GREENCITYPUZZLE

The new GREENCITYPUZZLE urban district combines existing green spaces and settlement structures to create a future-oriented district. A surrounding **Forest Belt** encloses, connects and harmoniously integrates the neighbourhood into its surroundings. A variety of residential and building typologies are being created within this framework. The guiding principle of the design is the piece of the puzzle that enables a flexible and needs-orientated composition of residential and green space elements in the course of the development.

The development area is located on the north-eastern city limits of Regensburg and comprises the 107-hectare competition area. It borders the Haslbach industrial estate in the north and the existing housing estates of Konradsiedlung, Wutzlhofen and Brandlberg in the south. With the GREENCITYPUZZLE, a new urban district is being developed that will create, urgently needed, affordable living space and at the same time preserve the high-quality landscape in the southern part of the city.

goals and guiding principles
The new urban district will create a green link between the scenic open spaces and forests to the west and east of the valley. The neighbourhood structures are based on a modular system that allows a high degree of flexibility in the formulation of the individual residential quarters and building typologies.

integration in/of the landscape
The newly planned district plays a central role in linking the landscape of Regensburg‘s northern urban area. The ambition was to not only create new urban qualities, but also to merge the surrounding natural structures more closely together. In particular, the surrounding forests are not cut up by the new district but deliberately connected with each other.
The connecting key element is the Forest Belt, a continuous belt that surrounds the central area of the district. Targeted afforestation of the surrounding wooded areas in the direction of the **Forest Belt** ensures that the previously individual forest structures are linked together. This results in a coherent biotope network that benefits both biodiversity as well as the inhabitants.
At the same time the existing fresh air corridor, which runs along the eastern and western edge of the planning area, was taken into account in the planning process. The **Breathing Zone** was integrated into the concept in order to preserve these climatic air flows in the long term. This open, landscape-oriented corridor allows fresh air to flow along the communities into the district center.

Regensburg, DE
GreenCityPuzzle

7,020 people live in the neighborhood
33% sealed surface
15% semi-sealed surface
52% unsealed surface

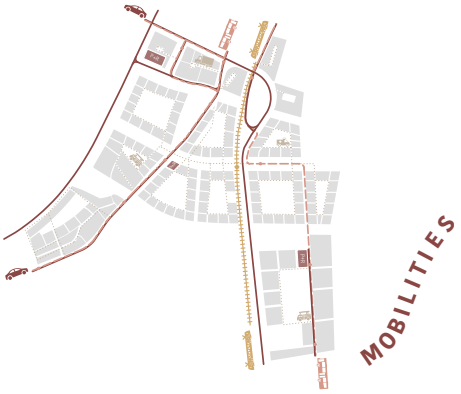
description of the green spaces in the urban distict

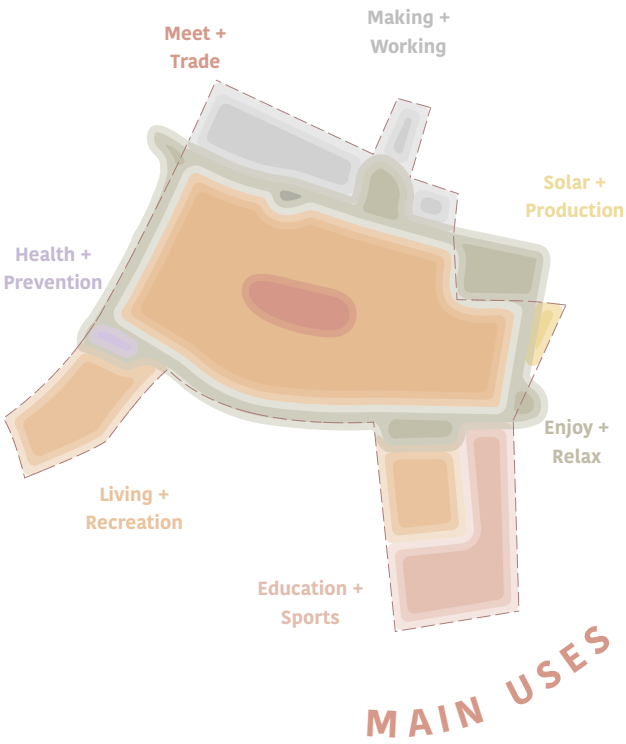
The green spaces in the district can be divided into four typologies. The first type of green space is the surrounding green corridor, the **Forest Belt**. This belt surrounds the core area of the planned district and serves as an urban recreational area. This vegetated zone is characterized by a forest-like character. The design of the green corridor is kept close to nature and is forested, alternating with lighter and denser areas of vegetation. The **Forest Belt** is structured by different paths that fulfill the needs of the divers population. A paved cycle path runs along the inner boundary and can be used for an easy ride through the landscape. This is supplemented by an unbound footpath and hiking trail that meanders across the entire width of the green space. Along these paths, there will be various themed activity areas. These include perennial plantings, play and sports facilities, retention basins and information boards. Expansions along this green corridor will create focal points that will be filled with areas for special use. The focal points are located in the north just below the bridge, in the south-east in the area of the Pilsner Allee retention basin and in the south-west on the B16. The special use in the northern area consists of a dirt park with a pump track, which is an attractive exercise facility especially for young people. In the south-eastern area, the special use consists of the retention basin system of the **Forest Belt**, in which the retention basin of Pilsner Allee is also integrated. This area will also be available to users as a water play area. The third focal point in the south-east will be widened to integrate a health center.

The second type of green space is an extensive wildflower meadow, the so-called **Blooming Strip**. This is located between the **Forest Belt** and the neighborhood development and serves as a buffer zone. The **Blooming Strip** offers both ecological and visual added value for users. Small, unbound paths and trails run through this space and enable a direct, informal connection between the **Forest Belt** and the adjacent buildings.

The **Breathing Zone** forms the third type of green space. This space acts as a connecting element between the individual communities and the surrounding green space as well as a link towards the district center. A three-metre-wide path runs through it, which is used by pedestrians and cyclists. The local bus route also runs through the eastern **Breathing Zone**. The green space typology of this vegetated zone is characterized by its modelled topography in the form of mounds and retention basins. This topography structures the area, improves the microclimate and forms a natural barrier to the high-voltage power line and the adjacent communities at the same time. In addition to its function as a connecting element, the **Breathing Zone** also acts as a cold air corridor for the district.

The fourth type of green spaces are the **Community Parks**. These are located within each individual community. They are designed as recreational areas for the inhabitants of the community. With their city park-like character and different areas of use, they offer places for residents to relax, meet up and be active. The design is characterized by organically curved islands and various mounds that create varied spaces and visual relationships.





mobility

The mobility concept provides for a new regional mobility hub in the Urban Heart, the urban district center. This hub is complemented by the expansion of both urban and regional bus networks, including the extension of existing lines and the addition of several new bus stops across the district.

Within the **Forest Belt**, the district is almost completely free of motorized individual traffic. The only road that can be used by private motorized individual traffic is Charmer Strasse. However, this road will be narrowed and reduced in traffic.

On the edge of the district, community garages with car-sharing points, parking spaces for buses and trucks as well as bicycle parking spaces are being built. The urban design concept integrates three strategically positioned mobility hubs that are each serving specific functions. The northern hub, located near the commercial area, acts as a terminus for buses and a transfer point for freight traffic, thereby relieving adjacent residential zones. The hub at the train station focuses on central connectivity, efficiently linking various modes of transport such as rail, bicycle and bus. The third hub, located near schools and the swimming center, organizes school and leisure traffic. All three hubs simultaneously function as mobility hubs for the surrounding communities and contribute to a low-car, sustainable lifestyle through shared mobility services and integrated charging infrastructure. Service and emergency vehicles are routed via reinforced paths that branch off into community parks, which are also accessible to individuals with limited mobility. The existing cycle paths will be continued in the urban district and another one will be added to the inner edge of the **Forest Belt**.

main uses

The urban structure of the new district is divided into four overarching areas, each with different main uses.

The south-western area is dominated by the existing development of detached houses and apartment blocks. A modern health centre is being built directly adjacent to the **Forest Belt**, and a careful redensification with additional residential buildings is planned in order to meet the demand for living space.

In the northern area, in the transition to the Haslbach industrial estate, new commercial areas are being built, supplemented by a mobility hub with parking spaces for buses and trucks.

The south-eastern area is being developed into an educational and sports campus with a primary school, a swimming pool and various sports facilities. The area is characterised by larger building volumes and public uses.

In the central area, which is currently undeveloped, eight new communities are being created as well as the centre of the district with a train station, local amenities and other public facilities. The result is a diversely structured neighbourhood that meets the different requirements of its users.

Neighbourhoods and housing types

For the communities within the **Forest Belt**, three different housing concepts have been developed: the **YardLiving**, the **ClusterHousing**, and the **HomePlus**. These housing types can be flexibly combined depending on the needs.

The **YardLiving** is inspired by the traditional farmstead. Several gabled roof buildings, each three to four stories high, are arranged around a central courtyard. Each floor offers space for two to three apartments. Additionally smaller structures such as single-family houses or greenhouses are also incorporated into this concept.

The **ClusterHousing** enables communal living based on the cluster system. The towers are four to six stories high, with one apartment on each floor. These apartments consist of several smaller units grouped around one or more shared common rooms.

The **HomePlus** housing concept targets older adults and individuals with support needs, sheltered residents, and housing partnerships. It offers multiple apartments and various communal spaces and is specifically designed for assisted living. The offer also includes childcare facilities and geriatric nursing service. The courtyard is fully enclosed by buildings and not visible from outside, ensuring privacy and security.

Each community also features so-called special building blocks. One special building block is on a designated building area with **CommunityHouses** arranged around a courtyard and connected via a walkway. Inside these **CommunityHouses**, there are diverse common rooms where residents can cook, work, and engage in other communal activities. The houses also offer small apartments for visitors. Artists from the community can rent studios and display their works here. Additionally, the **CommunityHouses** host co-working spaces, enabling residents to work remotely.

In three of the eight communities, another special building block is integrated in the form of a children‘s daycare center. These are positioned so that they serve multiple communities simultaneously.

The three communities between Charmer Strasse and the railway tracks have distinctive puzzle-piece features. They border the center of the new district and integrate its buildings into their community. The center buildings have commercial and communal spaces on the lower two floors facing the center. The upper floors facing the **Community Park** are equipped with apartments. An exception are two center buildings with different uses.

On the southwestern edge of the Urban Heart, there is a larger mobility hub primarily used by commuters for convenient access to bus and train services. In the northwestern part of the center, there is also a large hall with several multifunctional rooms and a rooftop terrace.

Development Phases

In the first construction phase, the new train station will be established as a central mobility hub, tangentially bordered by three residential communities. The district will be complemented by a children‘s daycare and the southern part of the center, which will house a Mobility Hub and other important infrastructure. This section provides housing for 1.980 people.

In the second construction phase, the western part of the city district will be developed, followed by the eastern section. The latter includes key educational and sports facilities such as the swimming pool and elementary school. Additionally, the northern part of the Urban Heart will be completed, with buildings designed for long-term flexible use, thus offering space for a variety of functions. The final construction phase will focus on the northern area of the urban district. The commercial areas in the north are designed to be flexible and can be developed according to demand.

In the residential communities the future residents will have the opportunity, similar to a building community, to actively participate in shaping the space requirements and layout. The modular housing forms are built like a building kit system and can be flexibly adapted to different lifestyles.