# Annual Report



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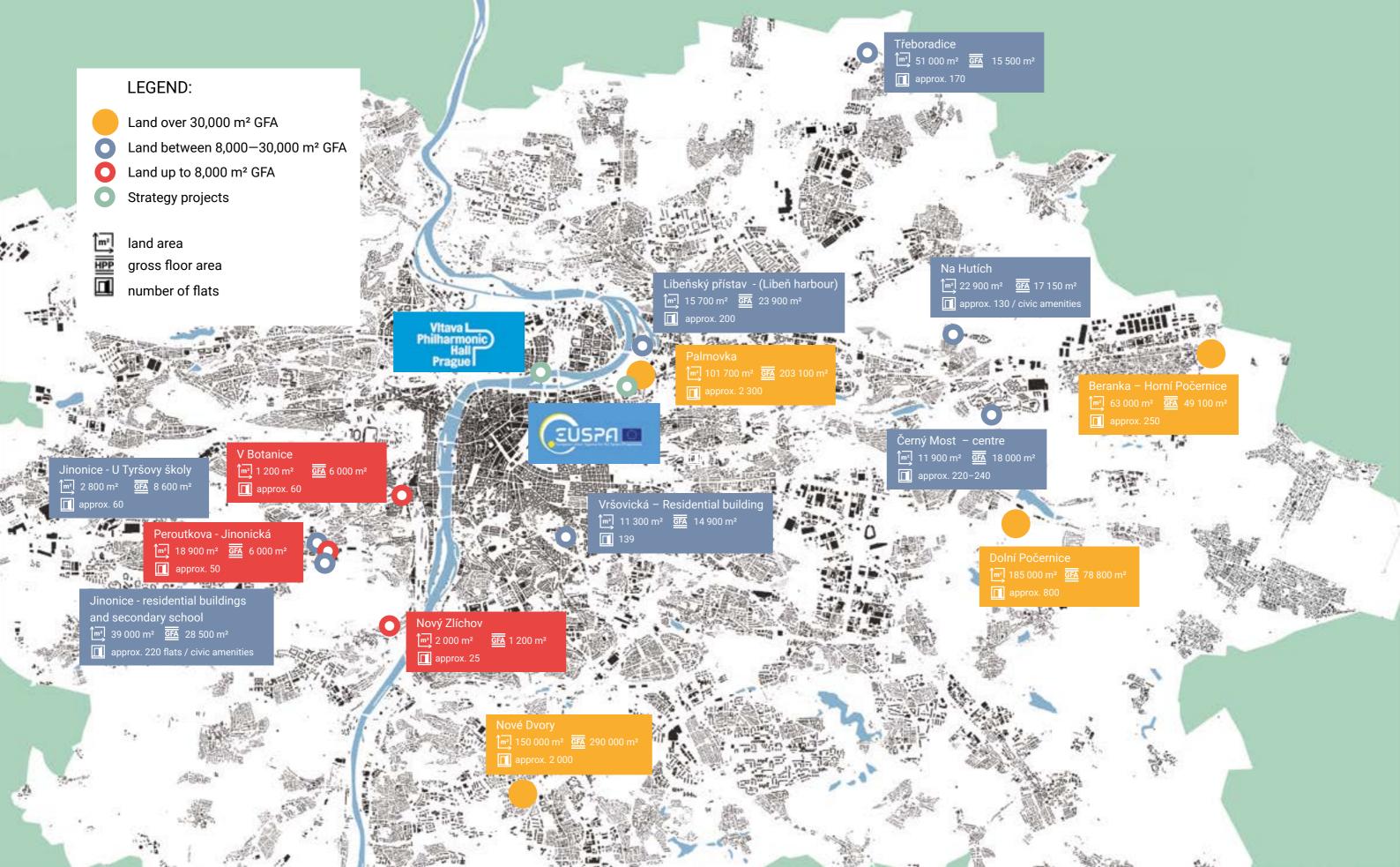
# PDS PROJECTS

Pražská developerská společnost [Prague Development Company, or PDS in the Czech acronym], is a municipal statutory organisation of the City of Prague. On the basis of PDS' charter, the City of Prague handed over to it land suitable for constructing affordable housing and other buildings in the public interest.

From 2021 to 2023, on the basis of a decision by the Prague City Assembly, the inventory of these city lands was updated and expanded, and as of 31 December 2023 it reached an area of more than 70 hectares.

The PDS real estate portfolio includes both large areas for which it is preparing new urban districts, as well as smaller parcels or locations intended for the construction of standalone housing projects.

On the basis of a 2022 decision by the Prague City Council, PDS was also entrusted with the preparation of two prestigious projects with strategic significance for the entire Czech Republic: the Vltava Philharmonic Hall and the headquarters of the EU Agency for the Space Programme (EUSPA).



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Smíchov – V Botanice, Prague 5
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Jalový Dvůr residential building,
Palmovka – Zenklova, Prague 8
Na Hutích – Sicherova nursery s
Černý Most, Prague 14
Nové Dvory – Durychova residen
Jinonice – U Tyršovy školy
Peroutkova – Jinonická, Prague
Other prepared larger projects and sites
Libeňský přístav, Prague 8
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### Dear friends and colleagues,

You have just opened the third annual report of Pražská developerská společnost [the Prague Development Company]. A municipal company we founded to prepare projects which Prague is lacking, especially for affordable municipal housing.

Thanks to the work of the Prague Development Company team, up to 8,000 new municipal rental flats will be built in coming years, which are intended mainly for public service professions that Prague needs for its development, in fields such as health care, firefighting, and teaching. The constructed rental flats will remain in the city's long-term ownership and will significantly expand the city's housing stock.

The Prague Development Company is preparing more than sixty projects, ranging from the construction of both large urban complexes to smaller residential housing. During design work, we place emphasis on the long-term sustainability of buildings, architectural quality, and the efficient use of public funds. For our first projects, it will be possible to start planning permit procedures in 2024.

I'd like to see the Prague Development Company team continue to do well, and that we can look forward to further steps taken toward making these projects a reality.



# 

doc. Ing. arch. Petr Hlaváček Deputy Mayor of the City of Prague (for territorial and strategic development)



#### Ing. Alexandra Udženija

Deputy Mayor of the City of Prague for Social Affairs, Housing, and Health Care

### Prague needs new apartment construction

Madam Deputy Mayor, in 2023 you started to work on issues that include housing in the city of Prague. How do you see the current housing situation in Prague, and what are its most pressing problems?

Prague, like other metropolises, is facing a large increase in demand for housing, and the number of people who want to move to Prague keeps growing. Similarly, the demand for rental housing has increased in recent years, and not only because apartments' market prices are unaffordable for a large number of citizens. We see this trend especially among young people, who don't have property ownership as a priority. And the most pressing issue? It's the same throughout our country. The main obstacle to housing construction is the length of the permit processes, which adds time and burden in terms of bureaucracy and costs.

But I'm not the kind of person to just complain that something is wrong and that others are to blame. So since taking up the position of deputy mayor, I've really tried to actively address housing policy on every possible level within my competencies, and we are intensively working on expanding the housing stock.

### Can you be specific? How are you and other coalition partners solving this, or planning to solve it?

We have a clear strategy together with our coalition partners. We want to start building new affordable housing, while at the same time reconstructing and renovating existing apartments and unused buildings. We discuss all options with municipal district representatives; they know best the needs of the citizens in a given location. As part of the development of housing stock, of course we will not forget about housing for vulnerable groups among Prague citizens and those in need. For example, 272 municipal flats will be built in the former Opatov Hotel, the reconstruction of the building on Moskevská Street in Vršovice will provide the city with 10 rental flats, and of course we have other projects in the pipeline. Another of these is the reconstruction of the former Prague Public Transit Company building in Prague 9, which will create 150 small flats. Prague is also cooperating with

the private sector, which it tries to accommodate, and with which it seeks solutions for affordable housing, civic amenities and transport.

#### In addition to the solutions to the housing problems you've mentioned, have you set other goals for yourself in the area of the city's housing policy which should contribute to its development?

7,700 flats in its housing stock. In order for young families with children to get access to rental flats, or to support needed professions (paramedics, firefighters, teachers, health care workers, etc.), it was necessary to change the rules and set them fairly. Which we managed to do in the fall of 2023. We are also trying to add to housing stock through the acquisition of buildings or residential units. Prague is still vying for the Czech Post residential building on Moravská Street in Prague 2, which the Post is selling. In short, I will try to acquire every apartment that meets the city's needs. This primarily with regard to small flats of around 50 square meters. We are also requesting some buildings for things like asylum housing through the Trade Center Praha jointstock company, which is our management company, and which monitors the real estate market. We are also working on a new action plan for the development of housing policy, which will be ready at the beginning of 2024. This plan will present a clear, transparent, sustainable, and long-term strategy for the Prague City Hall's housing policy.

#### The Czech Republic has joined the Nice Declaration, which commits it to the development of affordable housing. In your opinion, what are the paths to greater housing affordability in the Czech capital?

As was already mentioned – it's necessary above all to expand the available municipal rental housing stock, be it through new construction, cooperating with the private sector, reconstructing of existing buildings, and last but not least, by acquiring residential buildings. Of course, we cannot forget the necessary infrastructure either.

#### How would you evaluate the work of PDS so far in the preparation of new municipal housing construction? What do you see as its contribution?

PDS is, of course, a key organisation with regard to construction of affordable municipal rental housing. It is preparing approximately 60 municipal projects on land entrusted to it by the city. In 2020, the Prague City Assembly handed over to PDS plots of land suitable for the construction of 6,000 – 8,000 flats over a 10-year horizon, which is definitely not an insignificant number.



Peroutkova residential building, Prague 5, Pelčák and Partner Architects

Of these, 1,500 have already been passed by the Prague City Council and are in the project preparation phase. I believe that thanks to these projects, people who need new housing (single parents, the disabled, the elderly) will find it in the foreseeable future, as well as those who Prague needs in its service (health care workers, teachers, firefighters, police).

The implementation of an active municipal housing policy cannot be achieved without cooperation with the individual city districts. You were the mayor of Prague 2 for many years. How can the city and its districts get along, and what are the necessary conditions for this cooperation? They can accommodate each other in many ways. The districts can provide the city with buildings they are not using, such as the aforementioned residential building on Moskevská Street. Participation in financing (for example for the reconstruction of housing units from the City of Prague's Fund for the Development of Affordable Housing) is also important. Communication is an essential condition for any cooperation, and not only in the area of housing stock. The entire cooperation between the City of Prague and its districts is riding on it. But for myself, I must say that we now have excellent communication with the districts and that we try to accommodate each other as much as possible.

Any construction, not only in Prague, but anywhere in the world, is faced with the so-called NIMBY (not in my back yard) effect, which is a reluctance or even an active civic and local resistance to new construction. Do you see ways to mitigate it? What do you think helps?

I think it's a natural defense mechanism that most people have in them, and not just in the context of new construction. It might also be the fear of something new that will take us off the beaten path and disrupt the peace and security we've had so far. That's why we really need to speak openly with people, to explain and patiently answer their guestions. To reiterate: communication is very important. It's clear to everyone that Prague cannot do without new housing construction in the future. But people must not have the feeling that decisions are being made without them. By talking with them about their concerns, by treating their suggestions fairly and taking them seriously, their resistance to construction can often be overcome. Open communication and cooperation with the people who are directly affected by new construction is essential.

PDS is often asked how the apartments being prepared will be occupied, which is not even a matter of PDS' founding charter or its competence. In terms of occupancy, is the city preparing any strategy for how to approach the new apartments that will be built in a few years from now?

We approved new, updated, and fairer rules for allocating municipal housing in September 2023. According to these rules, until 2030 we will preferentially rent municipal housing at affordable rates to seniors, people with disabilities, people in social need, representatives of selected professions, and young families. The action plan I mentioned a moment ago will also be very important. I think we're well on our way to making apartments in our metropolis more affordable.





### The Nice Declaration on Affordable Housing in EU Member States – March 2022

A meeting of ministers of EU Member States responsible for housing issues took place in March 2022 in the French city of Nice. At its conclusion, the Nice Declaration was signed, where its signatories recognised that:

- renovated high-quality housing;
- of new housing construction or its renovation.

Ministers agreed and strongly recommended that further housing supply take into account criteria such as qualitative and spatial efficiency, based on an integrated approach to the building and development of cities, and at the same time actively decreasing the further acquisition of land and preventing urban sprawl.



Improving the parameters of housing affordability depends on the supply of new or

It is necessary to support all efforts leading to the improvement of permit processes:

And directing support in the area of financial (i.e. alternative) instruments in the area



Veronika Iwanowski Wiener Wohnen Department of International Relations

### Affordable housing maintains social harmony in Vienna, but costs half a billion euros per year

#### Vienna has long been at the top of various quality of life rankings in European and world cities. What's the secret for contentment among the Viennese?

In Vienna, we consider housing as well as other public services, such as public transport, water supply, and waste management, to be a basic human right and we believe that these public services should not be left to the private market alone. The so-called public added value of the Viennese system of housing is one of the foundations of the high quality of life Vienna is famous for. This system benefits not only the residents of affordable municipal and subsidised housing, but the wider society as well. The large proportion of affordable housing has an impact on the housing market overall and can serve as a buffer for prices. Thanks to an ecological approach

to construction and subsidised sanitation measures. energy consumption is reduced.

The construction of social housing creates and secures thousands of jobs. Access to safe housing is thus ensured both for low- and middle-income groups, which prevents segregation and the creation of unsafe neighbourhoods and so-called no-go zones. At the heart of our efforts is the belief that 'social' housing need not be synonymous with housing for the poorest. In our conception, it maintains social peace and targets broad sections of the population. All of this together leads to a good social mix in Vienna, which is continuously maintained by all of these measures. It is practically impossible to draw conclusions about a Vienna resident's social origin or income situation based on their address.

#### One of the important factors is undoubtedly affordable municipal housing. Vienna has de facto built its housing stock for the past 100 years.

At the beginning of the 20th century, the vast majority of the Viennese population lived in cramped conditions and great poverty. After the Social Democrats took over Vienna's municipal administration following World War I, tax reform provided a decisive impetus for social housing construction. It introduced a new tax on apartment construction and helped to raise new revenue by taxing the luxury assets of the rich.

Although times and conditions have changed, the issue of affordable housing is just as important as it was 100 vears ago, when the first programme of social housing construction was implemented in Vienna. Vienna's good governance in the area of housing policy is founded today on a combination of key principles, such as the creation of a stable legal framework to strengthen housing as a public interest. Our housing policy is supported by three key laws: 1) the Vienna Housing Promotion and Housing Rehabilitation Act, which contains provisions on subsidies for the construction and renovation of residential buildings. 2) the Limited-Profit Housing Act, which provides a framework for all nonprofit and 'limited-profit' builders and developers, and 3) the Austrian Rental Act, which is a powerful instrument for housing policy, and which regulates the rights of tenants.

Another principle is a commitment to long-term planning using appropriate and reliable models of financing, where the financing of social housing construction through the aforementioned taxes serves as a reliable basis for planning housing construction programmes in the long term. The third principle we follow is to meet people's housing needs by providing an inclusive approach, long-term security for tenant relations, and

tenant protection. If the rental sector is regulated in favour of tenants, home ownership is no longer the only way to ensure a stable housing situation. This is why almost 80% of the population in Vienna lives in a rental flat. Another important aspect of our system is the socalled "social mix," the importance of which has been respected since the 1920s, when the city administration decided to build municipal housing in the wider city centre instead of concentrating such developments on its outskirts. Today, the social mix is implemented citywide, as housing managed by the city is distributed across all districts and is not limited to certain areas. At the same time, support or the possibility of housing in municipal flats is also available to groups of residents with relatively high average incomes, and all of the measures and approaches mentioned here prevent and mitigate social and territorial segregation. All of these measures contribute to the fact that today more than half of all Viennese live in affordable and high-quality housing: either in one of the 220,000 municipal flats managed by the Wiener Wohnen company, or in subsidised flats in the nonprofit sector, whose assets include some 200.000 residential units managed by 58 nonprofit and 'limited-profit' development companies operating in Vienna.



Nordbahnhof, Baldassion Architektur © City of Vienna, Wiener Wohnen

Vienna is often given as an example for Prague or for the Czech Republic, but on the other hand, it must cost a lot of money. How many million euros per year, or how much has Vienna invested in various ways in recent years to support affordable housing? Can this be expressed in absolute numbers, and also as a share of the municipal budget?

The resources needed for affordable housing are financed from federal taxes and through the general income tax system, as the financing of social housing construction in Austria is linked to a fixed part of the income tax (the so-called 'housing allowance'). This quota is regulated by federal law, and amounts to 0.5% of the gross wages of employers or gross income of employees.

On the basis of this tax, Vienna receives approximately EUR 250 million per year from the federal state for the purpose of housing construction. Overall, however, Vienna spends around EUR 400 million per year on housing **construction**. This is because the city provides loans to limited-profit housing developers - and by continuously repaying these loans, a long-term sustainable and renewable system is actually created.

In Vienna, a distinction is made between 'object funding' and 'subject funding.' 'Object funding' means the

financing of new construction and reconstruction. Out of the total EUR 407 million Vienna invested into housing related measures in 2022, EUR 362 million was in object funding - EUR 237 million was invested into new construction and EUR 125 million in refurbishment and renovation.

'Subject funding' on the other hand means direct financial assistance to persons with low income who cannot even afford subsidised rent. In 2022, EUR 45 million was invested in 'subject funding.' There is a clear reason more money is being invested into housing construction and reconstruction than into housing benefits - in Vienna we believe it is better to proactively spend money on affordable housing than to reactively address the impacts and consequences of extreme social inequality.

Have there been discussions in Vienna in recent years (possibly in connection with the more difficult economic situation) about whether it is necessary on such a scale? Shouldn't these funds be directed elsewhere, or is there a long-term societal consensus on such an approach? By providing a high proportion of affordable housing options, we are not only ensuring that people living in Vienna have access to an affordable place to live, but our measures also have a much wider impact on society at large, because Vienna housing policy has a positive influence on the level of rent across the entire market. It contributes to social cohesion, reduces energy consumption, and creates thousands of jobs - just to name a few of the positive effects that contribute to the overall high quality of life in Vienna. That is why this system is widely accepted by the population. People are aware of its importance.

Ensuring affordable housing for today's Viennese and future generations remains a shared responsibility. The City of Vienna is committed to continuing the policy of social housing. This approach has never been guestioned, not even at times when the trend was moving towards privatisation.

Considering the aforementioned difficult economic situation, I would like to add that the City of Vienna offers a number of measures to help mitigate the economic burden on citizens: a number of support measures on the part of the city exist for those having difficulty paying rent or energy bills, as well as the direct support the Wiener Wohnen company offers. Its so-called 'Case Management' is a team of specialised social workers who come into contact with tenants of Vienna's municipal flats at risk of being evicted from their homes. They offer assistance in resolving their situation and prevent the possible termination of their leases and eviction.

What have Wiener Wohnen's greatest successes been in recent years? In addition to the management and maintenance of the existing housing stock, have you also managed to implement new projects?



Biotope City, © IBA Wien, Y. Fetz



Aspern Seestadt, © Schreiner Kastler

Vienna is growing, and with it the demands on affordable In the Viennese model of housing, do you see any negahousing. In response to high demand, the city is currently tives that you have encountered and which could prevent building new municipal housing as part of the 'Gemeinits full transfer to other cities? dewohnungen NEU [New Municipal Housing]' pro-While the full transfer of the Vienna model of affordable gramme. The first project, with 120 new municipal flats housing to other cities may not be entirely possible due in Vienna's 10th district, was handed over to its residents to differing conditions and circumstances, nevertheless at the end of 2019. Other projects have been completed our system can be summarised into the principles I've in previous years, or are currently being implemented. mentioned and which could be applicable in other cities' And since 2020, the social housing sector has become contexts: a stable legal framework to strengthen housing even more inclusive: A new criterion for the allocation as a public interest, long-term planning and reliable of flats, 'single parent,' was introduced with the goal models of financing, an inclusive approach, security and of supporting the growing number of single parents in protection in the tenancy relationship and a social mix Vienna and ensuring that they have access to affordable focused on the prevention of social and territorial segremunicipal housing stock. gational tendencies.

In addition, Wiener Wohnen contributes to climate protection through a range of measures, both in connection with the renovation of existing residential buildings, and with the construction of new buildings. Wiener Wohnen sees its task not only as preserving its rich heritage, but also as adapting it to new requirements by making the buildings sustainable and climate-neutral. The goal is to develop municipal housing not only for current but also future generations.

#### Austrian society, and therefore Austrian communities place great emphasis on sustainability. How is this reflected in the management of existing municipal housing stock, or in the preparation and construction of new projects?

Wiener Wohnen in Vienna is making great efforts to renovate and modernise its municipal residential buildings according to modern standards and needs.

Improvements such as the installation of lifts, modern bathrooms, connections to district heating, and improved thermal insulation are continuously being made. Many of the 1,800 municipal housing projects or sites date from the very early days of housing support programmes, and their condition corresponds to those which are nearly 100 years old. In order to preserve the historical structure of these architectural monuments, Wiener Wohnen is working in close cooperation with the Heritage Authority. It is also worth mentioning that every year more than 1,000 flats are converted to climate-friendly district heating as part of tenant changeover.

Wiener Wohnen is also intensively involved in investigating and preparing the conversion of heating and hot water systems in all municipal buildings. In locations that cannot be supplied with district heating, a switch to heat pumps is being investigated, for example in combination with photovoltaics. In some residential complexes, largescale community photovoltaic systems have already been installed on roofs and facades.

The so-called THEWOSAN financing system, which involves integrated thermal-energy renovation of resi-

dential buildings, is another measure to achieve sustainability, and is implemented in the renovation of municipal housing estates. It not only contributes to environmental protection, but also reduces the cost of space heating for residents.

As for new construction projects, gas is not allowed as an energy source in new municipal buildings. Motion detectors for lighting (in addition to regular switches) are installed in stairwells, garages, garbage rooms, and bicycle storage rooms. Construction materials must meet specific requirements, and in new municipal complexes facades are expected to be green to reduce ambient temperatures. These are just some of the requirements for new construction projects.

#### What interesting new housing projects are you planning? What about the Aspern project and others?

In addition to the already mentioned municipal complexes which are being developed as part of the 'New Municipal Housing' programme, new development areas are continuing to spring up throughout the city, offering a wide range of different housing options, among which subsidised, affordable housing plays a central role.



Karl Marx Hof, © IBA Wien, Y. Fetz



Sonnwendviertel, © Wolf Leeb

One of these is the 'Nordbahnhof' development area in Vienna's second district, which covers an area of 85 hectares. Construction work on more than half of this area has already been completed. The remaining part will be gradually built over the next few years and will offer housing for more than 20,000 people.

Another location where construction work has already been completed is the 'Sonnwendviertel' in Vienna's 10th district, where approximately 5,500 flats have been built, including more than 2,000 subsidised flats for more than 13,000 residents.

Also, the world's first 'Biotope City,' located in Vienna's 10th district, offers a total of approximately 990 residential units of various sizes and typologies. Of these, roughly 600 flats are subsidised. A special feature of 'Biotope City' is its green facades and roofs, which reduce the temperature throughout the site. And in the 22nd district, 'Aspern Seestadt,' one of the largest European urban development projects is growing on the site of a former airport. In 2030, this multi-phase development will offer housing for more than 25,000 people and thousands of jobs. All of these development projects function as vibrant mixed-use urban centers that offer not only housing, but include living and working in combination with a well-thought-out social infrastructure in the form of green outdoor spaces, shops, restaurants, cafés, nurseries, and schools, catering to the diverse needs of Vienna's residents.

# 1. Introducing PDS

Prague Development Company is a municipal statutory organisation of the City of Prague which is professionally focused on developing real estate assets owned by the city that have been entrusted to it. PDS initiates and co-ordinates the preparation of projects, especially rental housing and other buildings in the public interest, on land that has been handed over to it for management.

#### **Establishment of PDS**

The City of Prague is the administrative, economic, commercial, and cultural center of the Czech Republic, whose interesting job opportunities and attractive lifestyle draws tens of thousands of new residents every year. This trend of urbanisation, which affects the entire metropolitan region, is not expected to stop, but rather to strengthen significantly. The excess of demand over housing supply in the Czech capital dramatically increases the price of housing, thus limiting its affordability.

The political representation of the City of Prague agreed in June 2020 that one of the ways to counter the housing crisis is to revive municipal housing construction, which de facto ceased after 2000. Given that real estate development is a highly professional, investment- and time-consuming activity, it estabilished the Prague Development Company an independen professional municipal organisation to implement its approved plan.

PDS' establishment was preceded by roughly a year of preparation, which consisted of gaining experience from similar municipal companies in Hamburg and Munich, and identifying suitable locations for future municipal housing construction. In mid-2019, a small initiating team charged with investigating suitable parcels and the first considerations on the possibilities of their use for residential construction was established at the Prague Institute of Planning and Development (IPR Praha).

Based on a decision of the Prague City Assembly, land was handed over to PDS for management with a total of 40 hectares suitable for the construction of 6,000 to 8,000 flats within a 10- to 15-year horizon. At the same time, an expert team was created, led by managing director Petr Urbánek since 2020.

#### PDS' objectives

PDS' primary long-term objective is to increase the value of municipal land through expert integrated project management and an expanded housing stock. At the same time, its economic goal is to achieve cost neutrality for the taxpayer.

PDS is taking a comprehensive approach to the preparation of both municipal rental housing and to the development of larger areas of city-owned land, on which entirely new municipal districts will be created, including housing, administration, services, and public amenities (especially school and leisure facilities for children and young people).

The new municipal rental housing should be used primarily by people in professions that are critical to the optimal functioning of the city (education, health care, transportation, security, and technical services), and vulnerable groups of residents such as single-parent families and seniors living alone.

#### PDS' 2020-2023 strategy

PDS brings to the municipal environment the practices that are standard in professional development companies. This ensures cost and process efficiency in the comprehensive preparation of individual projects, and intensive cooperation with a wide spectrum of specialist professions the city does not have.

In its first years, PDS carried out activities of so-called land development on the portfolio of municipal land entrusted to it, which especially included unifying municipal land ownership under a single public-benefit entity so that subsequent project preparation could be effectively managed and coordinated. At the same time, PDS was engaged in preparing underlying economic, construction, and socio-economic analyses and the preparation of conceptual proposals for future projects.

After the Prague City Council approved the progression of the first few prepared projects under preparation to their next investment-design phases, a series of tenders for designers and design contractors were begun by PDS in 2022. In 2022, the first ever architectural competitions for municipal housing development were also announced: for the V Botanice residential building (Praha 5) and the Vršovická residential building (Prague 10). In both cases, renowned architecture studios from abroad participated.

In 2023, further tenders for designers followed, and some projects advanced to the phase of preparing documentation for planning permits or combined planning permit and construction proceedings.

PDS has also been significantly involved in the international ASCEND project. The project of a competely new district in Dolní Počernice, the City of Prague's pilot project in the international ASCEND network, is prepared in accordance with the principles of sustainable development, and PDS will be able to include various approaches and technologies that are environment-friendly and offer especially energy savings, or possibly energy independence, saving drinking water or reducing the

### Achievements of the past three years

2020		
	June 2020	PDS is founded The PDS real estate portfolio c
	October 2020	PDS acquires its headquarters The Prague City Council names PDS' team of project managers
2021		
	January 2021	First meeting of the Investmen made up of leading experts in e
	May 2021	First-ever market valuation of t handed over to PDS for manage

carbon footprint of PDS projects, whether in the phase of implementation or in subsequent operation. As of 31 December 2023, PDS had more than 750 thousand square metres of municipal land entrusted to its management.

#### Projects of strategic importance

In 2022, the Prague City Council entrusted PDS with the coordination of project preparation for two prestigious projects with strategic importance for the entire Czech Republic. These are the Vltava Philharmonic Hall project – a modern concert hall and exhibition space near the Vltavská metro station, and the project for a new headquarters for the EU Agency for the Space Programme (EUSPA) near the Palmovka metro.

In 2023, PDS worked on the preparation of documentation for the transformation of the 'Centrum Nová Palmovka' building into the new EUSPA headquarters near Palmovka metro in such a way that the Prague City Hall investment department could announce a tender for the general contractor in October 2023.

The activities related to this project were completed on PDS' part in October 2023, and subsequently, by a decision of the Prague City Council and Prague City Assembly, the land and real estate related to the 'Centrum Nová Palmovka' were removed from the PDS charter.

comprises 400,000 m<sup>2</sup> of entrusted municipal land.

ers in Radniční domy, just off the Old Town Square nes Petr Urbánek as director; he begins to assemble ers.

ent Expert Committee (IEV in the Czech acronym), which is n economics, real estate development, and construction law.

f the real estate portfolio of municipal land which has been agement. The market value is calculated at CZK 2.939 billion.

June 2021	Client's brief for municipal housing construction is approved by the Prague City Council. It is a unique concept paper even in a national context.		September 2022	The project team for the Vltava banner of PDS.
September 2021	Cooperation begins with universities – with the Faculty of Architecture at Czech Technical University in Prague on a semester-long assignment on the Palmovka project, and with the MBARE programme at the Prague University of Economics and Business on		October 2022	PDS presents the Palmovka, No trade show in Munich.
	a development project for the Nové Dvory location for students' diplomas.		October 2022	An expert jury announces the w residential building. It is the Brr
September 2021	The Prague City Council approves PDS' practices on its first projects, which were previously approved and assessed by its Investment Expert Committee, for the next phase of investment and project preparation.		December 2022	PDS presents a concept study local residents of the Černý Mo
October 2021	First presentation of the Palmovka and Nové Dvory development areas at the prestigious Expo Real real estate trade show in Munich.		December 2022	The 16-member PDS team is res
November 2021	PDS announces its first tender for architects and designers. It is for the Na Hutích nursery school in Prague 14.	2023		
December 2021	The 15-member PDS team is responsible for 12 locations and a total of more than		January 2023	PDS launches a series of tende ousing projects.
			February 2023	PDS presents a large-scale more specialised media created by s Technical University in Prague.
February 2022	PDS launches a series of tenders for project documentation suppliers and design contractors for the first ten of its projects.		March 2023	The new neighbourhoods proje international cooperation progr tricts in the EU.
March 2022	PDS announces the first ever architectural competition for municipal development in Prague, for the V Botanice housing project in Prague 5.		May 2023	PDS presents its activities over
March 2022	PDS presents the Palmovka, Nové Dvory, and Dolní Počernice development areas at the MIPIM real estate trade show in Cannes. The presentation also includes a large-format		May 2023	PDS presents its activities to th
	spatial model of the future Palmovka area created by students of the Faculty of Architecture at the Czech Technical University in Prague with support and cooperation from PDS.		June 2023	Successful defences of develop gramme in real estate developr of Economics and Business (So ments for development project
April 2022	The Prague City Council entrusts PDS with tasks connected to the coordination of project preparation for the Vltava Philharmonic Hall.		July 2023	Websites launched for the V Bo
June 2022	PDS announces a second architectural competition – for the Vršovická residential building in Prague 10.		-	PDS commissions the annual r
June 2022	PDS becomes a member of the Czech Green Building Council.		Value	of municipal land handed over
June 2022	The Prague City Council authorises PDS to set up the project preparation process for the Former Centrum Nová Palmovka building as the new headquarters of the EU Agen- cy for the Space Programme (EUSPA)		September 2023	Completion of project preparati nouncement of a tender for a g Prague City Hall.
July 2022	PDS commissions an annual market valuation of its expanded portfolio. The market		October 2023	Presentation of the Nové Dvory show in Munich.
August 2022	An expert jury announces the winner of the architectual competition for the V Botanice residential building. It is the Prague-based bod architekti.		December 2023	The 19-member PDS team is res
	June 2021 September 2021 September 2021 October 2021 November 2021 December 2021 February 2022 March 2022 March 2022 June 2022 June 2022 June 2022 June 2022 June 2022	It is a unique concept paper even in a national context.         September 2021       Cooperation begins with universities – with the Faculty of Architecture at Czech Technical University in Prague on a semester-long assignment on the Palmovka project, and with the MBARE programme at the Prague University of Conomics and Business on a development project for the Nove Dvory location for students' diplomas.         September 2021       The Prague City Council approves PDS' practices on its first project, which were previously approved and assessed by its investment Expert Committee, for the next phase of investment and project preparation.         October 2021       First presentation of the Palmovka and Nové Dvory development areas at the prestigious Expo Real real estate trade show in Munich.         November 2021       PDS announces its first tender for architects and designers. It is for the Na Hutich nursery school in Prague 14.         December 2021       The 15-member PDS team is responsible for 12 locations and a total of more than 50 projects.         February 2022       PDS launches a series of tenders for project documentation suppliers and design contractors for the first ten of its projects.         March 2022       PDS announces the first ever architectural competition for municipal development in Prague, for the V Botanice housing project in Prague 5.         March 2022       PDS presents the Palmovka, Nové Dvory, and Dolní Pocénice development areas at the MIPIM real estate trade show in Cannes. The presentation also includes a large-format spatial model of the future Palmovka are created by students of the Faculty of Architecture at the Czech Technincal University in Prague with support and	It is a unique concept paper even in a national context. 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April 2022 PDS presents the Palmovka were created by students of the Faculty of Architecture at the Czech Technical University in Prague with support and cooperation for PDS. April 2022 PDS promoses a second architectural competition – for the Višovická residential June 2022 PDS promoses a second architectural competition – for the Višovická residential July 2023 PDS prepared in the Spac

20

va Philharmonic Hall gradually starts work under the

Nové Dvory, and Dolní Počernice projects at the Expo Real

e winner of the architectual competition for the Vršovická Brno-based Kuba & Pilař architects.

ly of affordable municipal housing and public space to Most neighbourhood as part of public hearings.

responsible for 17 locations and a total of nearly 60 projects.

ders for project documentation suppliers for upcoming

nodel of the Nové Dvory project to the expert public and by students of the Faculty of Architecture at the Czech ue.

oject in Dolní Počernice is PDS' pilot project in the ASCEND ogramme, which prepares climate-neutral municipal dis-

ver the past 12 months to the media.

the newly-elected mayors of Prague's districts.

elopment diploma projects by students of the MBA proopment, investment and valuation at the Prague School (Sofijské náměstí area). PDS is the guarantor of assignects in the City of Prague.

Botanice, Jalový dvůr and Vršovická projects.

I market valuation of its current portfolio. The market

er for management increases to CZK 7.124 billion.

ations for the new headquarters of EUSPA and the ana general contractor for the Investment Department of

bry project at the Expo Real international real estate trad

responsible for 17 locations and a total of nearly 60 projects.

# People of PDS



Petr Urbánek Managing director



Mgr. Martin Červinka, MBA Deputy director



**Ing. Kristina Fillová** Office manager



**Mgr. Hana Matějková** Financial manager



Jaroslava Krutská Financial controller



Martina Frintová Communication specialist



Mgr. Anna Volencová, LL.M. Tender administrator



**Šárka Olšanská** Assistant









Ing. arch. Michaela Kloudová Project manager

Ing. arch. Roman Brotánek

(ČKA authorisation)

Ing. Radka Kalfeřtová

Project manager

Project manager

M.A. Martin Kloda

(ČKA authorisation) Project manager

Ing. Jakub Kováříček Project manager



Ing. arch. Štěpán Kubíček (ČKA authorisation) Project manager

Ing. arch. Tomáš Lukeš (ČKA authorisation) Project manager



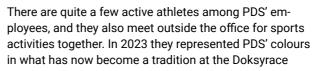
Ing. David Mestek Project manager



Ing. arch. Pavel Novák Project manager



Ing. Petra Vaněčková Project manager





Doksy Race 2023, © PDS



Ing. Rastislav Tomaščík, MBA Project manager

triathlon (16 September 2023 at Máchovo jezero [Lake Mácha]), two PDS relays placed 10th and 15th out of 33 teams in the separate "REAL ESTATE CUP" category.





Doksy Race 2023, © PDS

Doksy Race 2023, © PDS



PDS traditionally holds a Christmas fundraiser for charitable causes. PDS employees managed to raise more than CZK 10 thousand in support of the "Good night's sleep for children from the Klokánek home," charity collection, which helped to buy new mattresses for the children's home in Žatec.

# Investment Expert Committee

The PDS Charter (Article VII, paragraph 2) also established the PDS Investment Expert Committee [IEV in the Czech acronym]. The nomination of IEV members was approved by the Prague City Council in publication R-37460 on 3 August 2020.

With regard to PDS' activities as a non-profit public-benefit organisation of the City of Prague, the IEV was defined as an expert advisory body assessing projects prepared by PDS and their individual phases from an economic, cost, and financial point of view. The IEV assesses in particular the materials that are intended for subsequent discussion in the Prague City Council, and which are the basis for decisions on the expenditure of City of Prague funds. In the context of the functioning of municipal statutory organisations, it is a unique expert body that oversees the optimal operation of the organisation and its outputs.

In accordance with the wording of its charter, 5 members were named to the IEV for a three-year term.

All of the following members meet the definition of a trustworthy and professionally competent person (for the purposes of the definitions according to the Czech National Bank Statement from 3 December 2013). The Statutes of the IEV were approved on 25 January 2021 at its founding meeting and the presented members of the IEV were given their letters of appointment.

At its first meeting in March 2021, the basic parameters of the documents to be submitted by PDS to the IEV for review and verification were agreed upon. The will include key parameters of economic return and economic sustainability for PDS projects.

One IEV meeting was held in 2023. At the June 2023 IEV meeting, next steps for the following projects were approved for further action:

- Nové Dvory PROJECT 1a and Nové Dvory PROJECT 1b
- Na Hutích PROJECT 3 SV centrum

We assume that the next steps for these projects will be submitted to the Prague City Council for discussion in the first half of 2024.

# Membership of the Investment Expert Committee:











Mgr. Martin Bendík, law Wilsons law firm specialist in real estate law, real estate development and acquisition

Ing. arch. Jaromír Hainc, Ph.D., land use planning, IPR Praha academic and university educator (FA ČVUT)

Ing. Martin Hvězda, economics construction projects MH Cost Management specialist in economics and construction budgets

Ing. arch. Lukáš Kohl, architecture and residential development Atelier Doma je Doma Architect, developer, analyst on smaller development projects

Ing. Miroslav Singer, PhD., banking sector and financing Generali CEE Holding economist

# 2. Expert preparation of PDS projects

# Projects and 2024 budget

Specific PDS projects were introduced into the City of Prague's project list on PDS' proposal. Larger sites were divided into phases or projects managed separately. In total, more than 60 PDS projects are registered in the City of Prague budget, for which, at today's prices and at the current level of knowledge, total investment costs of more than CZK 40 billion, including VAT, can be assumed. The table below shows the projects for which resources have been approved from the City of Prague budget for 2023, and which are furthest along in active preparation.

#### DRAFT CAPITAL EXPENDITURE BUDGET – OVERVIEW OF PROJECTS BY BUDGET CHAPTERS AND ADMINISTRATORS (in thousands of CZK) FOR THE CITY OF PRAGUE

01 – Municipal development	1	1	1	1		
Department/organisation	Operation no.	Name of operation	Total cost of the project	Revised budget for 2023	Approved transfer of funds from 2023	Draft budget fo 2024
Administrator: 0004 - doc. Ing. arch. Petr Hlava	ček	·				
PRAŽSKÁ DEVELOPERSKÁ SPOLEČNOST	0045709	Dolní Počernice - residential construction	1 885 200.00	12 000.00	5 000.00	12 000.00
PRAŽSKÁ DEVELOPERSKÁ SPOLEČNOST	0045874	Smíchov - V Botanice	304 900.00	10 000.00	4 000.00	5 000.00
				-		
PRAŽSKÁ DEVELOPERSKÁ SPOLEČNOST	0045875	Nový Zlíchov	143 000.00	0.00	0.00	3 600.00
		1				
PRAŽSKÁ DEVELOPERSKÁ SPOLEČNOST	0045876	Černý Most - centre	842 500.00	4 500.00	2 500.00	5 000.00
· · · · · · · · · · · · · · · · · · ·	1		1	1		
PRAŽSKÁ DEVELOPERSKÁ SPOLEČNOST	0045877	Na Hutích PROJECT 0 - infrastructure	131 000.00	4 000.00	0.00	0.00
	0045004		100,000,00	0.00		
PRAŽSKÁ DEVELOPERSKÁ SPOLEČNOST	0045881	Na Hutích PROJECT 4 - nursery	100 000.00	0.00	0.00	2 000.00
PRAŽSKÁ DEVELOPERSKÁ SPOLEČNOST	0045884	Palmovka - Zenklova	176 700.00	4 000.00	0.00	3 000.00
	0043004		170700.00	4 000.00	0.00	3 000.00
PRAŽSKÁ DEVELOPERSKÁ SPOLEČNOST	0045887	Nové Dvory PROJEKT 0 - infrastructure	513 200.00	20 000.00	10 000.00	10 000.00
	1	1				
PRAŽSKÁ DEVELOPERSKÁ SPOLEČNOST	0045890	Nové Dvory PROJECT 4	197 000.00	5 000.00	1 000.00	8 000.00
	·	·	·			
PRAŽSKÁ DEVELOPERSKÁ SPOLEČNOST	0045892	Nové Dvory PROJECT 6	3 105 000.00	0.00	0.00	2 000.00

Total			21 671 387.00	157 500.00	50 000.00	212 900.0
PRAŽSKÁ DEVELOPERSKÁ SPOLEČNOST	0046638	Jinonice - apt. building U Tyršovy školy	717 000.00	1 000.00	0.00	8 000.00
PRAŽSKÁ DEVELOPERSKÁ SPOLEČNOST	0046637	Jinonice - Mezi Rolemi - apartment constr.	121 000.00	0.00	0.00	0.00
PRAŽSKÁ DEVELOPERSKÁ SPOLEČNOST	0046636	Jinonice - apartment buildings	1 139 000.00	500.00	0.00	0.00
					1	1
PRAŽSKÁ DEVELOPERSKÁ SPOLEČNOST	0046635	Jinonice - High School	386 000.00	500.00	0.00	0.00
PRAŽSKÁ DEVELOPERSKÁ SPOLEČNOST	0046634	Třeboradice - apartment construction	1 020 000.00	1 000.00	500.00	3 000.00
PRAŽSKÁ DEVELOPERSKÁ SPOLEČNOST	0046632	Palmovka - Sokolovská	1 004 000.00	1 500.00	0.00	0.00
PRAŽSKÁ DEVELOPERSKÁ SPOLEČNOST	0046630	Dolní Počernice - School - Project	893 000.00	1 500.00	500.00	8 000.00
PRAŽSKÁ DEVELOPERSKÁ SPOLEČNOST	0046629	Beranka - Hor. Počernice - School - Project	570 000.00	1 500.00	500.00	3 000.00
PRAŽSKÁ DEVELOPERSKÁ SPOLEČNOST	0046628	Nové Dvory - public amenities	580 000.00	500.00	0.00	0.00
PRAŽSKÁ DEVELOPERSKÁ SPOLEČNOST	0046393	Vltava Philharmonic Hall - project preparation	1 149 000.00	36 000.00	0.00	88 300.0
PRAŽSKÁ DEVELOPERSKÁ SPOLEČNOST	0046340	CNP - Praha 8 - project preparation	96 100.00	10 000.00	0.00	0.00
		1			1	
PRAŽSKÁ DEVELOPERSKÁ SPOLEČNOST	0046095	Peroutkova - Jinonická	313 800.00	4 000.00	1 000.00	8 000.00
PRAŽSKÁ DEVELOPERSKÁ SPOLEČNOST	0046092	Beranka - Hor. Počernice - infra. PROJEKT 6	510 000.00	4 000.00	0.00	0.00
PRAŽSKÁ DEVELOPERSKÁ SPOLEČNOST	0046088	Beranka - Hor. Počernice - apartment building - PROJECT 1	1 357 900.00	8 000.00	5 500.00	8 000.00
PRAŽSKÁ DEVELOPERSKÁ SPOLEČNOST	0046087	Nové Dvory PROJECT 1	813 200.00	10 000.00	8 000.00	10 000.00
PRAŽSKÁ DEVELOPERSKÁ SPOLEČNOST	0045900	Dolní Počernice - PROJECT 2	2 075 400.00	10 000.00	8 000.00	10 000.00
PRAŽSKÁ DEVELOPERSKÁ SPOLEČNOST	0045899	Dolní Počernice - infrastructure	755 200.00	3 000.00	1 500.00	4 000.00
PRAŽSKÁ DEVELOPERSKÁ SPOLEČNOST	0045898	Vršovická - apartment building	879 300.00	10 000.00	7 000.00	1 000.00
	1		· · · · · · · · · · · · · · · · · · ·			
PRAŽSKÁ DEVELOPERSKÁ SPOLEČNOST	0045895	Nové Dvory PROJECT 9	255 400.00	5 000.00	3 500.00	4 000.00

# Valuation of land handed over to PDS for management

In its founding charter and by Resolution No. 17/3 of 21 May 2020 of the Prague City Assembly, PDS was handed over tracts of land and sets of tracts for the purposes of preparing projects of municipal housing construction. In the years that followed, by resolutions of the Prague City Assembly, the real estate portfolio as of 1 June 2023 – the date the last market valuation was performed – totalled 816,000 m<sup>2</sup>.

As part of the preparation of individual PDS projects, it is necessary to correctly consider the value of land on which municipal housing construction projects are to be prepared. The parameter of market value of land serves as one of the important inputs for the preparation of long-term project budgets and forecasts, for the correct setting of future costs and decisions on the further direction of project preparation.



Ongoing development activities carried out by PDS on the land entrusted to it adds value and will continue to add value over time. To appraise and monitor land value, it is necessary to always know its initial value, which was set according to international real estate market valuation standards (RICS valuation methodology).

PDS therefore commissioned its first-ever preparation of current market values of the land portfolio handed over to it for management in its founding charter of 21 May 2020, and the presented appraisal was prepared as of 1 June 2021.

On the basis of the decision of the Prague City Council, PDS will arrange for a market valuation every year, as is common in open real estate mutual funds for example, so that it always has an up-to-date overview of the value of the real estate assets entrusted to it. Subsequent market valuations of the current portfolio of real estate entrusted to it were prepared as of 1 June 2022 and 1 June 2023.

The determination of market value of land owned by the City of Prague is also an important basis for further consideration and examination of the possibilities of financing municipal housing construction, partly from external sources. As an investor in projects prepared for the implementation of affordable housing, the city would undoubtedly be a creditworthy and attractive client for the banking sector, but it is necessary to set appropriate conditions during preparatory phases of municipal housing construction, especially with regard to the prescribed limits of the City of Prague's credit burden, and to find optimal bank financing models. Knowing the current market value of land suitable for municipal housing construction is a prerequisite for any considerations and negotiations.

The submitted market valuation is prepared in accordance with the applicable legislation and international valuation standards and estimates the market value of individual plots of land and locations. The stated market

Market valuation of land handed over to PDS management as prepared by the Knight Frank company value is the amount estimated by an appraiser for which the property should exchange on the date of valuation between a willing buyer and a willing seller in an arm's length transaction after proper marketing wherein the parties had each acted knowledgeably, prudently and without being under compulsion at which a property, on the date of its appraisal, after properly being offered on the market, transferred between a willing buyer and seller in an arms-length relationship, whereby both parties would act consciously, prudently and without coercion (definition according to European valuation standards 2012 – EVS 1, respectively Article 4, paragraph 7 6 Regulation of the European Parliament and of the Council (EU) No. 5 75/2013, on prudential requirements for credit institutions and investment firms).

In all three cases, the market valuation of the set of properties was prepared by the international consultancy Knight Frank.

- The valuation prepared as of 1 June 2021 set the market value of a total of 419,000 m<sup>2</sup> of land handded over to PDS for management at the amount of CZK 2,939,000,000 (two billion nine hundred thirty nine million Czech crowns).
- The market valuation of the PDS real estate portfolio prepared as of 1 June 2022 set the value of a total of 683,000 m<sup>2</sup> at CZK 4,298,800,000 (four billion two hundred ninety eight million eight hundred thousand Czech crowns).
- The market valuation of the PDS real estate portfolio prepared as of 1 June 2023 set the value of a total of 816,000 m<sup>2</sup> of land at CZK 7,123,980,000 (seven billion one hundred twenty three million nine hundred eighty thousand Czech crowns).

The market value of the comparable part of the portfolio (i.e. those properties that can be compared to the state of the last valuation as of 1 June 2022, when the set of land was valued at CZK 4.063 billion) totalled CZK 4.650 billion at the valuation date of 1 June 2023. Compared to the valuation as of 1 April 2022, its value increased by CZK 587 million.

The year-on-year increases in the market values of the PDS portfolio were mainly due to changes in scope and an expansion of local developer preparation of individual PDS projects, as well as a general increase in prices on the Prague real estate market.



This model of the Nové Dvory project was created as part of the Department of Building Theory under the leadership of prof. Ing. arch. Michal Kohout.

PDS expects that a significant increase in market value of the real estate portfolio entrusted to it will occur after completion of important milestones as part of investorproject preparations for individual projects, especially in the key Palmovka and Nové Dvory locations. An increase in construction capacity which enables the full utilisation of the economic, social, and environmental potential of both of these locations will, among other things, naturally reflect positively in their valuations.

#### VERIFICATION OF VALUES DETERMINED BY THE RESIDUAL VALUE METHOD

We present in the following table values calculated using the residual value method converted to  $m^2$  total area of land in the location and also converted to 1  $m^2$  of GFA of potential construction.

Site	Size of lots (m²)	GFA KF (m²)	Value of real estate in current state calculated by residual value method (CZK)	Value of real estate in current state calculated by residual value method (CZK/m <sup>2</sup> of land)	Value of real estate in current state calculated by residual value method (CZK/m <sup>2</sup> GFA))
1 - Černý Most	40 684,00	9 704,00	126 000 000	3 097,04	12 984,34
2 - Dolní Počernice	185 194,00	78 734,10	988 000 000	5 334,95	12 548,58
3 - Nové Dvory	155 154,00	111 268,00	850 000 000	5 478,43	7 639,21
4 - Krč	6 847,00	12 325,00	316 000 000	46 151,60	25 638,95
5 - Kobylisy	10 067,00	3 000,00	41 000 000	4 072,71	13 666,67
6 - Кује	61 216,00	54 620,00	398 000 000	6501,57	7 286,71
7 - Libeň	17 849,00	20 467,00	389 000 000	21 793,94	25 714,29
8 - Smíchov - Štefánikova	1191,00	5 950,00	153 000 000	128 463,48	25 714,29
9 - Smíchov - Zlíchov	1 958,00	1 950,00	38 000 000	19 407,56	19 487, 18
10 - Vršovice	11 435,00	14 955,00	350 000 000	30 607,78	23 403,54
11 - Beranka (Horní Počernice)	61 632,00	45 048,00	328 000 000	5 321,91	7 281,12
12 - Jinonice - Prokopových	64 603,00	11 915,00	127 000 000	1 965,85	10 658,83
13 - Jinonice - Peroutkova	18 904,00	5 914,00	133 000 000	7 035,55	22 489,01
14 - Nádraží Braník	29 018,00	23 445,60	64 000 000	2 205,53	2 729,72
15 - Libeňský přístav	15 660,00	15 696,00	349 000 000	13 522,01	22 234,96
16 - Centrum Nová Palmovka	16 382,00	45 516,00	1 223 980 000	74 714,93	26 891,20
17 - Palmovka (Sokolovská západ)	16 835,00	32 884,00	682 000 000	40 510,84	20 739,57
18 - Palmovka (Sokolovská východ)	6 449,00	6 911,60	144 000 000	22 329,04	20 834,54
19 - Jinonice - U Tyršovy školy	2 840,00	5 112,00	123 000 000	43 309,86	24 061,03
20 - Jinonice - Waldorfské lyceum	38 968,00	10 952,00	232 000 000	5 953,60	21 183,35
21 - Třeboradice	53 187,00	15 523,00	69 000 000	1 297,31	4 445,02
Total	816 073,00	531 890,20	7 123 980 000,00	-	-

\* Pozemky a nemovitosti v k.ú. Libeň týkající se "Centra Nová Palmovka" byly v rozhodnutím ZHMP v prosinci 2023 ze zřizovací listiny PDS vyjmuty. cz



Nové Dvory location – current state, drone view

# PDS project financing

### PDS prepares a proposed structure for financing affordable municipal housing

On the basis of Assignment No. 810/2021 given by the Prague City Council. PDS has examined the possibilities and is prepared to participate in the creation of a concept for alternative means of financing City of Prague investment projects, especially in the area of affordable housing with the following conclusions and starting points for further possible action.

In its three years of existence, PDS has commenced investment project preparation for more than 60 larger and smaller projects, as well as for larger municipal complexes on City of Prague land, the preparation and implementation of which has a positive influence on the social, environmental, and economic environment in the Czech capital city.

The economic benefit of PDS projects is currently realised especially through the appreciation of existing real estate assets through a proactive, holistic, multidisciplinary investor project preparation and approach.

Hypothetically, if PDS projects were implemented and put into operation today, it can be legitimately assumed that they would generate approximately CZK 1 billion per year in annual rental income. In the future, from the City of Prague's perspective, it is possible to responsibly consider creating a structure for the utilisation of capitalisation revenues, not only from future projects implemented by PDS, but also from rents derived from the City of Praque's current portfolio.

Capitalisation of rental revenues would enable the creation of a new benchmark for the structure and dynamics of financing - speed of preparation, implementation, and operation of PDS or City of Prague projects. The optimal alternative tool - after studying the currently available options - appears to be the creation and utilisation of a so-called 'ELTIF' (European Long-Term Investment Funds) structure.

On the basis of Regulation 2015/760 of the European Parliament and of the Council of the European Union,

ELTIF funds are conceived of as a pooled investment vehicle that corresponds to the mission of the European Investment Bank (EIB) Group, which is to contribute to the balanced and undistorted development of the internal market for long-term investments in the interest of the EU and its Member States respectively.

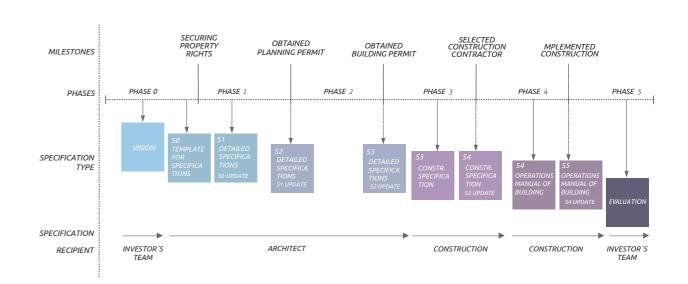
ELTIFs are also designed as an investment vehicle in real assets that, by their nature and characteristics, have value and can provide returns. Real assets shall also mean infrastructure and other assets providing economic or social benefit, such as education, consultancy, research and development, including commercial or residential property, where such property is an integral or complementary part of a long-term investment plan that contributes to the EU's objectives of smart and sustainable arowth.

Given their focus on long-term asset classes, ELTIFs can thus fulfil their intended role as a priority instrument for the implementation of investment plans, through which funds can be channeled to finance European infrastructure and the development of small and medium-sized enterprises from the European Investment Bank Group, as well as private savings.

Development of cumulative costs and investor's influence during the implementation of development projects (source: PDS)



#### Recommended development of the client's brief during the project (source: PDS)





Mgr. Filip Horák Independent attorney specialising in financial law and regulation, worked for several years at KPMG

### New ways of financing affordable municipal housing

The construction of municipal housing is a challenge, especially in terms of securing adequate financial resources. What opportunities do communities, and by extension large cities such as Prague, have in this area? It's true that there has been no larger-scale municipal housing construction in the Czech Republic since 1989. The traditional way, of course, would be to establish and build or expand the housing stock within the framework of the budgets of individual municipalities. These budgets are subject to rules, including a maximum level of public debt. Considering the need to finance other projects at the same time, whether those are routine operational or, on the contrary, strategic and financially complicated projects, as a rule there aren't sufficient funds left for housing construction.

### Is this specific to the Czech Republic, or is the situation more positive in other countries?

It's well known that countries or cities that have housing stock available to them that has been built over the long term – over a period of decades – are better off. It can't be said that any country or local government today has some miracle formula for dramatically speeding up housing construction. However, it is necessary to be inspired and seek out ways of financing other than the traditional one mentioned above. After all, this direction is also preferred by EU public support policy. Specifically we're talking about, for example, the issuance of financial instruments or the use of regulated investment funds.

#### What could come to mind under these alternative means?

Whether it's the EU or other international entities such as the European Investment Bank or the Council of Europe Development Bank, the preference is for financial support, or investment, into transparent structures that are known and understandable even to foreign subjects. A good example is an investment fund established under the Investment Companies and Investment Funds Act using the ELTIF designation. A regulated investment fund may also be attractive to other institutional investors, typically banks, insurance companies, or pension funds.

#### In the case of ELTIF, what kind of a fund is it?

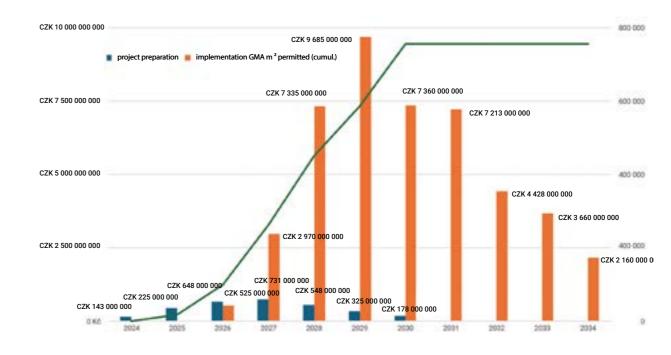
It stands for European Long-term Investment Fund. Regardless of the specific legal form, these funds are designed, as their name implies, to assemble together money for the financing of projects with a long investment horizon and limited liquidity, which at the same time contribute to sustainability and economic and social benefit. The construction of municipal housing for preferred professions fits well with the objectives of ELTIF funds. The relevant legislation dates back to 2015, but the specific conditions for the operation of ELTIFs were quite restrictive, which resulted in the creation of only a small number of these funds. The European Commission has been aware of this problem, which is why the rules are being amended from the beginning of 2024, which everyone hopes will lead to a higher use of ELTIFs.

### Can the functioning of an investment fund be compared to anything?

First of all, it must be said that it is crucial that the community maintain control over the assets it contributes to the Fund or creates within the Fund. The institution of a self-managed fund can serve this purpose, where the city retains shareholder control and appoints its representatives to the fund's bodies. These persons must meet the conditions of expertise and trustworthiness and are, like the entire structure, subject to the approval of the Czech

#### Forecast of future expenditures on preparation and implementation

in the event all projects are gradually prepared over the next 10-12 years



National Bank, which supervises collective investment. The legal form and details of the fund's operation, including for example an investment committee or the wording of the statutes, are flexible, and a solution must be chosen that best suits the needs of the city and investors.

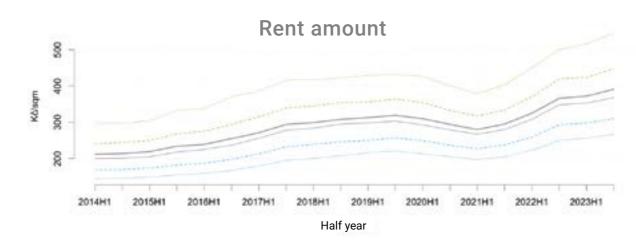
#### Could you also give a specific or model example of what a real estate project implementation could look like using these funds?

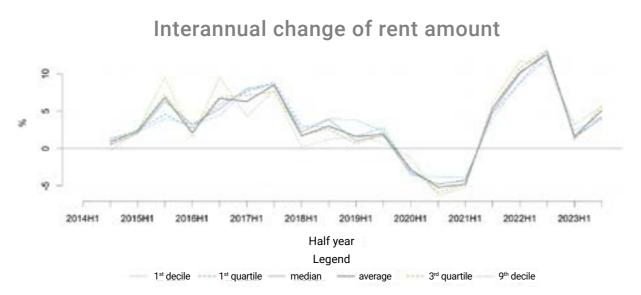
If we consider a self-managed fund in the form of a jointstock company with variable capital, a so-called SICAV [Société d'Investissement à Capital Variable, or investment company with variable capital], then it is possible to use sub-funds as separate units of property, into which the land for the construction would be contributed by the city, funds would be gathered for the implementation of the construction, and then the rent collected. The properties can then remain in the fund or be transferred back to City ownership or sold at the end of the specified investment horizon. Administrative support, whether in the preparatory phase of zoning proceedings or the subsequent collection of rent and property management, can be provided by another professional entity that already has the appropriate background.

# Analysis of rental housing price development

Since 2019, the City of Prague has regularly analysed the development of rent prices in Prague, and has available a unique time series updated every six months with data going back to 2014. The latest analysis for 2023 was commissioned by PDS to maintain a comprehensive view of the development of rents in Prague over time. It is thus possible to compare trends in rent levels with the periods before the coronavirus pandemic.

The dynamic development in 2022 was affected by the wave of refugees in connection with the war in Ukraine, and also by a dramatic change in the real estate market - the unavailability of mortgage financing due to the rise in interest rates. In 2023, a continuing trend of rent increases throughout Prague is evident, especially as a result of difficult to obtain mortgage financing coupled with a continuing lack of supply, with high interest rates reflected in a tendency on the part of investors and developers to stop, delay, or postpone projects due to the significant impact of financing on the cost component of projects. These factors necessarily lead to greater pressure on the rental market and to rising rental prices throughout the capital city.



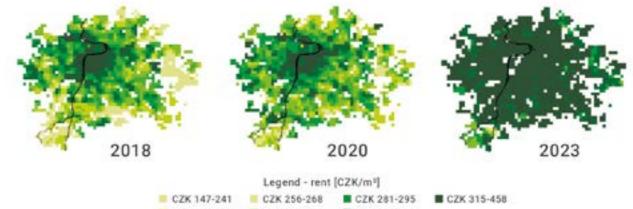


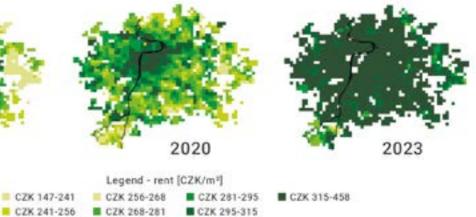
The analysis also examines in detail the development in individual cadastral areas (indicating the number of offers over time, from which the adjusted and analysed data are obtained) and also compares trends between traditional municipal development and Prague housing estates.

In the second half of 2023, rental prices in Prague continued to rise (although mostly not as sharply as at the end of 2022) in all parts of the city, with all larger locations surveyed recording a relative increase. While rents in the first half of 2022 were still making up for the decline in growth during the pandemic, average rents in the second half of 2022 already rose above 2019 levels.

In 2023, rents significantly surpassed pre-pandemic levels, and according to the analysis, the Prague-wide average of offer prices is CZK 391. Taking into account the development of interest rates, insufficient housing supply, economic uncertainty, and the continuing war in Ukraine, further rent increases can be expected during 2024. In 2024, a revival in demand for owner-occupied housing can be expected as a result of a reduction in mortgage rates, but this will be mainly reflected in a renewed increase in property sales prices. In terms of rents, rent levels can be expected to rise throughout the year.

Averages for at least the 40 nearest offers, guantile squares for the entire period





A more detailed chart of of year-on-year changes in rents and flat prices shows that the increase in flat prices culminated in the first and second halves of 2016, and returned to a high rate of growth in the second half of 2019, from which it continued until 2021, when growth began to slow. The tempo of rent increases culminated in 2017, then declined significantly, and rents began to fall in 2020 in reaction to the coronavirus crisis.

However, from the second half of 2021, rents started to rise again, and in the first and second halves of 2022, they reached the highest levels since the beginning of measurement in 2014. This is due both to a recovery in the market after the coronavirus crisis, and especially to the arrival of Ukrainian refugees, who created a positive demand shock on the rental housing market. Since 2018, flat transaction prices have risen at a relatively stable pace and show cyclicality, with the first half of the year rising at a slower pace than in the second half of the year. It is also clearer to see that a more pronounced difference in the tempo of price growth compared to rents prevailed in the first half of the period, roughly to the beginning of 2017, when average rents grew by an average of 3.8% per half-year, while property prices grew by an average of 5.3%.

But there is an even bigger difference in the following years, when flat prices grew at a half-year on half-year rate of 6% by the end of 2022, while rents stagnated and then fell - the average half-year on half-year growth in rents was 3% in the same period.

The full analysis available in Czech on the PDS website www.pdspraha.eu/analyza\_najemni\_bydleni

#### Average rent offer prices

# Analysis of strategic professions in the City of Prague

PDS has an analysis of the so-called preferred professions in the capital city, for which it is entrusted by the city to prepare affordable housing projects. As of 1 September 2022, there were a total of 105,501 workers in selected preferred professions living in the territory of the City of Prague, according to data prepared by CE-Traffic, a company which performs sociodemographic analyses. The largest groups were those working in health care (49,178 people) and education (43,431 people), which together make up 88% of workers in preferred professions. 6,150 people worked in social services, 5,900 in the security forces, and only 842 people worked in fire protection.

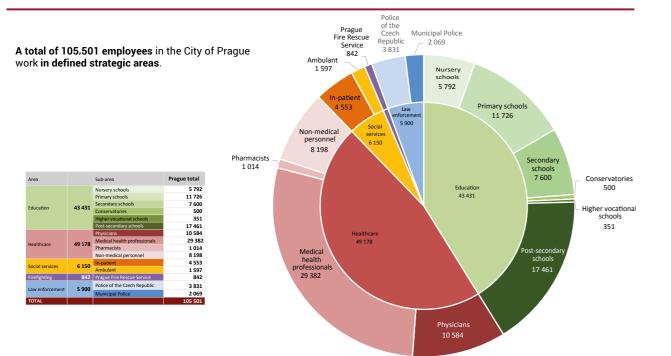
The analysis did not include other workers of state administration and local government, workers of central state offices located in Prague, employees of the Labour Office, or the social security administration. According to the Czech Statistical Office, Prague had a total of 1,275,406 inhabitants as of 31 December 2021. However, according to anonymised geolocation data from mobile operators commissioned by the city in previous years, more than 1.55 million inhabitants actually live in Prague.

The distribution of such jobs in the capital is rather uneven, which is mainly related to the distribution of large hospitals and university campuses as places with thousands of workers in one location - in particular, in Prague 1 and 2, Prague 5, Prague 6, and Prague 8.

However, from these large numbers it certainly follows that every affordable housing project that can provide housing for people in these professions with longer-term tenant security will help ensure the functioning of the education, health care, and social service in the capital city. The needs and deficits of each municipal district can be roughly determined from the details of the distribution of these professions within the city.

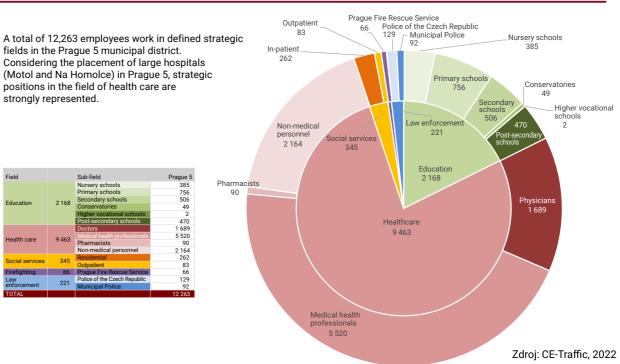
The analysis is available for download on the PDS website www.pdspraha.eu/analyza\_preferovanych\_profesi

#### Summary of analysis results



## Summarised analysis results - Prague 5

#### A more detailed view of the makeup of monitored professions in the Prague 5 district

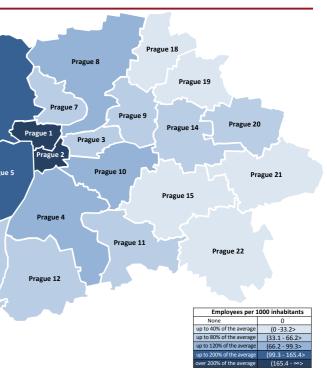


#### Summary of analysis results

Employees in all strategic positions per 1000 inhabitants

Administra- tive unit	total	per 1000 inhabitants	multiple of the average
Prague 1	9 845	369.9	4.47
Prague 2	13 676	296.6	3.59
Prague 3	4 037	55.4	0.67
Prague 4	12 197	90.0	1.09
Prague 5	12 262	137.1	1.66
Prague 6	13 036	115.1	1.39
Prague 7	2 336	51.5	0.62
Prague 8	9 005	79.6	0.96
Prague 9	2 922	49.6	0.60
Prague 10	10 193	93.4	1.13
Prague 11	3 211	39.7	0.48
Prague 12	2 692	40.5	0.49
Prague 13	2 146	32.5	0.39
Prague 14	1 697	34.7	0.42
Prague 15	1 591	32.2	0.39
Prague 16	977	40.1	0.49
Prague 17	812	26.7	0.32
Prague 18	845	25.9	0.31
Prague 19	459	32.8	0.40
Prague 20	641	41,4	0.50
Prague 21	492	27.1	0.33
Prague 22	430	23.3	0.28
	105 501	82.7	

Main analysis outputs. Total number of workers in individual Prague districts



Source: CE-Traffic. 2022

# PDS expert activities

The issue of housing affordability has become a national topic in recent years, and efforts are evident on the part of public administration and the state to take an active approach toward improving the parameters of housing affordability throughout the country.

At the same time, however, in terms of professional preparation of municipal housing projects on the part of the public sector and local government, the setup and functioning of PDS is unique in a national context.

PDS representatives continuously make their experience available in preparing municipal housing construction projects to other entities and representatives in consultations and personal meetings.

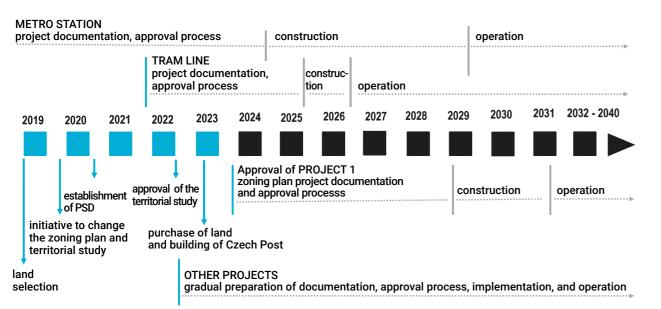
Over the year, PDS welcomed political or professional representatives from Bratislava, Trnava, Zlín, Hradec Králové, and Mnichovo Hradiště.

PDS representatives have been invited to participate in working groups and internal discussions, and as expert advisors to the Ministry of Local Development, Ministry of Finance, Ministry of Industry and Trade, and the CzechInvest agency.

PDS is continuously involved in consultations and the preparation of documents with the City of Prague for intended or implemented real estate transactions. An example would be assessing the suitability of acquiring real estate in Prague 4 from Czech Post.

Another example is in the timetable for the preparation of the Nové Dvory area with all aspects of the complexity of such a process and its long-term perspectives, where PDS representatives document the comprehensive context of preparation of the development of the area, and the preparation of municipal housing construction projects.

#### Nové Dvory AREA DEVELOPMENT TIMELINE



Nové Dvory zoning study, Department of Urban Development, UNIT architects, 2022



# Client's brief Municipal housing construction

In 2020 and 2021, the Guidelines for the Client's brief for Municipal Housing Construction were prepared in cooperation with PDS, IPR Prague, and the Faculty of Architecture at the Czech Technical University in Prague. The document, approved by the Prague City Council in April 2021, fulfils the following objectives:

Unifies practice in preparation of municipal rental housing projects.

Defines the principles of municipal housing construction and recommends an appropriate housing structure.

Serves as a guide to help define the objectives of specific projects and the requirements placed on preparing the proposal.

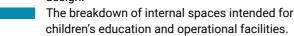
On the PDS side, the client's brief is an integral part of the tender documentation for the selection of designers. According to the decision by the Prague City Council, the client's brief is also binding for all organisations of the City of Prague and is recommended for similar activities of individual Prague municipal districts. The client's brief is available for download at the PDS website: www. pdspraha.eu/zadani-investora-pro-mestskou-bytovou-vystavbu

# Elementary schools construction

In 2022, PDS, in cooperation with the Faculty of Architecture at the Czech Technical University in Prague, prepared the document 'Primary Schools – Manual for Procuring Public Building Projects,' which unifies the practice of procuring public primary education projects in the City of Prague.

The Primary Schools manual comprehensively summarises all aspects public investors should take into consideration. It especially contains recommendations on:

Selecting suitable land and urban/architectural design.

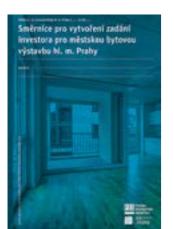


children's education and operational facilities. Exteriors and division of school grounds into sports fields, school yard, traffic accessibility, etc.

Technical, legal, safety, and hygienic regulations.

The Primary Schools manual is available for download on the PDS website:

www.pdspraha.eu/zs-manual-pro-zadavani-projektu-verejnych-budov



Client's brief prepared by Czech Technical University in Prague, IPR Praha and PDS in 2021



Primary Schools – Manual for Procuring Public Building Projects, prepared by the Czech Technical University in Prague and PDS in 2022

# PDS agenda discussed by the Prague City Council in 2023

R-46581 on the proposal for further preparation of the "Beranka - Hor. Počernice - residential building PROJECT 1" housing construction project

R-46582 on the proposal for further progress in the preparation of the "Dolní Počernice - school - project"

R-46586 on the proposal for further progress in the preparation of the "Jinonice - U Tyršovy školy residential building"

R-46587 on the proposal for further preparation of the project for the construction of the "Beranka – Hor. Počernice – school – project"

R-46746 on the proposal to amend the founding charter of Pražská developerská společnost [Prague Development Company], a municipal statutory organisation – within the competence of the Department of Urban Development at Prague City Hall

R-49398 on the market value of land handed over to the Prague Development Company, a municipal statutory organisation

R-49572 on the proposal to amend the founding charter of Pražská developerská společnost [Prague Development Company], a municipal statutory organisation – within the competence of the Department of Urban Development at Prague City Hall



Dolní Počernice, LOXIA, 2023

# Professional partnerships and public appearances

### Cooperation with universities

PDS has intensively cooperated long-term with universities on the preparation of its projects. In the 2021/2022 academic year, students of the Faculty of Architecture at the Czech Technical University in Prague sought out an urban planning solution for the Palmovka development area, and put together a large-format 3D model for it, which was a success at the MIPIM 2022 international trade show in Cannes, France.

The cooperation continued in the 2022/2023 academic year and was focused on the Nové Dvory development area. One of the outputs was also to prepare a large-format 3D model of Nové Dvory, which was presented in

February 2023 to the expert public, representatives of Prague's municipal districts and the specialised media at the Faculty of Architecture at Czech Technical University in Prague. PDS Managing Director Petr Urbánek is one of the lecturers of the Development module taught at the Faculty of Architecture at the Czech Technical University in Prague.

PDS is also a partner in the MBA programme (MBARE – MBA Real Estate) at the Prague School of Economics and Business, which is accredited by the international professional organisation RICS for commercial real estate and its valuation. From 2021 to 2023, PDS was



Meeting with the media on 3 May 2023 at PDS headquarters.

the professional guarantor and consultant for the Development Project class, in which MBARE students examined selected areas owned by Prague City Hall suitable for municipal development. In 2023, MBA students completed a course that examined the possible transformation of the Sofijské náměstí area in Prague 12. With the presentation of the proposed development projects, students of the 4th MBARE class successfully completed their postgraduate





Dolní Počernice, CAMA design office, 2022

studies. The cooperation with MBARE continues in the 2023/2024 academic year, when students of the 4th MBARE class are taking up the Palmovka area, which is a part of the area under ownership of the City of Prague.





### Meeting with the media

In 2023, PDS organised a media briefing to summarise its activities to date and to present its approach to its largest projects. The event was attended by journalists covering Prague, real estate, and development and architecture.





Meeting with the media on 3 May 2023 at PDS headquarters.

### Active participation in professional conferences, seminars, and exhibitions

In 2023 PDS representatives participated in a number of professional conferences, seminars and meetings where they presented the PDS approach to project preparation and specific examples of project and development preparation. The City of Prague participated in the international real estate trade shows MIPIM 2023 and Expo Real 2023, and PDS projects played a key role in presentations.

Trends on the residential market, ARTN discussion meeting, January 2023

Presentation of the Nové Dvory 3D model at the Faculty of Architecture at the Czech Technical University in Prague, Prague, February 2023

MIPIM trade show 2023, Cannes, presentation of PDS projects as part of the City of Prague's presentation, March 2023

The Counselors of Real Estate – International Conference Prague – June 2023

TVIZE Round Table, presentation of PDS projects, September 2023

Can housing be affordable? The Prime + Wolf Theiss discussion event, October 2023

Rough waters for office building rents, ARTN discussion event, October 2023

Expo Real 2023 trade show, presentation of PDS projects as part of the City of Prague's presentation, October 2023

Municipal Architects' Platform conference - Kutná Hora - October 2023 Best of Realty 2023, November 2023



Presentation of the Nové Dvory model at the Czech Technical University in Prague, February 2023

# 2024 Outlook

In 2024, the preparation of projects for which tenders for project documentation suppliers / design work, and architectural competitions that were launched in 2023 will progress significantly.

Contracts have been signed with selected architects/ designers and work has begun on individual phases of specific projects. In can be assumed that for some projects, the first versions of project documentation will already be discussed with the relevant state authorities and the necessary opinions obtained. Intensive work will continue on the coordination and preparation of large development areas – especially in the Nové Dvory, Palmovka, and Dolní Počernice locations.

A regular annual update of the market valuation of the portfolio of land handed over to PDS for management will also be prepared and submitted in mid-2024.





The model of the Palmovka project was created as part of the Department of Building Theory under the leadership of prof. Ing. arch. Michal Kohout

# 3. Environment

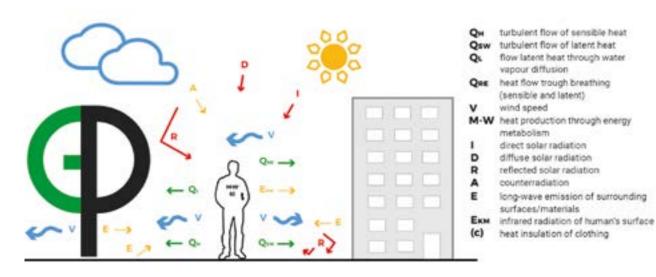
# Sustainability and an environmental approach to projects

When PDS prepares its projects, it takes into account Prague's climate commitment to reduce CO2 by 45% by 2030, and to achieve climate neutrality by 2050. For this purpose, PDS works with a number of Czech expert institutions and companies, and is also involved in international initiatives. The internal sustainability consultant is Ing. Rastislav Tomaščík, MBA, project manager at PDS.

PDS' Czech partners in the field of sustainability include UCEEB (the University Centre for Energy Efficient Buildings at the Czech Technical University in Prague), the

Czech Green Building Council, and the Prague Innovation Institute, with which it is involved in the Cirkulární Praha 2030 [Circular Prague 2030] strategy. The goal is to prepare PDS projects to ensure their increased durability and a low carbon footprint (or climate neutrality) at the same time, a sensible approach to recycling building materials, and the conservation of energy and water resources. These principles are also reflected in the Client's Brief for Municipal Housing Construction, which is a binding base document for the creation of affordable municipal housing.





Energy balance model, © GREENPASS a Katzschner, Campe, Kupski 2011

# The ASCEND EU project

### Creating climate-neutral and energy-positive municipal districts

The ASCEND project is part of a key EU programme called Horizon Europe, which funds research and innovation, including the promotion of climate neutrality among European cities by building energy-positive and CO2 neutral municipal districts (so-called Positive Clean Energy Districts [PCED]). The ASCEND project aims to accelerate the design and implementation of PCED municipal units.

A total of 10 European cities including Prague are participating in the ASCEND project. Using the example of the two most advanced cities (Munich and Lyon), packages of proven, inclusive, and affordable solutions are being assembled, and will gradually be made available to eight partner cities so that they can create their own energy positive and emission-neutral districts.

The entire process of sharing information, its application and evaluation within the ASCEND programme will last until the end of 2027. An integral part of the project will



ASCEND international working group meeting, Lyon 2023

be to propose the implementation of results in other projects and generally to disseminate the knowledge gained to other European cities. The cooperation was launched at an introductory conference of all participants in Lyon in February 2023. A joint workshop was held in the Czech capital in the spring of 2023.

On behalf of Prague, a working group was created with representatives of PDS, the University Centre for Energy Efficient Buildings at the Czech Technical University, and OICT, which will jointly prepare a concept for energy-environmental solutions for the new district project in Dolní Počernice. The municipal rental buildings in that district are being prepared according to passive standards with an emphasis on internal structures' accumulation capacity and passive shading of exteriors. The new district will have its own multi-source energy centre and local distribution system. It is expected to use geothermal and solar energy, as well as a cogeneration gas boiler with its own storage tanks.

In the second half of 2023, a tender for a general designer of the second phase of municipal construction on the "DLP Project 2" in Dolní Počernice was formulated

- into which UCEEB's energy solutions were significantly reflected. The tender will be announced in Q1 2024.



ASCEND international working group meeting, Lyon 2023

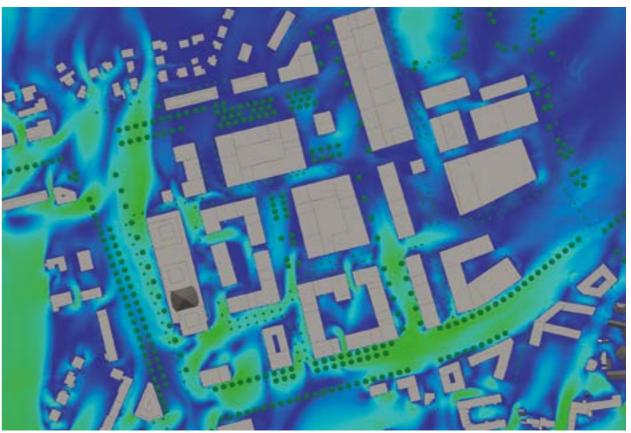


ASCEND international working group meeting, Lyon 2023

# Working with Buildigo Detailed environmental study for Nové Dvory

PDS is engaged in all aspects of the development of individual sites, and for this reason a detailed environmental study has been commissioned for the Nové Dvory site. Its goal was to obtain an expert assessment of the impact of the Nové Dvory zoning study on public spaces as part of the newly-built site and its immediate vicinity, and further to utilise recommendations for optimising the proposal so that it will be possible to avoid potential negative impacts, as well as to create high-quality living conditions for future residents.

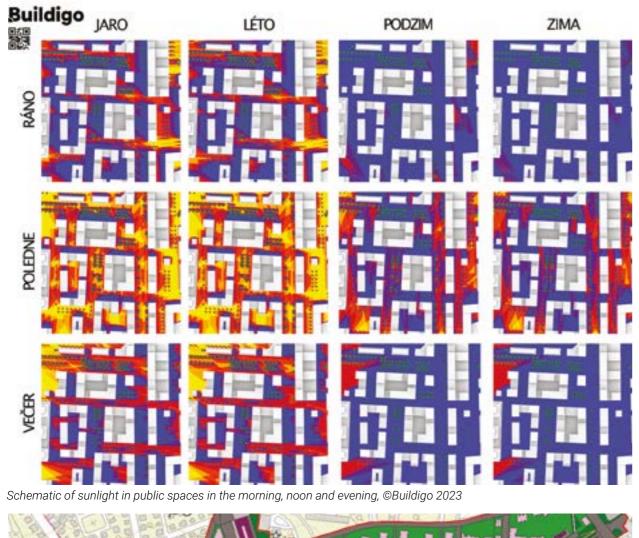
The Nové Dvory project aims to create welcoming and open spaces, to integrate main roads, and to incorporate green-blue infrastructure into the overall proposal. As part of a comprehensive environmental study, wind



Overall view of the Nové Dvory site showing wind speed at the 1.5m level, ©Buildigo 2023

flow in the area, the influence of solar radiation, the effect of greenery in terms of shade, improving thermal comfort and evaporation, and a balance of rainwater were assessed.

Within the environmental study, a dynamic simulation was performed on wind flow and solar radiation in the study area, based on climate data specific to the location, as well as information on existing and proposed buildings and vegetation. For the purposes of the study, digital documents including a 3D model of the proposed construction area were made available. The outputs are a graphic representation and text evaluation at multiple elevation levels in the study area.



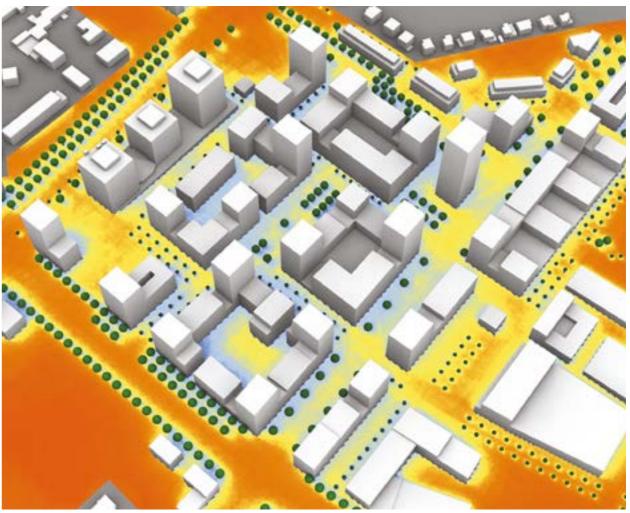


Basic division of site areas, © Vodohospodářský rozvoj a výstavba a.s. 2023

Thermal comfort was evaluated in greater detail for what will be the most-used public spaces in the areas where Squares I and II will be. The GREENPASS international assessment tool in the form of Climate Check was used to calculate the 'feels like' temperature in the areas of Squares I and II. This tool enables the analysis and evaluation of the microclimate in the given areas with regard to various factors affecting human comfort. Evaluation criteria included air temperature, relative humidity, wind speed, and exposure to the sun. These factors have a significant impact on the subjective perception of temperature and comfort in the given environments.

A simulation of lighting and shade makes it possible to assess the expected course of shading and sun over the year in a given location.

At the Nové Dvory site, most of its rainwater is drained away from the area by storm sewers. The study of



Total amount of solar radiation - intersection of Chýnovská and Libušská streets, © Buildigo 2023

rainwater at the Nové Dvory site addressed support for the natural water cycle and the return of rainwater back to the point of its impact. The blue-green design solutions were examined through calculations, and at suitable places were adjusted to minimise the runoff of rainwater into sewers. Green roofs, storage tanks, and a requirement to use rainwater from roof areas are proposed in the area under consideration. Water from selected roofs will be diverted into storage tanks, and can be suitably used for watering or in the building. Green belts in the road are being considered as culverts to slow runoff from paved areas. Surface retention basins are another element that improve the microclimate, add to the aesthetic value of the area, increase biodiversity, and slow and retain runoff.

# Working with Ecoten Energy/technical project solutions

In cooperation with the Ecoten consulting company, PDS is preparing energy solutions for individual residential buildings and residential units. These solutions are based on requirements set by current EU and Czech legislation for new construction of residential buildings, which include, among other things, construction according to passive standards, limited CO2 emissions, and careful handling of water and energy. Ecoten reflected PDS' requirements into the specifications for designers of upcoming municipal housing construction, the purpose of which is cost effectiveness while maintaining guality during the preparation, implementation and longterm operation of individual bulidings.

For example, for the Dolní Počernice 2 project, Ecoten is involved in a centralised energy concept, which is one of the solutions proposed in the ASCEND project. The technical solution for the Dolní Počernice project will integrate such things as:

Local distribution system (LDS), enabling the consumption of electricity generated primarily on-site. The LDS will be supplied with its own electricity generated by photovoltaic panels on the roofs of buildings and in the gas cogeneration unit.

- An Energy Centre whose main source of heat production is a heat pump supplemented by a cogeneration gas boiler and storage tanks.
- For periods with very low electricity prices, the Energy Centre will be supplemented with a powerful electric boiler providing rapid water heating into storage tanks.
- The construction of all buildings will be designed using passive standards with emphasis on the accumulation capacity of internal structures and passive shading of exteriors based on their position with regard to the cardinal directions.
- Throughout the preparation of the proposal, the design of buildings and public spaces will consider the results of CFD modelling simulating the main wind flow and other climate data on the site.



Example of a bio-solar roof, school building in Prague 9, © Ecoten

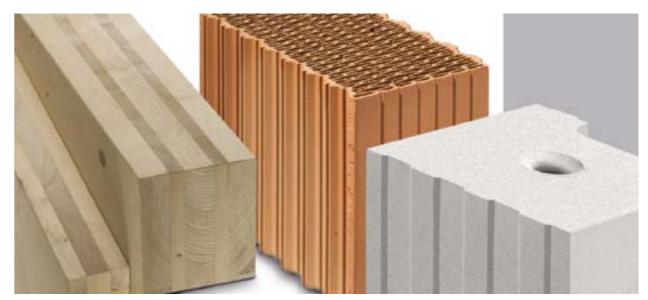
# Internal assessment – construction from CLT panels Examining the Jalový dvůr building-construction system with regard to

the building's life cycle

At the smaller Jalový dvůr housing complex, which is part of the Nové Dvory project, PDS tested and assessed the use of three variants of a building-construction system: 1) masonry made of sand-lime blocks, 2) masonry made of ceramic blocks, 3) wooden made of solid wooden cross-laminated timber (CLT) panels.

Given that the housing complex is designed as low-rise (maximum 2-3 above-ground floors with a capacity of around 40 flats and non-residential space on the ground floor), it was possible to consider a wooden building due to the low fire height.

Based on an internal assessment of all of the above parameters, the most advantageous variants were the sand-lime bricks and CLT panels. The differences between the two variants are minimal when all of the above inputs are taken into account. The decisive parameters are the initial construction costs, the size of the leasable floor



An illustration of the three variants of the construction systems under consideration

area (due to differing thickness of the structures), taking into account the binding and production of CO2 emissions in manufacturing the materials, and the duration of construction.

The SWOT analysis compared the advantages, disadvantages, opportunities, and threats of each variant.

- In the case of sand-lime masonry, it is possible to emphasise the accumulation capabilities of the construction, which leads to less heating consumption and higher thermal inertia.
  - For CLT panels, it is the speed and precision of implementation, due to industrial production (the potential to complete construction in Q2-Q3 2026) and the opportunity to dismantle the building cheaply if another use becomes necessary.



**Ing. Jiří Tencar, Ph.D.** ECOTEN managing director

### We prepare smart and healthy residential buildings

What are the greatest challenges facing investors or developers of new residential construction in terms of climate change and environmental protection? What must be taken into account in present-day considerations and specifications in order to fulfil current/future legislative requirements and ensure the comfort of the flats' future users, while at the same time keeping their future operation within reasonable limits? Investors today face several challenges that are almost contradictory. People spend up to 90% of their time in built environments, meaning in buildings. This means that the primary task is to ensure a quality and healthy microclimate, because this directly affects our health. In order to ensure a high-quality microclimate, you have to use certain technologies such as forced ventilation, heating, and sometimes even cooling and artificial lighting. These technologies are powered by various fuels, and also require service and maintenance. And it's necessary to design them to be used as efficiently as possible while keeping consumption to a minimum. At the same time, due to climate change, in our latitude we have to think about how to ensure comfort even in summer, when the number of tropical days is increasing. Which leads to the need for additional technologies or construction modifications. At the same time, we try to maximise the local production of renewable energy or to use the energy potential of the environment - air, land, or water.

With regards to construction, long-term sustainability is a broad term. What principles are you focusing on in the case of the PDS portfolio, which assumes around 60 separate projects? Have you set any priorities that you will want to apply to most or all projects?

The basic task is to design the building in such a way that energy losses are minimised, meaning this is about requirements on the robustness of the technological equipment. Then to design the most effective solution from a long-term perspective, i.e. in terms of life cycle costs. It's important to remember that the investment makes up 10 - 30% of life cycle costs. Significantly more resources are consumed during the building's operation. These are the main priorities according to which the optimal solution should be sought.

Could you name a specific project of a smaller residential building from the PDS portfolio (for example V Botanice, Zlíchov, etc.)? What specific benefits will the sustainable solutions you propose have for both future tenants and the city as the owner/operator of these flats? The V Botanice project, like other projects, should be

The V Botanice project, like other projects, should be rented to workers in so-called preferred professions. We create high-quality and healthy housing for our tenants, where they will not be exposed to any large fluctuations in the prices of electricity or water. Services and maintenance will be reflected in the amounts, but these amounts are much more predictable in the long run, and at the same time their prices can be reduced due to economies of scale, because there is an effort to use similar technologies in other facilities. A space opens up for the city to do a better job with rent levels and less risk of the need for interventions/subsidies in the event of large fluctuations in the price of electricity and water, and the risk of energy poverty among tenants.

The new district in Dolní Počernice is being prepared according to the principles of modern urbanism, and you're preparing your own energy-environmental concept for it. What does it consist of, and how will the upcoming construction and upcoming district be unique in a Czech context? This is a larger area where there will be smaller residential buildings. Again, the idea is to design buildings to be as energy-efficient as possible. In this case, the energy supply would be central, both for heat (a so-called thermal energy supply system), and for electricity (a so-called local distribution system). At the same time, tenants would not only use the Energy Centre for the sale of heat and electricity, but also for other commercial activities, such as offering flexibility to the grid, i.e. switching off consumption during peak load times, or, on the contrary, activating consumption during times of surplus,

as well as using predictive management to buy and sell electricity to the grid depending on the price on the network, and taking into account consumption, production, and accumulation for a given time period.

The energy crisis which erupted in the wake of the war in Ukraine has shown that one of the ways to reduce consumption, and therefore energy costs, is to reduce waste and to be more economical with consumption. The same applies for other resources, such as drinking water. What water-related solutions are you recommending and are putting into proposals for municipal affordable housing? We're also trying to work with water in individual projects. The rules for managing rainwater are very much determined by legislation. We try to use rainwater to water the greenery, and in doing so, to create a pleasant environment for residents. Water consumption in residential buildings can be roughly divided into 50% for flushing and 50% for sinks and showers. We can purify water from sinks and showers and use it as greywater for flushing. This saves a significant amount of drinking water. Not only do we encourage the conservation of drinking water, but we are also protecting tenants from possible large fluctuations in the price of water such as the ones that recently occurred with energy, and which can easily occur with water. We're already seeing water shortages in many places in southern Moravia.

In Prague, one of the main topics of discussion is transportation and support for eco-transport and alternative modes of transport, and public transportation in general. How is this reflected in the design of the residential buildings that PDS is preparing in cooperation with you? For projects, we're considering offering chargers for electric cars. Nevertheless, there are still many unknowns, such as in the area of fire safety measures. It is also one of the areas where technological developments are moving faster than the preparation of related legislation.

#### Is there any European city/district or urban area that could serve as a relevant source of inspiration for Prague in the field of energy? Why? What can we learn?

In Vienna there's the Aspern district, which is similarly designed. At the same time, it is built with support for community and social contact in mind. Another similar smaller district can be found in Stockholm: Hammarby Sjöstad. For these foreign examples as well as for the Prague Development Company, the goal is to build longterm sustainable construction in accordance with the New European Bauhaus initiative, i.e. enriching, sustainable, and inclusive construction.

# 4. PDS project overview

# Key locations

LEGEND:



Land for housing projects

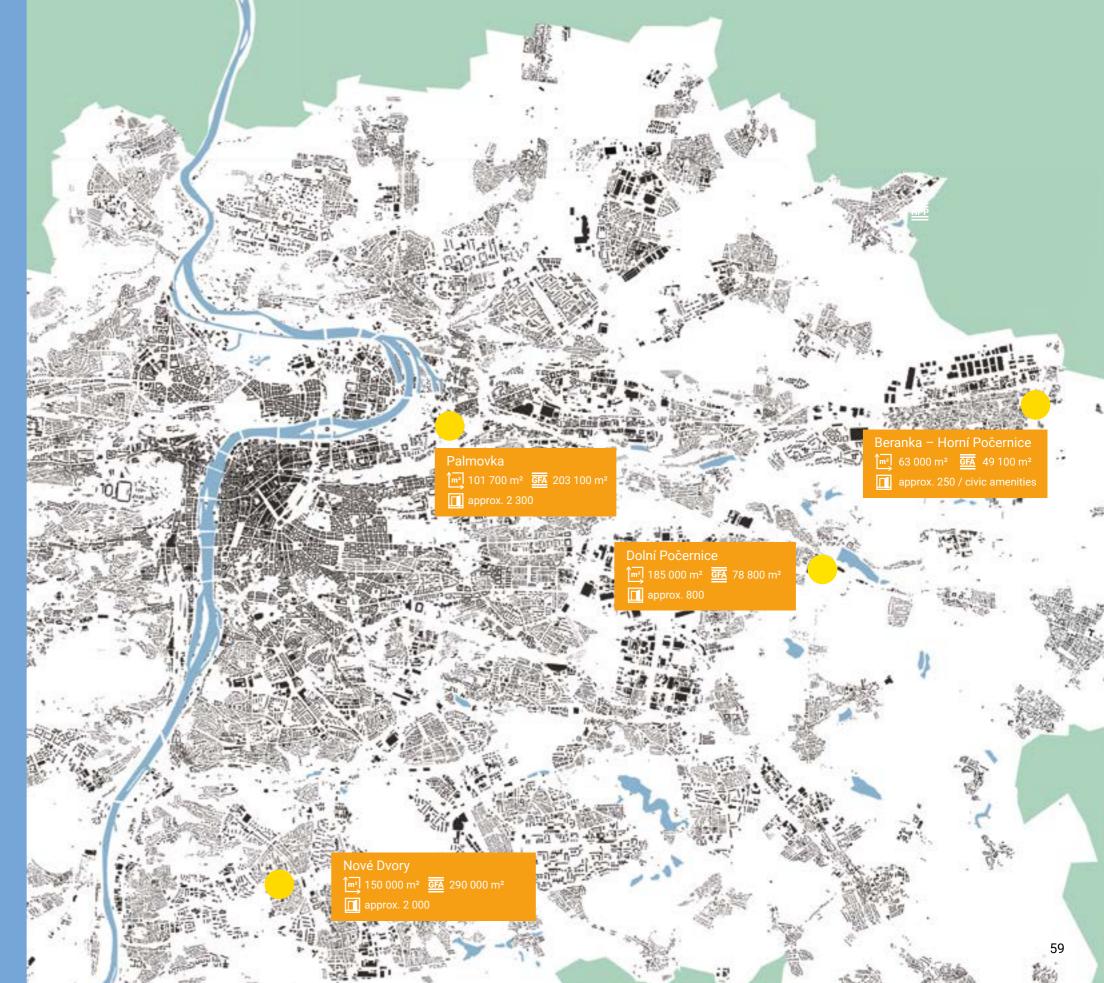


land area

**GFA** gross floor area (GFA)



number of flats



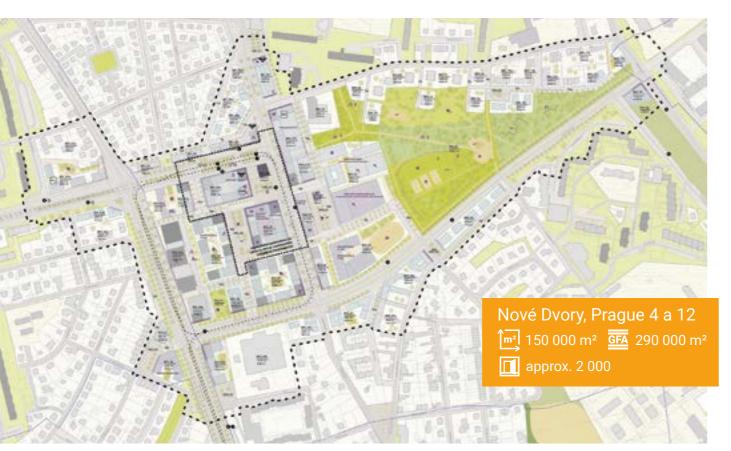
# Nové Dvory, Prague 4 and 12

### Residential district near a new metro station

The Nové Dvory transformation area, with an area of about 30 hectares, is one of the City of Prague's largest continuous property holdings. In the vicinity of the new metro station, which is expected to be completed around 2029, Prague will build a municipal district with affordable rental housing and complete civic amenities in the form of a kindergarten and primary school, a cultural centre, space for shops and services, public transport lines, and facilities for sports and recreation. By connecting the Jalodvorská louka park with new squares, a generous public space intended for recreation will be created. The new district is expected to provide homes for up to 5,000 people and job opportunities for approximately 5,000 more.

### Nové Dvory zoning study

Studio Unit architects has prepared a zoning study of the entire transformation area for the Department of Urban Development of Prague City Hall, which was discussed with representatives of the Prague 4 and 12 municipal districts. It was presented to the public as part of the participation process and approved in September 2022. It represents a societal agreement on the development of the area and is the basic conceptual starting point for the preparation of the development of the entire site and its individual projects. It is based on the principles of sustainable development and a compact city of short distances and full of greenery.



# Four pillars of sustainable municipal development

#### Social

Diverse groups of citizens, regardless of age or socioeconomic status, will live in Nové Dvory. The intention of the City of Prague is to build quality affordable rental housing which will be intended primarily for so-called preferred professions (teachers, health care workers, police officers), single parent families, and for independently living seniors.

#### Economic

In the central part of Nové Dvory, especially near the future metro station and to a lesser extent also on the new squares, the construction of administrative and retail space is planned. Revenue from the new municipal properties will significantly support the economic return on public investment in the area.

#### Environmental

The intensive use of the site, which is directly connected to various modes of public transportation with sufficient public services, including education, is a key parameter for the sustainability and efficacy of the development of this new part of the city. This will also create a generous public space consisting of several squares in Nové Dvory, some of which will be connected to the Jalodvorská louka park. The development of a so-called blue-green infrastructure is planned for the area, including rainwater catchment that soaks into the soil and is not drained away by sewers, as well as the cultivation of the Jalodvorská louka park and the creation of new green areas. By building a metro station and extending the tram line from Modřany, the city will support the use of public transport.

#### Cultural and educational

A number of cultural and leisure facilities are part of the Nové Dvory proposal, including a nursery school, a primary school and possibly a secondary school, a cultural centre, sports hall, and outdoor playground. The restaurants and cafés that will be opened in the commercial parts of the project will also be of considerable importance. Current and future residents will no longer have to frequently commute to other parts of Prague 4 (to Pankrác, for example) or directly to the city centre.

## Nové Dvory spatial model

In the 2022/2023 academic year, PDS continued its cooperation with the Faculty of Architecture of the Czech Technical University in Prague. During the winter semester, students in the Department of Building Theory took part in the design of a large-format 3 x 3 metre 3D model of Nové Dvory. The model was exhibited in the foyer of the Faculty of Architecture at the Czech Technical University in Prague in Prague's Dejvice district from 23 February to 16 March 2023 for both the expert and general public. It can now be found in the PDS headquarters in the Radniční domy building in the centre of Prague, and can be visited by appointment.

The Nové Dvory model was created in the Department of Building Theory under the leadership of prof. Ing. arch. Michal Kohout.





### First projects

Investment and project preparation is beginning on a total of almost 300,000 m<sup>2</sup> GFA (gross floor area, the total potential after approval of the pending zoning plan amendments), especially for municipal housing. At the same time, a significant part of it, estimated today at around 130,000 m<sup>2</sup>, will be used for offices, restaurants, cafés, shops and services, a nursery school and primary school, a cultural and community centre and sports facilities. The preparation of the new district is taking place in parallel with the construction of a new metro station with an extension of the tram line from Modřany, which will end at the metro. The site is divided into individual projects that will be implemented gradually over a period of 10 to 15 years.

## Jalový Dvůr housing complex

The Jalový Dvůr housing complex is the furthest along in preparations with around 40 residential units, for which PDS has tested variants on solutions for a building and construction system in terms of the building's life cycle (50 and 80 years). The variants were: 1) brick from sand-lime blocks, 2) brick from ceramic blocks, and 3) wood from solid wood cross-laminated timber (CLT) panels. The following indicators were calculated for each variant: internal rate of return and net present value. At the same time, a SWOT analysis identified the strengths, weaknesses, opportunities, and threats of the design variants. Based on an internal assessment of the above parameters, the most advantageous variants were the lime-sand bricks and CLT panels.

In 2023, preparatory work was carried out on other projects, in particular the multifunctional Nové Dvory PROJECT 1, a project which is directly connected to the future Nové Dvory metro station.

Visualisation of the Jalový dvůr project, monom works, 2022





# Palmovka, Prague 8

### A new, vibrant centre on the right bank of the Vltava

Land owned by the City of Prague and the Prague Public Transit Company, which is located right next to the Palmovka transport hub, represents the largest development area in the wider city centre which the city controls in property terms. PDS is preparing a completely new district with the ambition of it becoming a vibrant centre on the right bank of the VItava. It will consist of residential and office buildings with restaurants, cafés, shops, and services. Civic amenities are also planned in the form of a primary school and a cultural centre with a library.

Great attention will be paid to high-quality public space. Palmovka is expected to have a central park with a promenade, several smaller squares and a number of courtyards, which will be pleasant places for children and adults thanks to high quality landscape architecture.

### Urban planning study of Palmovka

For the key part of the Palmovka development area, the so-called 'Pentagon', the Prague 8 municipality initiated the creation of an urban planning study based on the agreement of all cooperating partners (Prague City Hall, the Prague 8 municipal district, the Prague Institute of Planning and Development, and PDS), which captures the consensus of these partners on the urban concept for the area and which forms the basis of the ongoing changes to the zoning plan.

The urban planning study prepared by Unit architects respects the existing values of the site, incorporates residential and office buildings into it, and creates an attractive public space between them. The study is based on the principles of sustainable development and a compact city with a sufficient amount of well-designed green spaces and parks.

Palmovka, background from an urban planning study procured by the Prague 8 municipal district, UNIT architects. 2022



### Palmovka spatial model

A physical model of Palmovka is also based on the aforementioned urban planning study, which illustrates the possibilities of the concept of development of the new municipal district. It emerged from collaboration between PDS and architecture students of the Czech Technical University in Prague on the urban and architectural design of Palmovka in the 2021-2022 academic year.

A total of 45 students from three studios at the Faculty of Architecture at the Czech Technical University in Prague (Kohout-Tichý, Juha-Tuček and Stempel-Beneš) created a 2 x 3 metre physical model of Palmovka in one semester which contains 60 various buildings in 12 blocks. Upon completion, the model was successfully presented at the prestigious MIPIM 2022 real estate trade show in Cannes, France, where it was positively received. It was then brought to the PDS headquarters in the Radniční domy building in the centre of Prague, and can be visited by appointment.

### First projects at Palmovka

On 8 hectares of municipal land, 2,200 municipal flats and around 40,000-50,000 m<sup>2</sup> of space are being prepared which can be used for offices, retail (restaurants, cafés, small shops and services) and other noncommercial purposes (especially a primary school, cultural or community centres, library, and children's leisure activities). Implementation will take place in stages over a period of 5-15 years (until 2035).

PDS is gradually publishing individual sub-projects. These include, for example, the Palmovka – Zenklova residential building, for which PDS has selected the MS Architects studio as designer. Additional sub-projects will be announced in 2024, and tenders will be announced for their designers.

Palmovka Zenklova - architectural study, MS Architekti, 2023





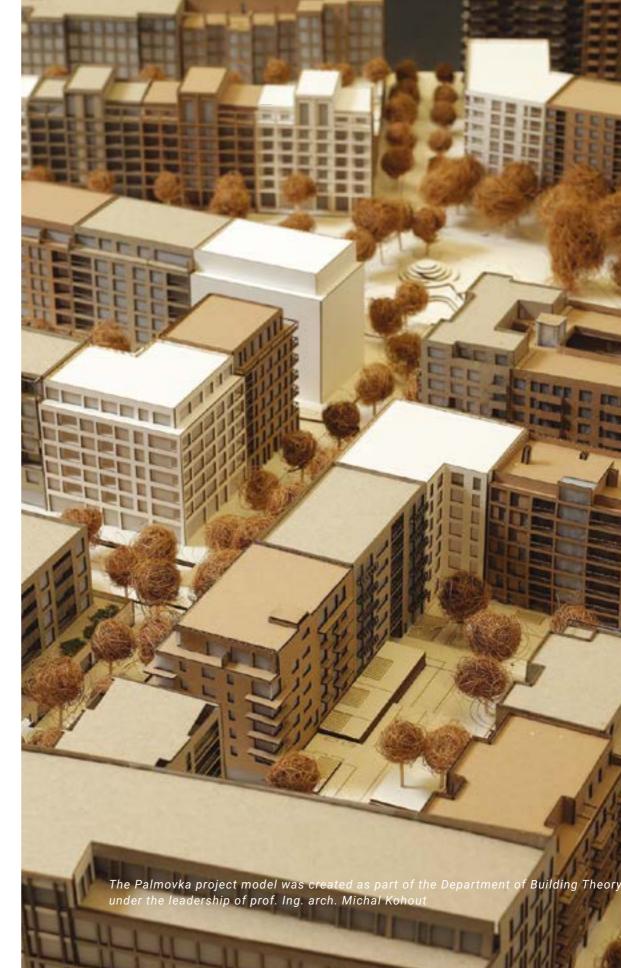
### Headquarters of EUSPA – the European Union Agency for the Space Programme

A key shift for the location is the revitalisation of the never-completed Centrum Nová Palmovka building, which the City of Prague, the Czech Finance Ministry and Ministry of Transport have agreed is a suitable building to house the new headquarters of the EU Agency for the Space Programme (EUSPA), and in August 2022 a future lease agreement was signed between the City of Prague and the Finance Ministry in relation to the building. In the second half of 2022, PDS, on the authority of the Prague City Council and in cooperation with both ministries and EUSPA, started to prepare a project for the transformation of this building for its new purpose.

In 2023, PDS prepared transformation documentation by defining a detailed assignment for next steps and implementation of the transformation of the Centrum Nová Palmovka building into the EUSPA headquarters. These documents served as a key input into the tender documentation, on the basis of which the City of Prague will select a Design & Build contractor.

Centrum Nová Palmovka, status in summer 2023





#### Dolní Počernice A new district in the style of a 21st century garden city

With a total area of 18.5 hectares, the land in Dolní Počernice is one of the largest contiguous areas owned by the city where it is possible to build affordable municipal rental housing. Thanks to a suburban railway and its proximity to he nearby city ring road, the area is well connected to the centre and offers plenty of opportunities for recreation and various leisure activities.

In Dolní Počernice, a district conceived of as a garden city is being prepared according to the principles of sustainable development. Within a 10- to 12-year horizon, 800 residential units will be built in single-family homes, terraced houses, and low-rise residential buildings with common gardens and courtyards that tie in sensitively to the surrounding residential development. The project will also include smaller commercial spaces for retail shops, spaces for small services or medical offices, public spaces with ornamental greenery, and sports facilities for children and adults. In the next stages, a primary school – to which a significant area is designated under the master plan – will be part of the zoning plan. Given that housing construction is in accordance with the zoning plan, PDS has divided the land entrusted to it into four project parts which should be implemented in phases from 2025 to 2034:

- Dolní Počernice Project 1 includes the construction of approximately 270 flats (approved by the Prague City Council in 2021)
- Dolní Počernice Project 2 includes the construction of approximately 550 flats (approved by the Prague City Council in 2022)
- Dolní Počernice Infrastructure (all networks, sewerage, waste, transport connection approved by the Prague City Council in 2022).
- Dolní Počernice School. Part of the territory also includes a large area designated by the zoning plan as public amenities, and given the scale of the project and other projects in the area including private ones it seems necessary to also prepare the construction of a primary school.



#### Development in Dolní Počernice – urban and typological concept

Through architectural workshops, PDS prepared an urban and typological concept for the entire area, a so-called master plan. In 2022 it announced the first tender for a design contractor for Project 1 in such a way that the project documentation will contain advanced solutions for energy saving and necessary community features.

Dolní Počernice, LOXIA 2023





# European project for climate-neutral and energy-positive municipal districts

With the project for a new district in Dolní Počernice, Prague has joined the EU ASCEND project, which aims to build energy-positive and emission-neutral districts. A working group was created with representatives of PDS, the University Centre for Energy Efficient Buildings at the Czech Technical University, and OICT, which will jointly prepare a concept for energy-environmental solutions for the new district project in Dolní Počernice, which is being presented as part of European cooperation. The municipal rental buildings there are being prepared with passive standards with an emphasis on internal structures' storage capacity and passive shading of exteriors. The new district will have its own multi-source energy centre and local distribution system. It is expected to use geothermal and solar energy, a cogeneration gas boiler and its own storage tanks.

#### An energy self-sufficient district

In cooperation with the consulting company Ecoten, PDS is preparing energy solutions for individual residential buildings and housing units. These solutions are based on the requirements set by current European and Czech legislation for new construction of residential buildings, which include, among other things, construction using passive standards, limited CO2 emissions, and careful handling of water and energy. On behalf of PDS, Ecoten reflects these requirements into the brief for designers of municipal affordable housing.

A concept of so-called centralised energy is being prepared for the new urban area of Dolní Počernice. It is assumed that the energy buildings there will be connected to:

- A local distribution system (LDS), enabling the consumption of electricity generated primarily on-site. The LDS will be supplied with its own electricity generated by photovoltaic panels on the roofs of buildings in the gas cogeneration unit.
- The energy centre, whose main source of heat production will be a heat pump supplemented by a cogeneration gas boiler and storage tanks for the purpose of risk diversification. In periods of very low electricity prices, the Energy Centre will be supplemented by a powerful electric boiler, providing fast heating of water in storage tanks.
- The construction of all buildings is designed using passive standards with emphasis on the storage capacity of internal structures and passive shading of exteriors based on their position with regard to the cardinal directions.
- The design of buildings and public spaces will be taken into account throughout the design process period.
- The results of continuous CFD modelling simulating the main flow of wind and other climate data at the site.

## Beranka, Prague 20 Expansion of residential construction and civic amenities in Horní Počernice

The municipal land at the Beranka site has an area of 6.3 hectares, and is planned to be used for the construction of around 250 units of municipal affordable rental housing, a primary school for around 540 children, and a sports complex. In 2023, PDS commissioned a master plan of the area, which will lay out the new construction and divide it into suitable implementation units. PDS will then select the suppliers of individual project documentation for the zoning and planning procedures. The construction of low-rise residential buildings according to the low-rise/high-density urban concept is expected. The flats will be connected to the existing development in Horní Počernice.

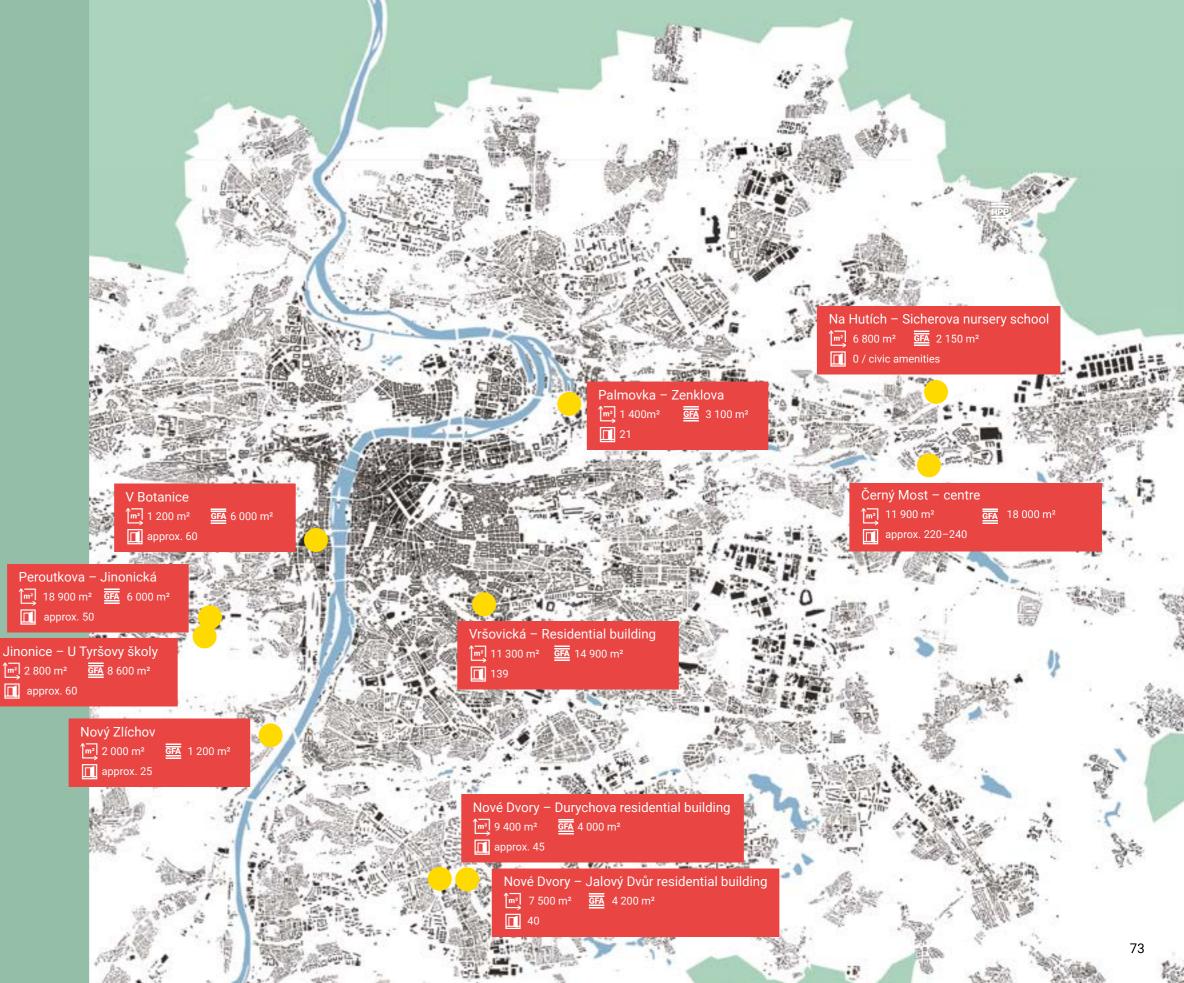
Within the framework of this project, the city is significantly accommodating the request of the Prague 20 municipal district to construct a primary school and is proposing it for the originally purely residental Beranka project. Other areas in Horní Počernice designated by the zoning plan for education are mainly owned by private owners, who are not considering using their land for this purpose.

Master plan - Projektil architects/environmental study – Buildigo, 2023



## Projects

Projects approved by the Investment Expert Committee (IEV in the Czech acronym) and discussed by the Prague City Council



#### LEGEND:



Land for housing projects



number of flats

#### Vršovická – Residential building, Praha 10

In 2022, PDS continued to coordinate project preparation between the City of Prague and the Prague 10 municipal district, and announced an architectural competition for the design of the Vršovická residential building, with 139 residential units and retail space on the ground floor. The assignment also included the design of public spaces and the nearby Botič riverbed.

A total of 47 studies were submitted from the Czech Republic and abroad, of which 5 studios advanced to the second round of the competition. In November 2022, an expert jury led by ing. arch. Pavla Pannová announced the winners and determined the order of competitors.

PDS completed the administrative process of negotiating a contract with Kuba + Pilař architects, the winning architectural firm.

Further progress has been delayed due to administrative complications associated with the process of transferring the rights to the building permit from the Prague 10 municipal district and Společnosti Praha 10 Majetková [Prague 10 Assets Company] to the City of Prague. The residential building project should be implemented following the permit procedure, probably between 2026 and 2028.

Situation of the designed Vršovice area, winning architectural design by Kuba & Pilař Architects, 2022.





Vršovická residential building, winning architectural design by Kuba & Pilař Architects, 2022.



#### Smíchov - V Botanice, Prague 5

In 2022, PDS announced the first ever architectural competition for a municipal residential development in Prague. It was for a smaller plot of land in Prague 5, in an attractive location near the Baroque Portheimka villa, not far from the Anděl metro station. According to the competition specifications, the residential building had to contain up to 60 residential units and spaces for shops and services on the ground floor.

The competition was organised according to the rules of the Czech Chamber of Architects and led by an expert jury which consisted of respected architects, urban planners, representatives of the PDS project team, leadership of the Prague 5 municipal district, and Prague City Hall.

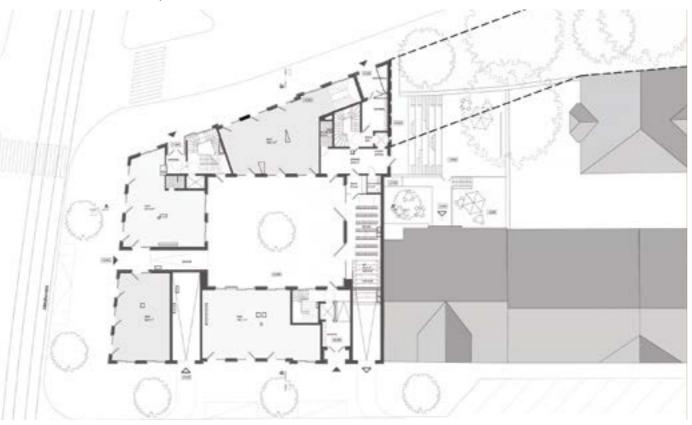
The architectural competition was announced in March 2022, and 30 studios entered the competition from the Czech Republic and abroad. Five studies were selected for the second round and produced a competition design. In July 2022, an expert jury determined the winner and the further ranking of the competition proposals. The winner was announced in August 2022: Atelier bod architects from Prague.

Intensive project preparation was underway in 2023, and the permitting process will commence in 2024 if optimal progress is made, with the necessary permits expected to be obtained at the beginning of 2025.

The winning proposal envisages a total of 56 flats and ground floor retail space. It should be implemented following the progress of the permitting process with an expected start in 2025-2027.

www.pds-vbotanice.eu

V Botanice – floor plan, Atelier bod architects, 2022





V Botanice, winning architectural design by Atelier bod architects, 2022



#### Nový Zlíchov, Praha 5

On a smaller municipal plot of land with less than 2,000 m<sup>2</sup> located in a residential part of the Prague 5 municipal district, PDS is preparing a smaller residential building with approximately 25 municipal rental units.

The land is located on the slope of Děvín hill, which has beautiful views of the Vltava valley and Kavčí Hory. The site seems to call for the construction of a terraced building, with the majority of residential units having an accessible terrace, balcony, or private garden area. Given the nature of the project, PDS anticipates that it will be primarily used by families with children.

PDS announced a tender for project preparation which was won by the Kava company. Intensive project preparation was underway in 2023, and the permitting process will commence in 2024 if optimal progress is made, with the necessary permits expected to be obtained at the beginning of 2025. Depending on the permitting process, construction of the project could begin within two to three years.

www.pds-novyzlichov.eu

Nový Zlíchov residential building, Kava, 2022





Nový Zlíchov residential building, Kava, 2022



#### Jalový Dvůr residential building, Prague 4

Jalový Dvůr is the first municipal housing construction project on the Nové Dvory site, where the City of Prague is preparing to build a new district with its own metro stop, municipal housing construction, complete public amenities, and cultivated public space.

The upcoming Jalový Dvůr complex of low-rise residential buildings, located between Libušská and Kunratická streets, will connect to the surrounding Libuše residential development and will combine blocks of flats and terraced houses.

As part of the project, PDS will use environmentally friendly materials that meet circular economy requirements, enable water conservation (by using rainwater), and energy savings (by orienting the building appropriately, installing heat pumps, and the placement of photovoltaic panels). PDS also examined in detail the optimal construction and design solutions for further progress and continuation in the detailed design phase (more in the 'Environment' chapter).

Intensive project preparation was underway in 2023, and the permitting process will commence in 2024 if optimal progress is made, with the necessary permits expected to be obtained at the beginning of 2025. The project will be implemented following the permitting process with an expected completion date in 2025-2026.

www.pds-jalovydvur.eu

Jalový Dvůr, monom works, 2022





Jalový Dvůr, monom works, 2022



#### Palmovka – Zenklova, Prague 8

On City of Prague land in a clearing near the intersection of Zenklova street and the Libeň bridge, PDS is preparing the construction of two multi-functional buildings intended for municipal rental housing with 21 residential units. Non-residential spaces suitable for retail and administrative use are planned on the ground floor and first two floors. One of the buildings will also include an entrance to the new metro station.

In January 2022, PDS announced a tender for the architectural designer for the entire site and project documentation for the first of the buildings. Based on the result of the tender, PDS started cooperation with MS Architects, with whom a contract was signed for design work; project preparation is underway. Intensive project preparation was underway in 2023, and the permitting process will commence in 2024 if optimal progress is made, with the necessary permits expected to be obtained during 2025.

Palmovka - Zenklova, MS Architekti, 2022





Palmovka - Zenklova, MS Architekti, 2022



#### Na Hutích – Sicherova nursery school Prague 14

A nursery school with a gymnasium and a children's group on Sicherová street in Prague 14 is the first part of a future new centre for the existing Na Hutích district, which will grow to include municipal rental housing and civic amenities with shops and services.

PDS announced a tender in December 2021 for architectural design and project work, and from 2022 a proposal for a nursery school with four classes, a gymnasium, and a children's group for children under 3 has been prepared. The design of the nursery school, including the adjacent street spaces, was prepared by the Atelier Xtopix architekti together with the Atelier Lando5 landscape and garden studio.

Project preparation was begun following the signing of the contract for the work in the fall of 2022. Intensive project preparation was underway during 2023, and the permitting process will commence in 2024 if optimal progress is made, with the necessary permits expected to be obtained at the beginning of 2025.

MŠ Sicherova, Xtopix architekti, 2023





MŠ Sicherova, Xtopix architekti, 2023



### Černý Most, Prague 14

The PDS portfolio also includes municipal land in the Černý Most neighborhood with a total area of just under 30,000 m<sup>2</sup>, which is intended for residential construction, retail, services and public spaces.

A housing project is currently proposed on the land entrusted to PDS; it still has a valid building permit from 2005. PDS revised the project in 2022 to meet both current requirements on residential housing and the client's brief for municipal housing construction.

As part of the project preparation, PDS has divided the entire entrusted land into two parts:

- Stage 1 includes an area of approx. 11,900 m<sup>2</sup>, on which the proposed housing project according to the valid zoning plan of the City of Prague enables the construction of 220-240 flats.
- Stage 2 includes the remaining 16,250 m<sup>2</sup> of land where the Metropolitan Plan envisages further residential construction with the potential for the construction of approximately 250 flats.

Černý Most, City Work, 2022



In 2023, PDS, in cooperation with the City Work architecture studio, prepared a study and urban and architectural designs for the entire location, so that the potential of the area can be fully developed, as the Metropolitan Plan will allow in the longer term.

In the first half of 2024, a designer will be selected for project preparation of the first phase, which will be in accordance with the current zoning plan with a potential for construction of approximately 220-240 flats.

Černý Most, City Work, 2022



COMMON COURTYARD SPACES Public BBQ, children's playground, community garden

SERVICES ON THE GROUND FLOOR restaurant, café, pharmacy, grocery, hair salon

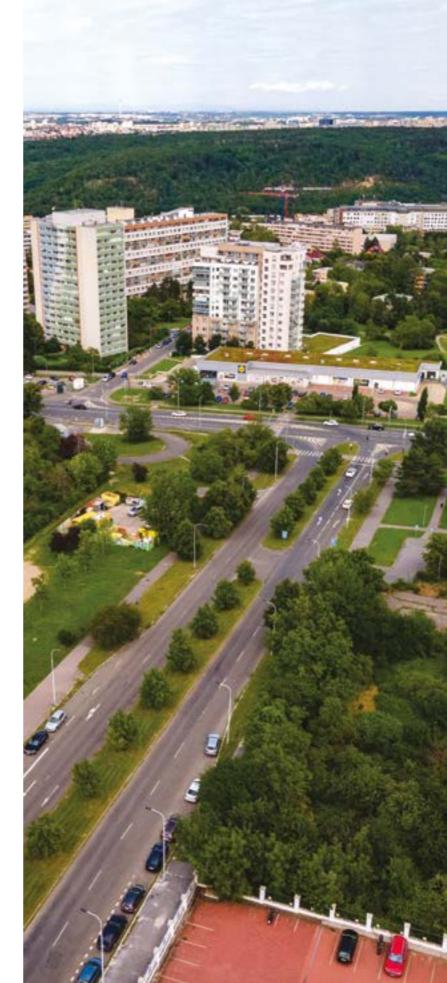
#### Nové Dvory – Durychova residential building Prague 4

Nové Dvory is one of the largest Prague development areas where the city owns continuous plots of land suitable for residential construction. The construction of the metro D line is an impulse for the municipal development of the entire area, which will include various residential projects, a nursery and primary school, a centre for shops and services, spaces for leisure/recreational activities, especially sports and cultural activities.

The residential project 09 – Durychova I is located at the intersection of Novodvorská and Durychova streets. 45 new municipal flats are expected to be built here. PDS commissioned a volumetric verification study of the construction in 2022. In 2024 it will select a designer to contract for design work for the residential building on Durychova street.

Nové Dvory, PDS, 2023

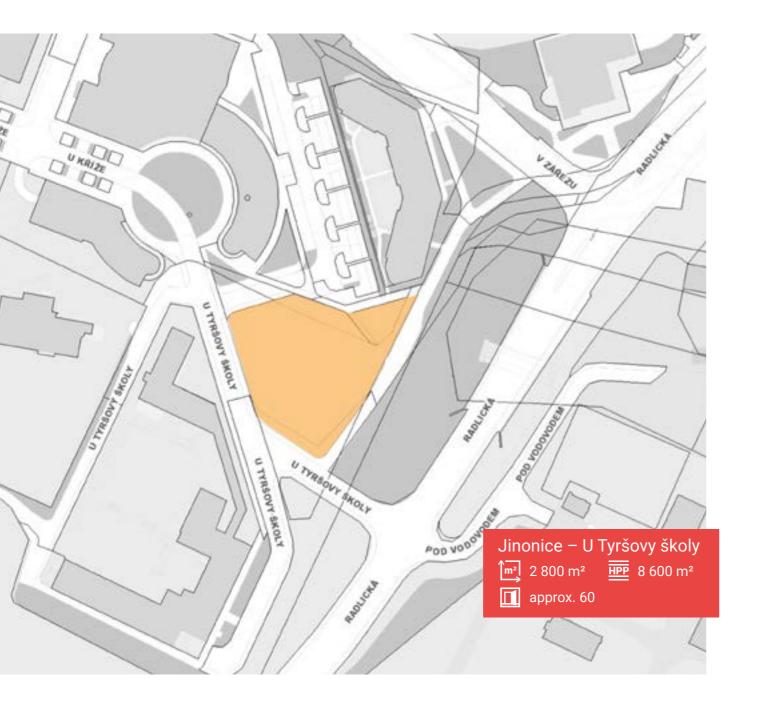




Nové Dvory location – current state, drone view

#### Jinonice – U Tyršovy školy

This is a compact, smaller plot suitable for the construction of a residential building with approximately 60 residential units. In 2023, the project concept was approved by the Investment Expert Committee and the Prague City Council. A tender for the selection of a designer will be announced at the beginning of 2024, and design work will commence.



#### Peroutkova – Jinonická, Praha 5

On a 1.8 hectare municipal plot of land located in the wider centre of Prague, the construction of a residential building is planned with approximately 50 rental units and spaces for services on the ground floor.

In 2023, PDS selected an architect to prepare the project – Pelčák and Partner Architects. Intensive project preparation was begun in the second half of 2023, and the permitting process will start in 2024. In the event of optimal progress, gaining the necessary permits is assumed at the beginning of 2025.

The project should be implemented following the permitting process in the 2025-2027 timeframe.

Peroutkova, Pelčák and Partner Architects, 2023



Further progress on these is subject to further decisions by the Prague City Council or the Investment Expert Committee.





number of flats

Land for housing projects



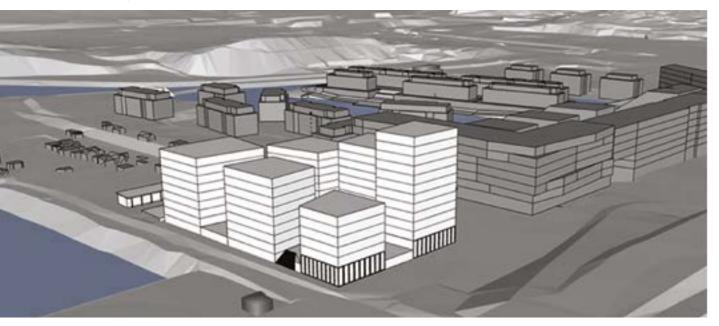
LEGEND:



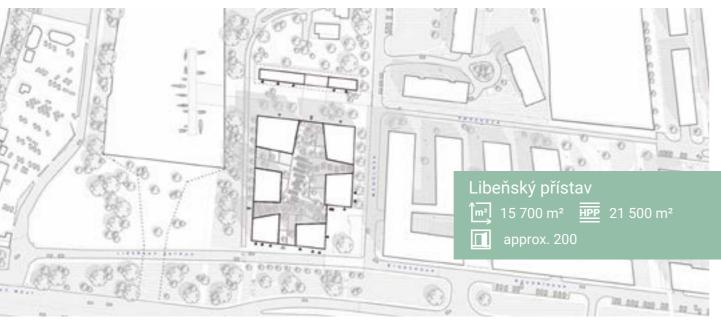
#### Libeňský přístav, Prague

On city-owned land on the corner of Štorchova and Menclova streets in Prague 8, PDS has prepared a concept for the construction of affordable rental housing with approximately 200 flats. Its future form and exact capacity are being prepared as part of a volume study. Certain property rights relationships and flood protection still need to be resolved at the site. For this reason, the selection of a designer has been postponed to 2024.

Libeňský přístav, QARTA Architektura, 2022



#### Libeňský přístav, QARTA Architektura, 2022



#### Třeboradice

A municipal housing construction project on 5.3 hectares of land in Třeboradice, which is located in the municipal district of Prague Čakovice. The construction of municipal terraced houses with approximately 170 residential units is envisaged, along with the creation of a municipal park and to address the wider relationships and transport links at the site.

In 2023, in cooperation with the Archum studio, PDS prepared a more detailed study defining possible further development of the site. If further action is approved by the Prague City Council in 2024, PDS will proceed to select a designer and commence project preparation.



#### Jinonice – Residential buildings and secondary school

The site is located in the Prague district of Jinonice on a gentle northwest-facing slope, and is bounded on the west and south sides by the Waldorf Elementary School campus and then by Mezi Rolemi street; on the north side by a closed Czech Army area, on the east side the project is adjacent to a partially completed landscaping project.

The area is immediately urbanistically connected to the Waldorf Elementary School campus on Mezi Rolemi street and will be independently served by a road connected at the intersection of this street into Radlická street, next to the existing substation.

Approximately 65% of the site of just under 20,000 m2 of GFA can be used for municipal housing construction with the expected distribution into three residential buildings located on a gently northern slope along a newly created street forming a boundary between the school site and the housing. The remaining capacity defined after changes to the zoning plan will be used for a secondary school project (probably a Waldorf Lyceum). The City of Prague and the Prague 5 municipal district concluded a memorandum of understanding in 2023 defining next steps and cooperation, but the preparation of the projects themselves can only begin after approval of changes to the zoning plan (Z3768) with the assumption that it will be issued at the end of 2024.

In the area near Mezi Rolemi street, two separate two-story residential buildings with parking in a semi-closed basement are also planned.

Jinonice – Residential buildings and secondary school, kaa-studio, 2023





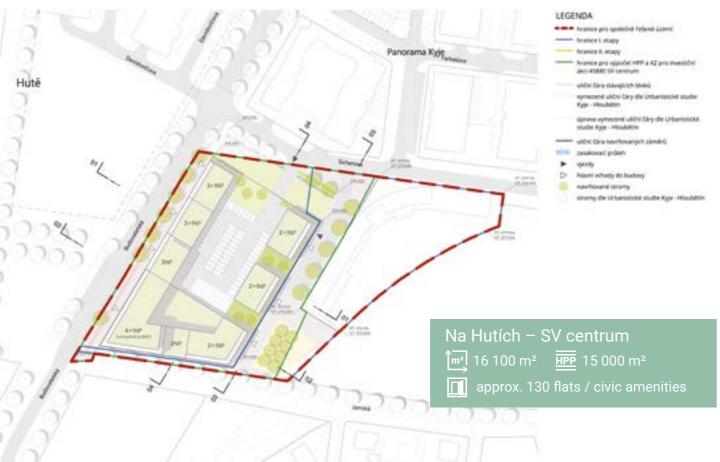
Jinonice - Residential buildings and secondary school, kaa-studio, 2023



#### Na Hutích – Northeast Centre

The municipal land at the Na Hutích site has an area of more than 2 hectares, and the construction of a local centre for the entire area is planned with residential buildings, terraced family houses, services, and civic amenities, including retail space and a nursery school with a community centre. Part of the area's development will include the improvement of public spaces and the completion of necessary transport and technical infrastructure.

The Na Hutích – Northeast Centre project, which will offer approximately 130 flats in accordance with the approved changes to the zoning plan, should be implemented within 3-7 years. In September 2022, the Prague City Assembly gave final approval to changes in the zoning plan which will enable the proposed development of the site and the preparation of the first specific projects. The Investment Expert Committee approved the next steps for the Na Hutích PROJECT 3 – SV Centrum project in 2023, and it is assumed that the Prague City Council will confirm the project preparation in the first half of 2024.



Na Hutích - SV centrum urban planning study, UNIT architects, 2023



#### Strategic projects

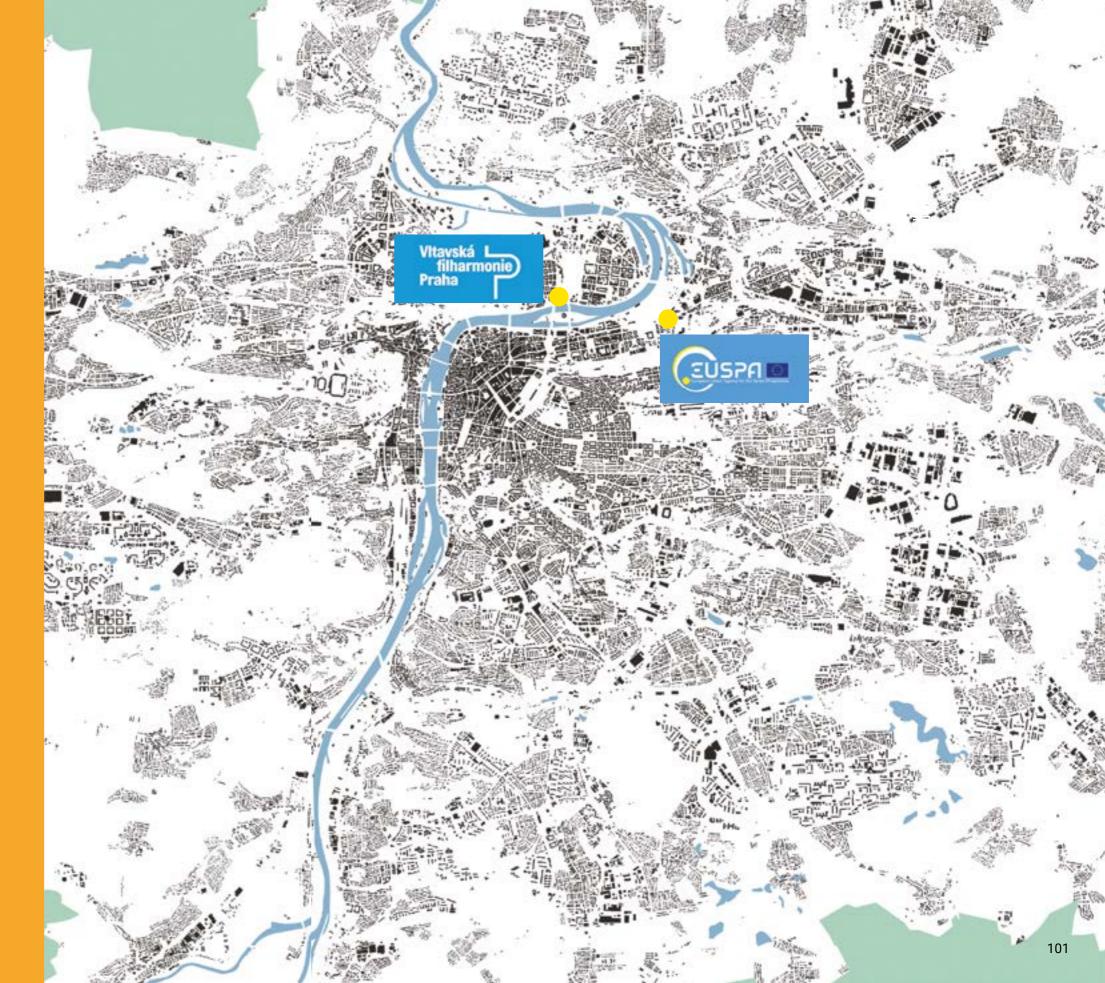
PDS was founded primarily for the purpose of preparing municipal housing construction, but it has also received other tasks related to the care of municipal real estate assets and city projects, as well as the development preparation of municipal projects.

As part of the key development area at Palmovka, PDS was entrusted with project preparation for the transformation of the former Centrum Nová Palmovka into the headquarters of the EUSPA agency. These tasks were successfully completed by PDS in 2023 and the project has been handed back to the City of Prague for next steps in implementation.

The Vltava Philharmonic Hall project is the initial input for the transformation of the entire Bubny-Zátory area. As part of its transformation, several infrastructure issues must be resolved so that the entire Vltava Philharmonic Hall project can be implemented within the expected timeframe. Also for these reasons, the project preparation of the Vltava Philharmonic Hall is organisationally anchored within PDS, and intensive project preparation was carried out under the leadership of the Vltava Philharmonic Hall team.

#### LEGEND:

Strategic projects



#### Strategic projects

An exceptional project of the City of Prague, the VItava Philharmonic Hall is a future music centre in which uniquely combines first-class concert halls with a creative hub, open and adapted for use by the general public, as well as other spaces for the pubic such as cafés and a rooftop restaurant.

The Vltava Philharmonic Hall project is currently organisationally anchored under the banner of PDS, which is a municipal statutory organisation specialised in investment and project preparation of development projects directed by the city.

In October 2022 the City of Prague, through its Property Management Department, signed a contract for the work with the Bjark Ingels Group (BIG), the winner of the international architectural competition. The subject of the contract includes the creation of architectural studies, project documentation, engineering activities, architect's supervision, and all related activities.

The competition design is currently being refined into a detailed architectural study. It was presented to the public on 24 January 2024 by Bjarke Ingels, the founder and creative director of the BIG studio, just before its handover.

The submission of the final version of the architectural study is expected in April 2024. The designers will then start work on the next state - the preparation of project documentation for the building permit.

In the future, the VItava Philharmonic Hall will become the base for the FOK Prague Symphony Orchestra, the Municipal Library of Prague, and for the Czech Philharmonic. Construction is expected to begin in 2027, with operation starting in 2032.

> www.vltavskafilharmonie.cz www.big.dk/#projects-vph

The Vltava Philharmonic Hall, winning design by the Bjarke Ingels Group architectural studio, 2022



#### New EUSPA headquarters

The EU Agency for the Space Programme (EUSPA) is the only independent EU organisation with its headquarters in the Czech Republic. In March 2022, the Czech Ministry of Transport signed an agreement with EUSPA that the Czech Republic will provide it with space in Prague that will enable the European agency to continue to operate and expand its activities.

In August 2022, a contract on a future lease agreement was signed between Prague City Hall and the Czech Ministry of Finance for the purposes of housing the EUSPA agency headquarters for 25 years.

Since September 2022, PDS has coordinated preparatory work and has cooperated with the City of Prague, the Ministry of Finance, the Ministry of Transport, and EUSPA to define the requirements for the new headquarters.

In 2023, the complete so-called transformation documentation was prepared under PDS leadership and technical conditions of the future lease, technological solutions, and the overall feasibility of the project of transforming the building into the EUSPA headquarters were specified. Furthermore, in cooperation with the Investment Department of the City of Prague, detailed procurement and contractual documentation was prepared, on the basis of which the City of Prague launched a tender titled "Selection of a Design & Build Contractor for the Transformation of the Original 'Centrum Nová Palmovka' for the Purposes of the Use of the EU Agency for the Space Programme (EUSPA)".

Thus, at the end of 2023, PDS' activities on this project were completed, and by a decision of the Prague City Assembly and Prague City Council, the land and real estate of the original Centrum Nová Palmovka project in Prague 8 were removed from the PDS charter.

EUSPA Headquarters – conceptual interior design, © CASUA, 2023



www.euspa.europa.eu

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