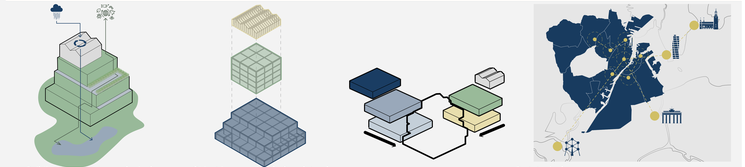
AR3AP100 PUBLIC BUILDING GRADUATION STUDIO | P5- DELFT | SJOERD TEKELENBURG 5112036

PROTOTYPE | DESIGN PRINCIPLES

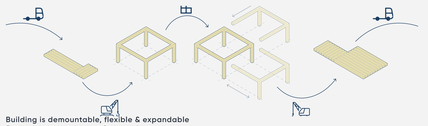


Building incorporates ecological architecture
Biosphere integrity & Fresh water change

Object is recognizable & sculptural
Creates eco-conscious identity & promotes participation

Plug 'n play functions
Adds to identity & land-use change

Prototypical
Being able to create a network of eco-conscious public condensers



Building is demountable, flexible & expandable
Future land-use change & reusable

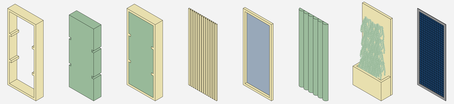
FUNCTION GROUPS

Encouraging functions

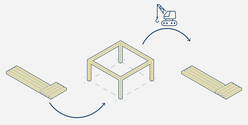
Sustainable Functions

Attractive functions

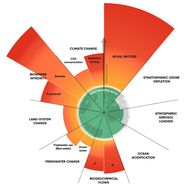
FAÇADE SYSTEM



GLULAM 6X6 GRID

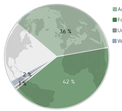


GLOBAL SUSTAINABILITY ISSUES

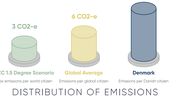


NINE PLANETARY BOUNDARIES

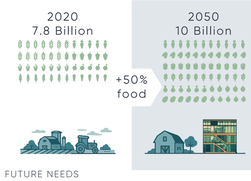
DISTRIBUTION



HABITABLE LAND-USE

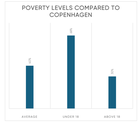


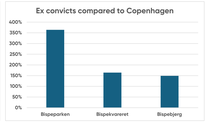
DISTRIBUTION OF EMISSIONS

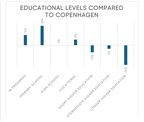


FUTURE NEEDS

BISPEBJERG CHALLENGES & ARCHITECTURAL GOALS

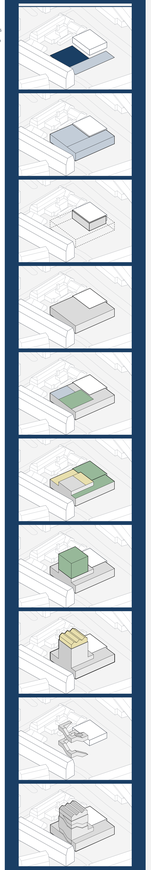




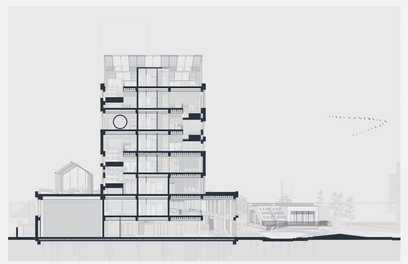


CONTEXTUAL ARCHITECTURAL IMPLICATIONS

MASSING

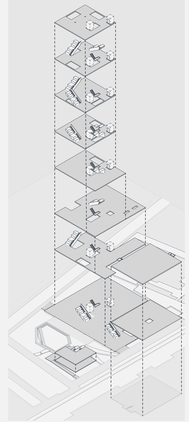


URBAN SECTION

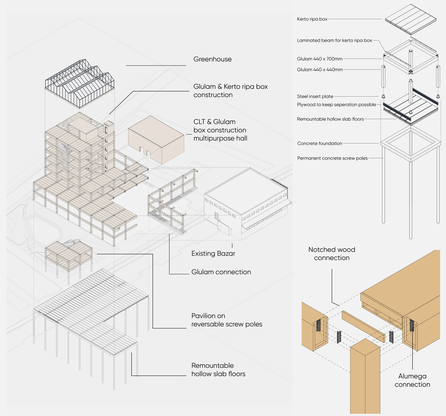


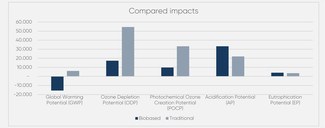
SITE PLAN 1 :1000

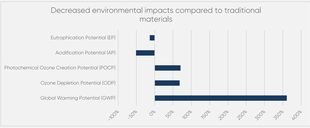
CIRCULATION



CONSTRUCTION & IMPACTS

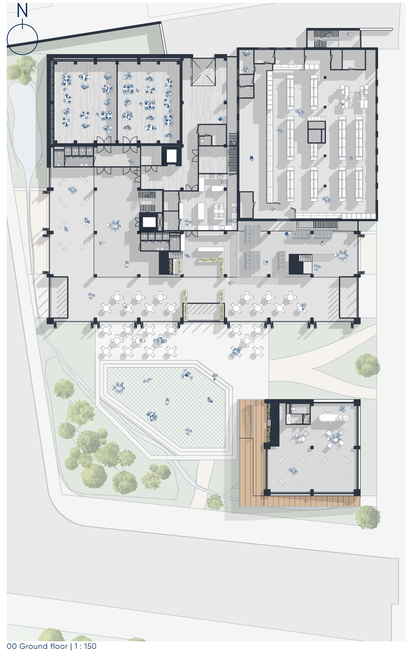




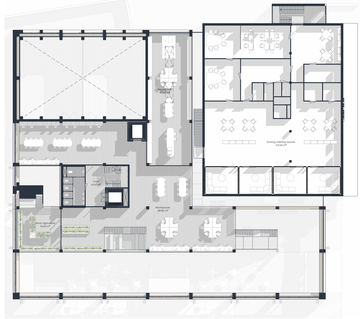


IMPRESSIONS

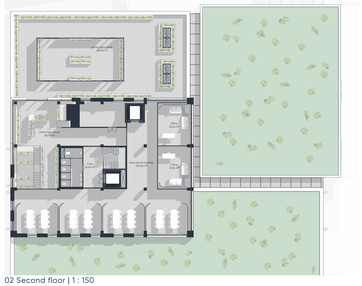
FLOOR PLANS 1:150



00 Ground floor | 1 : 150



01 First floor | 1 : 150

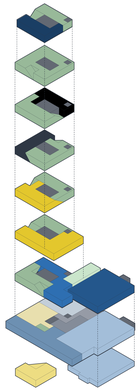


02 Second floor | 1 : 150

05 Fifth floor | 1 : 150

07 Seventh floor | 1 : 150

FUNCTIONS AXO



07 | Urban agriculture & rooftop bar

06 | Urban agriculture

05 | Pyrolisis plant & urban agriculture

04 | Technical room & urban agriculture

03 | Educational facilities & urban agriculture

02 | Educational facilities & urban agriculture

01 | Meeting-, workspaces & urban agriculture

00 | Public plinth & multipurpose hall

-01 | Shopping underground

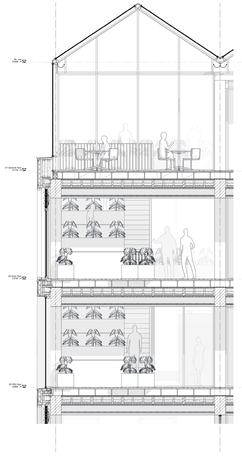
Attractive functions
- Multipurpose hall
- Grocery store
- Restaurant
- Workspaces
- Meeting spaces
- Rooftop bar

Encouraging functions
- Foyer / exhibition
- Pavilion
- Educational facilities

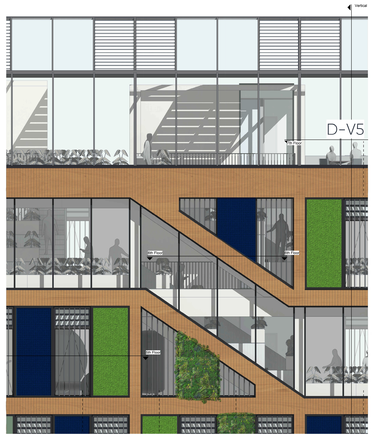
Auxiliary functions
- Service entrance
- Kitchen
- Core & circulation
- Technical room
- Pyrolysis plant

Sustainable functions
- Repair café
- Urban agriculture

FRAGMENT

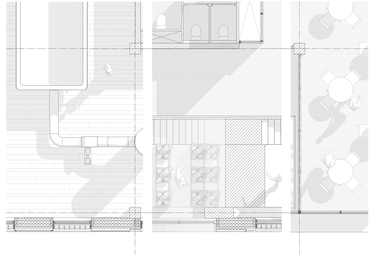


Vertical
scheet 1 : 40



Façade
scheet 1 : 40

Fragment Axonometric
sheet

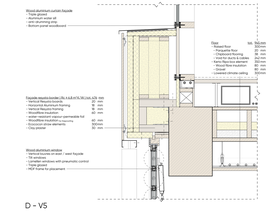


5th floor waste management
scheet 1 : 40

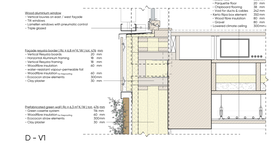
6th floor urban agriculture
scheet 1 : 40

7th Floor Dining
scheet 1 : 40

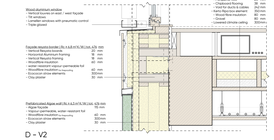
DETAILS 1:10



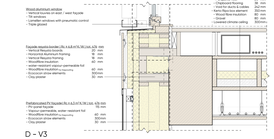
D - V5



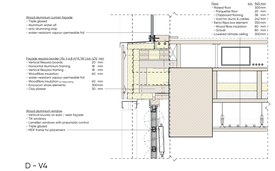
D - V1



D - V2

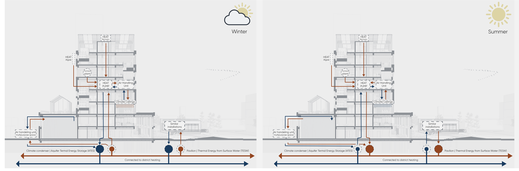


D - V3

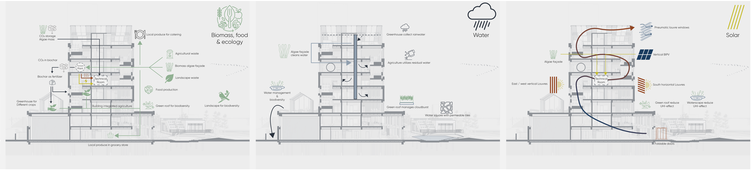


D - V4

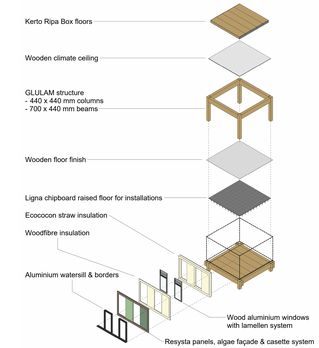
CLIMATE & SUSTAINABILITY APPROACHES



SUSTAINABILITY APPROACHES



BUILDING SYSTEM



SCENARIOS