

Noviteiten duurzame gevels

NVBV Kennisdag

10-12-2020

Leonie van Ginkel
Senior engineer | Geveltechniek en bouwfysica



35
countries

85
offices

14,000
employees



HAUT *Amsterdam*



Energy Academy *Groningen*



Echo *Delft*



Centraal Station *Arnhem*

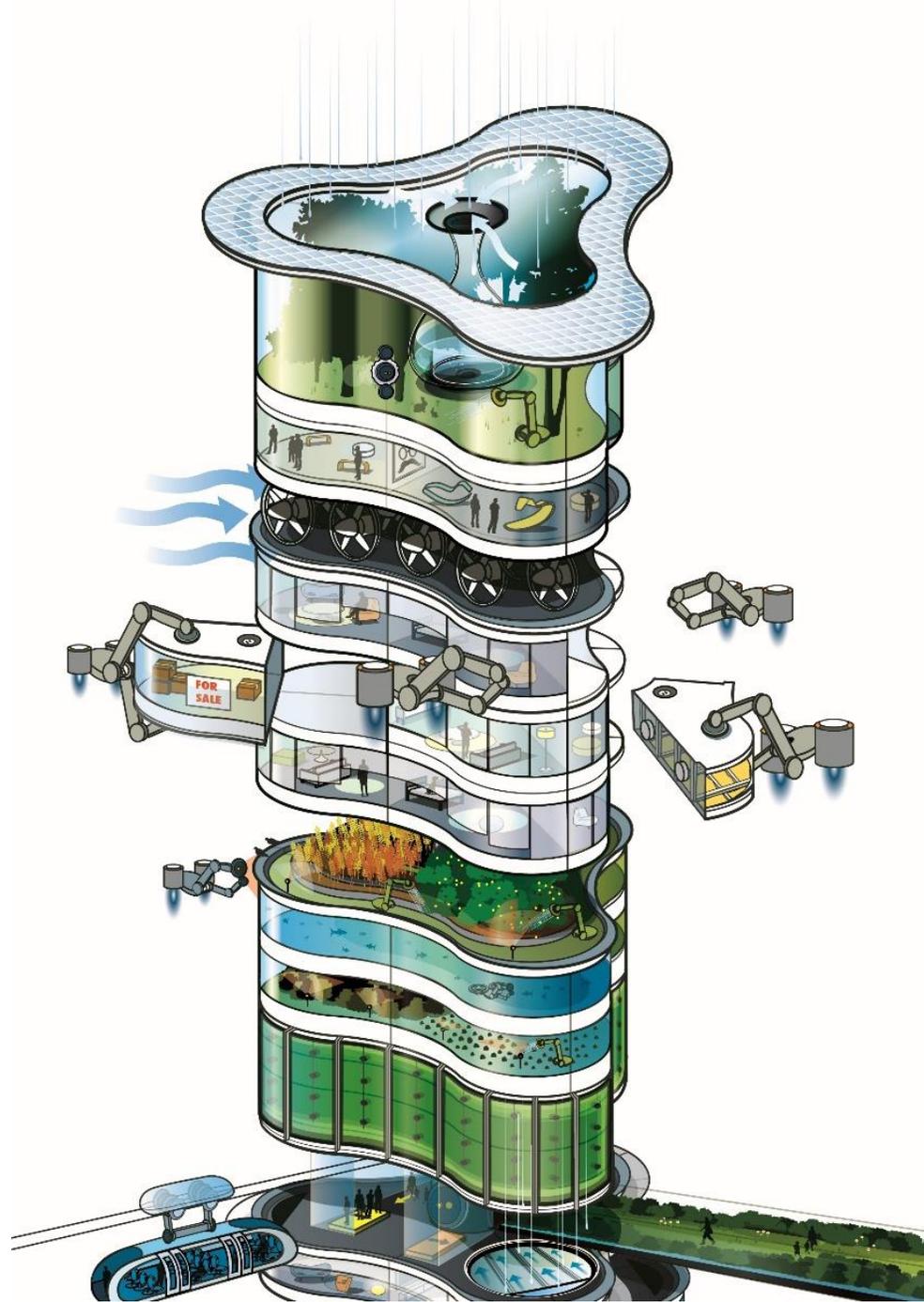


Lochal
Tilburg

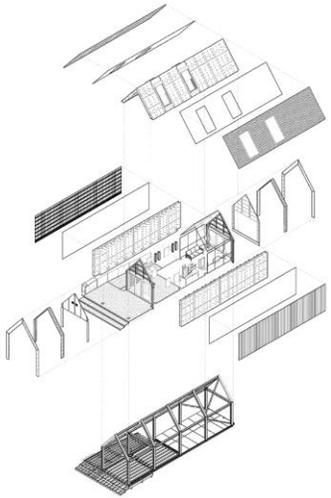


Smakkelaarspark *Utrecht*





‘design for disassembly’



biobased en circulair



groen



energiezuinig en gezond



People's Pavillion

Dutch Design Week, Eindhoven, Nederland

Overtreders W, Bureau SLA

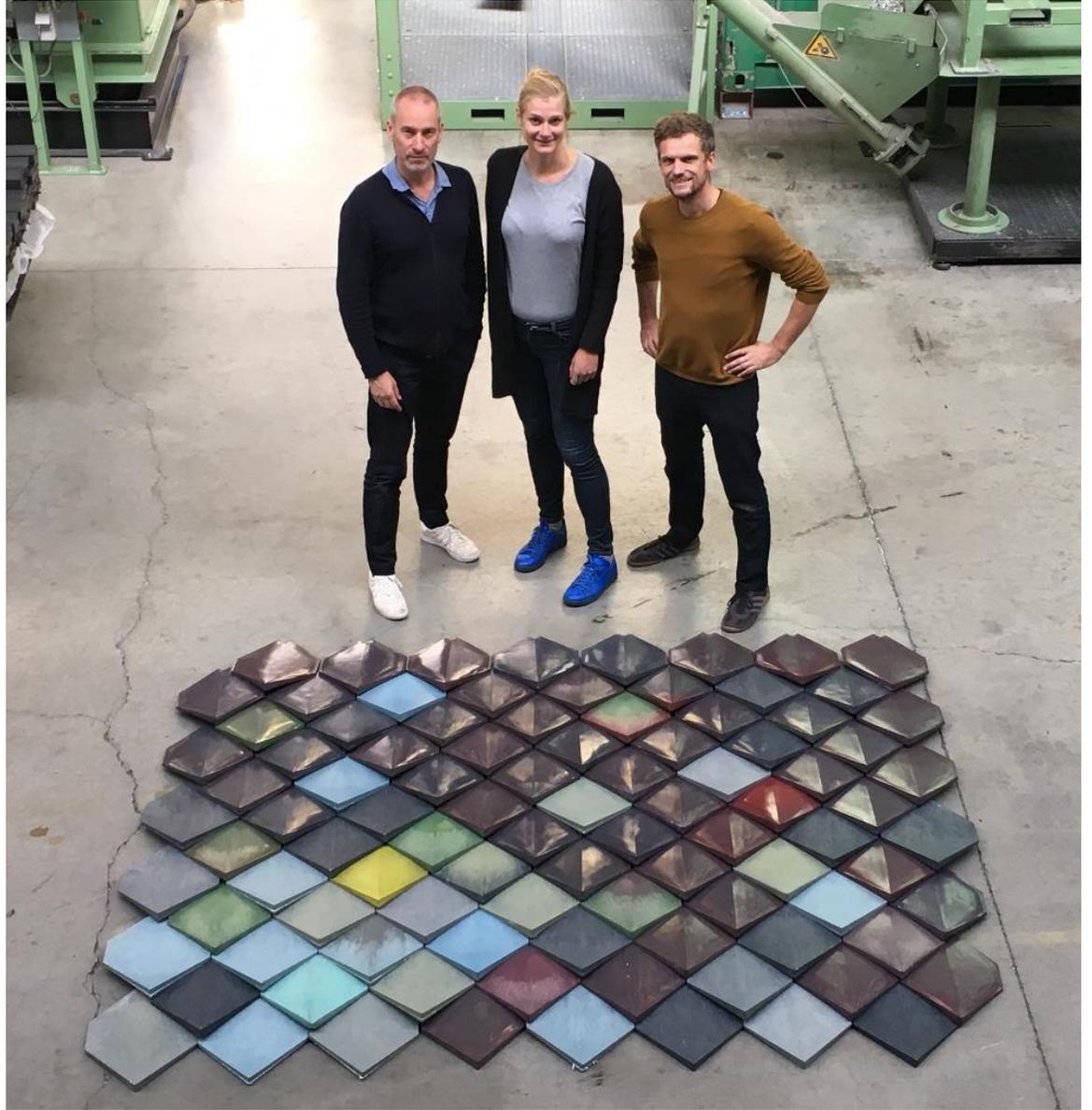


niet:



wel:







BIQ-Haus

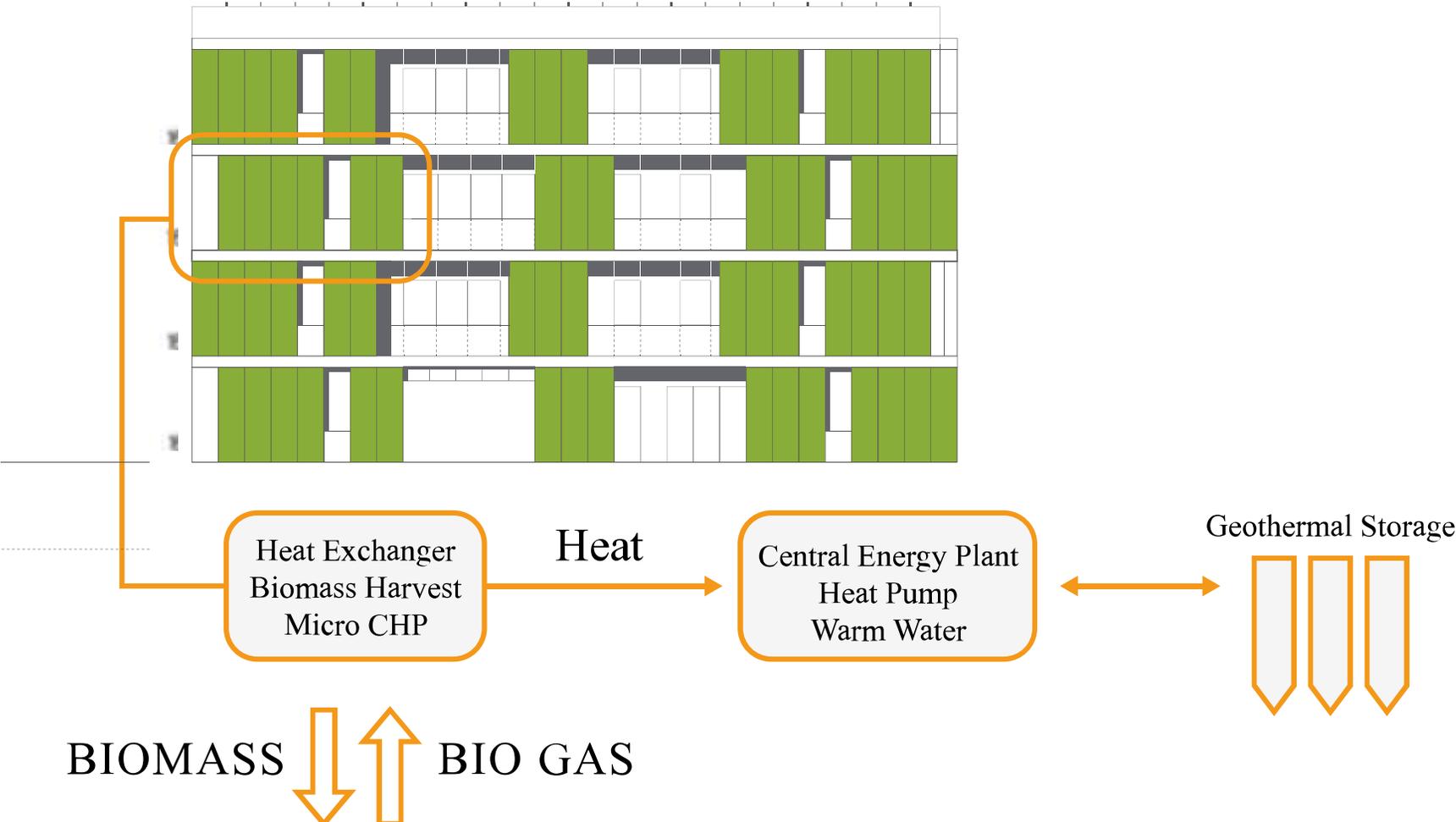
Hamburg, Germany

With SSC, Colt International & Splitterwerk Architekten

*[Not just avoiding heat gain
but harvesting energy]*



Building Integration







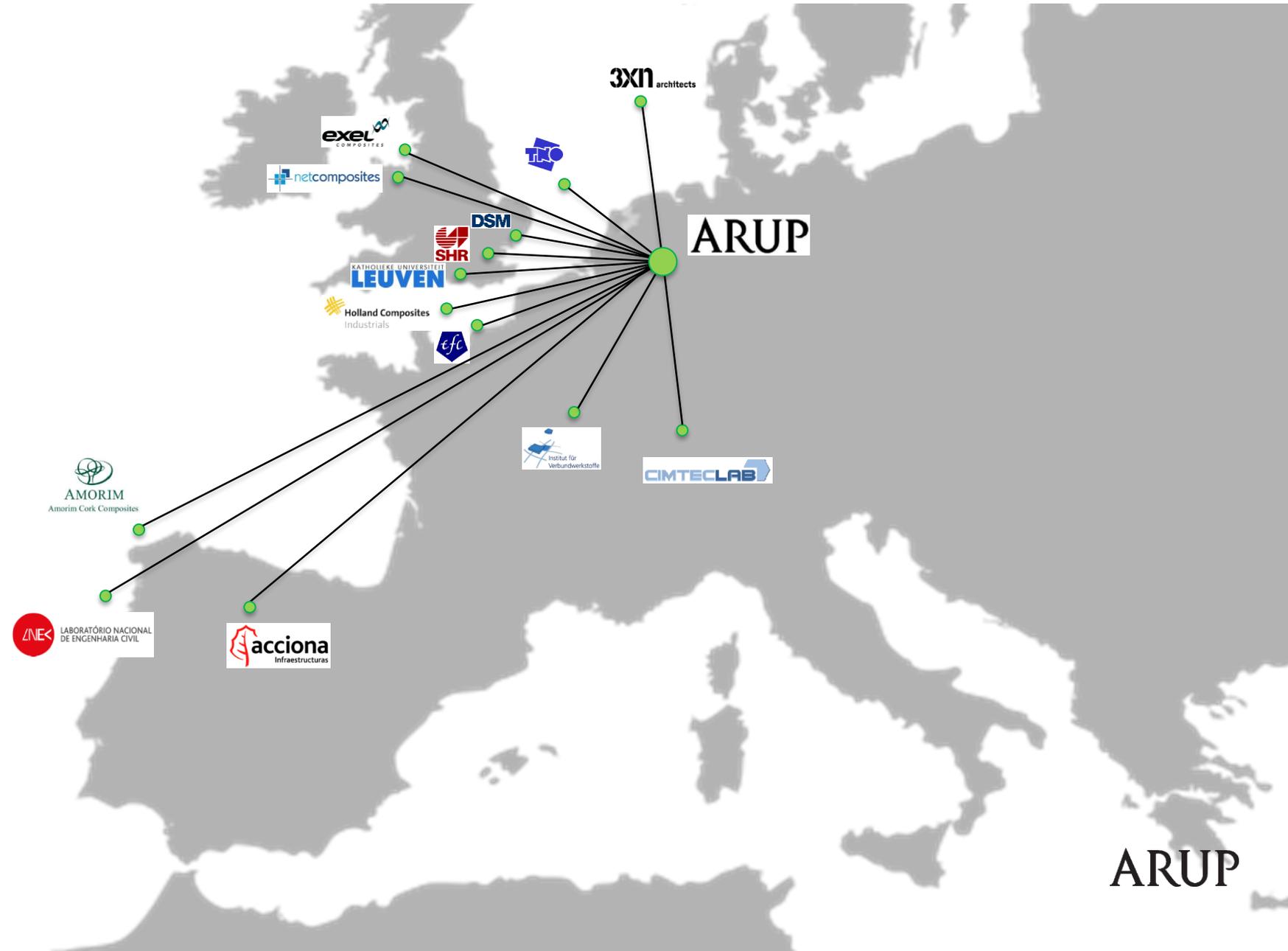
BioBuild

Berlin, Germany

*[Bio degradable façade components
for a cradle to cradle design]*

BioBuild

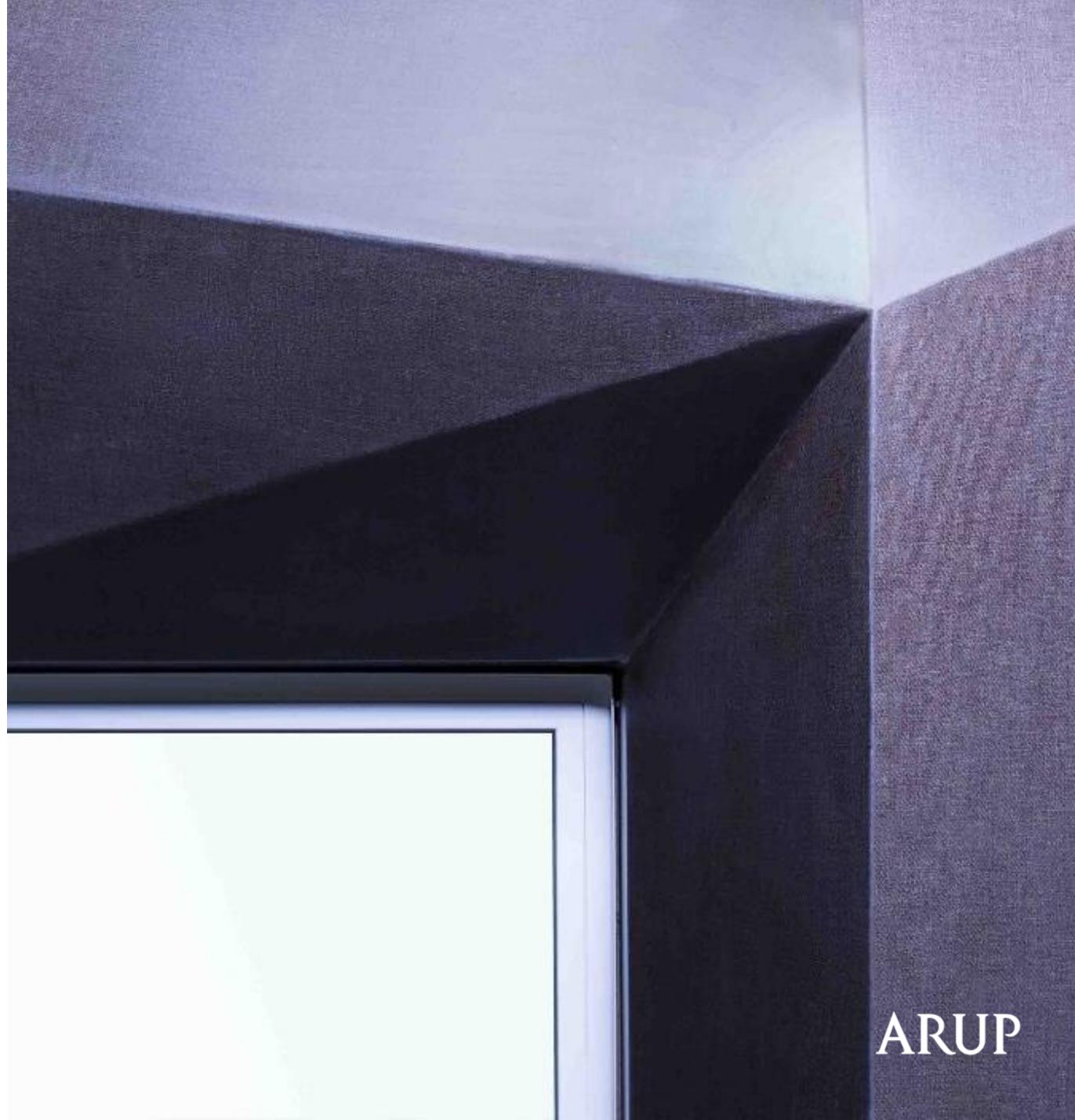
- F7-EU funded project
- International consortium
- 15 Partners

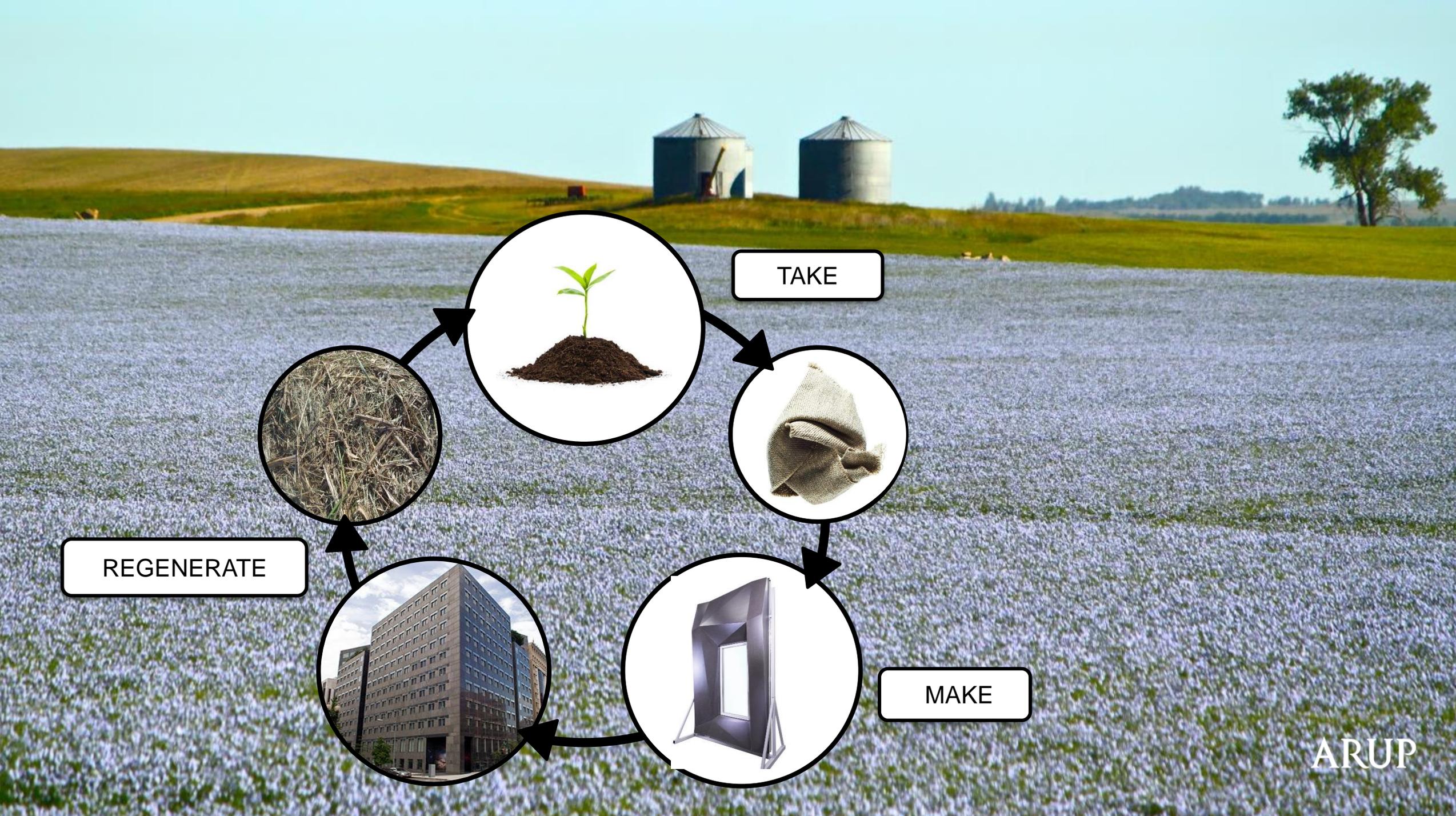




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TAKE



MAKE

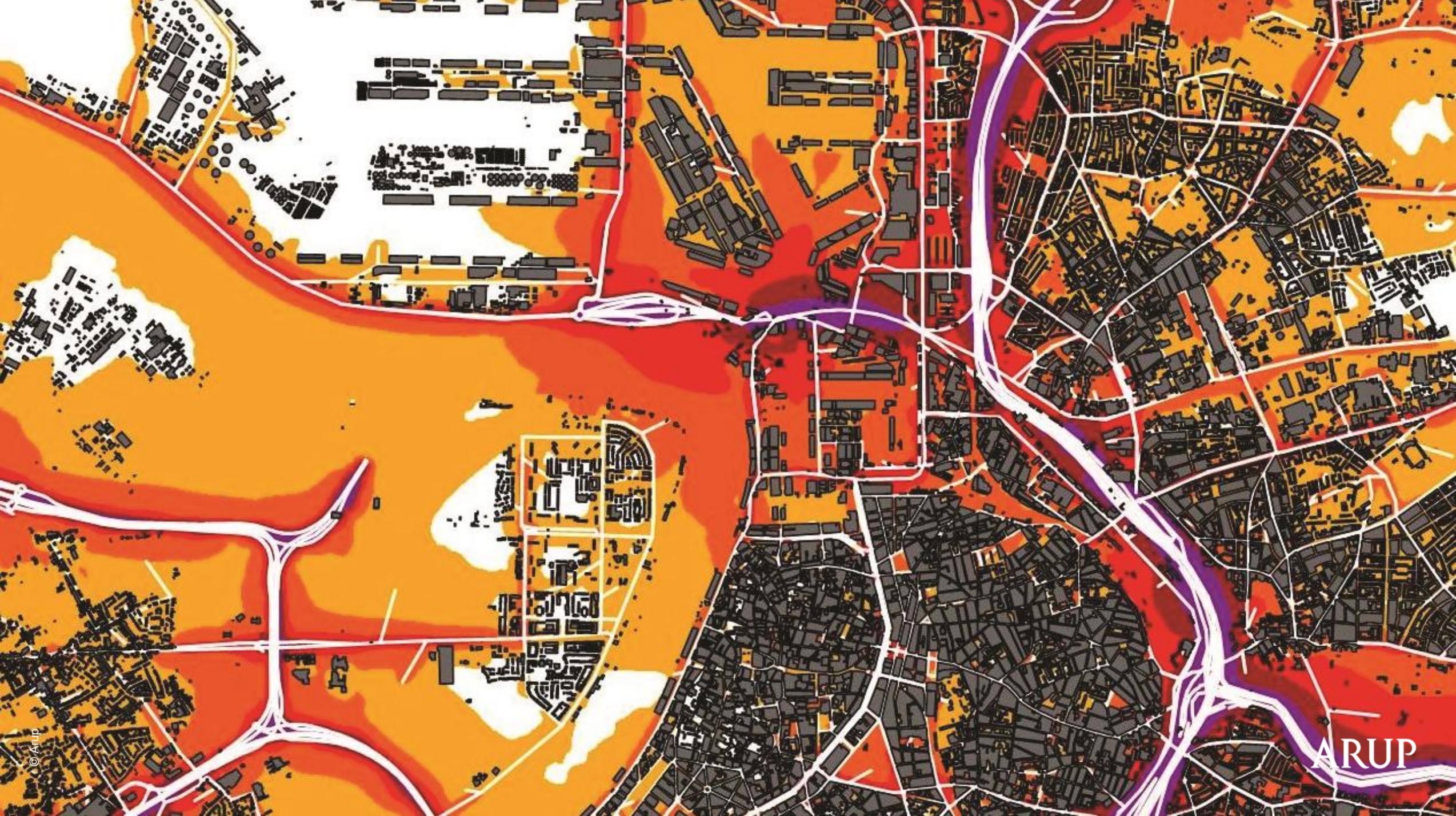


REGENERATE



Groen







12°C

hotter evening temperatures
in urban areas with a population
exceeding 1 million than
in surrounding areas

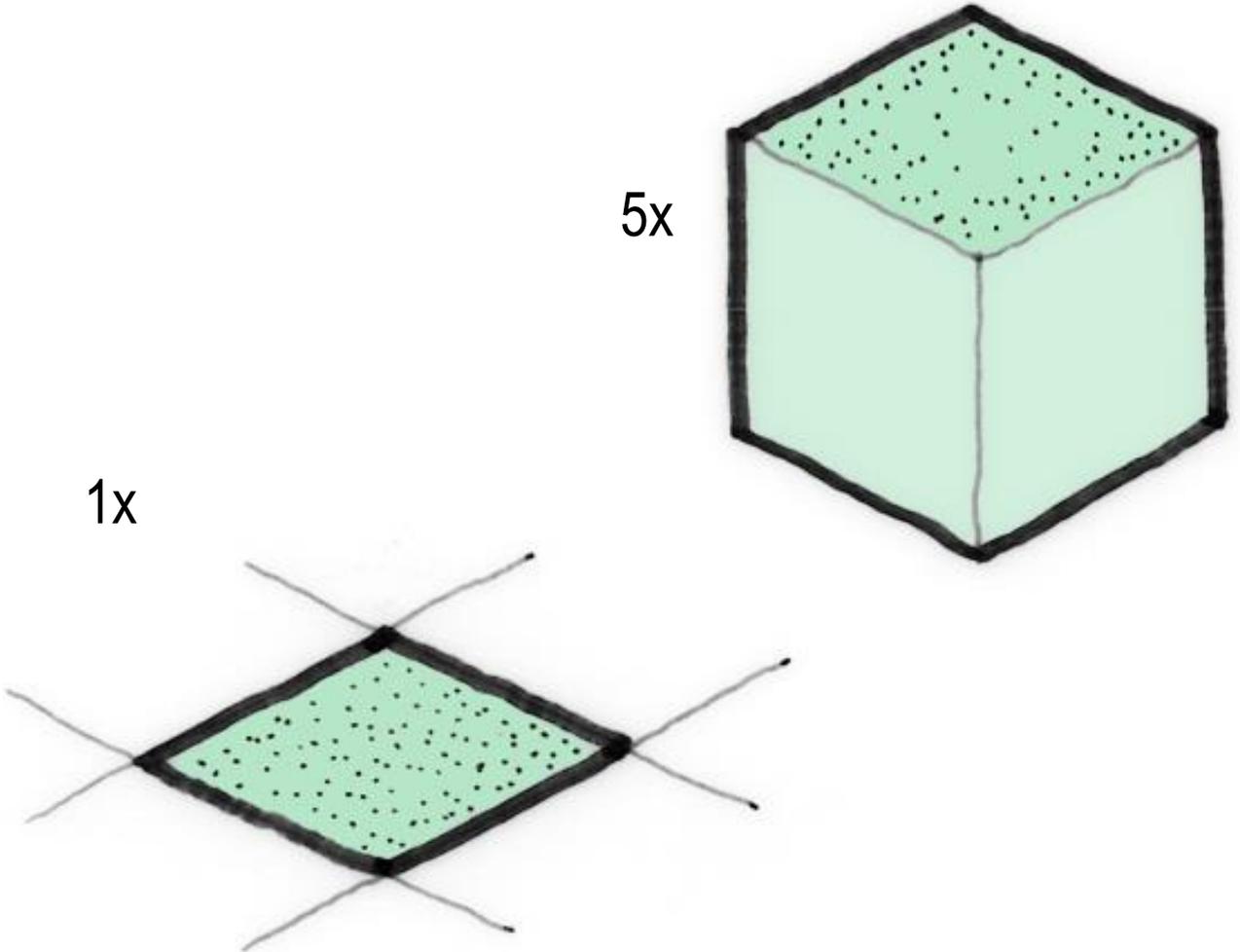
1.78 bn

People have inhaled
polluted air over the past
decade; this has led to
multiple diseases

6-10 dB(A)

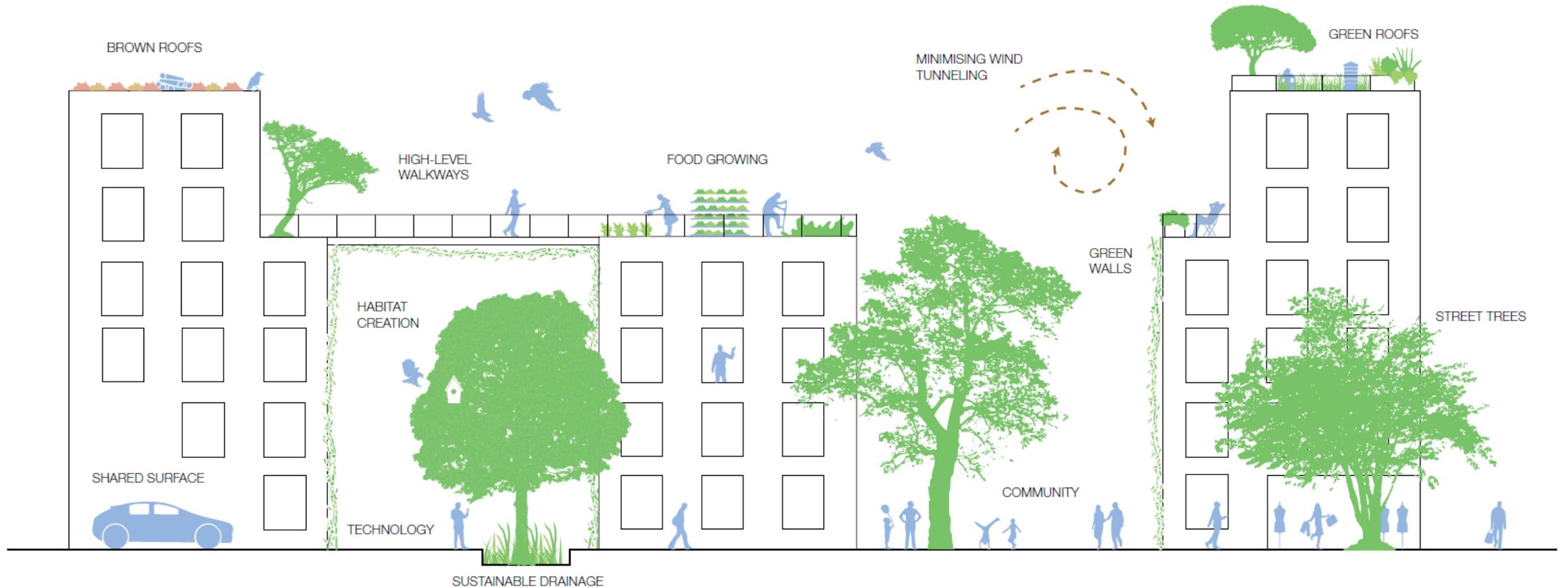
reductions are feasible
in ambient noise levels

The Role of Buildings



Buildings as Green Infrastructure

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Elements

Amsterdam, Nederland

Kondor Wessels Vastgoed, Koschuch Architecten

*[Gevel als de sleutel tot
holistisch gebouwconcept]*

Arup adviesdiensten

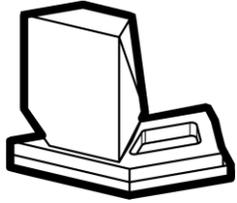
Parametric Design Services

Multidisciplinary engineering design



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6 Key Performance Indicators (KPI's)



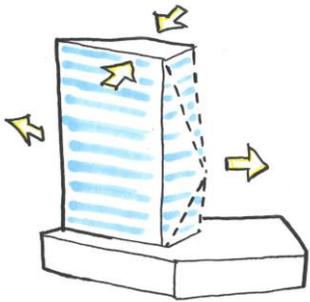
Building



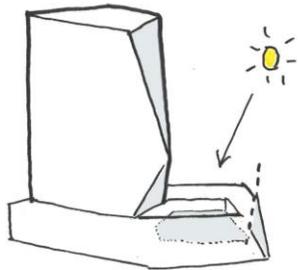
Neighborhood



Planet



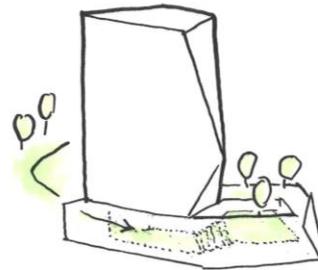
daglicht



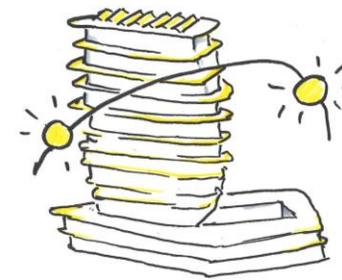
bezonning



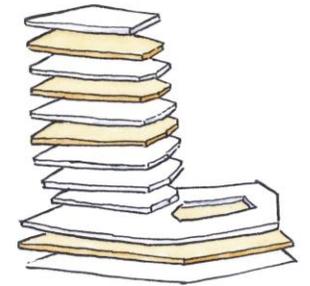
wind



groen



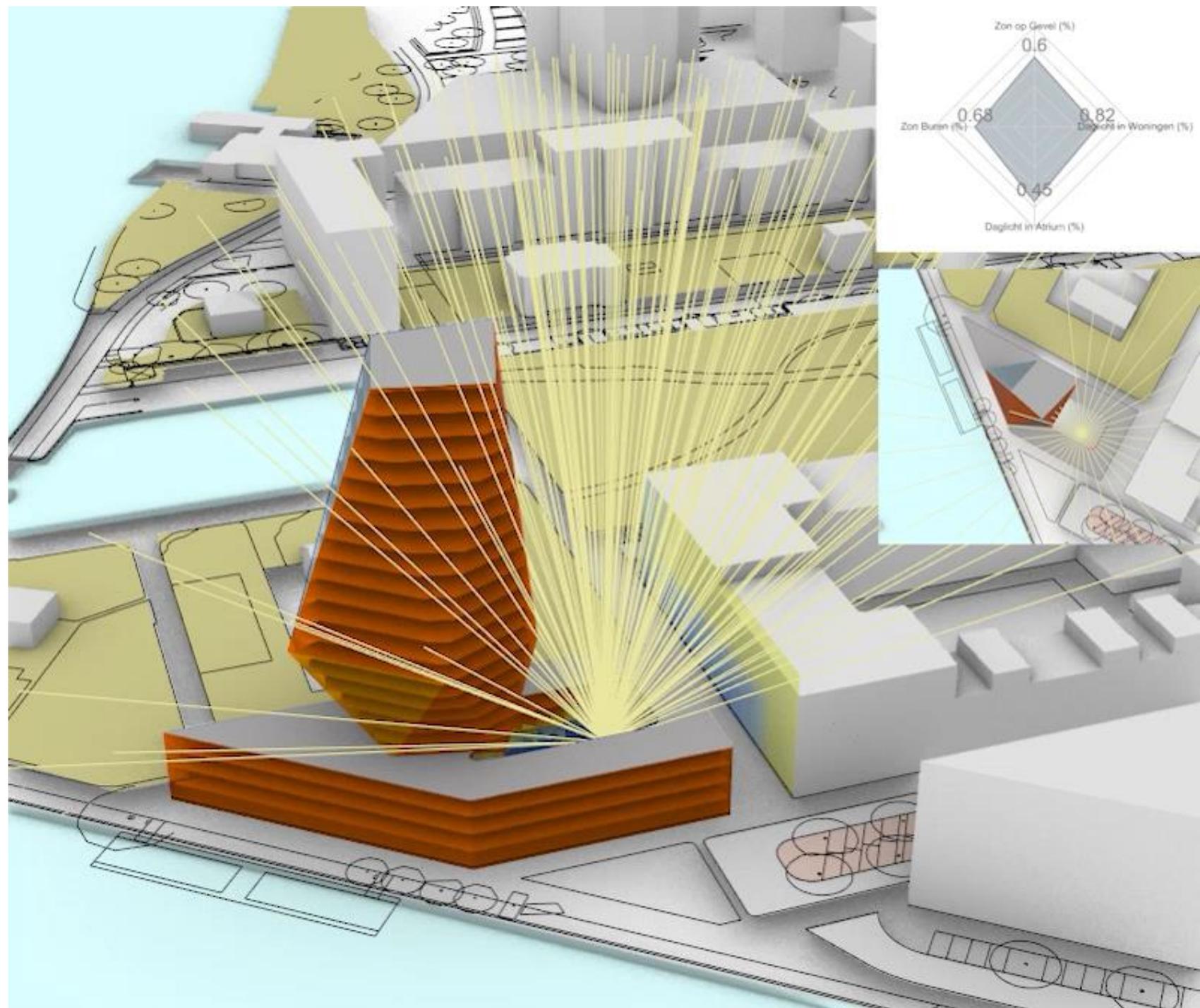
energie
Energie neutraal



materiaal
51% Carbon reduction

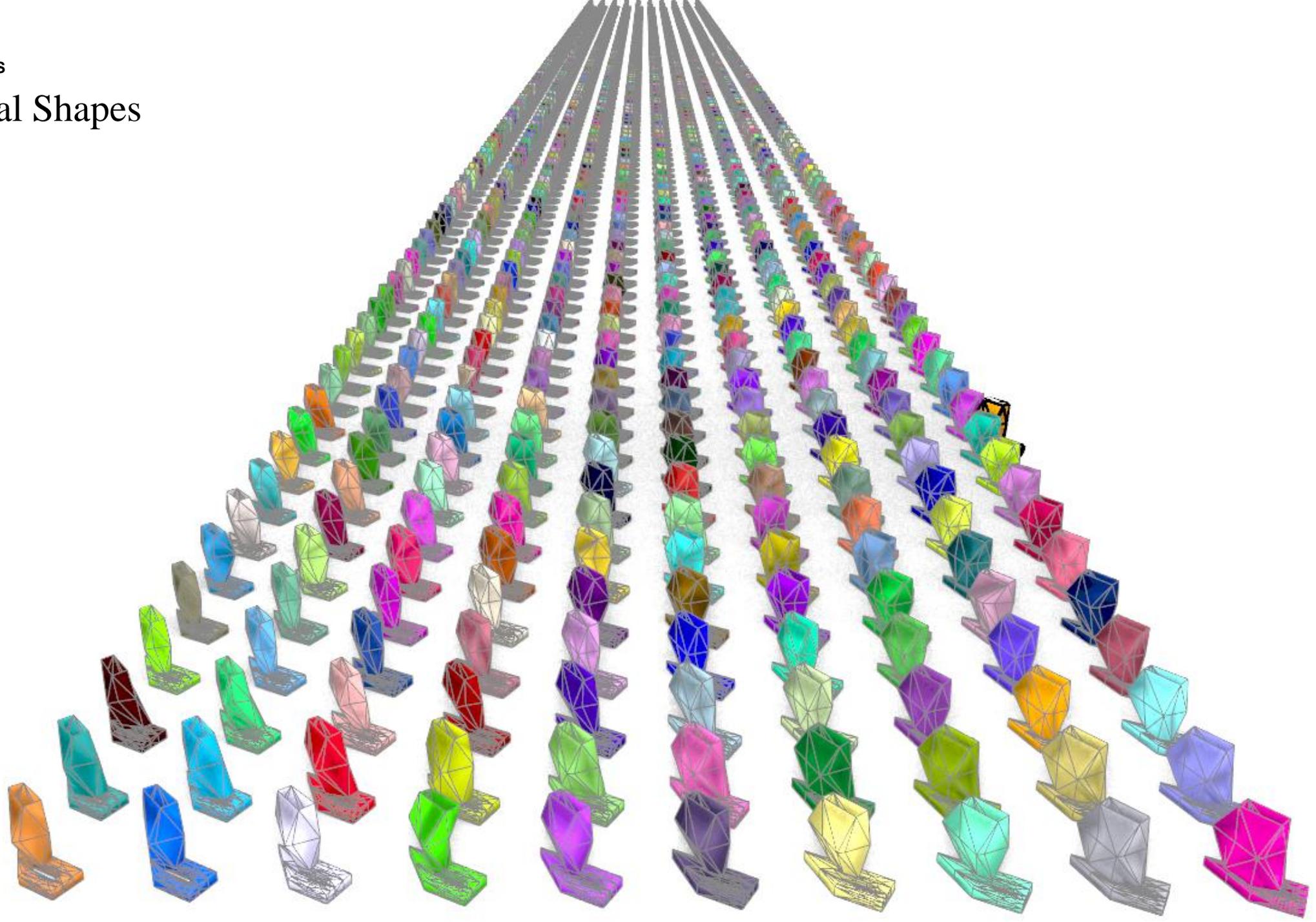
ELEMENTS

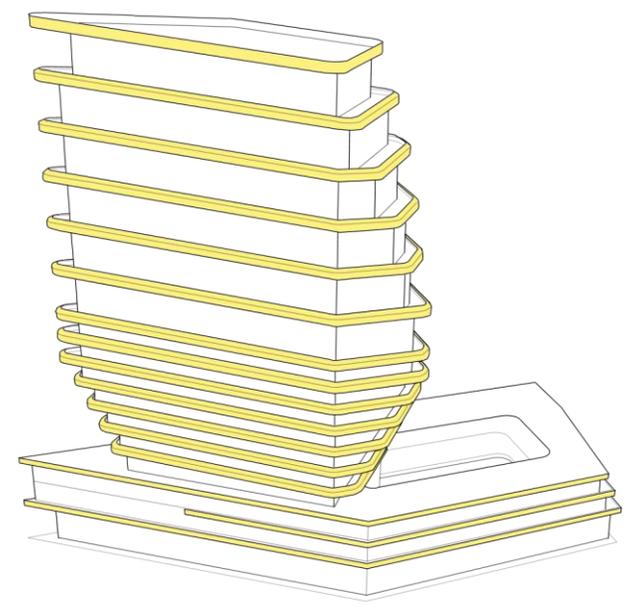
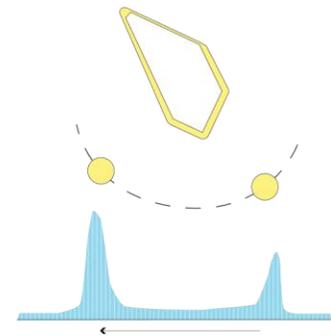
Shaping algorithm



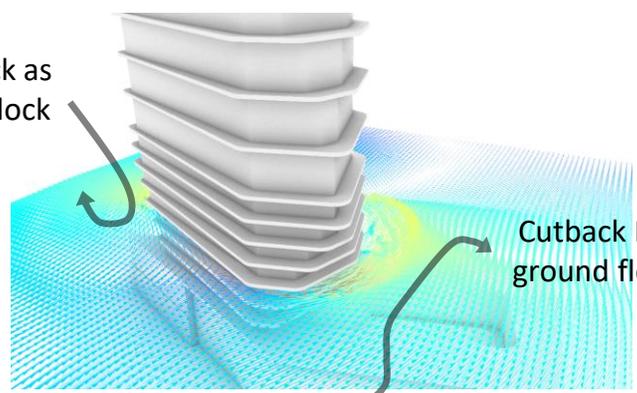
ELEMENTS

Potential Shapes



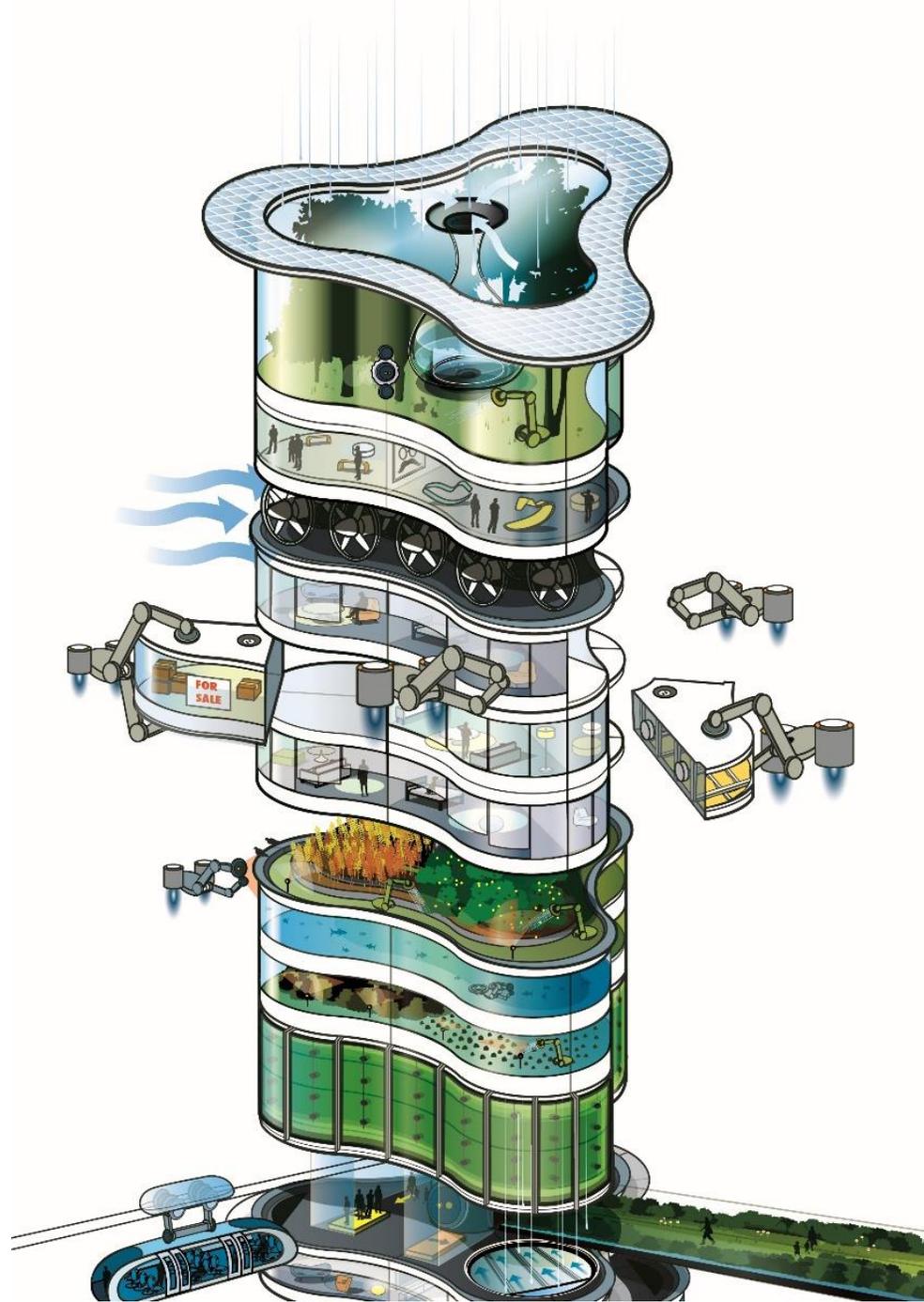


Setback as windblock



Balconies block wind coming down

Cutback Relief wind at ground floor conditions



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