

schmidt/hammer/
lassen/
architects/

Leverage



Bankkvartalet

CLT-LT

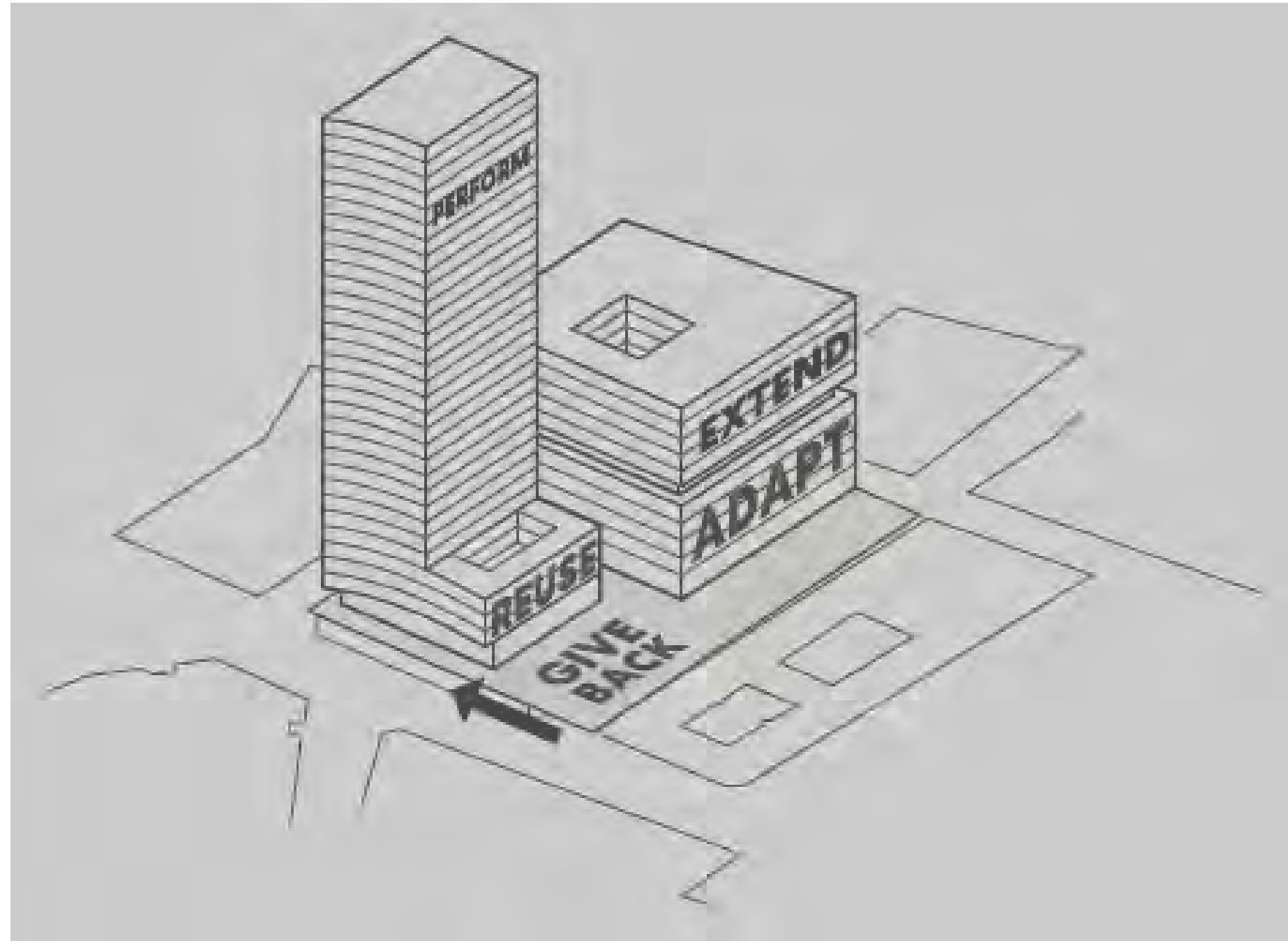
Oslo/ Norway

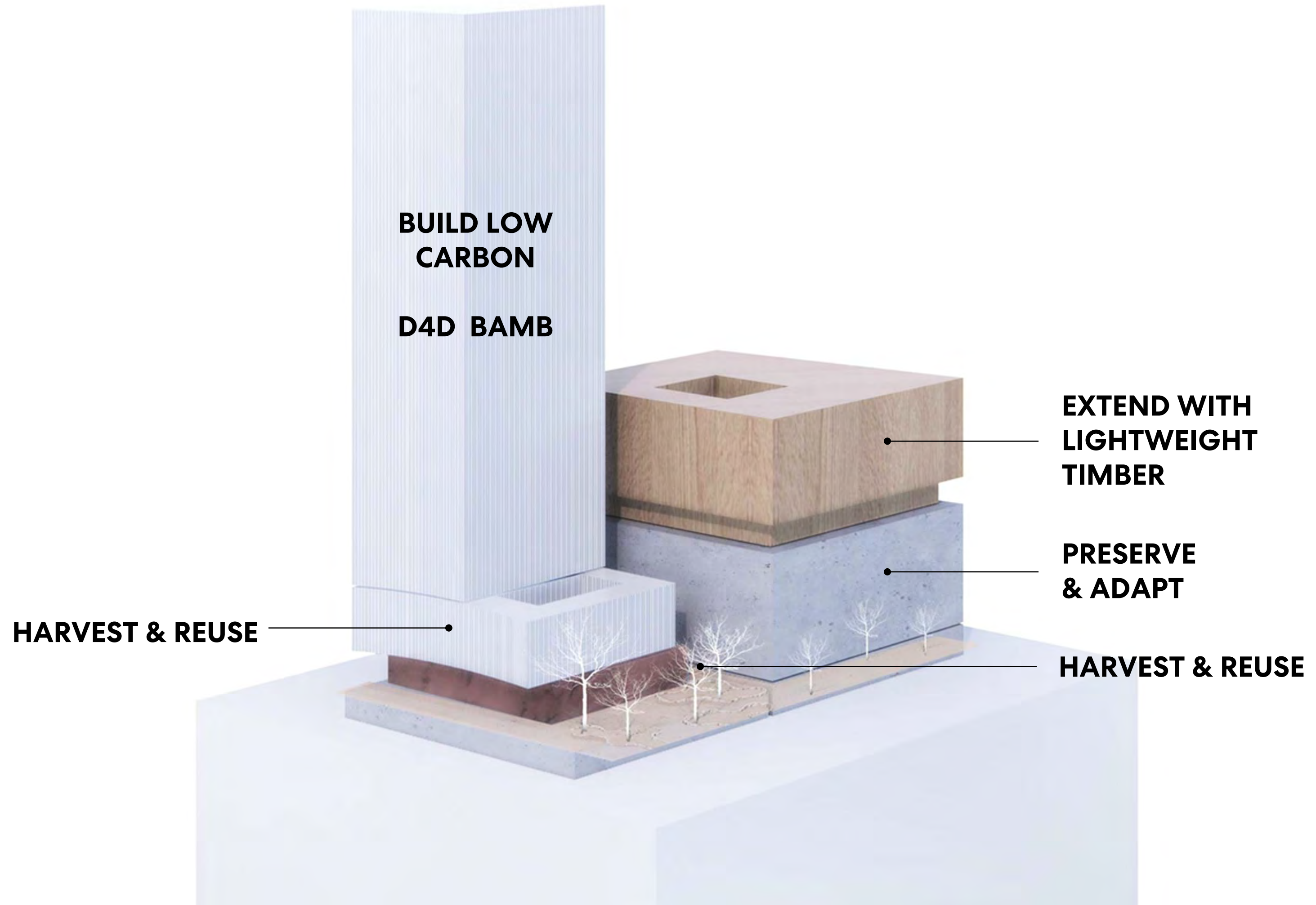
Size: 64.000m² mixed-use office

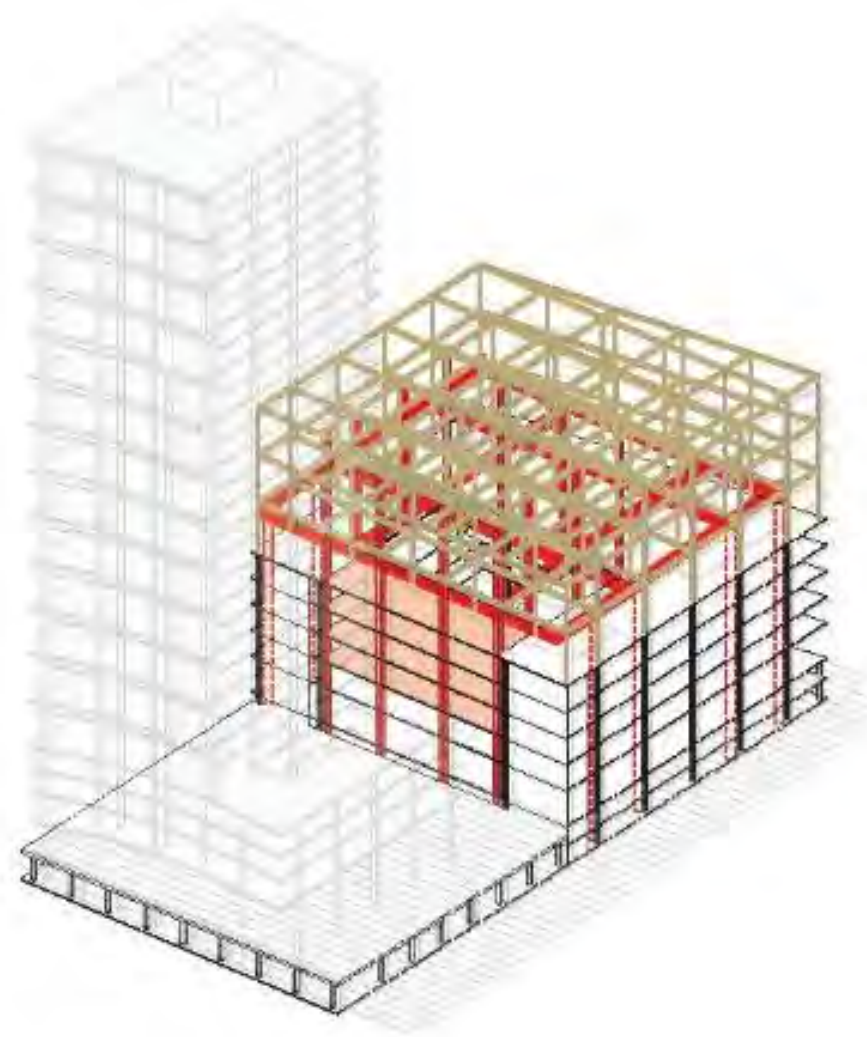
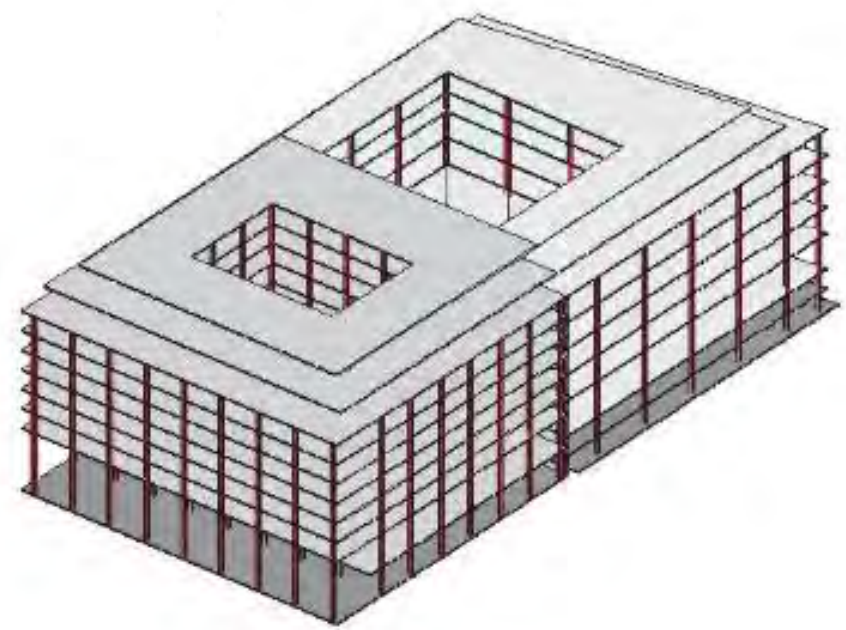
Status: Ongoing

Client: Sparebank1

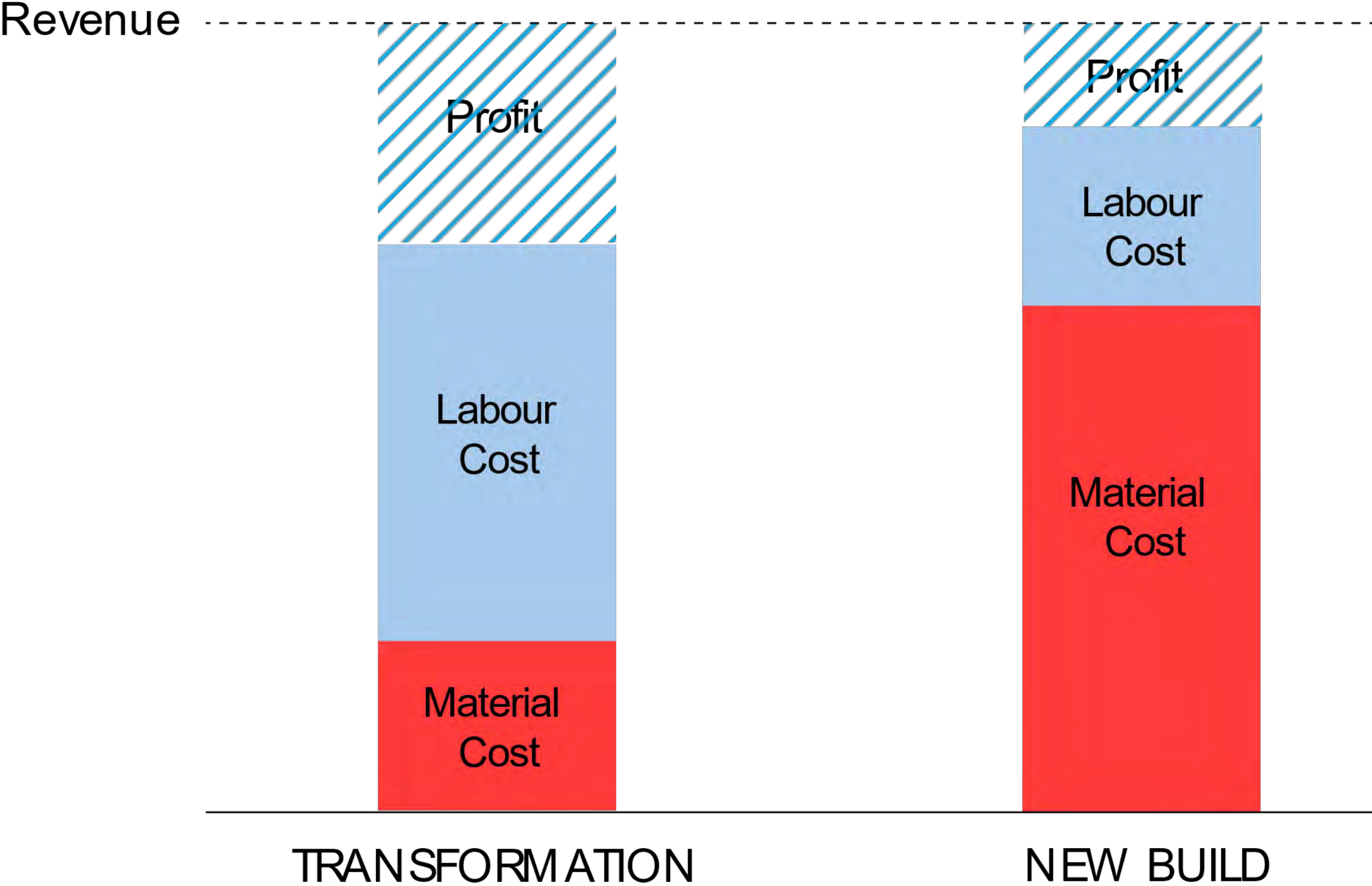




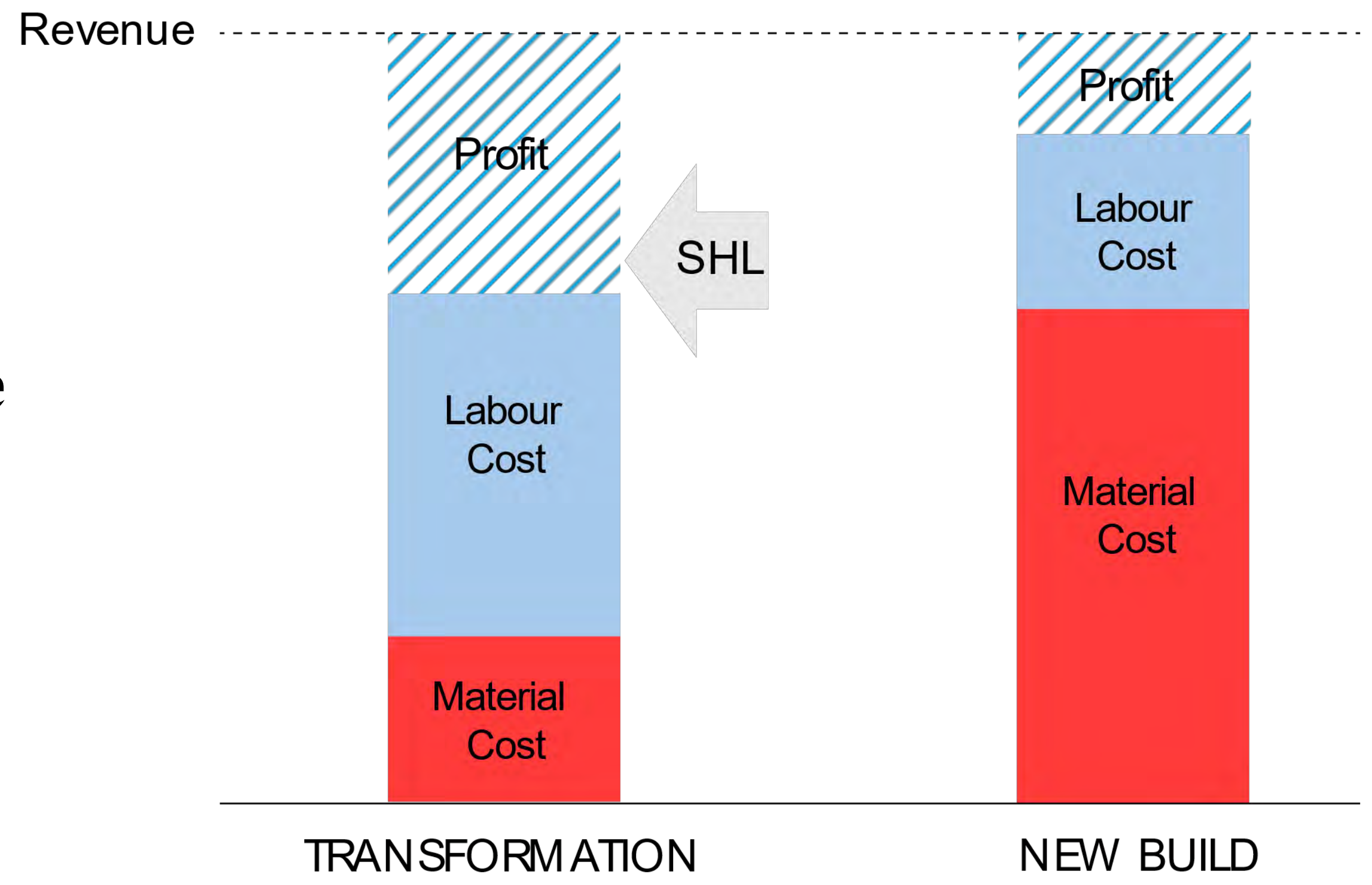




Materials vs Labour



Offsite Manufacture



Rocket & Tigerly

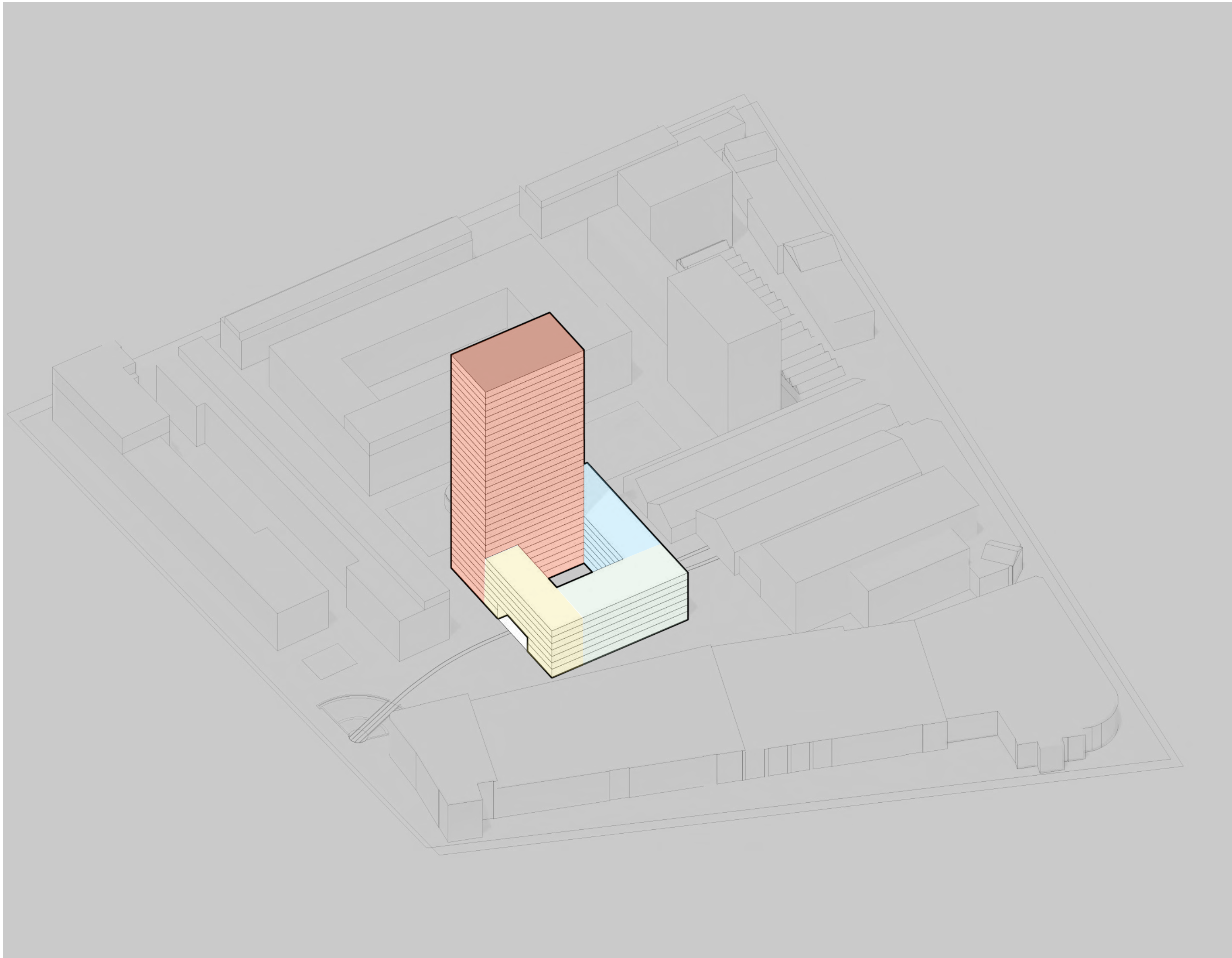


schmidt/hammer/
lassen/
architects/

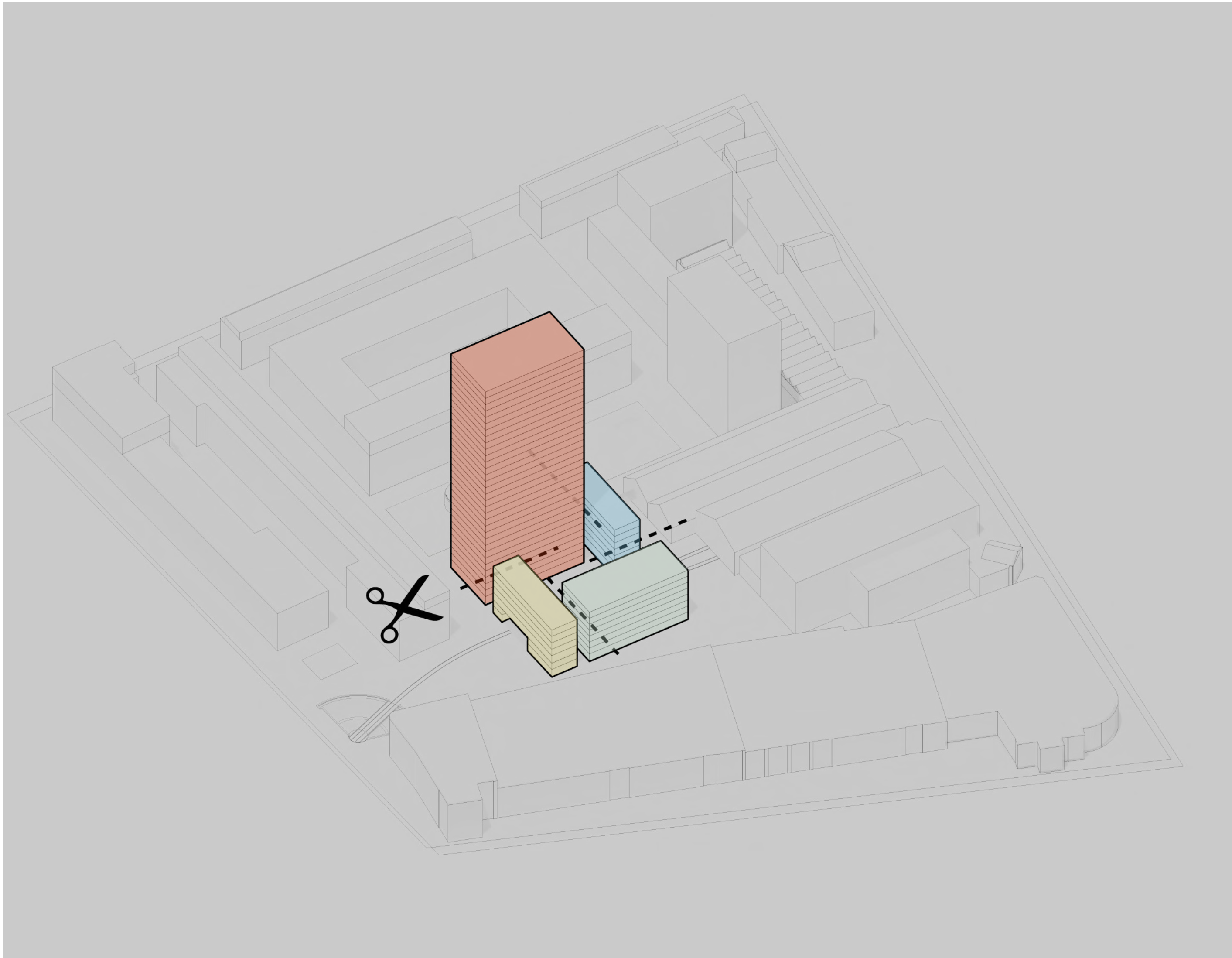
Exposed structure



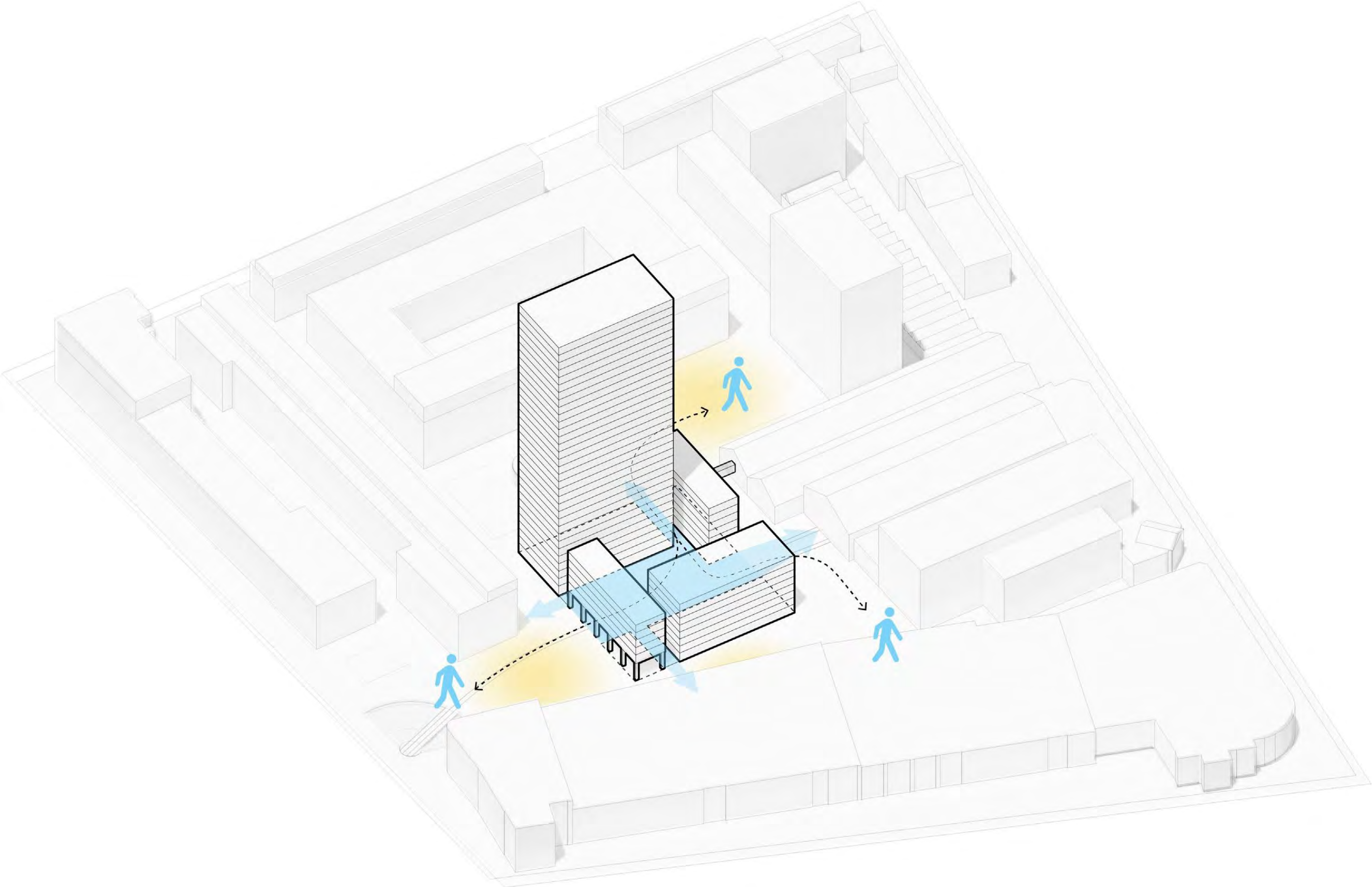
Brief:



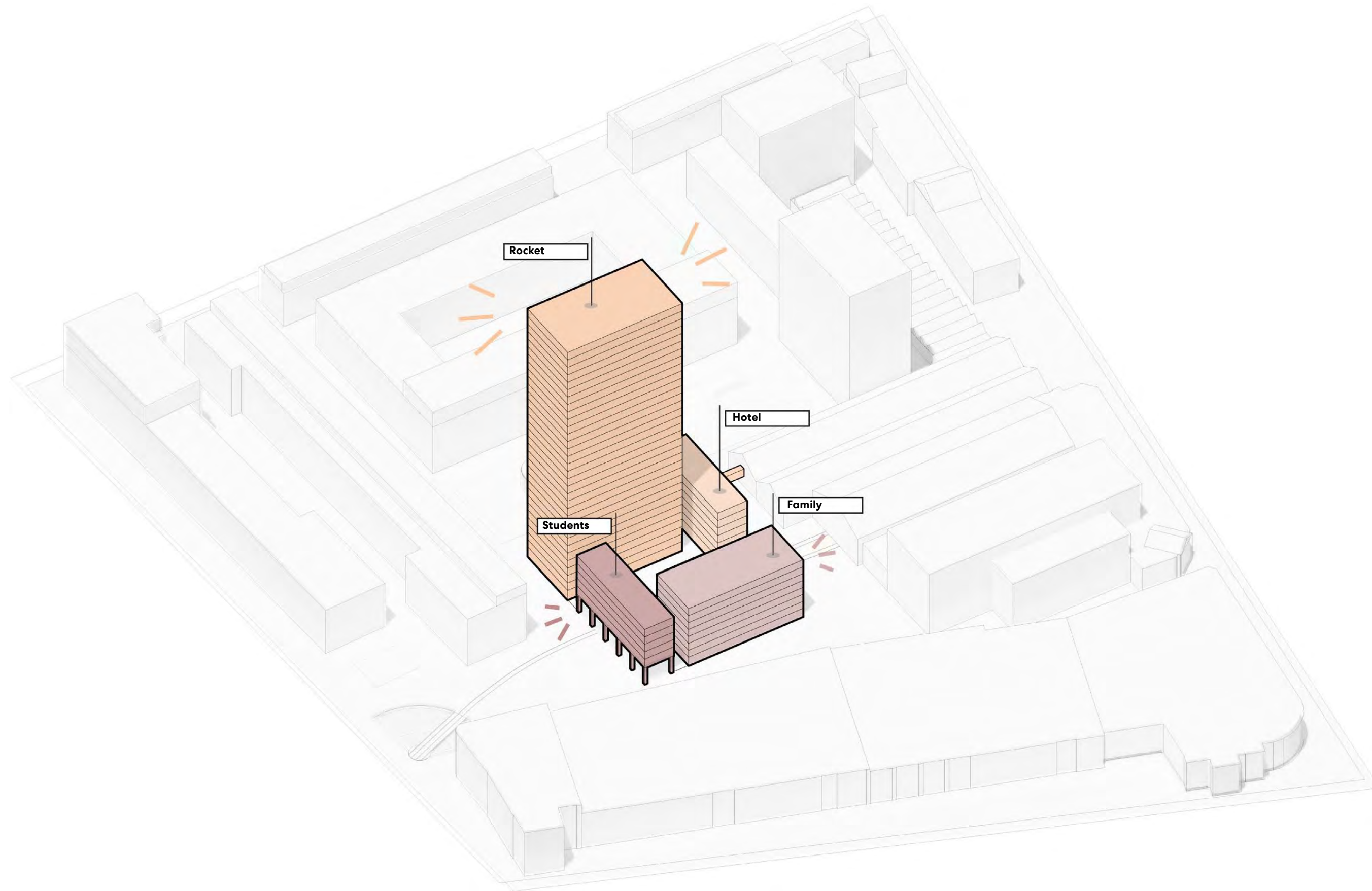
Permeability



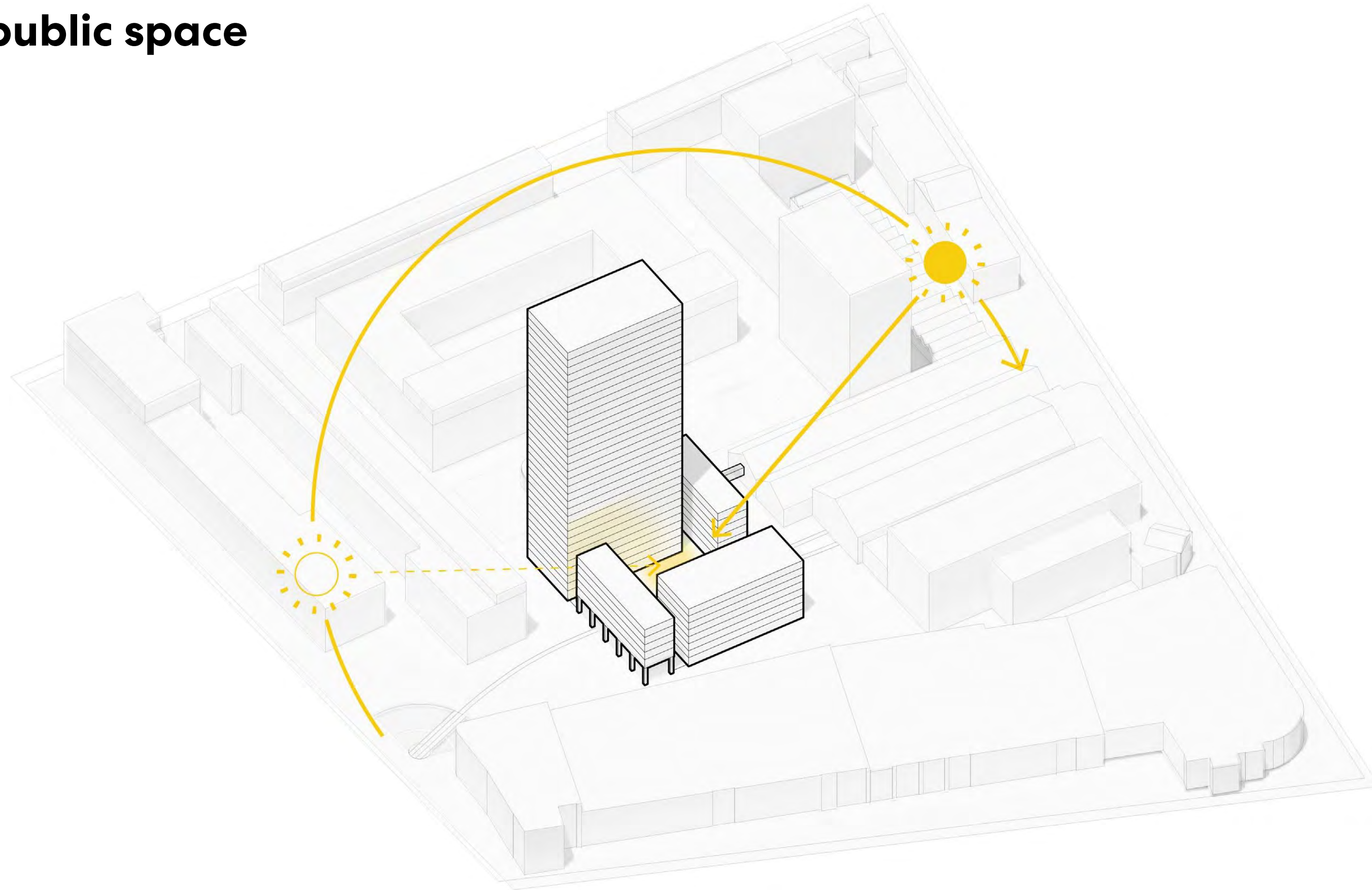
Public access



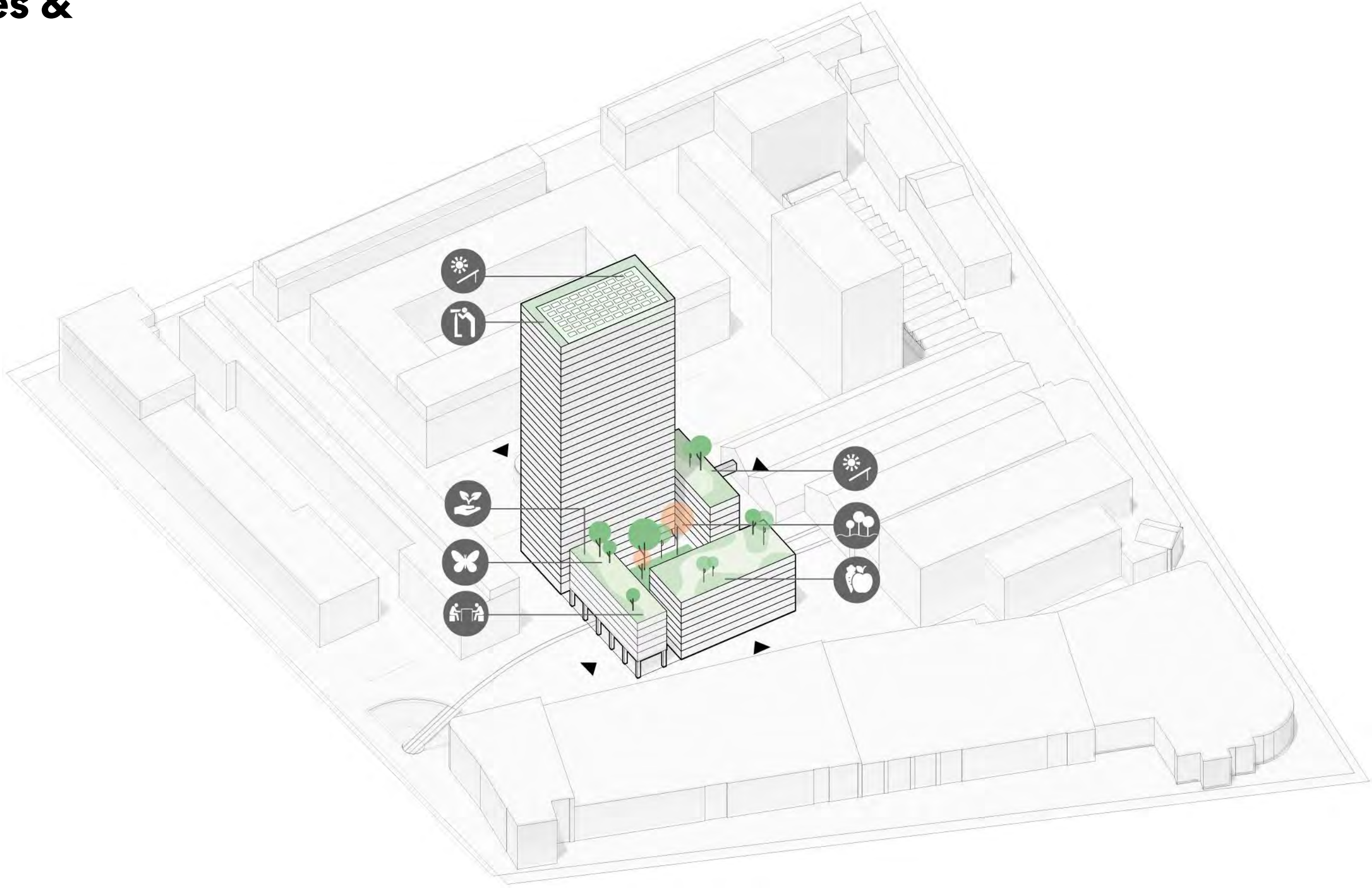
Identity



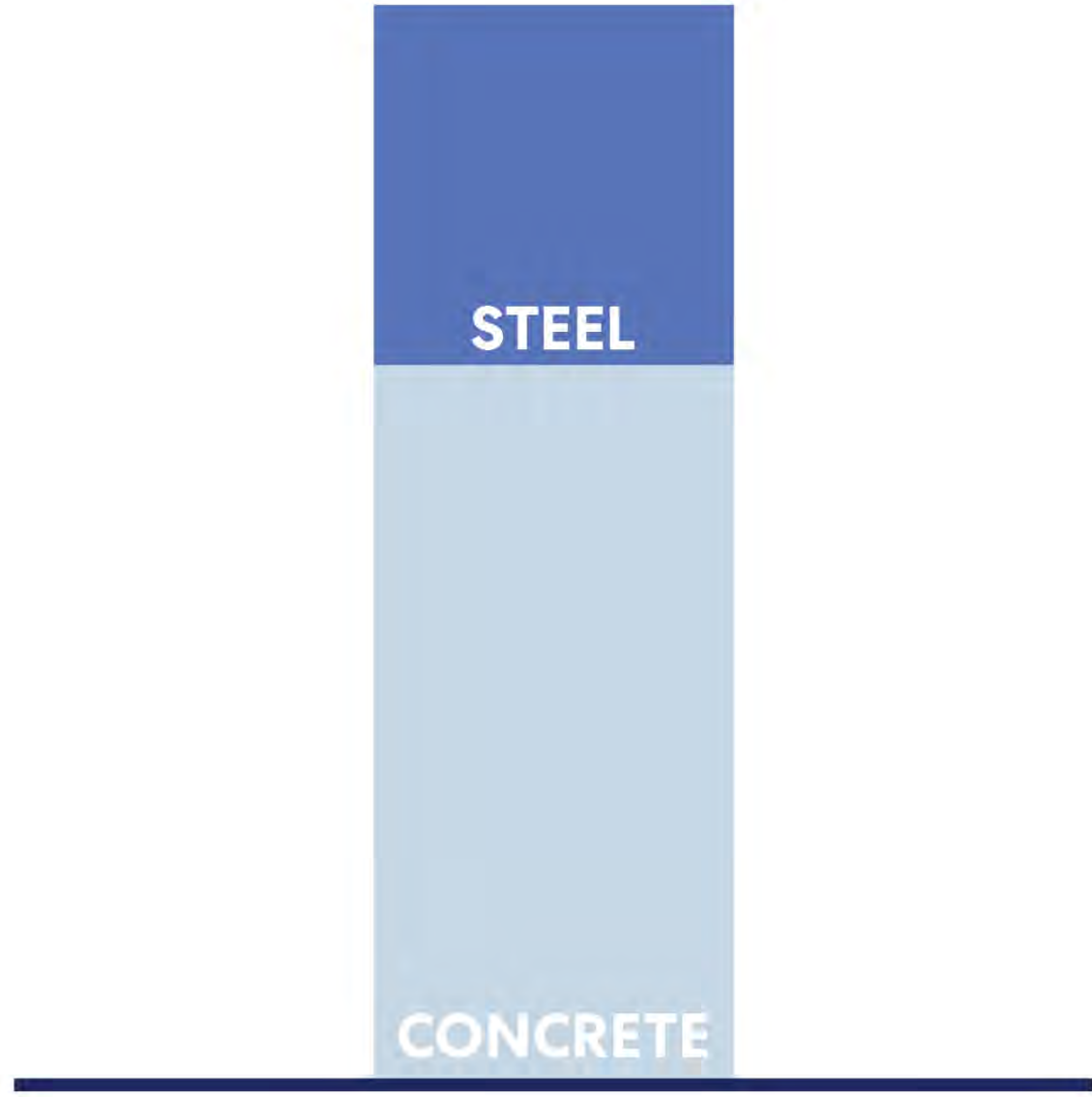
Daylight and public space



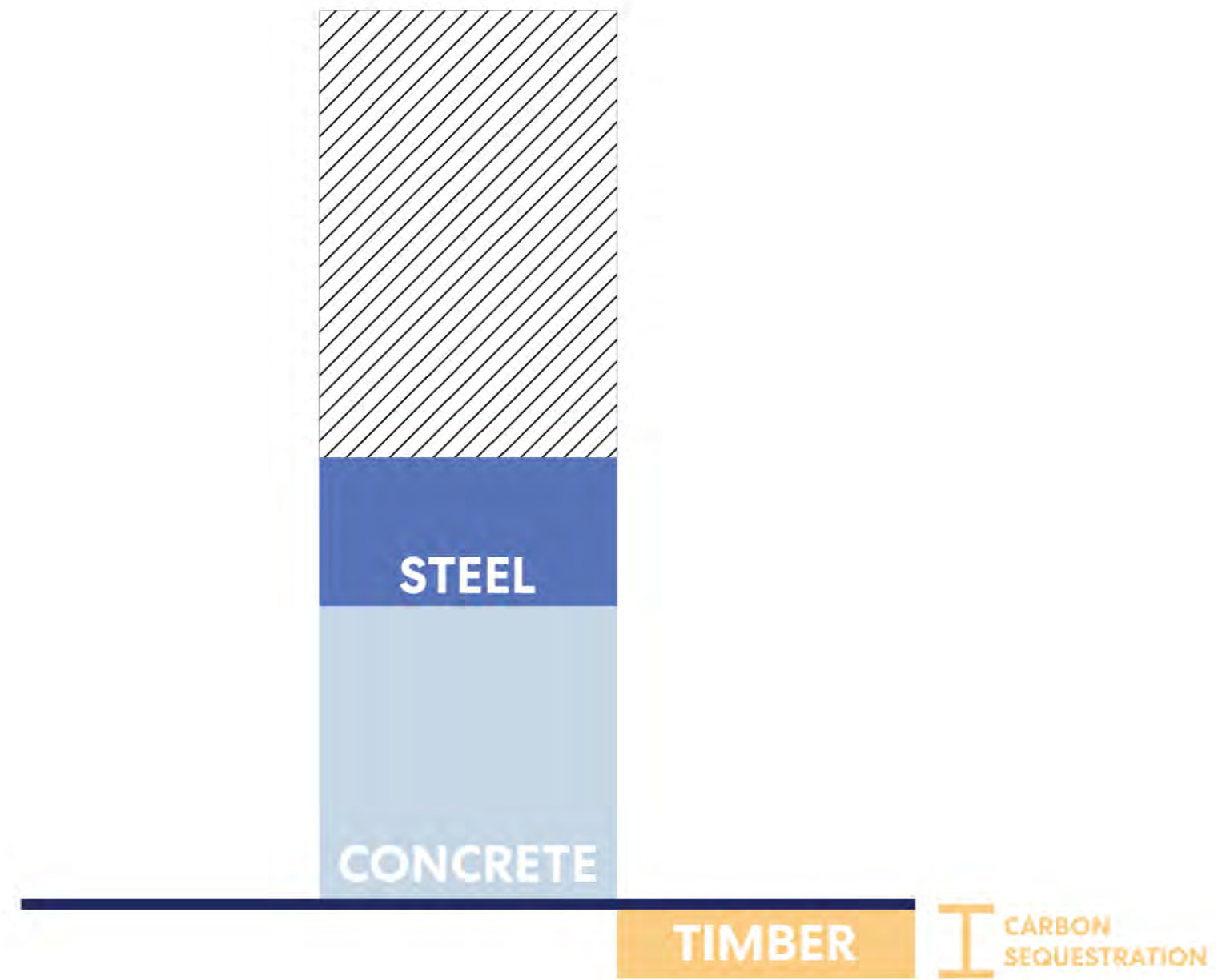
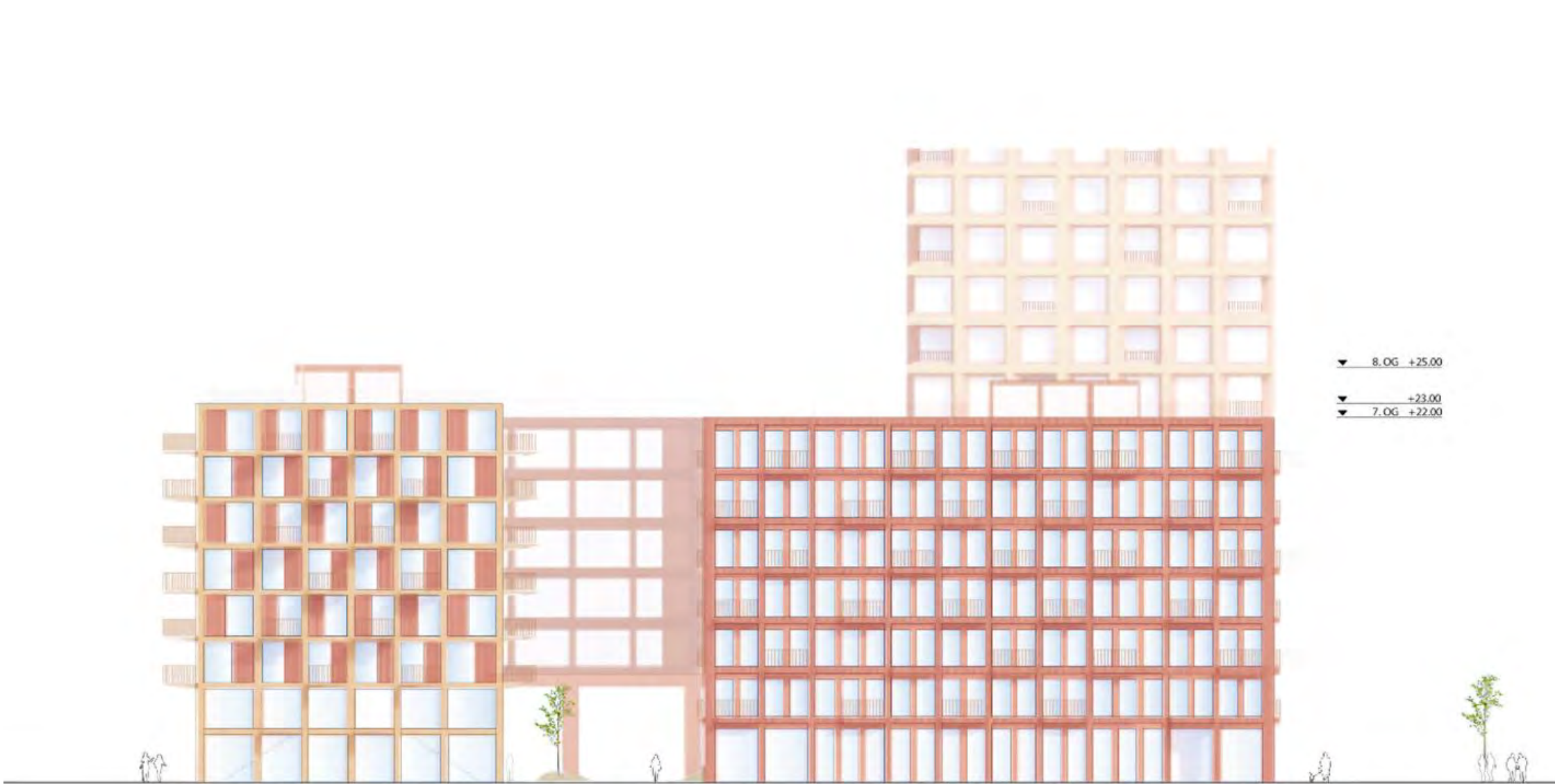
Growing spaces & Biodiversiy



Embodied Carbon: Baseline

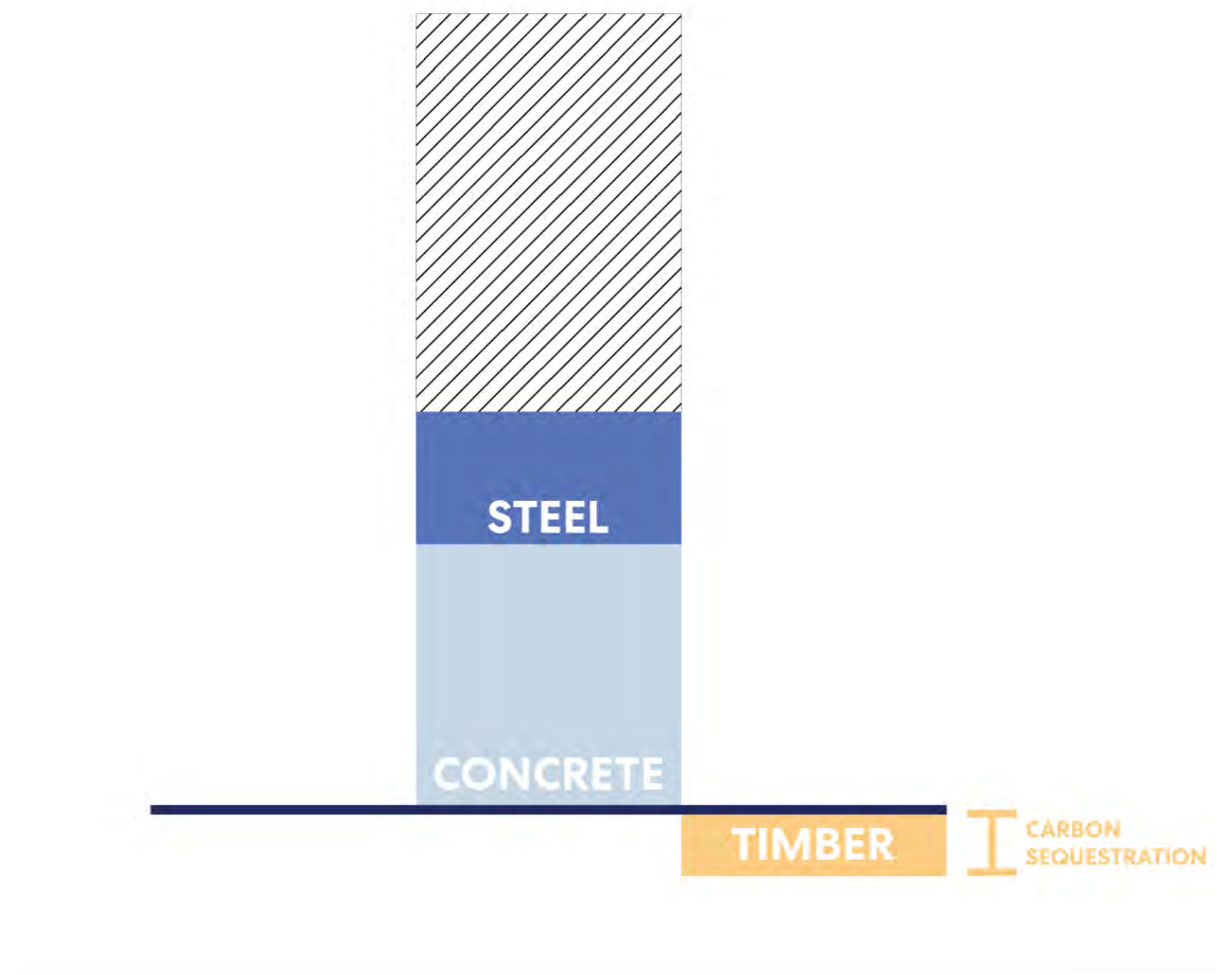
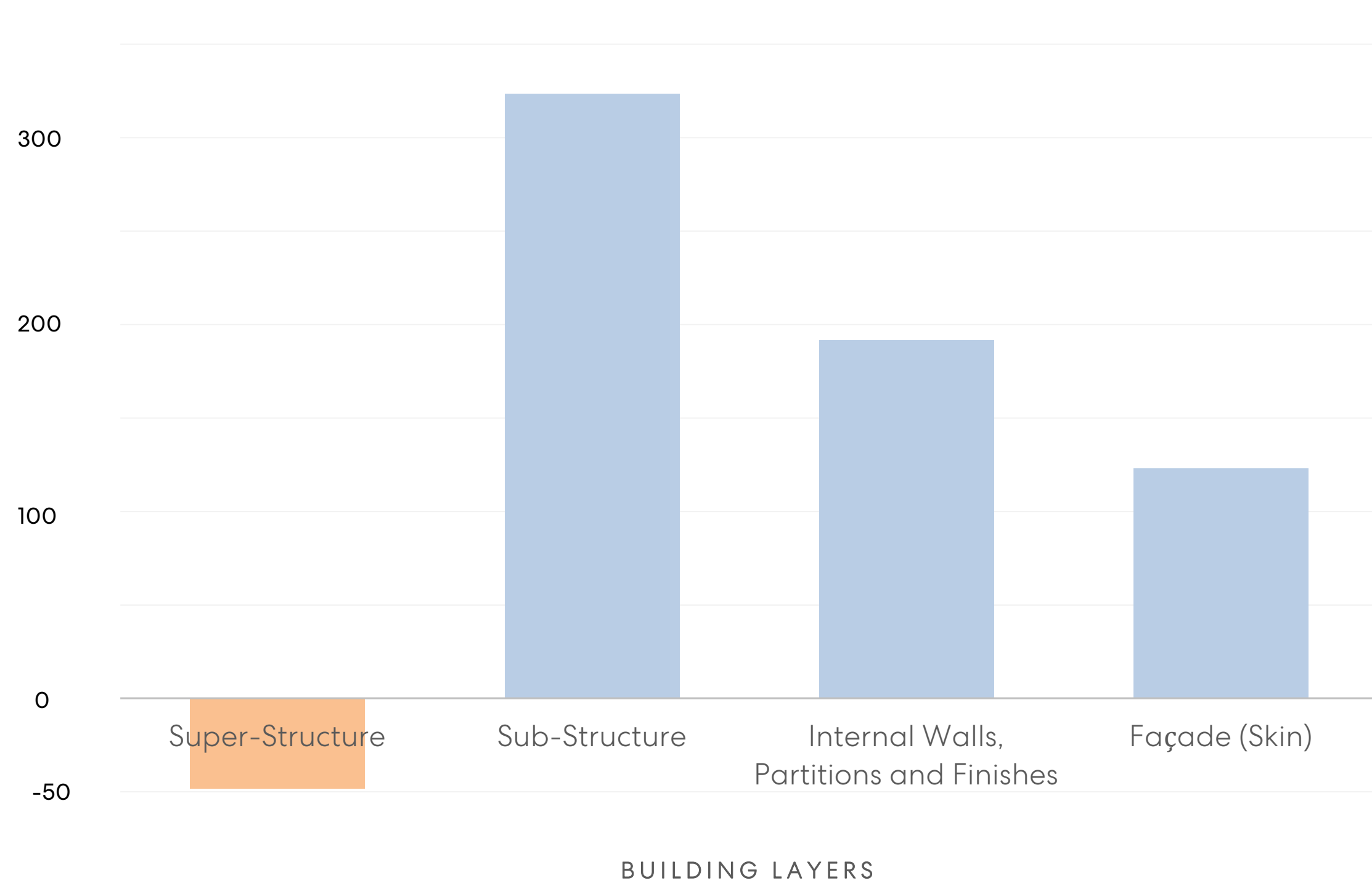


Embodied Carbon: Reduction



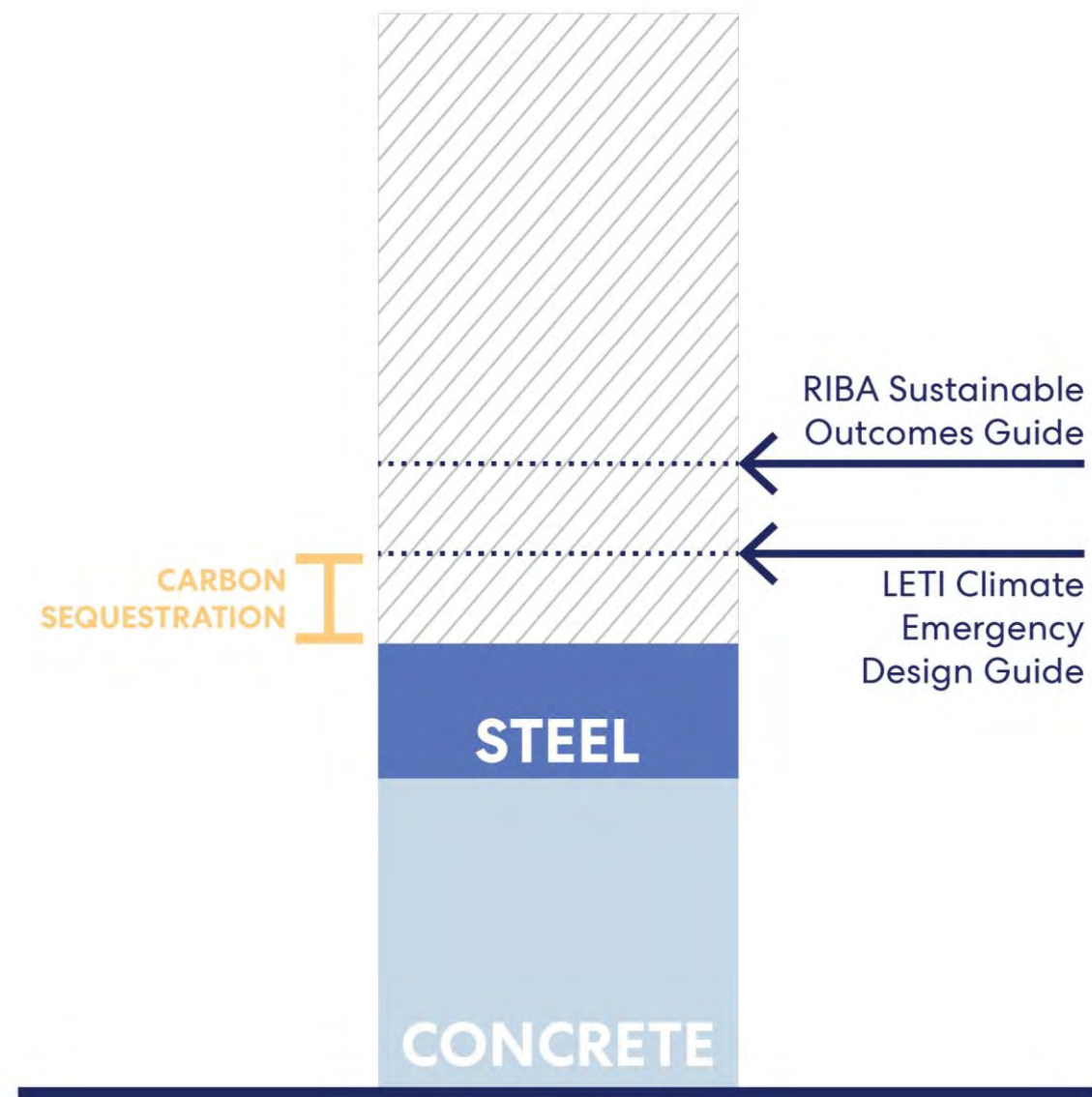
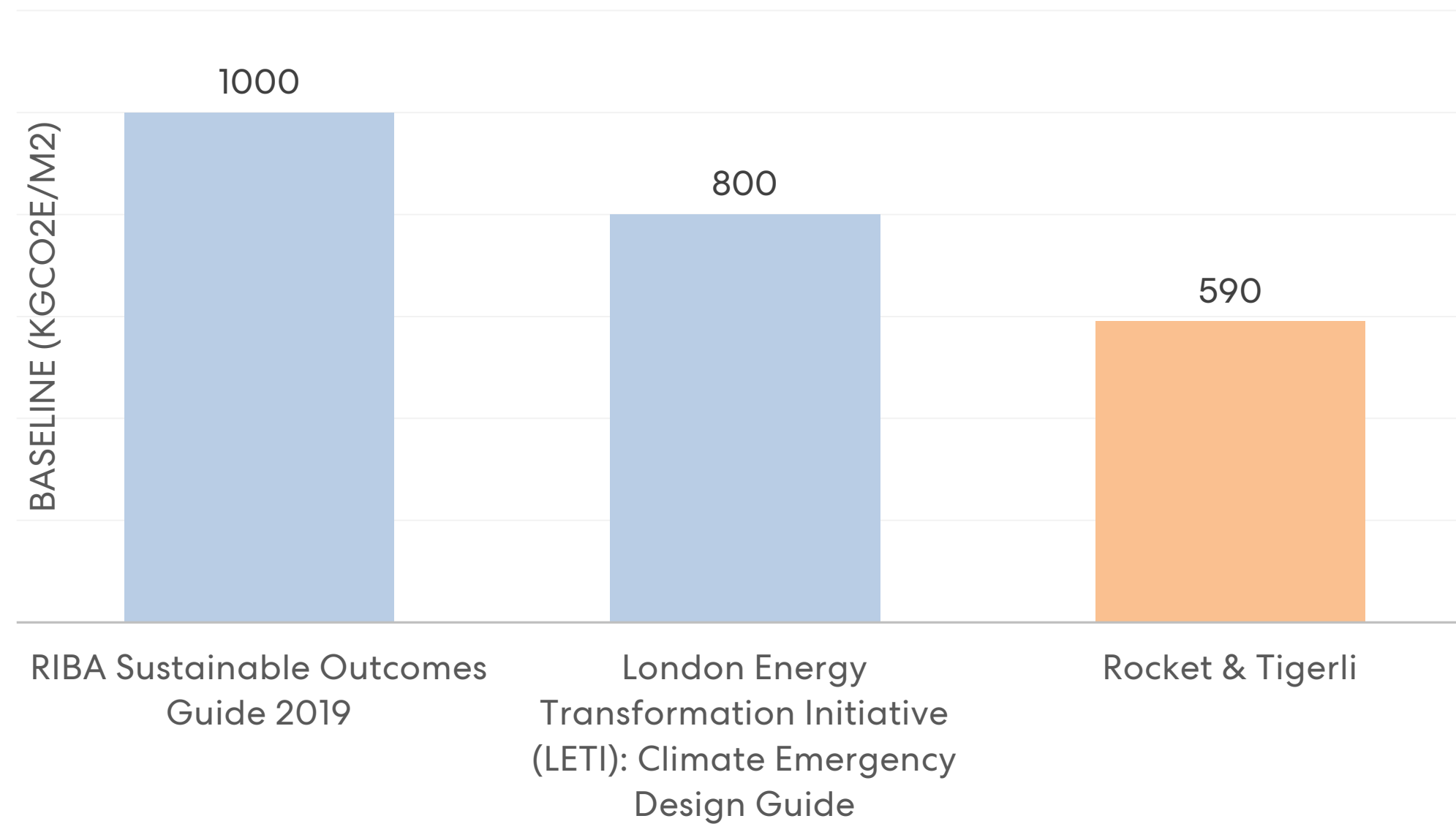
Embodied Carbon: Reduction

Rocket & Tigerli Building Layer Comparison (kgCO_{2,e}/m²)



Embodied Carbon: Comparison

Embodied Carbon Reduction Targets



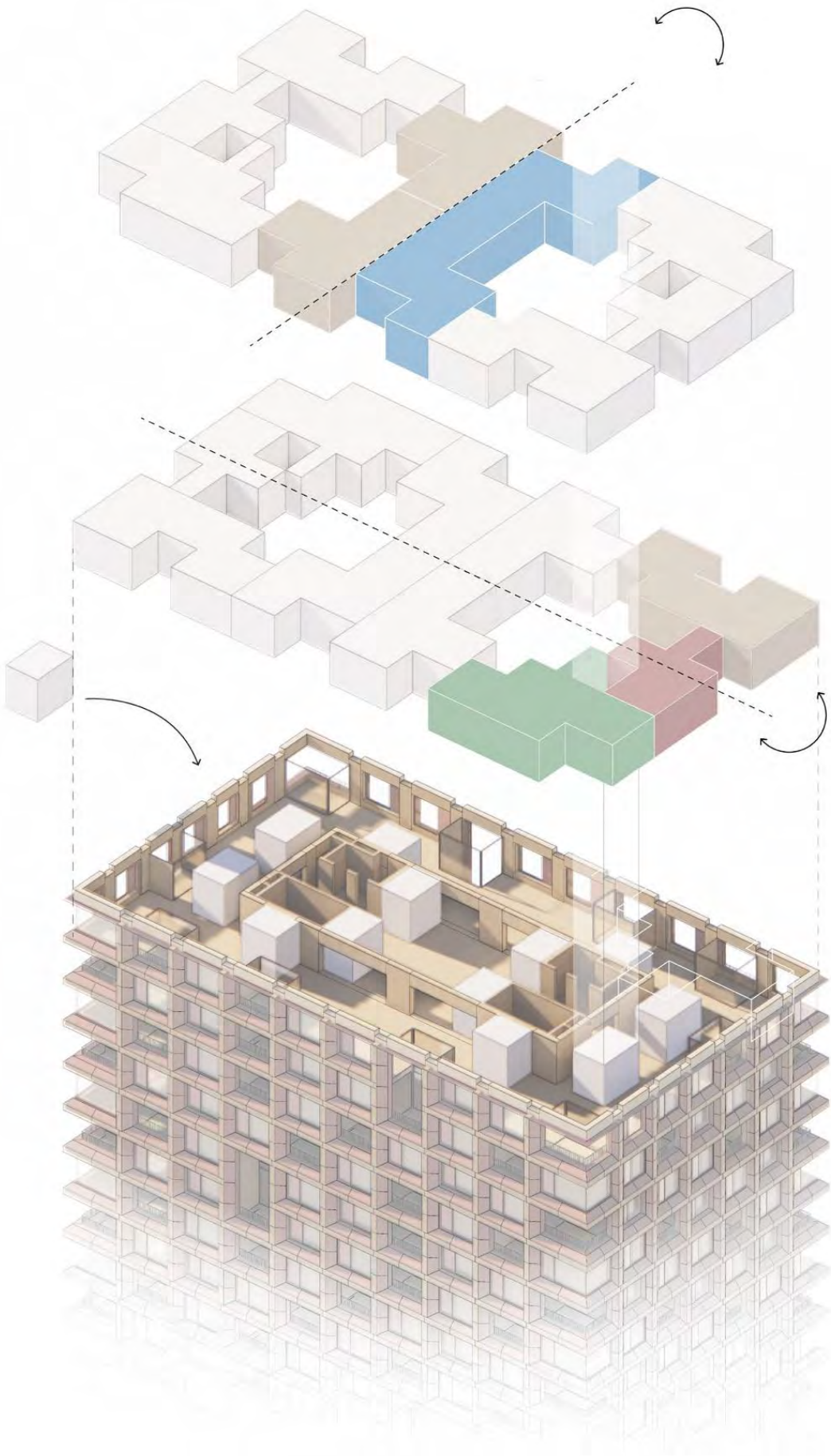
Schmidt hammer/
lassen
architects



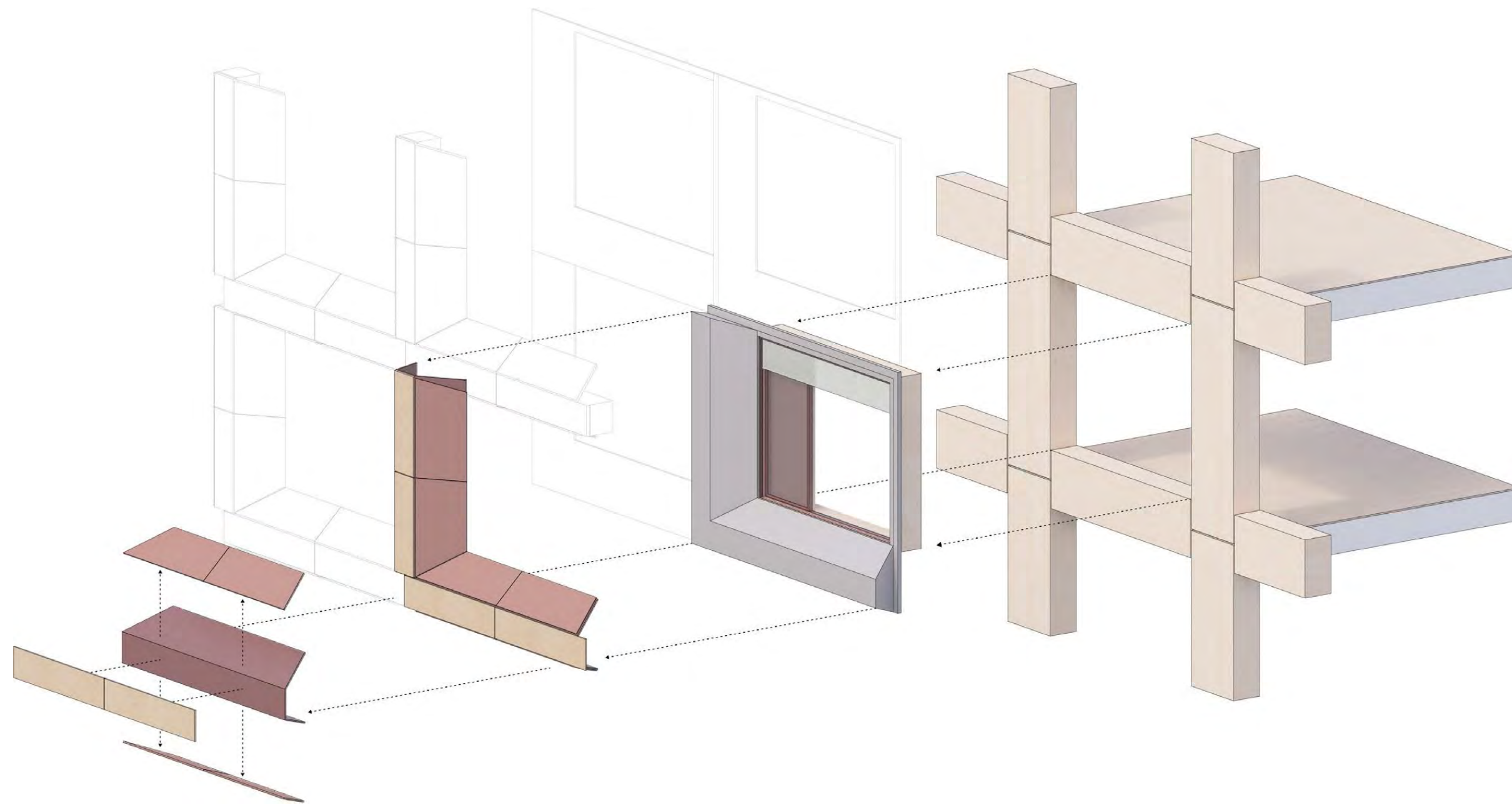
Fleksibilitet

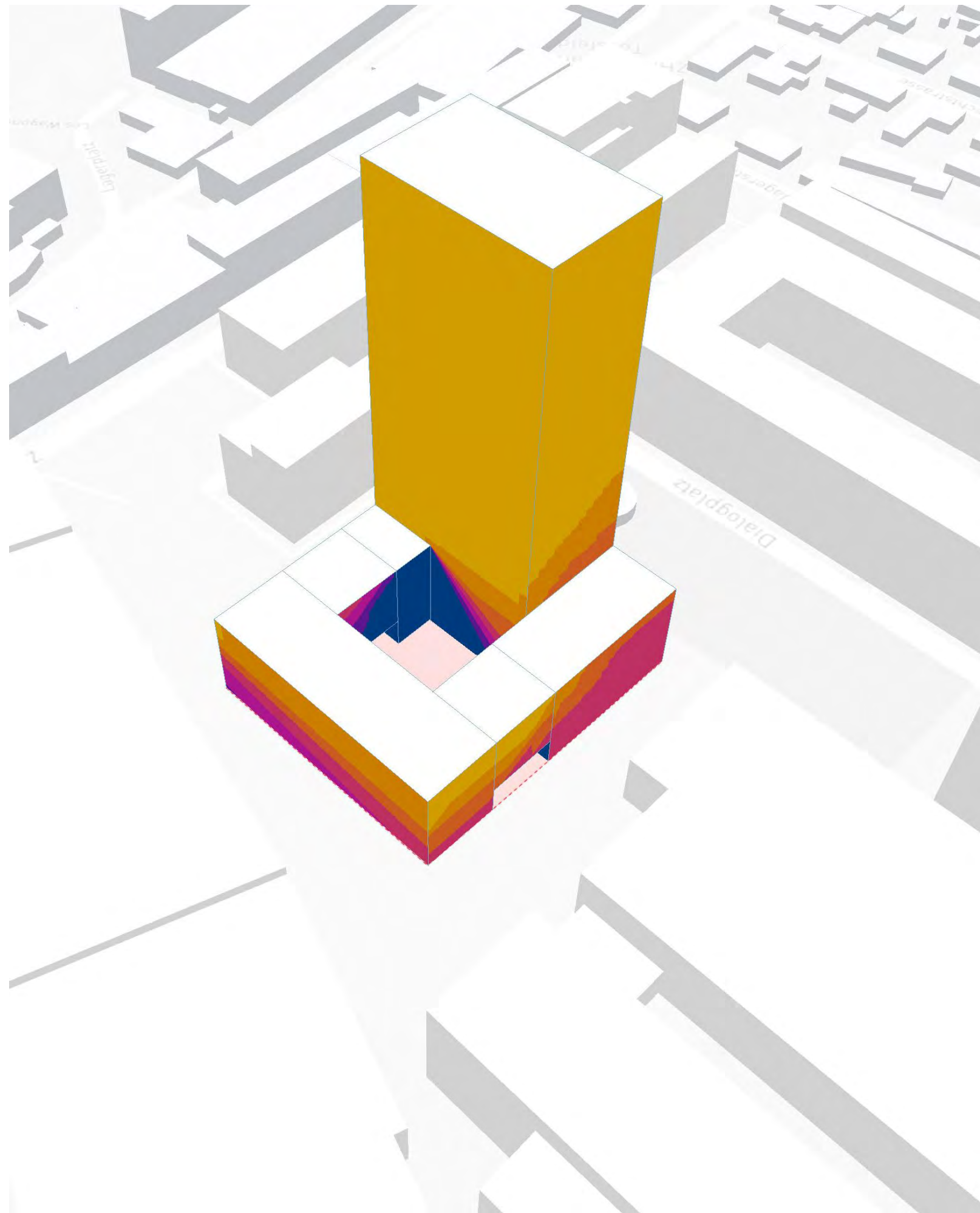


Flexibility



D4D facade

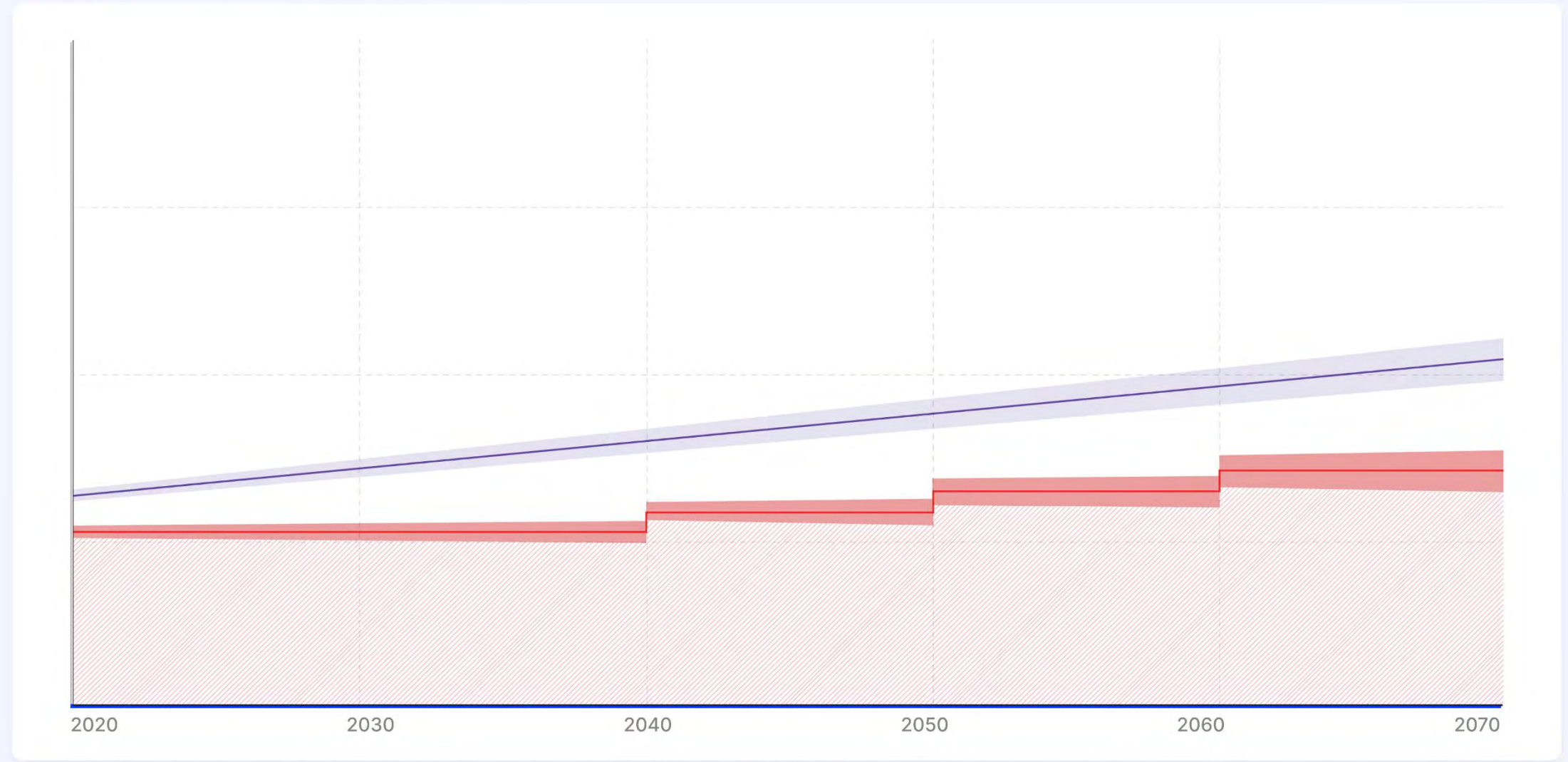




Rocket & Tigerli

Project settings

- Baseline
- Design 1
- Design 2
- Design 3



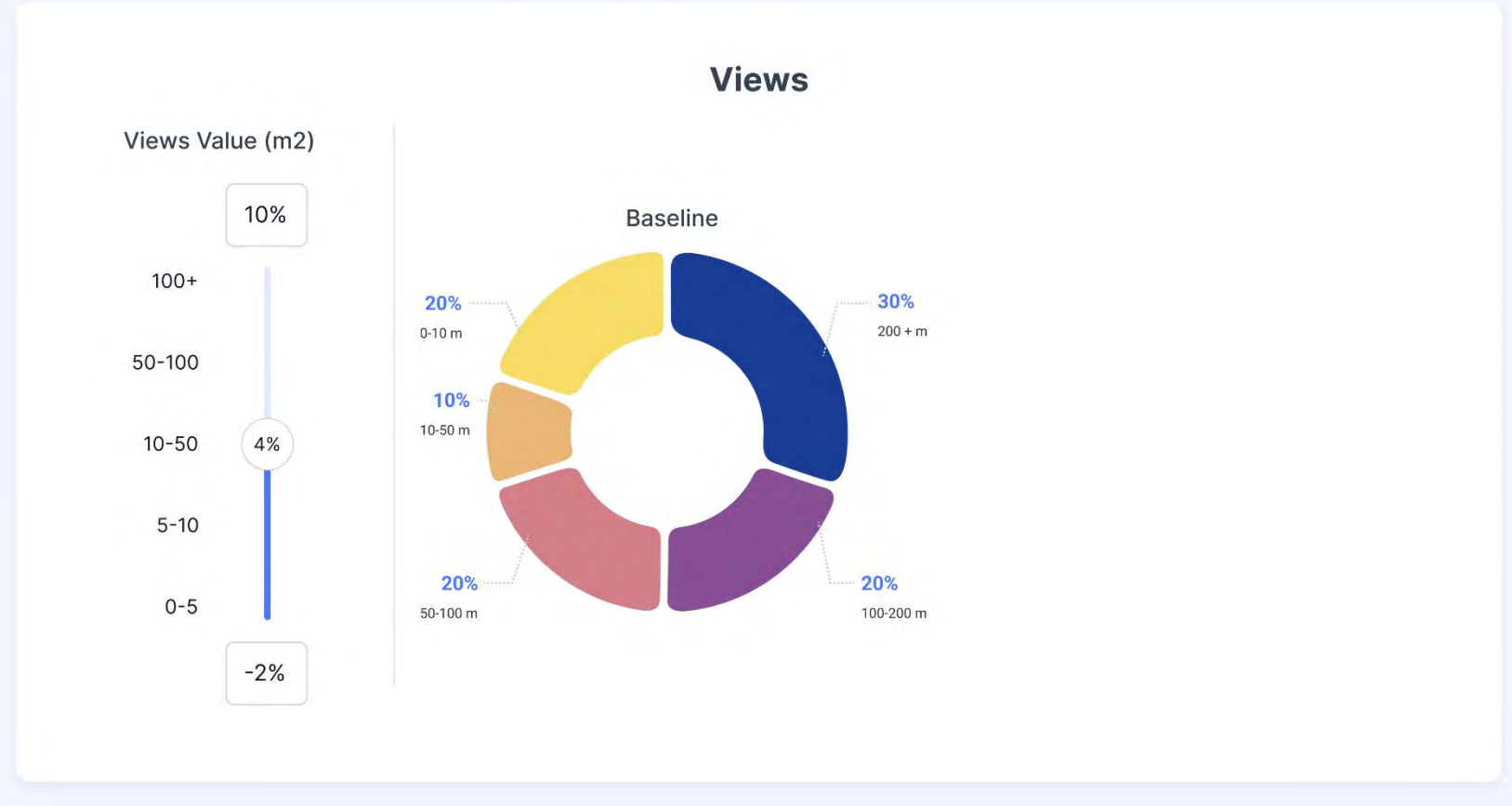
Start Year: 2020

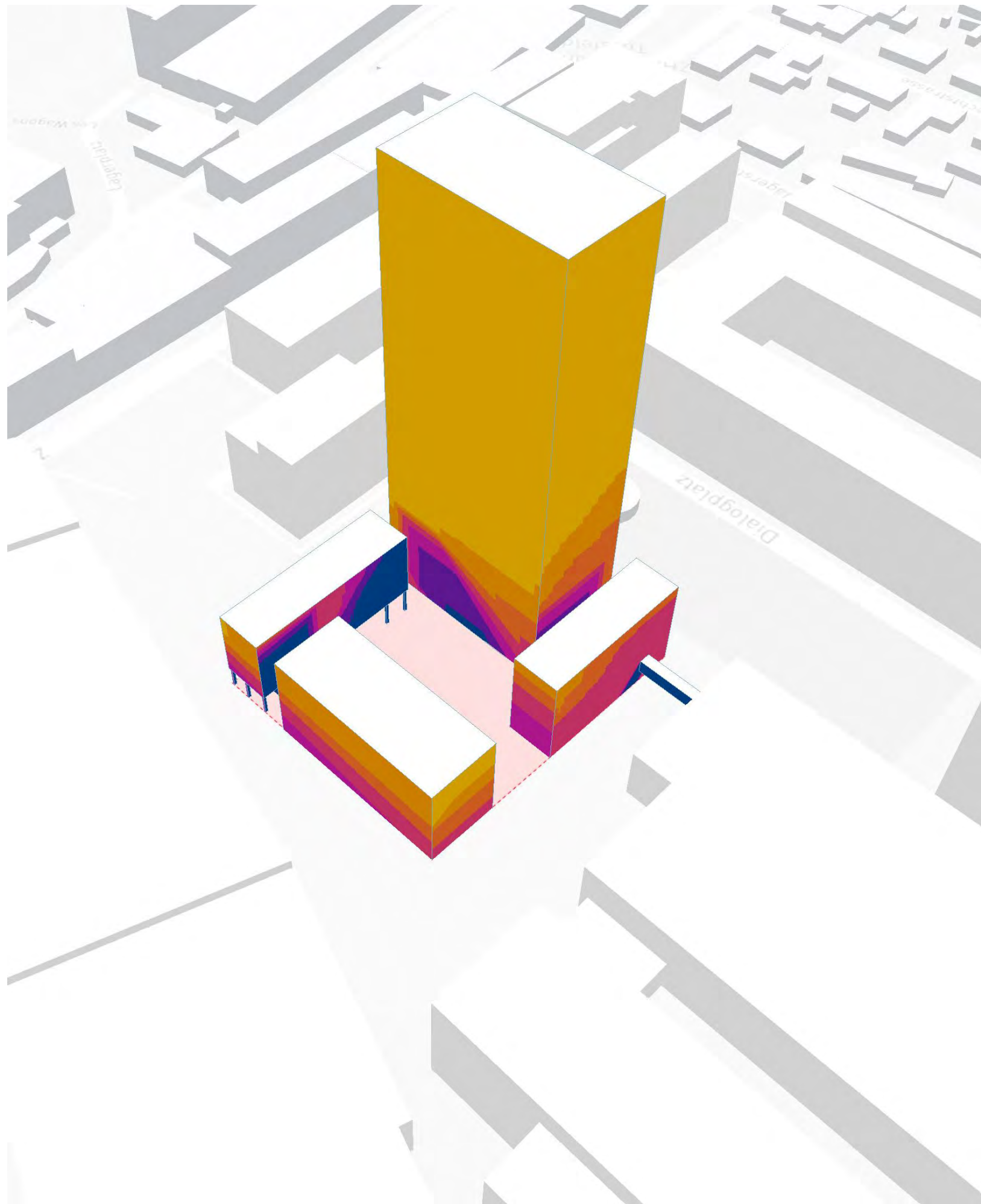
Timespan (years): 50

End Year: 2070

Key Data

- ### Resilience Factors
- Views
 - Views to Feature
 - Trees + Planting
 - Design for Adaptability
 - Community Amenities
 - Daylight
 - Thermal Performance

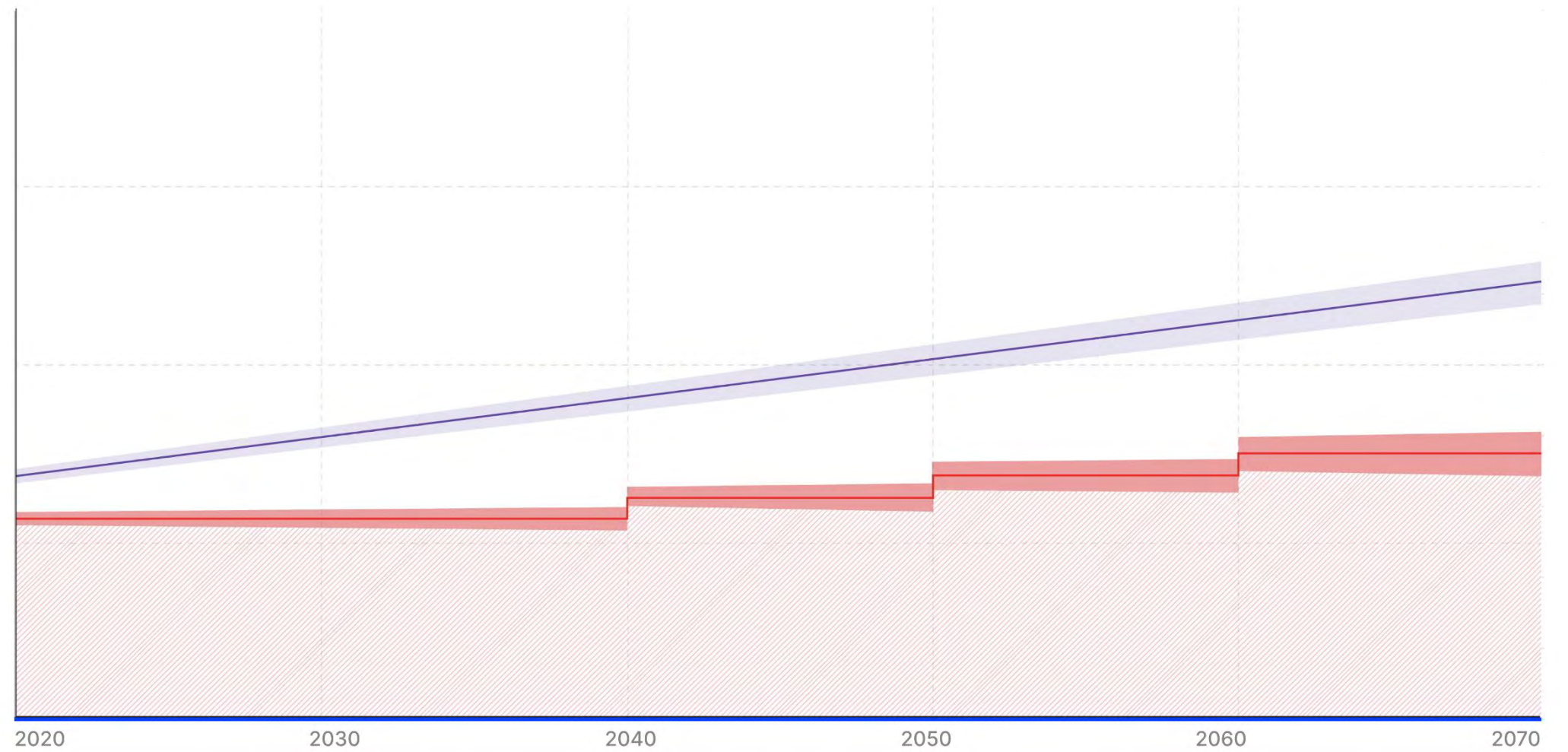




Rocket & Tigerli

Project settings

Baseline **Design 1** Design 2 Design 3



Start Year

2020

Timespan (years)

50

End Year

2070

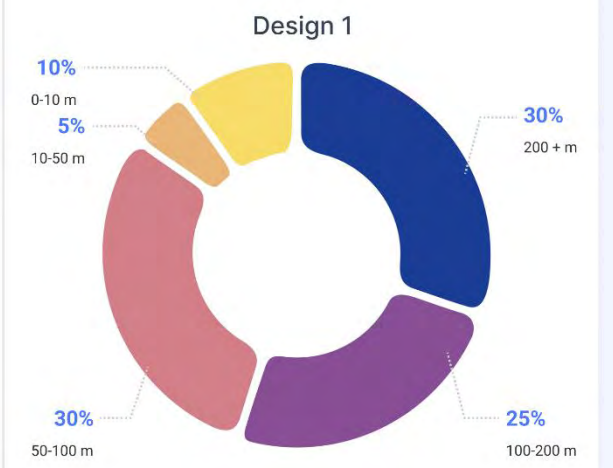
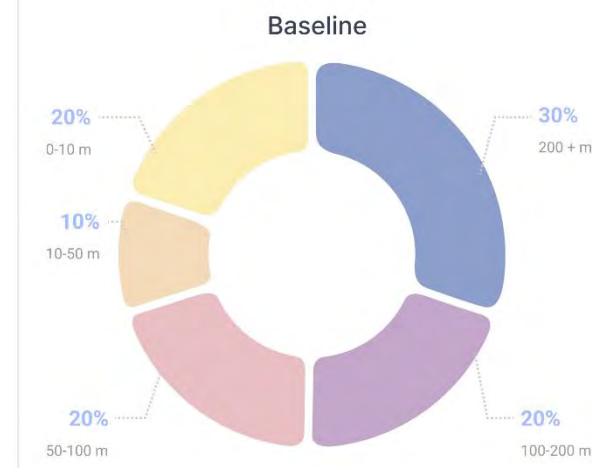
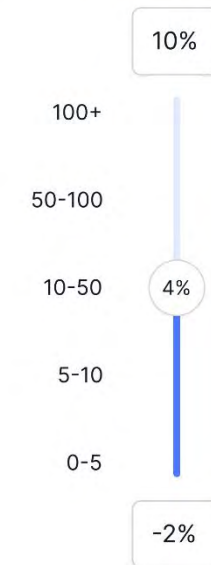
Key Data

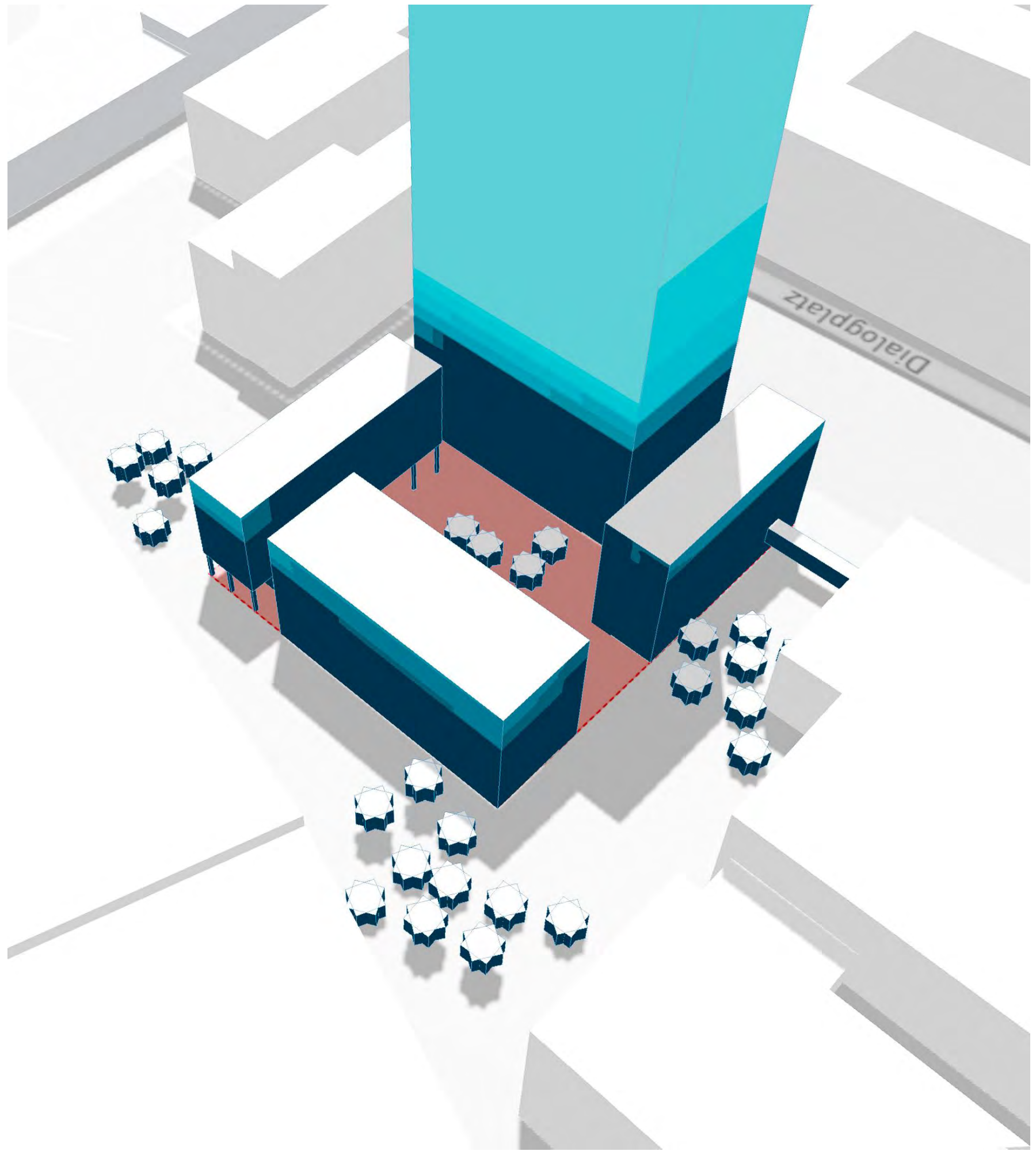
Resilience Factors

- Views
- Views to Feature
- Trees + Planting
- Design for Adaptability
- Community Amenities
- Daylight
- Thermal Performance

Views

Views Value (m2)

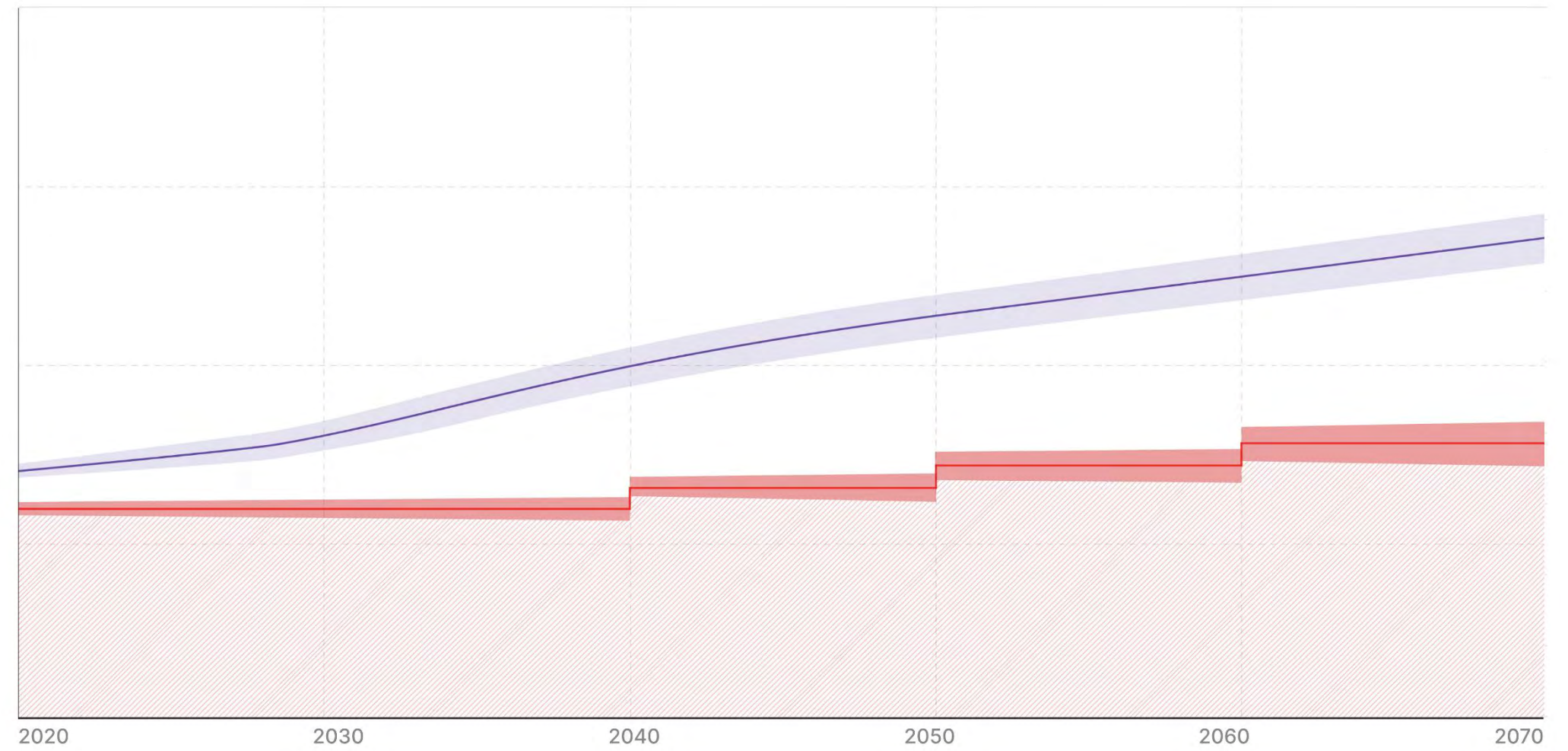




Rocket & Tigerli

Project settings

Baseline **Design 1** Design 2 Design 3



Start Year: 2020 Timespan (years): 50 End Year: 2070

Key Data

Resilience Factors

- Views
- Views to Feature
- Trees + Planting
- Design for Adaptability
- Community Amenities
- Daylight
- Thermal Performance

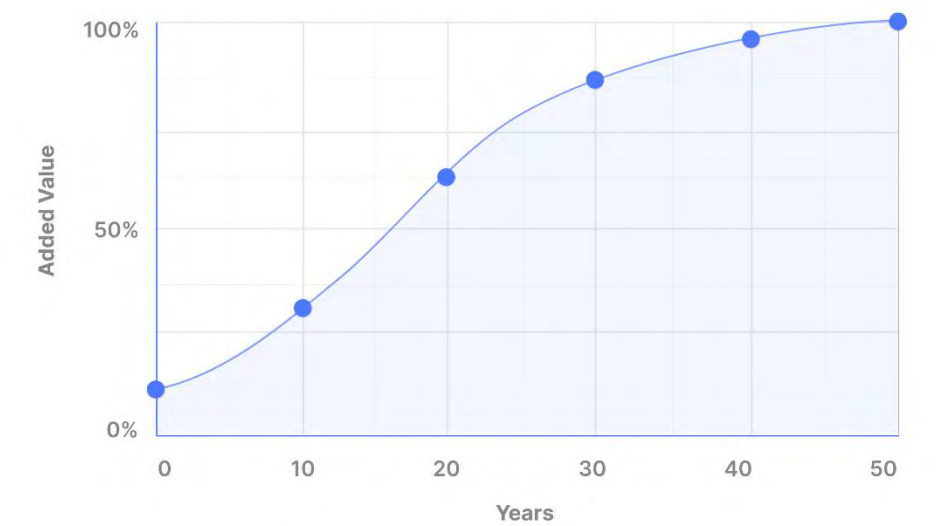
Cost per Tree

150

% of Added Value

Min: 3% Max: 8%

Trees + Planting

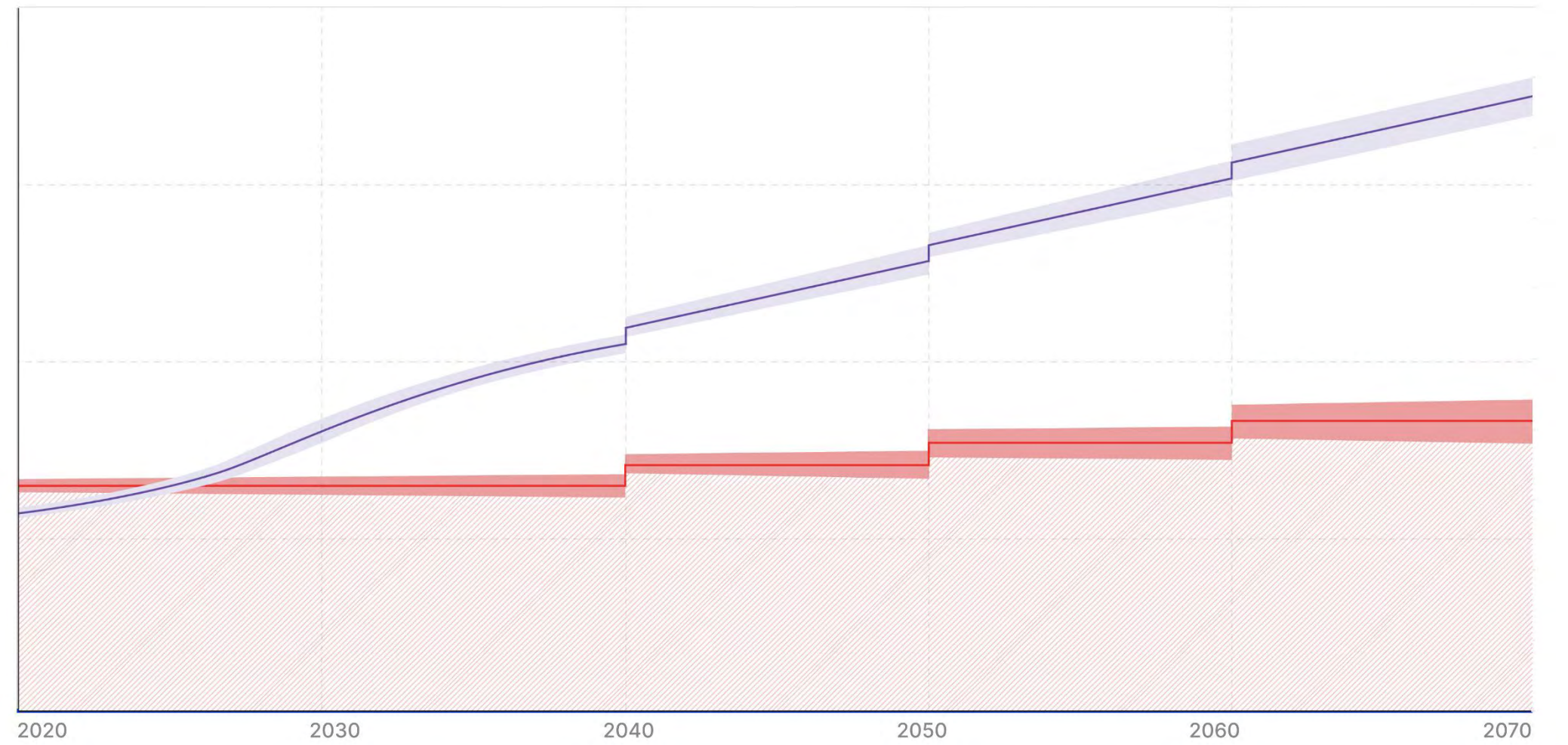


Polyline Bezier

Rocket & Tigerli

Project settings

Baseline **Design 1** Design 2 Design 3



Start Year

2020

Timespan (years)

50

End Year

2070

Key Data

Resilience Factors

- Views
- Views to Feature
- Trees + Planting
- Design for Adaptability
- Community Amenities
- Daylight
- Thermal Performance

Extra Cost per Day

15%

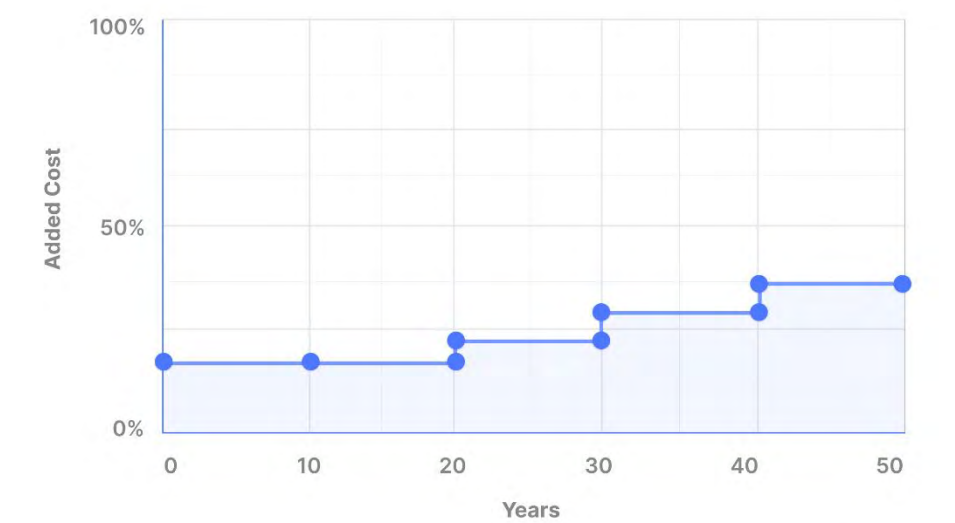
Market Shift?

0 60

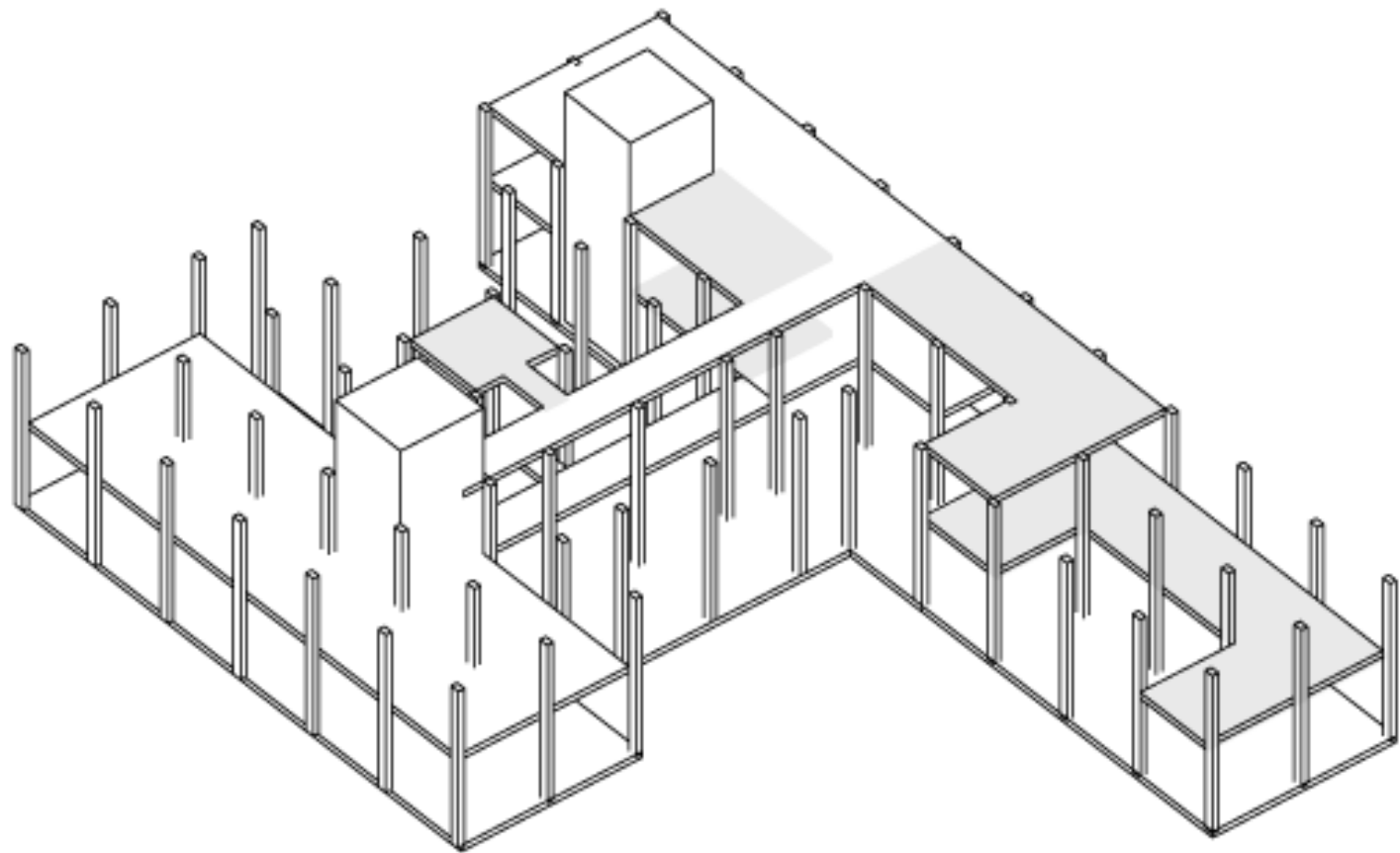
Risk Sum

75%

Design for Adaptability



Polyline Bezier

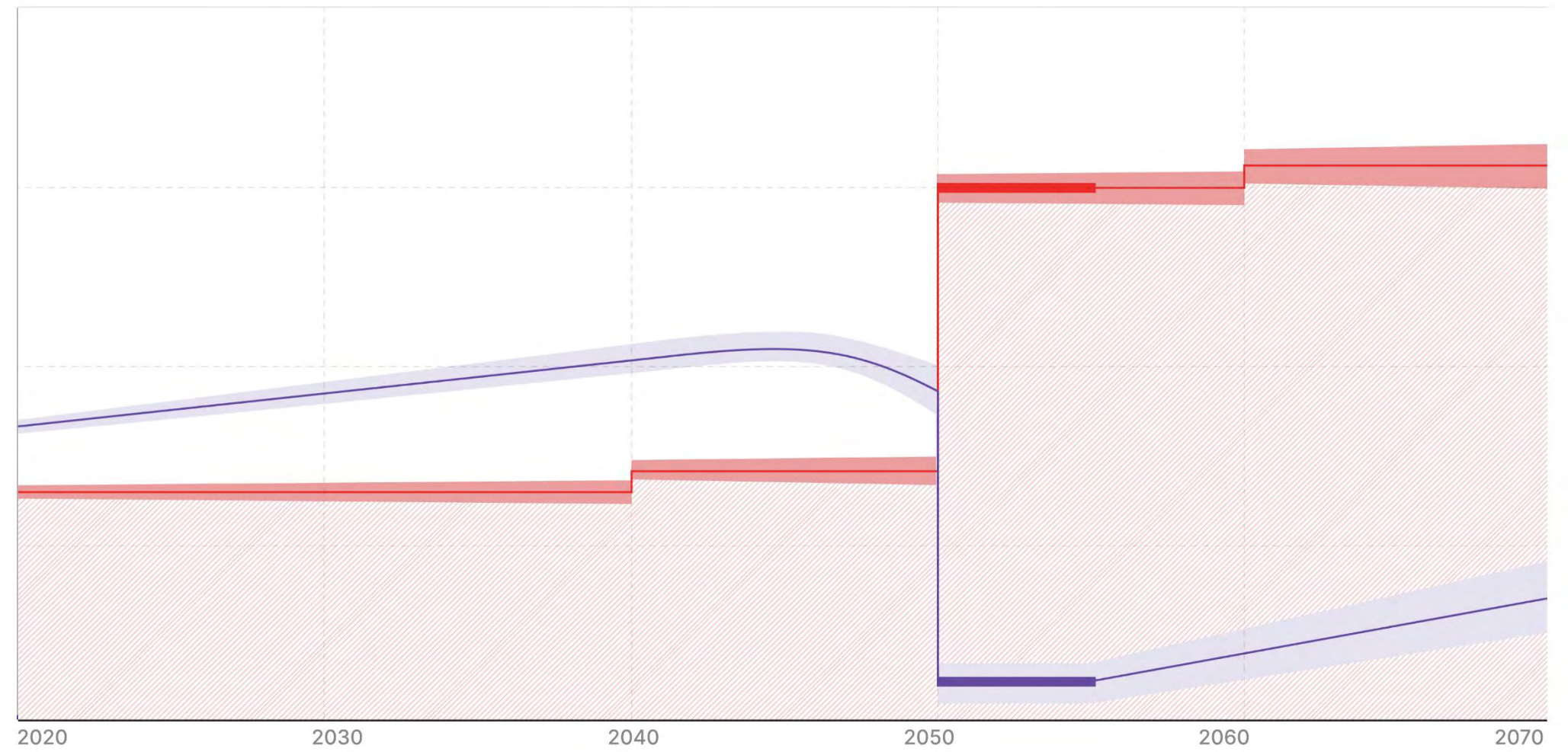




Rocket & Tigerli

Project settings

Baseline **Design 1** Design 2 Design 3



Start Year: 2020 Timespan (years): 50 End Year: 2070

Key Data

Resilience Factors

- Views
- Views to Feature
- Trees + planting
- Design for Adaptability
- Community Amenities
- Daylight
- Thermal Performance

Extra Cost per Day

15%

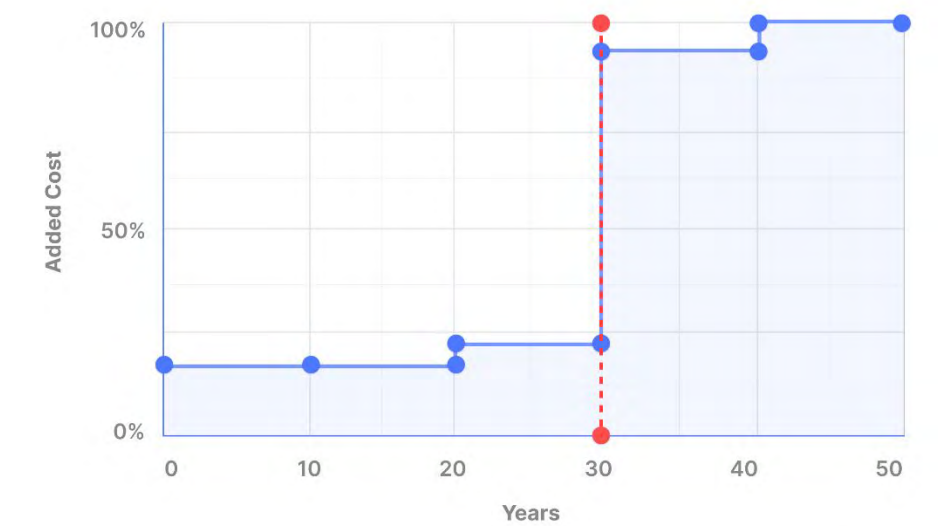
Market shift?

0 60

Risk Sum

75%

Design for Adaptability



Polyline Bezier

PROFITEROLES



Start Year
2020

Timespan (years)
50

End Year
2070

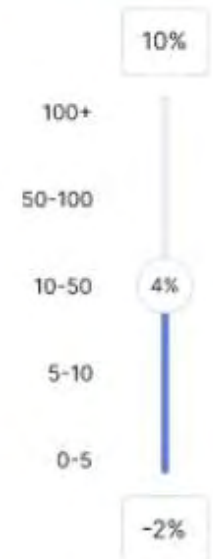
Key Data

Resilience Factors

- Views
- Views to Feature
- Trees + Planting
- Design for Adaptability
- Community Amenities
- Daylight
- Thermal Performance

Views

Views Value (m2)



Baseline



SHL Practice Cards



SHL Practice Cards

Question

Natural Daylighting

Are daylighting needs met through passive methods?

Phase/Frameworks

Open Question

People & Resources

Tools

13

Process



Life-cycle Analysis

Description

Life cycle assessment or LCA is a methodology for assessing environmental impacts associated with all the stages of the life cycle of a commercial product, process, or service.

People & Resources

Living Design - Teams, Licences available from PW. Digital Practice - Teams, Experts: Jesce Walz, Elton Gjata

Tools

Tally (for Revit), OneClick LCA Analysis, Athena Impact Estimator for Buildings, Tally (for Revit), OneClick LCA Analysis

Benefits

WELL A13, X10, X11, X12, X13
BREEAM Man 02, Mat 01, Mat 02, Mat 03, Mat 05, Ene 04, Le02
DGNB PRO2.1, ECO1.1, ENV1.1
LEED MR02, MR03, MR04, MR05, MR06, IE04
LBC Health-09, Materials-12, Materials-14

Phase/Frameworks

Development

9

Tool



Universal design for learning

Description

Universal Design for Learning is a system created to ensure students with learning differences can thrive in the same educational environment. Universal Design for Learning refers to a framework established to minimize physical and mental barriers to learning, affording all students equal opportunity to flourish.

People & Resources

Elif Tinaztepe, PW: Rachael Dumas

Tools

Benefits

WELL
BREEAM
DGNB
LEED
LBC

Phase/Frameworks

Ideation/Development

15

Quality



Biodiversity Design

Description

Maintain biodiversity in the local environment, the diversity of the species there and their genetic diversity. Encourage positive steps towards creating, maintaining and increasing biodiversity both on buildings themselves and in their environs. Consider biological corridors, pollinator passages and re-wilding landscapes.

People & Resources

Enlai Hooi, Pim IJsendoorn

Tools

Climate Positive Design
Pathfinder, An Architect's guide to Biodiversity by E.Camplisson

Benefits

WELL
BREEAM LE02, LE03, LE04, LE05
DGNB ENV2.4, SITE1.1
LEED SS03
LBC Place-01, Beauty-19

Phase/Frameworks

Ideation/Development

26

Quality



Biodiversity Design

Description

Maintain biodiversity in the local environment, the diversity of the species there and their genetic diversity. Encourage positive steps towards creating, maintaining and increasing biodiversity both on buildings themselves and in their environs. Consider biological corridors, pollinator passages and re-wilding landscapes.

People & Resources

Enlai Hooi, Pim IJsendoorn

Benefits

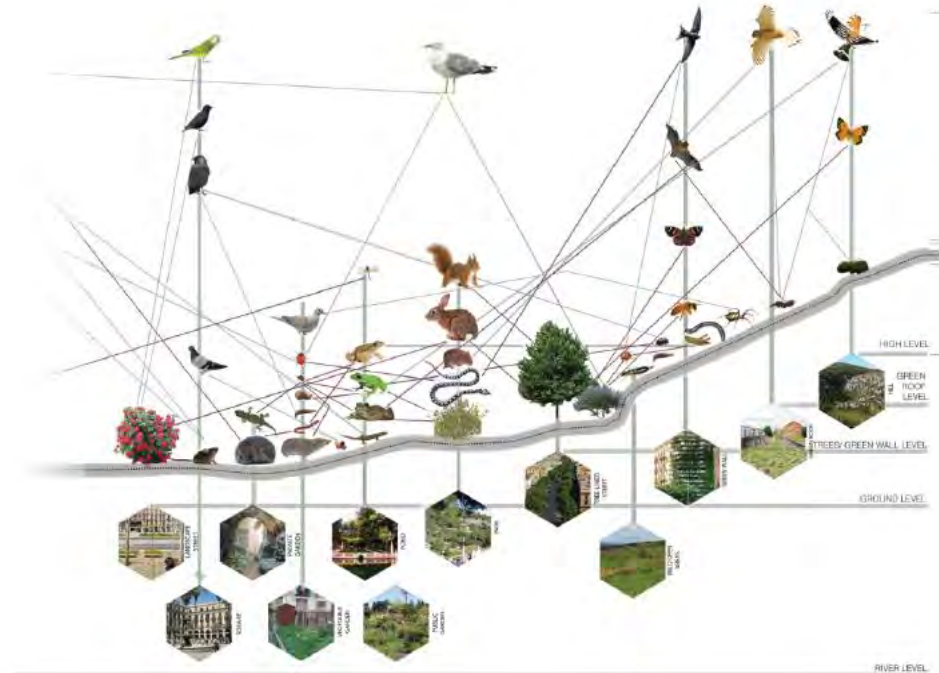
WELL
BREEAM LE02, LE03, LE04, LE05
DGNB ENV2.4, SITE1.1
LEED SS03
LBC Place-01, Beauty-19

Tools

Climate Positive Design
Pathfinder, An Architect's guide to Biodiversity by E.Camplisson

Phase/Frameworks

Ideation/Development



Quality

Biodiversity Design



Quality



Biodiversity Design

Description

Maintain biodiversity in the local environment, the diversity of the species there and their genetic diversity. Encourage positive steps towards creating, maintaining and increasing biodiversity both on buildings themselves and in their environs. Consider biological corridors, pollinator passages and re-wilding landscapes.

People & Resources

Enlai Hooi, Pim IJsendoorn

Tools

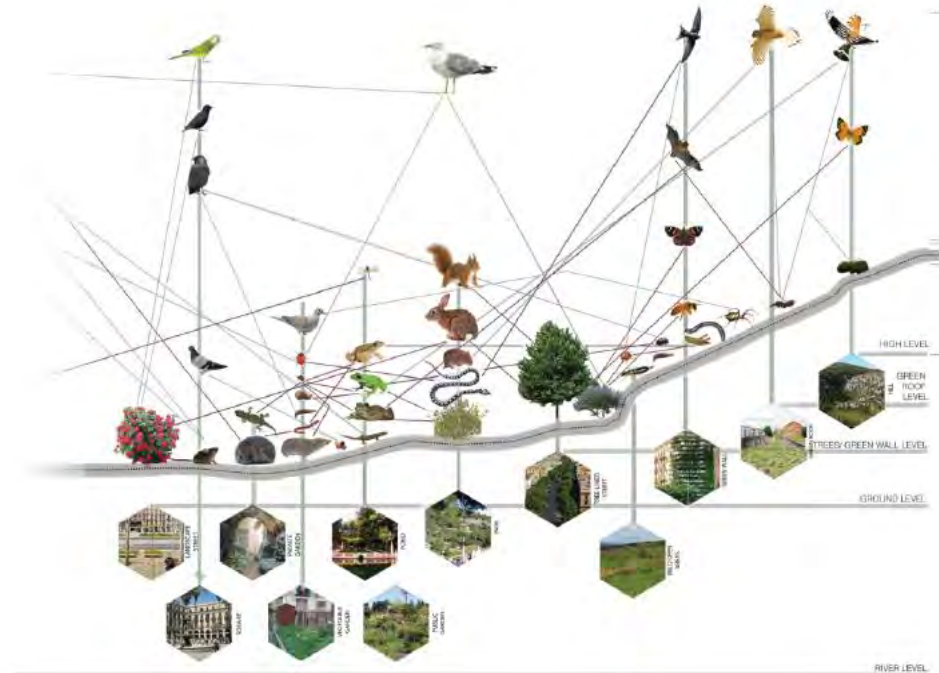
Climate Positive Design
Pathfinder, An Architect's guide to
Biodiversity by E.Camplisson

Benefits

WELL
BREEAM LE02, LE03, LE04,
LE05
DGNB ENV2.4, SITE1.1
LEED SS03
LBC Place-01, Beauty-19

Phase/Frameworks

Ideation/Development



Quality

Biodiversity Design



Quality



Biodiversity Design

Description

Maintain biodiversity in the local environment, the diversity of the species there and their genetic diversity. Encourage positive steps towards creating, maintaining and increasing biodiversity both on buildings themselves and in their environs. Consider biological corridors, pollinator passages and re-wilding landscapes.

People & Resources

Enlai Hooi, Pim IJsendoorn

Tools

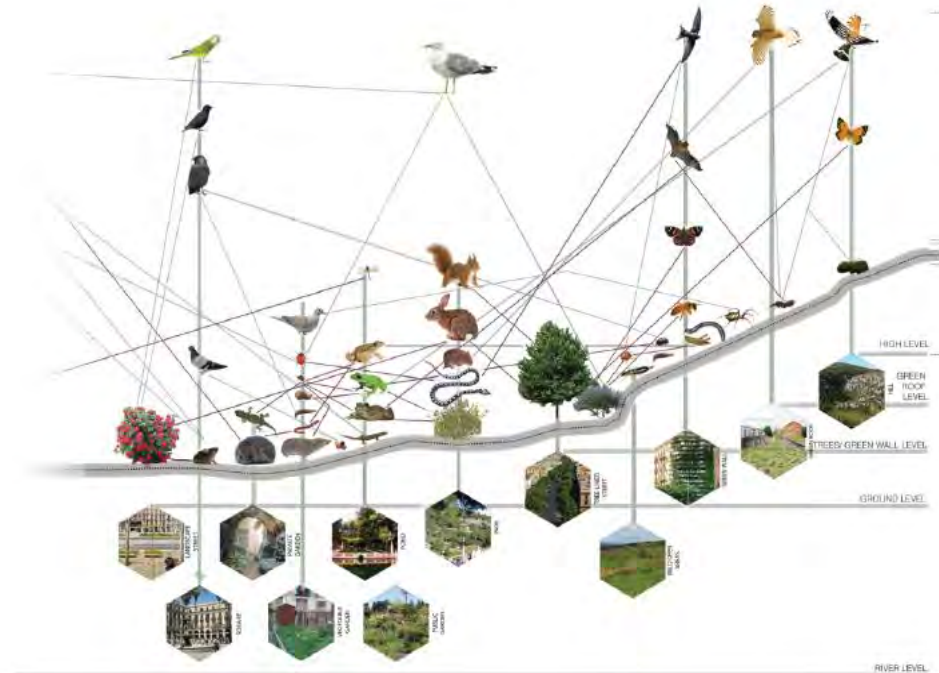
Climate Positive Design
Pathfinder, An Architect's guide to
Biodiversity by E.Camplisson

Benefits

WELL
BREEAM LE02, LE03, LE04,
LE05
DGNB ENV2.4, SITE1.1
LEED SS03
LBC Place-01, Beauty-19

Phase/Frameworks

Ideation/Development



Quality

Biodiversity Design



Quality



Biodiversity Design

Description

Maintain biodiversity in the local environment, the diversity of the species there and their genetic diversity. Encourage positive steps towards creating, maintaining and increasing biodiversity both on buildings themselves and in their environs. Consider biological corridors, pollinator passages and re-wilding landscapes.

People & Resources

Enlai Hooi, Pim IJsendoorn

Tools

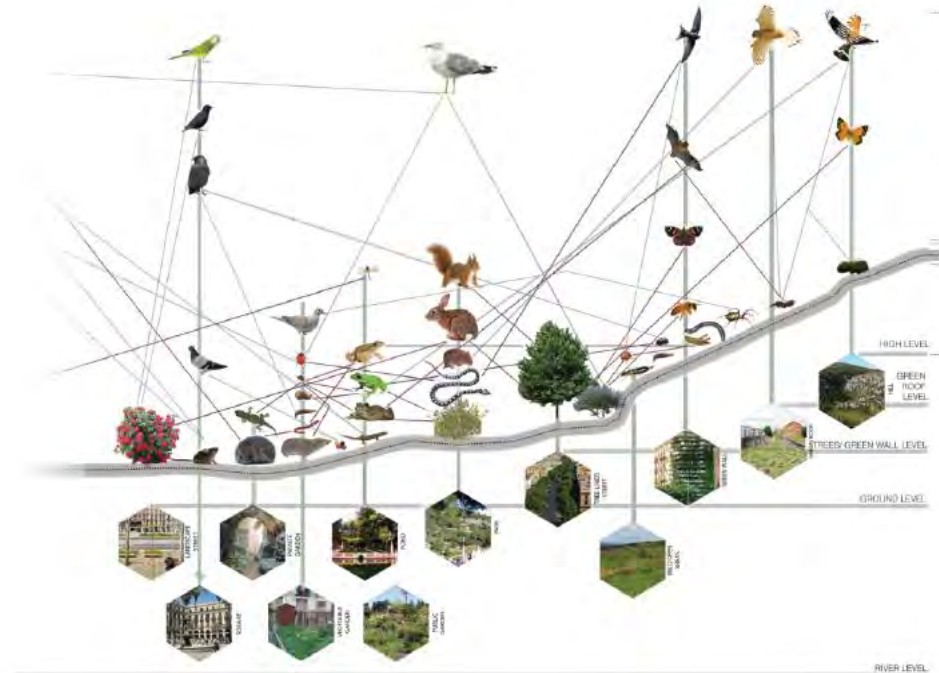
Climate Positive Design
Pathfinder, An Architect's guide to
Biodiversity by E.Camplisson

Benefits

WELL
BREEAM LE02, LE03, LE04,
LE05
DGNB ENV2.4, SITE1.1
LEED SS03
LBC Place-01, Beauty-19

Phase/Frameworks

Ideation/Development



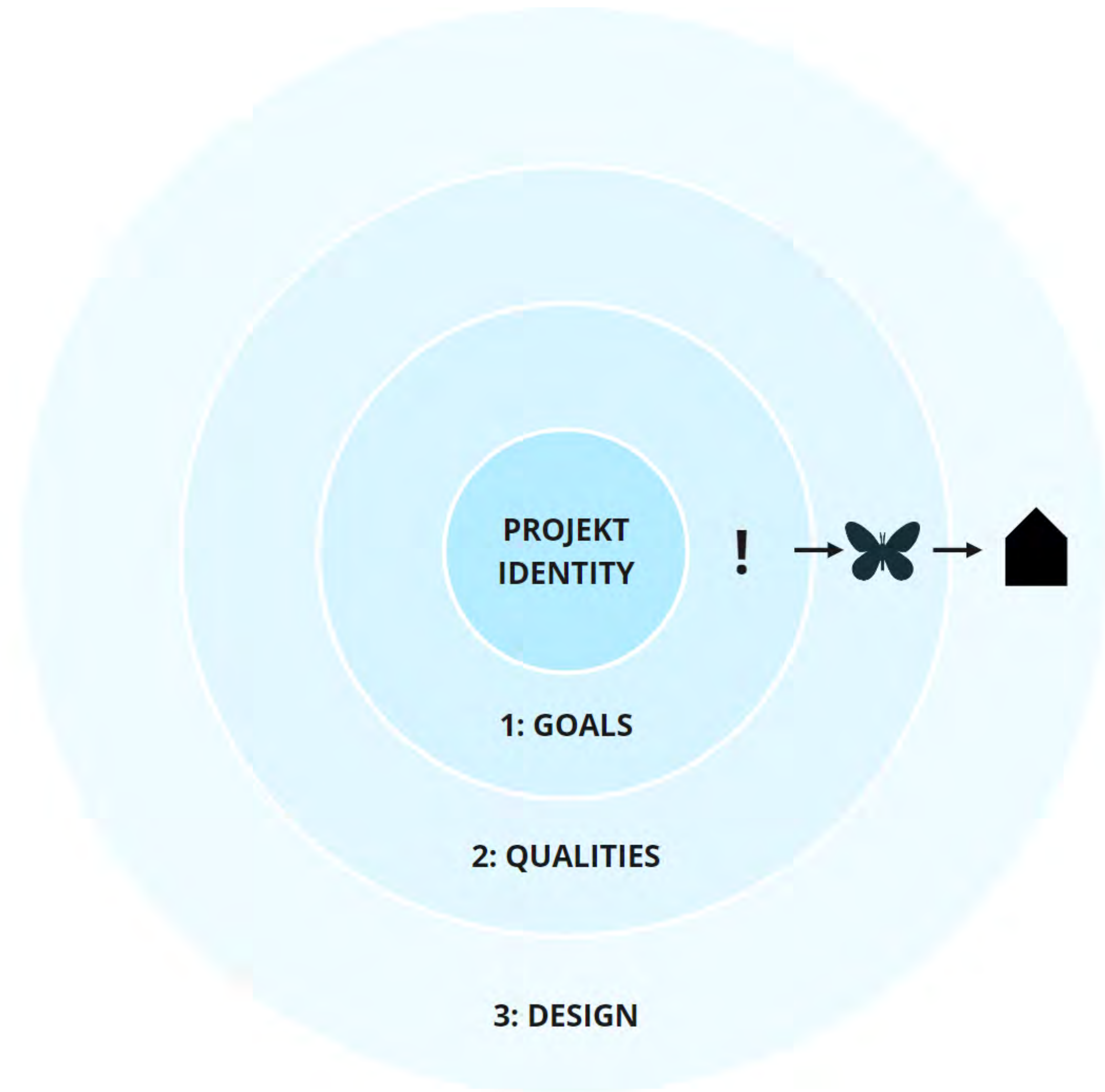
Quality

Biodiversity Design

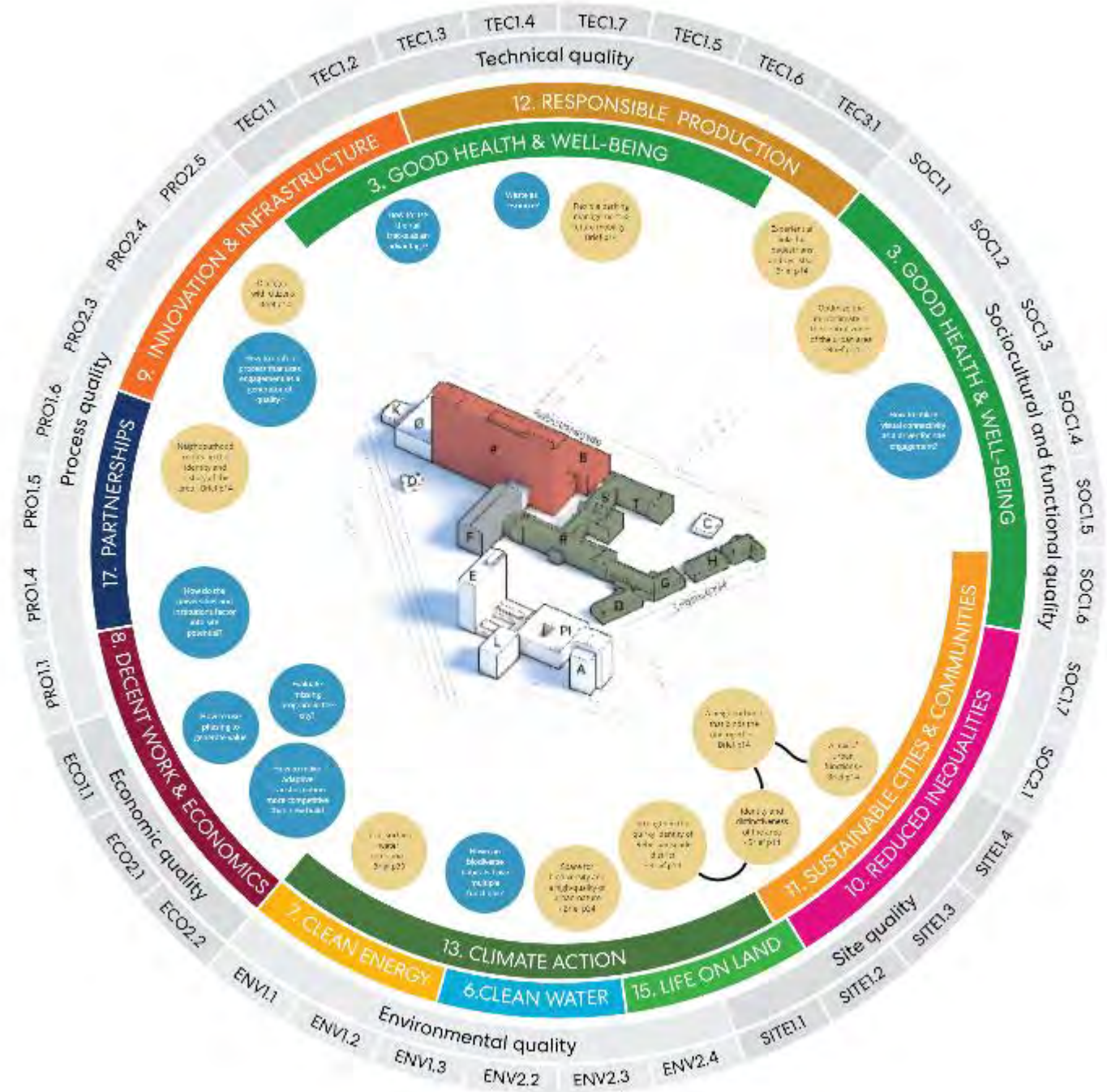
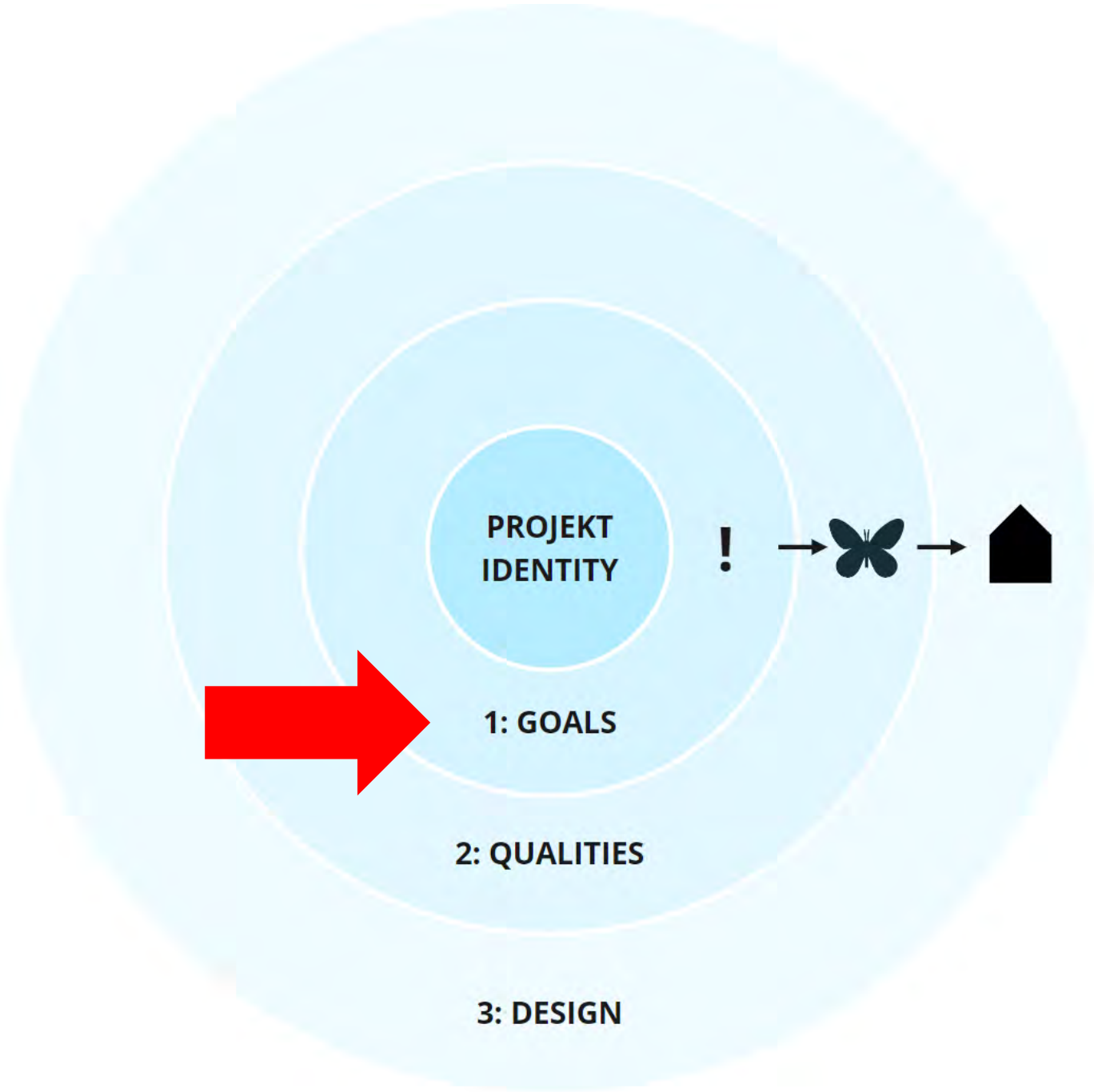


- **Unearthing *skills and experience***
- **Crafting a flexible & *project-specific approach***
- ***Communication tool* with clients and collaborators**
- **A way to visualise the *decision process***

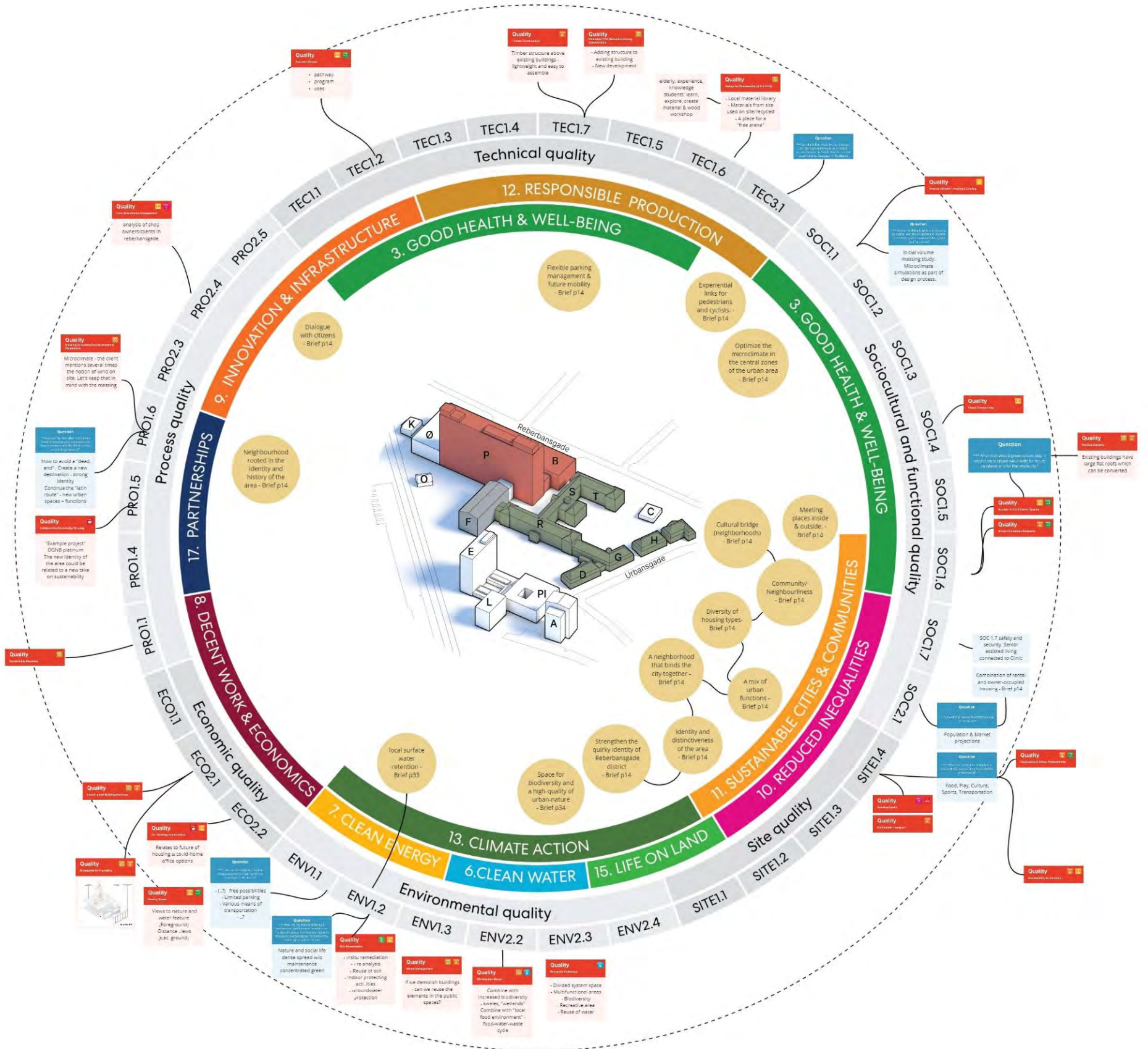
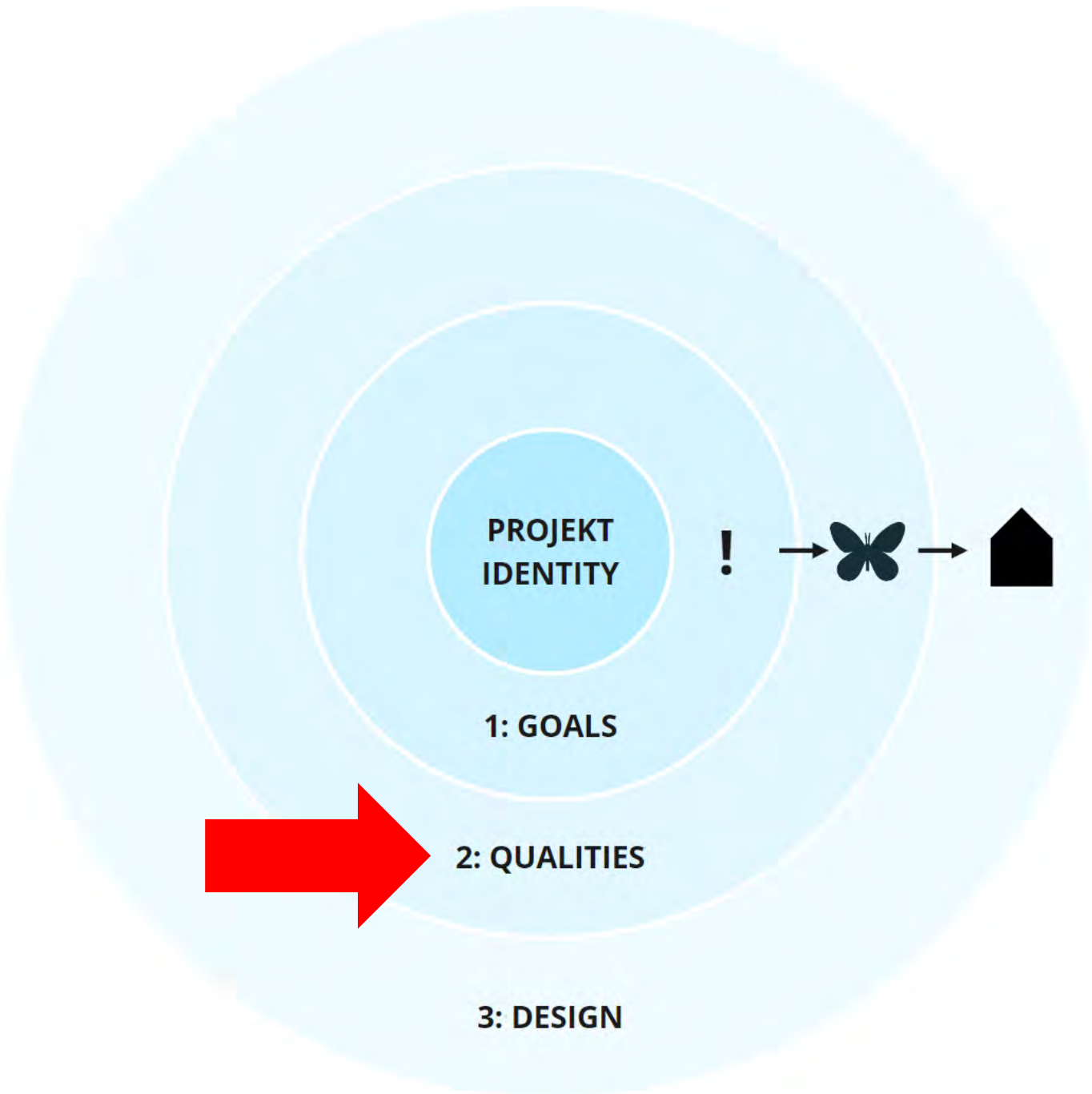
Snowball



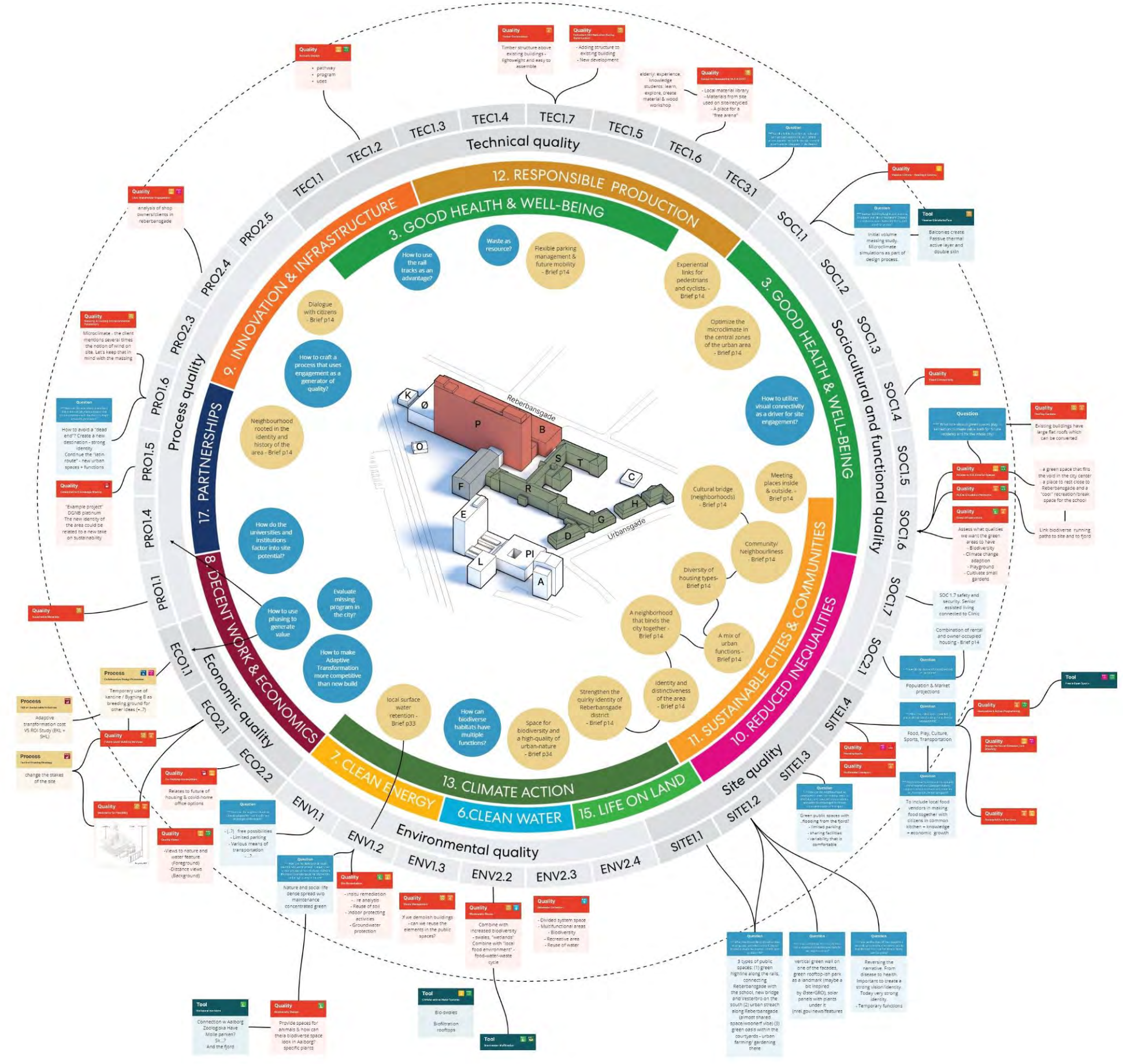
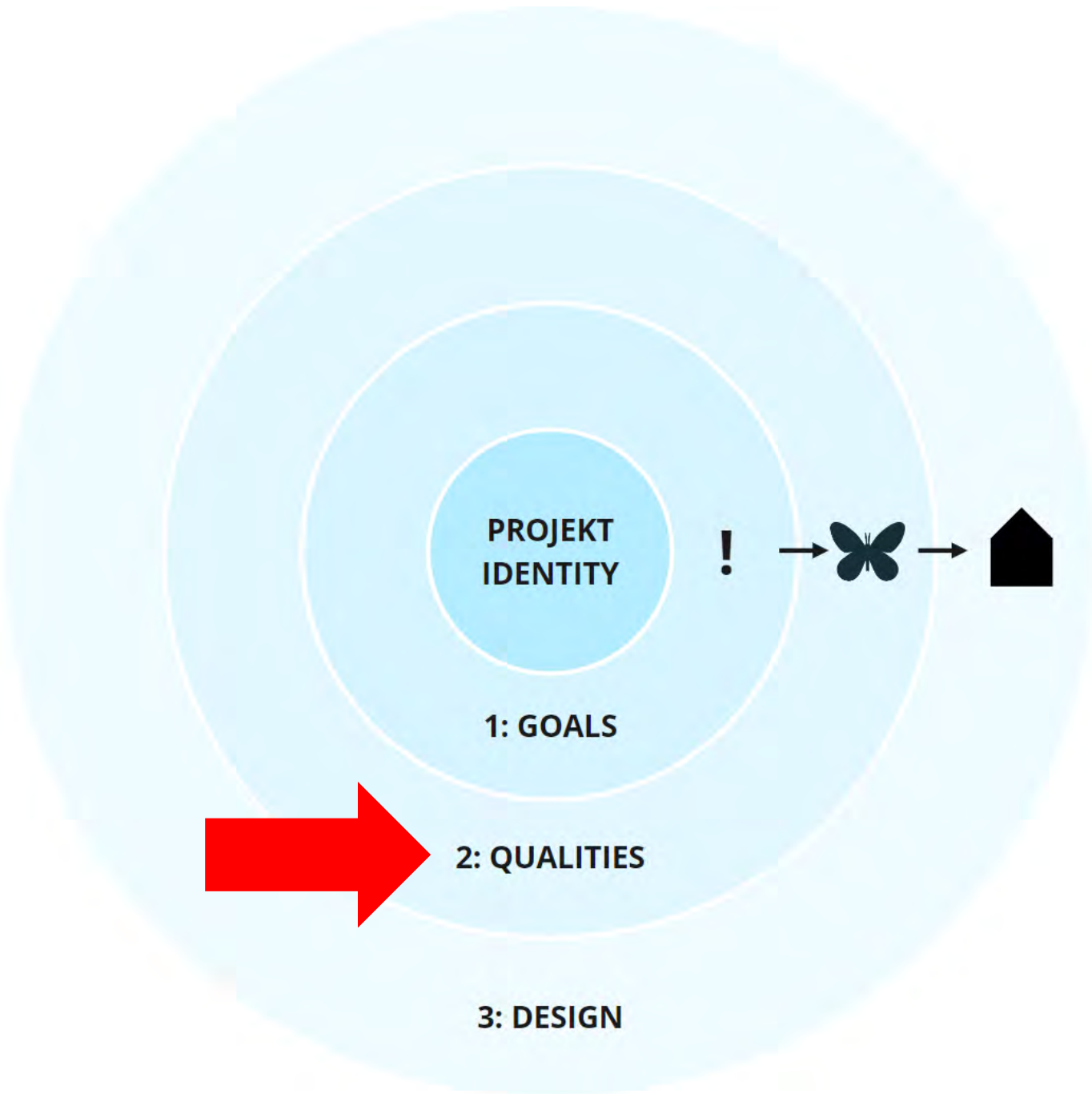
Brief Mapping



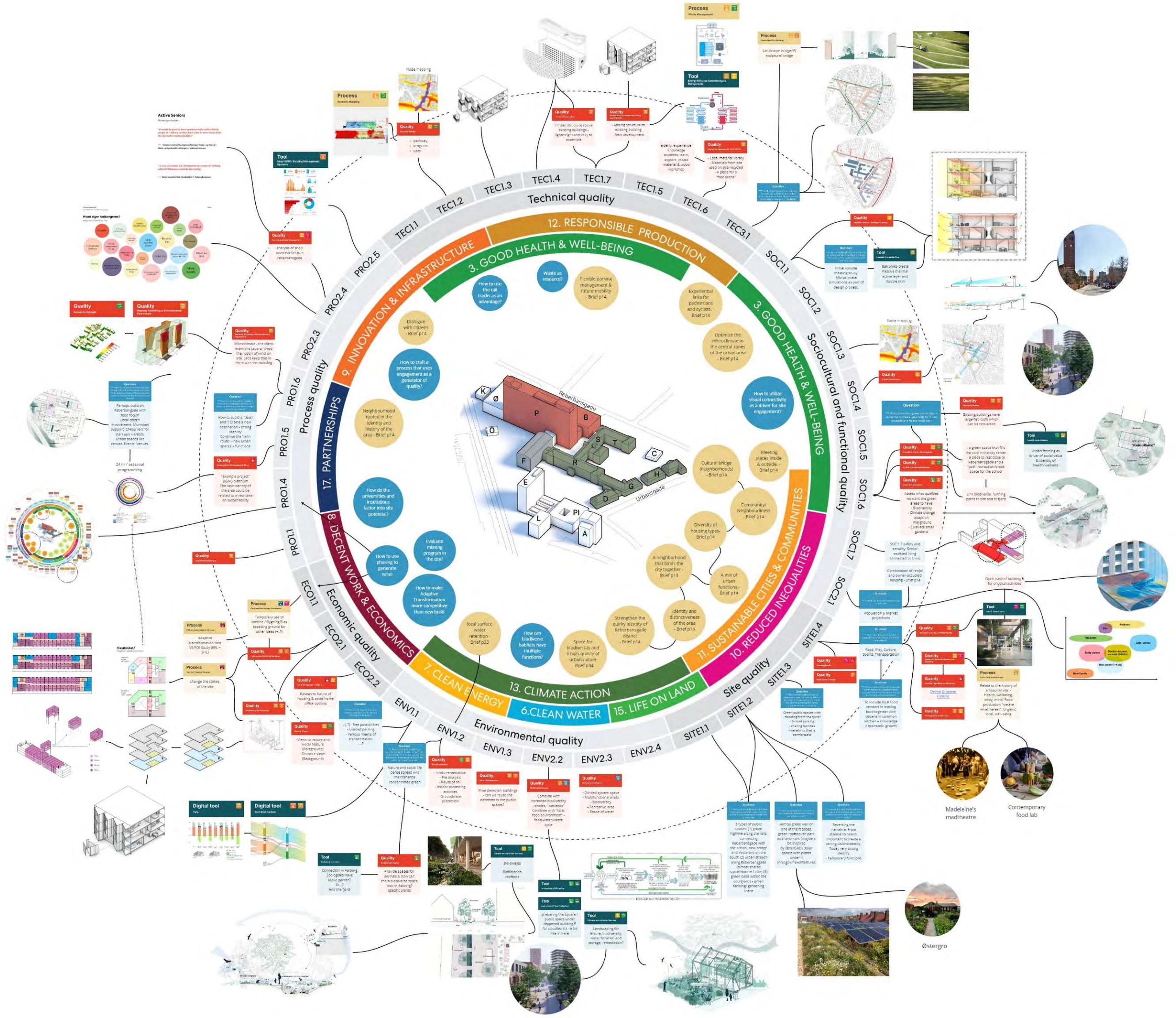
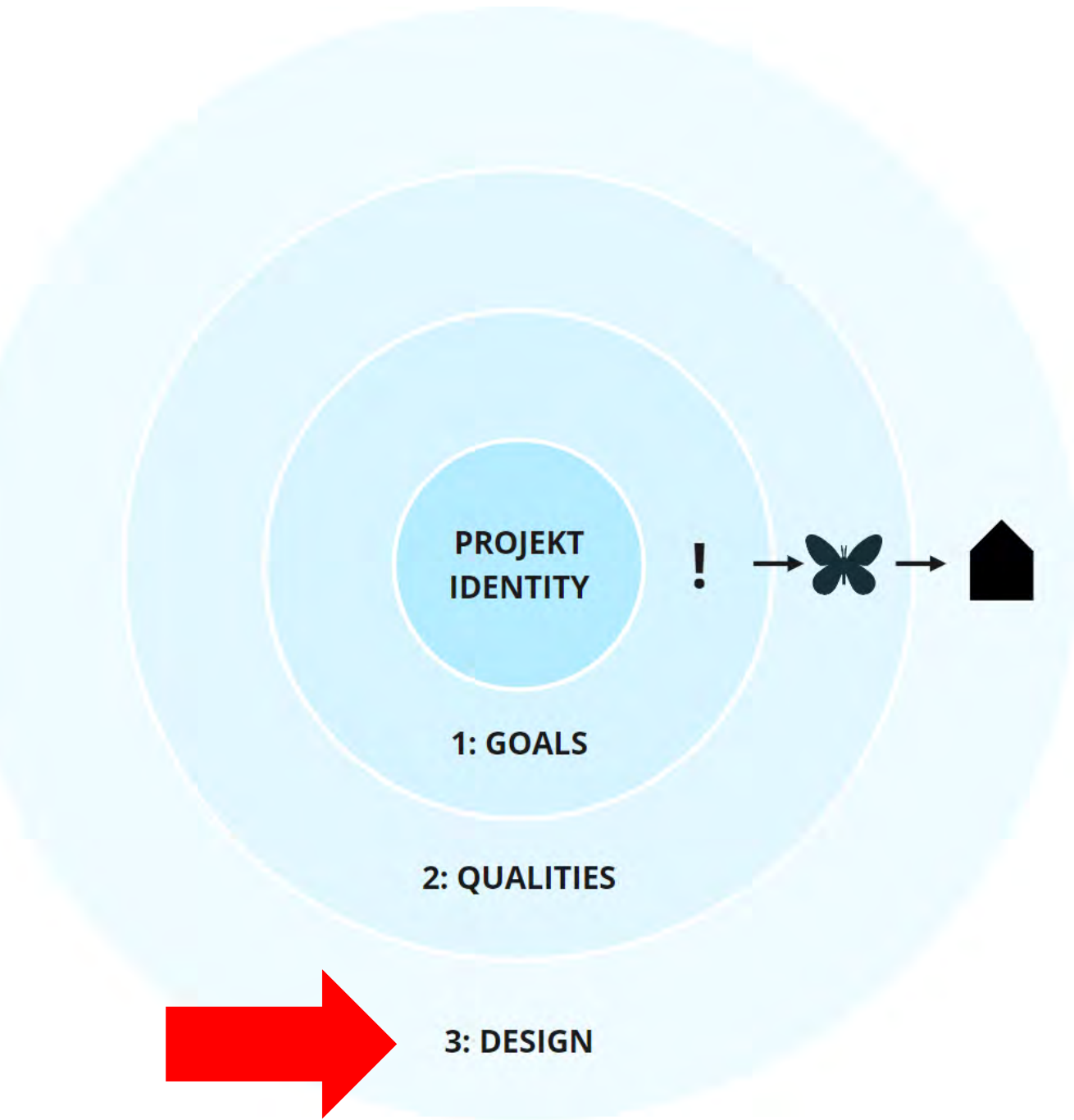
Qualities & Questions



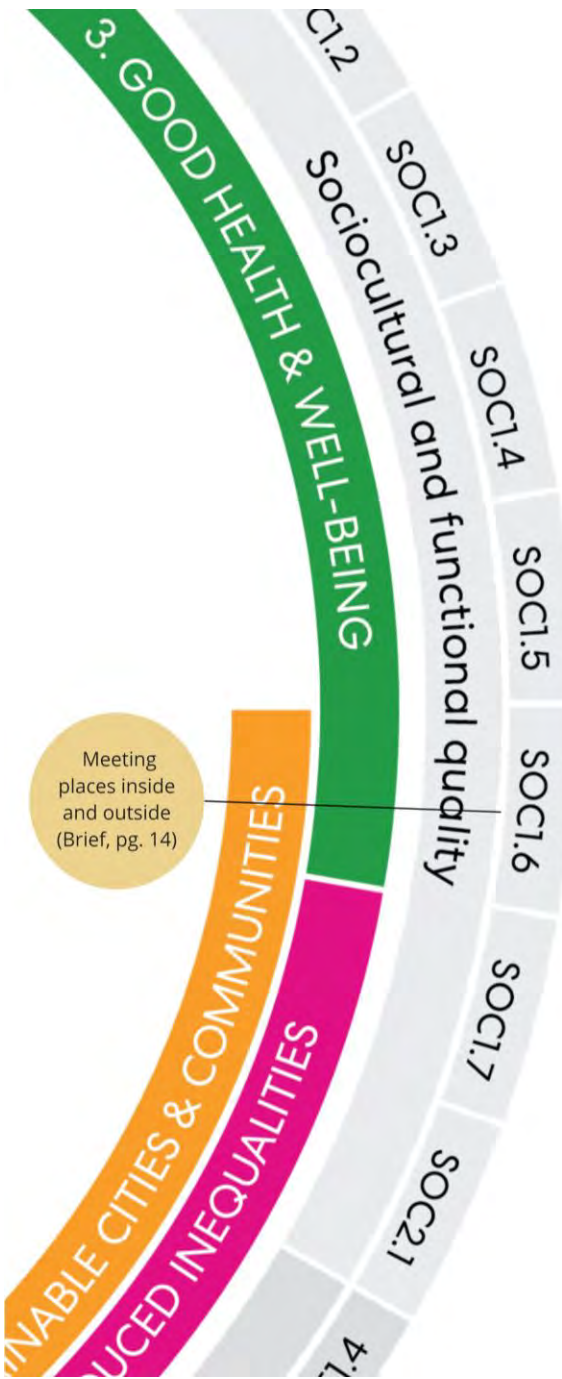
Ideas & critique



Proposals



Proposals linked to brief



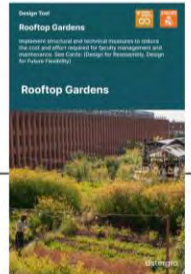
Meeting places inside and outside (Brief, pg. 14)



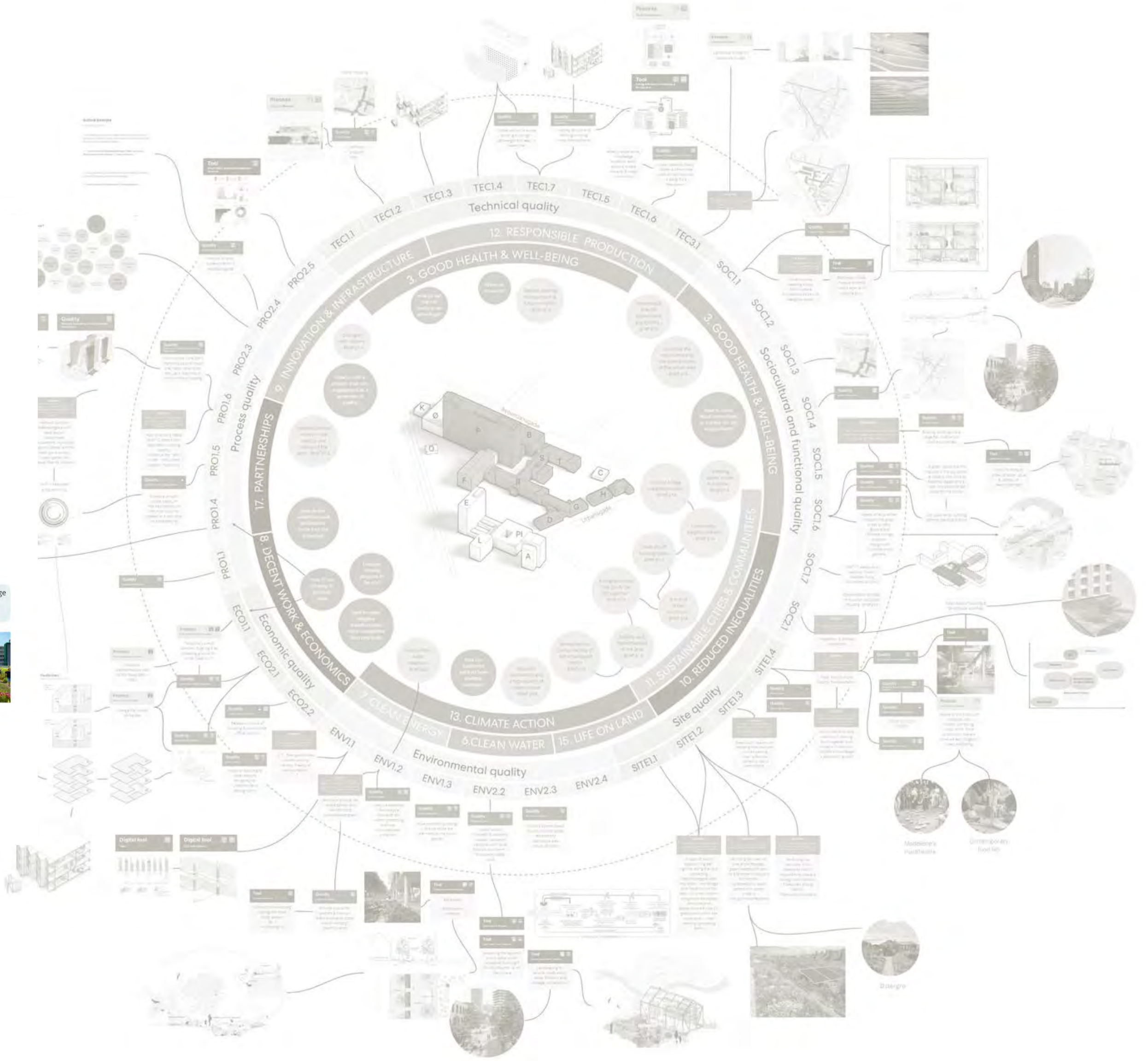
A green space that fills the void in the city center

A place to rest close to Reberbangade and a "cool" recreation/break space for the school

Question
 *** What role should green spaces play in recreation to create value both for future residents and for the whole city? *



Existing buildings have large flat roofs which can be converted



SHL Snowball App

Build

What role should recreational green spaces play to create value both for future residents and the city?

UN SDG's



DGNB

Sociocultural & Functional Quality
SOC1.6

- Quality
- Process
- Design Tools
- Digital Tools
- Questions

Quality Selection. Select 1 Card.

- 12 - Bedroom Accommodations
- 13 - Human-Centric Lighting
- 14 - Green Roofs
- 15 - Phyto-Remediation
- 16 - Rooftop Gardens
- 17 - Bioreactors
- 18 - Climate Positive Design Pathfinder
- 19 - PV Facade Panel
- 20 - Material Metadata
- 21 - Retrofit Life-Cycle Impact Tool
- 22 - Carbon Span Calculator
- 23 - IoT Devices & Sensors
- 24 - 15 Minute City

Idea Question

Existing buildings have large flat roofs which can be converted 54/100

+ New Idea or Question

Drag and Drop here
or
Select file



Rotterdam.jpg (1.087kb)

