

### LADIES AND GENTLEMEN,

We would like to briefly inform you about what Brno is implementing and designing and what we could work on together. The material itself is divided into three parts. Firstly, we discuss the overal information about our city. The Strategy #brno2050 is crucial for the future of the city. Last but not least projects that are already being implemented are presented.

If you wish to learn more about individual projects or start working together with us on them, please get in touch by email: <a href="mailto:chytre@brno.cz">chytre@brno.cz</a>.

Team of Strategic Development and Cooperation Department

### CITY OF ERNO

Brno is the second largest city in the Czech Republic and the main commercial centre of the South Moravian Region. It is a university city focused on innovation, research & development.



### STATE OF THE CITY

POPULATION 381,346

BRNO METROPOLITAN AREA 696,500

NUMBER OF STUDENTS 62,215

AVERAGE LIFE SPAN (LIFE EXPECTANCY)
83 years women, 77 years men

AVERAGE MONTHLY WAGE 1,500 EUR

UNEMPLOYMENT RATE 49

GDP PER CAPITA (EU28 = 100%) 140 %

NUMBER OF PASSENGERS AT BRNO AIRPORT PER YEAR 543,633

AMOUNT OF WASTE PRODUCED PER YEAR 104,631 tons (17 % recycling)

GREEN AREA PER INHABITANT OF BRNO 86 m<sup>2</sup>

DAILY WATER CONSUMPTION PER PERSON 106.5 litres

2.2 million EUR

FOR RESEARCH AND DEVELOPMENT FROM THE BRNO CITY BUDGET

2.2 billion EUR

FOREIGN DIRECT INVESTMENT

Brno have been selected in the european Intelligent Cities Challenge 2020

Brno is the 6<sup>th</sup> best student city in the world

STATE OF THE CITY REPORT 2020 data.brno.cz/en/

(Quacquarelli Symonds, 2019)



State of the City Report 2020

### BPNO AS A SMART CITY

Our main goal in the Smart City area is the **"CHANGE OF THE CITY'S APPROACH"**.

#### **Seven principles of Smart City Brno:**

- **Openess:** the city is open to ideas and new solutions
- **Responsibility:** high quality of services and urban development for future generations
- **Modularity:** combination of solutions for different areas of city development and their flexibility
- **Respectfulness:** towards the city's inhabitants and the environment
- **Effectiveness:** efficient city management; innovative business models enabling the involvement of entreprises
- **Diversity:** a wide range of options
- **Smartness:** smart use of the city's potential for its further development

## URBIS SMART CITY AIR 2020

The URBIS SMART CITY FAIR is the biggest Central European Smart City event. It takes place on the famous functionalist premises of Brno Exhibition Centre. In 2020 the event celebrates its third year. Over three days this unique international conference introduce the smart city concept to towns, villages and active citizens. This year URBIS SMART CITY FAIR also hosts The European Innovation Partnership's General Assembly and partners from City Science Initiative.



ENVIRONMENT DIGITALIZATION SERVICES MANAGEMENT

FUTURE

BENEFITS





smartcityfair.cz/en/

### STRATEGY #BRN92050

## TOGETHER WE ARE CREATING A CITY FOR FUTURE GENERATIONS

In 2017, the #brno2050 vision and city strategy was approved. The vision contains 23 values, each with its own professional guarantor. The guarantors are respected independent professionals, specialised in various issues and areas, important for the comprehensive development of the city. The vision is followed on by concrete plans, containing priorities and actions over 10 years and a short-term action plan for the upcoming years.

Three areas of urban development:

- 1) smart management of resources
- 2) quality of life (environment, prosperity and services)
- 3) efficient governance



brno2050.cz/en/

Together with the whole urban ecosystem we were looking to answer the following questions:

- Where should Brno be by 2050?
- Which basic goals are we setting to achieve it?
- How do we want to achieve these goals?

#### City's vision

In 2050, Brno will be a centre of top European science, research and innovation, the knowledge economy, architecture, culture and sport.

It is a safe home for half a million people, to whom it can offer housing, work, space for business, entertainment and leisure time.

Brno is a pleasant clean city without barriers.

It sensitively uses natural resources for its development. And it gives everyone the opportunity to participate to its governance.

The city breathes for its inhabitants, who are rightly proud of this place.

That is one of the reasons why they want to hand over Brno to the following generations in even better condition.



# PROJECTS BEING 'MPLEMENT'LD

# 

### A CITY THAT IS INCREASINGLY ONLINE

The objective of the project is to provide services to citizens in an electronic way and to communicate with them. The project started with the implementation of electronic season tickets for public transport and the creation of an e-shop of city services.

**Over 145,000 Brno residents** have their electronic account in the Brno iD e-shop, of which more than 60% are in the verified "full" version.

Through Brno iD these
10 areas can be handled:

**Public transport** 

Waste

**Brnopas tourist card** 

Library

**Brno Zoo** 

**Sports** 

**Residential parking** 

**City cemeteries** 

Voting and survey module

**Gift vouchers** 



#### **OBJECTIVES**

The objective is to gradualy make the user account in the e-shop become an urban electronic identity (which is called Brno iD). In the future, this identity can be used in a wide range of services to which customers will gain access.



brnoid.cz/en/



### DATA. BRIJO. CZ

The data.brno.cz web portal was launched in March 2018 as the main data signpost of the city. Around 40 thousand people visit the page yearly. The website offers not only open data but also provides the public with various analyses, applications, articles and sociological surveys.

**DATA.BRNO** has three distinct types of users. The first is a wide public who can get learn more about their city through the data. Thanks to the State of the City Report, which has become very popular with the public and is always published at the end of April, it has managed to bring a lot of basic information about the city into public awareness. The second type of user is the professional public or students, for whom the website offers a lot of interactive long-term statistics about the city or applications, which have gained the greatest popularity overall. The third type of user are developers and advanced users working with machine-processable datasets. An interesting fact – about 25 % of the visits originate from abroad.



#### data.brno.cz/en/

### BRNO URBAN GRID

Brno Urban Grid is an analytical web app allowing quick visualisations of spatial data for the Brno metropolitan area and Brno city. The App uses a square grid with size of  $250 \,\mathrm{m} \times 250 \,\mathrm{m}$  per cell which allows it to present data in the fixed and comparable units. Different types of data such as points, lines, rasters or other spatial phenomena can be visualised in the grid.

General public as well as urban planners, traffic planners, data analysts and journalists have access to spatial data without having to work with often very complex geographic information systems.



brnourbangrid.cz

### PILOT SMART DISTRICT ŠPITÁĽKA

In a five-year period (November 2016 to October 2021) Brno will design a brand new smart city district. The plan for the transformation the area of what nowadays is the Špitálka district heating plant arose as part of the prestige European project RUGGEDISED. The choice of innovative aspects of this new energy-efficient neighbourhood will be conducted in coordination with the local academic and private sector and other relevant stakeholders.

The RUGGEDISED project is a part of the Horizon 2020 programme. It brings together 6 European cities: Rotterdam, Glasgow, Umea, Gdansk, Parma and Brno, which will collaborate and share experience in implementing

smart solutions in the areas of mobility, energy and ICT, as well as in social, economic and environmental issues that lead to an overall improvement in the quality of life in the city.







#### **PROJECT OBJECTIVES**

- To prepare an investment plan and urban design for the future development of an innovative district named RE:Špitálka
- To verify the use of smart technologies and approaches for their possible expansion all over the city
- To create a modern neighbourhood where people can comfortably live, work and spend their leisure time

The smart district at Špitálka should become a symbol of progress and modern technologies in the City of Brno.



respitalka.brno.cz/en



### MUN'SS

### MULTINATIONAL UNIVERSITY STUDENT STUDIES

The main aim of the MUNISS Multinational university student studies is to develop cooperation between the City of Brno and talented students of the universities in Brno and to create studies with the potential to be implemented in the city.

The competition was held for the first time at Masaryk University in 2011 and over the years it has grown to include students also from Mendel University and Brno University of Technology. In total, more than 500 students have passed through the competition, creating 101 student teams. They have focused on more than 40 topics, including a proposal of the use of the Brno Exhibition Centre, the smart district of Špitálka, the Creative Centre in Brno's former penitentiary, revitalisation of sand quarries in the Brno metropolitan area and development of the city identity – Brno

iD. The project is financed by the City of Brno. Since 2016, a partnership competition has also been taking place in the City of Bratislava with local governments and universities.

Topic #muniss2021: The future appearance of the site "Za Zetorem"



### BCNO PHンTALENT

The aim of the Brno PhD Talent scholarship programme is to motivate and support talented students for doctoral studies, support the development of their strategic research management skills and strengthen their ties with the #brnoregion.

The Brno PhD Talent project has already had 10 competition seasons since 2009, during which it has provided support to several dozen talented students. Supported PhD students remains in scientific positions in Brno, others, loyal to research, work at universities abroad or as experts in research companies.

The project also helps research team leaders attract talented students from abroad (e.g. Spain, Italy, India and Slovakia). Since 2009, the City of Brno has contributed more than EUR 2.6 million to the programme and supported over 200 highly talented scholarship holders. The Brno PhD Talent project is part of the Regional Innovation Strategy of the South Moravian Region.



### DÁME NA VÁS

#### What is Dame na vas?

A project of the City of Brno, where citizens can decide on the part of the municipal budget. In 2020 the city allocated EUR 1.34 million for this project. This way residents of Brno can participate on the adjustment of their surroundings.

#### Dáme na vás divided into three stages:

- projects proposal the residents of Brno register the projects that will improve their city:
- gathering support project needs at least 300 "likes", for moving up to the third phase, the autumn finale;
- decision making in November the citizens of Brno vote and projects that receive the most votes are implemented by city agencies.

Participative budgeting in Brno was established in 2017. Involvement of the city citizens increases year by year, there is 134 projects registered this year. In 2019 there were 114. Winning projects have chosen an amount of 39 361 citizens of Brno (between 2017 and 2019).



damenavas.brno.cz

#### **EXAMPLES** OF IMPLE'MENTED PROJECTS



Gazebo - a dance place in the park in Pisárky



in Medlánky district



Holedná lookout tower



Poplar alley restauration in Řečkovice district



**Emergency homeless shelters** 



Cycle way in Žebětín, Bystro and Kohoutovice districts



Skate park in Tuřany district



Halda adventure playground in Medlánky district



Grill point in Nový Lískovec district

# INTELLIGENT CITIES CHALLENGE 2020

City of Brno have now been selected to take part in the european Challenge over the next 2 years. This group includes 54 new ICC applications, 26 cities that took part in the Digital Cities Challenge predecessor initiative, and 9 EU mentor cities.

As selected core City of Brno will receive high-quality and tailored guidance. They will take part in group trainings, learn from peers, participate in a series of high-level events, and collectively plan for large scale change.

Brno within Intelligent Cities Challenge mainly intends to develop electronic platform Brno iD, portal DATA.BRNO and working with sensor data.



intelligentcitieschallenge.eu

### SCIENCE POPULAPIZATION AND SUPPORT TO INNOVATIVE BUSINESS

In 2020 Brno finances this area from its budget with EUR 2.8 million. It funds a programme of cooperation between local creative workers and innovation companies – "Creative Vouchers". It has been supporting a programme helping businessmen in the phase of prototyping a new product. The city is involved in activities of the Observatory and Planetarium Brno and supports the VIDA! science centre. The Electron Microscopy Days (dem.brno.cz), Brno Creative Days festival, Brno Space Week, Science Festival, Scientists' Night and others are held with support from Brno.





Photos: Brno City Municipality, Brno City Chief Architect's Office, Pavel Gabzdyl, #brnoregion Visualisation: ATELIER 8000



#brno2050

chytre@brno.cz facebook.com/chytrebrno