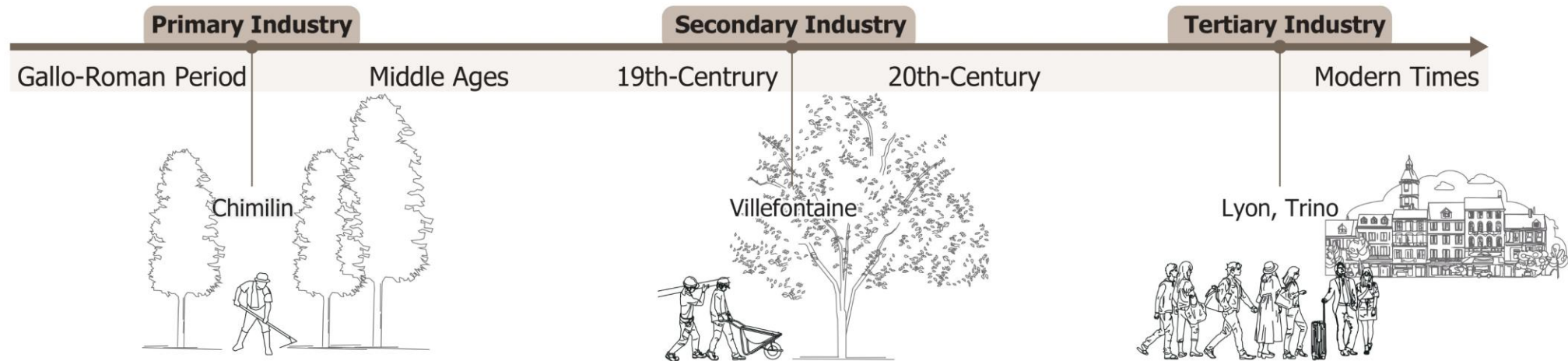
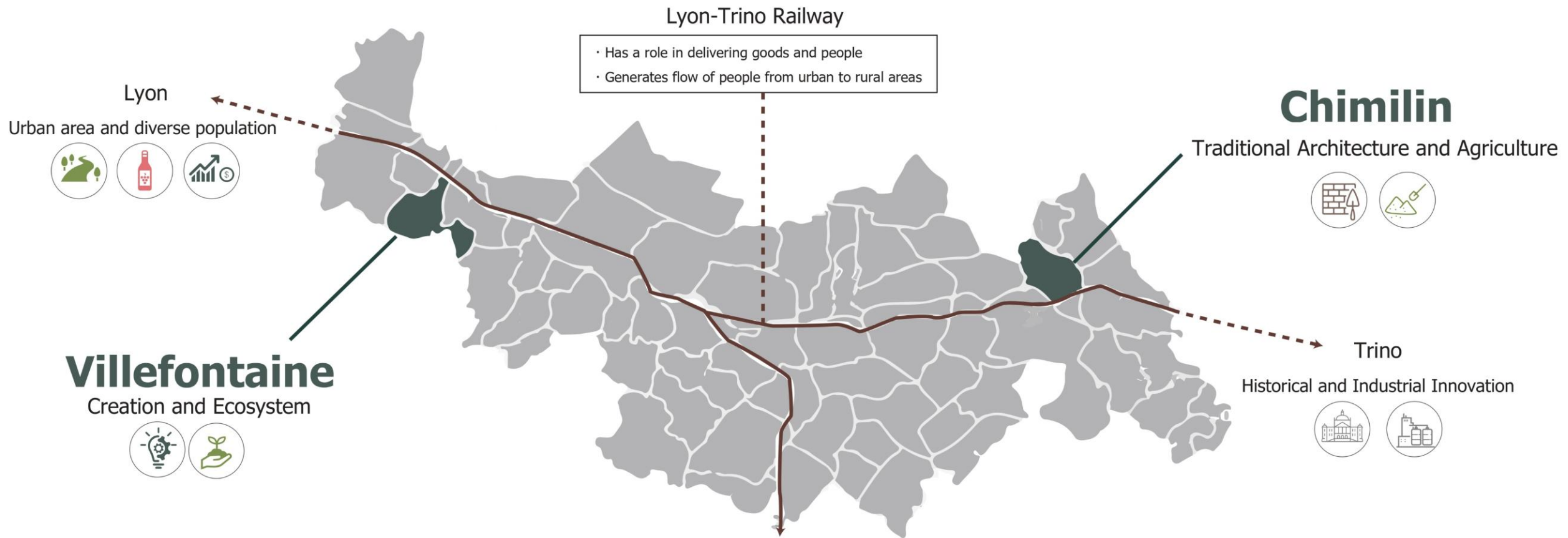
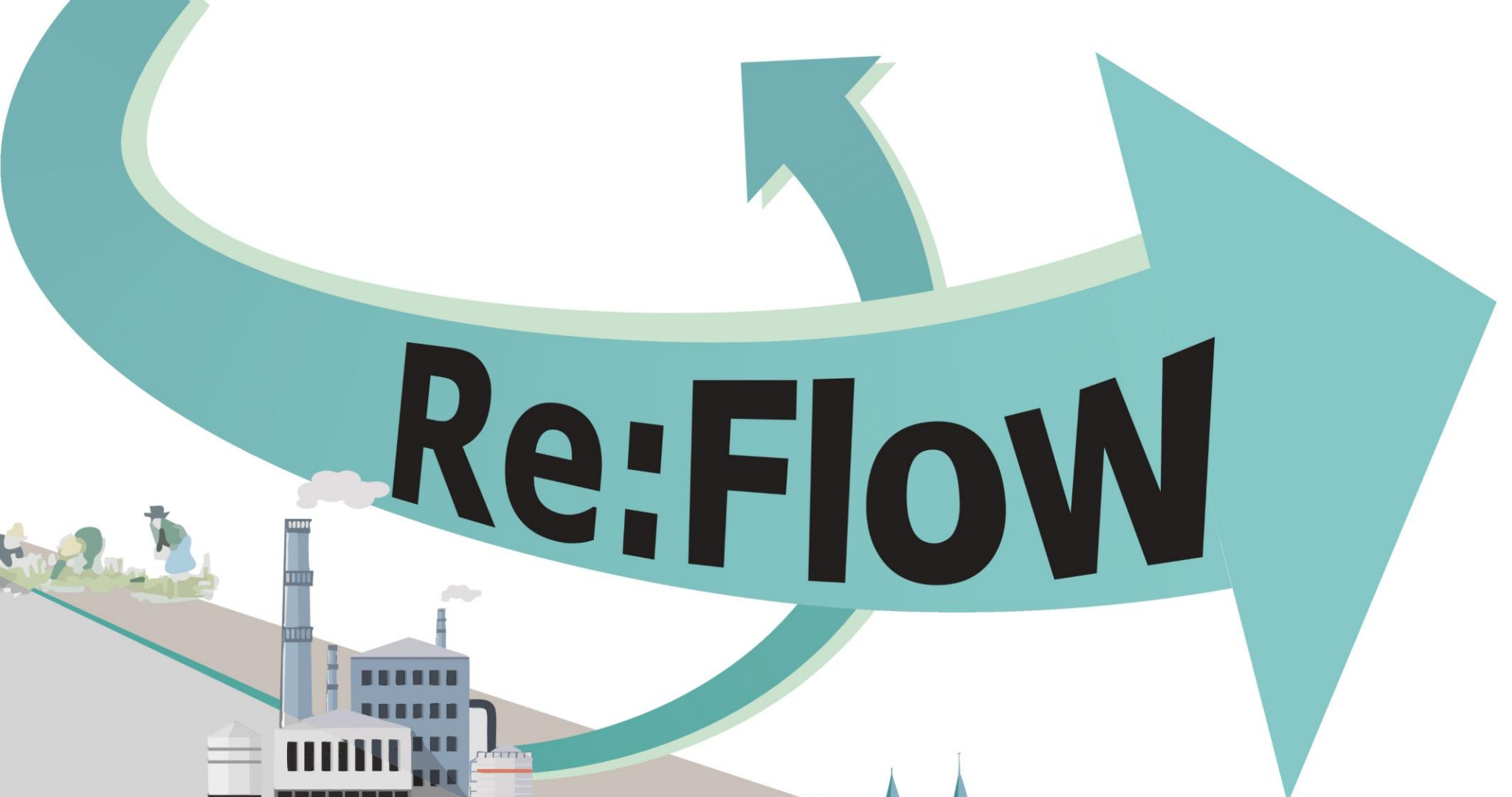


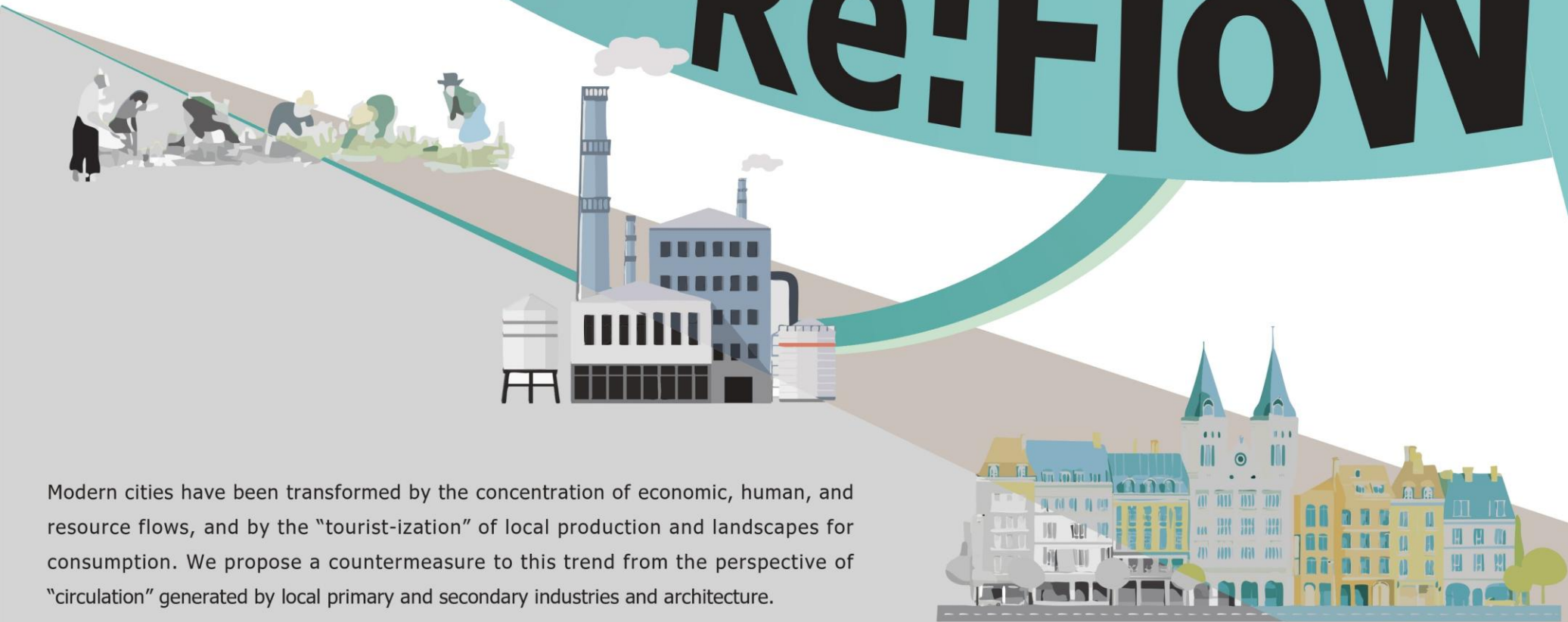
Re:Flow





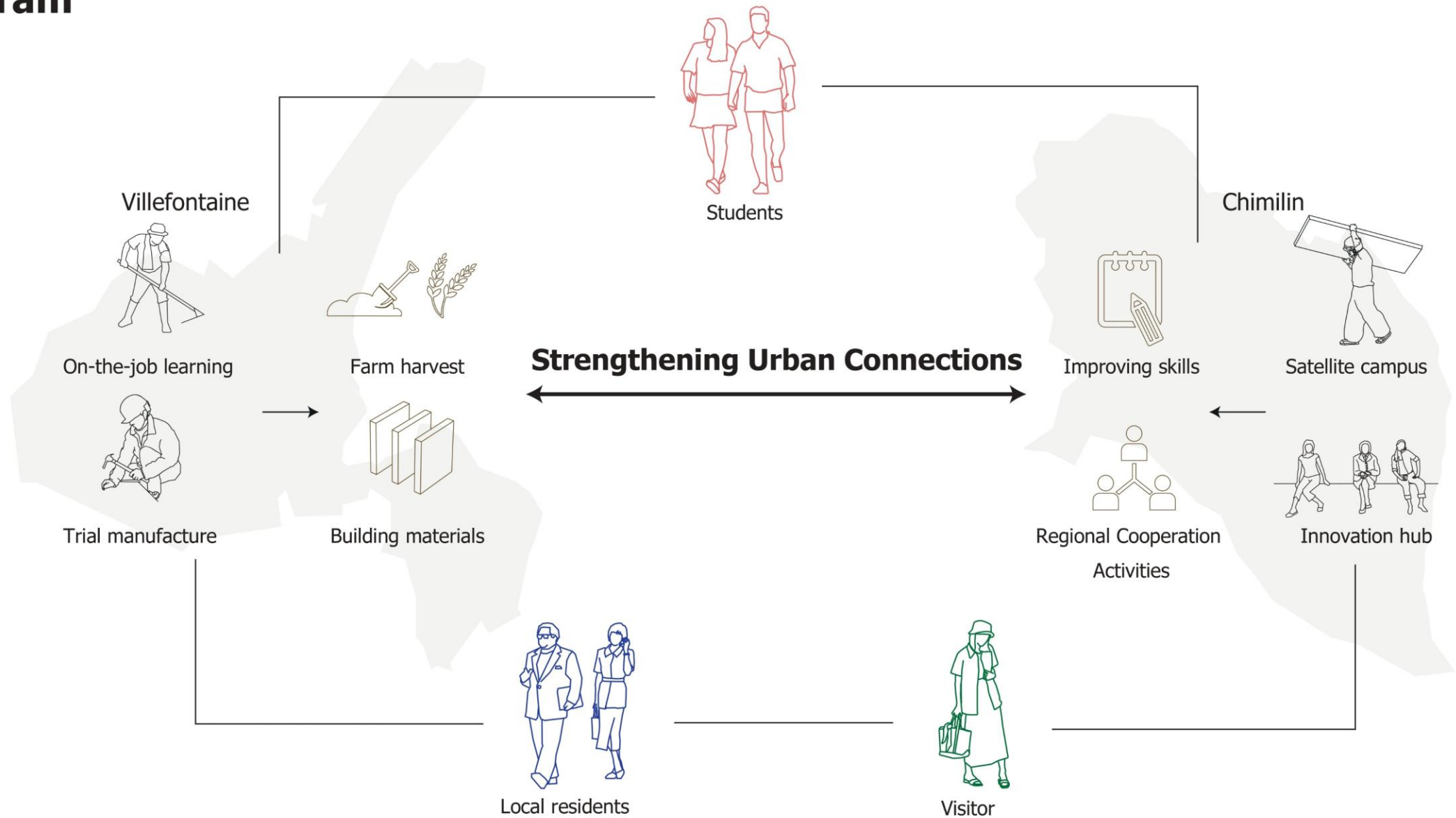


Re:Flow

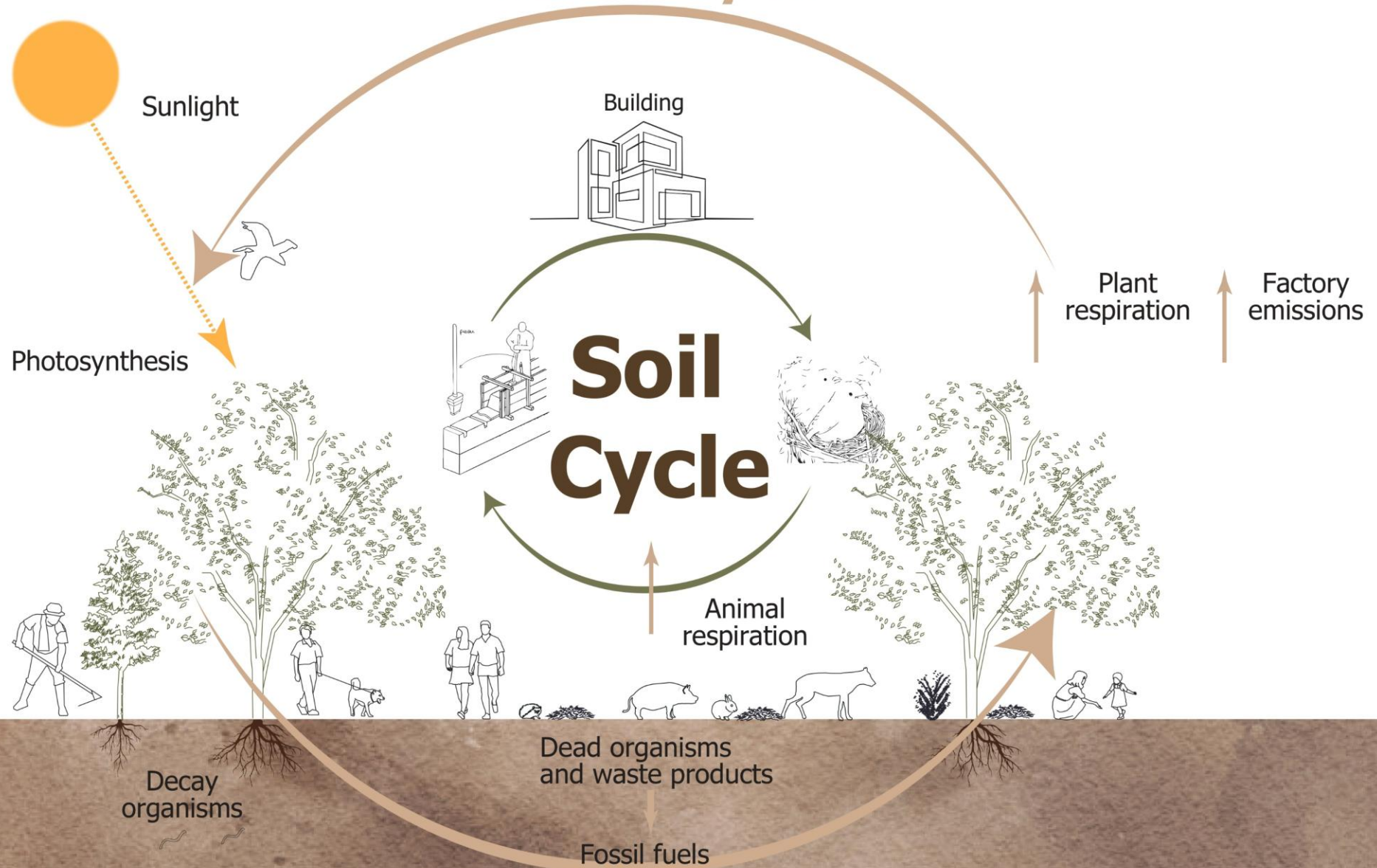


Modern cities have been transformed by the concentration of economic, human, and resource flows, and by the “tourist-ization” of local production and landscapes for consumption. We propose a countermeasure to this trend from the perspective of “circulation” generated by local primary and secondary industries and architecture.

Program



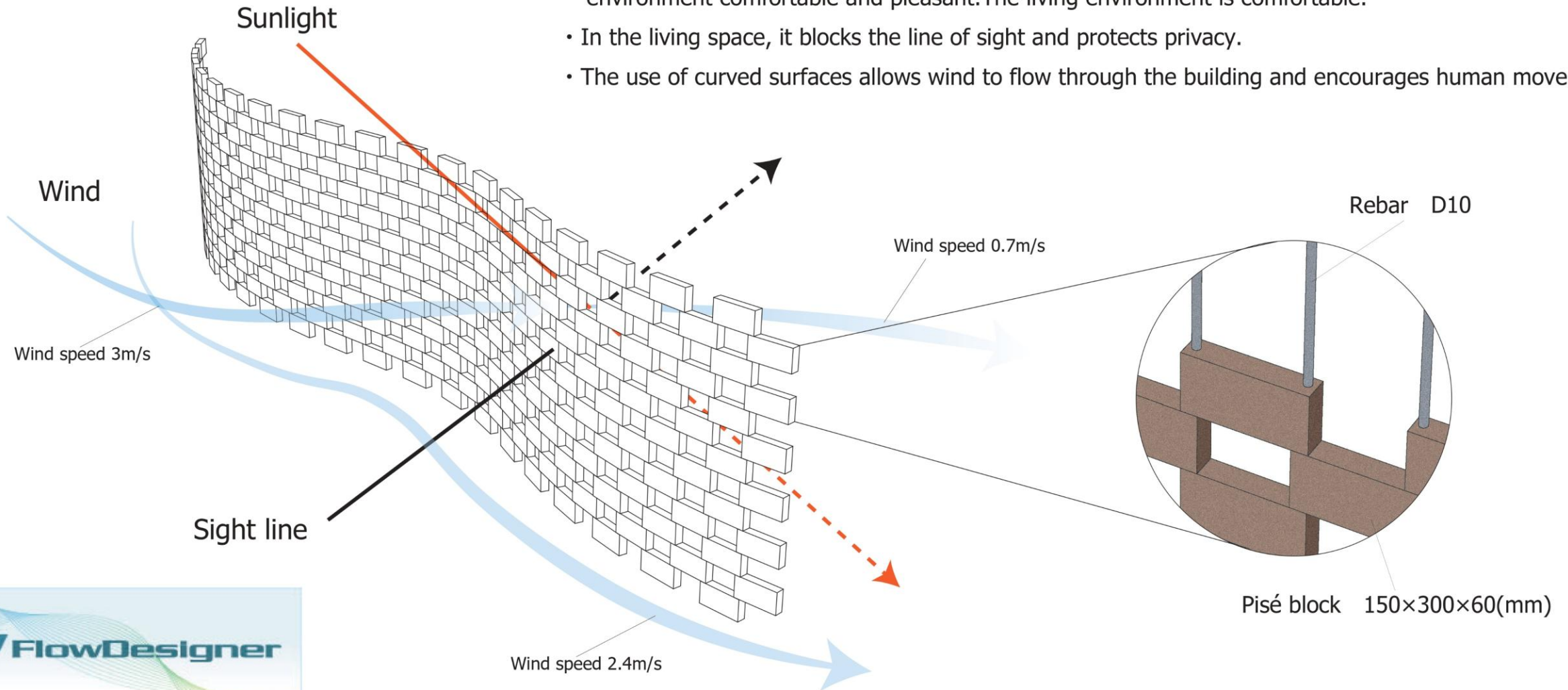
Carbon Cycle



Use of Pisé

Points

- The use of cement allows the soil to be returned to the ground.
- The brick walls of the pisé wall allow for a gentle ventilation and solar radiation, making the living environment comfortable and pleasant. The living environment is comfortable.
- In the living space, it blocks the line of sight and protects privacy.
- The use of curved surfaces allows wind to flow through the building and encourages human movement.



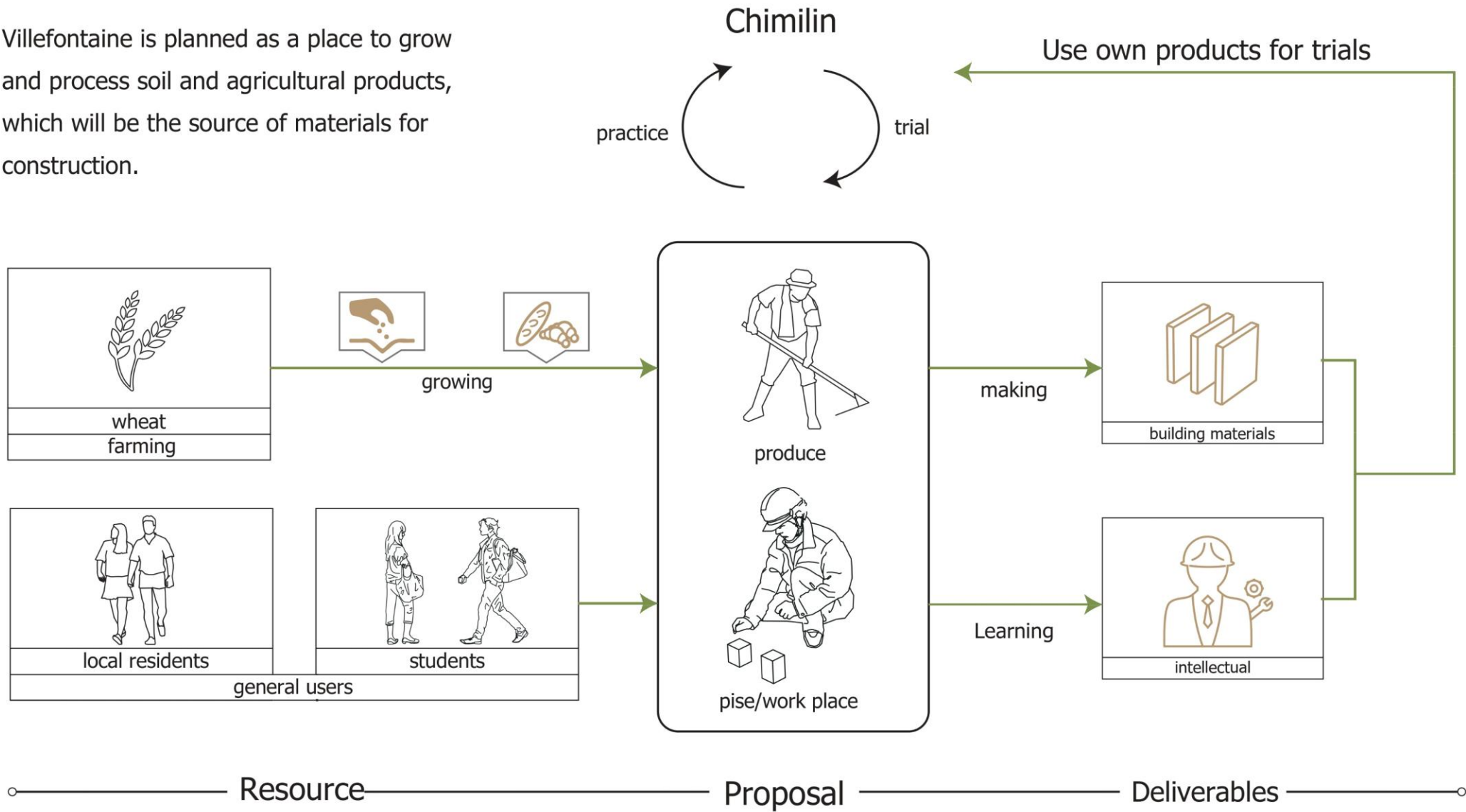
Building B - Co-Creation Lab



Villefontaine program

Villefontaine

Villefontaine is planned as a place to grow and process soil and agricultural products, which will be the source of materials for construction.



Master Plan



Office Room



Restaurant



Medical Clinic



Astus



Les Grands Ateliers



Boiler Room



Bakery



Dormitory



Co-Creation Lab

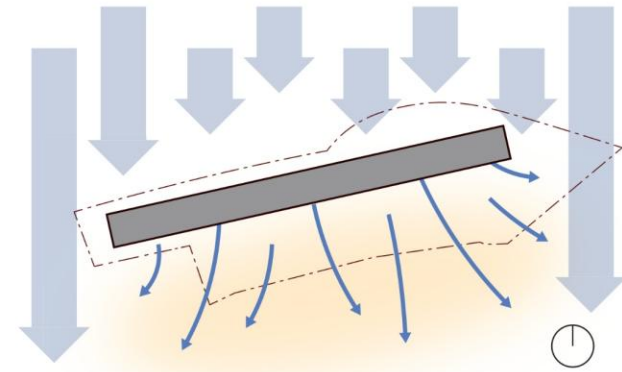


Biotope



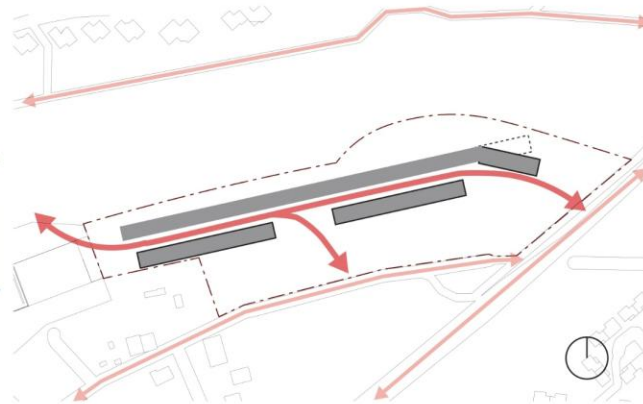
Massing Diagram

1 Wind × Flow



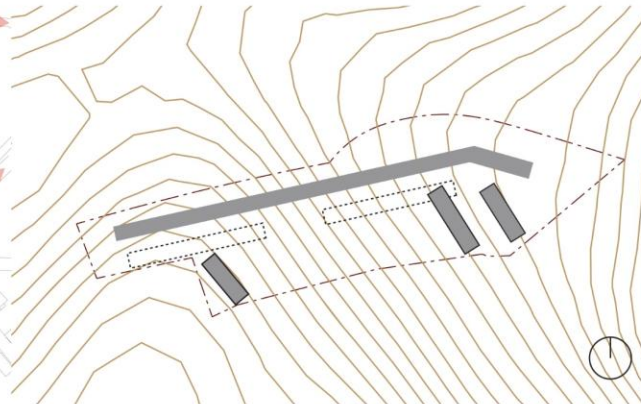
In Nord-Isère, the wind blows mainly from the north throughout the year. Building on the north side of the site created a comfortable space for people and crops for the wind to enter the site.

2 People × Flow



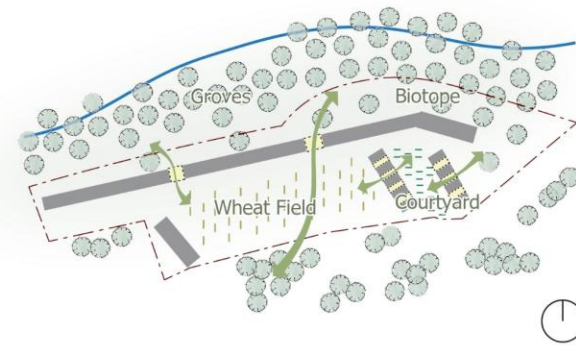
Passing flow lines through the centre of the site. Creating flow lines that allow people more flexible activities on a large site stretching from east to west.

3 Land × Flow



Environmental considerations were made so as not to destroy the original form of the site. In order to make use of the rich topography, volumes were manipulated along contour lines.

4 Green × Flow



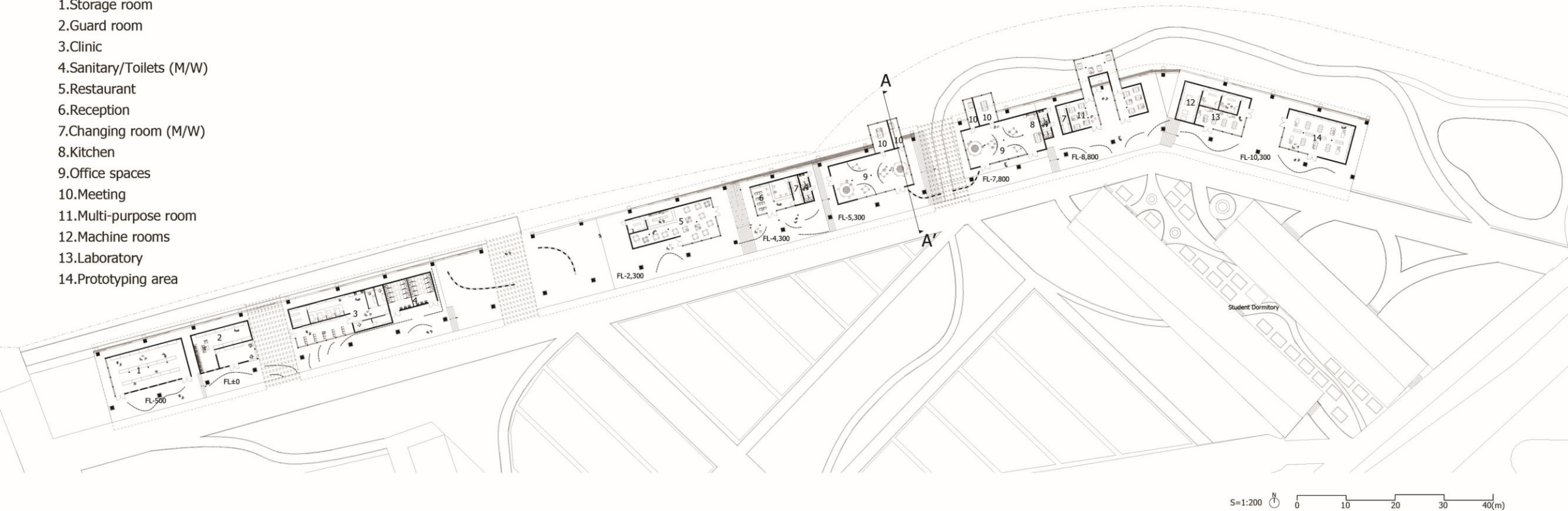
Gaps have been created in the building to connect the diverse ecosystems of Nord-Isère with people's activities. Environmental elements such as light and wind passing through the gaps provide an opportunity for users to experience the natural environment.

Building B -Plan

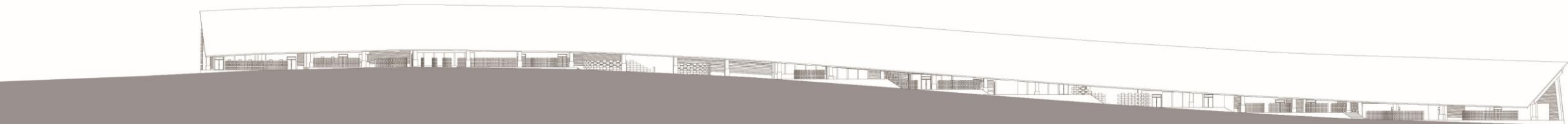
Co-Creation Lab

Ground floor plan

- 1.Storage room
- 2.Guard room
- 3.Clinic
- 4.Sanitary/Toilets (M/W)
- 5.Restaurant
- 6.Reception
- 7.Changing room (M/W)
- 8.Kitchen
- 9.Office spaces
- 10.Meeting
- 11.Multi-purpose room
- 12.Machine rooms
- 13.Laboratory
- 14.Prototyping area

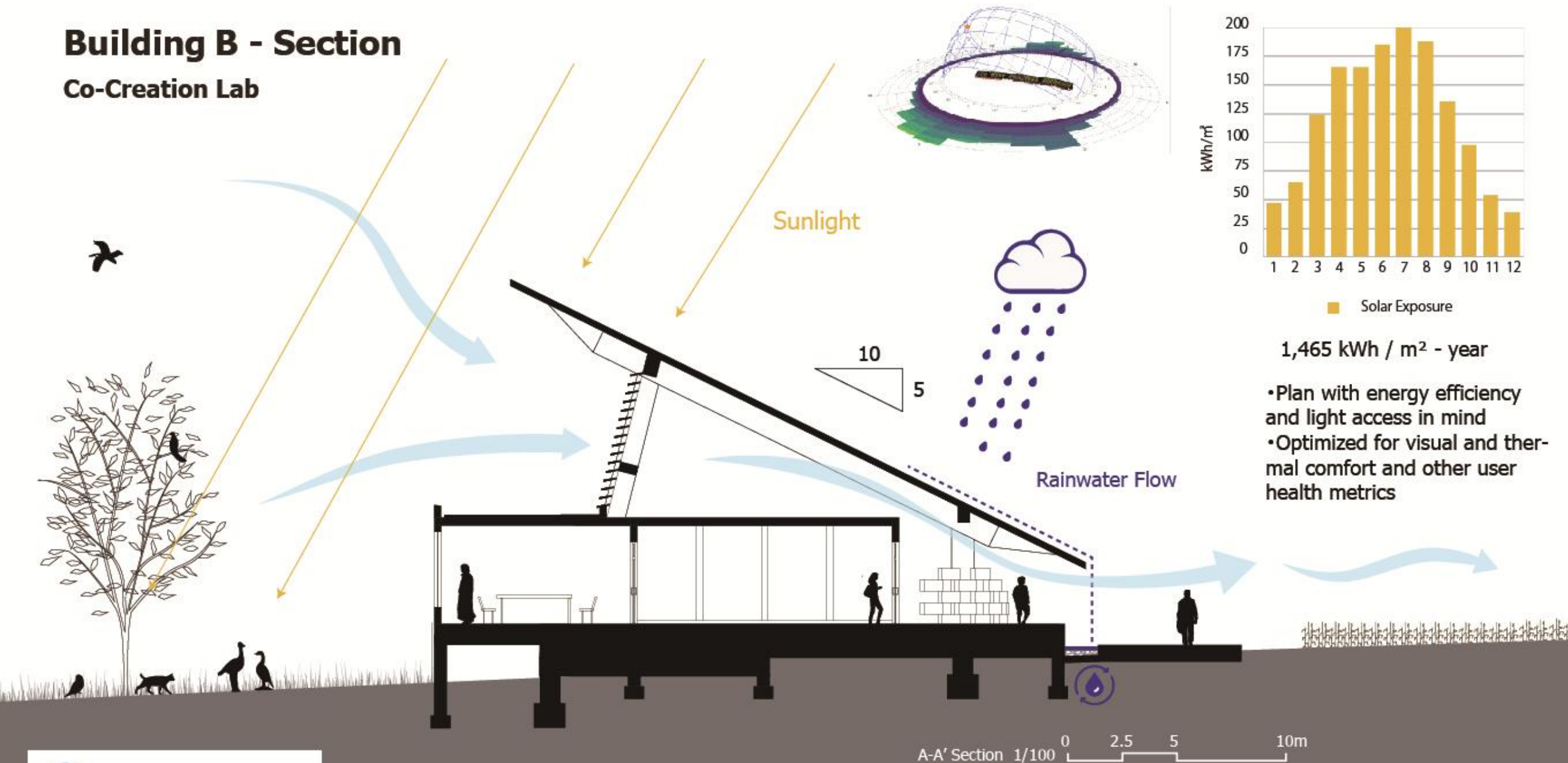


South Elevation



Building B - Section

Co-Creation Lab



Building B - New Construction for Residential Function in Campus Location



Building B - Office Spaces



Building B - Student Dormitory

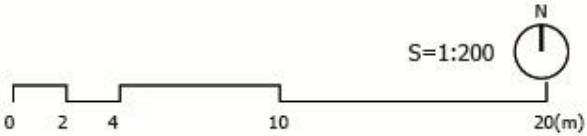


Building B -Plan

Student dormitory

Ground floor plan

- 1.Single room
- 2.Double room
- 3.Six-person dormitory
- 4.Eight-person dormitory
- 5.Toilet and shower
- 6.Farm tool storage

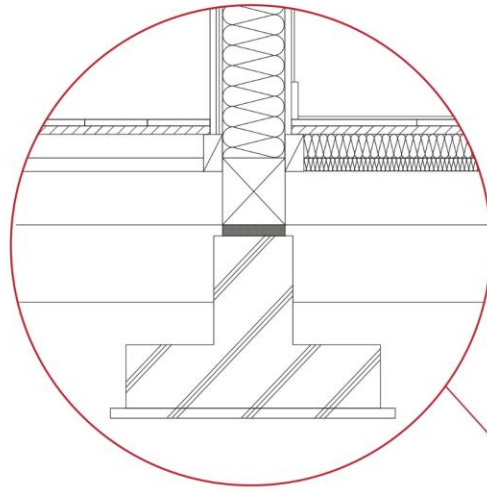


South Elevation



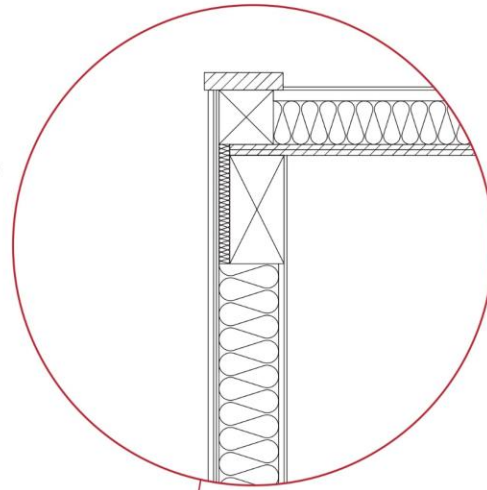
Building B - Detailed Cross Section

Student dormitory



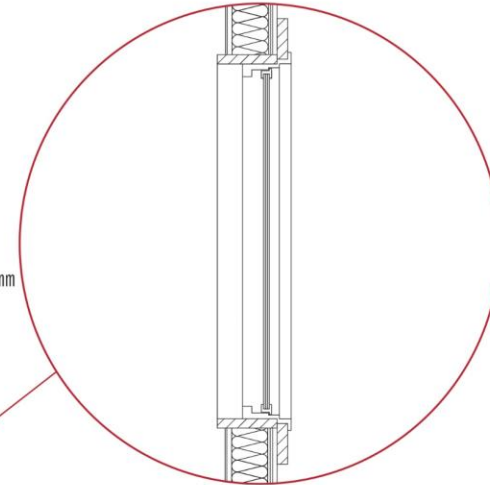
Inner Floor

Wood Flooring : 12 mm
Structural Plywood : 24 mm
Wood : 45 mm
Isover Standard : 150 mm
Wood:105 mm



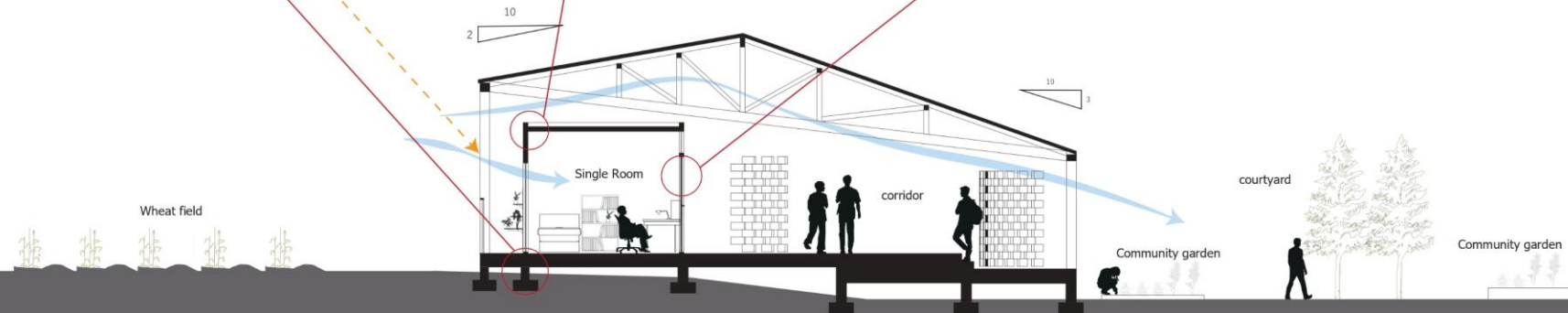
Outer Wall

Wood siding : 18 mm
Structural Plywood : 9 mm
Hard urethane : 70 mm
Wood:120 mm
Isover Barrio Extra Safe : 120 mm
Plasterboard : 12 mm



Window

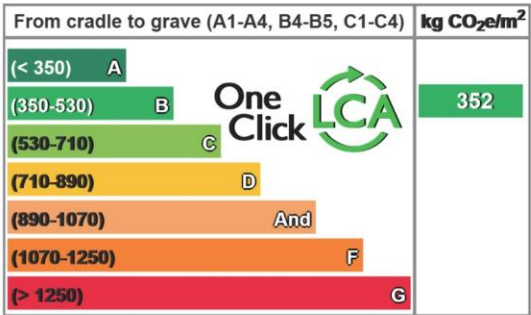
Glass
Saint gobain Low-E glass
ECLAZ3 + FL3 + ECLAZ3
 $U_g=0.512w/m^2k$
Wooden sash
 $U_g=2.15w/m^2k$
Spacer
 $U_g=0.029w/m^2k$
Visible transmittance:70.90%



B-B' Section 1/100 0 2.5 5 10m

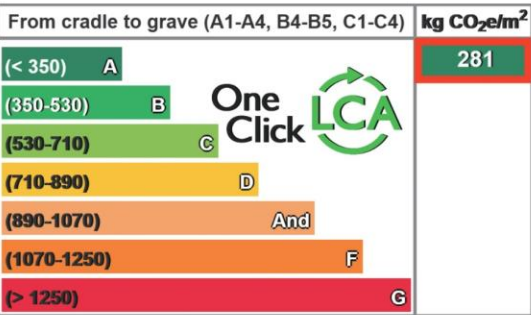
Life Cycle Assessment

Solid foundation

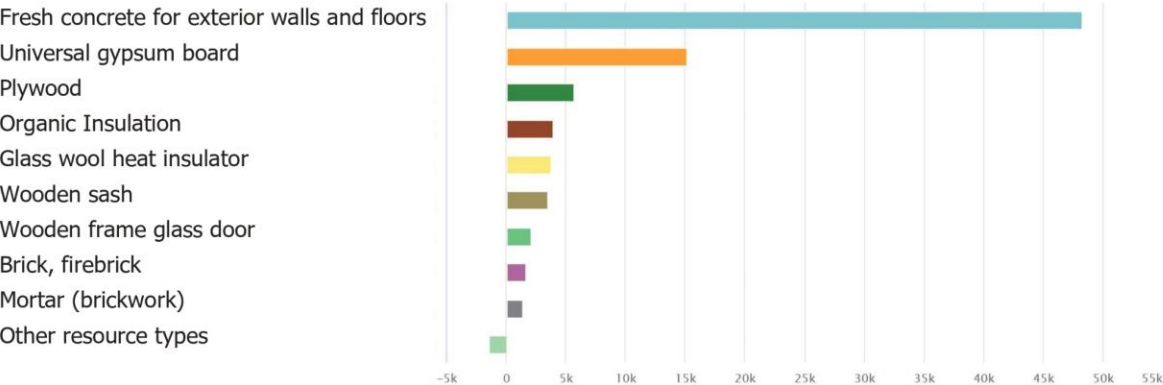


-71 kg CO₂e/m²

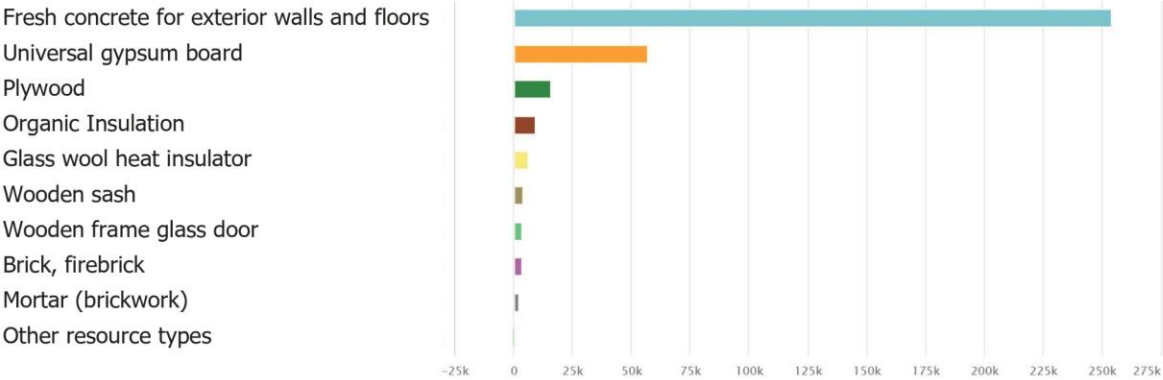
Fabric foundation



Total global warming potential kg CO₂ Resource type



Total global warming potential kg CO₂ Resource type



From a solid foundation to a cloth foundation
Reduce LCA CO₂ emissions while reducing the amount of concrete

Unit

Single room



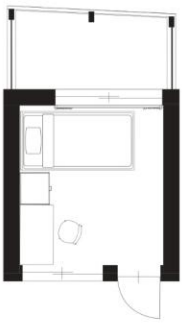
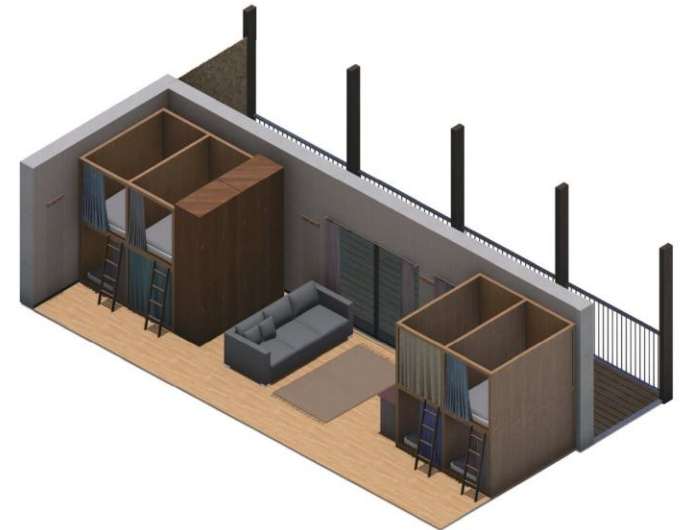
Double room



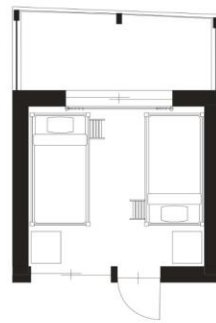
Dormitory for 6 persons



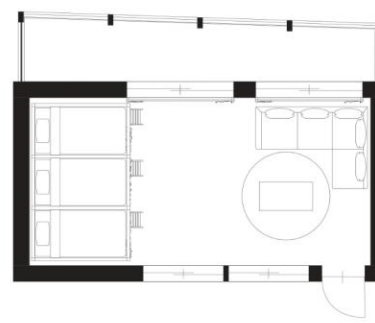
Dormitory for 8 persons



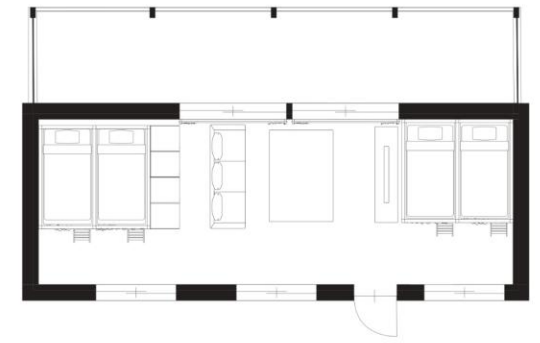
10m²



12m²



25m²



30m²

Building B - Student Dormitory



Single room



Double room

Building B - Student Dormitory



Dormitory for 6 persons



Dormitory for 8 persons

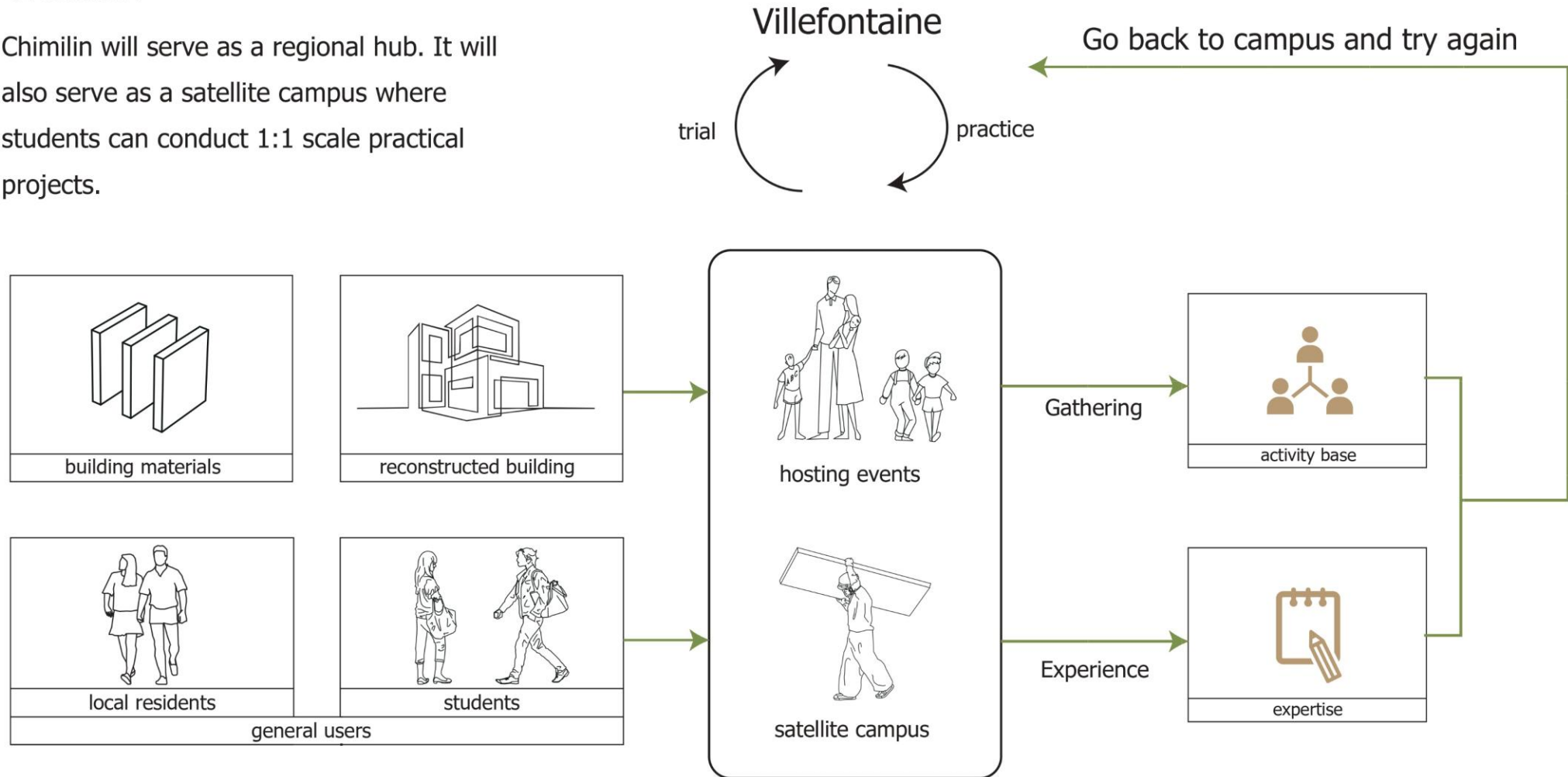
Building A - Renovation



Chimilin Program

Chimilin

Chimilin will serve as a regional hub. It will also serve as a satellite campus where students can conduct 1:1 scale practical projects.



Master Plan



Outdoor Gallery



Cafeteria



Administration Office



Meeting Room



Workshop



Local store



Terrace



0 10 30 60(m)

Renovation program

DEMOLISHED



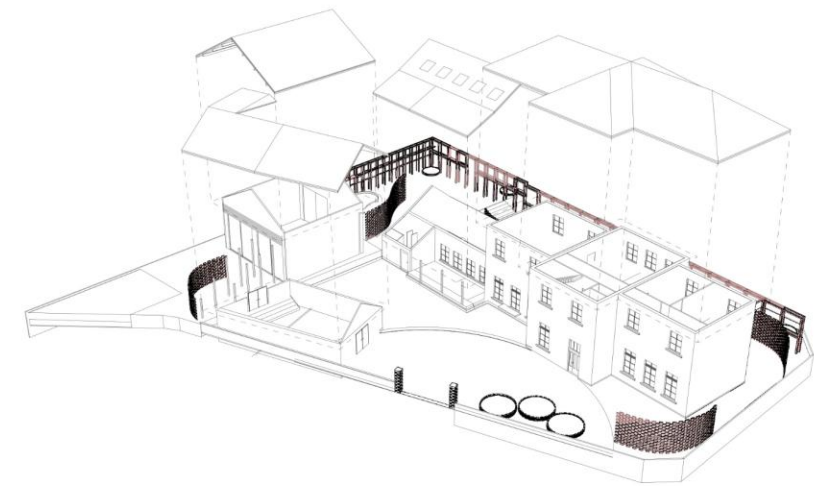
The site includes an abandoned school and two garages with all of the walls made of pisé. The inner walls separating the rooms are demolished to make room for a new use of the space.

URGRADE



The roof and windows will be renovated to improve the usability of the existing building. For site circulation, the roof was extended from the existing portion to connect to the west side of the site, and a terrace was placed on the front plaza. Skylights were installed to bring in light from above. The windows are triple-skinned to enhance the thermal insulation inside the building.

NEW

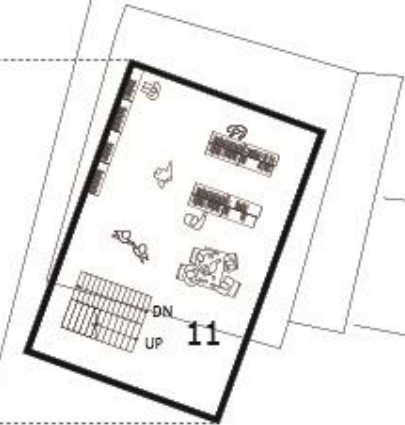
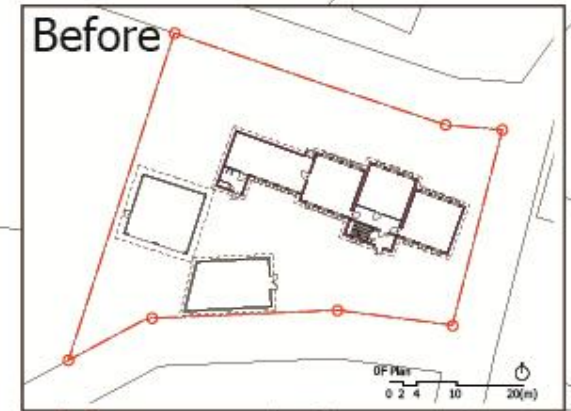


An outdoor extension will be built to serve as a satellite campus and regional hub. The plaza in the northern part of the site will be used for 1:1 scale learning and events as a regional hub. A partition made of bricks made of pisé was planned to create a circular flow line.

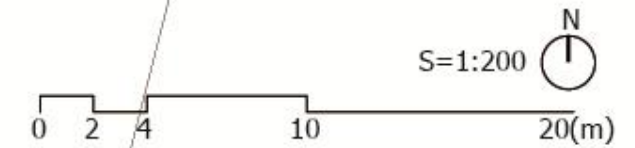
BUILDING A - Plans

B1-0F Plan

1. Selectshop
2. Grass garden
3. Workshop
4. Toilet
5. Playroom
6. Terrace
7. Cafeteria
8. Kitchen
9. Administration Office
10. meeting room
11. Storage room



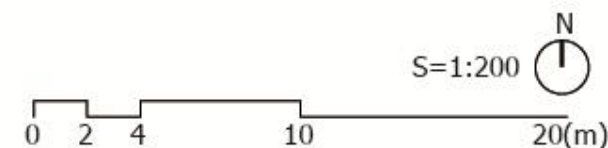
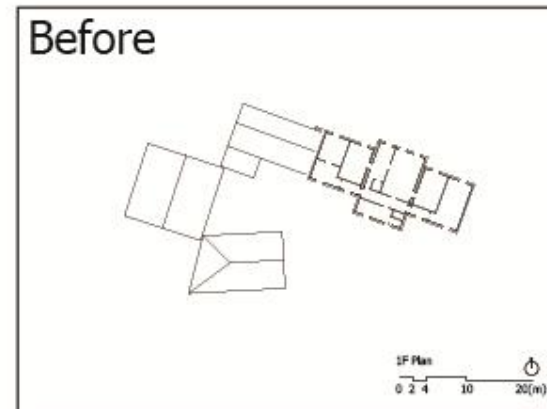
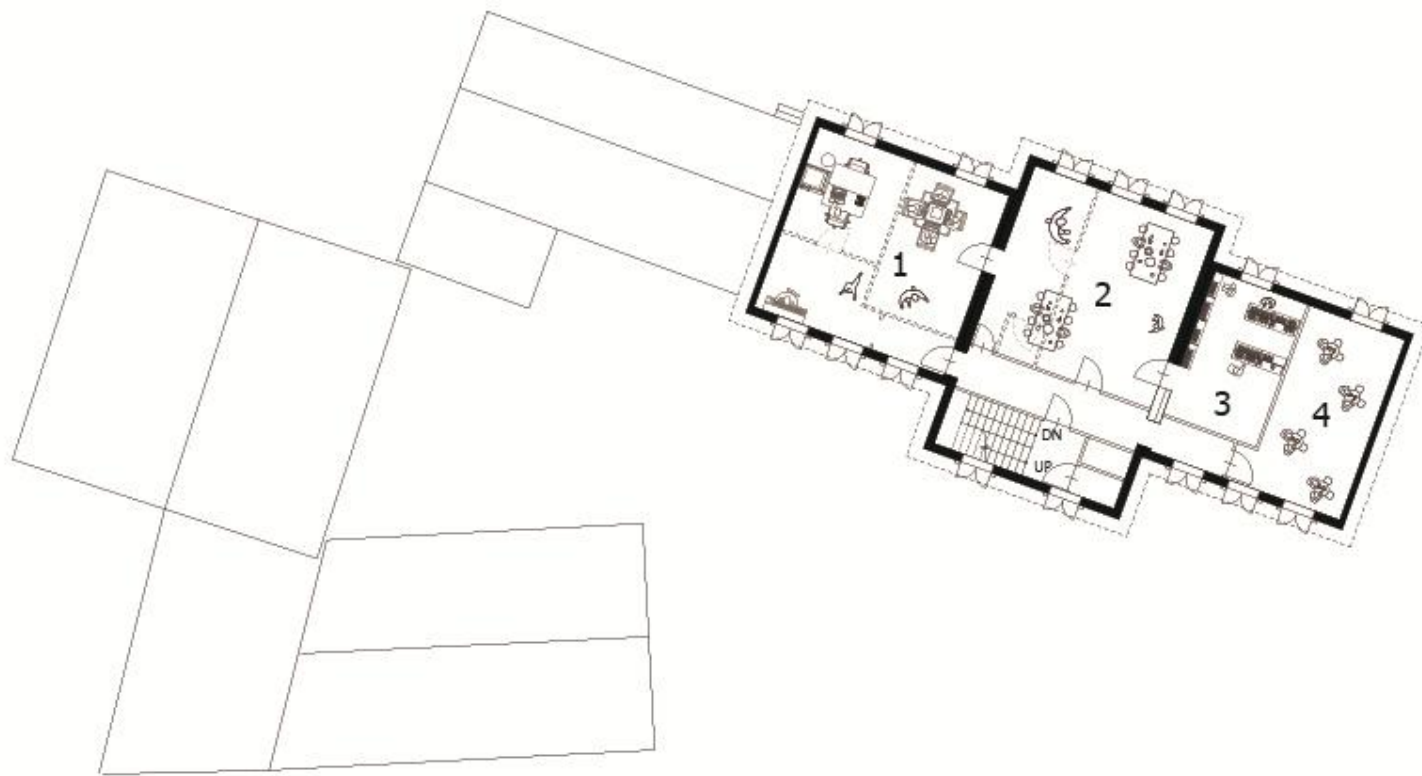
B1 Plan



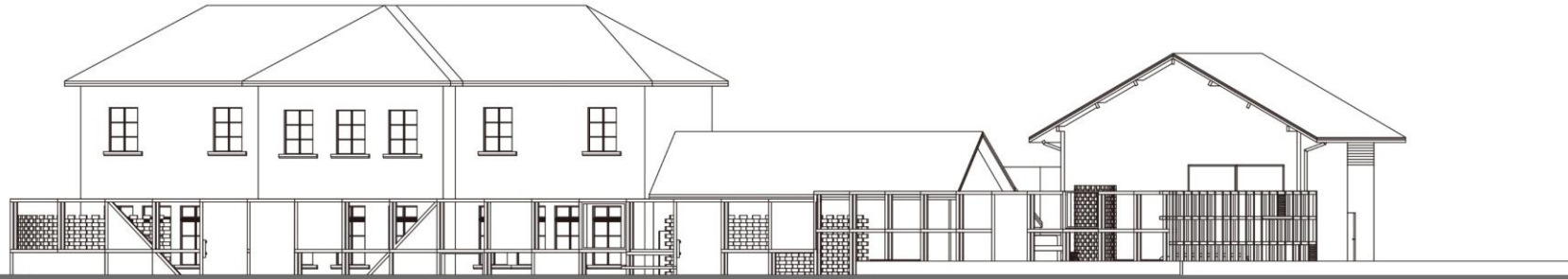
Building A - Plan

1F Plan

- 1.Playroom
- 2.Meeting room
- 3.Storage room
- 4.meeting room



Building A - North Elevation

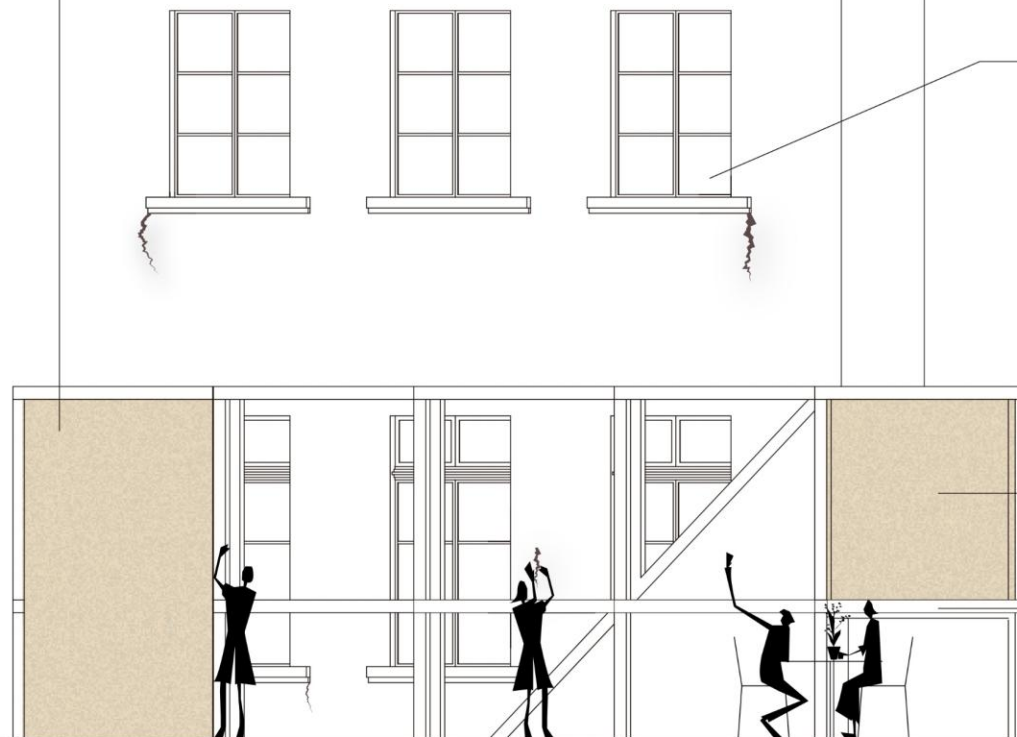


Elevation 1/100 0 2.5 5 10m

• Repair of cracks in wall

• 1 : 1 project

• Urban innovation hub



Glass

Saint gobain Low-E glass
ECLAZ3 + FL3 + ECLAZ3
 $U_g=0.512w/m^2k$

Wooden sash
 $U_g=2.15w/m^2k$

Spacer
 $U_g=0.029w/m^2k$
Visible transmittance:70.90%



Soil

Wood

Elevation Program 1/50 0 1.25 2.5 5 m

Building A - Renovation



Future City



Chimilin

Traditional Architecture and Agriculture



Lyon-Trino railway

To Lyon

To Trino

Villefontaine

Creation and Ecosystem



Re:Flow