Phase 1: Urban Renovation - social
(External Connection + Outdoor Spaces)

Provide social asset to public through promenade development.
- Create social awareness of development at Binckhorst.
- Promenade as social platform for people of different income class, ethnicity, education to come together.
Phase 2: Urban Renovation - economic
(Work/Dwelling + Program Interconnection)

Mixed use development to activate promenade.
- Ground floor will have various functional and recreational amenities to activate the promenade.
- Large housing complexes on the upper floors will be designed to accommodate for different income classes.

*Proposal (FSI)* 3.47

*Municipality Plans (FSI)* 1.5
Phase 3: Urban Renovation - social
(External Connection + Outdoor Spaces)

Activate latent potential of existing areas with park.

- The north of the site will be developed as a quiet nature retreat. It will blend in with the existing Binckhorst castle. It will also serve as a social platform for people working at the Mooof, an incubator for artists/creative.
- The south of the site will be developed as a recreational port. It will work together with the existing restaurants in the area and the big event ground that is used to host the annual I’m Binck festival every year.
Phase 4: Urban Renovation - social + economic (Program Interconnection)

The innovation factory

- The innovation factory will be the central heart of the area. In the building, there is a central passage that connects the North and South of the park together. It is a public physical space for people with ideas to make them into reality, a social place where they are able to reaffirm their identity, and an economic place where they will be supported with different technology which they normally will have no access to.

- **Scale:** The building is only 4 story in height, which is a comfortable human scale for interaction and staying. This is important because the surrounding areas are very dense and can be alienating.

- **Access point:** The building canopy sticks out along the main road as a welcoming gesture. The main passage is also directly aligned with the passage from the Southern park.
During the summer, the main passage is open. The structural system was inspired by columns of trees so that the transition from outdoor park to indoor is seamless, and an unwitting visitor will not feel the difference as will simply walk in.
**Structural system and materiality** - blurring the lines between park and building.

**Structure:** Verticality was an important consideration of the design in trying to blend the transition from outdoor park to indoor courtyard. Exposed I steel members are used with a wooden truss system for the roof.

**Materiality:** The decision to use prefabricated steel and wood construction system is to retain the identity of the industrial area while also maintaining the feeling of nature in the building.
A humble design to encourage diversity.

Detailing: As the project is developed on the premise that anyone can be an innovator, it was important to create a space so that everyone, including for instance a garbage disposal worker can feel socially accepted. As such in the deliberation of the detailing for the building, both the internal and external facade is very basic, with exposed steel and screws, in order to create an environment that is similar to what a low-income worker would be accustomed to.
The void spaces + the ground floor

Visibility (social asset): Visibility is key in sustaining innovation culture. The perception of activity, of people creating innovation helps to reaffirm the personal identity of innovators. As such, the void spaces within the building are key elements in facilitating innovation culture. There are 3 key void spaces, within the building, each with a different function, uniquely adapted to also the external environment (as can be seen on the left).

Workshops (economic + social asset): The workshops play both an economic and social role in innovation. As a social asset, the workshops activate the void spaces on the ground floor. A passer-by would be able to see many things happening. As an economic asset, the workshops have technologies such as the 3D printing machines, the wooden workshop machines, with supervision from staff members that will help any person to foster their idea.
The first floor - controlled collaboration

Controlled floor (physical + economic asset): The first floor is called the controlled collaboration floor because it has its own mechanical ventilation system and is also sound insulated. On this floor there are meeting and study rooms of various sizes which anyone can rent out. This will be a critical social and physical asset for entrepreneurs or start-ups who are not able to afford a proper office space for meetings.
Controlled floor (social asset): Although the first floor is primarily a controlled and internal area. In each of the rooms, there are windows that faces directly into the courtyard. There are social spaces where it is possible to look into all the activity that are happening in the area. Moreover in both the axonometric and also the render, the building can also function in the night time, where only the ground floor and first floor is accessible.
The second floor - independent learning

Independent learning (physical + economic asset): The second floor is the independent learning area. It functions like a typical library, with comfortable working spaces. In order to make the space more personal, the third floor has openable juliet balconies which the public can open and close out of their own free will.
view to void - second floor

Independent learning (social asset): The entire second floor has a direct view over the entire void. The public can either choose to sit by the window-side, where they feel more nature, or they can choose to face into the void, which has a more social environment.
maker’s living room

During the winter, the passage can close. Here, the choice of using glass as the envelope plays a critical social importance. The space is transformed as a safe social hub, and as a living room. It becomes an indoor-outdoor place for the public to enjoy.
climate strategy - roof

South facing roof - energy generator:
The southern facade of the roof is fitted with Tesla solar tiles. The energy generated will be stored in an aquifer in the mechanical room on the third floor.

North facing roof - natural light:
The northern facade of the roof is fitted with windows at a perpendicular angle. This is to allow natural light into the void space, without overheating the area in the summer.
climate strategy - roof

Floor heating and cooling.
The energy generated from the solar roofs, will be used for low exergy cooling and heating through water pipes running in the floor slabs to adapt to the different conditions in the seasons.
air inlet.

air outlet.

air inlet.

air outlet.

air inlet.

air outlet.

solar energy harvesting.

floor heating. winter.

floor cooling. summer.

mechanical ventilation. winter.

natural ventilation + mechanical ventilation. summer.

natural sunlight. summer/winter.
climate strategy - ventilation

Winter
In the winter, the entire building is run by mechanical ventilation.

Summer
In the summer when the passage is opened. The building is naturally ventilated by the draft from the passage.