



Met

- Dirk D'herde
Archipelago
- Hans Goverde
Kraaijvanger architecten
- Ignace Schops
Bond Beter Leefmilieu
- Hannah Bohez
VIPA

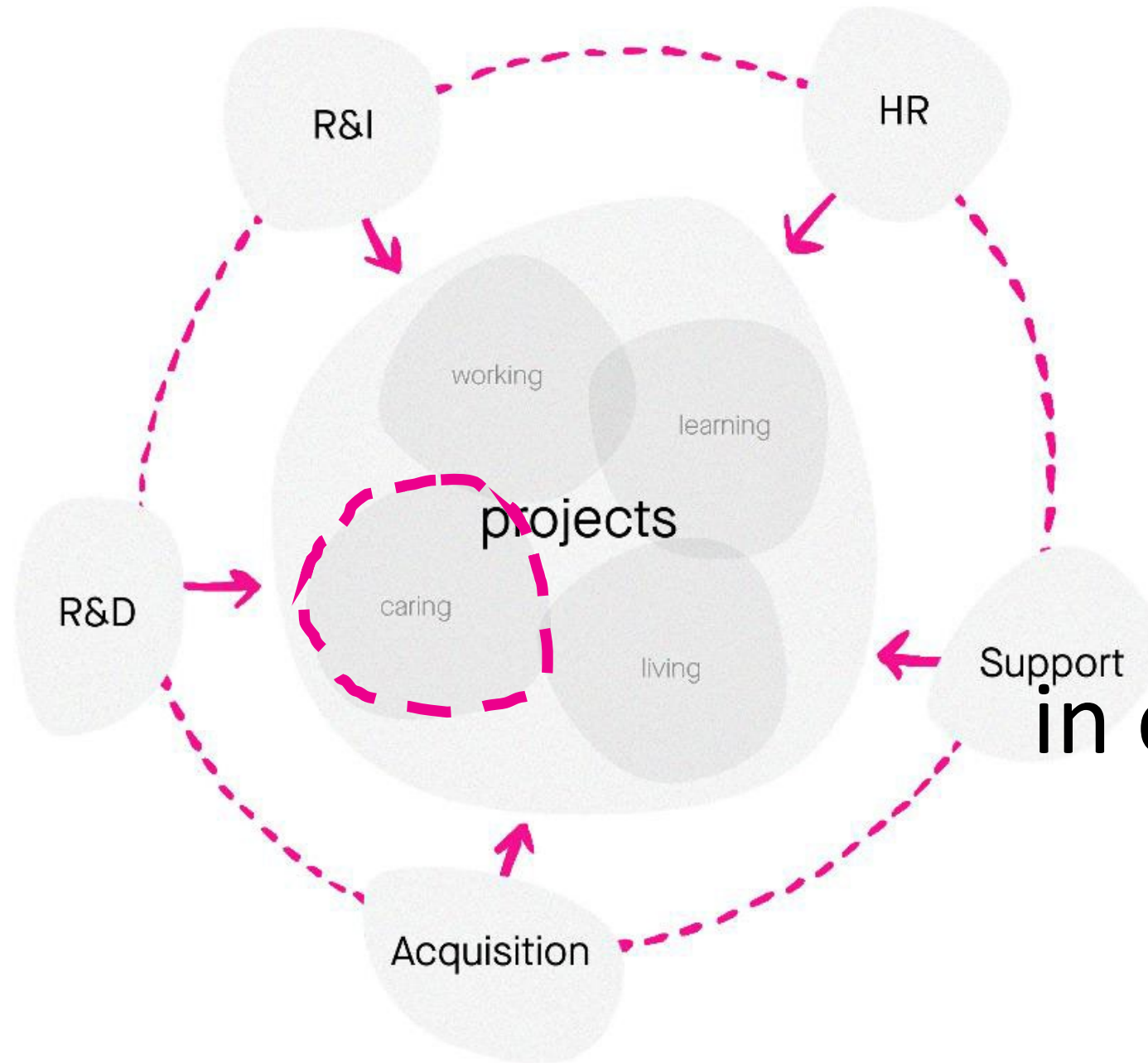
4

Klimaat & infrastructuur

Gerichte keuzes voor een
klimaatadaptieve transitie
van het zorgpatrimonium

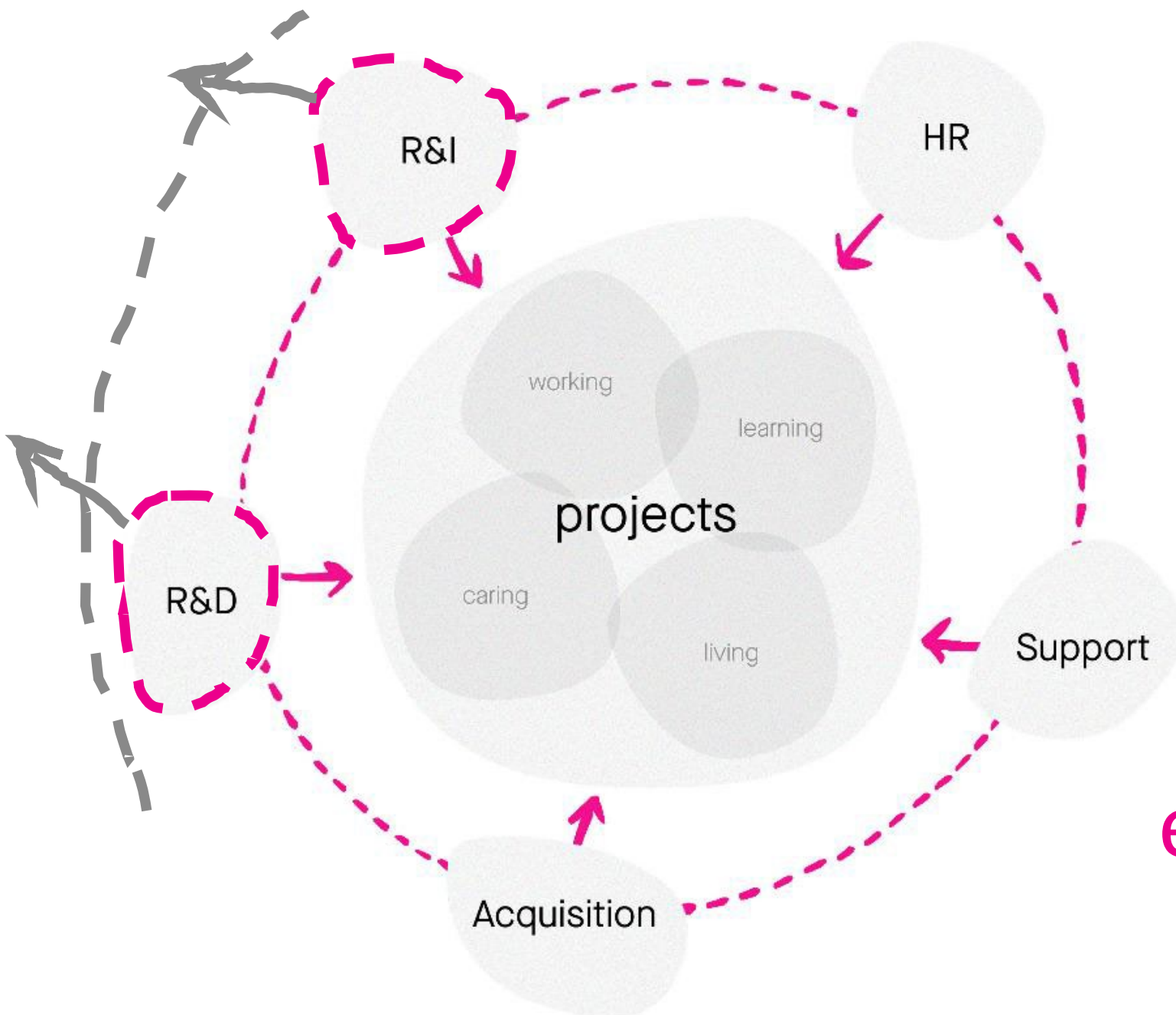


archipelago



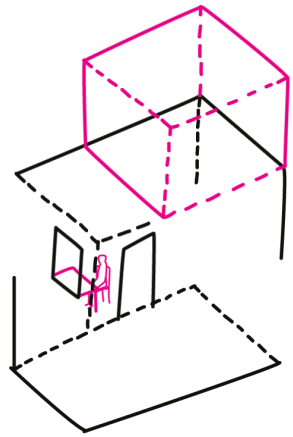
140 medewerkers
Leuven en Brussel

in een **collaboratieve**
organisatie

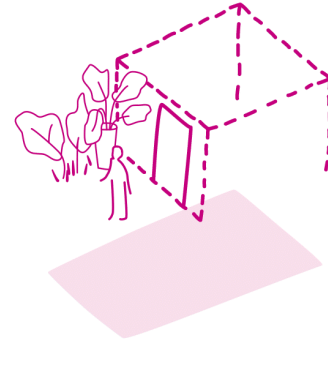


concepten en methodes

via eigen onderzoeks-activiteiten



Venustas
(*)/beleving



Firmitas (*)/duurzaamheid



economie



contextueel
evenwicht
concepten

(* Vitruvius,
De Architectura, 25 v.Chr.

Utilitas (*)/functionaliteit

medewerkers



zorg4

projecten

eigen organisatie



stakeholders



zorg-vuldige
methodes



ZMK



BRACOPS (Brussel)



DAKAR (Senegal)



UZ Gent



TARBES-LOURDES (France)



UZ Leuven

ontwerppreferenties
zorgsector



Zorgsite BORGERSTEIN



LDC / AW Tielt-Winge



WZC BOOGHUYSS



MPI Ter Engelen



Site SINT-ANNA Sint-Truiden

ontwerppreferenties
zorgsector

- Ontwikkeling *Zorgaddendum bij GRO*
- Ontwikkeling *Intergewestelijke GRO*
- Ontwikkeling *Praktische Gids Veranderingsgericht Bouwen* voor OVAM
- Ontwikkeling *Transformation Capacity Tool* voor Leefmilieu Brussel
- Vlaio Onderzoekstraject RECOVER ++ (resilience to overheating)
- ...

adviesreferenties

- een korte geschiedenis van de VIPA duurzaamheidscriteria

EPI studie I
&
MB VIPA Duurzaamheidscriteria



2004

2008



2010

REF B



2017



2019



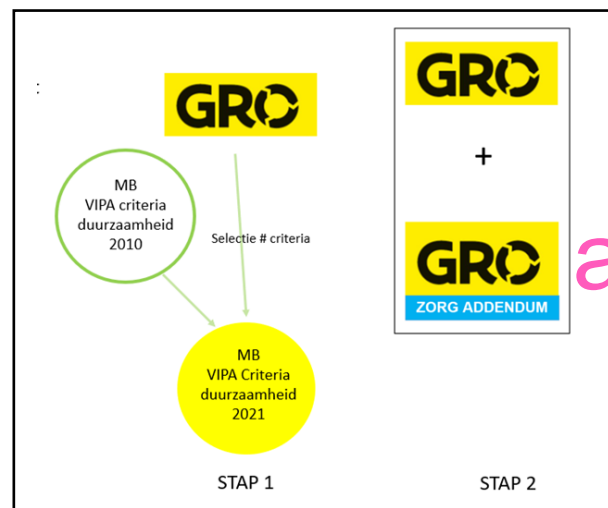
2020/2020.1



3 gewesten

MB actualisatie VIPA Duurzaamheidscriteria

Duurzaamheids-
Meter Zorg





Verso



Vlaanderen
is zorgzaam samenleven



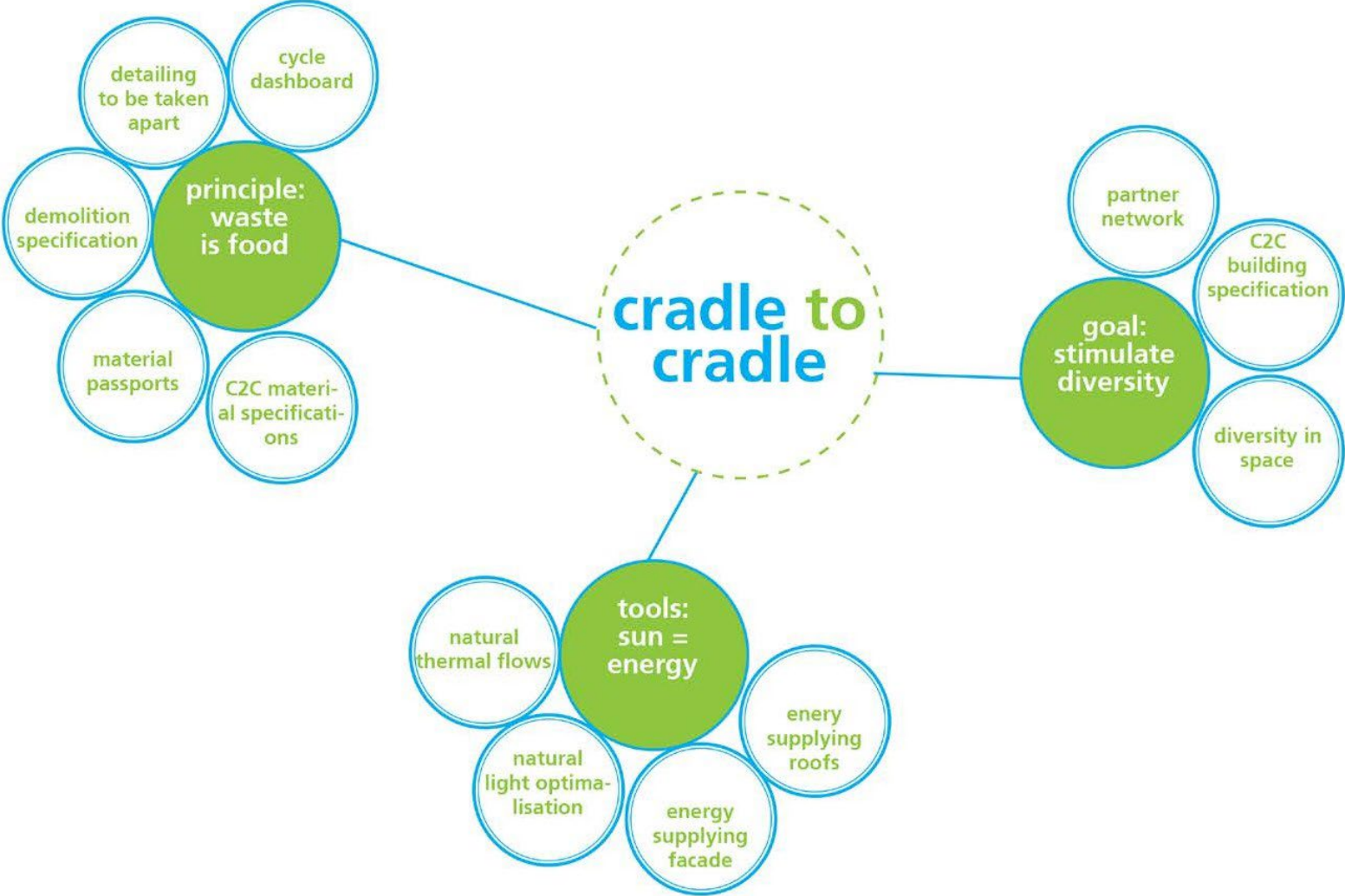
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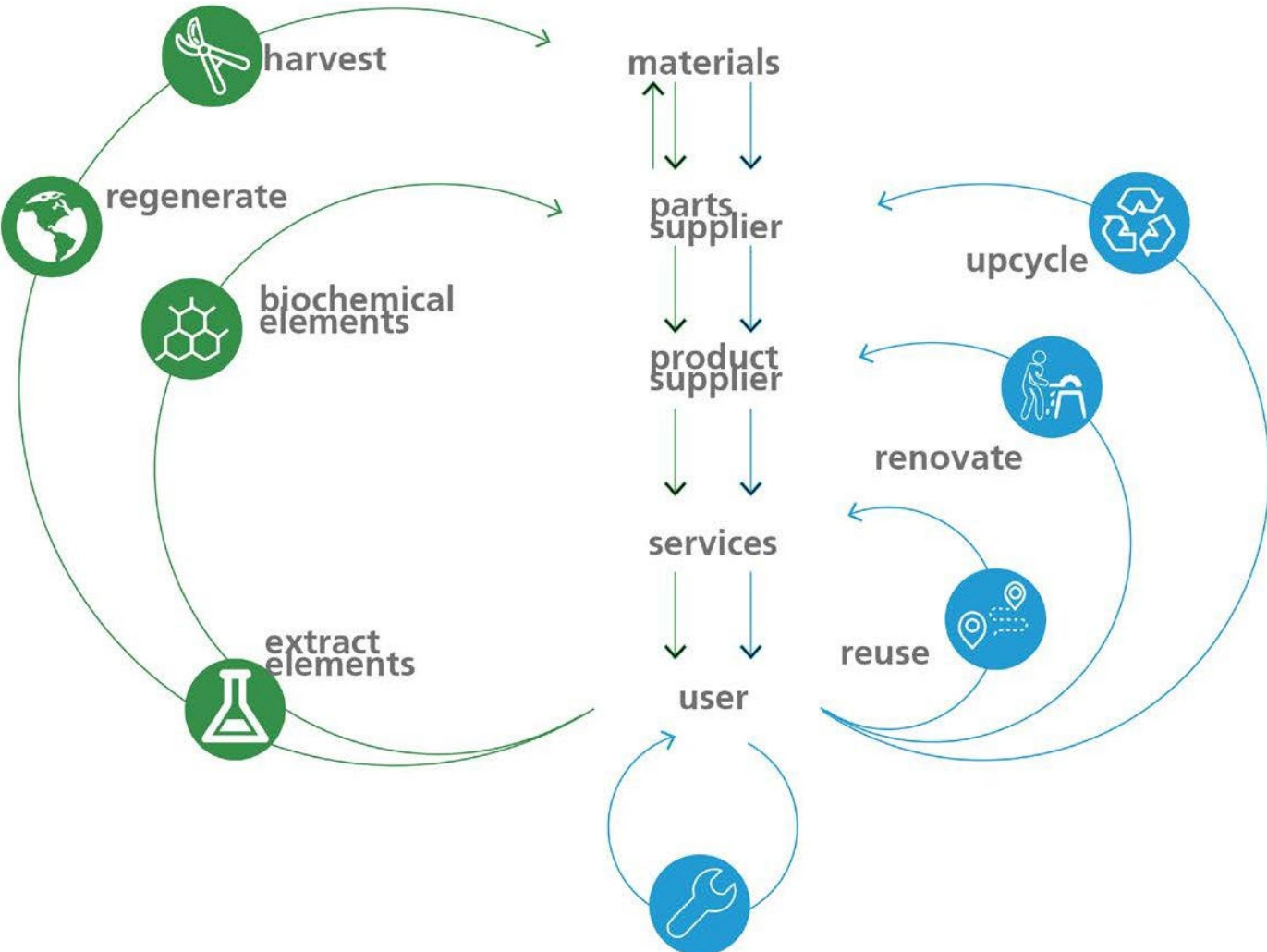
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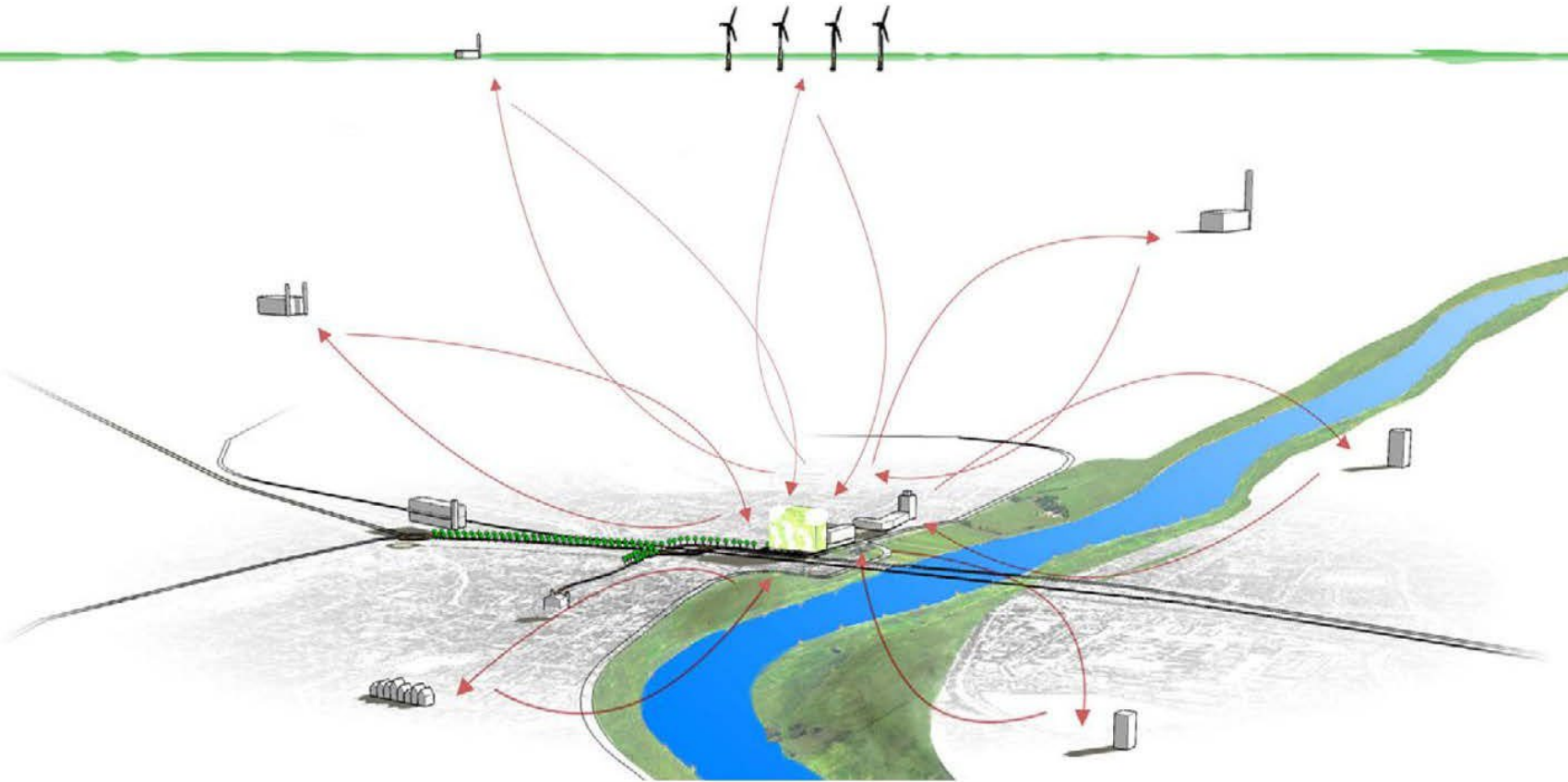
FIVE THEME'S FOR CIRCULAR DESIGN

1. Process innovation
2. Air purifying buildings
3. Materials and Health
4. Zero energy
5. Closed Water Loop

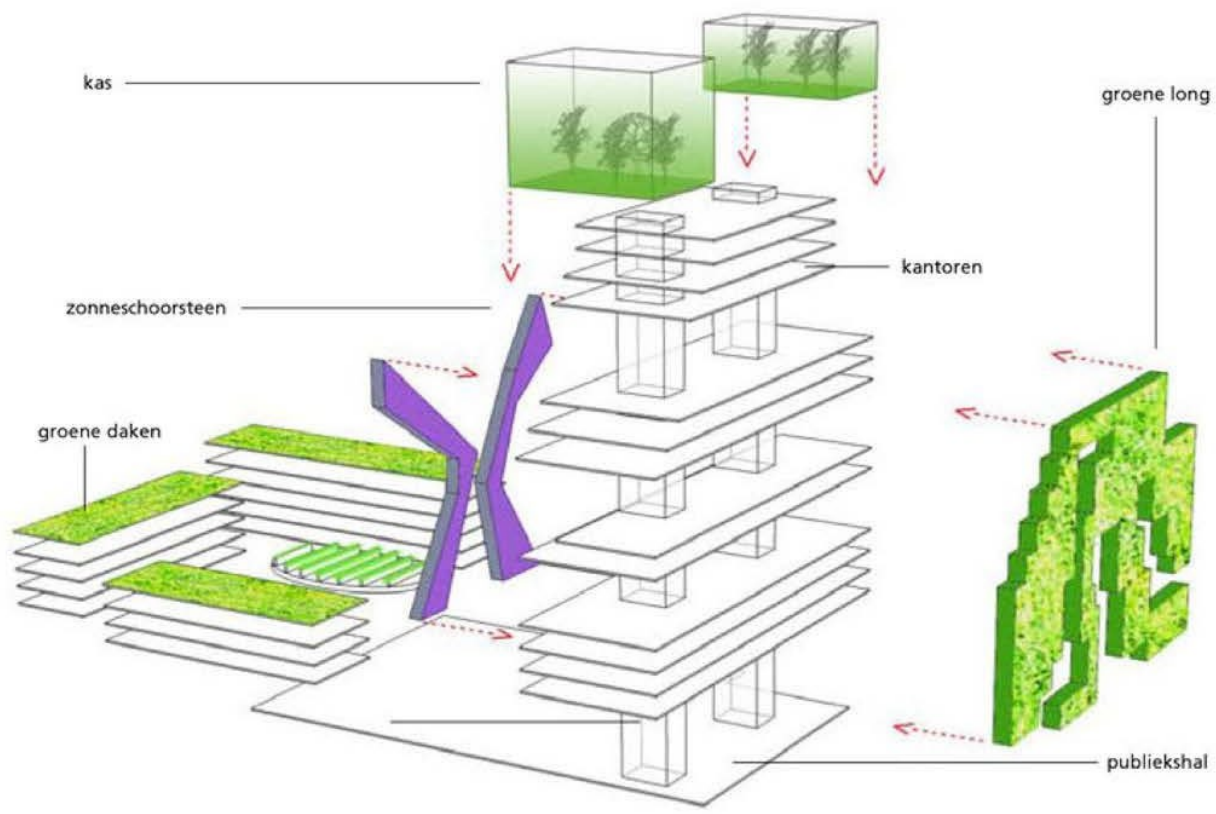
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process innovation

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Workshop: client, advisors & "the market"



External

Scheldebouw

Oscomere

Océ

Philips

Scheuten

C2C expolab

Mosterd de winter

Copijn

Mobilane

Kitchenadvisor

Internal

Customer contact centre

Facility workgroup

Technical workgroup

Urban planning workgroup

Maaswaard

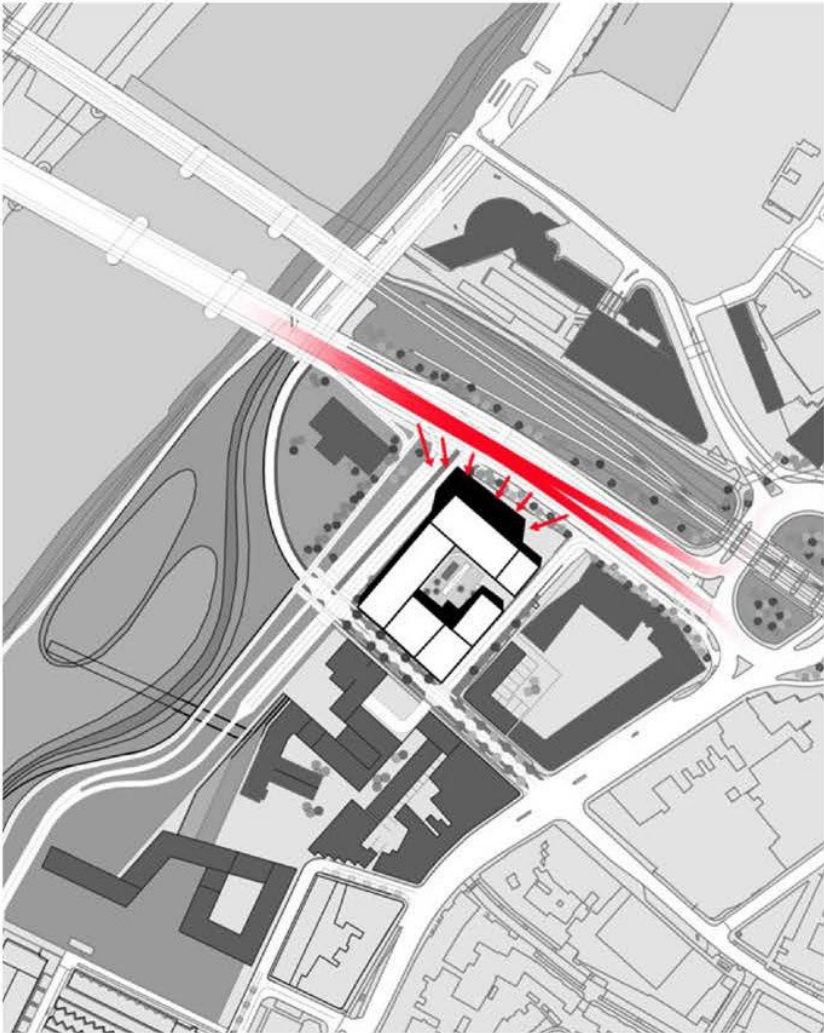
Dutch Railway

Fire Department Venlo

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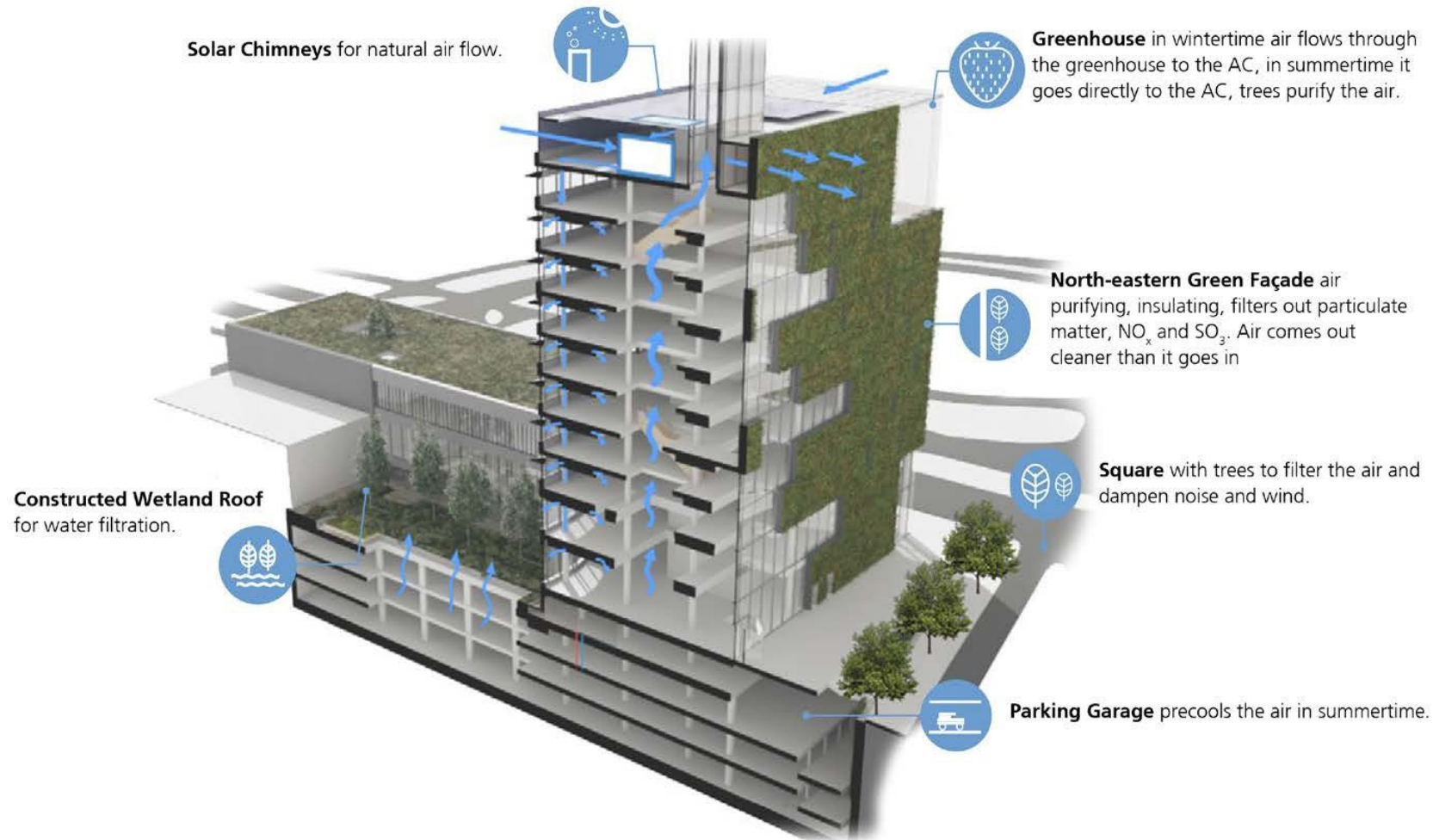
air purifying building

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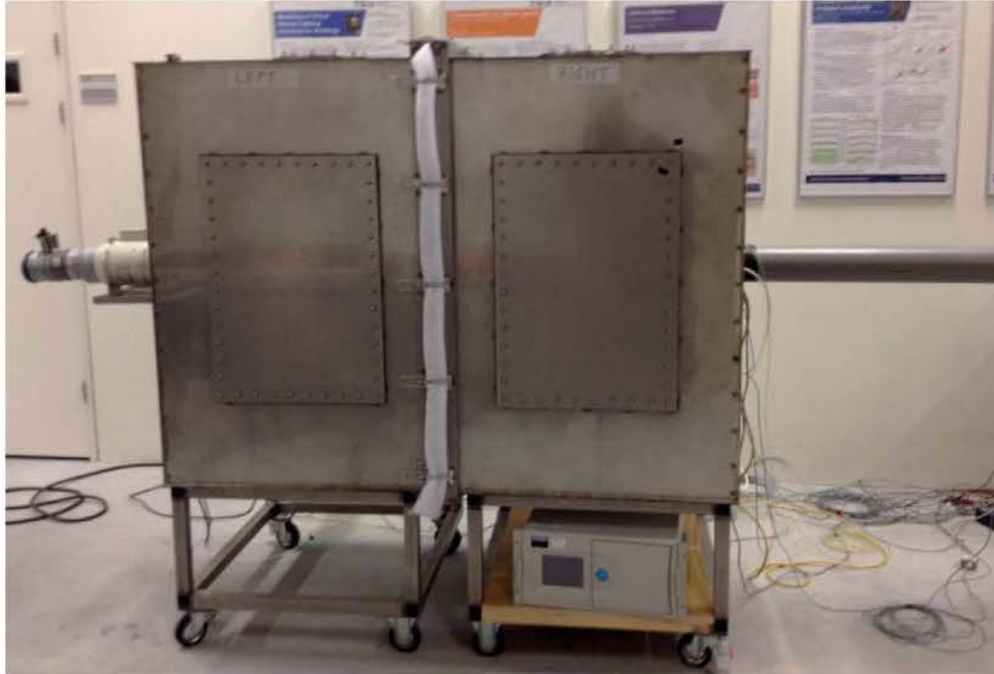
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Building facade as a green lung



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Building facade as a green lung

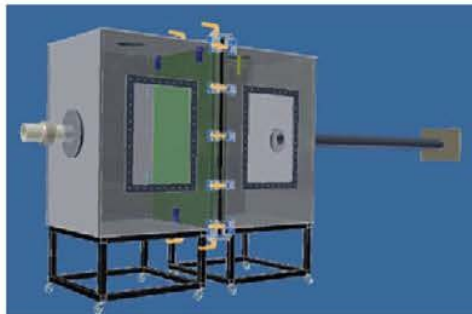


Results from tests with the facade at TU Eindhoven:

30% decrease in SO₂

30% decrease in NO_x

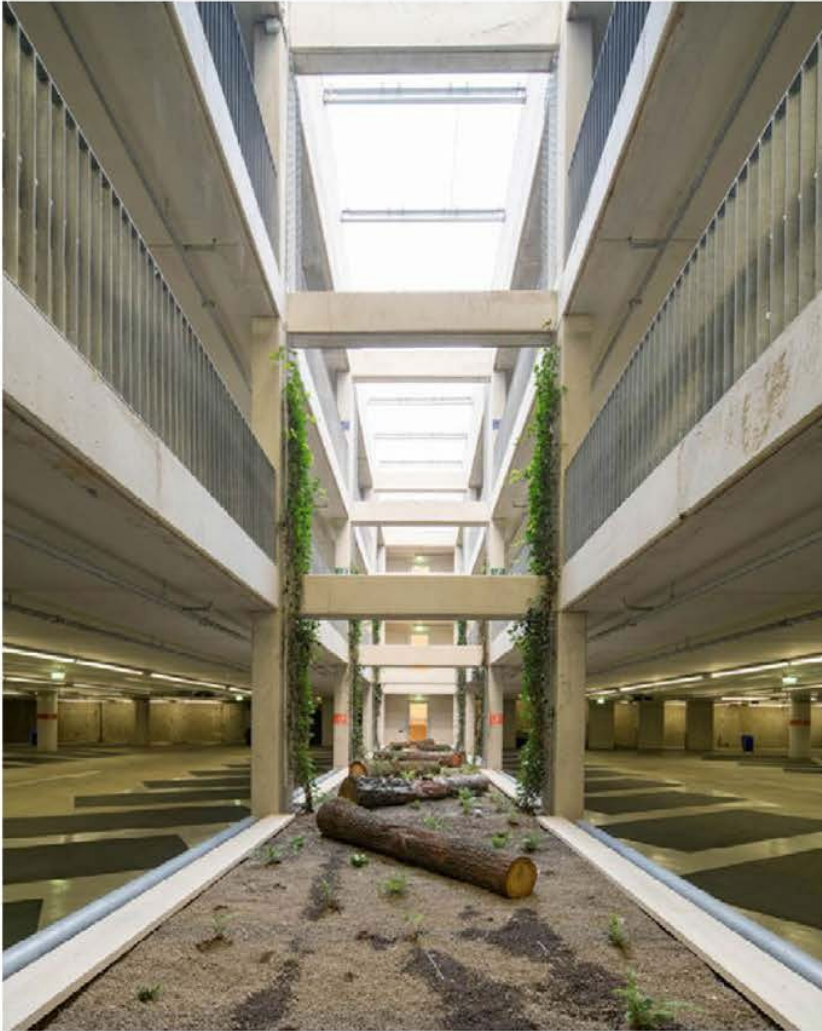
At lower airspeeds 50% reduction could be possible



The green facade compensates the emission of fine dust particles generated by the equivalent of 3000 m² road

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Low tech, high impact



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materials & health

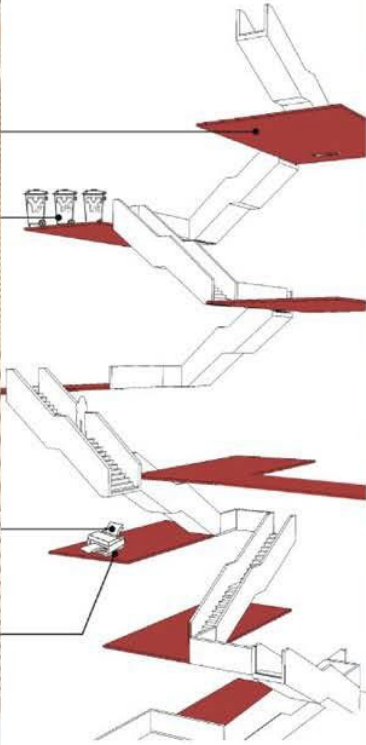
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Waiting wall emblazed with a map of the city

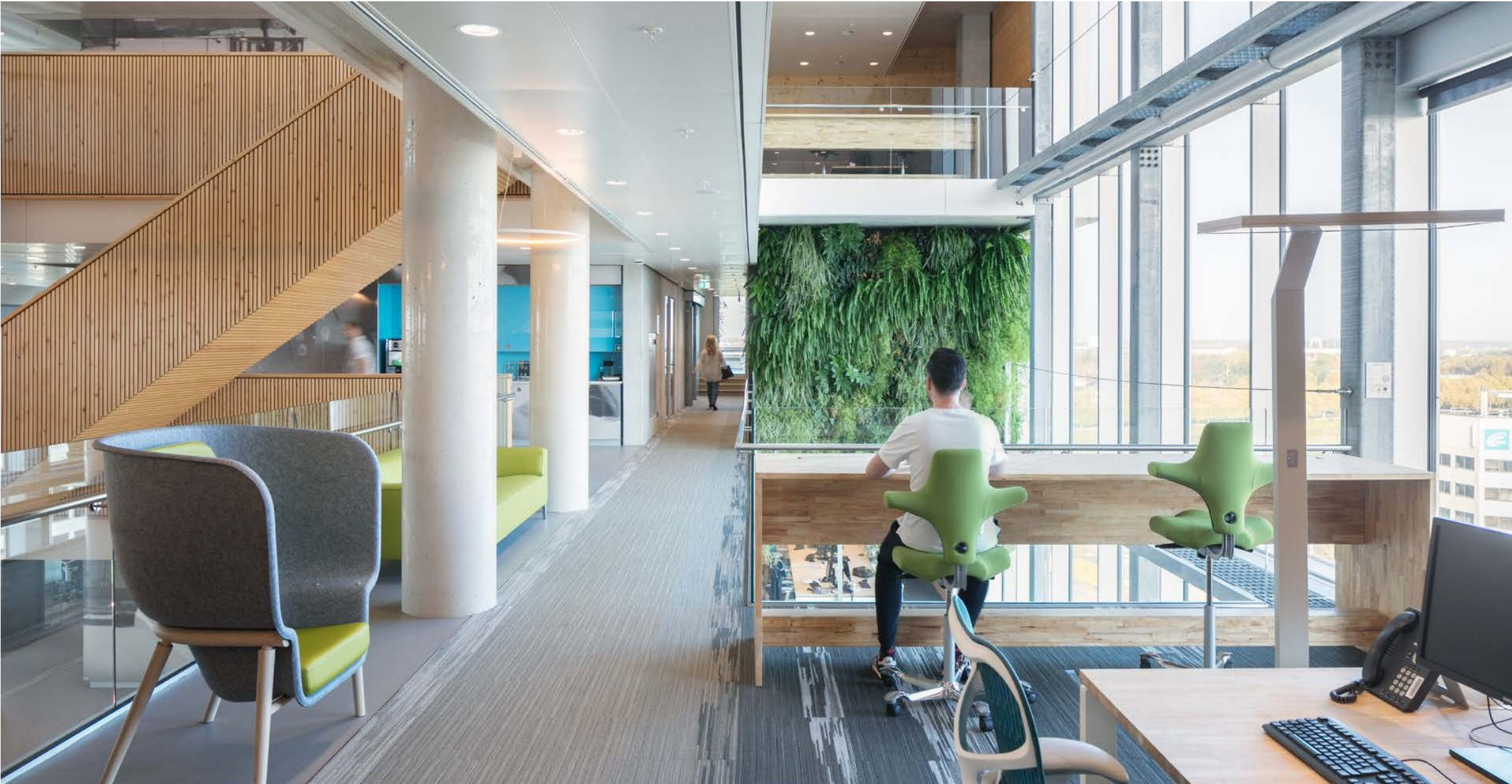


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Eye catching stairs increases activity during the day



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zero energy

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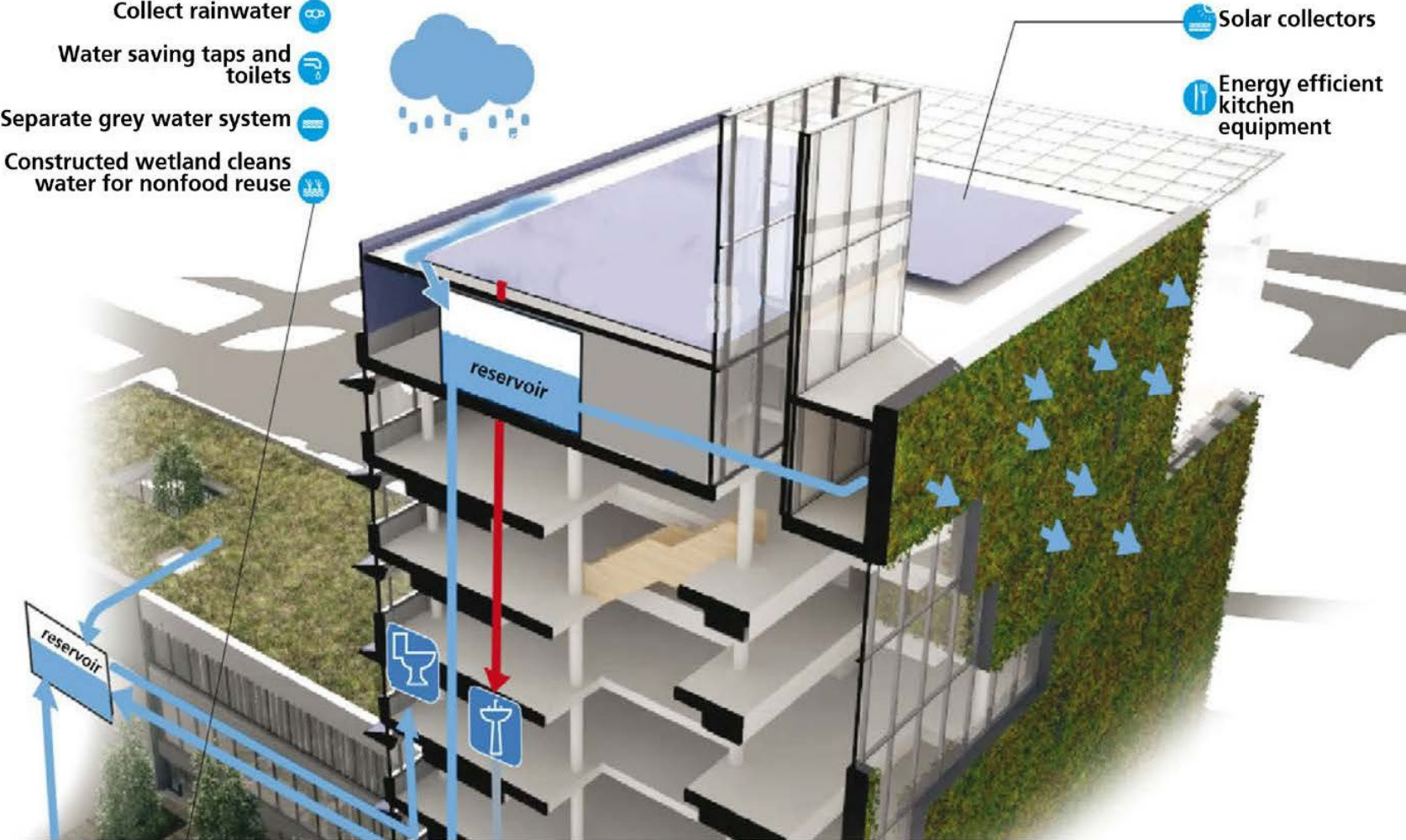
"We want active buildings!" Michel Weijers, City of Venlo



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**closed water
loop**

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Constructed Wetland



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**business
case**

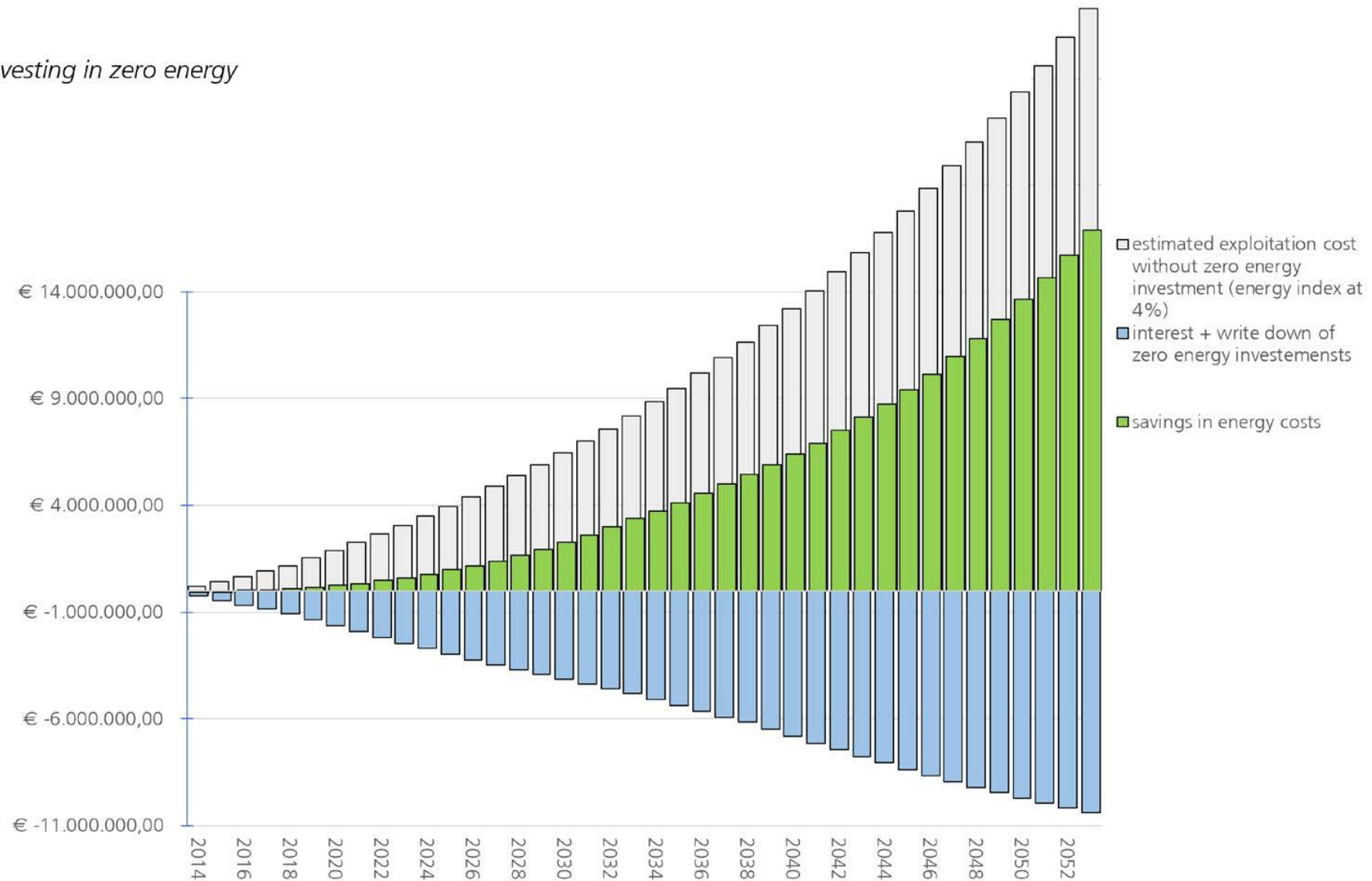
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Extra investments in sustainability

	Initial investment	Replacement costs in 40 years	Break even in years	Yield	Life-span in years	Cost reduction in 40 years	Savings in 40 years
total	€ 3.410.050,00	€ 1.702.000,00	15	12,50%		€ 27.285.528,00	€ 16.884.008,00
triple glazing	€ 465.300,00		26	7,00%	40	€ 1.847.173,00	€ 904.941,00
rain water collection	€ 27.500,00		9	18,30%	40	€ 327.396,00	€ 271.708,00
water free urinals	€ 3.300,00	€ 4.000,00	16	7,80%	20	€ 20.906,00	€ 5.878,00
constructed wetlands filter	€ 102.000,00		32	5,10%	40	€ 302.755,00	€ 96.205,00
PV cels	€ 496.100,00	€ 300.000,00	19	8,30%	25	€ 2.723.694,00	€ 1.126.472,00
solar collectors	€ 16.500,00	€ 20.000,00	8	20,00%	20	€ 250.491,00	€ 175.350,00
geothermal heating City Hall	€ 1.066.000,00	€ 520.000,00	10	15,30%	20	€ 11.801.940,00	€ 8.603.867,00
geothermal heating Maaswaard	€ 861.000,00	€ 265.000,00	18	11,40%	20	€ 6.250.983,00	€ 3.824.732,00
Rc=5,00	€ 146.850,00		17	10,80%	40	€ 930.300,00	€ 632.929,00
HR Heat Recovery	€ 49.500,00	€ 65.000,00	37	12,40%	20	€ 473.358,00	€ 235.443,00
LED lights	€ 176.000,00	€ 528.000,00	7	22,80%	10	€ 2.356.534,00	€ 1.006.483,00
total nominal savings	€ 3.410.050,00	€ 1.702.000,00	28	7,60%		€ 11.039.800,00	€ 2.561.211,00
total savings (energy index at 2,5%)	€ 3.410.050,00	€ 1.702.000,00	17	10,30%		€ 18.815.090,00	€ 8.413.570,00
total savings (energy index at 4%)	€ 3.410.050,00	€ 1.702.000,00	15	12,50%		€ 27.285.528,00	€ 16.884.008,00
total saving (energy index at 6%)	€ 3.410.050,00	€ 1.702.000,00	13	15,30%		€ 45.612.917,00	€ 35.211.397,00

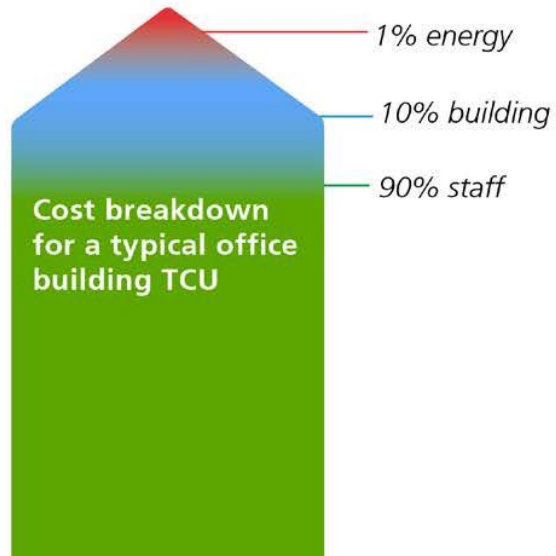
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Investing in zero energy



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Health + productivity



In a healthy building everybody profits

- 1% drop in sick leave is a € 600.000 saving for the city of Venlo. Per year!
- Constant monitoring air quality and wellbeing.
- Scientific field research by University of Berkeley, Maastricht en Aachen.

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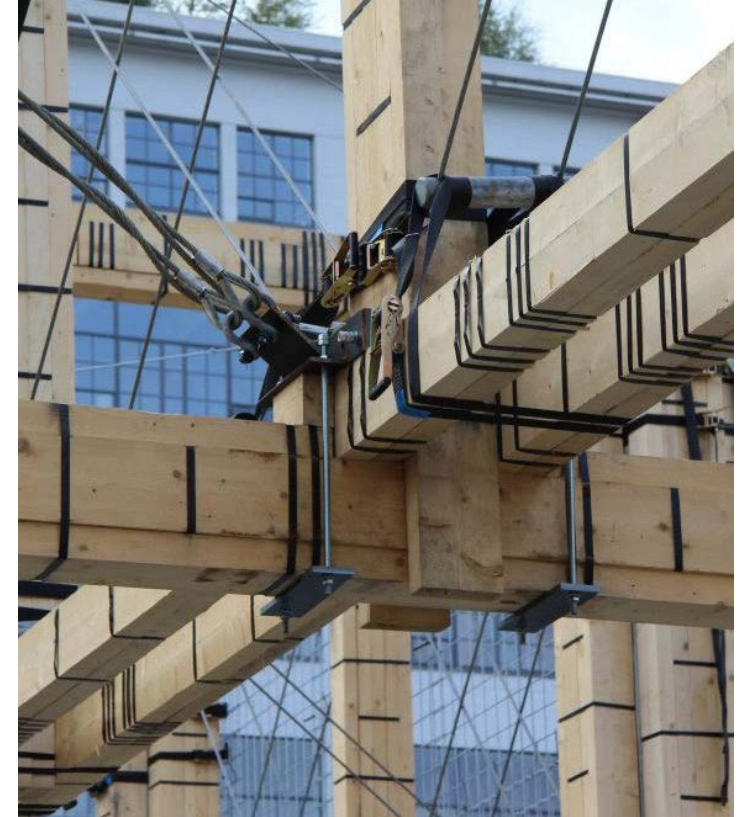
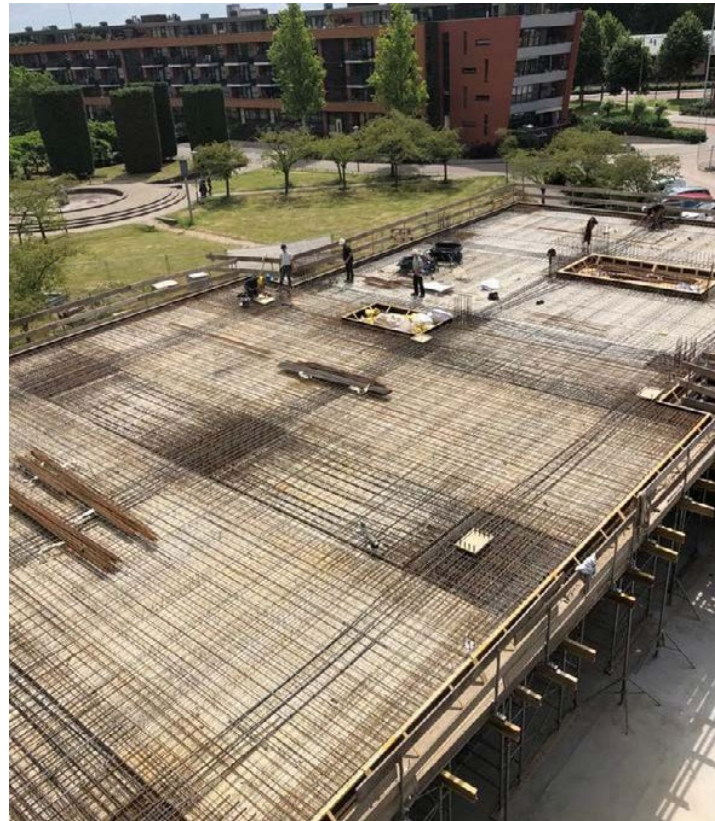
residual value



procurement with take-back guarantee

18%

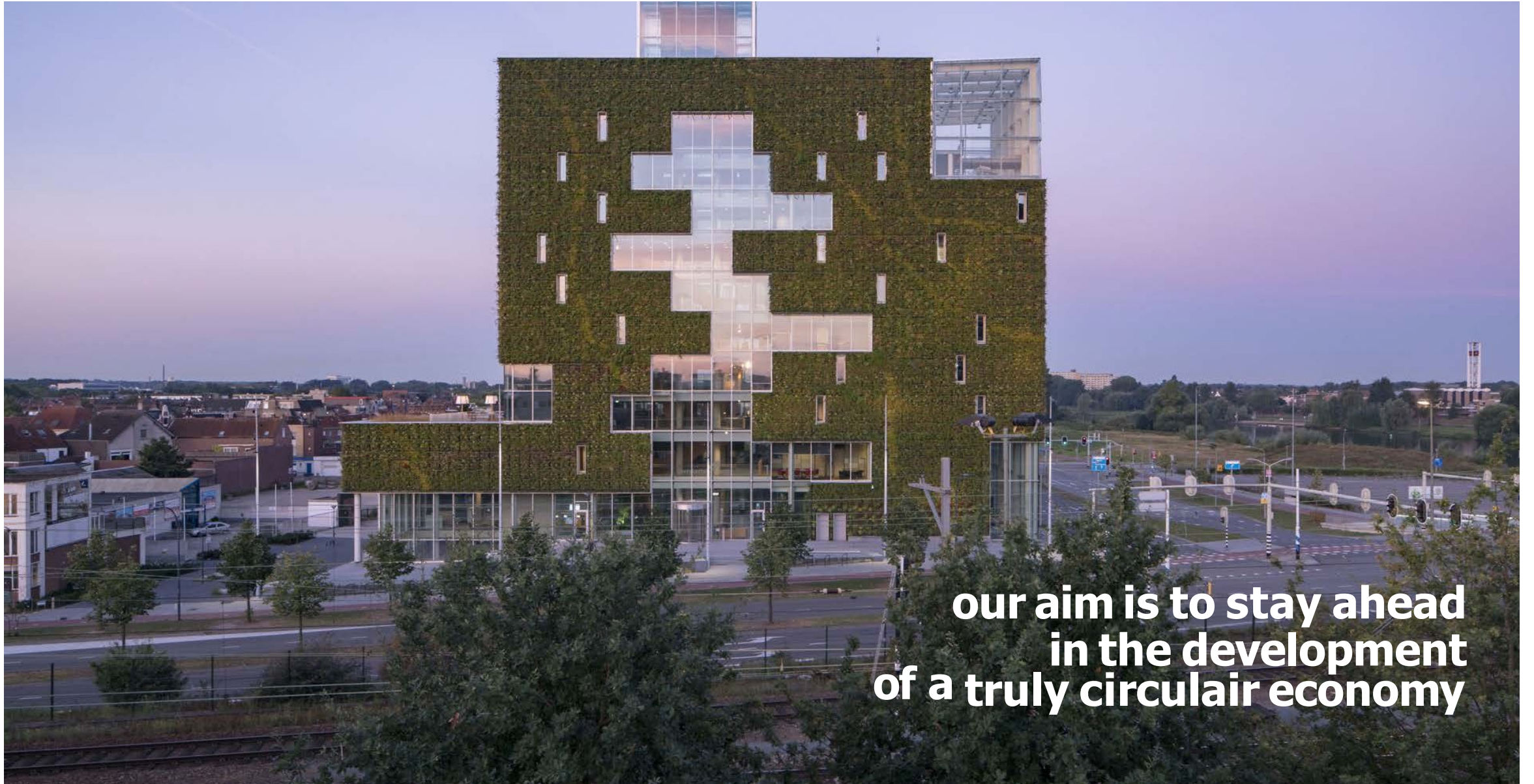
*residual value for demountable
design method*



residual value on mortgage

5%

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**our aim is to stay ahead
in the development
of a truly circular economy**

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Time for lunch



Verso



Vlaanderen
is zorgzaam samenleven



We herstarten om 13u20.
Next up: Sofie Desmet over de
de inhoud van de Vlaamse Green Deal.

Auditorium



100% Vegan lunch
Verso ondertekende de Green Deal Eiwitshift



Babbelke doen?
Leer ons en mededeelnemers kennen!
Bezoek de infostanden tussen 12:55 en 13:15.