



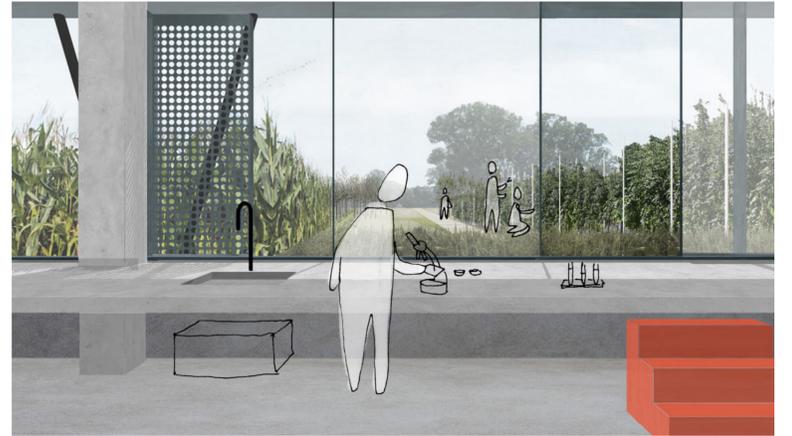
1 Green transversal link for pedestrians and cyclists, creation of a new square in front of existing hydropower station, revegetation of the mill stream banks;

2 Clearing of the central island and creation of a public green space with water playgrounds and pools for workers and residents, new hydropower station, transversal link for pedestrians and cyclists, link along the mill stream, a bridge connects the island with the MÜHLGANG HUB;

3 transversal link for pedestrians and cyclists through the new MÜHLGANG HUB: public multi-use space, green park with reed belt towards the river Mur, mill stream water is diverted through the building itself, providing natural cooling and watering;



Mill stream island with water park



View to the roof gardens

A productive city is a city of flows. Flows of resources, materials, goods, people, labor, knowledge, water, energy, wind (...) communicate and influence each other. MÜHLGANG HUB acts as nodal point, stage and connector amongst the productive flows of the city of Graz.

THE MILL STREAM OF GRAZ

The mill stream is diverted from the Mur river in the North of Graz and runs throughout the city and its southern periphery. Since the 13th century, mills and associated businesses have established alongside this productive vein. Until today, micro hydropower stations enable numerous production sites to use the mill stream's water as a source of energy. In addition to its power, the mill stream contributes to the aeration and the climatic balance of the city. Its riverbanks are partly cultivated as green spaces.

MÜHLGANG WITH HYDROPOWER STATIONS



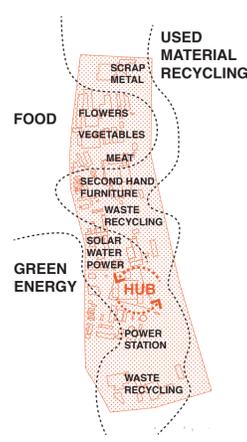
ENHANCING QUALITIES AND ACCESSIBILITY

Between Puchstraße and the Mur river, the mill stream runs midst through the industrial zone. The project addresses the streams qualities, enhances them at crucial points and makes them accessible. Thus, transversal links connect the residential areas in the west with the Mur river in the east. The vision for the strategic site suggest to clear the central island and create a public green space with water playgrounds and pools for workers and residents. A bridge connects the island with the MÜHLGANG HUB, where a new micro hydropower station supplies the productive center with energy. Besides generating power, water is also diverted through the building itself, providing natural cooling and watering.

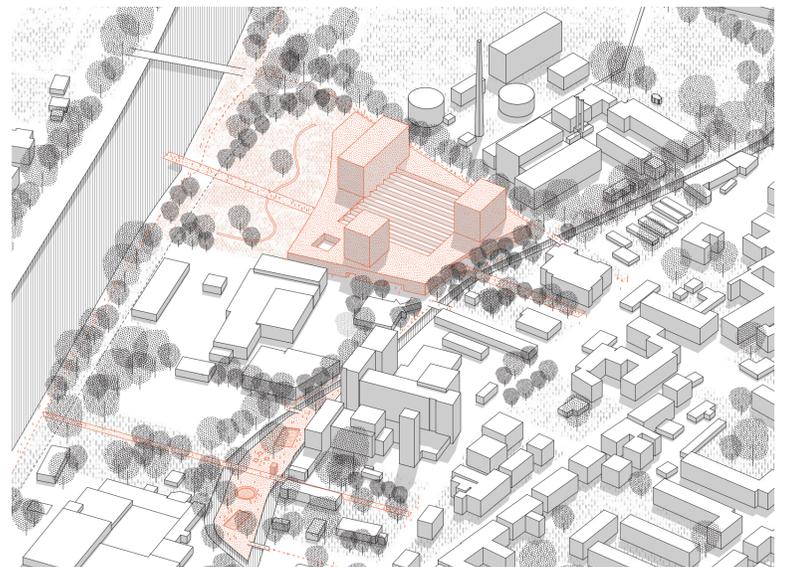
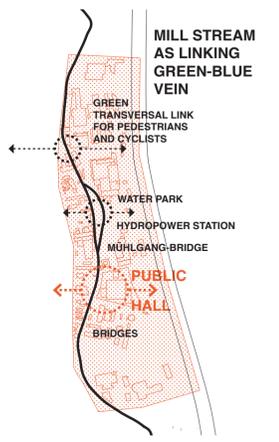
PRODUCTION PROCESSES

- disassemble**
used material:
metal, furniture, waste,...
- repair**
furniture, electrical devices, cars,...
- process**
food (coffee), building material
- generate**
food: vegetables, fruit, fish, ...
knowledge, skills, art
energy
- store**
for intermediate selling
to sell somewhere else
as a homebase for equipment

PROGRAMMATIC FLOWS



SPATIAL INTERVENTIONS

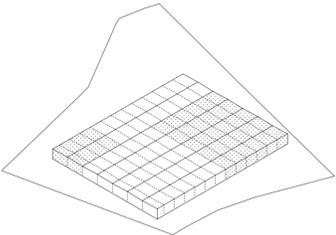


AXONOMETRIC VIEW OF THE URBAN SITUATION

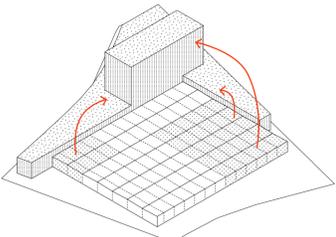


View along the mill stream bridge to the main entrance

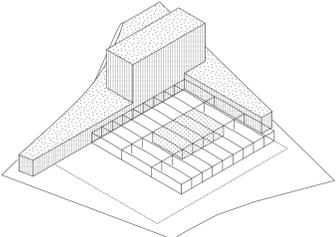
BUILDING PROCESS



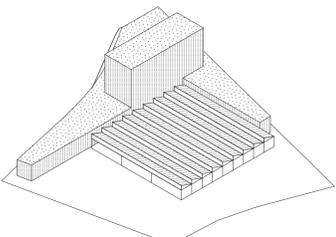
2019
The existing hall is partly occupied by long term users (marked areas).



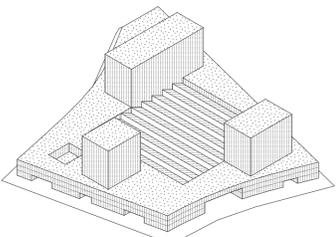
2022
The L-shaped section of the new building at the rear part of the plot is built. Some users move into the new building emptying the spaces that will be demolished or cleared and later commonly used.



2023
Some parts of the existing hall are demolished. The building shell is removed. The self-built studios of the collective Schaumbad remain as they are.



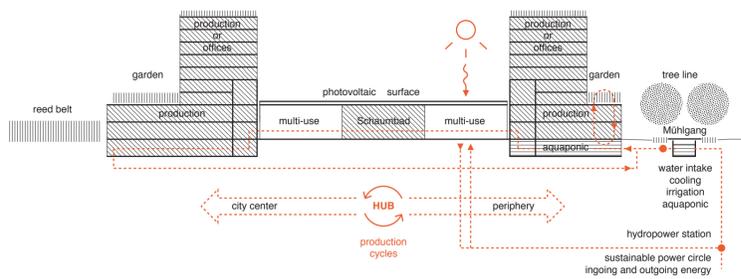
2024
A new roof covering is installed on the existing bearing structure of the hall. A shed with a photovoltaic surface facing south and big windows facing north provide this public space with ideal light and ventilation.



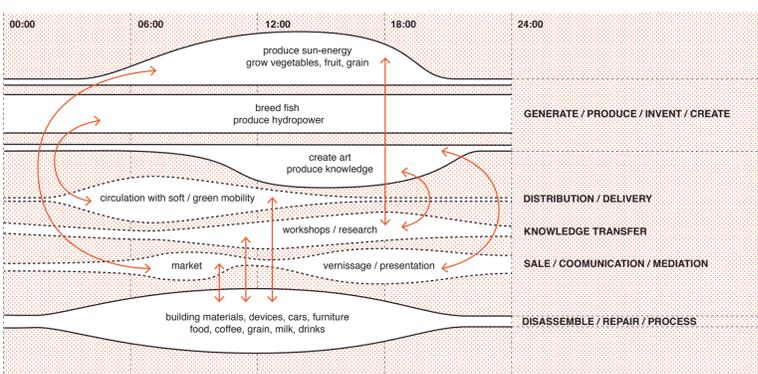
2025
The new building is completed. A new flat base structure with three towers surrounds the new public multi-use courtyard.

The existing hall is transformed into a covered, public inner courtyard, which is surrounded by a porous two-story structure. It is a meeting point, market place, workshop, storage, passage, delivery zone and gallery.

PRODUCTION CYCLES



24 H CYCLES



BUILDING DATA

GFA (BGF)
max as shown in plans:
UG: 7.159 m²
EG: 16.914 m²
OG1: 10.498 m²
OG2-8: 18.613 m²
52.826 m²

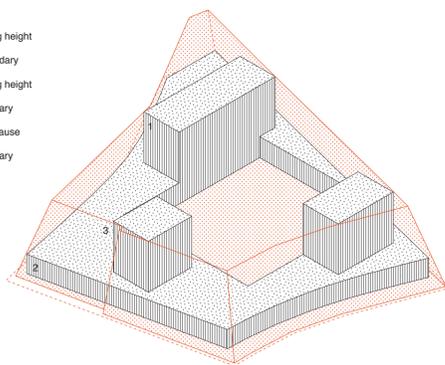
FAR (DICHTE)
52.826 m² / 21.153 m² = 2,5

GREEN AREAS
existing preserved green area
on the plot: 2.420 m²
green roofs, green gardens on/in the building: 9325 m²
(vegetation layer of 70 cm = 10% sealing degree)

PHOTOVOLTAIC SURFACE
existing system: 4.000 m²
new surface: 1.660 m²
5.660 m²

BUILDING ENVELOPE

1 distance line at a building height of 37,50 m (towers): 14 m from property boundary
2 distance line at a building height of 10,30 m (flat building): 5 m from property boundary
3 augmented distance because of neighboring building: 9 m from property boundary



A truck arrives with used windows for the recycling workshop. A freight bicycle loaded with freshly roasted coffee is on its way to Tribeka in the city center. While a Griehser employee repairs his bike, the Schaumbad collective prepares a vernissage for the evening.

MÜHLGANG HUB

The architectural design is based on the vision for the strategic site, implementing the principals spatially and programmatically within the new building. The MÜHLGANG HUB becomes a space, where ideas, materials, foods and energy are created, disassembled, repaired, recycled, processed, stored, sold, communicated and fed into cycles.

BUILDING

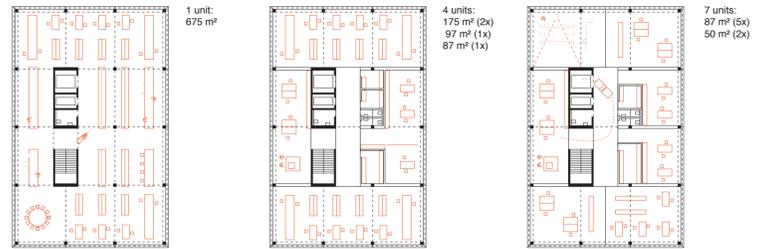
A large part of the existing hall is kept. The shell is dismantled. A lightweight, translucent shed roof is put on the existing modular concrete bearing construction. A two-story building surrounds the existing hall and transforms it into a covered, public inner courtyard. At three points, towers cut through the new flat base building, which creates a transversal east-west connection through the building. The towers frame the public passage, which creates a transversal east-west connection through the building. The roofs and inner courtyards are greened. Arable spaces are created on the roof of the flat base building.

THE CENTRAL HALL

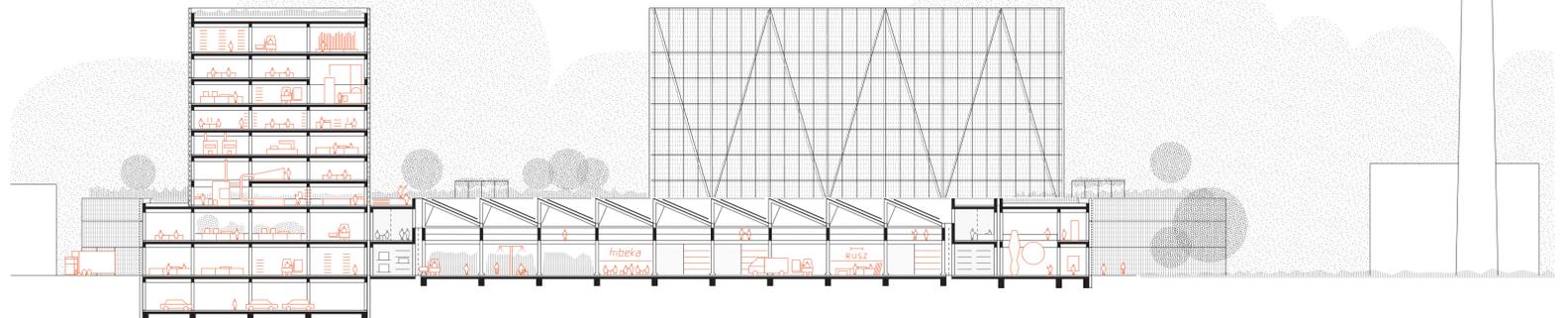
The central hall is market place, workshop, storage, passage, delivery zone and gallery. It is a meeting point and a public space for both users of the MÜHLGANG HUB and the neighborhood. It can be temporarily appropriated and serves as a buffer zone, while it also promotes communication between the public space and the businesses. The ring, a porous circular structure, connects the public courtyard with the surrounding production units. On the ground floor, it is understood as a serving zone, offering space for storing the hall's flexible furniture and small service providers. The porter and the reception of the hub are also integrated into the ring. Here goods are dropped off and further distributed throughout the building. On the first floor, the ring is transformed into an internal street, with common infrastructure, such as restrooms, kitchens and lounge areas. On the east and west side of the ring stairs connect the public courtyard with the gardens on the roof.

USERS

While the flat base building offers generous spaces for larger businesses, the towers' levels can be divided into small units for micro-businesses, start-ups and offices. The studios of the collective Schaumbad remain in the central hall. Their exhibition and office spaces are relocated to the ground and the first floor of the flat base building. In order to open the central hall to all users of the MÜHLGANG HUB and the neighborhood, the other current tenants are relocated to the new building after the first construction phase is completed.



FLOOR PLAN TOWER (WESTWING) – 1:500
EXAMPLES OF DIVISION INTO DIFFERENT UNITS



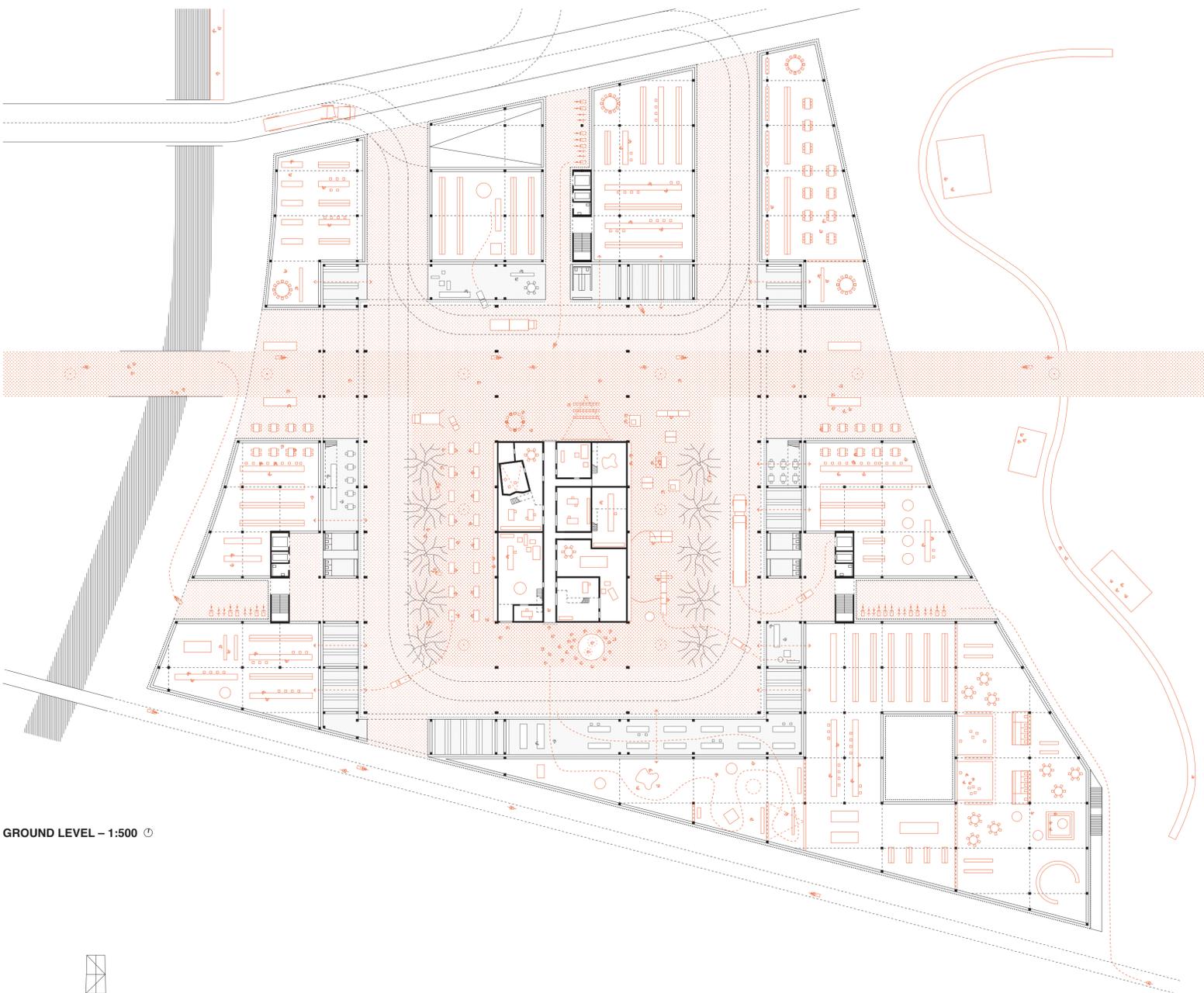
SECTION NORTH-SOUTH – 1:500



Central hall with different activities

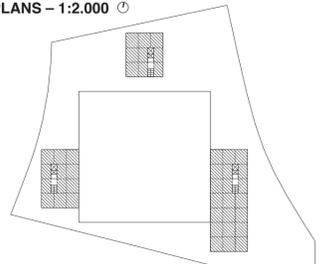
A spatial ring promotes communication between the central hall and the businesses. On the ground floor, it is a serving zone, offering space for storing flexible furniture, small service providers and the reception. On the first floor, it is transformed into an internal street.

While the flat base structure offers generous spaces for larger businesses, the levels of the towers can be divided into small units for micro-businesses, start-ups and offices.

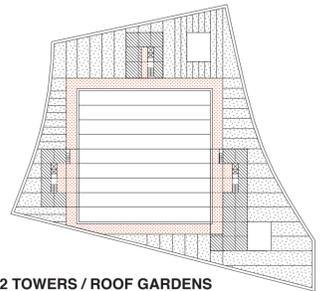


GROUND LEVEL - 1:500

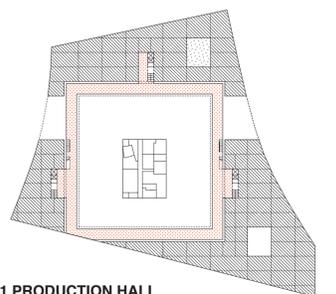
PLANS - 1:2.000



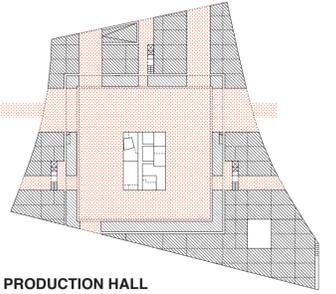
+3 TO +8 TOWERS
The towers' width of 22m allows a division into well-lit small units, which are suitable for small scale production, labs or offices.



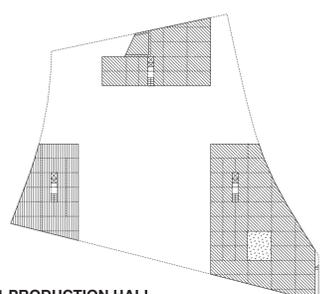
+2 TOWERS / ROOF GARDENS
Arable spaces offer the first level of the tower a green front yard, which is accessible for the public over the spatial ring.



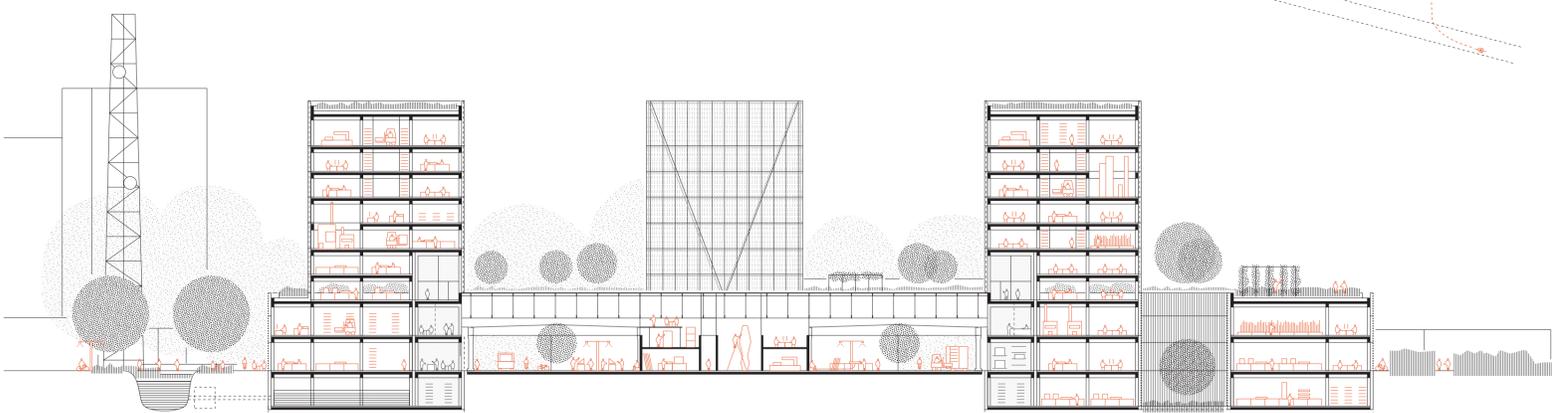
+1 PRODUCTION HALL
The spatial ring creates an internal road, which allows a flexible division of the production level into multi-scale units.



0 PRODUCTION HALL
The former hall is transformed into a covered, public inner courtyard. It can be temporarily appropriated and serves as spatial buffer and delivery zone.



-1 PRODUCTION HALL
Below the three towers, the hall extends into the ground. The fish farm, building technology, parking and production spaces lit by a courtyard are located here.



SECTION WEST-EAST - 1:500