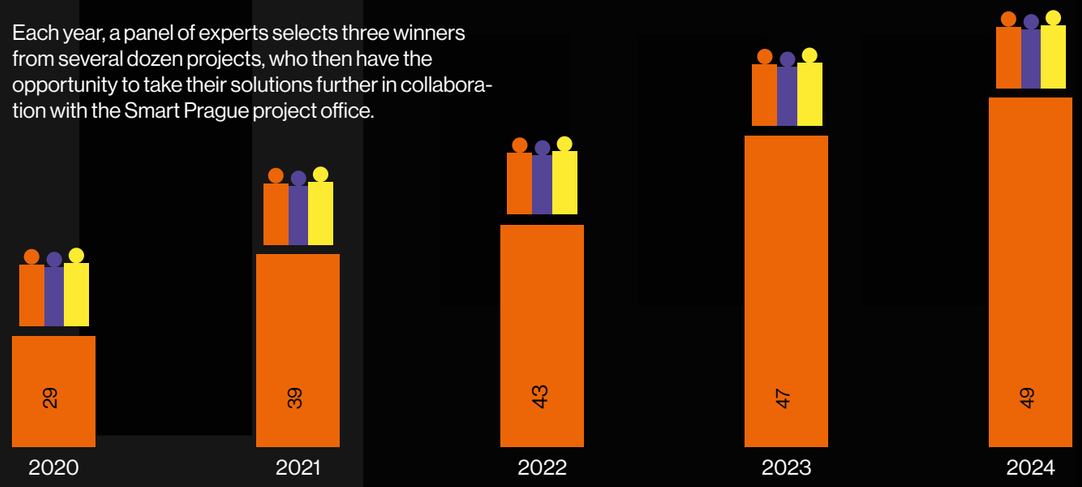
Each year, a panel of experts selects three winners from several dozen projects, who then have the opportunity to take their solutions further in collaboration with the Smart Prague project office.

Nakopni Prahu (Kickstart Prague) 2024

In 2024, nearly fifty teams submitted their ideas to the fifth edition of Nakopni Prahu. Among the ten finalists, third place went to a project called "Opravárna" (Repair Shop), which focuses on the reuse of electronics within the circular economy. Second place went to the "Vyrob si!" (Create it yourself) team with their construction kit, which anyone can use to create their own departure board displaying data on the location of public transport connections in Prague.

The winning idea was the HELP (YOURSELF) project, which focuses on improving the mental health of citizens through volunteering and serves a kind of "e-shop for good deeds". The project particularly impressed the jury with its innovative solution, its benefits for Prague residents and the city, and its applicability in real life and on the market. The next edition of Nakopni Prahu will start in spring 2025.

Nakopni Prahu (Kickstart Prague) - number of teams registered



[2]All cities are ranked both according to the fulfilment of individual indicators and on a letter scale, which ranks them according to how they compare to other cities in the group to which they belong based on their level of development. Cities are divided into four groups according to their level of development, within which mutual comparisons are made. The letter scales are as follows: group 1 (most advanced): AAA-AA-A--BBB-BB; group 2: A-BBB-BB-B-CCC; group 3: BB-B-CCC-CC-C; group 4 (least advanced): CCC-CC-C-D.

Innovation management

The innovation management service is a pilot service focused on improving the quality and efficiency of the Smart City project preparation process. The innovation management team actively seeks opportunities in the field of new technologies and trends that target the needs of end users. The aim is to ensure that the proposed innovative solutions are relevant, user-friendly, and respond to the real needs of the city's residents.

Emphasis is placed on the initial phase of projects, when their compliance and connection to the Smart Prague 2030 Concept and its implementation are verified. As part of the innovation management service, a solution is prepared in cooperation with all interested parties so that its design meets the needs of the target users. This process includes an analysis of trends and opportunities within the implementation of the Smart Prague 2030 Concept, which provides an overview of global trends in innovation and insight into the city's needs in line with its strategic goals.

The identified ideas are further developed into concepts and pilot projects in strategic areas such as the promotion of smart mobility, adaptation to climate change, and efficient energy use. The pilot phase of the service includes testing, configuration, and further development focused on the city's needs.

Smart Prague OICT team

The Smart Prague office includes both internal and external specialists and experts in the fields of project management, data analysis, and the implementation of innovations in the city. Smart Prague projects help to respond appropriately to the challenges facing Prague in a wide range of areas, whether it be new trends in mobility, challenges related to climate change, efforts to improve the quality of life in the capital, or solutions for the cost-effectiveness and operation of municipal buildings. Within the Smart Prague concept, OICT acts as an innovation and project manager responsible for project management. Its goal is to deliver answers to the individual challenges facing our metropolis by applying smart solutions to problems in the above-mentioned areas. In addressing Prague's challenges, OICT uses innovative technologies and proceeds with the maximum possible scope of solutions, while respecting competence neutrality. After the pilot phase is completed, OICT transfers the projects to the relevant entity of the City of Prague for their operational phase.

International cooperation

International cooperation is a key tool for developing the Smart Prague concept. It enables Prague to actively share experiences, know-how, and data with other European cities, thereby increasing the efficiency of planning and implementing smart solutions. Thanks to its involvement in European projects, the city comes into direct contact with innovative approaches, strengthens its capacities and expertise, and gains access to external financial resources, particularly through European Union programmes such as Horizon Europe.

As a municipal company, OICT actively participates in these activities through its International Cooperation Team. In recent years, Prague has been involved in several major European initiatives, such as the **ASCEND, CommuniCity, NEB-Star,** and **CrAFt** projects. These activities support the creation of a high-quality urban environment and contribute to achieving the city's strategic goals in the areas of climate neutrality and open, data-driven decision-making.

Innovation Office

Innovation managers within the OICT work to create meaningful projects in Prague that use modern technologies, respond to the specific needs of the city and its residents, and contribute to improving the quality of life for Prague residents. They also draw inspiration from abroad.

In 2024, the Innovation Office produced eight new innovation concepts, three of which were further developed into pilot project proposals that will have the opportunity to deliver concrete results in improving the quality of life for Prague residents.

These include Managing Heat Waves in Prague, aka the Cool Oasis Map; SPACE, a platform for presenting city data and innovations that will help the public better understand the work of the OICT and the innovative solutions being developed in Prague; and Benefit Programme 2.0, which is an extension of the existing Lítačka benefit programme.

Innovation and technological infrastructure

The first comprehensive analysis of Smart City trends and needs was also prepared, describing 105 trends and 65 challenges that may affect the future of Prague. It serves as a catalogue of possibilities that the city can draw on when planning innovative projects. The OICT innovation office will update this non-public document regularly once a year for Prague.

People and improving their quality of life are the top priority when implementing new solutions. However, technology is not neglected and serves as an essential tool for collecting, transferring, and visualising data that helps build a knowledge base and enables better decision-making and planning. This includes data platforms that make data available to city representatives, as well as the development of new digital tools and the use of artificial intelligence (AI).

Golemio data platform

The Golemio data platform collects, integrates, stores, visualises, and shares city data across the capital's agendas. It supports operational and strategic decision-making by combining data from various sources – such as IoT devices, transport, public procurement, and city projects – and creating meaningful outputs.

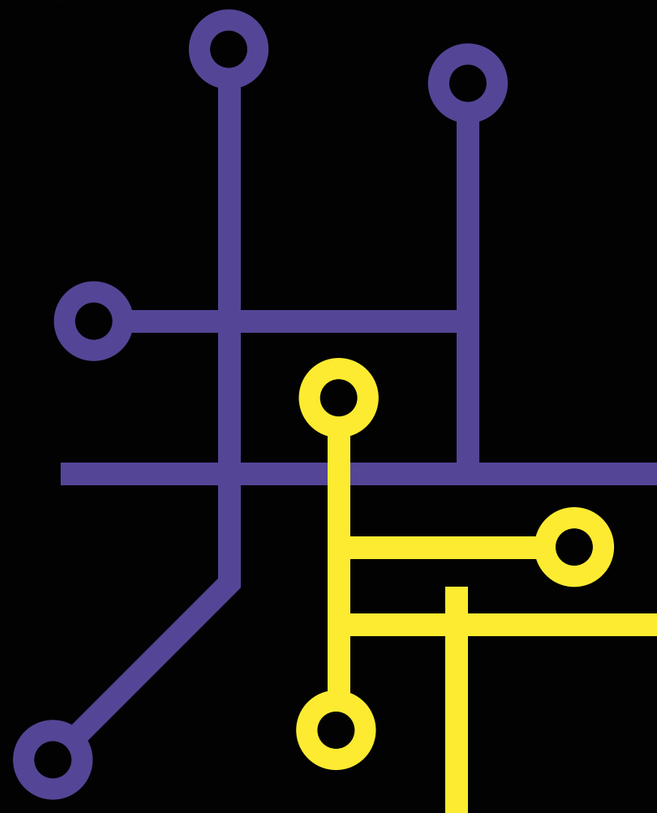
The data is made available to representatives of the city, city districts, and companies via the Golemio BI client panel, and to the wider public via data and data analyses at data.praha.eu. The data can also be used by developers, experts, and, above all, the city itself via API / open data.

The data.praha.eu environment is the central point for the presentation of data across Prague. It makes the outputs of the data platform and data from other organisations available to the general public. This provides the departments of the Prague City Hall and municipal organisations with a unified tool and place for presenting data to the general public in a simple and accessible form.

Administration and development of the Prague open data catalogue

The Prague local open data catalogue opendata.praha.eu is used to publish data sets from the City Hall, contributory organisations, city districts, and other entities. The catalogue, which was developed by the Golemio data platform team in collaboration with other organisations, is managed as open-source and allows for easy publication of open data.

Part of Golemio's development includes building technical competencies and monitoring technological trends such as AI, IoT, and edge computing. These tools help to process city data more efficiently and enable the creation of new digital services that bring greater value to the city.



Innovation and technological infrastructure

Portál Pražana (Prague Citizen Portal)

Innovation infrastructure aimsto use tools and technologies to make life easier for residents in the city. One way to achieve this is through the digitisation of municipal services, which allows citizens to not only communicate with the authorities easily and efficiently, but also to deal with administrative matters from the comfort of their own homes. This benefit is particularly important for people with reduced mobility or other special needs, who can take care of everything online.

One such digital authority is the Portál Pražana, which is gradually bringing the city's services into digital form. Every year, as the number of digitised agendas increases, so does the number of users who use these services. In 2024, the Portál Pražana came close to becoming a truly city-wide system, offering a wealth of online forms in the areas of healthcare, housing, local fees, and transport. For example, it became the main tool for dealing with municipal housing issues, and in 2024, the so-called entrepreneur module, which today represents a simple waste management solution for entrepreneurs in the city, became a significant innovation. Visits to the Portál Pražana more than doubled again in 2024, and the number of submissions made through it also increased significantly.

The Portál Pražana also offered a number of newly digitised forms, the number of which increased by more than 60% year-on-year.

	2020	2021	2022	2023	2024
Number of visits	N/A	63 600	61 044	393 276	**843 934**
Number of digitized forms	3	15	25	33	**54**
Number of users of digitized services	967	38 402	32 113	32 224	**98 514**
Number of applications processed/number of submissions	4	1 876	4 330	4 134	**5 869**
Number of online registrations	N/A	N/A	7 048	177 364	**150 288**

Mám nápad (I have an Idea) web portal

Since 2017, the Mám nápad web portal has been accepting proposals from citizens for projects with the potential to improve the capital city. Each idea received is evaluated by the Smart Prague office, and together with city representatives and experts from the academic sphere, the possibility of its implementation in Prague is assessed.

Ideas with real potential are then presented in the form of project plans to the city or relevant municipal organisations, which can then proceed with their implementation. Although interest in using the platform has declined in recent years, 2024 brought one idea approved for further processing.

This particular idea concerns the expansion of the city's smart infrastructure with a device known as a virtual lookout tower, which offers Prague's visitors better orientation in the city.

	2017	2018	2019	2020	2021	2022	2023	2024
Number of all ideas received	72	70	27	50	49	20	**27**	**9**
Number of approved ideas	40	20	15	43	43	1	**2**	**1**
Success rate of relevant projects	56 %	29 %	56 %	86 %	88 %	5 %	**7 %**	**11 %**

A pilot virtual lookout tower can be found in Prague's Libeň district, where it helps visitors navigate the site of the assassination of Reich Protector Reinhard Heydrich in May 1942.

Innovation and technological infrastructure

City mobile applications MOJE PRAHA (My Prague) and ZMĚŇTE.TO (Change.it)

Since 2024, the number of users of the Moje Praha and Změňte.to mobile applications has been counted in a slightly different way – only those users who give their explicit consent are recorded. Therefore, we cannot provide a comparison of how the user base of these two city mobile applications has changed year-on--year. However, we can still compare how the number of proposals submitted via the Změňte.to app has changed year-on-year.

The Moje Praha mobile app offers its users services such as a clear overview of P+R car parks and parking zones, information about authorities, municipal police stations, collection yards, including opening hours and the most important contacts, as well as an overview of cultural events currently taking place in the capital. The mobile app is constantly expanding its range of services for citizens and encouraging them to actively submit ideas for its improvement.

The Změňte.to app maintains an average of over 13,000 proposals submitted each year, which relate to improvements to public spaces in Prague and reports of malfunctions and defects. The proposals are sent via the app to municipal officials and their subordinate organisations, where they respond to the suggestions. The Změňte.to mobile app also includes the option to rate individual authorities and give them constructive feedback. Striving to improve for the benefit of its residents is one of the fundamental characteristics of smart cities.

	2019	2020	2021	2022	2023	2024
Number of submitted proposals within the **Změňte.to** application	5 895	14 113	12 141	13 194	**13 046**	**13 120**

Smart City a Smart Prague

SMART CITIES ARE

Ecological

Solutions contribute to reducing pollution and improving the environment (e.g. by managing energy and material consumption, including waste)

Innovative

Solutions build on new business models and use new materials and technology

Friendly and motivating

Initiatives and (preparation of) projects include involvement of city residents and other stakeholders, including the business community

Safe and resilient

Solutions strengthen the security of physical and information systems and contribute to the resilience of the city against attacks and natural disasters

Digital and open

Solutions are supported by information systems that are effectively integrated; generated data becomes open data to the maximum extent possible

Smart City

A smart city strives to simplify the lives of its citizens through a number of innovative solutions, most of which are various sensor systems that either expand the functionality of existing public space elements or replace them entirely. These "smart elements" then serve as information providers in the urban environment, helping residents make the most of the city's infrastructure and increasing their safety and comfort. At the same time, they help to collect data on the state of public spaces, which can then be analysed to come up with new solutions to the problems facing the city. Examples include waste collection solutions and smart lighting.

1 443 P+R parking spaces with intelligent sensors
↑ 7.3 %

50 537 smart electricity distribution network meters
↑ 53.3 %

4 914 cameras integrated into the Municipal CCTV system
↑ 1.6 %

10 vertical gardens in the built-up area of Prague
↓ 9.1 %

14 646 smart lamps
↑ 25.4 %

17 smart technologies supporting sports and leisure activities
↓ 10.5 %

In 2024, four new community gardening and farming sites appeared in Prague as part of the MetroFarm project. These sites are located in Letňany, on Císařský ostrov, in Jinonice, and in the form of smaller flower beds in the streets of Prague 7.

15 smart solutions to promote health in the city
↔ 0 %

35 locations with bicycle and pedestrian counting technology
↔ 0 %

36 cyclists

5 685 walkers

1 499 charging points for electric vehicles
↑ 21.9 %

73 greenery growing communities
↑ 7.4 %

9 re-use points
↑ 12.5 %

399 smart bins of the city districts
↑ 433.7 %

7 023 smart waste bins with sensors (in the framework of OICT projects)
↑ 24.1 %

135 sensors or stations measuring the state of the environment in public space
↔ 0 %

453 public transport information boards with real-time departures
↑ 36.9 %

118 urban green spaces with smart solutions
↑ 24.2 %

Mobility and public space

Mobility and public space

Energy consumption at Prague's electric car charging stations in 2024 corresponded to approximately 0.3% of the annual electricity production from solar panels in the entire Czech Republic.

You can find more on this topic on YouTube or Instagram Smart Prague.

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Mobility of the future

The direction of further transport development in Prague is subject to systematic analysis of the current situation and planned transport construction projects, as well as the specification of current challenges. It is in this direction that we define the area of Mobility of the Future in the capital city.

One of the current and long-term challenges facing the Czech capital is the growth in the number of Prague's inhabitants and passengers who regularly travel to the capital. The mobility of an ever-growing number of people increases the demands on transport performance every year, including the transport of people and goods.

Electromobility

Electromobility and the way it is viewed is changing significantly every year, whether it concerns passenger vehicles or high-capacity vehicles, i.e. public transport vehicles. The availability of passenger vehicles is increasing significantly, and the range of types on offer is expanding. However, we must also be aware of the changes for the average user resulting from the way it is used.

The change consists of minor planning and realising that we do not have to charge an electric vehicle only at night for several hours; we can also use the increasingly available chargers at shopping centres, where 20 minutes is enough to recharge for further operation, during which time we can do our shopping. It is therefore as simple as charging a mobile phone.

For some types of batteries, charging in this way may even be more convenient, and electric car users do not have to wait until the battery level approaches zero. The development of electromobility is supported and promoted by cities and governments, mainly because it improves the quality of life and living standards of the population. Electromobility is thus becoming a key element in the field of transport, contributing to improved air quality and reduced dependence on fossil fuels.

Passenger cars

In the Smart Prague Index, we use an indicator that monitors all vehicles that meet the conditions for the "EL" designation on their registration plates (hereinafter "RP"). This also includes hybrid vehicles that meet emission limits.

The graph below shows a steadily increasing trend in the number of low-emission vehicles in Prague. The year-on-year increase in the number of these vehicles was more than 50% in 2024, but their age did not increase. Compared to 2023, the vehicle fleet became younger because vehicles that were one year newer were on the streets. It is precisely the age of vehicles that indicates the potential for change over time, or rather the estimated time of the widespread effect of the measures introduced.

	2017	2018	2019	2020	2021	2022	2023	2024
Number of registered vehicles with the registration number "EL"	1 172	1 615	2 236	3 911	6 186	9 496	14 119	**21 589**
Number of vehicles on the territory of the Prague Capital City	746 894	810 624	877 448	938 854	1 005 336	1 081 838	1 102 493	**1 168 202**
Average age of vehicles on the territory of the Prague Capital City	17.5 years	16.6 years	15.6 years	14.8 years	13.9 years	13.0 years	13.2 yearst	**13.2 years**

Note: M1 and N1 category vehicles counted, source: Vehicle Register via Datová kostka (Data Cube).

In 2024, there was one car for every five out of six inhabitants in Prague, including the youngest ones.

Mobility of the future

Electric buses

Electromobility is also a hot topic in public transport. Today, we cannot imagine trains, trams, and metros without electric propulsion. This leaves us with bus transport, where electrification is taking place in the form of electric buses, trolleybuses, or a combination of these technologies in a single vehicle. The electrification of public transport is a key step towards a more sustainable and comfortable future.

Data from Prague confirms the trend of gradually testing and introducing electric buses and trolleybuses into service as part of the renewal of the vehicle fleet.

	2017	2018	2019	2020	2021	2022	2023	2024
Number of buses with electric drive (including trolleybuses)	**2**	**2**	**2**	**5**	**23**	**36**	38	**49**
Total number of buses (including trolleybuses) in the vehicle fleet of DPP	1170	1162	1144	1166	1203	1193	1207	**1215**
Total number of other buses PID contractors	934	1022	1350	1516	1889	1956	2049	**2040**
Number of km traveled by e-buses (including trolleybuses)	60755	45940	116660	168930	55377	410907	520916	**490218**
Total number of bus kilometres	72.5 mil.	75.6 mil.	75.6 mil.	70.3 mil.	70.3 mil	73.7 mil.	74.2 mil.	**64.0 mil.**
Number of vehicle kilometers of DPP buses in Prague	64.7 mil.	64.9 mil.	67.5 mil.	61.1 mil.	60.8 mil.	64.0 mil.	64.4 mil.	**66.6 mil.**
Vehicle kilometers of buses on city lines outside the DPP in Prague	7.8 mil.	7.7 mil.	8.0 mil.	9.2 mil.	9.5 mil.	9.7 mil.	9.9 mil.	**9.8 mil.**

Charging infrastructure

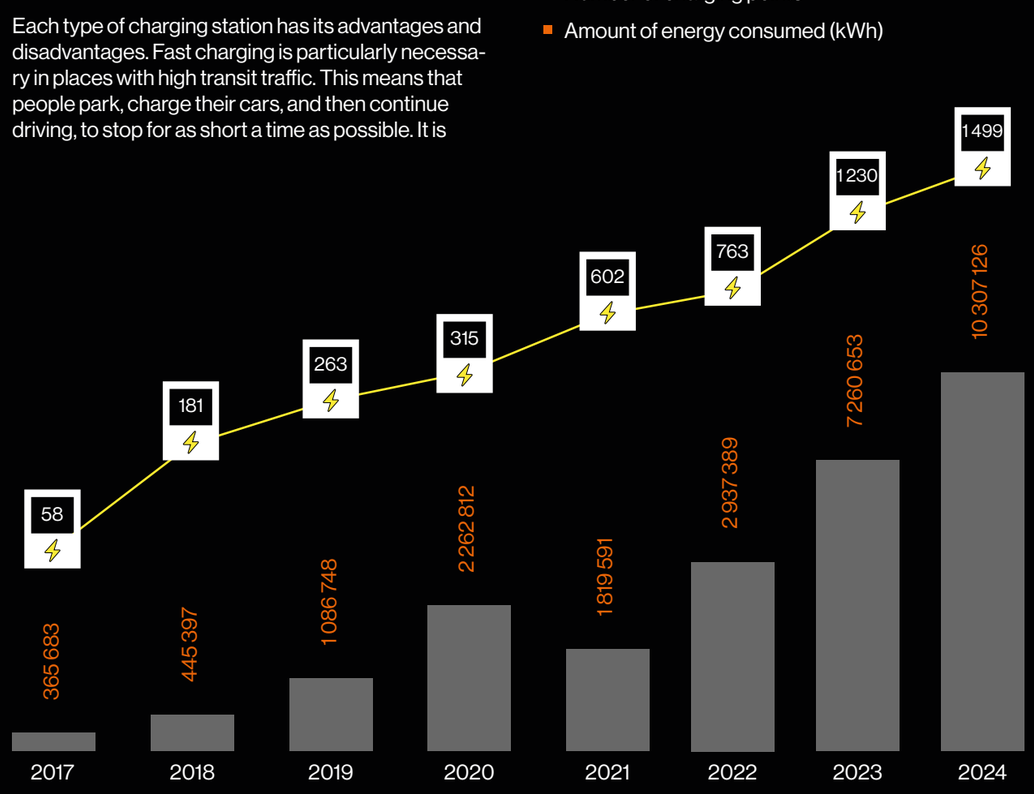
All vehicles need a source of power. With the growing number of electric and hybrid vehicles, it is necessary to develop infrastructure that will enable their effective use, including the construction of charging stations and support for research and development of new technologies.

The expansion of the infrastructure itself is also an important indicator. It is based on charging stations, which are divided into two basic types: fast charging stations (DC) and slow charging stations (AC). So-called HPC (High Power Charging) stations are also gradually expanding. This is a fast-charging system using direct current with a power output of up to 500 kW (500 A and 1,000 V). In 2024, there were a total of 14 such stations available in Prague which is a year-on-year increase of almost 200%.

Each type of charging station has its advantages and disadvantages. Fast charging is particularly necessary in places with high transit traffic. This means that people park, charge their cars, and then continue driving, to stop for as short a time as possible. It is therefore the equivalent of a regular petrol station for combustion engine vehicles. Slow charging, on the other hand, is useful, for example, when charging at residential parking spaces, where the driver spends more time, and the vehicle can slowly recharge in the meantime: typically at home, at work, or while shopping in shopping centres.

Another indicator of charging stations and system efficiency is the utilisation of charging stations, i.e. their utilisation rate. We can then conclude not only that they are being used more by users, but also that electromobility as such is developing.

The trend for 2024 is the further expansion of the charging infrastructure, which goes hand in hand with growing interest in low-emission vehicles.



Mobility of the future

The concept of the "General Plan for the Development of Charging Infrastructure in Prague" presents various scenarios for the development of electric mobility for passenger vehicles and charging stations. It shows that the number of battery and hybrid vehicles is high, i.e. optimistic scenarios. In contrast, the number of charging stations remains at a moderate realistic scenario.

Traffic lights

Traffic lights (TLs) are one of the most important means of traffic control today. As part of the gradual renewal of traffic light intersections, they are being connected to the Main Traffic Control Centre (HŘDÚ/MTCC), which enables more efficient coordination and management of individual intersection systems. The aim is to achieve smoother and safer traffic in Prague. The data in the table below shows the total number of traffic lights in Prague and the number of traffic lights connected to the MTCC. Another interesting piece of information is the number of traffic lights in the tram and bus network. These traffic lights are usually dynamic and respond to the current traffic situation. In the event of delays to arriving public transport vehicles, they adjust the signal plan and give priority to public transport vehicles. The goal here is clear – more efficient public transport. The data also show a stable state and gradual renewal depending on the individual public transport routes in a given year.

Devices providing real-time departure information

The development of digitalisation and online information is also taking place at public transport stops through devices that provide passengers with real-time departure information. The gradual renewal of public transport stops is leading to an increase in the installation of these devices in places that are significantly busy.

	2017	2018	2019	2020	2021	2022	2023	2024
Number of TLs connected to MTCC	466	478	484	503	528	539	544	**542**
Number of TLs with preference on the tram network	197	206	211	219	223	229	240	**242**
Number of TLs with preference on the bus network	232	238	245	251	260	274	300	**310**
Total number of TLs	660	665	667	668	675	682	684	**682**

	2017	2018	2019	2020	2021	2022	2023	2024
Number of devices providing real-time departure information located at public transport stops	125	189	203	218	220	291	331	**453**
Total number of stops within the PID on the territory of the Prague Capital City	3 331	3 401	3 354	3 362	3 470	3 469	3 448	**3 408**

Shared mobility

Shared mobility is a modern way of using vehicles. Users can borrow a vehicle from a provider or from each other. The advantage of these vehicles is that they are constantly in circulation, which reduces the need for permanent parking spaces. Vehicle sharing thus helps cities and their residents save space in public areas, as it is not necessary for one vehicle to occupy a parking space for the entire day.

Data from shared mobility providers show a renewed increase in the number of shared vehicles for 2024, by approximately 12%. This brings us to a similar number of vehicles as in 2022.

	2017	2018	2019	2020	2021	2022	2023	2024
Number of shared electric vehicles	17	61	69	242	221	2	3	**3**
Number of shared hybrid cars	0	0	100	278	441	551	456	**569**
Total number of shared cars	265	650	919	1 466	1 554	1 850	1 613	**1 806**
Number of vehicles in Prague	746 894	810 624	877 448	938 854	1 005 336	1 081 838	1 102 493	**1 168 202**

1 027 625
unique users of the PID Lítačka app. That is almost 74% of Prague's population.

Mobility of the future

Public transport
Autonomous driving in the metro

Nowadays, autonomous vehicles can be seen primarily off-road, most often on railways. Railways have stricter operating rules than roads and also have the advantage of easier implementation of automatic vehicle control.

For trains, autonomous mode has the following levels of automation:

Automation level 1:
automatic train security
in operation with a driver

Automation level 2:
automatic train control
in operation with driver

Automation level 3:
automatic train control in operation without drivers
but with the presence of a train conductor

Stupeň automatizace 4:
automatic operation completely
without train staff

In the Prague metro, automation level 2 has already been implemented, specifically on lines A and C, and is gradually being implemented online B as well. This is the main reason for the gradual increase in the number of automated trains in the graph.

The renewal of this technology not only increases operational safety, but also allows for a reduction in the time interval between individual trains, thereby increasing transport intensity and the number of passengers transported.

In 2024, Prague metro trains travelled 6 million kilometres more than if they had taken the shortest route from Prague to Mars.

	2017	2018	2019	2020	2021	2022	2023	2024
Number of autonomously controlled metro sets by automation level 2	94	103	113	123	132	139	139	**141**
Total number of metro sets	146	146	146	146	146	146	146	**146**
Number of vehicle-kilometres travelled by public transport vehicles in autonomous mode	N/A	35.9 mil.	42.4 mil	47.6 mil.	46.4 mil	55.3 mil.	55.9 mil	**58.2 mil.**
Total number of vehicle--kilometres travelled by public transport/DPP vehicles - metro	58.1 mil.	59.2 mil.	60.9 mil.	56.7 mil.	56.8 mil.	59.2 mil.	58.8 mil.	**60.5 mil.**

Automation level 4 is planned for the new C metro trains and the D metro line, which is currently under construction.

Mobility of the future

Mobility as a Service (MaaS)

Public transport accessibility

The accessibility of public transport in Prague is at a very high level, as evidenced by international surveys and evaluations.

The graph below shows a growing trend in the number of PID Lítačka users, which now exceeds 2.2 million. On the contrary, a decline is evident in paper and SMS tickets, which indicates a gradual transition of users to digital purchasing via the PID Lítačka city mobile application.

	2017	2018	2019	2020	2021	2022	2023	2024
Number of paper tickets sold	39. 5 mil.	36. 9 mil.	29. 9 mil.	10. 8 mil.	7. 2 mil.	8. 4 mil.	7. 9 mil.	**7. 2 mil.**
Number of PID Lítačka users	851 000	890 703	1. 1 mil.	972 910	967 573	More than 1. 3 mil.	More than 1. 5 mil.	More than **2. 2 mil.**
Number of SMS tickets sold	18. 9 mil.	18. 9 mil.	17. 7 mil.	10. 5 mil.	10. 7 mil.	10. 3 mil.	9. 3 mil.	**8. 2 mil.**

PID Lítačka users: those who have an active coupon on any medium (Lítačka card, InKarta, digital coupon in the PID Lítačka mobile app, etc.).

2.2 million users of the PID Lítačka app

Usage of the city app for transport around the city

The PID Lítačka city transport and tick-purchasing app continues to grow in popularity among users, which is particularly evident in the number of public transport connections searched for. As the number of functions offered by this mobile app expands, so does its popularity among passengers. In PID Lítačka, users can track public transport delays, see vehicles live on a map, or buy tickets for themselves and their loved ones for specific routes.

From 2023, the PID Lítačka app will also offer an intermodal planning function. This is a significant step towards the concept of MaaS – Mobility as a Service.

	2018	2019	2020	2021	2022	2023	2024
Number of requests to find a connection	14.0 mil.	19. 9 mil.	21. 6 mil.	31. 6 mil.	53. 3 mil.	72. 1 mil.	**83. 6 mil.**
Number of ticket purchases	227 800	1. 9 mil.	2. 3 mil.	4. 3 mil.	5. 8 mil.	8. 9 mil.	**10. 9 mil.**

Public space

A city cannot be smart if it does not put its residents first. Modern technologies are then only a means to create a safe and sustainable city where people prosper and develop into a strong and modern society. Innovative solutions in the urban environment affect the daily lives of its citizens, whether it is providing the most accurate information about public transport, digitising government services, or simple devices in public spaces that maintain urban greenery.

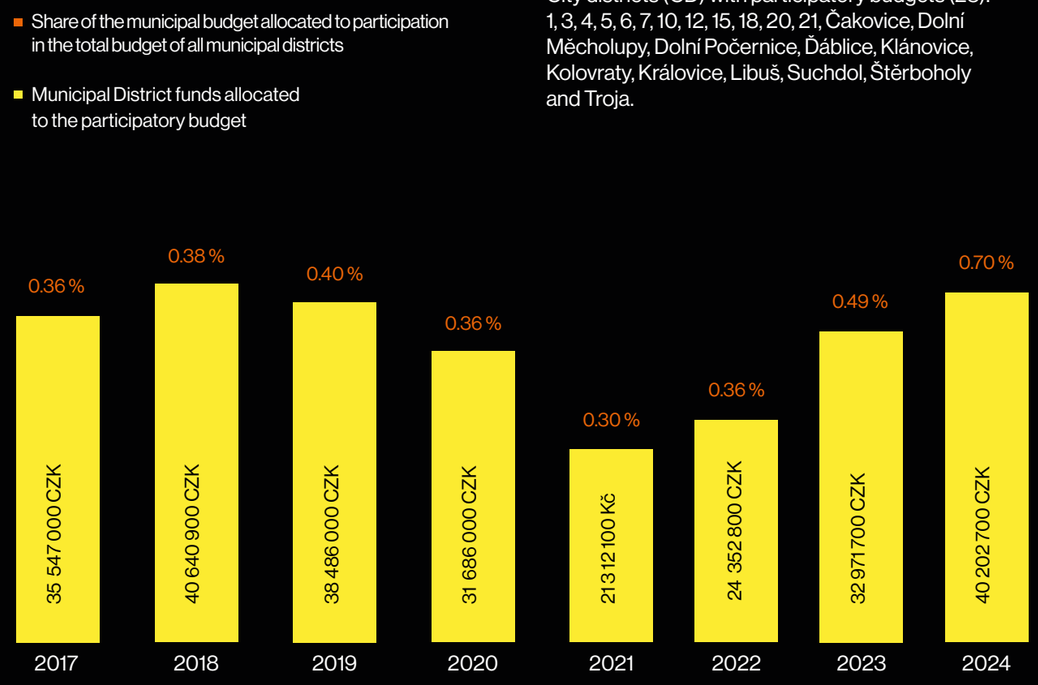
The urban environment strives to adapt to the needs of both its residents and visitors, who feel safe there and are happy to return in the future. Creating such a space that provides people with exactly what they expect requires participation and close cooperation between the city and its residents, both at the local and international levels.

City districts and participatory budgeting

The residents of the capital city have the opportunity to actively participate in decisions on the use of public funds allocated for the development of city districts. In 2024, approximately 40% of Prague's city districts used participatory budgeting tools, a total of four more than in the previous year. The number of proposed projects increased by more than 15%, of which 100 were selected for implementation, i.e. just under 30% of them.

The amount of funds allocated to projects selected under the participatory budget also increased, by 22%. In 2024, participatory budgeting funds accounted for 0.7% of the total budget of all city districts, which is almost twice as much as two years ago. This clearly shows that public interest in participating in decisions about the future direction of their neighbourhoods is growing. The city districts are responding to this interest by allowing their residents to actively participate in their further development.

City districts (CD) with participatory budgets (23): 1, 3, 4, 5, 6, 7, 10, 12, 15, 18, 20, 21, Čakovice, Dolní Měcholupy, Dolní Počernice, Ďáblice, Klánovice, Kolovraty, Královice, Libuš, Suchdol, Štěrboholy and Troja.



In 2024, a participatory budget was announced for the first time in the Prague 1, Prague 18 and Prague-Královice districts. Prague 18 then implemented 11 of the proposed projects, i.e. almost 60% of them.

Tourism

In 2024, sensors counted 29 911 859 visitors to Prague.

Prague is a place where history, culture and innovation meet. It is a city we want to visit and where we want to live. This is evidenced by the annually increasing number of residents and tourists visiting the metropolis. It is for them that the capital city strives to be the best place to live and holiday, which is why it focuses primarily on innovation in the area of services.

Tourist feedback

Tourist feedback is key to improving services in the city. Most tourists choose information centres as their means of contact with the city, but communication via social networks is also becoming increasingly popular. Interaction via the Facebook platform increased almost 25 times in 2024..

Geolocation games

Geolocation games are fun educational activities in which people travel to a destination according to GPS coordinates and designated points. They are used for themed routes of various focuses and are primarily aimed at families with children. However, others will also enjoy them, as the games offer many historical motifs and interesting plots.

In Prague, the GeoFun geolocation game with 25 routes and the Hidden Stories game with 34 routes are currently available free of charge. There are also a number of games from private companies. In 2024, for example, the Prague Public Transport Company came up with an interesting geolocation game to mark the 50th anniversary of the Prague Metro. The game, called "Metro 50", took players through all 61 stations and presented a wealth of details that one might not normally notice.

Sensory visitor counting

Sensory people counters use sensors to detect human presence, allowing the city to monitor the movement of people in certain locations. This helps to analyse the occupancy of key locations in the city and better manage the space, especially with regard to crowd concentration in public spaces. Wi-Fi sensors, pyroelectric sensors, and advanced video analysis on city camera system (CCTV) cameras can be used to monitor pedestrian traffic intensity.
As part of the OICT project, we monitor traffic at five locations in Prague: Rašínovo nábřeží (Náplavka), Charles Bridge, the intersection of Na Můstku and Rytířská streets, Stromovka, and U Výstaviště street (under the railway viaduct). In a similar way, it is also possible to monitor the number of cyclists in the capital, which is counted by 30 bicycle counters on the busiest cycle paths.

	2017	2018	2019	2020	2021	2022	2023	2024
Number of interactions in information centers	1 233 364	1 633 623	2 043 093	438 117	374 995	1 230 470	1 319 111	**1 435 905**

	2017	2018	2019	2020	2021	2022	2023	2024
Number of available geolocation games	2	41	10	47	50	25	**52**	**59**

Tourism

Number of visitors and number of nights

The capital city's tourism activity is monitored, for example, by the total number of visitors or the number of overnight stays in collective accommodation facilities. The number of visitors to the city is a very important indicator every year. It reflects not only the overall situation in tourism, but also the capital city's efforts to increase its attractiveness among European capitals. In 2024, the number of visitors to Prague increased by more than 8%, and the number of domestic and foreign visitors exceeded pre-COVID-19 levels for the first time. According to data from the Czech Statistical Office (ČSÚ), tourists spend an average of 2 to 3 nights in the capital.

Tourism productivity

Tourists come to Prague not only from foreign countries, but also from all corners of the Czech Republic. Their ratio is approximated by the tourism productivity indicator. It uses indicators related to tourism expenditure, broken down into expenditure by foreign and domestic visitors. The ratio of these two indicators shows the productivity ratio of these groups of tourists in relation to the overall result. The data shows that the values are slowly returning to the situation before the COVID-19 pandemic, but total visitor spending was highest in 2023.

For further illustration, we present the year-on-year percentage share of tourism in gross value added (GVA) and gross domestic product (GDP).

	2017	2018	2019	2020	2021	2022	2023	2024
Total number of visitors	7 652 761	7 892 184	8 029 110	2 178 267	2 354 720	5 984 803	7 442 614	**8 063 367**
Number of foreign visitors	6 562 518	6 670 706	6 786 151	1 453 530	1 411 256	4 491 611	5 864 981	**6 502 298**
Number of domestic visitors	1 090 243	1 221 478	1 242 959	731 322	943 464	1 493 192	1 577 633	**1 561 069**
Total number of overnight stays	18 055 838	18 249 084	18 456 261	4 903 295	5 257 254	13 398 104	16 861 664	**18 279 256**
Average length of stay (number of nights)	2.4	2.3	2.3	2.2	2.2	2.2	2.3	**2.3**

	2017	2018	2019	2020	2021	2022	2023
Share of tourism in GVA	2.8 %	2.8 %	2.8 %	1.5 %	1.5 %	2.1 %	**2.3 %**
Tourism's share of GDP	2.9 %	2.9 %	2.9 %	1.5 %	1.6 %	2.2 %	**2.4 %**
Tourism's share of employment	4.4 %	4.4 %	4.4 %	4.1 %	4.0 %	4.1 %	**4.2 %**
Total visitor expenditure on tourism in billion CZK	292.5	295.0	308.0	135.8	155.2	285.9	**328.9**
Expenditures of foreign visitors in billion CZK	164.9	168.5	176.9	49.0	50.0	139.5	**185.8**
Domestic visitor spending in billion CZK	127.6	126.5	131.4	86.9	105.1	146.4	**143.1**

*Data is published with a one-year delay; data for 2024 will be available in the SPI 2025 yearbook.

Tourism

Prague Visitor Pass tourist card

In June 2022, Prague, together with the municipal companies Prague City Tourism, a.s. (PCT) and Operátor ICT, a.s. (OICT), launched the Prague Visitor Pass (PVP) city tourist card. It is a comprehensive system that includes complete information, sales and check-in functionalities. A web and mobile application with an e-shop was also created, as well as a check-in system at participating monuments and attractions.

The PVP is available both in physical form as a plastic card and as a modern e-Pass in a mobile application. It is available in three categories (child, student, adult) and three validity options (48, 72 or 120 hours). The card makes visiting Prague much easier, especially for foreign tourists. In addition to free or discounted admission to interesting tourist attractions throughout the capital, the PVP also offers free use of public transport and bus transport to the airport (Airport Express).

The Prague Visitor Pass has achieved record results so far in 2024, with more than 40,000 cards sold. Trends include both a long-term increase in sales through online sales channels (e-shop, mobile app, online partner sales) and a significant increase in the number of users who prefer e-Pass (i.e. an electronic carrier in a mobile app). In line with the principles of sustainability, in 2024 we also introduced the option of returning physical Prague Visitor Pass cards back into circulation after use. In 2024, the Prague Visitor Pass tourist card offer was expanded to include new experiences, such as the Mozart Interactive Museum, Modernista design shops and a number of seasonal attractions (e.g. the historic carousel at Petřín Hill, the winter ice rink on Wenceslas Square). PCT and OICT are also working systematically to improve the user experience at . In addition to the aforementioned expansion of benefits, this is also aided by the collection and evaluation of reviews and new language versions of the website and mobile app.

Prague Visitor Pass sales

This indicator shows the total number of Prague Visitor Passes sold in a given year, broken down by category and time period validity.

Visitor numbers at participating attractions

The indicator shows the total number of visits made using the PVP tourist card to all participating attractions, the number of which has increased from 55 to 86 since the card was introduced in June 2022.

Use by carrier

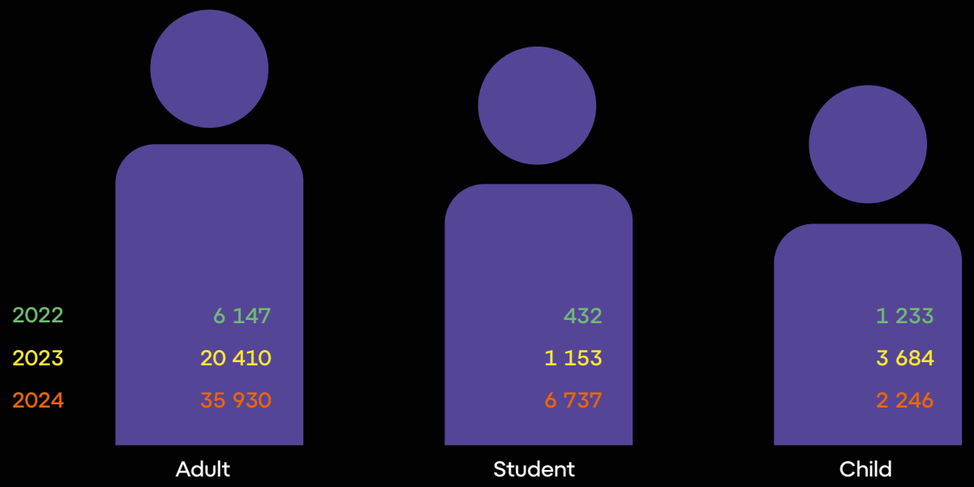
The Prague Visitor Pass is available on two types of media. It is either a plastic card, onto which the customer can load a voucher at selected points of sale, or a modern e-pass that can be used via a mobile application.

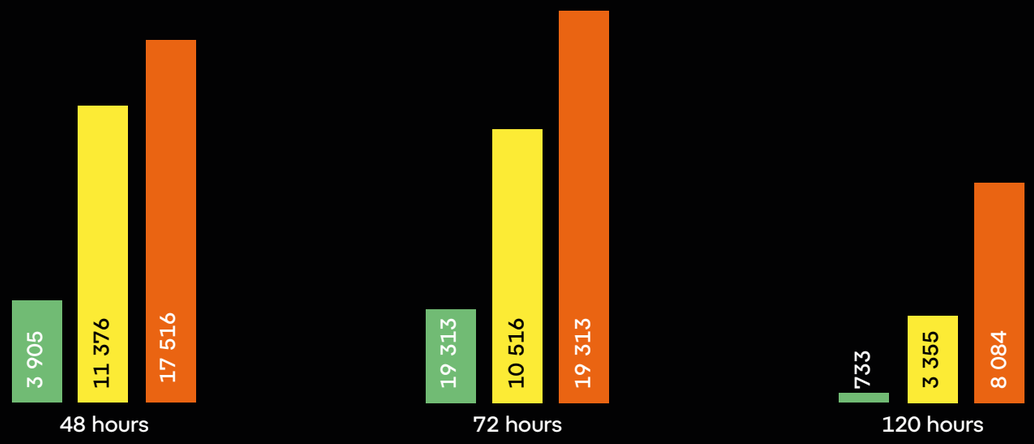
	2022	2023	2024
	5 601	15 455	24 518
	1 874	9 792	20 010

44.000 cards sold

Prague Visitor Pass sales

The indicator shows the total number of PVP tourist cards sold in a given year, with a breakdown of sales by category and time period validity.





Total number of PVP tourist cards sold/year

International projects

NEB-Star

In May 2024, the NEB-Star project team participated in the prestigious Nordic Edge Expo festival in Stavanger, Norway, one of Europe's key platforms for presenting urban innovations.

Our presentation included the Prague Pixels art and data installation, which presents the possibilities of connecting urban data, art and interactive technologies in an engaging visual way. The installation attracted the attention of visitors and experts in the field of smart cities and urbanism and helped to raise international awareness of the activities of the NEB-Star project and its Prague partners.

In November 2024, the project was presented at the Smart City Expo World Congress (SCEWC) in Barcelona, the world's largest event dedicated to smart cities. As part of the Czech stand, we presented the above-mentioned audiovisual installation Prague Pixels, which we developed in collaboration inspired by the ideas of the New European Bauhaus. The installation used a combination of light and sound elements to tell stories about urban data and offered visitors a unique interactive experience. Thanks to our participation in SCEWC, we were able to establish new contacts and present the project to a wide international audience.

Shortly after returning from Barcelona, a face-to-face meeting of all NEB-Star project partners took place in Prague. This allowed us to evaluate the progress of the project so far, discuss experiences from activities that have already been put into practice, and plan next steps. The programme also included tours of inspiring local sites and discussions on the possibilities of incorporating NEB principles into other urban projects.

CrAFt

In 2024, the implementation of the CrAFt project continued, which led to the creation of the NEB innovation team. This team brings together representatives of Prague entities affected by the New European Bauhaus. This model has inspired the creation of similar groups for other cross-cutting areas, such as energy and the environment, and will be gradually put into practice.

ASCEND

ASCEND is a project focused on the construction of so-called clean energy plus neighbourhoods in participating cities, which include Munich, Lyon, Stockholm and Prague. The preparation of such a neighbourhood is now underway in cooperation with ČVUT UCEEB and PDS in the Dolní Počernice area. In 2024, preparations began for the "Smart Neighbourhood Concept", which defines areas related to data infrastructure for new neighbourhoods. At the same time, it will be part of a Prague-wide strategic document prepared by the Prague Institute of Planning and Development, the "Sustainable Neighbourhoods Manual".

In addition, thanks to the large number of international partners in the ASCEND project, OICT is gaining a number of best practices, particularly in the areas of energy management and data infrastructure. Also, a meeting of the entire consortium was held in Munich.

CommuniCity

In the first half of 2024, the second round of the European innovation project CommuniCity took place, which aims to use digital technologies to strengthen residents' involvement in decisions about urban development. A pilot activity was launched in the Prague 6 district, in which Prague residents could express their opinions on events in their neighbourhood via digital feedback boxes.

These boxes enabled citizens to easily share suggestions, ideas or reports of problems directly with the local government, without the need for complicated administration. The project thus offered a new channel for two-way communication and created space for the city district to respond more quickly to the needs of its residents.

In autumn 2024, **the third round of the CommuniCity project** was launched, bringing new challenges and opportunities for broader involvement of technological innovators. The aim was to find answers to two key questions:

How can digitalisation be used to streamline c ommunication between Prague residents and local government?

What digital solution could facilitate the transfer of feedback from citizens to the city?

These questions opened up space for proposals from start-ups, IT companies and civic initiatives that could bring practical and sustainable tools for better urban communication. The third round built on the experience of the previous phases and expanded cooperation between the city, citizens and technology partners.

Environment

You can find more on this topic on YouTube or Instagram Smart Prague.

→

Environment

Environment

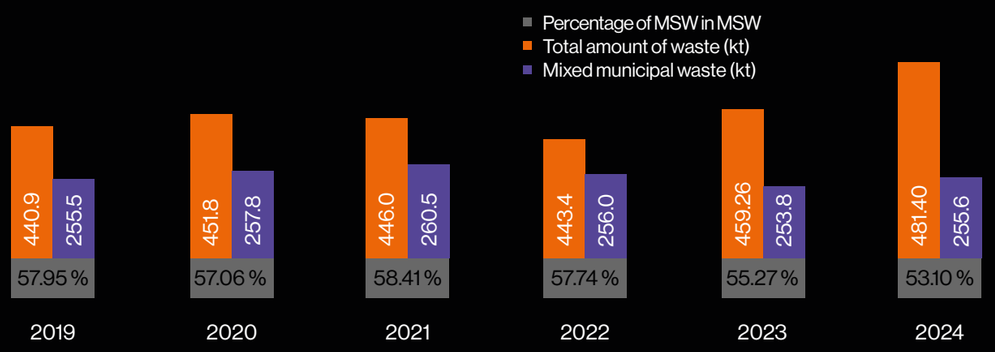
The environment has a significant impact on the quality of life of city residents. It is influenced not only by waste management, but also by urban planning. Fortunately, Prague is increasingly using modern technologies to digitise and optimise waste management, enabling it to plan waste collection and reuse more efficiently.

An important aspect of waste management is also the zero-waste approach and the associated means of the circular economy. The capital city regularly organises increasingly popular reuse days, during which Prague residents reuse dozens of tonnes of items that would otherwise often end up in illegal landfills. The quality of the environment in which we live can also be significantly influenced by waste sorting, the main aim of which is to reduce the negative impacts of industrial production.

The efficiency of urban green space maintenance and the optimisation of urban development planning can be improved by measuring microclimatic parameters, which help the city to better adapt to climate change.

The primary objective of waste sorting is to reduce the negative impact of industrial production on the environment. Waste sorting:

- conserves primary sources of raw materials, energy, and the environment,
- processes (recycles) waste,
- allows for the reuse of items and raw materials—this is the best way to prevent waste generation.

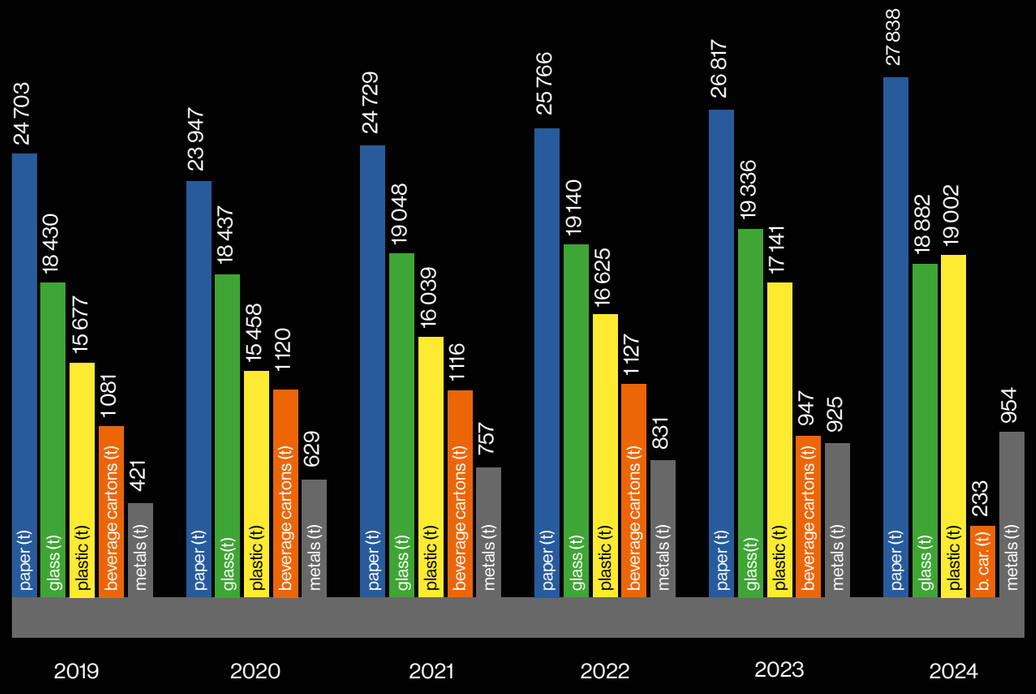


Sorting municipal waste and its use

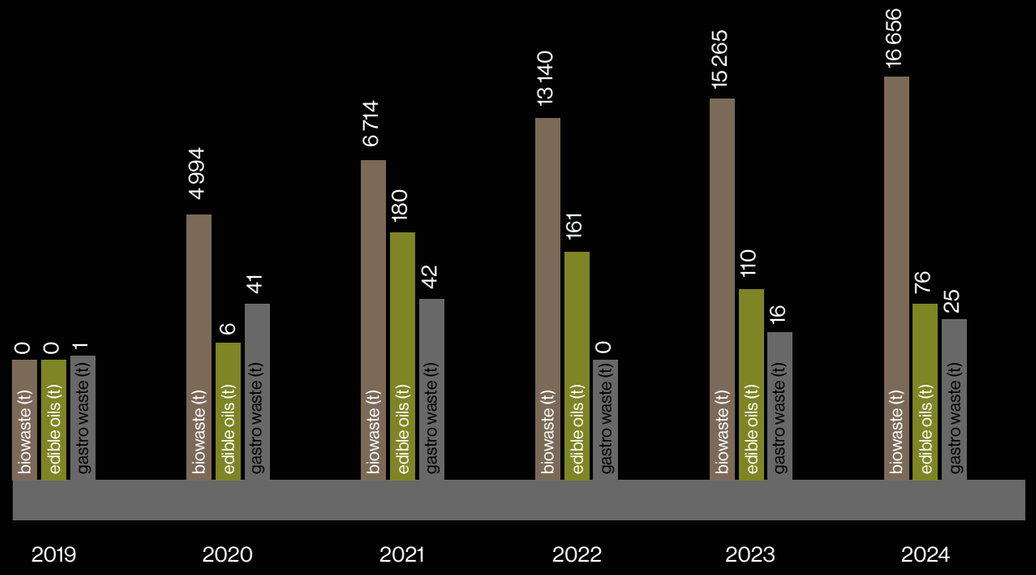
The total annual cost of the waste management system for waste deposited by citizens in 2024 amounted to approximately CZK 2,626 million, of which just under 30% (CZK 764 million) was spent on the management of waste deposited at public waste sorting sites. More than half of waste management expenditure is accounted for by the costs of collecting, transporting and utilising/disposing of mixed municipal waste (51% of the total amount). Given the high costs of waste management in Prague, it is necessary to coordinate all activities within a common strategy for responsible waste management, which will ensure the efficient collection and material or energy recovery of the waste produced.

The **Mixed Municipal Waste (MMW)** indicator shows the waste produced by Prague residents from containers located at public waste sorting sites or from household sites. At the end of 2024, there were 3,510 collection points located on the streets of the city. The number of household collection points for sorted waste is growing every year, which is why there were an impressive 6,987 waste sorting locations in 2024. When household collection points are included, there is one sorted waste collection point for every 198 residents of the capital, thus fulfilling the target set out in the Municipal Waste Management Plan – to provide one collection point for a maximum of 300 residents.

Of the total amount of 481.4 tonnes of waste generated in Prague households, mixed waste (from citizens' bins in residential buildings or in front of their homes) still accounts for the largest share, at 53%.



Almost 90% of sorted waste was recycled or used for energy in 2024.



Use of MMW and its components

With the new Waste Act coming into effect in 2021, there has been a trend away from landfilling and towards maximum sorting and utilisation of waste or recycling, in order to meet mandatory European targets. As a result, we are now hearing more and more about terms such as swap, reuse and energy recovery from waste. Energy recovery is considered to be the use of waste as fuel, whether for energy production or to obtain the energy content of waste. However, to make it not so simple, the waste used must not require any other supporting fuel after ignition, and the heat generated must be used either for own consumption or for other people.

As Prague aims to reduce landfill as much as possible, most of the waste produced is used to generate energy at the Waste-to-Energy Plant in Malešice (ZEVO). Here, the energy released during the incineration of MMWis converted into heat and electricity. Prague has set the maximum proportion of landfilling for energy recovery from MMW at 10%.

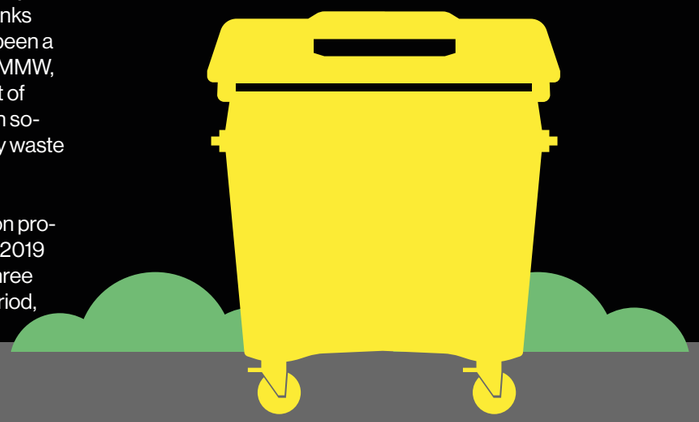
In 2024, a total of 274.3 kilotonnes of waste was processed at ZEVO, which is approximately 96% of the total amount of mixed municipal waste. Part of the bulky waste, street sweepings and catering waste is also used for energy, but this goes to the biogas plant in Přibyšice near Benešov.

In 2024, the share of material recovery of all waste produced by the city was 32%. Its amount in 2024 increased to 156.4 thousand tonnes. The increase in the amount of waste recovered for material recovery is due to the collection of bio-waste through containers provided free of charge to citizens directly at their family homes or apartment buildings. Thanks to this step taken by the capital city, there has been a repeated reduction in biodegradable waste in MMW, which has led to a decrease in the total amount of MMW from citizens in household containers (in so-called black bins). Only 11% of mixed and bulky waste production was landfilled in 2024.

In November 2023, the kitchen waste collection project also returned in a modified form. Between 2019 and 2021, this pilot project was carried out in three city districts – Prague 5, 6 and 7. During this period, 39.59 tonnes of kitchen waste were collected in using food waste bins located in 75 apartment buildings (approximately 1,000 households). At the end of 2023, it was decided to continue testing the collection of kitchen waste, this time in eight city districts, with the difference that containers for biodegradable MMW(KBRKO) are now located at publicly accessible waste sorting stations.

In 2024, 58 outdoor locations were selected in an area of detached houses in the eastern part of the city with a lower population density, where 240-litre containers with a sealing top rim and a lid latch were placed. Thanks to these bins, a total of 2.28 tonnes of kitchen waste from households was transported to a biogas plant for recycling in the 1.5 months of the project's operation in 2023. In 2024, 25 tonnes of kitchen waste were collected as part of this project.

However, the collection of food waste is not new in Prague. Since October 2021, 28 schools have been able to use a free food waste collection service from school canteens. During 2024, various social facilities also joined the scheme, including retirement homes, nursing homes and other similar social facilities. By the end of the year, 421 schools and social facilities were involved in the collection of food waste, from which 2,036 tonnes of food waste were transported to the biogas plant.



Energy utilisation of MSW

	2019	2020	2021	2022	2023	2024
Energy utilisation of MMW	94.08 %	92.89 %	87.51 %	91.60 %	95.95 %	**97.46 %**
Landfilling of SKO	5.92 %	7.11 %	12.49 %	8.40 %	4.05 %	**2.54 %**
Sorting efficiency (material recovery only)	27.10 %	27.80 %	28.68 %	29.95 %	31.31 %	**32.49 %**
Share of waste utilisation (material and energy utilisation)	84 %	83 %	81 %	84 %	89 %	**89 %**

Ways of dealing with MSW in Prague

	2019	2020	2021	2022	2023	2024
Material use	27.1 %	27.8 %	28.7 %	30.0 %	31.0 %	**32.5 %**
Incinerated (energy utilised)	56.5 %	55.6 %	52.0 %	53.7 %	59.0 %	**57.0 %**
Landfilled	14.5 %	14.2 %	19.0 %	14.3 %	10.0 %	**10.5 %**

All biological waste is composted – biologically utilised. Biological utilisation is part of material utilisation.

Material recycling of waste

Thanks to the material utilisation of waste, secondary raw materials that do not differ greatly in quality from primary raw materials are also returned to circulation.

In 2024, Prague had 20 collection yards (SD) in operation. However, a significant change compared to previous years (which came into effect in 2023) is the change in tyre collection. Until now, tyres were collected as waste and a fee had to be paid for their collection at the collection yard. However, this changed in 2024, and tyres began to be collected as part of a take-back scheme (ZO). Since then, there has been no charge for handing in tyres to SDs. This change has been a great success, as evidenced by the number of tyres handed in. In 2022, a total of 257 tonnes of tyres were handed over to collection yards, in 2023 this figure doubled (549 tonnes) and in 2024, 644 tonnes were collected, which greatly contributed to the reduction of illegal dumps in the outskirts of the capital. A total of 4,647 large-volume containers (VOK) appeared on the streets of Prague during 2024.

These are allocated to city districts according to the number of inhabitants, with each district having at least 10 VOKs per year at its disposal to prevent illegal dumping. Representatives of the city districts then decide on the location and dates of delivery. The total amount of bulky waste collected at collection yards or large-volume containers in 2024 was 43,400 tonnes. Since June 2021, recyclable components have been separated from the bulky waste collected at collection yards and from the large-capacity containers placed on the streets, thereby reducing the production of residual bulky waste.

Environment

A total of 26 tonnes of old textiles were collected at the capital's collection yards in 2024. Ninety-eight per cent of all textiles are used for material aid. Unsuitable material is used to make cleaning cloths for humanitarian purposes or as alternative fuel for cement works.

Imagine that 6,076 tonnes of bulky waste were collected in 2024 as part of the clean-up around outdoor sorted waste collection points, which roughly corresponds to the weight of a thousand African elephants.

	2019	2020	2021	2022	2023	2024
Number of visits at stable collection sites	424 411	429 409	419 745	354 857	386 910	**427 976**
Number of collection sites	101	90	45	19	20	**20**
Number of places PoTB electrical equipment - red containers	299	293	307	298	303	**300**
Quantity of bulky waste from LVC, CS, MCS (t)	37 585	40 627	39 805	37 282	37 871	**43 418**
Number of residents of the Prague Capital City	1 324 277	1 335 084	1 274 562	1 286 120	1 384 732	**1 397 880**

*Due to low public interest, the mobile collection yard service was discontinued in June 2021, which has been reflected in a decline in the number of collection yards since 2022.

Utilisation of re-use points and take-back points

Re-use points at collection yards expanded during 2024, bringing their total number in Prague to nine. Reuse has been a major trend in recent years, as can be seen in the infographic. In 2024, 14,014 items were collected at Prague collection yards, with 12,875 items being taken by citizens. According to the waste management hierarchy, the use of re-use points and take-back points is the second strategic objective after waste prevention itself. The aim of re-use is not to throw things away if they can be repaired or made useful to someone else.

Re-using items is much more important for reducing waste than reducing or recycling it. Prague is thus fulfilling its waste prevention strategy. In 2024, it expanded the number of locations where citizens can drop off items such as furniture, books and sports equipment free of charge, i.e. items that could be reused by residents of the capital who need them. Although the city's leadership is trying to expand free services as close as possible to its residents, it is increasingly encountering illegal dumpsites during the renovation of houses and flats.

Despite all efforts to simplify waste management, there are still many residents in Prague who do not use collection yards and find it easier to take their waste to the nearest separate waste collection point, i.e. coloured waste bins. Year after year, the amount of bulky waste collected from locations designated for sorted waste containers is growing. In 2024, up to 6,076 tonnes of bulky waste, such as wardrobes, chairs and household electronics, was removed from locations where this waste does not belong.

Smart technologies

In 2024, Prague City Hall continued to use data from sensors placed in bottom-discharge bins and underground containers for sorted waste. The city uses the data measured by the sensors as one of the key inputs for adjusting the frequency of waste collection. Thanks to the continuous evaluation of the data obtained in this way on the current fill level of containers, it is possible to respond flexibly by changing the frequency of waste collection, thereby directing expenditure in waste management more efficiently. For this reason, there are plans to extend the use of sensors to other containers in the coming years. In December 2024, the implementation phase of the RFID pilot project in waste bins was launched in cooperation with TSK. As part of the project, 322 bins owned by TSK in the Prague 2 district were fitted with RFID chips. These chips are designed to verify whether the bin has been emptied. The technology aims to increase the efficiency and quality of waste collection in city districts. The chips will remain on the bins for one year, until December 2025. Similarly, as part of another pilot project in cooperation with TSK, 29 cleaning trolleys for manual cleaning in Prague 1 were equipped with GPS modules. Their task is to record the route taken by the trolley during cleaning. In the first phase of the pilot project in 2023, a suitable tool for tracking these trolleys (GPS modules) was identified, and in the next phase of the project, additional modules were installed during 2024 to cover the entire Prague 1 district. The possibility of using this technology is being tested in its dense urban development. The aim is to improve the quality of cleaning services and to map the possibility of using this technology in other locations in Prague.

	2020	2021	2022	2023	2024
Ratio of material issued to material received	83.5 %	83.9 %	79.9 %	87.7 %	**91.9 %**
Material received (pcs)	316	4 725	3 889	8 666	**14 014**
Material issued (pcs)	264	3 962	3 108	7 604	**12 875**
Total number of re-use points in Prague	3	3	5	8	**9**
Collected textiles in stable collection sites (t)	68.4	58.7	38.2	29.6	**26.0**
Number of re-use events organized	0	1	3	6	**19**
Amount of items brought during re-use events (kg)	0	1 000	6 800	4 074	**18 627**

Re-use events are very popular with citizens, and so Prague organised more than three times as many in 2024 as in the previous year.

Environment

Use of sewage sludge and energy potential

Untreated sewage sludge must first undergo a sanitation process to significantly reduce the content of pathogenic organisms and thus any potential health risks. In other words, only sanitised sludge can be reused. Sanitised sludge is generally considered to be sludge in which the indicators of pathological organisms have been reduced to the required levels. Sludge application is one of the alternative options for adding a certain amount of organic matter and nutrients to the soil, thereby ensuring protection against erosion. The amount of dewatered sludge is related to water consumption, or rather the amount of treated wastewater. The lower the water consumption, the less dewatered sludge is produced from wastewater treatment. Increased biogas production corresponds to higher sludge production at the Central Wastewater Treatment Plant in Prague and a higher amount of imported waste entering the digestion tanks.

In mid-September 2023, Pražské vodovody a kanalizace, a. s. (PVK) began producing biomethane and injecting it into the gas distribution network. In 3.5 months, 60,313 Nm³ of biomethane was supplied to the distribution network from PVK. During the twelve months of 2024, 1,053,176 Nm³ of this gas was injected into the distribution network.

A joint project to build a new hospital wastewater treatment plant was completed in 2024 by PVK and Thomayer University Hospital (FTN). This treatment plant was the first in a healthcare facility in the Czech Republic to use unique treatment technology. As part of the project, a completely new wastewater treatment plant was built on the FTN premises. It consists of various technologies that enable more efficient and effective removal of pollutants. The project focused on treating specific hospital wastewater directly at its source. The removal of drug residues from wastewater is one of the key tools for preventing the development of antibiotic resistance in bacteria, for example.

During 2024, there were three flood situations in Prague, during which it was necessary to activate pumping stations. At the beginning of the year, the flood situation from December 2023 continued, when the Čertovka stream was pumped over closed flood gates at the lower head for 18 days. A similar situation occurred in June. In September, there was a larger-scale flood situation, as the Vltava River in Prague peaked on 17 September 2024 just below SPA II (930 m³ /s), and three pumping stations were activated during the flood. The water treatment plant in Káraný also battled floods in January and February.

Due to snowmelt and heavy rain, sources in the northern part of ČS Benátky, ČS Sojovice, the Hornokochánecké wing, ČS Předměřice, Prague 8 and Dolnolabsko were gradually flooded and taken out of operation.

	2019	2020	2021	2022	2023	2024
Liquid waste received and treated by WWTPs in the territory of Prague Capital City (t)	111 362	110 754	118 979	114 074	118 806	**121 959**
Biogas volume (Nm3)	17 357 124	15 063 150	15 044 000	16 643 924	17 658 000	**18 720 000**
Hygienized dewatered sludge from wastewater treatment (t)	85 457	90 800	77 550	81 211	80 449	**83 921**
Amount of electricity and thermal energy produced within the WWTP (MWh)	66 387	61 195	57 038	69 031	68 997	**75 302**

Measurement of microclimatic parameters

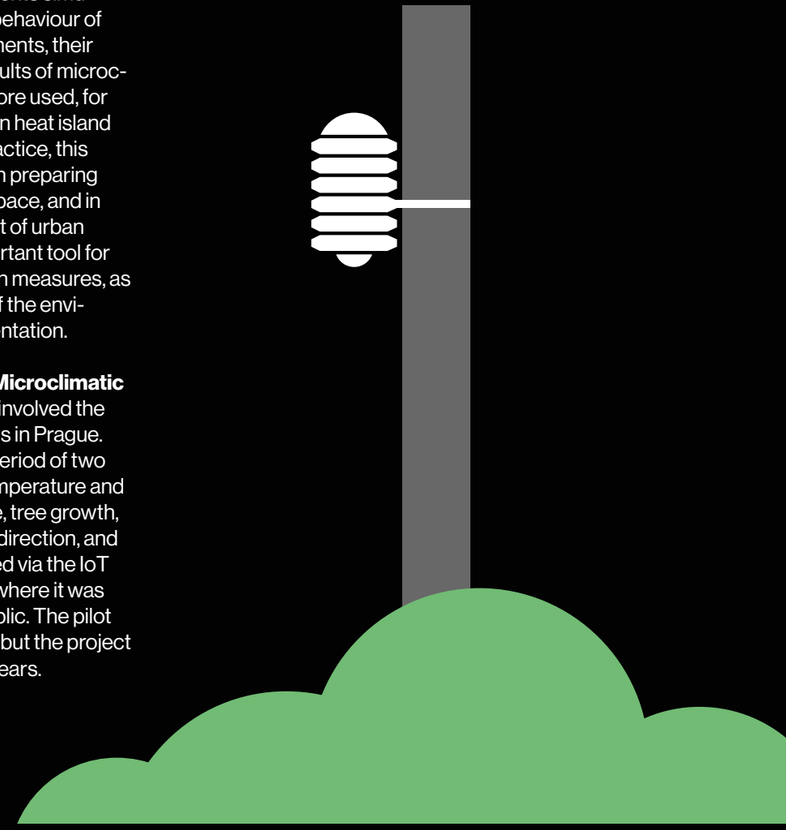
Measurement of microclimatic parameters

Climatic conditions change from year to year and significantly affect the quality of life of people in cities. Data on microclimatic conditions therefore provide an important basis for planning and implementing urban adaptation measures to environmental change. Measuring microclimatic parameters allows for continuous recording of environmental conditions in specific locations, such as air temperature, relative humidity, wind speed and direction, solar radiation intensity, and precipitation. This data makes it possible to monitor differences between different parts of the city, not only between shaded and sunny areas, but also between densely built-up streets, parks and other green spaces.

The data obtained in this way complements simulation models, which can describe the behaviour of larger areas, but without real measurements, their accuracy would remain limited. The results of microclimate parameter monitoring are therefore used, for example, to better understand the urban heat island effect and its impact on residents. In practice, this information is used in spatial planning, in preparing changes to the organisation of public space, and in the care and appropriate replenishment of urban greenery. At the same time, it is an important tool for verifying the effectiveness of adaptation measures, as it allows for a comparison of the state of the environment before and after their implementation.

The OICT pilot project, **Monitoring of Microclimatic Parameters in Urban Environments**, involved the installation of 134 sensors in 19 locations in Prague. The measurements took place over a period of two years and focused on measuring air temperature and humidity, soil moisture and temperature, tree growth, precipitation intensity, wind speed and direction, and solar radiation. The data was transmitted via the IoT network to the Golemio data platform, where it was made available to key users and the public. The pilot phase was completed in autumn 2024, but the project is expected to continue in the coming years.

One of the project's objectives was to compare different types of locations, specifically streets, courtyards and squares with and without greenery, parks, areas with impervious surfaces and other typical urban environments. Measurements taken during the first 14 days of July 2024 showed that at the Holešovice Market, which has only a limited amount of greenery, the average air temperature was 2°C higher than in Heroldovy sady Park and 1°C higher than at Vítězné náměstí Square. The data thus confirmed the significant influence of greenery not only on daily temperatures, but also on the rate of night-time cooling, which was significantly faster in green areas than in built-up areas with impervious surfaces. The measurement of microclimatic parameters thus aids urban planning, which further improves the quality of life in cities.



Energy and buildings

Energy & buildings

Energy and buildings

Energy is the third key area addressed in the Smart Prague Concept, focusing on the development, support and implementation of innovations in urban energy. Its main objective is to promote efficient energy use alongside the modernisation of urban infrastructure. Innovative solutions in this area serve as a tool for reducing energy consumption and emissions, together with efforts to create a self-sufficient and environmentally friendly urban environment. An integral part of this are modern systems for monitoring and controlling energy consumption and flows in buildings, so that energy consumption and thus the carbon footprint of buildings is as low as possible.

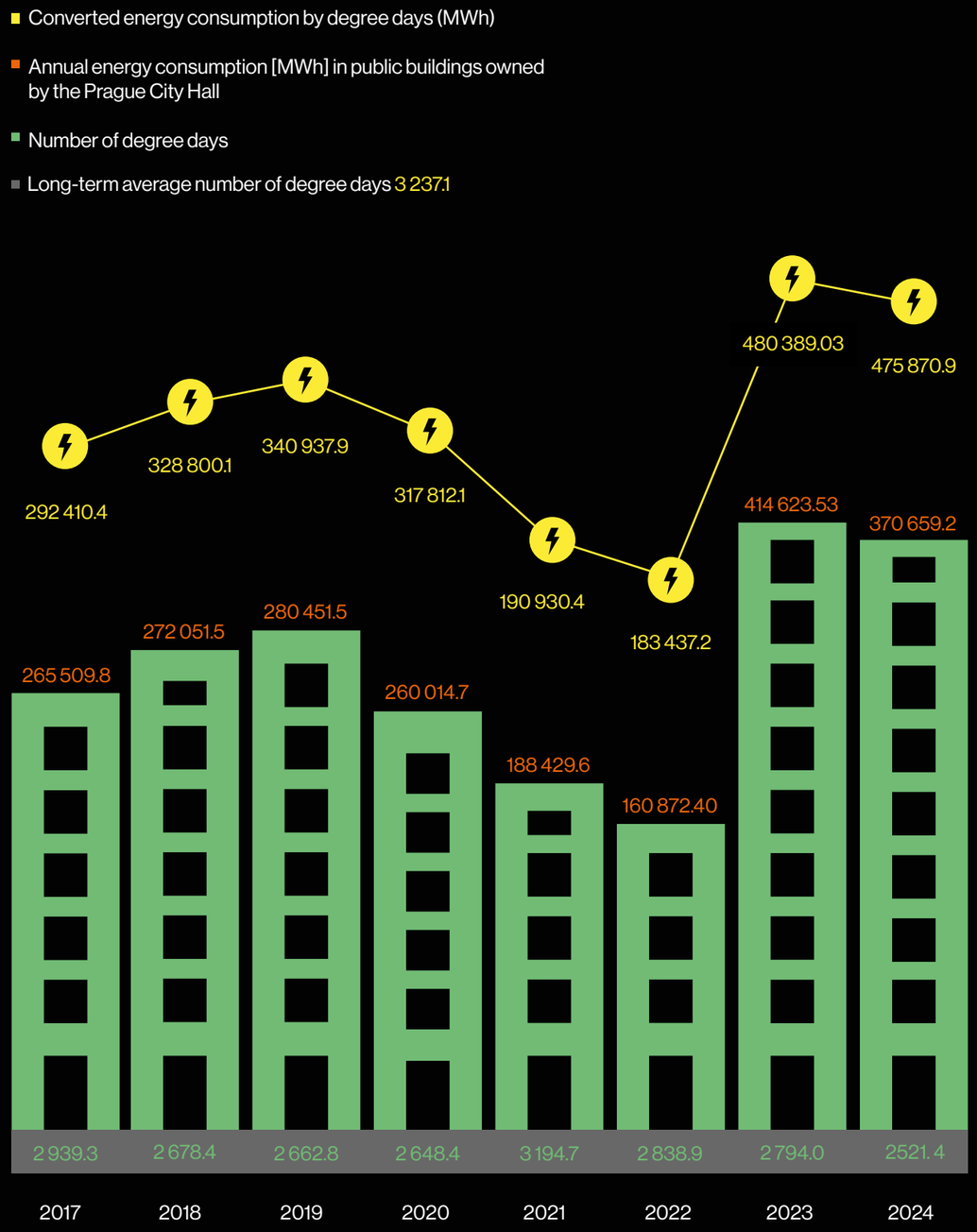
Energy consumption in public buildings (energy intensity)

This indicator monitors the energy performance of public buildings in terms of energy consumption. It applies to buildings and consumption points registered for the purposes of centralised energy procurement. In 2024, actual annual energy consumption in buildings fell by more than 10% compared to 2023.

However, after taking into account climatic conditions and recalculating according to degree days, the difference is significantly smaller, which shows that part of the savings is due to a milder winter. This is confirmed by the year-on-year decrease in the number of degree days from 2,794.0 to 2,521.4. Overall, the data suggest that energy consumption was lower in 2024, but more favourable climatic conditions played a significant role in this development.

The calculation of degree days is used to determine the characteristics of the heating season based on meteorological data – specifically, the number of degree days and the number of heating days – and is one of the methods used to design, evaluate and compare heat sources and consumers. The calculation is performed on a database of daily average outdoor air temperatures.

Year-on-year, the total number of smart meters in the electricity distribution network increased by 53% in 2024, accounting for almost 4% of all meters.

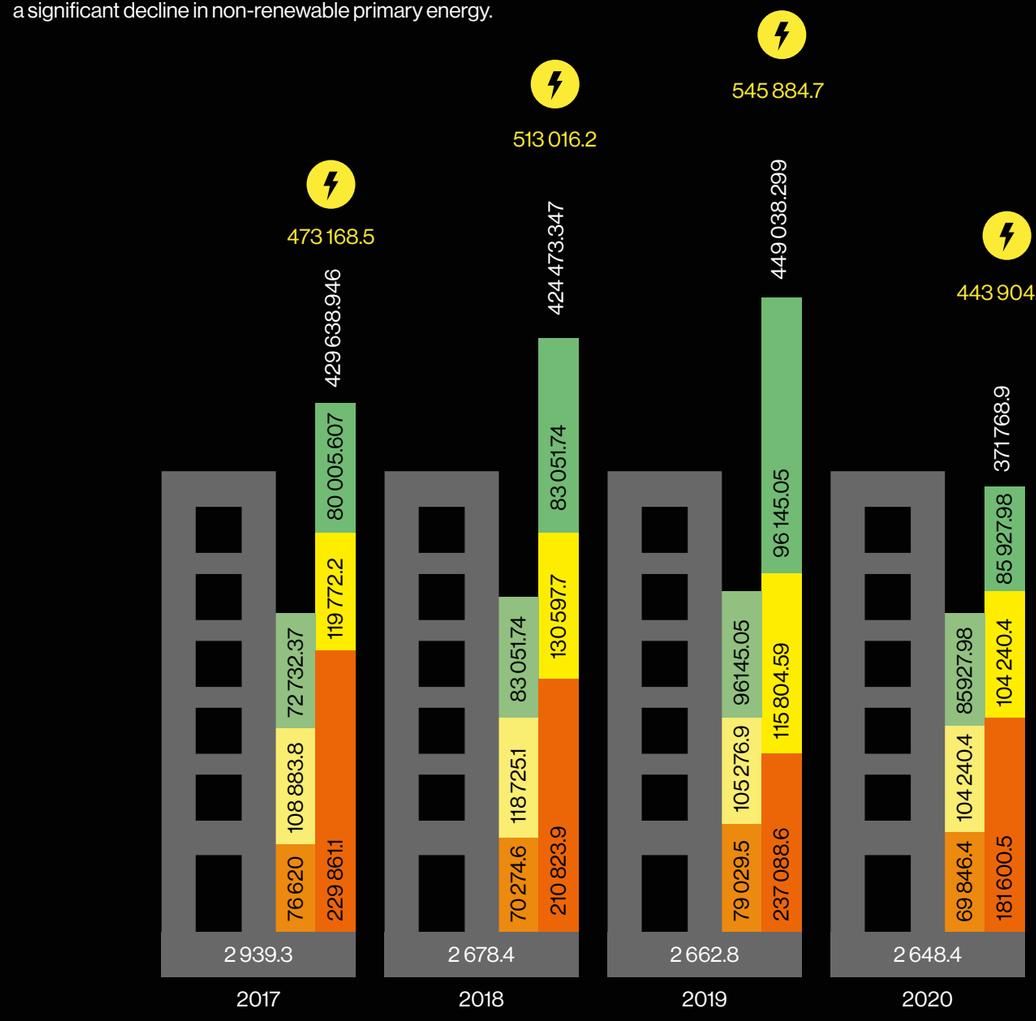


Energy and buildings

Consumption of non-renewable primary energy in public buildings

When comparing individual energy sources, it is clear that there is a significant decline in natural gas consumption, which indicates an increasing shift away from this raw material. At the same time, we see a significant decline in non-renewable primary energy.

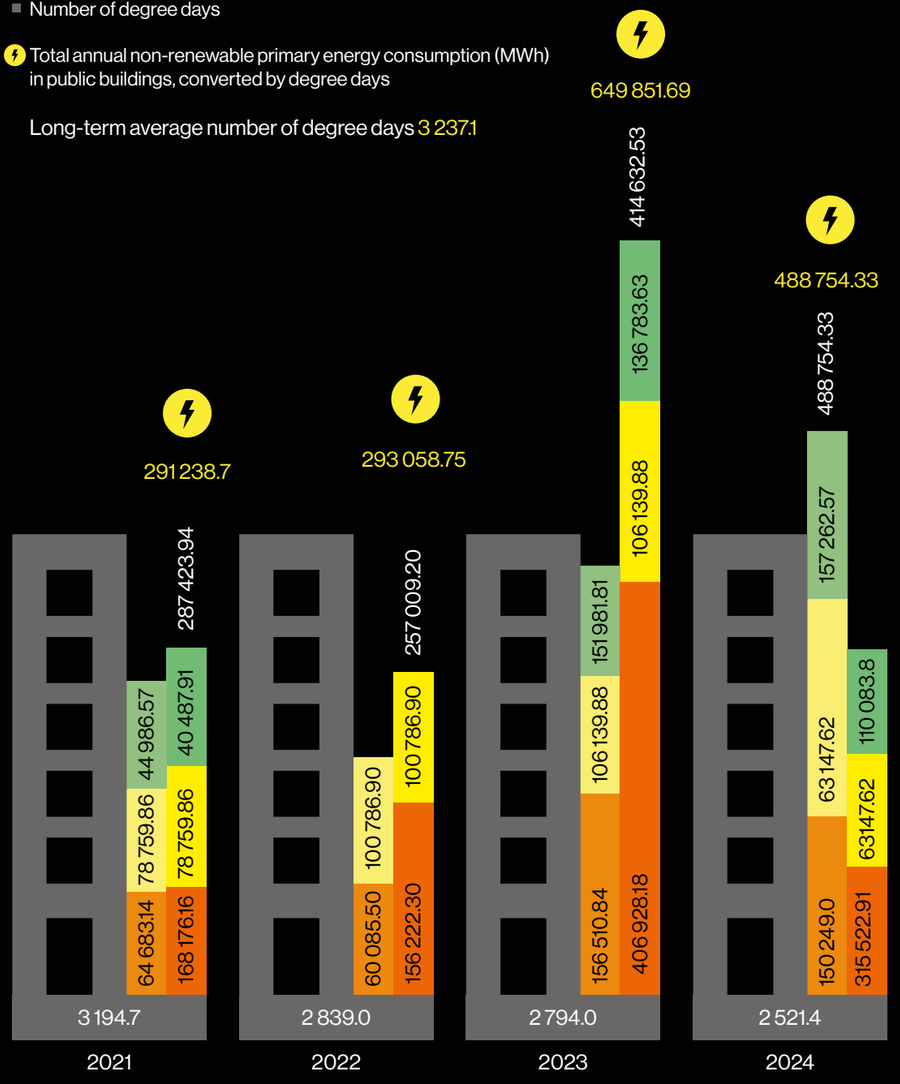
This is due to a combination of favourable climatic conditions and a gradual reduction in primary non-renewable energy factors[3], as a result of the gradual replacement of energy sources.



- Electricity – Annual energy consumption (MWh) in public buildings
- Electricity – Annual consumption of non-renewable primary energy (MWh) in public buildings
- Gas – Annual energy consumption (MWh) in public buildings
- Gas – Annual non-renewable primary energy consumption (MWh) in public buildings
- Thermal energy – Annual energy consumption (MWh) in public buildings
- Thermal energy – Annual consumption of non-renewable primary energy (MWh) in public buildings
- Total annual energy consumption (MWh) in public buildings
- Number of degree days

Total annual non-renewable primary energy consumption (MWh) in public buildings, converted by degree days

Long-term average number of degree days 3 237.1



[3]The primary non-renewable energy factor indicates how much non-renewable energy (source - coal, oil, natural gas, uranium) is needed to deliver 1kWh of final energy to the consumer. These factors are listed in V. 222/2024 Coll. in Annex No. 3. Currently, this is the main evaluation criterion for buildings when processing energy performance certificates (PENB).

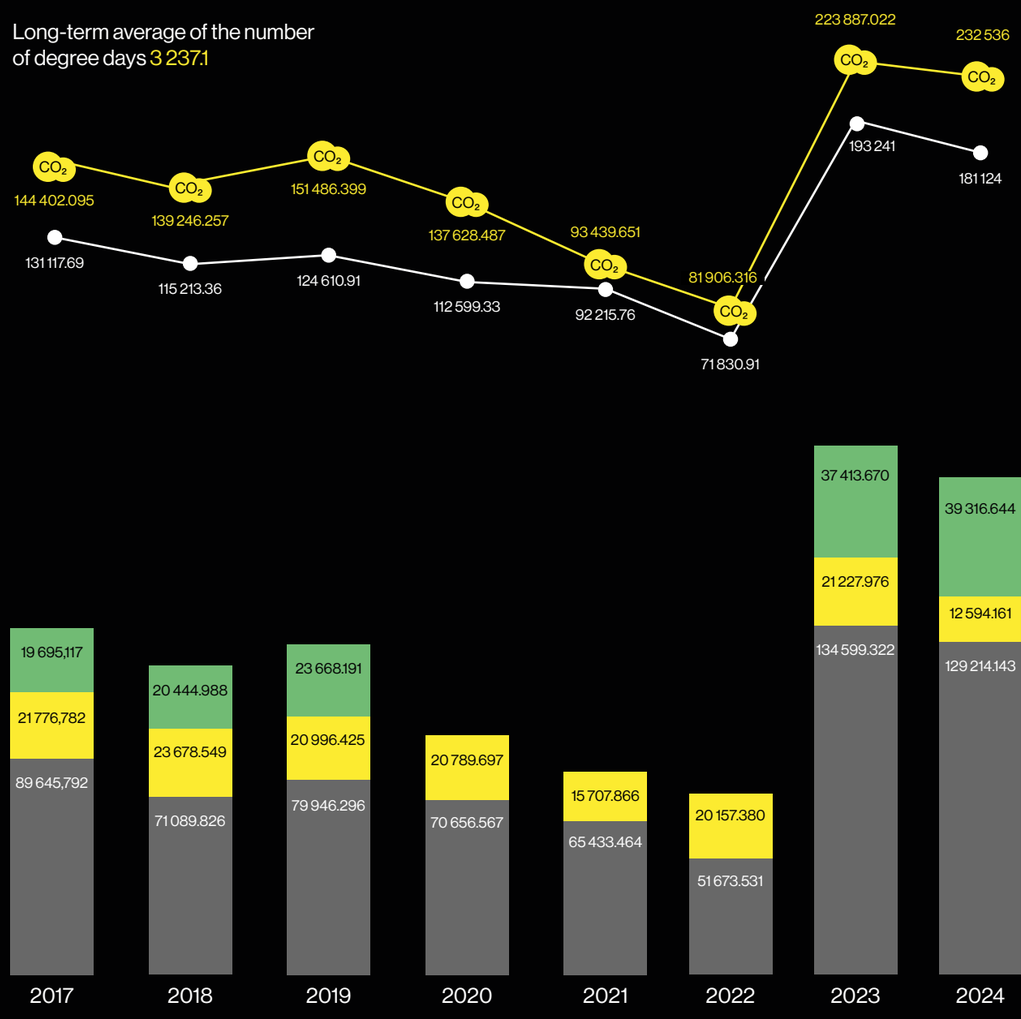
Energy and buildings

Carbon footprint of public buildings

The data for this indicator relate to consumption points registered in Prague's energy tool. The carbon footprint is based on energy consumption. Its values are calculated based on knowledge of the energy consumption of individual energy carriers and subsequent conversion according to a table based on Decree No. 140/2021 Coll. on energy audits.

- CO2 emissions in public buildings related to energy consumption – converted into degree days
- CO2 emissions in public buildings related to energy consumption
- CO2 emissions in public buildings related to energy consumption – energy carrier thermal energy
- CO2 emissions in public buildings related to energy consumption – energy carrier gas
- CO2 emissions in public buildings related to energy consumption – energy carrier electricity

Long-term average of the number of degree days 3 237.1



Energy costs (in CZK)

Costs for electricity, natural gas and heat in 2024 for consumption points registered in Prague's energy tool. Compared to previous years, the data differs considerably. This is because it is based on a different sample of buildings than last year. However, individual cases show a significant reduction in the commercial component of both electricity and gas prices.

Energy costs	
2017	453 072 677 CZK
2018	512 151 965 CZK
2019	553 649 412 CZK
2020	497 190 024 CZK
2021	259 174 971 CZK
2022	608 559 368 CZK
2023	1 195 327 359 CZK
2024	**851 900 435 CZK**

The installed capacity of solar power plants in Prague (in MW) increased by 57.5% year-on-year, with the number of installed sources increasing by 28% year-on-year.

Energy and buildings

Energy performance class of public buildings

Nowadays, energy performance certificates (EPCs) are issued to assess the energy performance of buildings. In the EPC document, the energy performance of a building is divided into several classes. The energy performance class is indicated by a letter from A to G, with A being awarded to exceptionally energy--efficient buildings and G to exceptionally energy-inefficient buildings. The EPC is valid for 10 years, so there are only minimal changes in the indicator. A new PENB is only prepared in the event of a major change to a completed building. PENBs for buildings larger than 500 m2 were prepared in 2013, so they will gradually be renewed. We should see greater differences in the coming years.

In 2023, the Prague City Council launched a process that will lead to ISO 50001 certification. Part of this process is the consolidation of all PENBs into a single database. All activities should be completed by the end of 2026, so this indicator will be presented again when new data becomes available.

Degree of digitisation of the electricity distribution system

This indicator monitors the degree of readiness of Prague's electricity distribution network – the PREdistribuce a.s. (PREdi) distribution network – to use services associated with smart grid capabilities.

The total number of meters on the distribution network (see table) refers to the number of consumption points. A smart meter is one that has at least a remote reading function. As can be seen from the table on the next page, the total number of electricity meters in Prague is growing year on year. This is due to ongoing new construction. It is highly likely that this trend will continue in the coming years. At the same time, legislative requirements for the installation of smart meters will begin to take effect.

Degree of digitisation of distribution systems

This indicator expands on the previous category and captures the degree of digitisation of all distribution networks in Prague. This indicator recorded a significant increase in 2024, reaching a value close to 4%. It can be assumed that the degree of digitisation will continue to grow in the coming years, driven by customer demands and, in particular, legislative requirements.

In 2024, the number of smart meters at Pražská plynárenská, a.s. did not grow as significantly as in previous years. However, it can be assumed that increasing customer demand for remote gas metering will lead to the widespread use of smart metering.

The total number of meters at Pražská plynárenská, a.s. continues to decline, especially in the household customer category. These were mostly customers who cancelled their gas stoves and do not have any other gas appliances at home.

However, the number of smart meters at PREdistribuce, a.s. is growing. In addition, we expect a much more significant increase in the coming years, as legislative requirements related to smart metering will be gradually implemented.

The share of water meters with remote reading is increasing every year. In 2024, the total number of water meters with remote reading exceeded 20,000. Since 2020, PVK, a.s. has been increasing the number of smart meters by more than 2,000 per year. Its measurement digitisation rate is approaching 17%, which is the highest among distributors.

	2017	2018	2019	2020	2021	2022	2023	2024
Number of smart meters	<1 %	<1 %	<2 %	<2 %	<1 %	<2 %	<2 %	**<3 %**
Total number of all meters within the PREdi distribution network	791 000	791 000	810 000	817 000	818 000	828 500	838 500	**849 400**

	2017	2018	2019	2020	2021	2022	2023	2024
% of smart meters within the distribution network	1.1 %	1.2 %	1.6 %	1.8 %	1.8 %	2.1 %	2.4 %	**3.7 %**

% of smart meters within the distribution network of PREdi, Pražská plynárenská distribuce, PVK

Number of smart meters	14 621	15 853	21 215	24 668	24 042	28 684	32 969	**50 537**
Number of smart meters PREdistribuce, a. s.	7 000	7 000	10 000	11 000	8 000	10 000	11 800	**26 400**
Number of smart meters Pražská plynárenská, a. s.	2 120	2 150	2 971	3 290	3 480	3 820	4 031	**4 099**
Number of smart meters PVK, a. s.	5 501	6 703	8 244	10 378	12 562	14 864	17 138	**20 038**
Total number of meters	1 327 958	1 326 935	1 345 221	1 352 453	1 350 682	1 358 608	1 365 403	**1 366 857**
Total number of meters PREdistribuce, a. s.	791 000	791 000	810 000	817 000	818 000	828 500	838 500	**849 400**
Total number of meters Pražská plynárenská, a. s.	424 742	423 215	421 373	421 086	417 531	413 080	407 894	**398 826**
Total number of meters PVK, a. s.	112 216	112 720	113 848	114 367	115 151	117 028	117 895	**118 631**

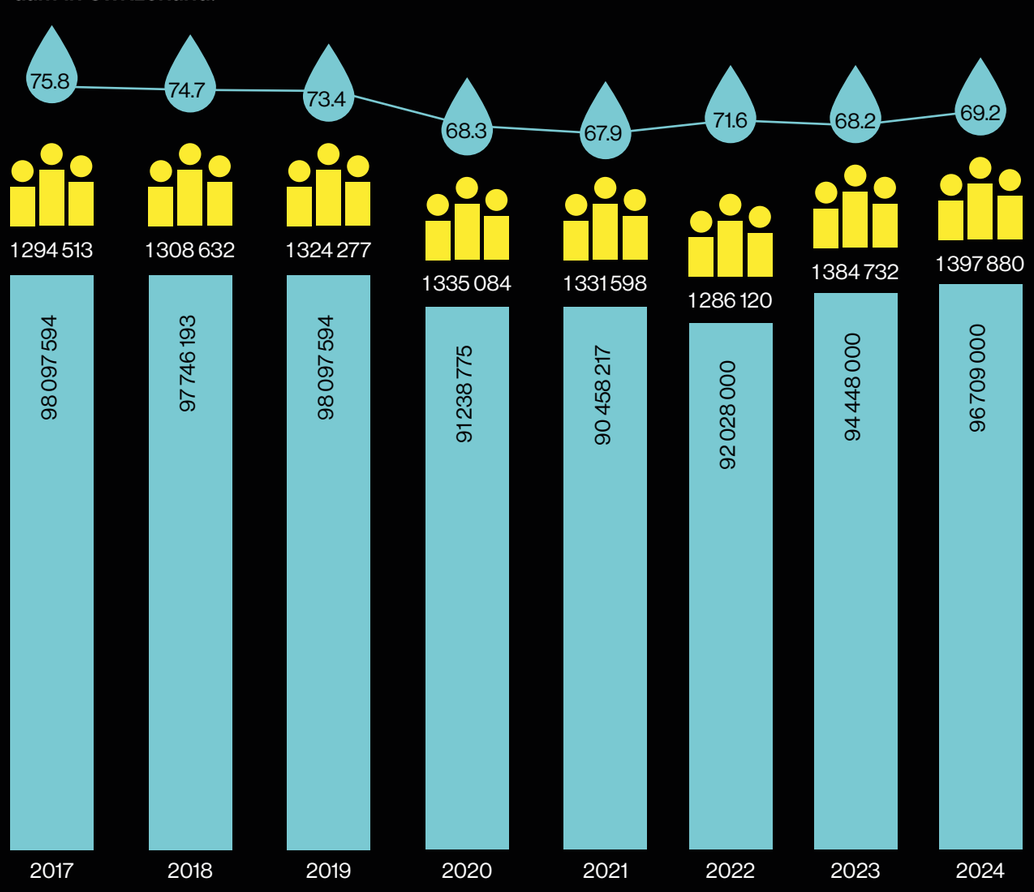
Energy and buildings

Water consumption

The amount of water supplied in Prague includes drinking water and industrial water. The figure includes the total amount of water supplied to the network, together with technical losses such as faults and leaks. In 2024, Pražské vodovody a kanalizace, a.s. (PVK) supplied 96,700,000 m³ of water to the water supply network, confirming the gradual upward trend of recent years.

- Quantity of water delivered to the network for implementation in the territory of Prague Capital City in relation to the population of Prague Capital City) (m³)
- Population of Prague Capital City
- Quantity of water delivered to the network for implementation in Prague Capital City (m³)

96 709 000 m³ is similar to the maximum retention volume of the Stausee Mattmark dam in Switzerland.



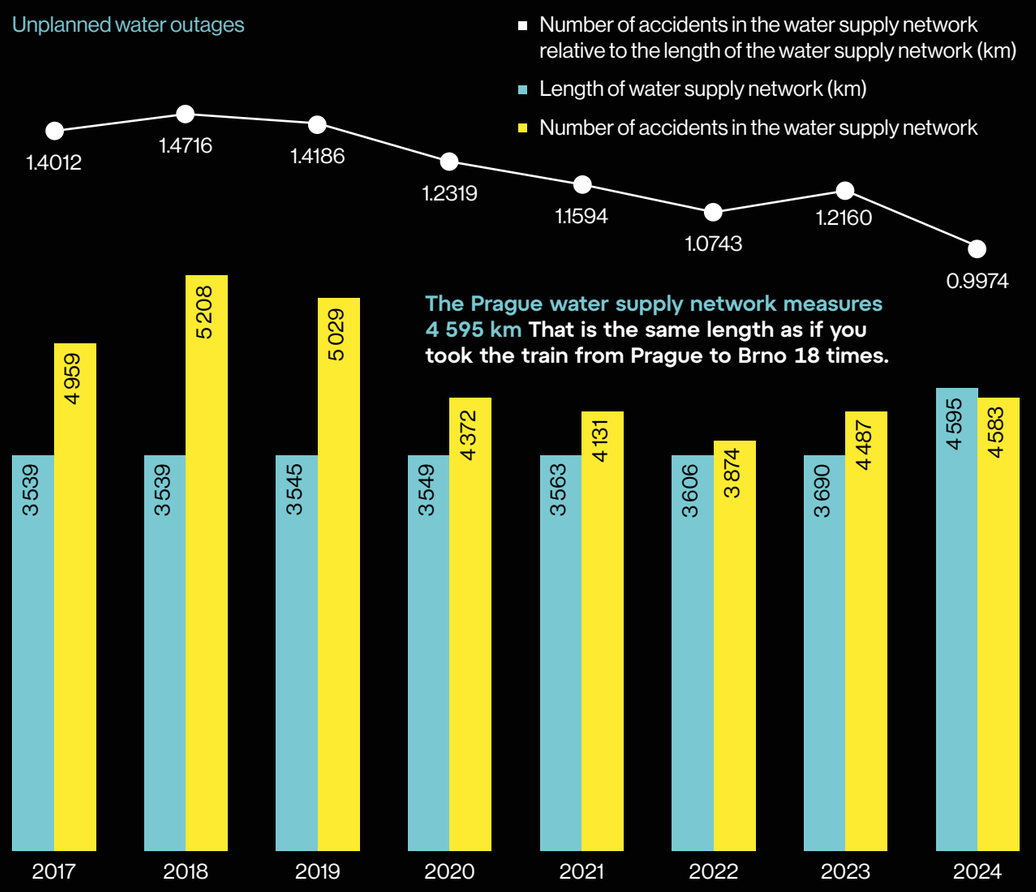
Use of grey water for energy needs – public sector

	Amount of water preheated by grey water energy (m³)	Total water consumption in public sector buildings (domestic hot water and cold water in m³)
2017	N/A	1 506 823.8 m³
2018	N/A	1 187 699.7 m³
2019	N/A	1 385 154.7 m³
2020	8 712	1 141 642.5 m³
2021	7 895	251 838.8 m³
2022	5 195	N/A
2023	3 261	1 101 345.0 m³
2024	**11 347**	**1 189 326.0 m³**

Unplanned water outages

- Number of accidents in the water supply network relative to the length of the water supply network (km)
- Length of water supply network (km)
- Number of accidents in the water supply network

The Prague water supply network measures 4 595 km That is the same length as if you took the train from Prague to Brno 18 times.



Energy and buildings

Smart lighting

The modernisation of public lighting is one of the innovative tools aimed at reducing energy consumption through the modernisation of urban infrastructure. An important element is the use of so-called smart lamps, which can communicate remotely with the control centre and reduce the intensity of lighting during the night. Some of the lampposts can also change their intensity depending on the movement of pedestrians or work during the night with a change in the colour temperature of the light.

The original existing sodium lighting is gradually being replaced by more economical LED lights with a communication interface and regulation. The number of smart lamps increased by more than a quarter in 2024, with the vast majority of them installed as part of pilot projects and the renewal of public lighting by Technologie hlavního města Prahy, a. s. (THMP). Similarly, there has been an expansion of EV-ready lamps, i.e. public lighting poles with chargers for electric vehicles. In 2024, there were 222 of these in Prague, which is a year-on-year increase of more than 20%.

	2017	2018	2019	2020	2021	2022	2023	2024
Total number of smart lamps	3	103	134	549	1 042	7 254	11 684	**14 646**
Number of smart lamps OICT	0	92	92	0	0	0	0	**0**
Number of smart lamps PRE	3	11	11	12	14	14	14	**14**
Number of smart lamps THMP	0	0	31	537	1 028	7 240	11 670	**14 410**
Number of EV ready lamps THMP	N/A	N/A	N/A	N/A	N/A	55	184	**222**
Total number of all street lighting lamps	134 000	135 868	135 690	138 005	137 024	139 060	144 551	**144 620**

Decentralised solar power generation

In 2024, the trend of rapid growth in installed PV capacity from previous years continued. The number of installed PV power sources increased by almost 30% and installed capacity grew by more than half.

	2017	2018	2019	2020	2021	2022	2023	2024
Amount of installed capacity of solar power plants on the territory of Prague Capital City [MW]	22.9	22.8	22.4	23.4	25.9	36.5	66.1	**104.1**
Number of electricity sources installed on the territory of Prague Capital City [MW]	1 223	1 242	1 481	1 724	2 052	3 205	6 557	**8 401**
Average of the installed [MW]	0.019	0.018	0.015	0.014	0.013	0.011	0.010	**0.012**

The number of smart lamps increased by 25% year-on-year, accounting for approximately 10% of all public lighting lamps in 2024.

PCED quarter

Since 2023, Prague has been involved in the international ASCEND project, which aims to develop Positive and Clean Energy Districts (PCED) neighbourhoods with a positive energy balance and zero CO_2 emissions. As part of the project, Prague is gaining valuable know-how from its partner cities of Lyon and Munich, which are already actively building their PCED neighbourhoods.

Prague plays the role of a replication city in the project, which means that it focuses on transferring and adapting proven foreign models to the local context. The result of this process will be not only the creation of a methodology for the implementation of PCED districts in Prague, but also a concrete proposal for its application in the upcoming development project in Dolní Počernice.

By 2028, a new neighbourhood for 2,000 to 4,000 residents is to be built in Dolní Počernice, which will not only be energy positive but also climate neutral. The project envisages the construction of municipal rental apartments, a new primary school, outdoor sports facilities, retail space and a fully-fledged technical and transport infrastructure.

ASCEND is also helping to answer the question of how this neighbourhood should be designed in terms of energy management and the use of data that can be collected and further utilised about its functioning. This is the first time that Prague has systematically sought to achieve a positive energy balance in one of its districts – a step that could have a fundamental impact on the future of urban planning.

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