

Data Centre Strategy

City of Vienna

The Data Centre Strategy of the City of Vienna: Key Objectives and Measures

Vienna is committed to digital sovereignty and is shaping the expansion of its computing infrastructure to make it self-reliant, crisis-proof and human-centred.

Data centres are an infrastructure element of key importance for the digital future. They enable digital services, artificial intelligence and the processing of large data volumes. Reliable access to high-performance computing infrastructure is increasingly becoming a decisive location factor for business, research and public administration. At the same time, data centres are creating new challenges for cities and regions. They require substantial grid connection capacity, suitable spaces, efficient data networks and cooling.

The Data Centre Strategy determines the ways in which this development will be actively shaped by the City of Vienna. The focal objectives of the strategy lie in strengthening Vienna as a hub of business and research, in ensuring digital sovereignty and crisis resilience as well as in the responsible management of energy, water and land consumption.

The guiding principle towards these goals is digital humanism: Technology should be deployed in the service of people. Hence, great importance is assigned – in addition to technical efficiency – to data protection, security, transparency, climate protection and societal benefit.

Vienna does not aim at hosting as many data centres as possible but strives to ensure reliable access to the required computing capacity in suitable locations. In this, the City Administration wants to assume an active role also through co-ownership and the co-creation of value added.

VIENNA'S OBJECTIVE: STRENGTHENING BUSINESS, RESEARCH AND EXPERT KNOWLEDGE

The provision of adequate computing capacity is a crucial prerequisite for the competitiveness of Vienna as a business location. Enterprises need it to develop new products and services, for data analyses and the application of artificial intelligence. Research, too, is increasingly dependent on this infrastructure.

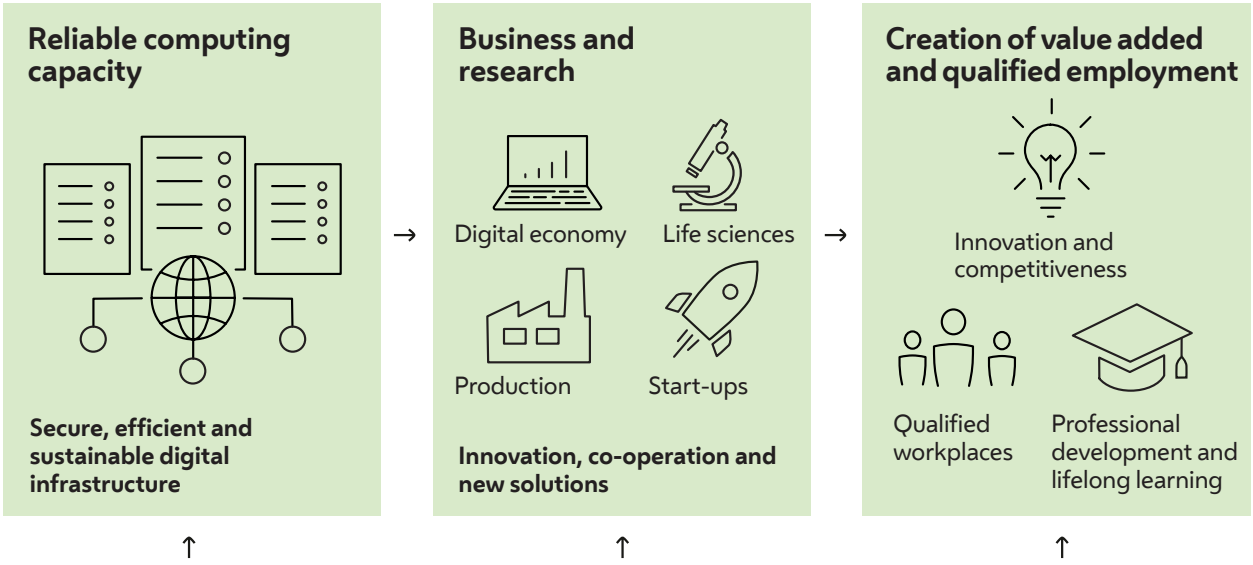
It is of particular importance for the digital economy, life sciences and healthcare as well as for data-intensive research, quantum technologies, smart production, technology start-ups and the creative industry.

The strategy combines access to computing capacity with the fostering of innovation, corporate growth and qualified employment. While the Vienna Business Agency (VBA) supports companies with regard to innovation, growth and settlement in the Austrian capital, the Vienna Employment Promotion Fund (waff) reacts to changes in the world of labour by offering vocational training and further professional development.

Not every additional demand for computing capacity needs to be covered by establishing a new data centre in Vienna. Rather, what is decisive is the contribution made by this infrastructure to the creation of value added, technological expertise and employment.

Vienna as an IT location: Infrastructure creates opportunities

Schematic overview of strategic co-operation



ENSURING RELIABILITY OF SUPPLY THROUGH DIVERSIFIED LOCATIONS AND PROVIDERS

Vienna prioritises the synergy of local, regional, European and global computing capacities. Data centre locations situated in Vienna offer advantages above all whenever short transmission times, direct data access or the integration into urban energy grids are of primary importance. The fact that Vienna is part of the larger eastern region of Austria opens up additional opportunities; European providers enhance the freedom of choice; global offerings provide flexibly usable capacities and specialised services.

Yet digital sovereignty does not equal isolationism. Vienna wants to be able to determine independently which technologies and service providers are drawn upon and to reduce avoidable dependencies. This objective may be decisively impacted, not only by the location per se, but also by ownership rights, operating structures and data management systems. European operators play an essential role in this context.

Power supply and data connectivity are evaluated at an early stage for all new projects. The additional infrastructure needs must be co-ordinated with other demands made on the city, such as electromobility and heating supply.

CONSIDERING POWER, HEAT, WATER AND LAND AS ONE SYSTEM

The construction and expansion of data centres makes high demands on the urban infrastructure. For this reason, new projects must be evaluated with regard to their energy and cooling needs, water consumption, available land resources and connections to power grids and data networks.

Special attention should be paid to the exploitation of waste heat. Wherever the necessary technical and economic conditions are in place, it is to be harnessed for buildings, neighbourhoods or existing heating networks. The energy provider Wien Energie will thus be involved at an early stage. A pioneer

project that is already fully functional concerns the heat supply for the Viennese hospital Klinik Floridsdorf, which is provided by a data centre.

Additional computing capacity is not to be created exclusively through newly built facilities. The upgrading of existing plants, more efficient hardware, high-performance cooling systems and improved utilisation rates, too, can generate additional capacity and help to cut down on resource consumption.

ACTION PLAN: SIX IMPLEMENTATION MEASURES

Measures outlined in the Data Centre Strategy of the City of Vienna

1	**Creating a single point of contact**	Single point of contact at the Vienna Business Agency for existing and prospective data centre operators. Co-ordination and monitoring of strategically relevant projects.
2	**Facilitating access to computing capacity**	Improved access to computing capacity in particular for Vienna-based SMEs, evaluation of existing funding instruments, modernisation of facilities, potential financing and participation models.
3	**Vienna Planning Commission**	New body co-ordinating developments within the City Administration and its enterprises. Special focus on land, power grids, data networks, cooling and heat utilisation.
4	**Urban planning tool**	Specific planning tool for data centres, steering of large-scale, energy- and land-intensive facilities towards suitable locations and consideration of potential conflicts of use.
5	**Holistic concept of computing infrastructure**	In-depth exchange and communication with Lower Austria and Burgenland, joint consideration and co-ordination with regional infrastructure development.
6	**Monitoring and periodic reports**	Ongoing monitoring of developments, evaluation of project experience and periodic reports submitted by the Vienna Business Agency. The results are incorporated into the further evolution of the strategy.

The strategy provides for specific instruments to monitor the further development of computing infrastructure and ensure better co-ordination between the competent bodies.

1. **Creating a single point of contact:** A single point of contact for existing and prospective data centre operators was established at the Vienna Business Agency. It is to co-ordinate and monitor strategically relevant projects and will support co-ordination with the City Administration and infrastructure companies.

2. **Facilitating access to computing capacity:** Vienna evaluates the further development of economic policy instruments and an extension of the funding portfolio of the VBA with the aim of specifically supporting SMEs, one-person businesses, start-ups and scale-ups in their access to adequate computing capacity. The modernisation and efficiency increase of existing data centres are likewise taken account of.

3. **Vienna Planning Commission:** A new body will co-ordinate the development of the data centre infrastructure within the City Administration and the municipal enterprises. In particular, this includes such aspects as land, power grids, data networks, cooling and heat utilisation.

4. **Urban planning tool:** Vienna widens its planning options to be able to steer above all land- and energy-intensive data centres towards suitable locations. Here, the main focus is on planning certainty, efficient resource utilisation, avoidance of conflicts of use and optimised integration into the existing infrastructure.

5. **Holistic concept of computing infrastructure:** The exchange and communication with Lower Austria and Burgenland (the other two federal provinces forming part of the eastern region) will be intensified. Joint opportunities and potentials for co-ordinated infrastructure development will be evaluated. Vienna encourages supraregional exchange with regard to data centre infrastructure.

6. **Monitoring and periodic reports:** Ongoing monitoring and a strategic evaluation process in 2028 are to safeguard that new technological, economic and infrastructure developments are identified at an early stage and taken account of in the further evolution of the strategy.

The new co-ordination instruments do not affect the existing statutory responsibilities in any way. All administrative procedures and technical evaluations remain a task of the respective competent authorities.

VISION 2036
By 2036, and hence in ten years, Vienna will have reliable and needs-based access to computing capacity, will have strengthened its digital options and will have further developed the necessary infrastructure in the most resource-conserving manner possible.

The success of the strategy will not be determined by the volume of additionally installed computing capacity. Rather, what counts is the contribution made by this infrastructure to digital sovereignty, reliability of supply as well as to innovation, the creation of value added and qualified employment.

FIGURES, FACTS, DATA
Vienna as an IT location: Economic significance
With approx. 9,000 ICT enterprises, roughly 72,000 workers and over half of Austria's ICT-based gross value added (2023 data), Vienna is the economic centre of Austria's digital sector. The demand for high-performance computing infrastructure is growing especially in areas that reflect Vienna's key strengths – from life sciences and healthcare or artificial intelligence to quantum technologies and modern production techniques.

Growing demand for computing capacity
Already today, the demand for computing capacity clearly exceeds domestic supply. According to a current survey by the economic research institute EcoAustria, a national demand of roughly 419 MW computing capacity contrasts with an available supply of only 80 to 100 MW. For Vienna, forecasts envision a demand of approx. 250 MW by 2030, which is hardly met by a current supply of around 53 to 77 MW in the city.

