### **Steel Plant Ecosystem**



SCALES: XL/L - territory / urban + architecture

TEAM REPRESENTATIVE: urbanist / architect / landscaper

SITE FAMILY: CHANGING METABOLISM – From linear to circular economy

**LOCATION:** Warsaw, Bielany District **POPULATION:** approx. 1,804,000 (the city)

STRATEGIC SITE: 648 ha PROJECT SITE: 115 ha

SITE PROPOSED BY: The City of Warsaw

**ACTORS INVOLVED:** the City, private landowners, developers, companies

**OWNER OF THE SITE:** The State Treasury, private owners **COMMISSION AFTER COMPETITION:** Land-use study,

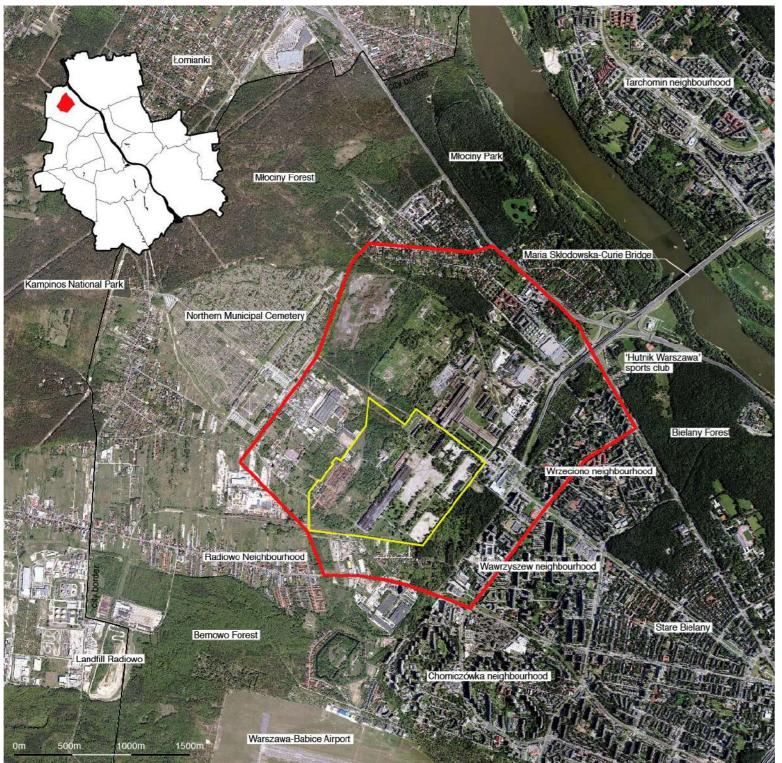
local land development plan

#### HOW CANTHE SITE CONTRIBUTE TO THE PRODUCTIVE CITY?

The Warsaw Steel Plant (Huta Warszawa), opened in 1957, was, at the time, located on the outskirts of the city, similarly to other industrial facilities. Due to the ongoing spatial development of Warsaw and the increased accessibility (the bridge, metro services, the steel plant area has become part of the urban fabric. The areas surrounding the steel plant serve various functions and are iverse in terms of scale. In addition to the industrial, storage and commercial areas (including small-scale crafts), there are forests and parks, a cemetery, large housing estates and a shopping centre. Although owners of the plant changed several times and the facility was subject to restructuring proceedings, it maintained production continuity, and is currently a prosperous company. The plant's area reserves provide an opportunity to incorporate its production function into the urban space.

#### **CITY STRATEGY**

Warsaw's dynamic growth is accompanied by the problem of urban sprawl, and evelopment of monofunctional housing estates and office-building districts. The main challenge faced by spatial policy is to transform Warsaw into a compact and sustainable city. The city's local authorities marked out a high-density development zone in the area of Warsaw, i.e. urbanised areas characterised by high-density development, access to public transport, social services, and the city infrastructure, etc. The next step was to identify the wasteland within the high-density development zone, which should be developed first with view to becoming multi-functional districts. Attractive post-industrial areas (brownfields) comprise most of the wasteland, including a part of the area which was formerly used by the Warsaw Steel Plant, which is the subject of the 15th edition of the Europan contest.





#### SITE DEFINITION

The project area is situated in the north-western part of Warsaw, in Bielany District, in the vicinity of a large interchange junction in Młociny, consisting of a metro terminus, a bus and tram loop, and a multi-storey Park & Ride facility. The project area covers a part of the former Warsaw Steel Plant area. Over more than half a century of its operations, and due to introducing changes to the production technology, the plant gradually reduced its functioning area, leaving a large share of the site unused and demolishing subsequent industrial structures. Some of these, including a characteristic row of stacks, constitute a vital part of the district's spatial structure. The environmental restrictions of the area development can be due to soil contamination and, in particular, the noise accompanying steel production. The proposed strategic site includes a cross-section of various types of development of the areas surrounding the project site.

#### HOW IS PRODUCTION CONSIDERED IN THE URBAN DIVERSITY PROGRAM?

Steel plant – a driving force for development. In the past, the Warsaw Steel Plant operated close to smaller enterprises and institutions related to heavy industry, although it was largely a self-sufficient plant, which required a vast area and an extensive internal infrastructure. Contemporary industrial models (including those applying to steel plants) are different, as they rely on an extensive and flexible network of business partners and third-party suppliers operating in the city and the region. This leaves visible traces on the area's spatial structure in the form of reduced production areas, emergence of brownfields, and the ragmentation of the area as regards ownership and function. The challenge which the urban planners will have to face involves creating spatial conditions for maintaining and extending a multi-functional "ecosystem", based on industrial production, the existing and potential synergies, human

and material resources, including the recovered brownfields. This can create an opportunity to transform this enclosed area into a multi-functional, open and accessible district integrated with the urban fabric and, more importantly, with the social environment. For over 60 years of continuous operations, the steel plant has attracted an integrated, multi-generational community of qualified workers. Steel plant – a recycling facility. Together with the municipal waste treatment plants operating nearby, the steel plant could be perceived as a link in the emerging local circular economy; a plant which uses steel scrap as its principal material is in fact a large enterprise recycling secondary raw materials. Steel plant – a barrier for urban sprawl. The location of the steel plant limited the northward growth of Warsaw, and, together with the creation of the nearby Kampinos National Park in 1959, it made the urban sprawl scale smaller than on the other sides of the agglomeration. The transformation of the steel plant area should contribute to the protection of the natural sites in its vicinity.





