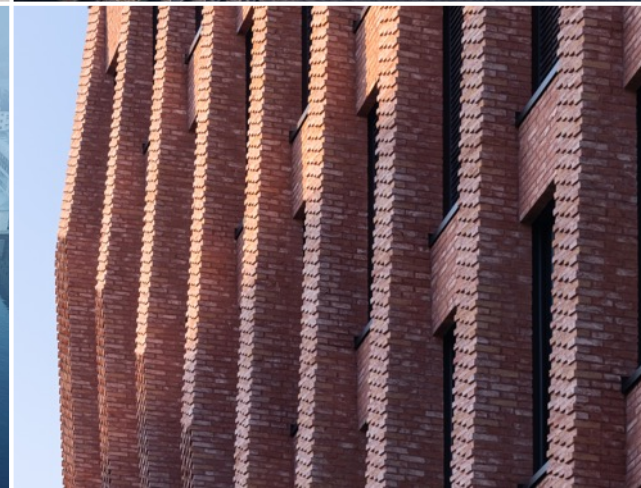


Mad

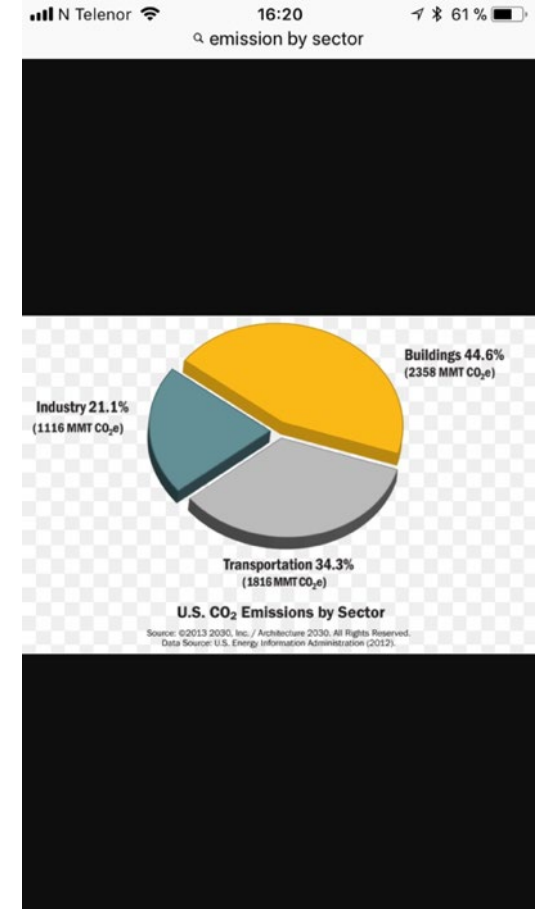
Mad about Reinventing Cities

Mad team

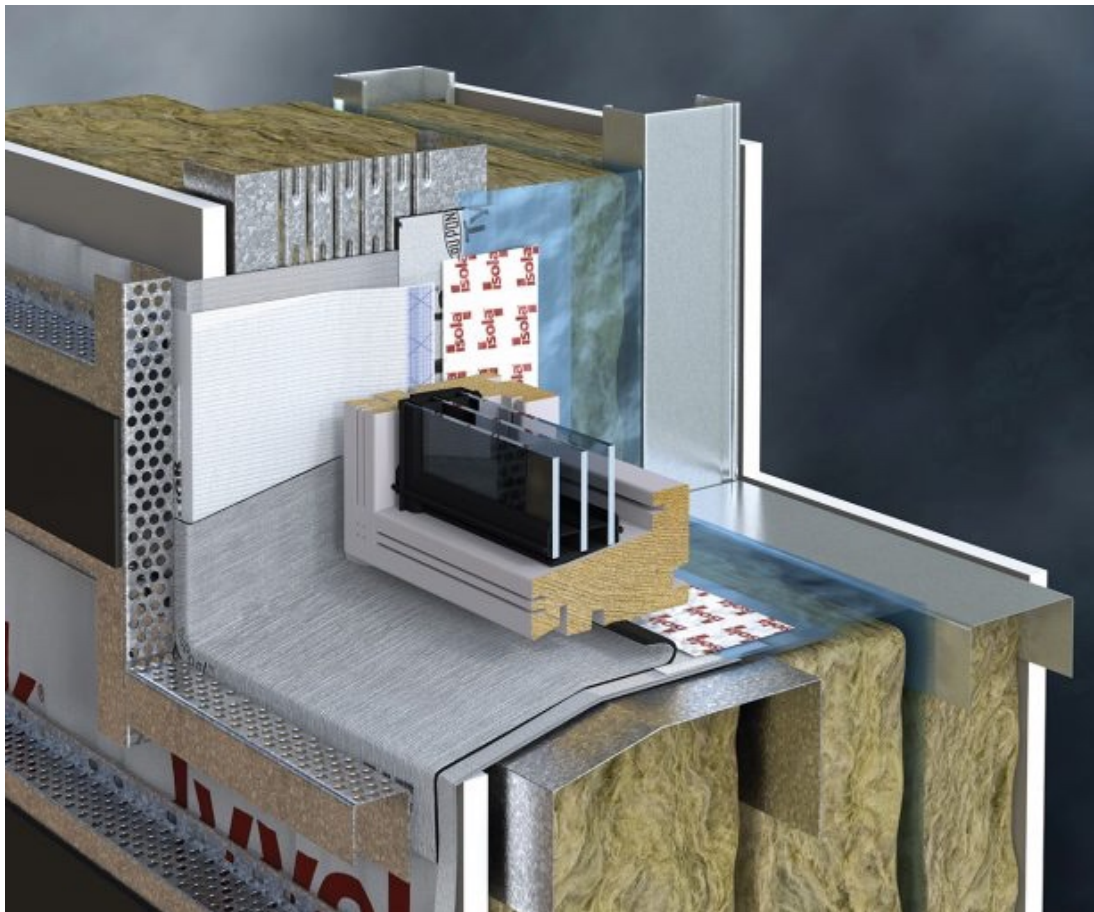




The enviroment



Producer driven



Fight the nature

The entrance and ceiling of 'Elements' at the Venice Architecture Biennale 2014 by Rem Koolhaas



From 50 to 20 000



Oslo 2019



Oslo business district



C40

Reinventing Cities - Stovner Oslo

Recipe for Future Living

INEO
EIENDOM

In collaboration with

ppw

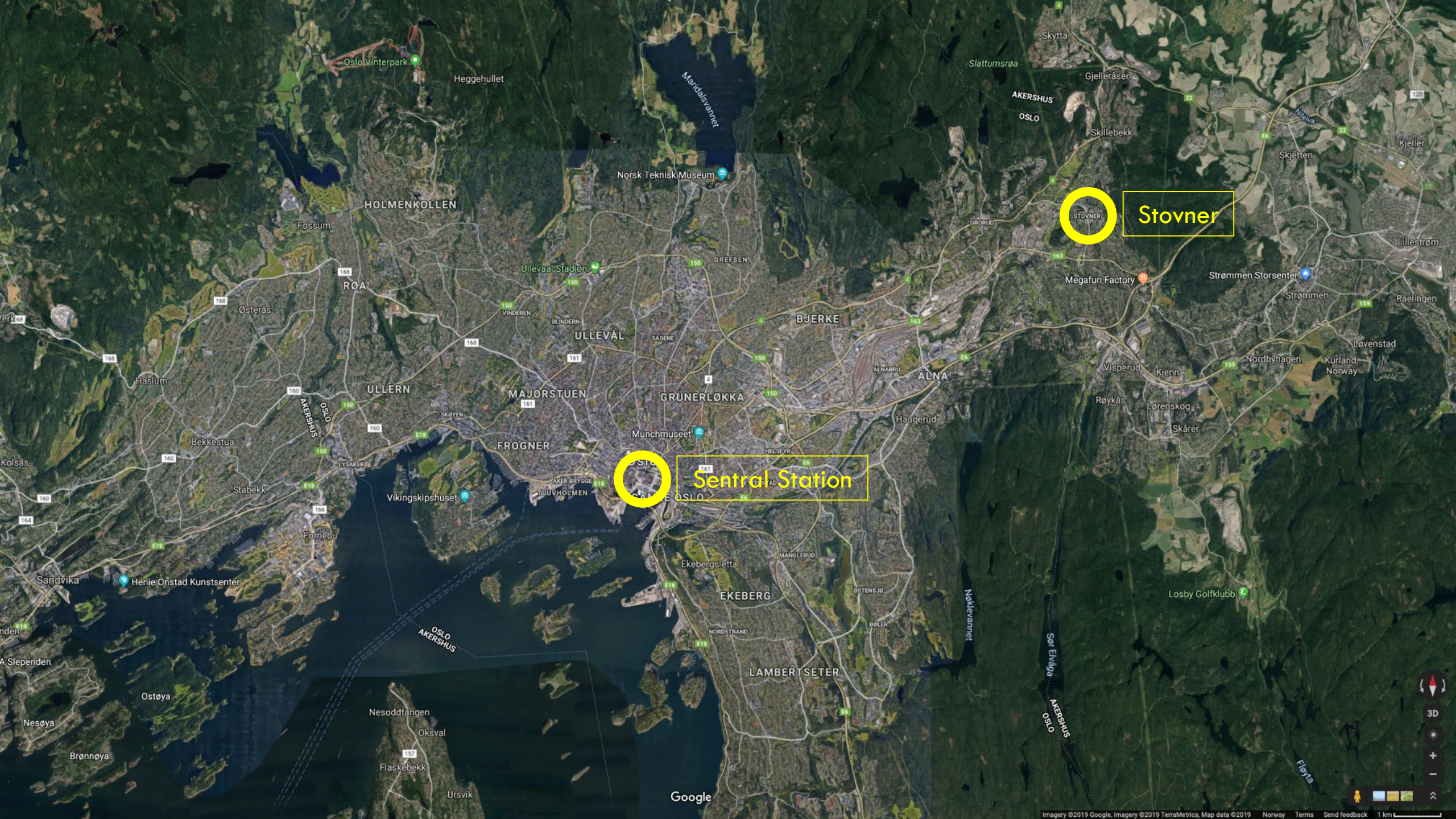
LÉVA

LANDSKAP +

 **asplan viak**

RESIROQEL 

V I **L L** **VILL URBANISME**



Stovner



Sentral Station

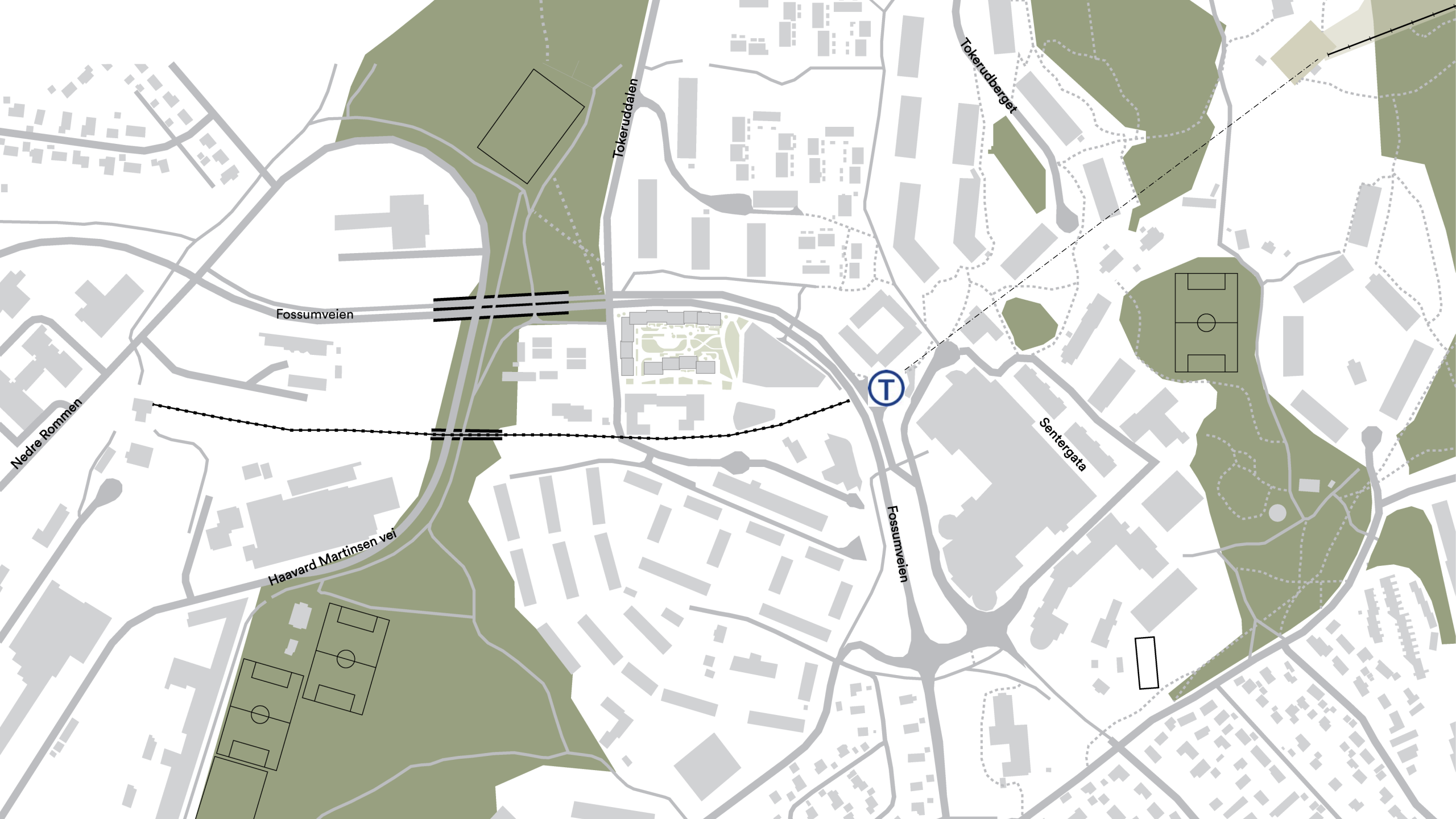


IMAGE INSIDE STOVNER

Stovner culture



“ Growing up in Stovner has prepared me for challenges in life



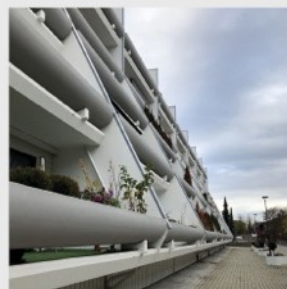
“ It's like no difference if you're from Morocco or Somalia

Hangout spot



“ There are many clever and talented young people, but they don't have the resources to know how and where they can develop

Home



“ Girls are more careful and doesn't seek situations and places with illegal activities at the same way as boys do.

IMAGE OUTSIDE STOVNER

Violence and crime



NEWSPAPER ARTICLES:

- ! Stovner principal asks for acute help
- ! Fight between dozens of young people at Stovner

The ghetto



“ Highest percentage of people with immigrant- and minority background

For the tourists



World's largest floor lamp



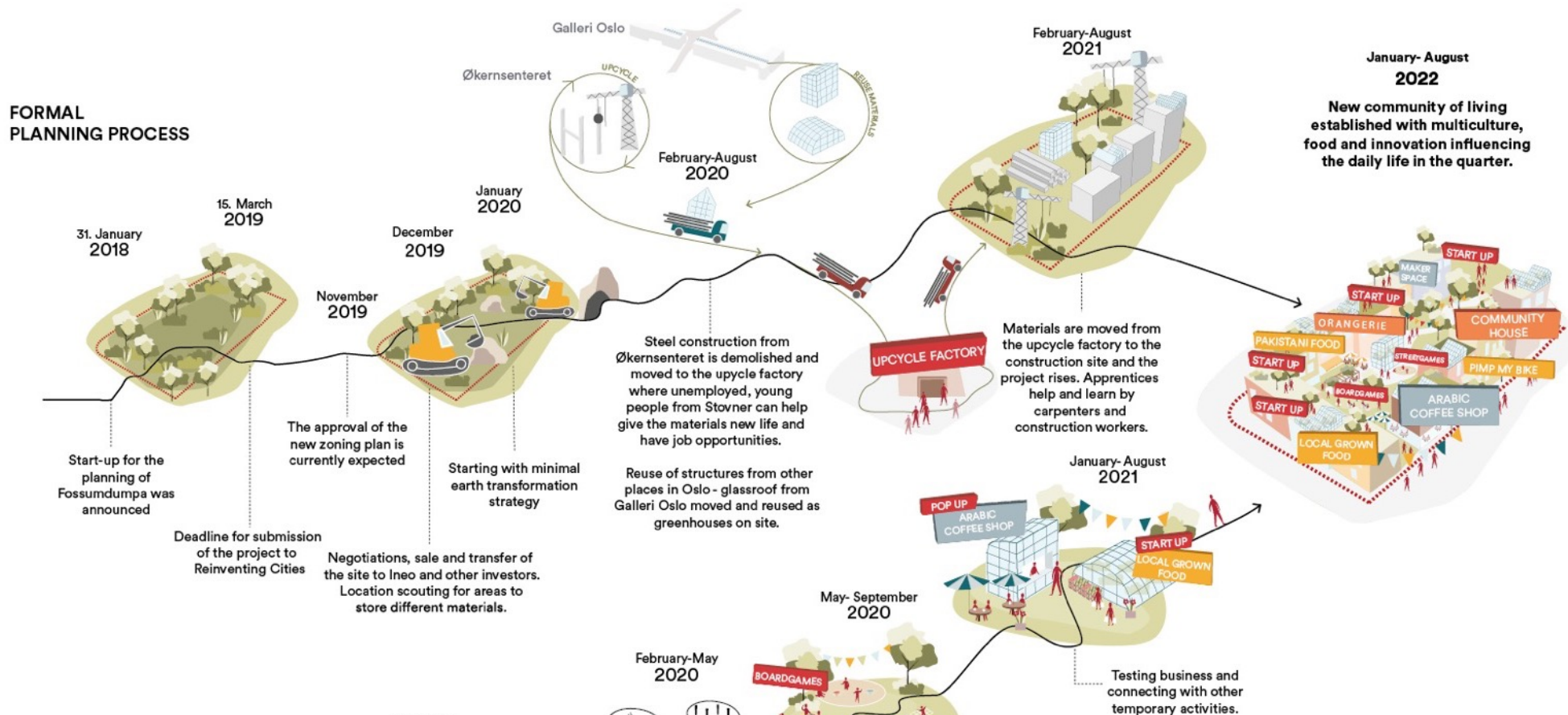
Nature



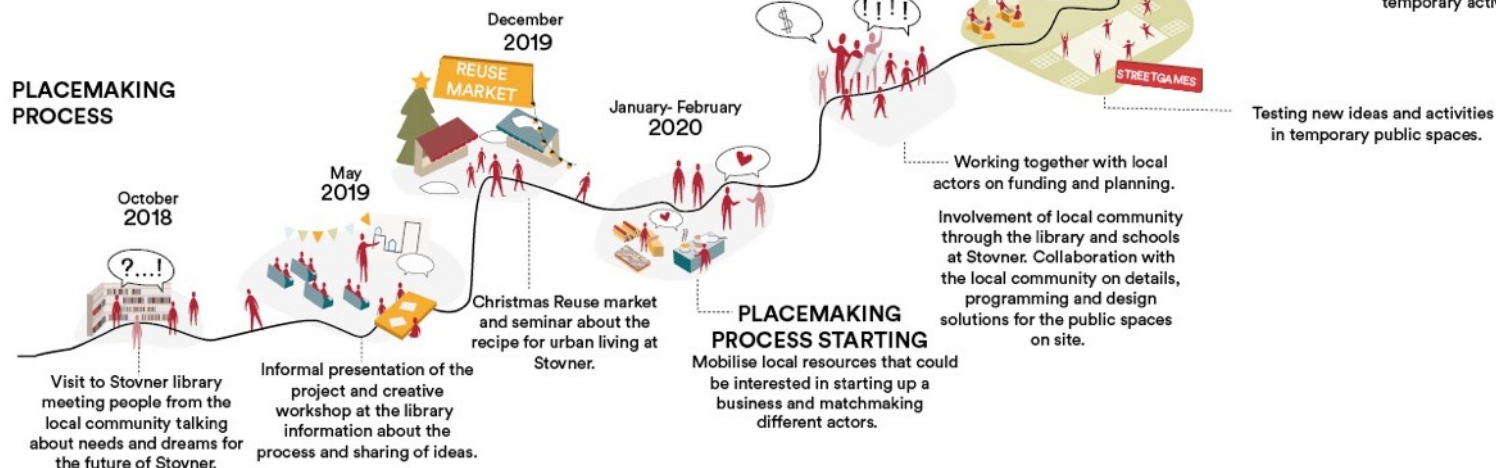
The Stovner Tower



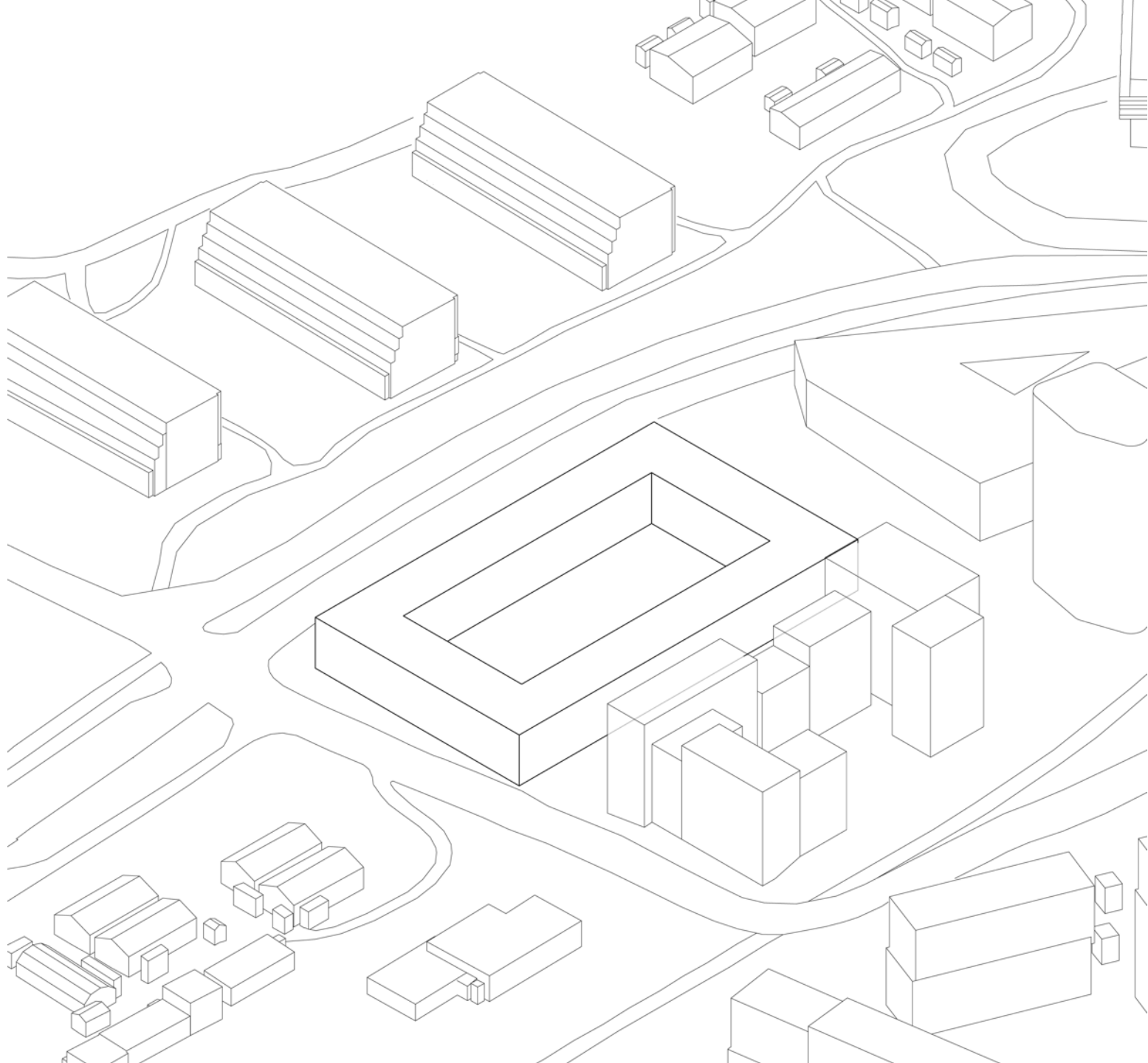
FORMAL PLANNING PROCESS

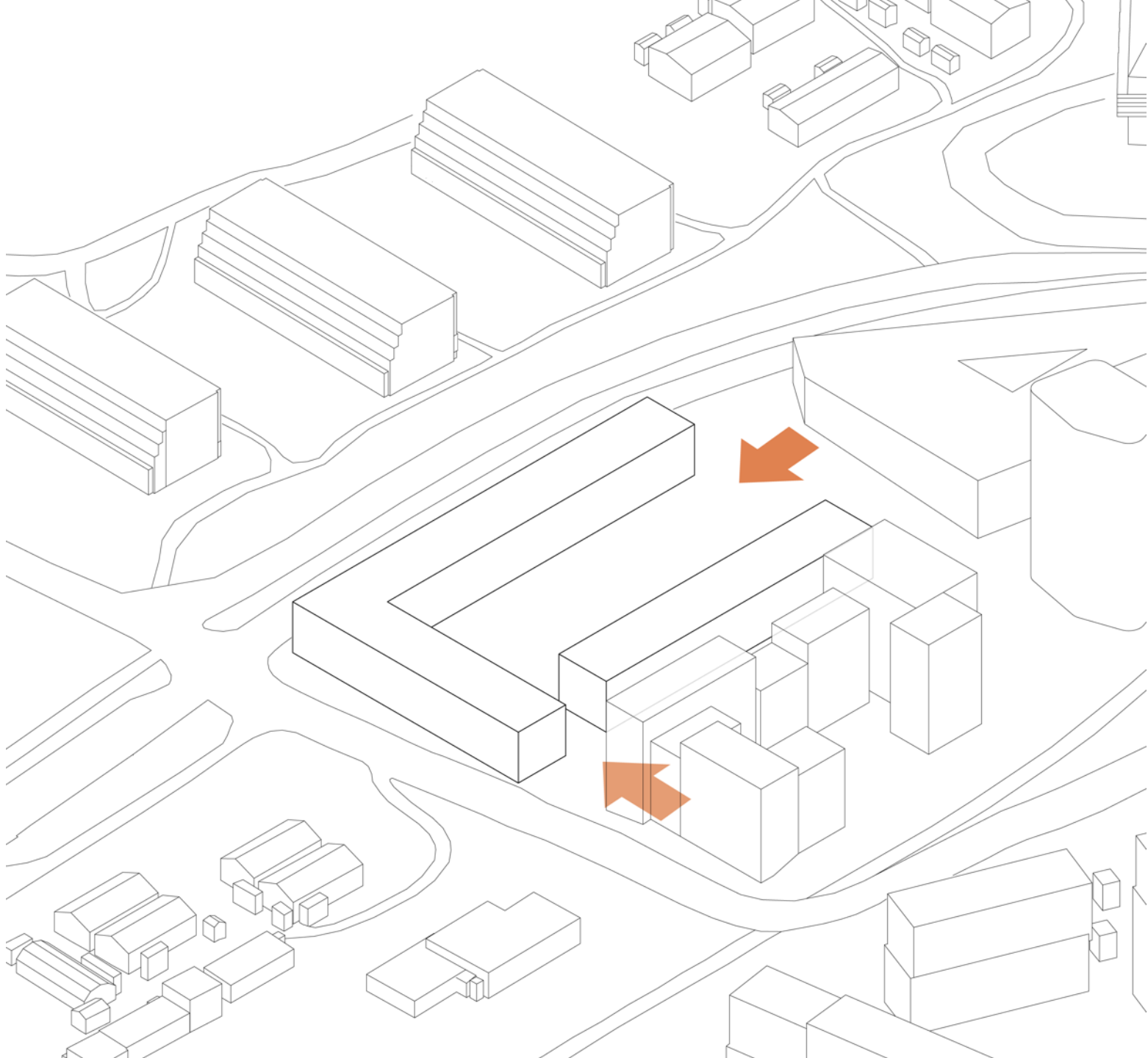


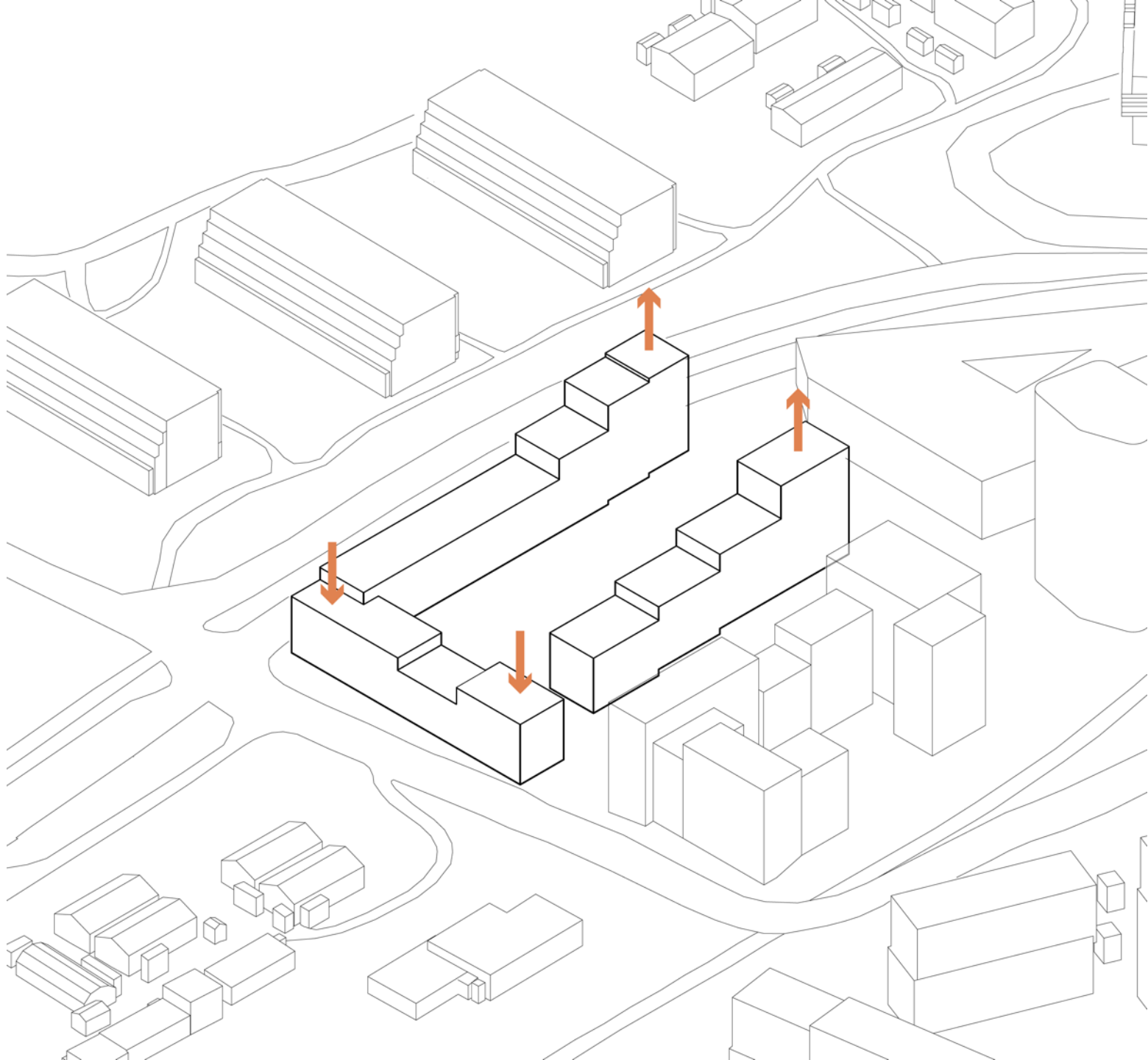
PLACEMAKING PROCESS

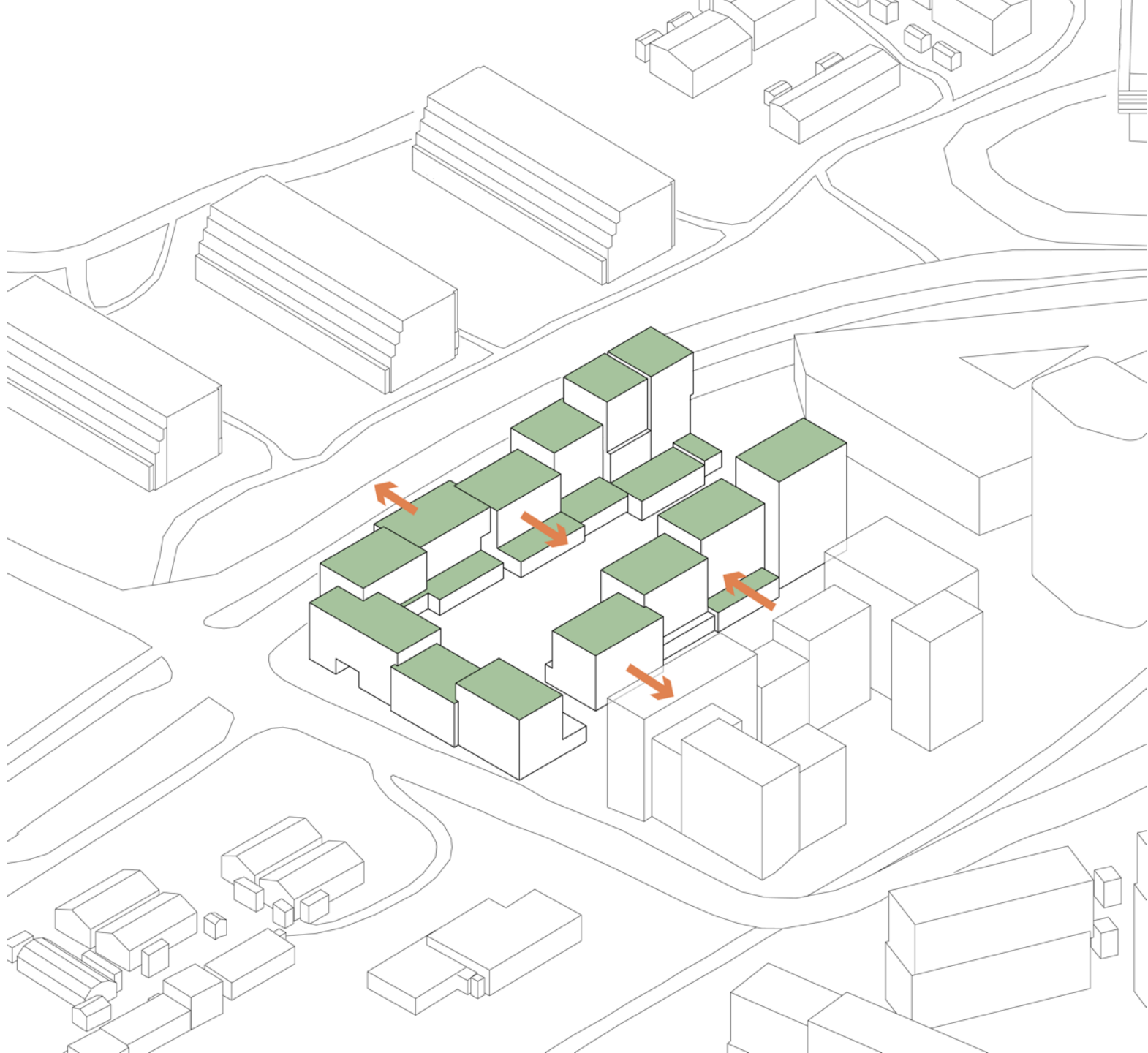


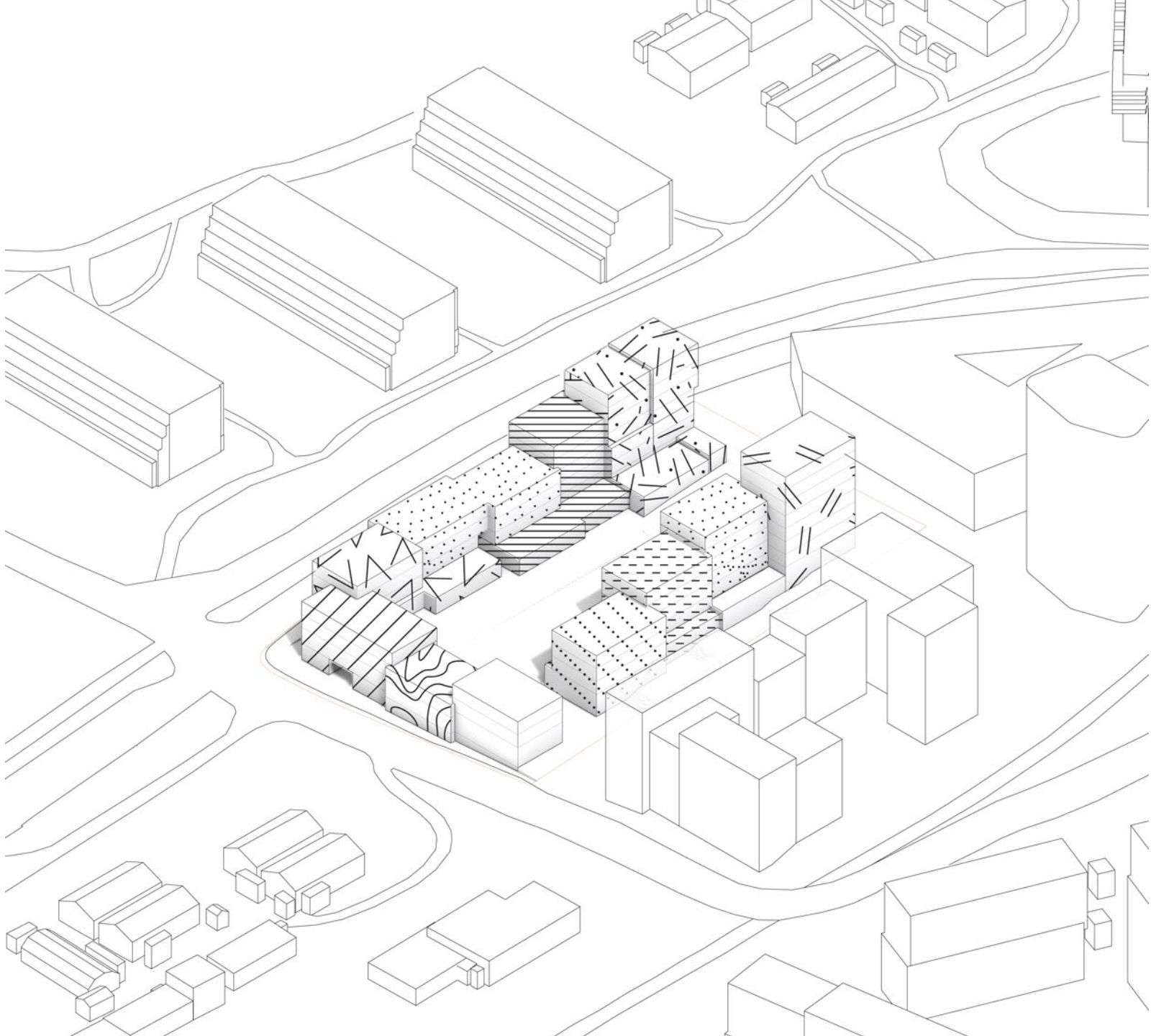
Shaping the volume











Urban mining

Material banks

Reuse of nearby buildings

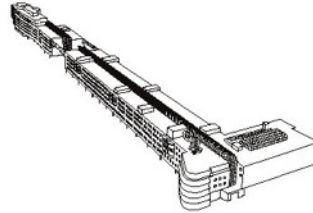
1. Regjeringskvartalet R4/M17

- Granite facade
- Interior/lighting
- Stone floors
- Paving from Johan Nygaardsvolds plass



2. Galleri Oslo

- Foundations/concrete elements
- Concrete element slabs (hollow core slab)
- Concrete cores with stairs and elevators
- Curtain wall/glass
- Stairs, steel profiles
- Glass roofing
- Columns, beams, steel grills, brackets
- Interior
- Terrazzo floors



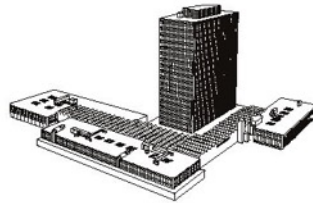
3. Urtegata 9

- Steel frames



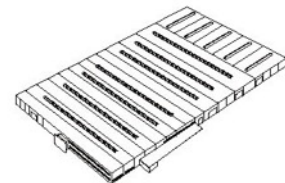
4. Lørenfaret 3

- Concrete columns
- Facade
- Interior



5. Økernsenteret

- Concrete columns
- Facade material, floatglass from windows
- Steel construction



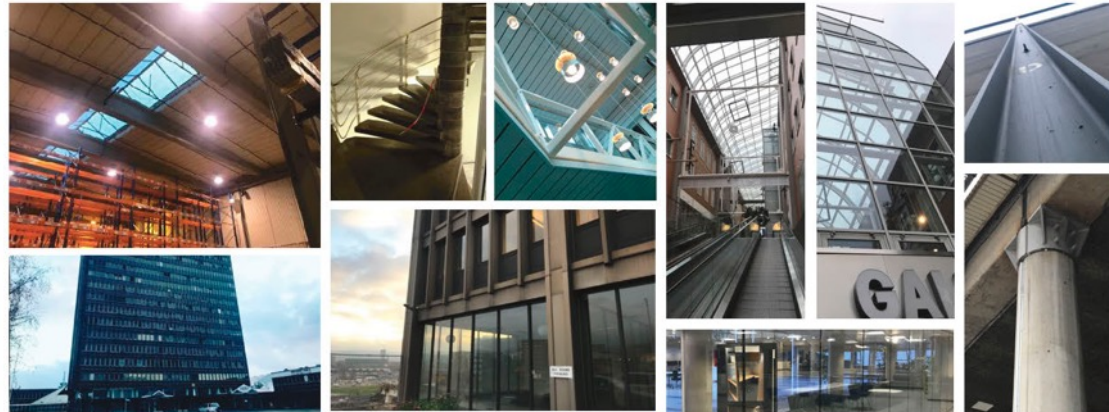
6. Motek-bygget

- Windows and facade
- Roof glasswool insulation
- Skylights
- SIB sloped I-shaped beams (concrete)
- Main carriers, (concrete)
- Technical HVAC, vent, fire, electrical
- Industrial gates and loading docks
- Fire escape stairways
- Interior/lighting



Distance to material banks

The strategy is to reuse materials from large scale planned demolitions in Oslo. The buildings on this list are planned for demolition. Resirqel is responsible for salvaging materials from the projects.

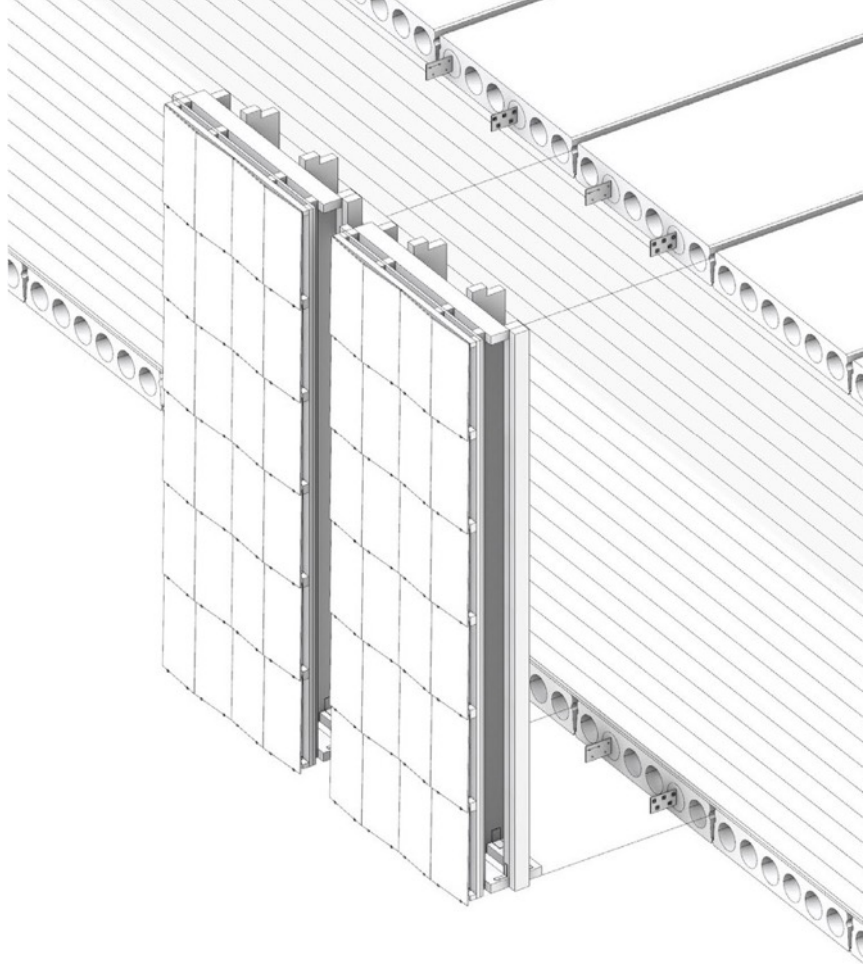


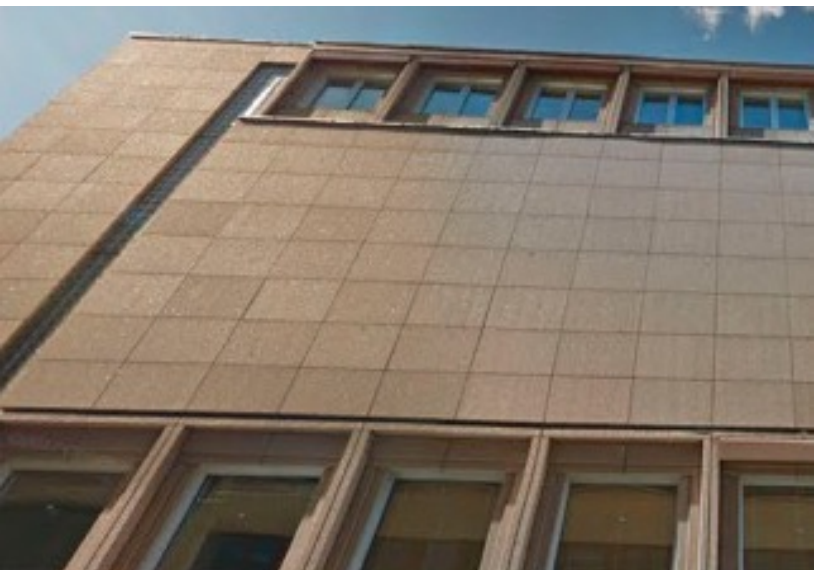
Reuse components list

Concrete slabs	Galleri Oslo	Slabs	20 920 m²
Concrete wall elements	All sources	Cellar	2 084 m²
Concrete wall elements	All sources	Stairwells	5 521 m²
Concrete pillars	Galleri Oslo	Pillars	836 m
Fasade			
Window elements made of recycled thermo-window-panes and larch-wood	Lørenfare, R4, Økern C.	35% of facade.	3852
<i>Modular facade elements: Wood frame 13%, wood-fiber insulation, vapor retarder, windblocker, cover material.</i>			
Floatglass, various hues, sandblasted on inside, (Possibly with integrated solar panels)	All sources	Element with sandblasted floatglass	2 899 m²
Folded sheet-metal profiles	Commonly Available	Element with folded shingles	2 259 m²
Slate	Commonly Available	Element with slate	1 248 m²
Granite	Regeringskvartalet R4	Element with granite	749 m²
<i>Steelbrackets for fastening of elements on concrete slabs.</i>	New		7 418 pcs.
Rolling doors	Regeringskvartalet R4	Startups along Fossumveien	12 pcs.
Glass wool	Motek Building	Roof insulation 400mm	2 755 m²
Steel profiles	Motek, Økern center	Balconies	2 020 m
Float glass 12mm	Økern center, Lørenfare	Balconies	2 020 m²
Solid beech parquet	Sports floors	Interior cladding on outer walls	20 730 m²
Fixtures & furniture			
Solid beech parquet	Sports floors	Apartment floors	20 730 m²
Brick elements	Regeringskvartalet R4	Heavy partition walls	17 280 m²
Steel spiral staircases (Measured vertically)	Motek Building	Connecting rooftops	33 m
Terrazzo-steps	Motek Building	Internal staircases	1 567 pcs.
Steel profiles	Motek, Økern center	Internal staircases	846 m
Brick (cut-out cement mortar brick / brick elements)	R4, Commonly Available	Cornice inside / roof railing	332 m²
Elevators	Regeringskvartalet	Elevators	12 pcs.
Slate, terrazzo floors	R4, Galleri Oslo	Floor (ground floor plan)	5 300 m²
Doors, oak, stuffed doors – refurbished	Regeringskvartalet R4	Apartment doors	150 pcs.
Selected fixtures, fittings, lamps, furniture etc.	All sources	Bathroom, kitchen, furniture etc.	
<i>Elements can also be reused in a new function:</i>			
For example a kitchen counter can be made out of a heavy concrete/steel plate from industrial buildings.			
eg. Cabinets can be made from reused wood, fibre cement facades etc.			
Landscape			
Earth topsoil	From site	Rooftops 500mm	1 505 m³
Earth	From site	Courtyard	12 040 m³
Granite, square pavement	Regeringskvartalet	Paths & square	700 m²
Small pieces of marble and slate	Commonly Available	Mosaic for the Bazaar Square	340 m²
Irregular granite	Roadwork	Thread-stones green areas	
Irregular granite	Roadwork	Rainwater distribution on rooftops	
Filling material in gabions			11 m³
Greenhouses			
Curtain walls, glass corridor	Galleri Oslo	Greenhouses	950 m²
Skylights	Motek Building	Greenhouses	1 127 m²
BRA			



Section of a typical block in the structure.





Window element

Reused thermo panes, set in new frames. The windows are composed of multiple panes that form a pattern - a mosaic that frames the view, and from the outside provides a filter to the private life inside.

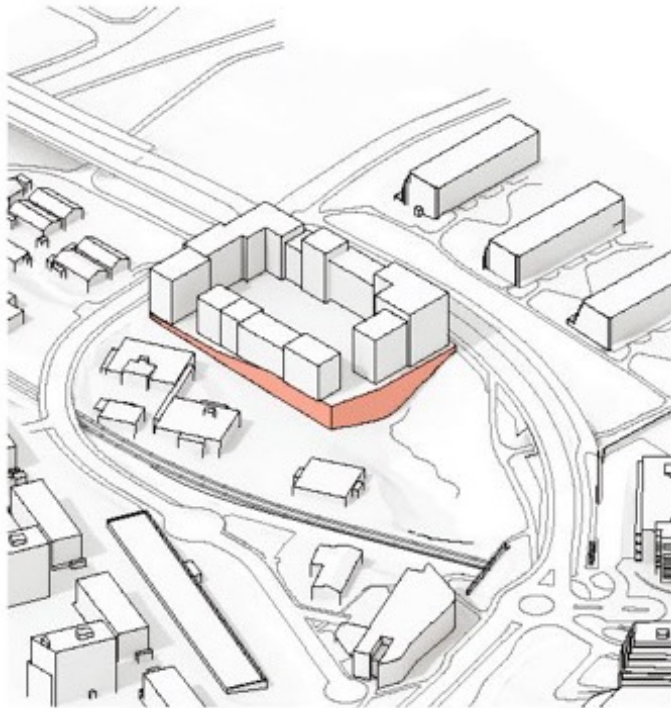
The frames and infill are made from larch or pine wood.

The windows have a vent in the bottom, letting fresh air between the thermo pane and another layer of glass. The passively controlled vent regulates the flow of air to the outside climate. If it is cold and windy, the vent will tighten. By this, fresh air is let into the building.

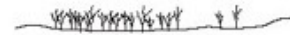


Landscape

Following the terrain



Minimal earth transformation strategy



Existing low site

Natural stream, trees and bushes



The Zoning plan

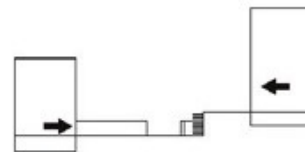
The area is filled to match the surrounding terrain



The alternative

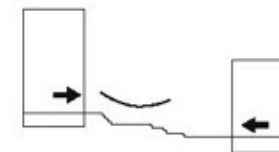
Following the terrain, a low courtyard & local earth reuse.

Landscape and biodiversity



Entrance

The entrances match the landscape.



Levels

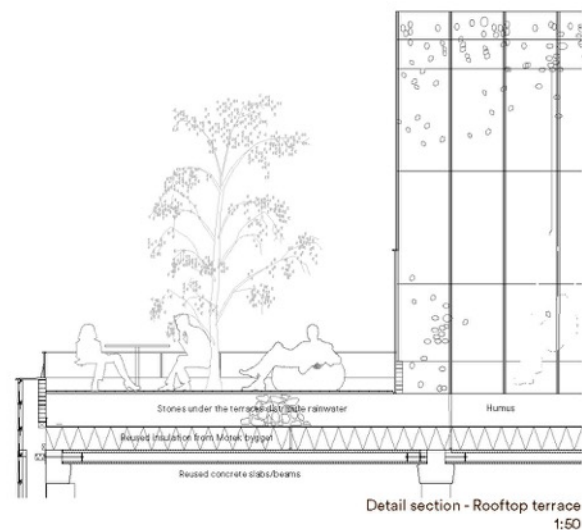
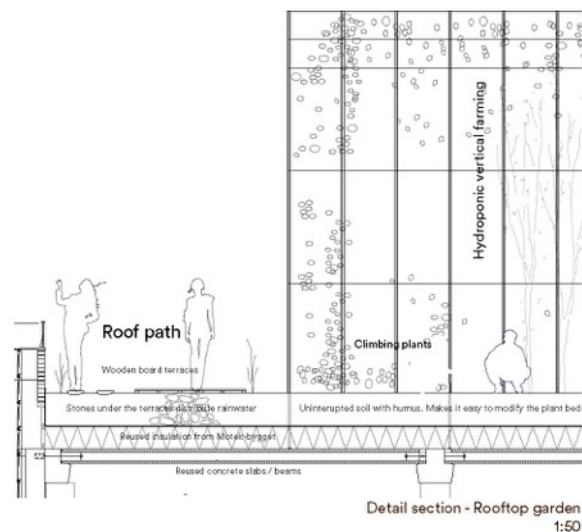
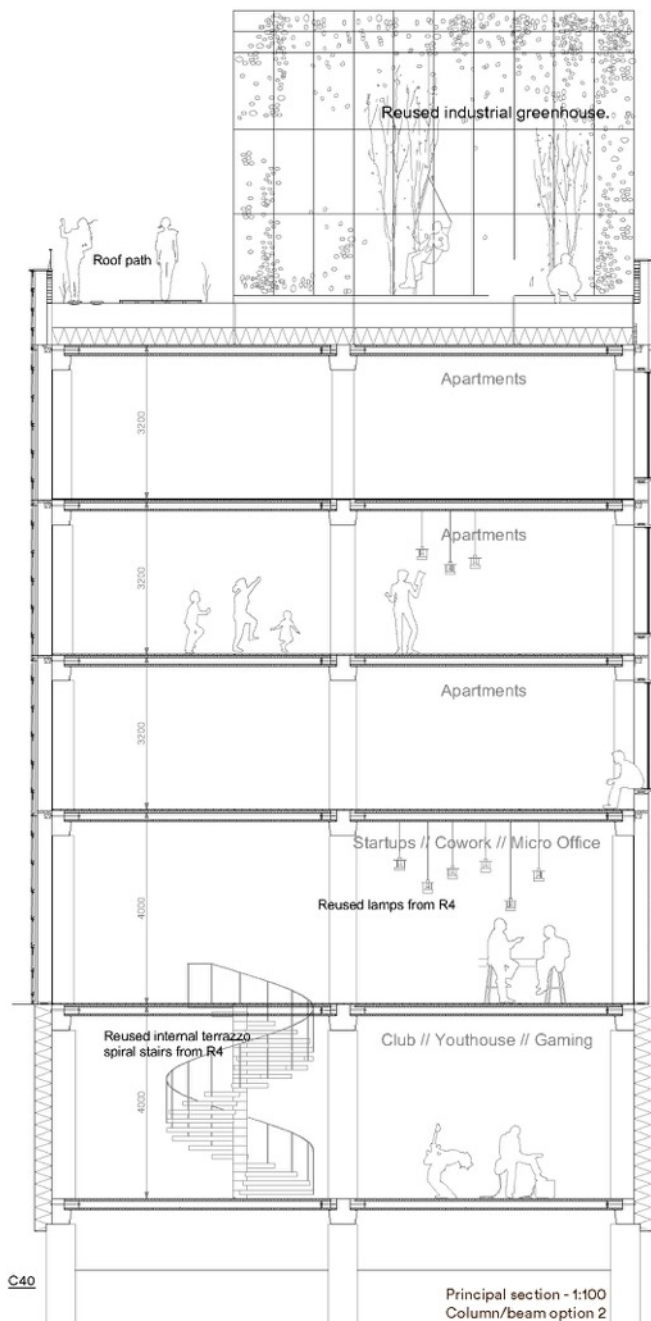
A natural green hill and several terraces for activities.



Earth

By reusing the earth on site, local biotopes can be preserved.





Roof tops

The roofs are made of reused insulation and 50cm soil. This makes it possible to facilitate local rainwater use, a wide range of urban farming in the greenhouses and rooftop gardens, beekeeping etc. - a whole ecosystem on top of the buildings, and a facility that sparks a urban rooftop life.

The greenhouses are made of reused skylights from the Motek-building and the glass corridor from Galleri Oslo.

Area GIA/BRA

Residential and community area

Residential
Community centre
Greenhouse
Balconies
Corridors and staircases
Staircases on roof

Residential and common area total: 13 000 m²

Commercial

Start-up business, maker-space, incubators
Café
Production Kitchen
Shop
«Pimp my bike», bike-repair and bike-hotel
Storage for bike hotel

Commercial total: 3 000 m²

Total: 16 000 m²

Basement

Production kitchen storage
Club and exchange room
Start-up storage
Basement, access, parking

Basement total: 2 800 m²

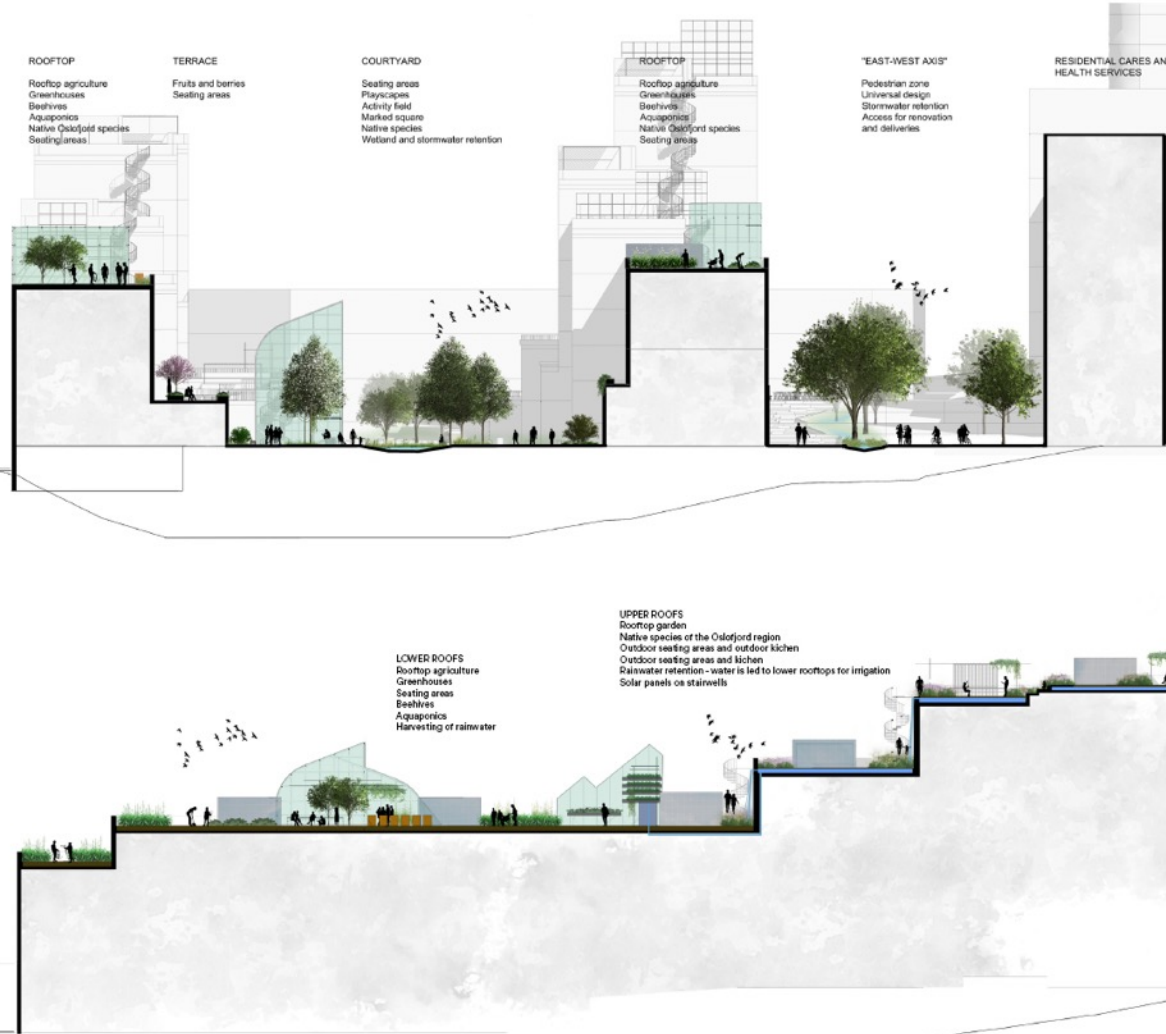
Local species of the wooded gully



Native species of the Oslofjord region



Bamboo and ivy



Wetland vegetation



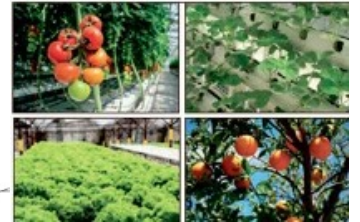
Fruit and berries



Urban agriculture - allotment gardens on the roof



Greenhouses





Last but not least



