

HORTUS

House Of Research Technology Utopia and Sustainability



**A statement in radical sustainability
in Basel's main innovation district
10'000m² of next-level office workspace,
ready to move in 2025**



ШНО

WHO?



WHO?



Liebe zum Ort –
Entwicklung, Planung und
Realisierung von Immobilien



B-Hive 
Zürich

BLOG



SENN sucht Land

Ein Kloster für Kulinarik



ALL für ALL



Ein Hochhaus wacht am Triemliplatz



Pionierbau an der Piccardstrasse



NE WS



SENN in den Medien.



WHO?

A SENN development with Herzog & de Meuron architects

SENN was founded in 1965, is privately held and has previously gained a reputation for developing commercially viable real estate projects with particularly high standards in architecture.

In 2018 SENN management decided this was not enough

Commercial viability and ambitious architecture got a fierce little sister: radical sustainability.

Starting with HORTUS, every SENN project is kicked off with rigorous sustainability requirements which are given the exact same importance as its economical and architectural requirements.

sia Umsicht Award 2013:
NOERD

Gute Bauten Stadt Zürich
2011-2015: NOERD

sia Umsicht Award 2017:
Zwicky Süd

Architekturpreis des
Kantons Zürich 2016:
Zwicky Süd

Hochparterre «Die Besten»
2016: Zwicky Süd

Label des Deutschen
Werkbunds 2018:
Gesamtschau

Gute Bauten BL/BS 2018:
HELSINKI DREISPITZ



werk bund
label 2018



WHO?

H&dM

WHERE

**HORTUS is part of Basel Area
a tri-national life sciences
hotspot of global
importance**

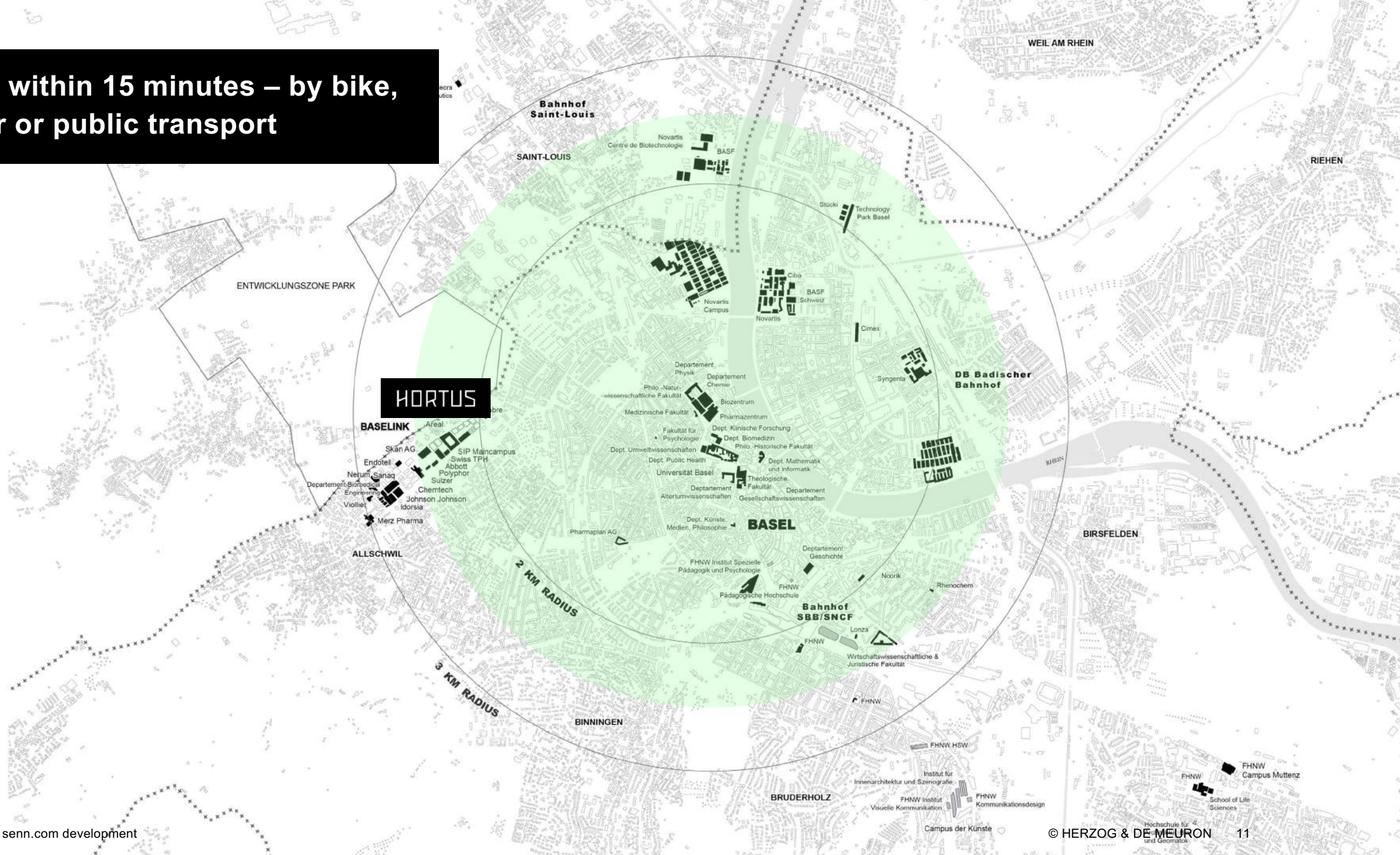


**HORTUS is mid-way
between Euro Airport
and Basel Train station**

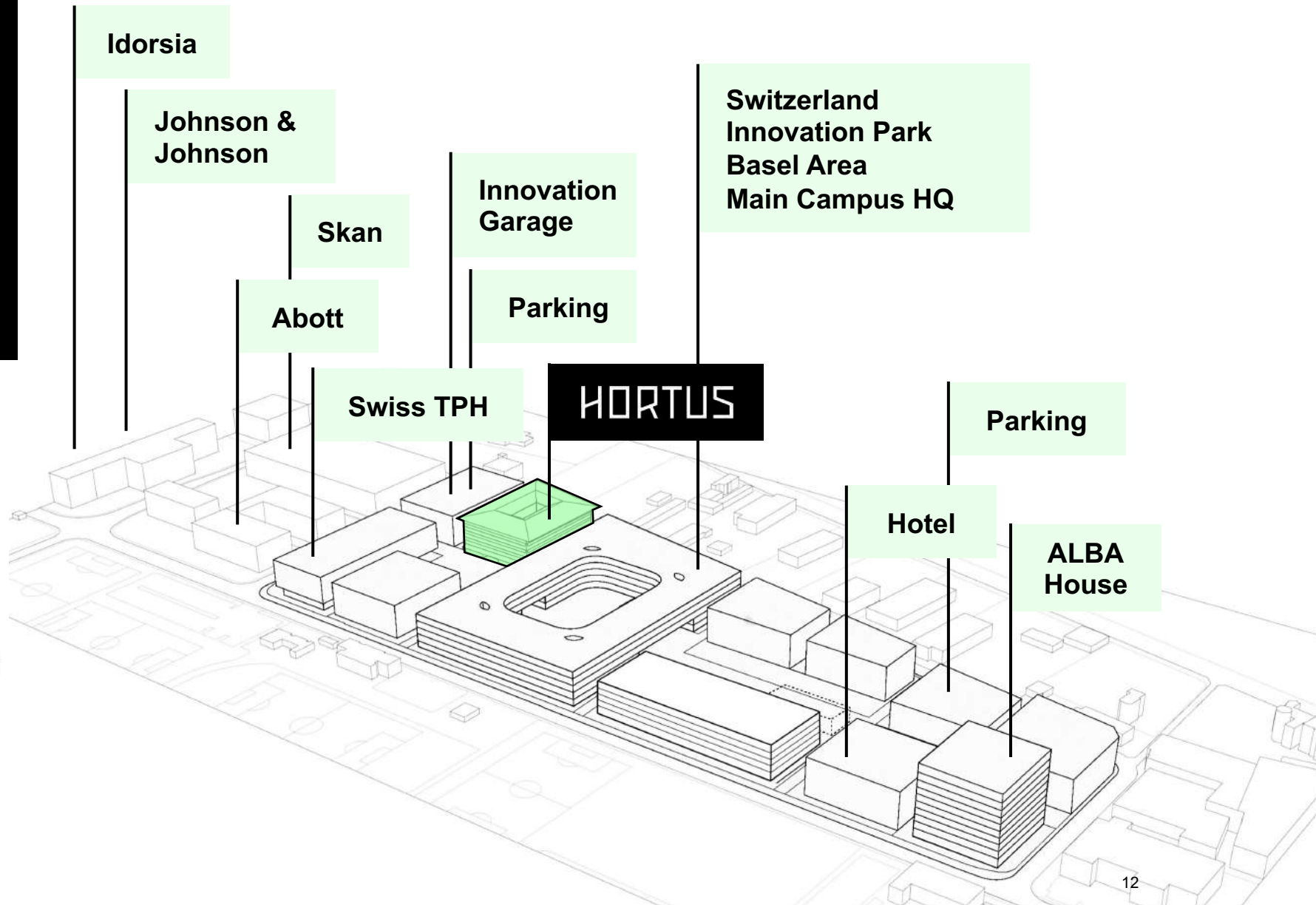
**In a triangle with Roche
and Novartis campus**



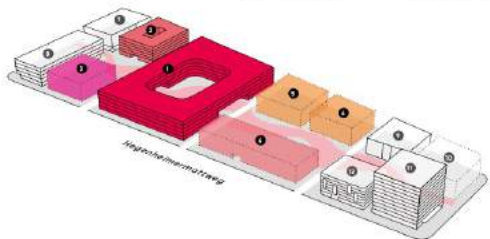
All within 15 minutes – by bike,
car or public transport



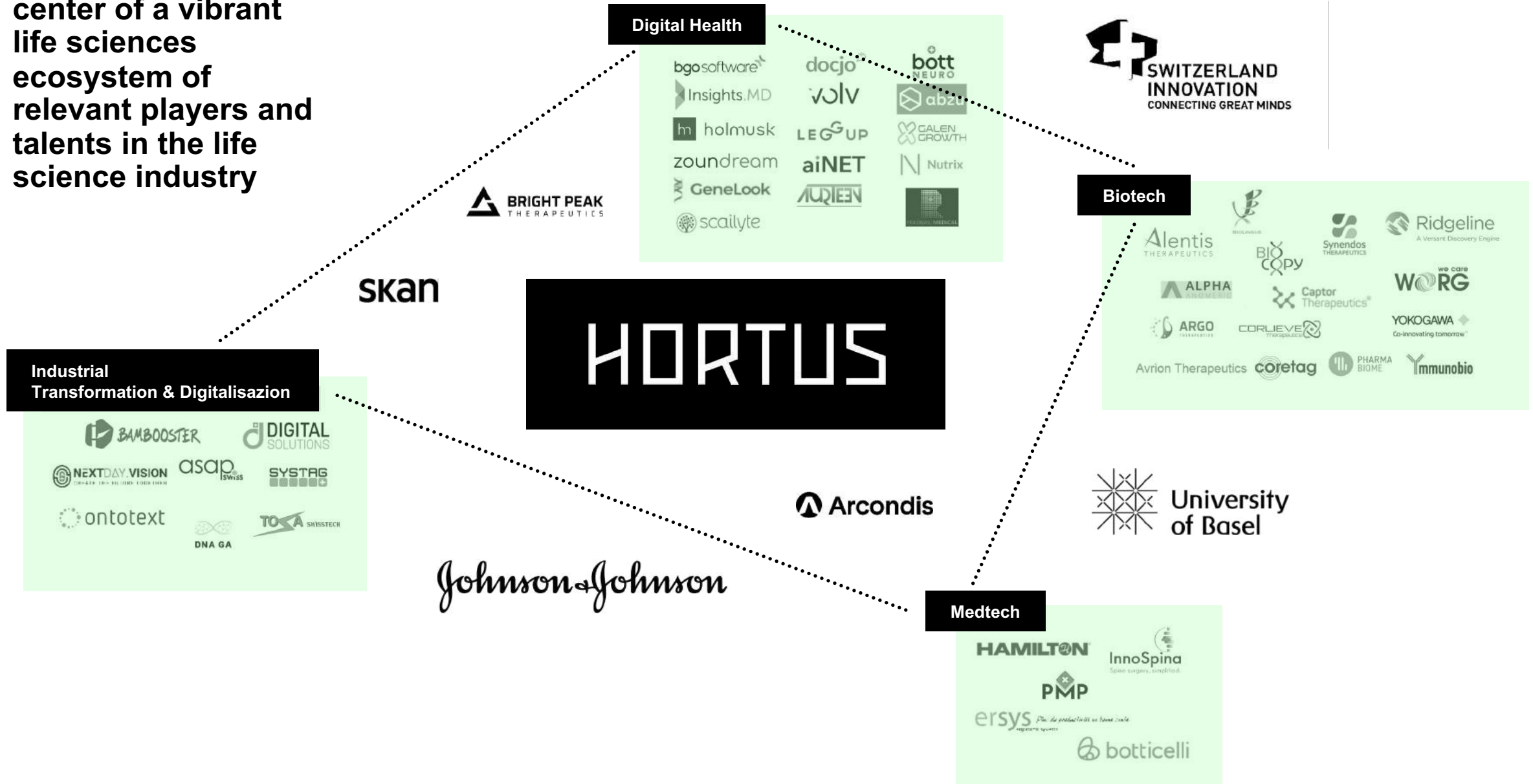
HORTUS is part of the Main Campus of Switzerland Innovation Park Basel Area.



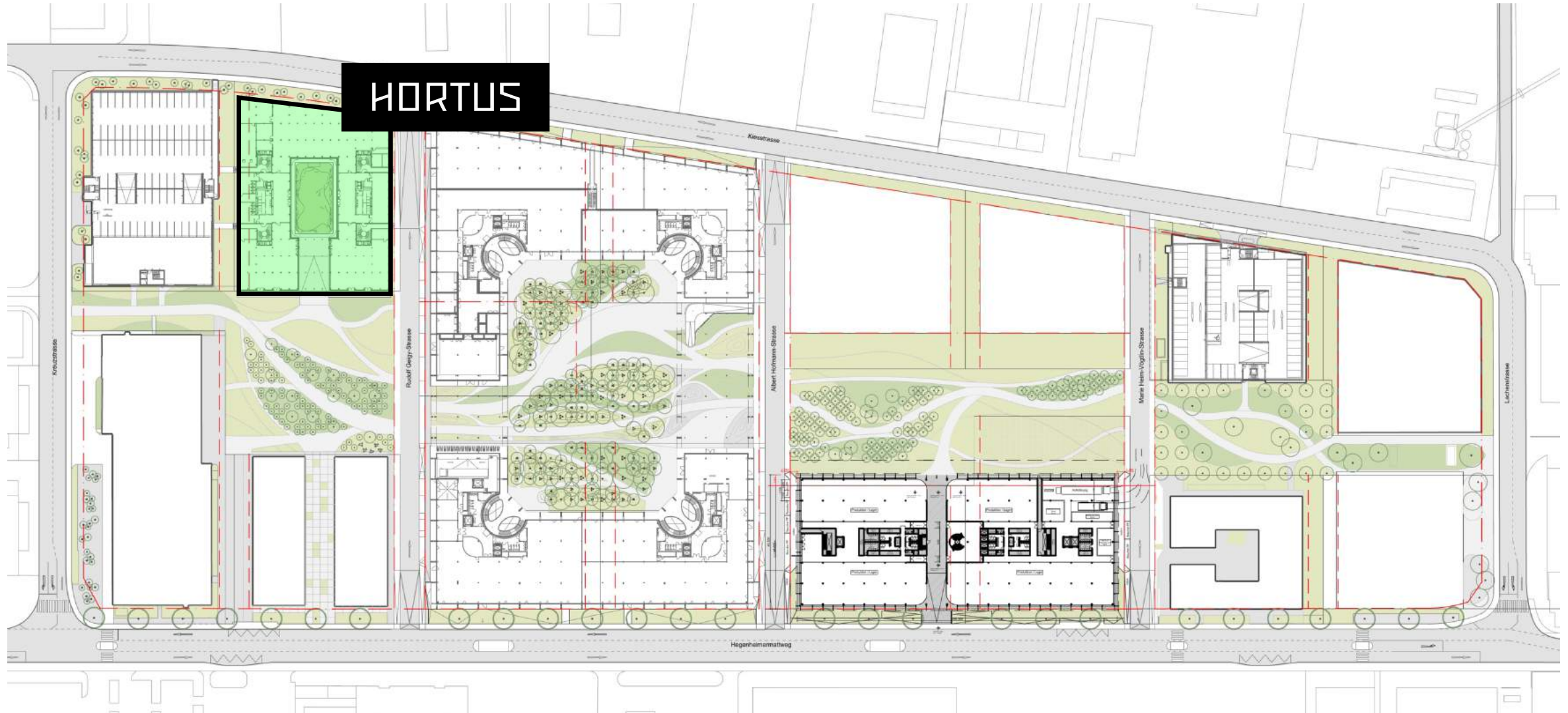
- 1 Main Campus HQ
Hegenheimermattweg 167 A-D
- 2 HORTUS
Rudolf Geigy Str. 3
- 3 Bauprojekt «HOPE»
- 4 Bauprojekt «ALL»
- 5 Baufeld C1
- 6 Baufeld C2
- 7 Parkhaus West
Innovation Garage
Kreuzstrasse 4
- 8 Swiss TPH
Kreuzstrasse 2
- 9 Parkhaus Ost
Kiesstrasse 4
- 10 Baufeld D2
- 11 ALBA HAUS
Lachenstrasse 1
- 12 Hotel Holiday Inn Express
Hegenheimermattweg 179



HORTUS lies at the center of a vibrant life sciences ecosystem of relevant players and talents in the life science industry



**HORTUS is part of a 75'000m² innovation campus along a green park lung.
First protagonists moved here in 2021. The last will move here in 2028.**



2022–2027

2021 – SENN:
INNOVATION GARAGE
> 600 parking spaces
> 500m² innovation space



2025 – SENN:
HORTUS
> 10'000m² office space by
Herzog & de Meuron



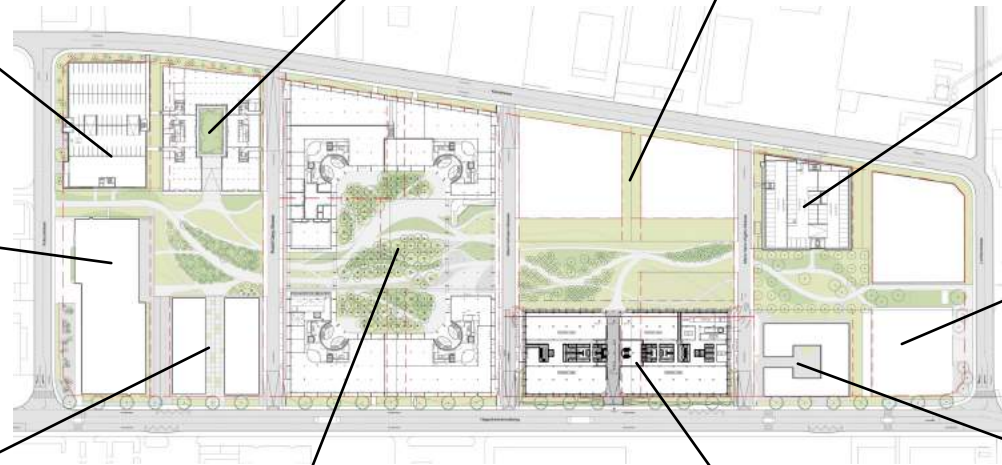
2028 – SENN:
CLOUD*
Open Opportunity
> 15'000m² lab-, office- or
production space



2022 – Fortimo:
Parkhaus Ost
> 600 Parking Spaces



2021 – Swiss TPH:
Swiss TPH Headquarters
> 700 employees



2023 – JP Bachgraben:
ALBA HAUS
Office Building by Herzog & de
Meuron



2027 – SENN:
HOPE
> 8'000m² office space by
Felippi Wyssen



2022/23 – SENN:
MAIN CAMPUS HQ
> 40'000m² labs-/office by
Herzog & de Meuron



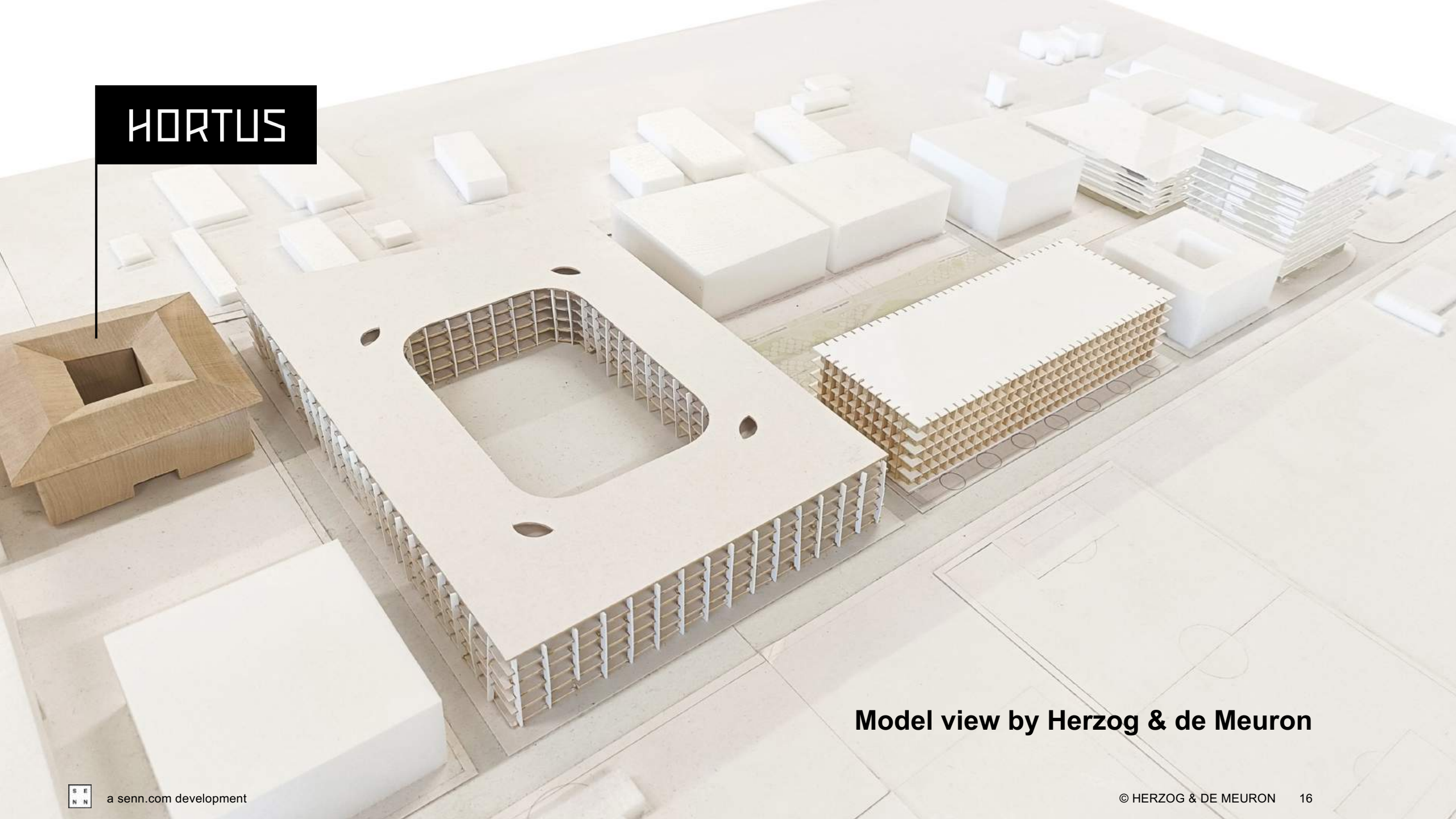
2026 – SENN:
ALL
> 15'000m² labs/offices by
Herzog & de Meuron



2023 – INA Invest:
Holiday Inn Express
Hotel



HORTUS



Model view by Herzog & de Meuron

ШНЧ

WHY?

The built environment contributes significantly

- to the functionality and aesthetics of our cities
- to individual, corporate and public budgets
- to the energy and carbon footprint of society
- to quality of life today and in the future

Radical sustainability requires us to look all these challenges in the eye, with a vector of minimum 60 years from today's decision.

A vector that long had better be pointing in the right direction

НОВЫЙ

6+

- + Liebe zum Ort
- + Empowerment & Control
- + Zonierung und Aneignung

- + Licht, Luft, Liebe
- + Kollaborative Verfahren
- + Öffentlicher Beitrag und Belebung

- + Gesundheit
- + Nutzwert
- + Städtebauliche und architektonische Qualität

- + Biodiversität
- + Verdichtung und Suffizienz

- + Anbindung und Mobilität
- + Wohlbefinden und Behaglichkeit
- + Sozial u. programmatische Durchmischung
- + Nutzer Ökosystem und Partizipation



- + Treibhausgasausstoss in der Erstellung
- + Schadstoffe
- + Graue Energie in der Erstellung
- + Energieproduktion (Plusenergie) Effizienz und Suffizienz
- + Kreislaufwirtschaft
- + Treibhausausstoss Betrieb

- + Nachwachsende Rohstoffe
- + Ressourcenschonung

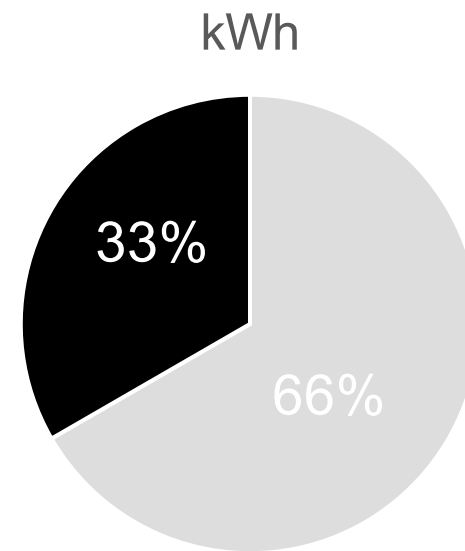
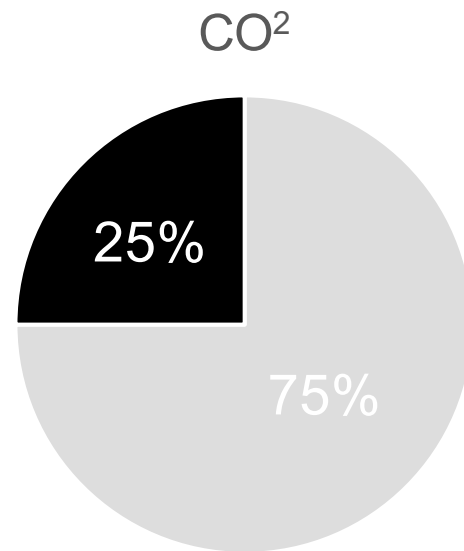
- + Variabilität
- + Unterhaltskosten
- + Ausbaustandard
- + Erstellungskosten
- + Erschwinglichkeit
- + Langlebigkeit
- + Flexibilität
- + Effizienz

**The new new: 5 Years
between Main Campus
and HORTUS**



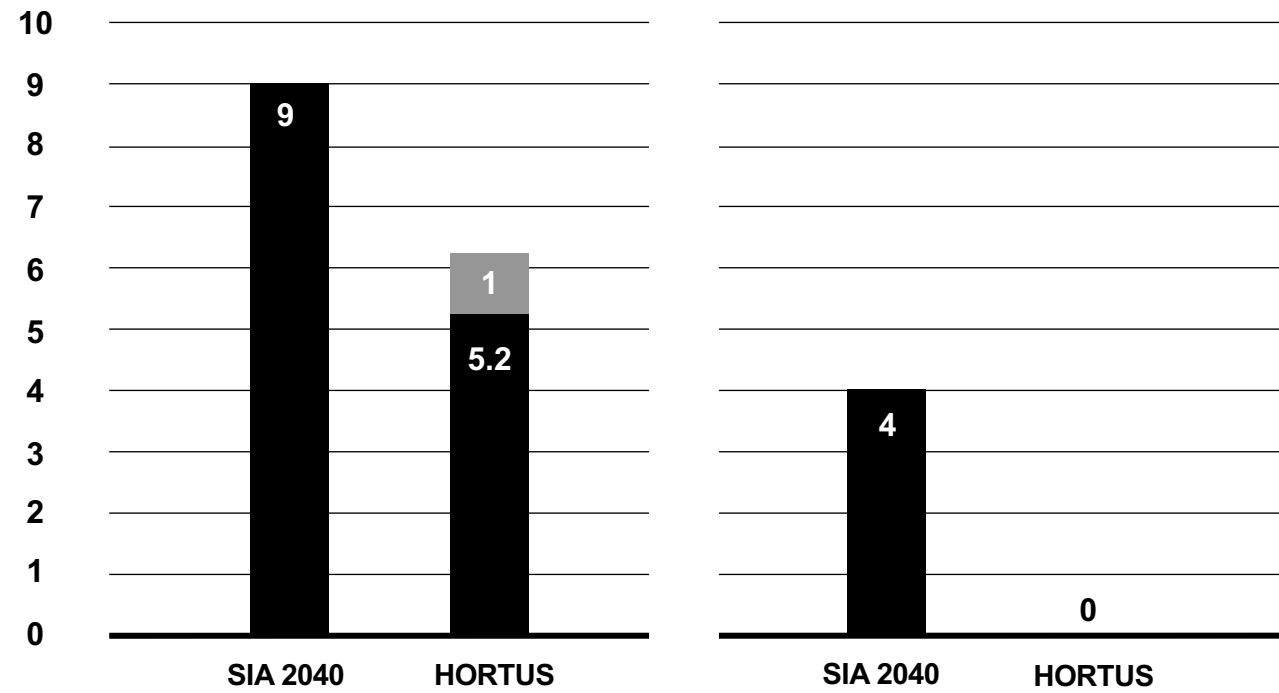
ШНРАТ

SIA 2040
EFFIZIENZPFAD ENERGIE
NETTO-NULL-ZIEL FÜR 2050:



TREIBHAUSGASE

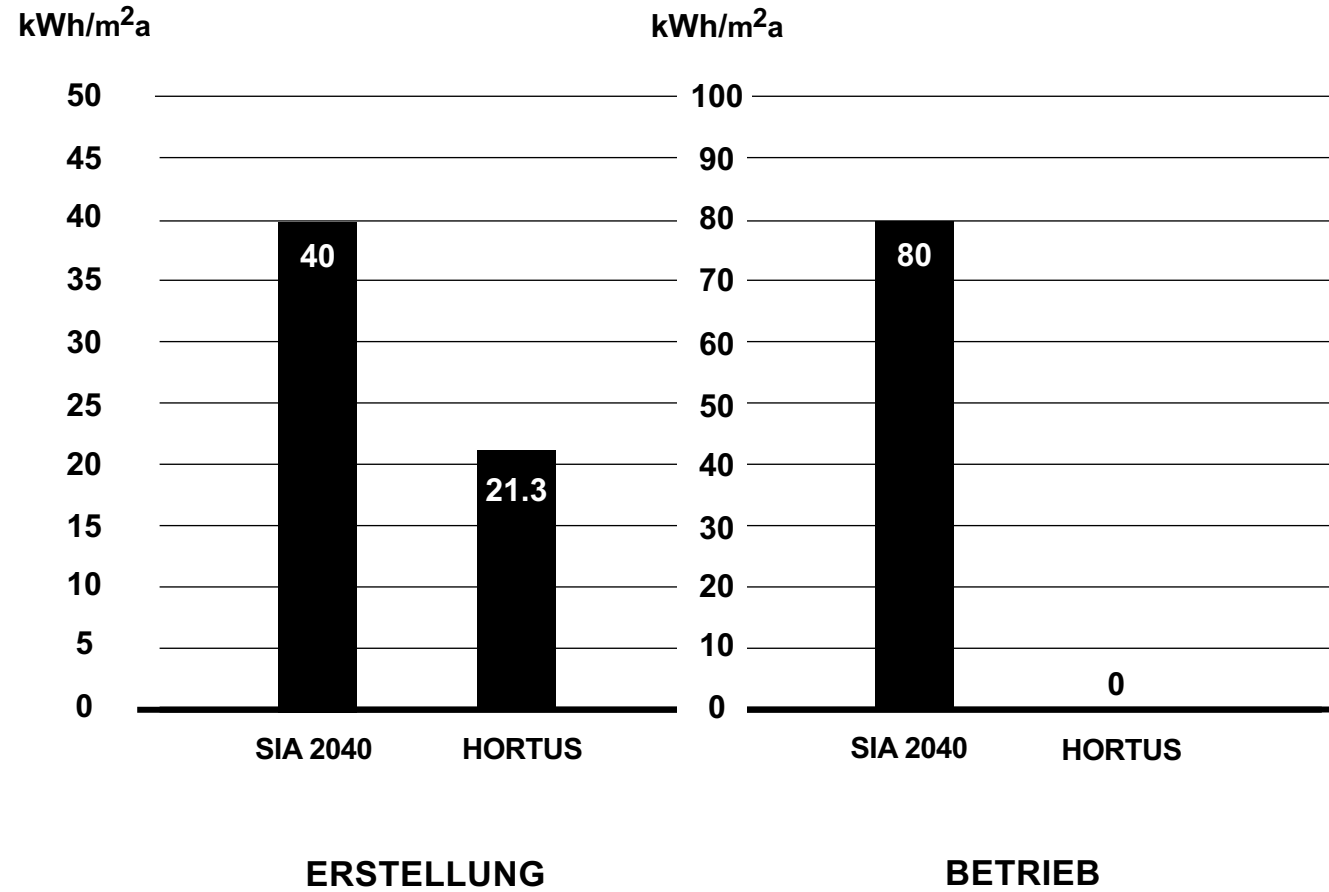
kg CO²/m²a

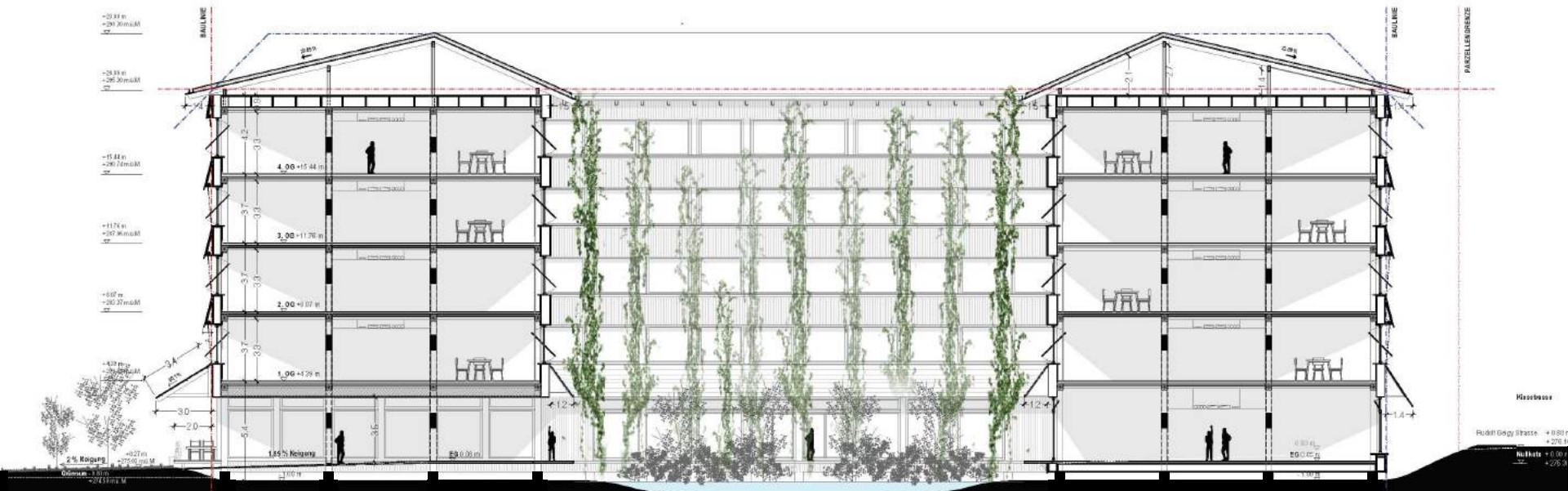


ERSTELLUNG

BETRIEB

NICHT ERNEUERBARE PRIMÄRENERGIE

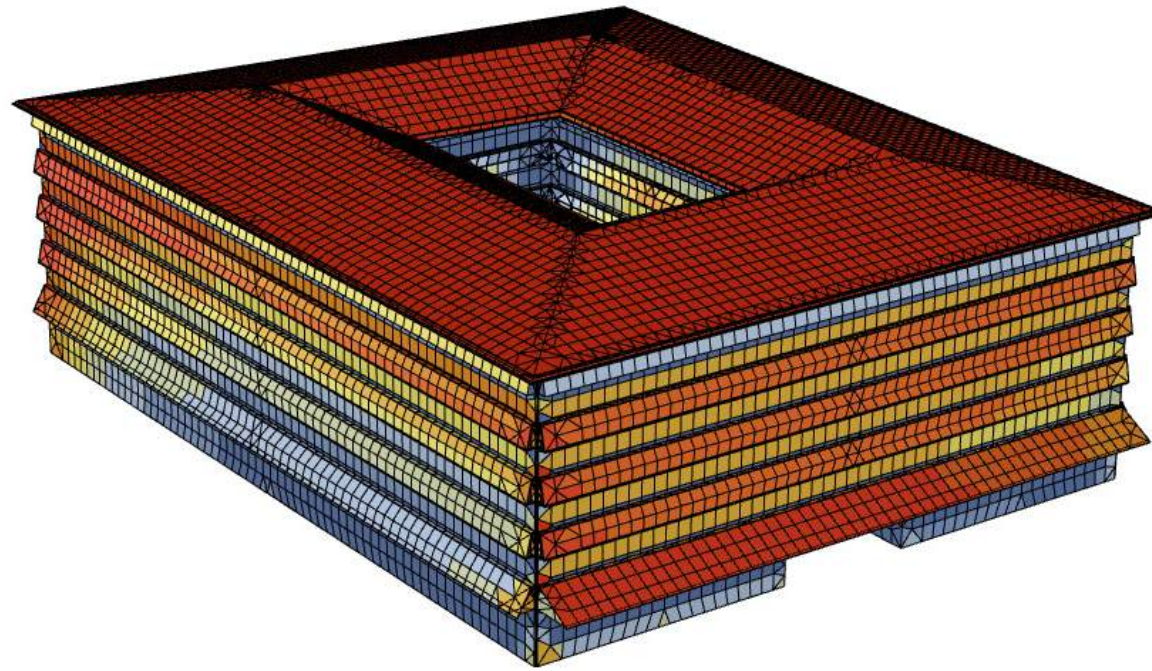






PHOTOVOLTAIK

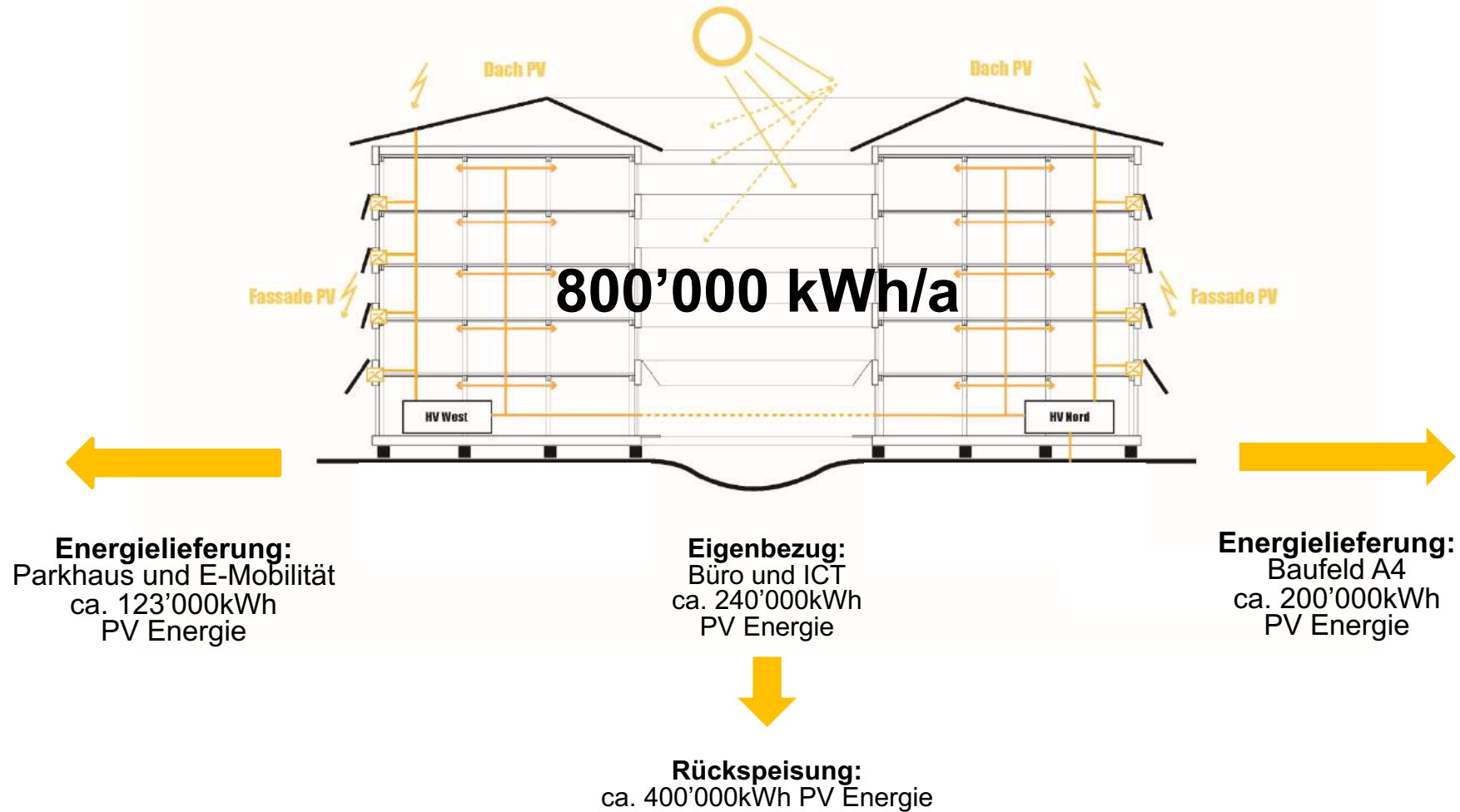




5000 m² Photovoltaik
(EBF 12'500 m²)

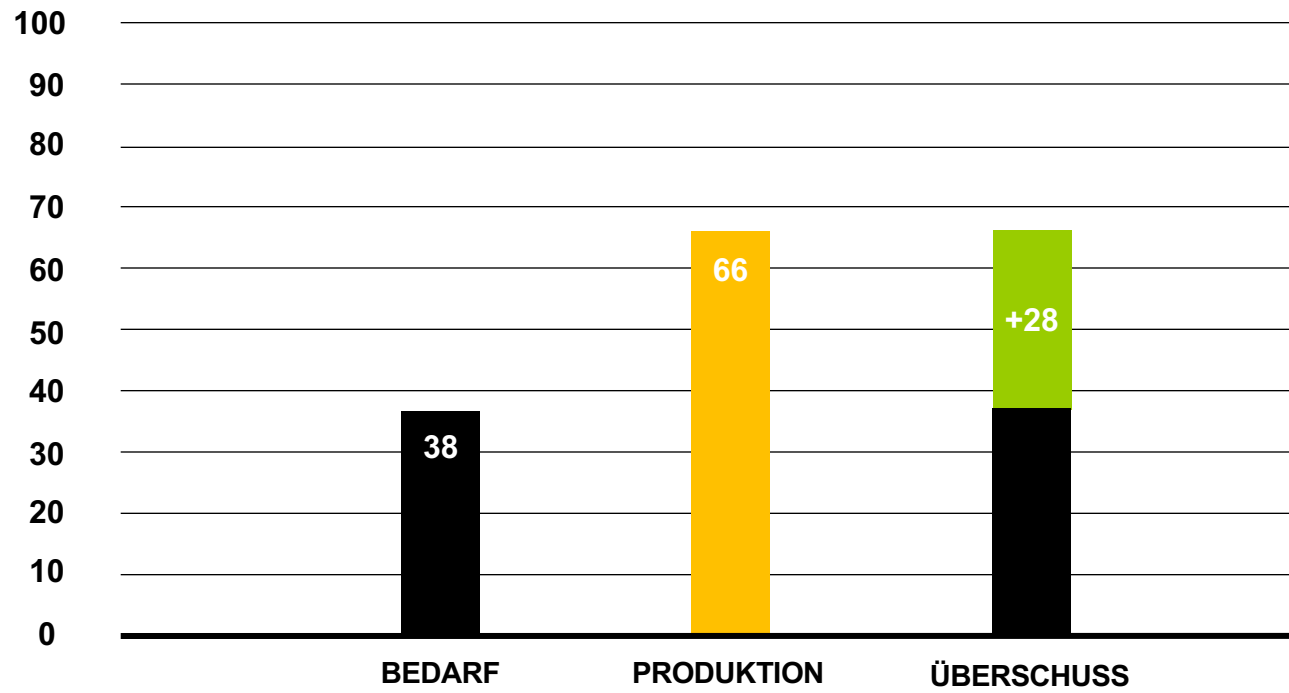
ENERGIEERZEUGUNG MIT PV ANLAGEN

PV DACH: 650 kWp -> 653'000 kWh/a; PV FASSADE: 337 kWp -> 150'000 kWh/a;
Direktbezugsquote ca. 70 %

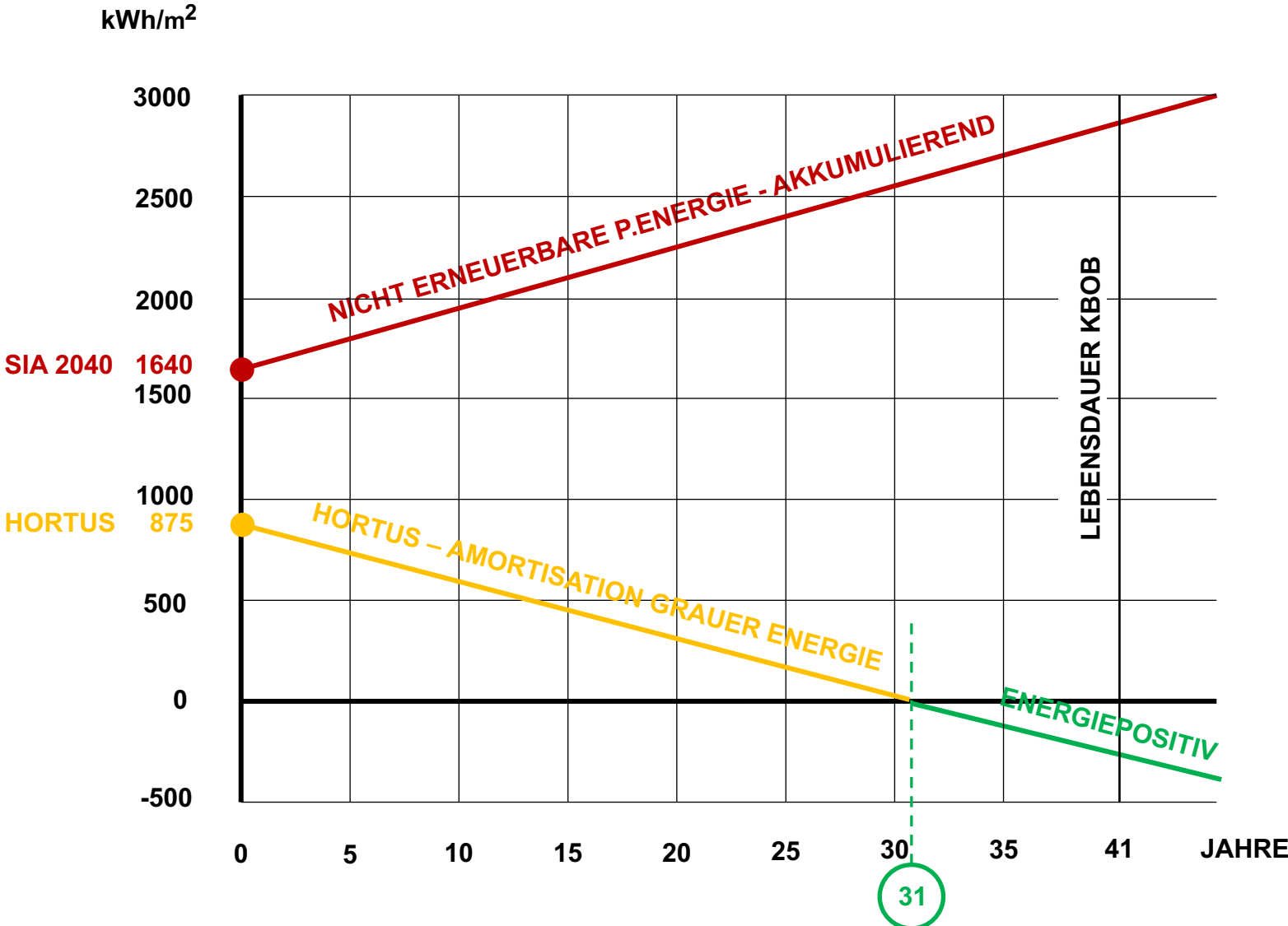


ENERGIEPRODUKTION

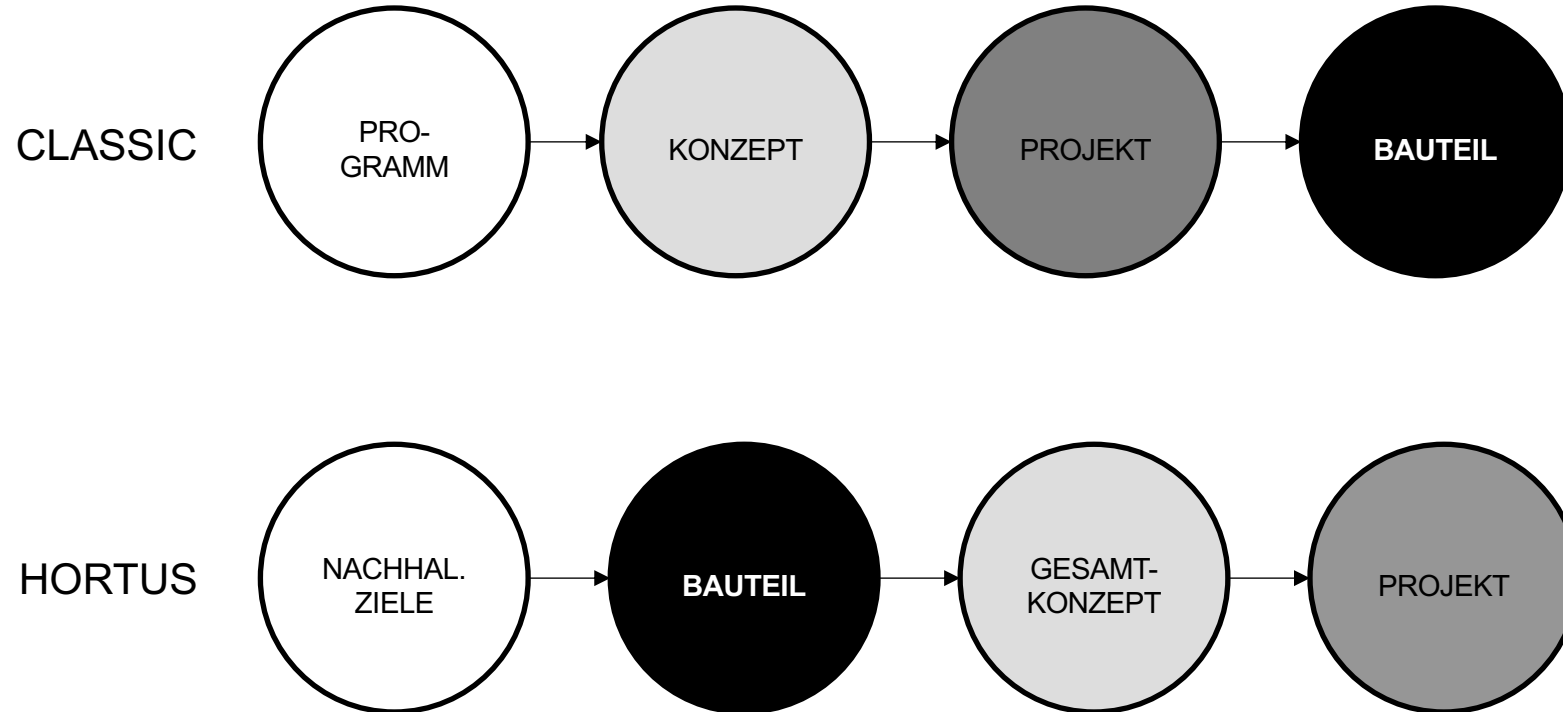
kWh/m²a



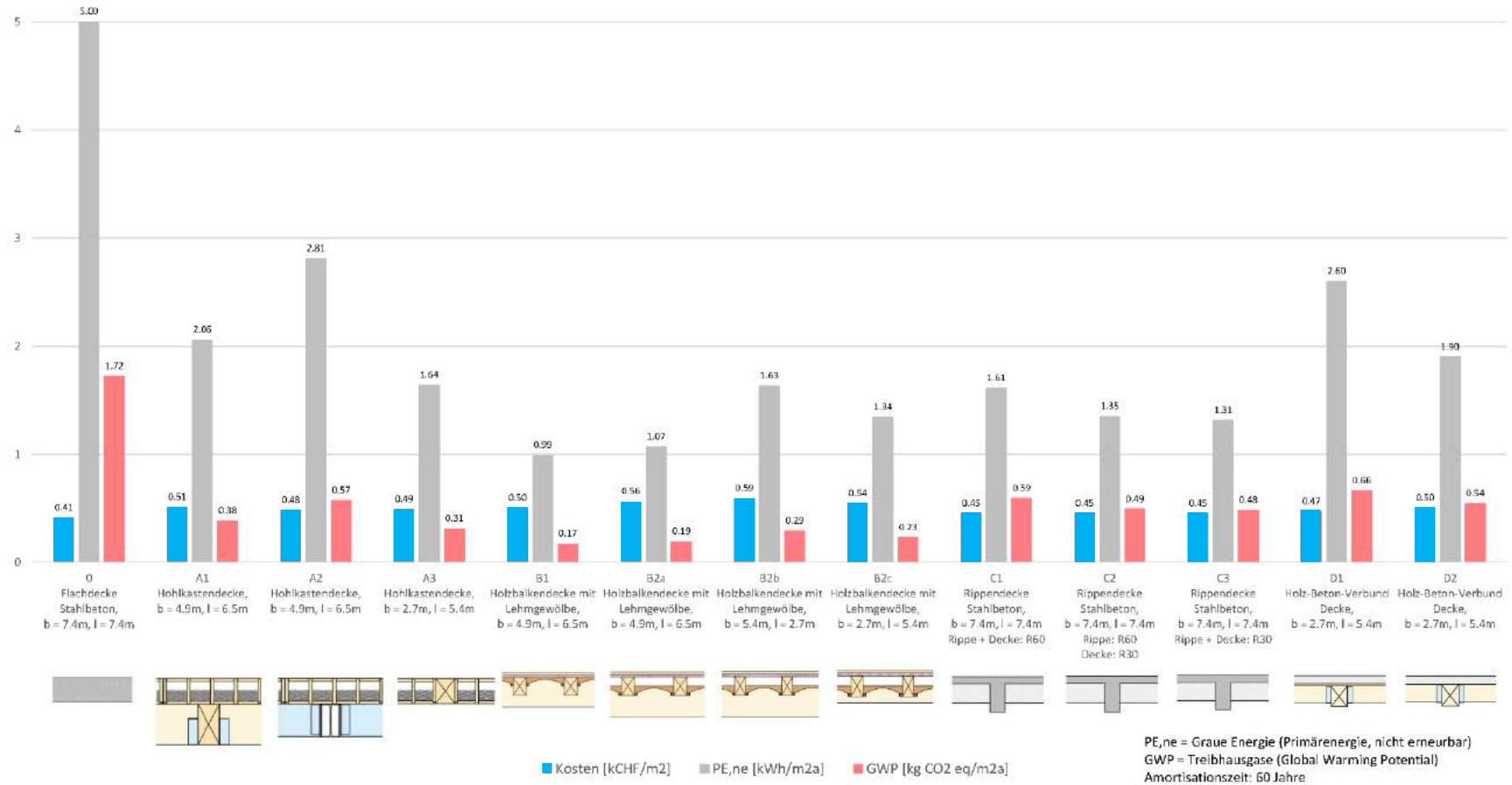
ENERGIEPOSITIV IN EINER GENERATION



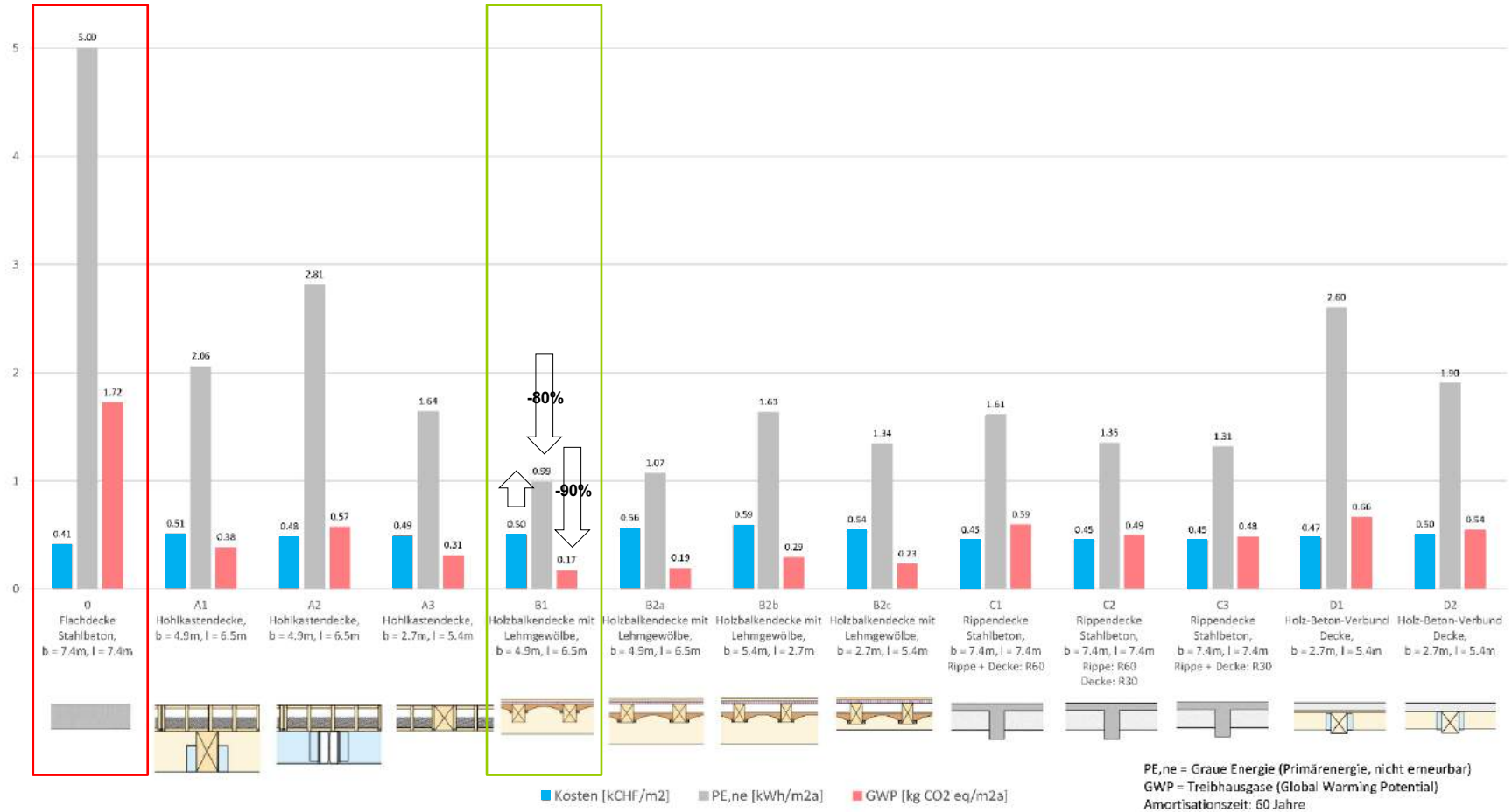
INVERTIERTE ARBEITSMETHODE



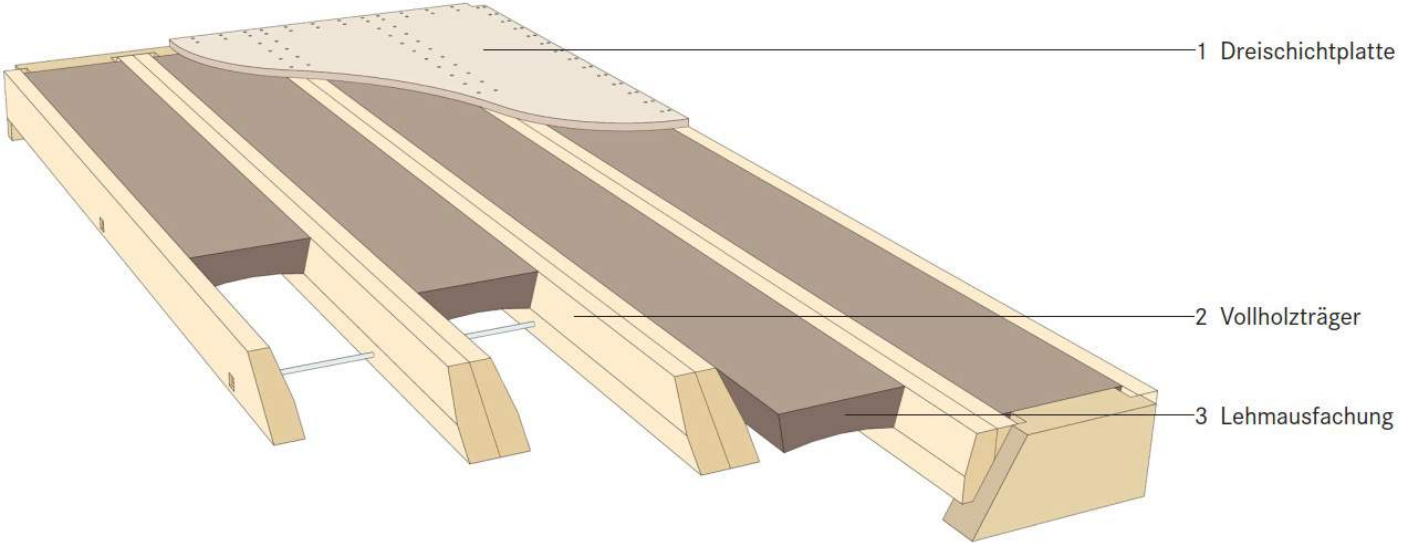
DECKEN - RASTER
Vergleich Deckensysteme

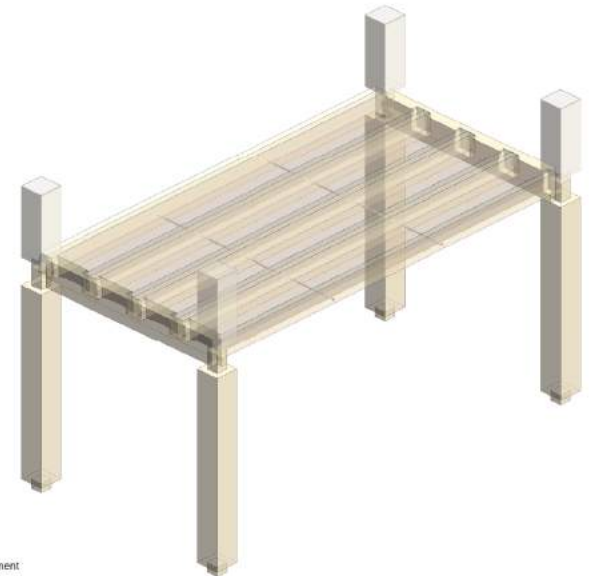
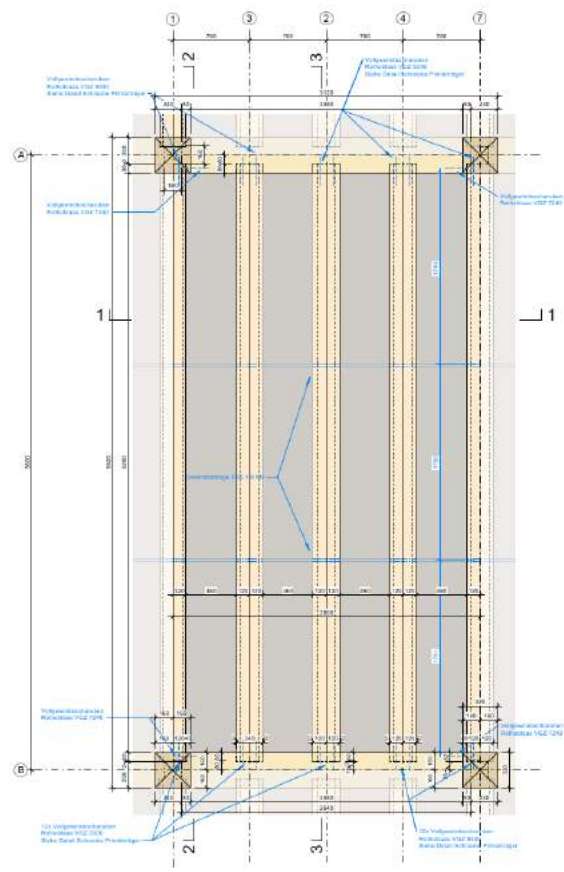


DECKEN - RASTER
Vergleich Deckensysteme

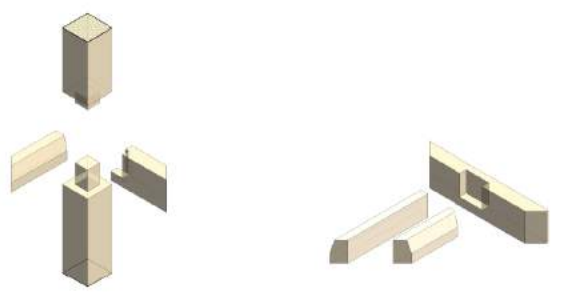








3D Element



**MOCK UP @ LEHM TON ERDE
(MARTIN RAUCH)**







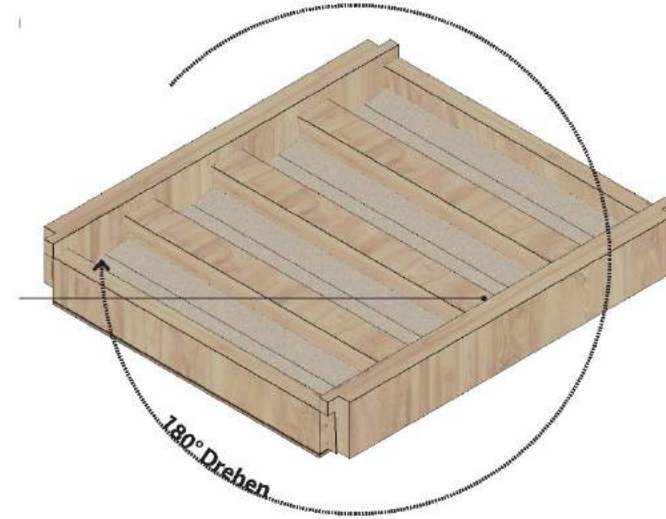
SYSTEM 02

Lehm in **Holzrahmen** gestampft.



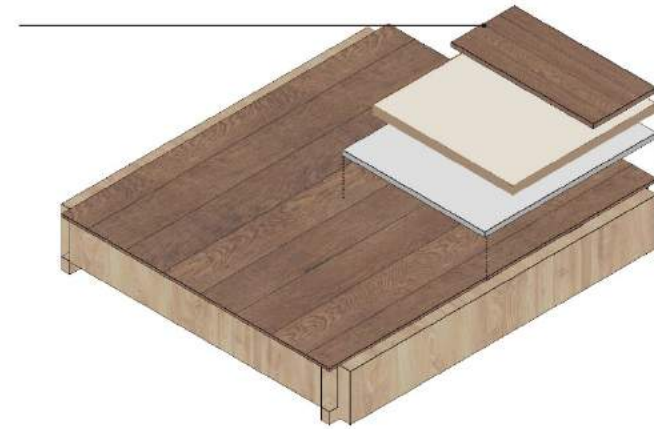
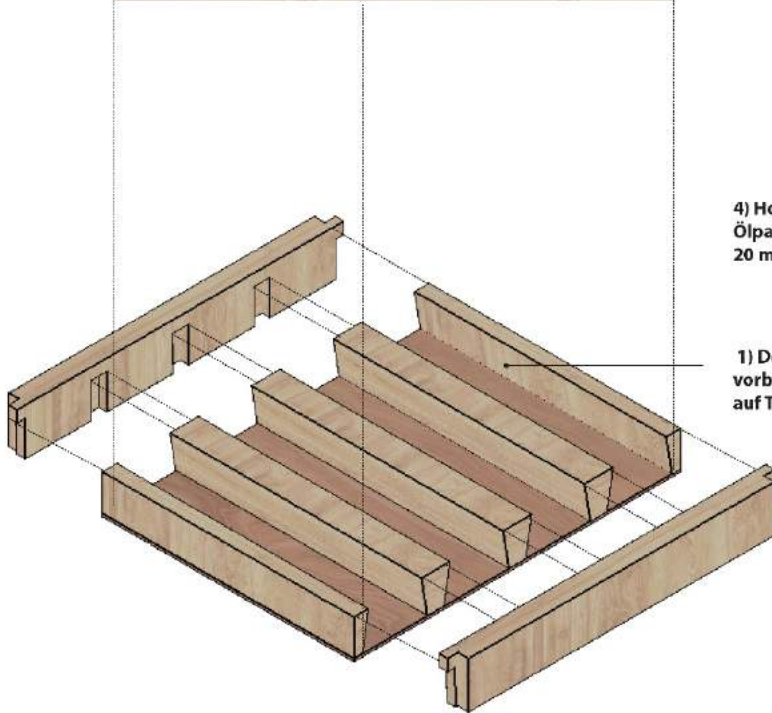
2) Lehm in Decken - Rahmen
"Schalung" schütten und
stampfen.

3) Decken-Rahmenelement
180 ° drehen.



4) Holzfaserplatte 40 mm +
Ölpapier+ Sandschüttung 30 mm +
20 mm Eichendielen

1) Decken-Rahmenelement
vorbereiten. 3 - Schichtplatten
auf Träger vernagelt.









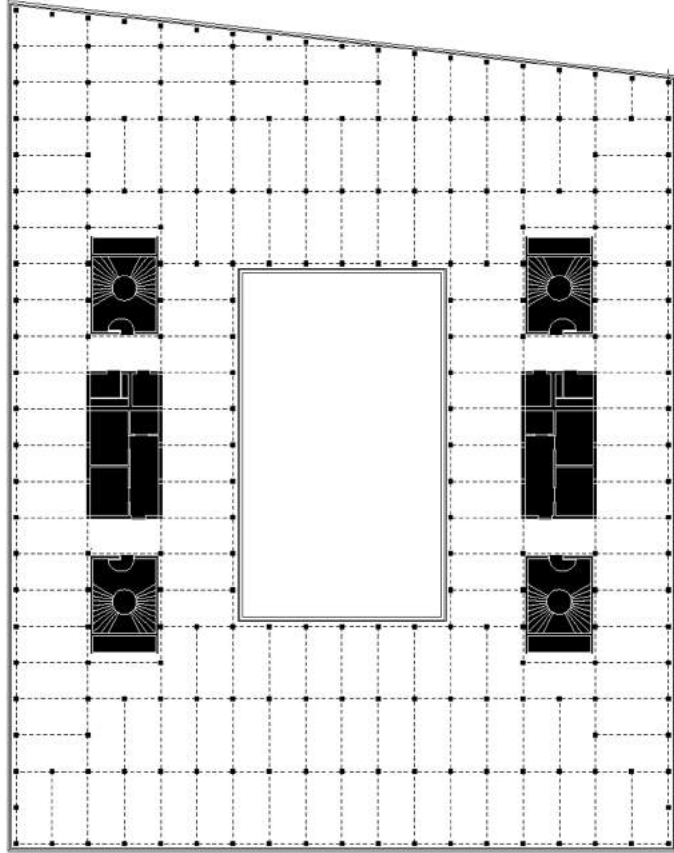


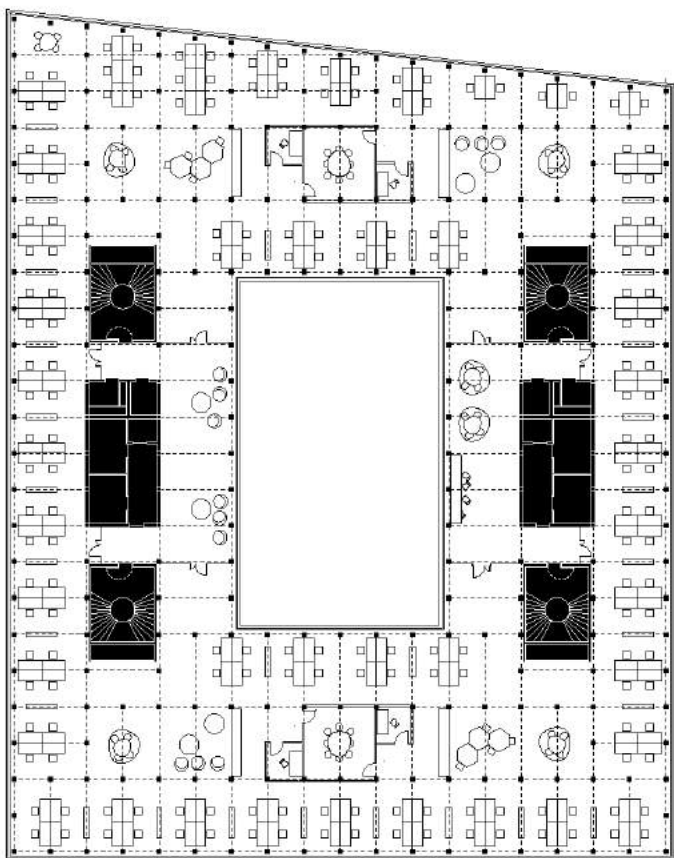


**REI 60
ZULASSUNG ERTEILT**

800 DECKENELEMENTE, 1400 STÜTZEN

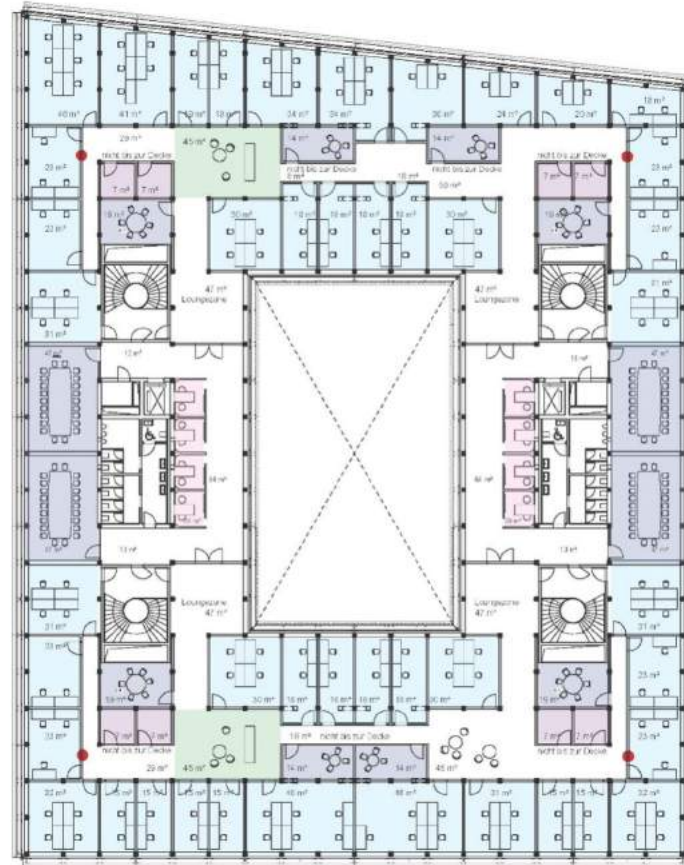




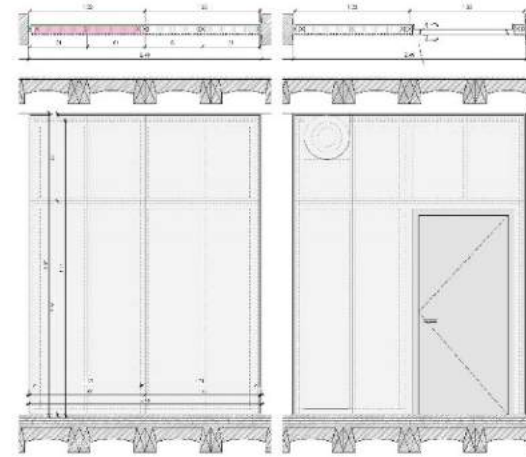




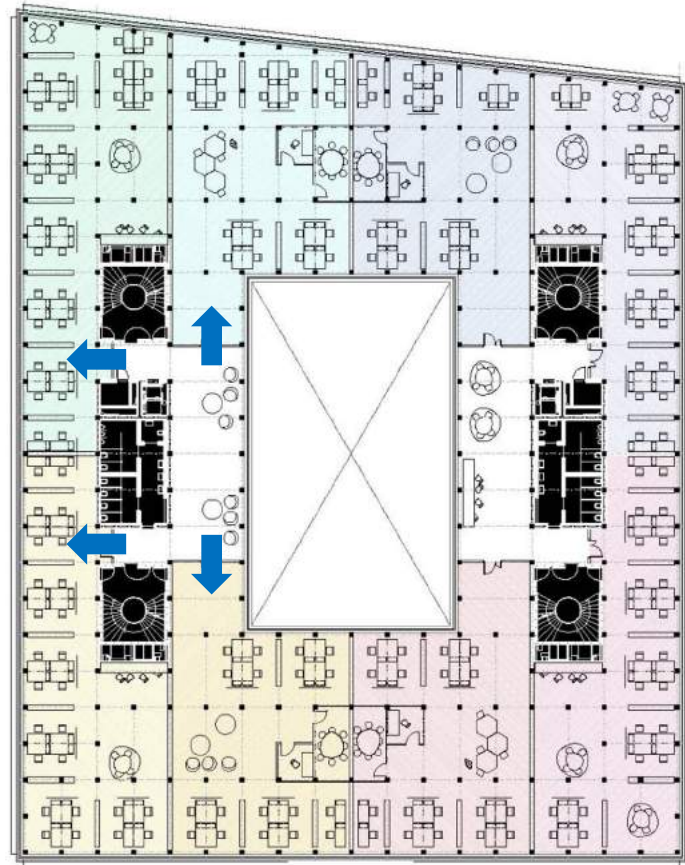
GESCHLOSSENE RÄUME



MIETERAUSBAU



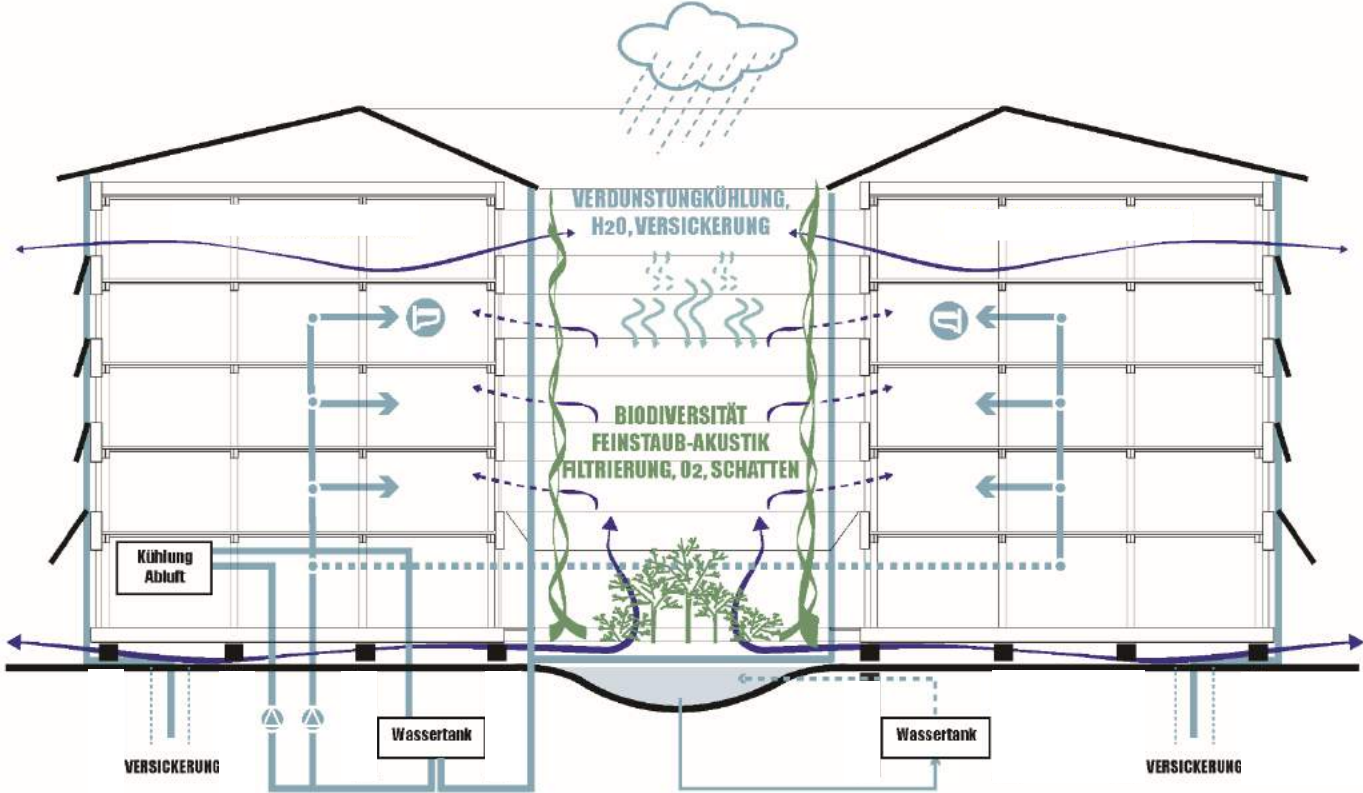
FLEXIBILITÄT







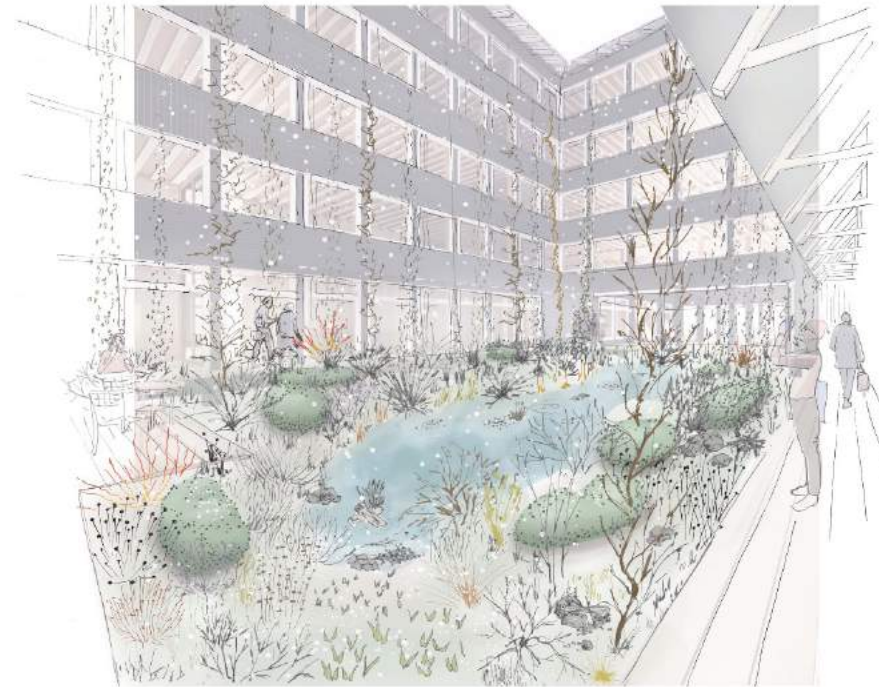
REGENWASSERAUFBEREITUNG



HORTUS CONCLUSUS



SOMMER



WINTER



1/ Geissblatt
Lonicera periclymenum
'Serotina'

H : 7m / Duftend



2/ Alpen-Waldrebe
Clematis alpina

H : 3m



3/ Gewöhnliche Waldrebe
Clematis vitalba

H : 18m



4/ Selbstkletternde Jungferrebe
Parthenocis quinquefolia

H : 15m



5/ Kletterrose
Rosa 'Seagull'

H : 5m



6/ Pfeifenwinde
Aristolochia macrophylla

H : 10m



Hoplitis adunca +
Echium vulgare



Trichius sexualis



Hippolais polyglotta

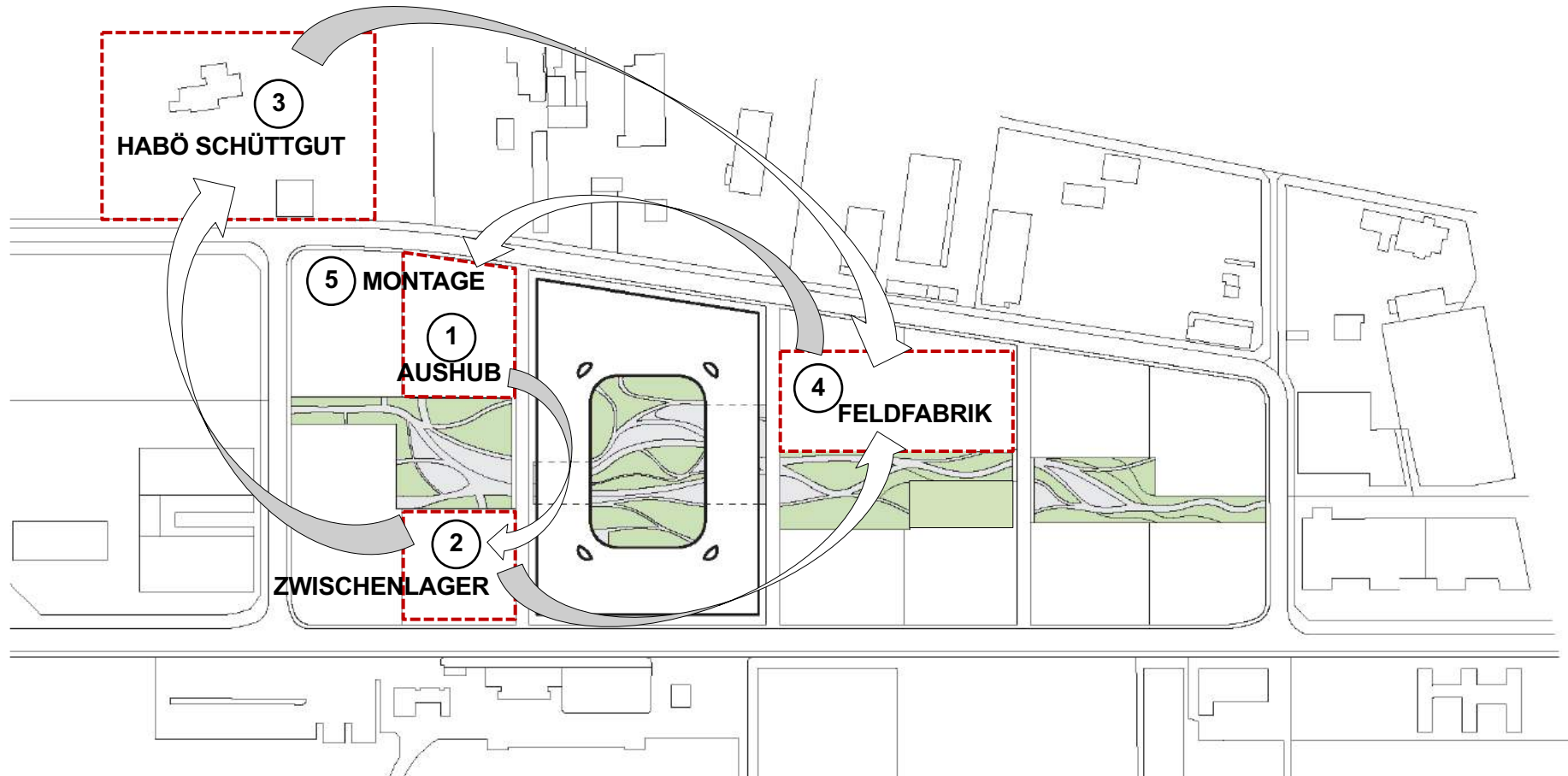


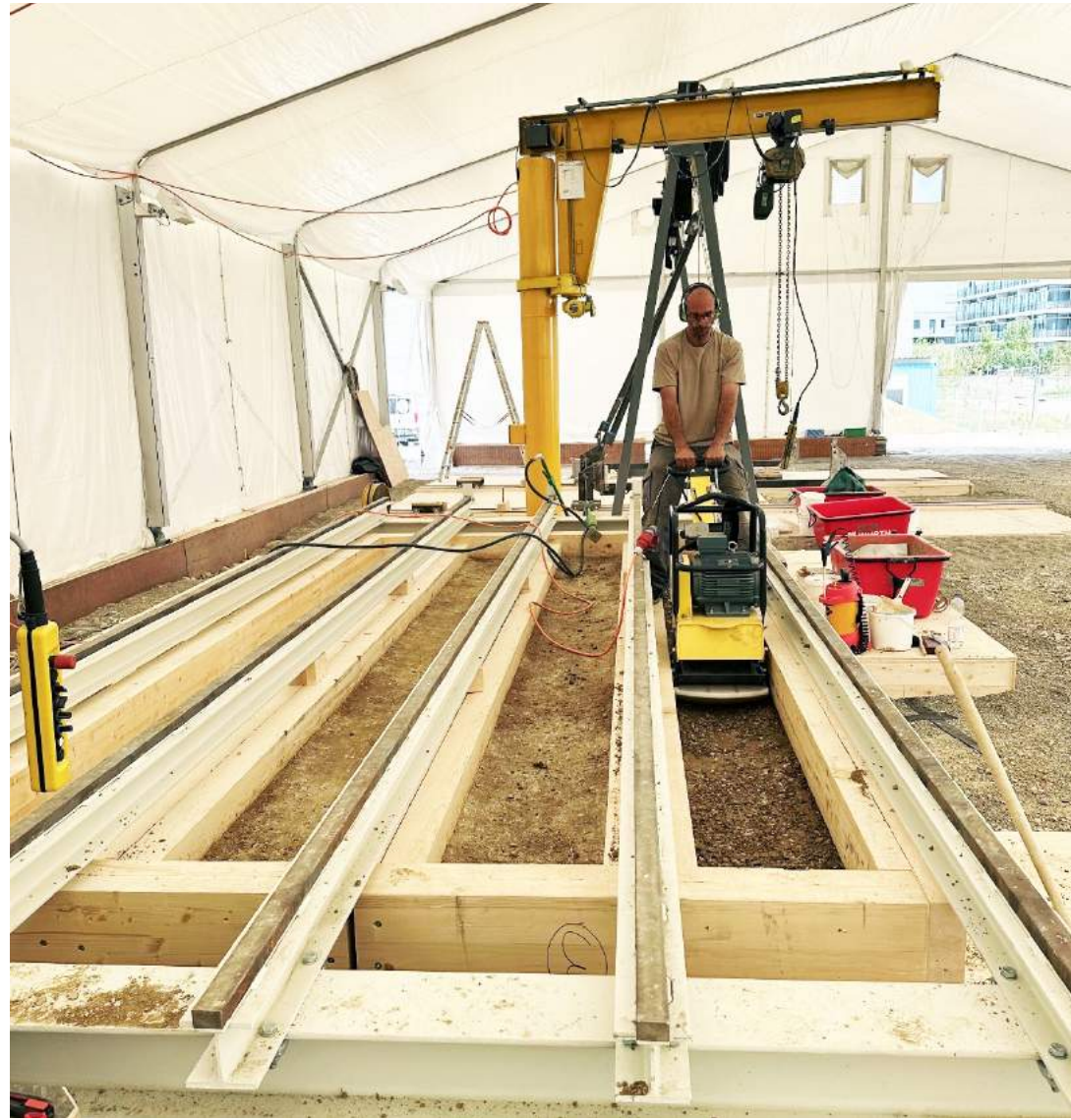






VOR-ORT-FERTIGUNG





ШНЯТ

6+

- + Liebe zum Ort
- + Empowerment & Control
- + Zonierung und Aneignung

- + Licht, Luft, Liebe
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- + Öffentlicher Beitrag und Belebung

- + Gesundheit
- + Nutzwert
- + Städtebauliche und architektonische Qualität

- + Biodiversität
- + Verdichtung und Suffizienz

- + Anbindung und Mobilität
- + Wohlbefinden und Behaglichkeit
- + Sozial u. programmatische Durchmischung
- + Nutzer Ökosystem und Partizipation



- + Treibhausgasausstoss in der Erstellung
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- + Variabilität
- + Unterhaltskosten
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- + Langlebigkeit
- + Flexibilität
- + Effizienz

WHAT?

Energy and Resource Positive (Ecological):

- Grey energy (non-renewable primary energy) in the building ca. 10'000 MWh
- Surplus energy production photovoltaics approx. 5'000m²
- Amortisation time (current calculations) approx. 30 years
- Fossil-free heating and cooling (Fernwärme/Kältenetz)
- Extended rain water usage
- Construction: Swiss wood, rammed earth, isofloc, glass, photovoltaics, steel stairs, no basement
- Circularity: True, separatable materials, complete material inventory and design for future re-use

Benefits for tenants:

- Important step on the CO2 reduction path
- Reduce, re-use & biodiversity light house project in corporate social responsibility

WHAT?

Human and Community Positive (Social):

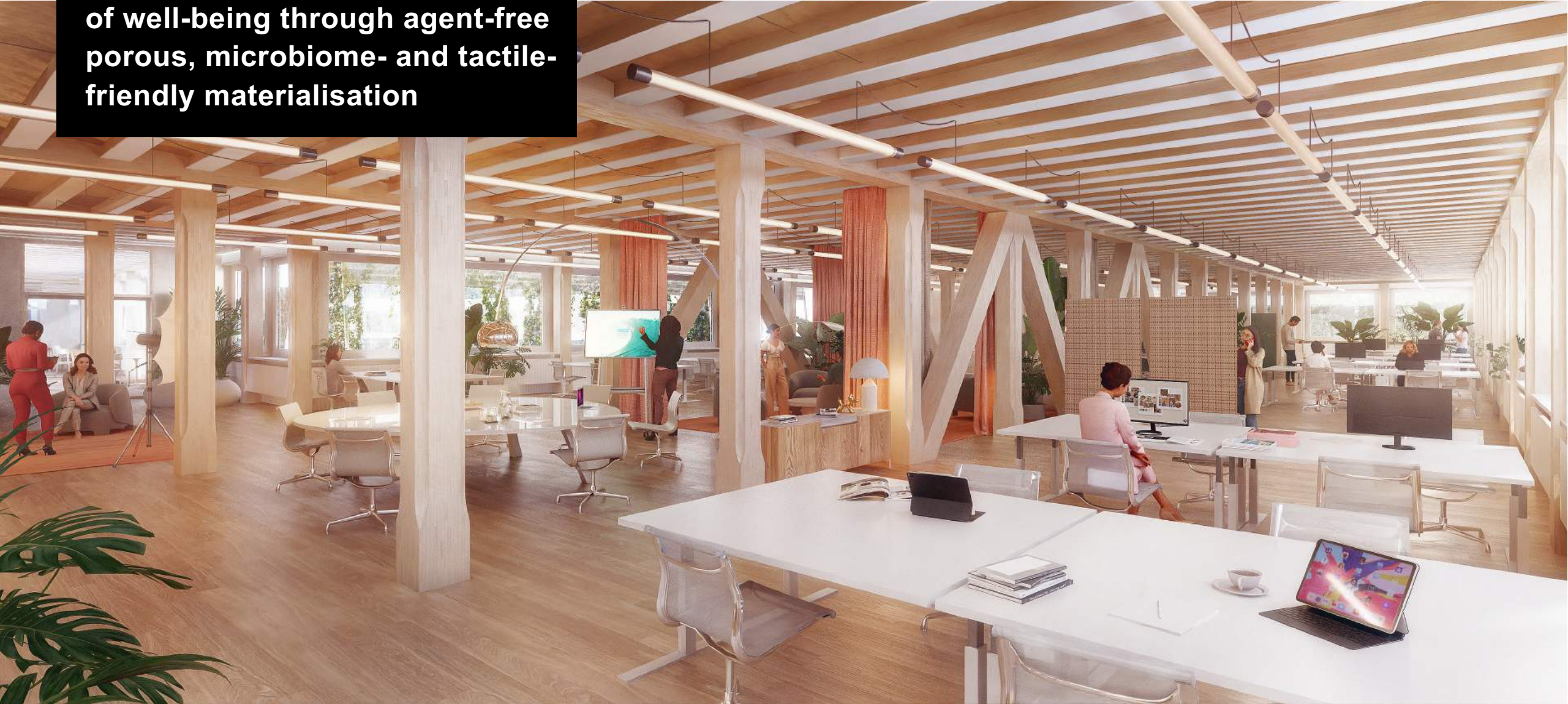
- Luxurious room height: Ground floor 3.80m i.L., upper floors 3.30m i.L.
- Biodiverse surroundings and perspectives for users
- Active temperature handling through greenery (ca. -3° in summer)
- Active temperature and humidity handling through wood/rammed earth materialisation
- Natural, agent-free, porous materials throughout, positive microbiome and tactile well-being
- Controlled air handling including filtering, humidification, swinging windows, diverse sensors (temp., humidity, CO2, VOC, lux, aerosols) and app-based transparency & monitoring

Benefits for tenants:

- A new kind of focus on health and well-being of tenants and their employees



HORTUS explores new aspects of well-being through agent-free porous, microbiome- and tactile-friendly materialisation





Human Positive

HORTUS furthers well-being and outlook through biodiversity.

A BFF of 0.52 means HORTUS provides more biodiversity than the pasture it was built on.



A cooling facade in summer (up to -3°C)

Maximizing natural light in winter



WHAT?

Business and Investment Positive (Economical):

- Fit out: Ready Made incl. flooring/walls/ceiling (porous, low-energy, low-carbon materials), incl. distributed electricity and lan, incl. basic acoustics and lighting
- Easy move-in: Tenant brings own furniture, individual mood lighting and individual acoustics and can order separators/walls/single rooms additionally à la carte
- Sharing access-over-ownership lease model: Ready-made «own» space + furnished common spaces on floor + extensive furnished and catered common meet/work/eat lounge on ground floor
- Total lettable space for offices, meeting, F&B and services ca. 11'000m², ca. 2'300m² per floor

Benefits for tenants:

- More working quality at less cost and responsibility.
- More flexible lease terms possible.



Investment Positive



Resource Positive

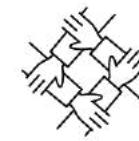
**HORTUS is built to be re-used.
Made from wood, rammed earth,
necessary glass, photovoltaics
and recycled paper – a big step
on any tenant's or investor's road
to meeting CO₂ targets**

**All elements are inventorized,
materials and systems are
separated for repair and resale**





Business Positive



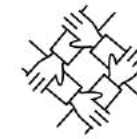
Community Positive

HORTUS delivers a new tenant model based on a ready-to-move-in fitout, with more shared spaces, allowing access-over-ownership efficiency and furthering interaction and collaboration between tenants





Business Positive



Community Positive

Ready made fitout includes flooring, walls and ceilings, as well as lights (up to 500 lux), acoustics, electricity and lan (every 10m²) for a move-in open-space layout

Separators and office/meeting room modules fulfilling HORTUS radical sustainability standards (rammed earth, isofloc, wood) are bought à la carte or made part of the lease

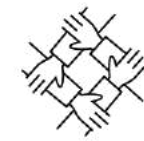
Redundant, battery-operated electrical system for emergency operation including cooling

Shared spaces are sustainably furnished and operated





Business Positive



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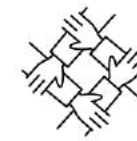
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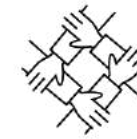
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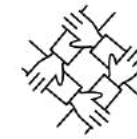
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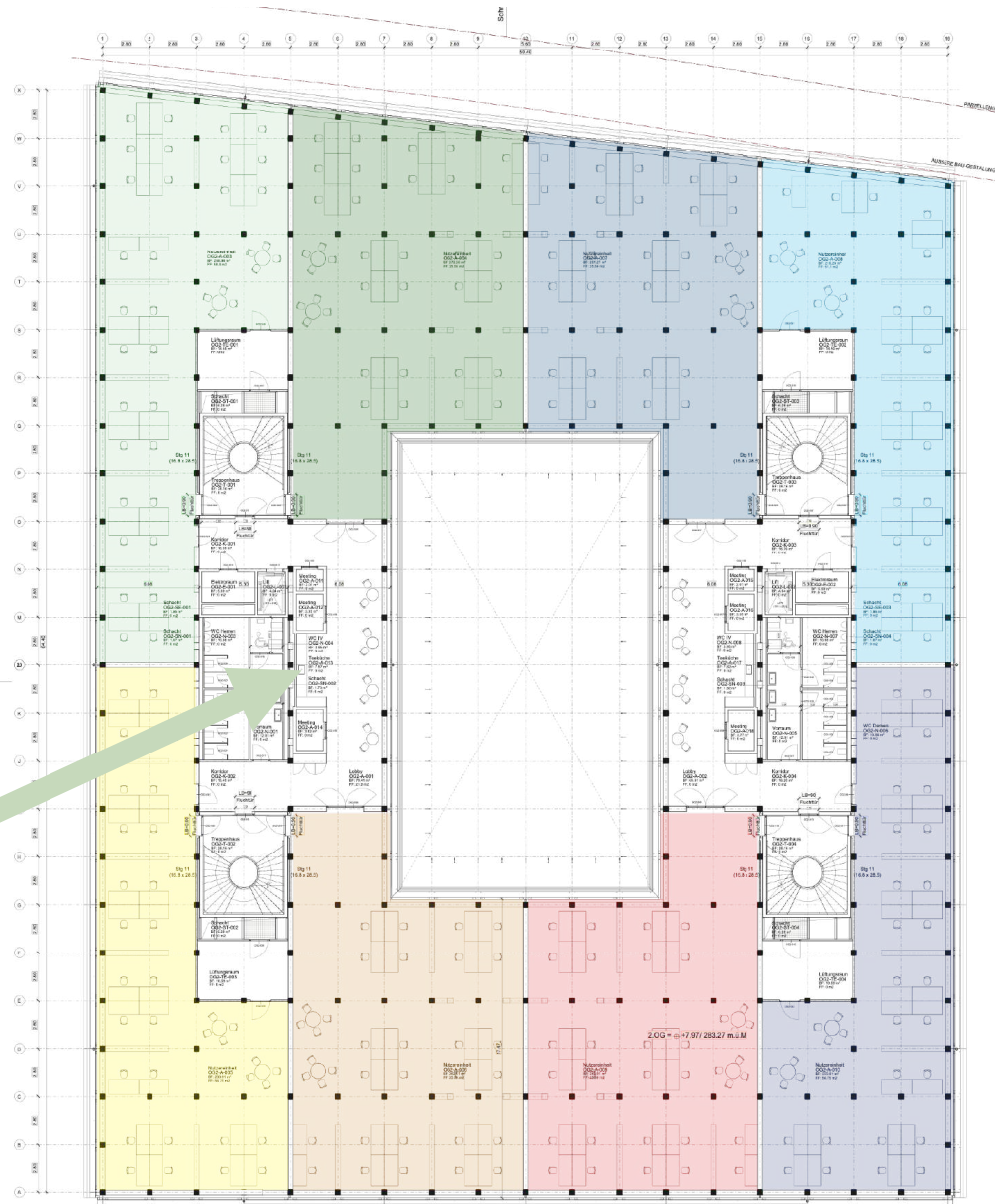
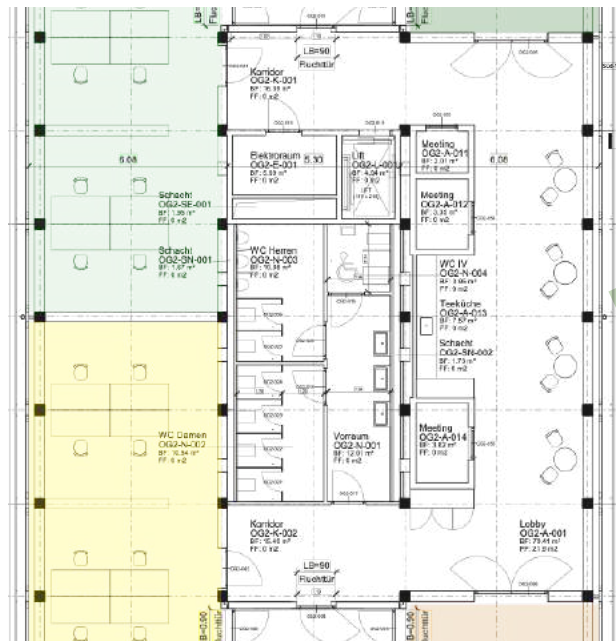
Your offices: Xm² with 1'000m² of furnished space on top.



Business Positive

On the floors, fully furnished and operated common spaces are shared by adjoining tenants.

For functions, where proximity counts: Coffee, phone calls, chitchat.



The use of the furnished common spaces is factored in the tenant's lease agreements per quota, at around 10% of their rented space.

Together with the ground floor quota of 20%, each lease agreement roughly combines 70% exclusive company space and 30% shared spaces.

The actual value of access being significantly higher.

Upper Floors

Your offices XXXm² – with 1'000m² of expansion space

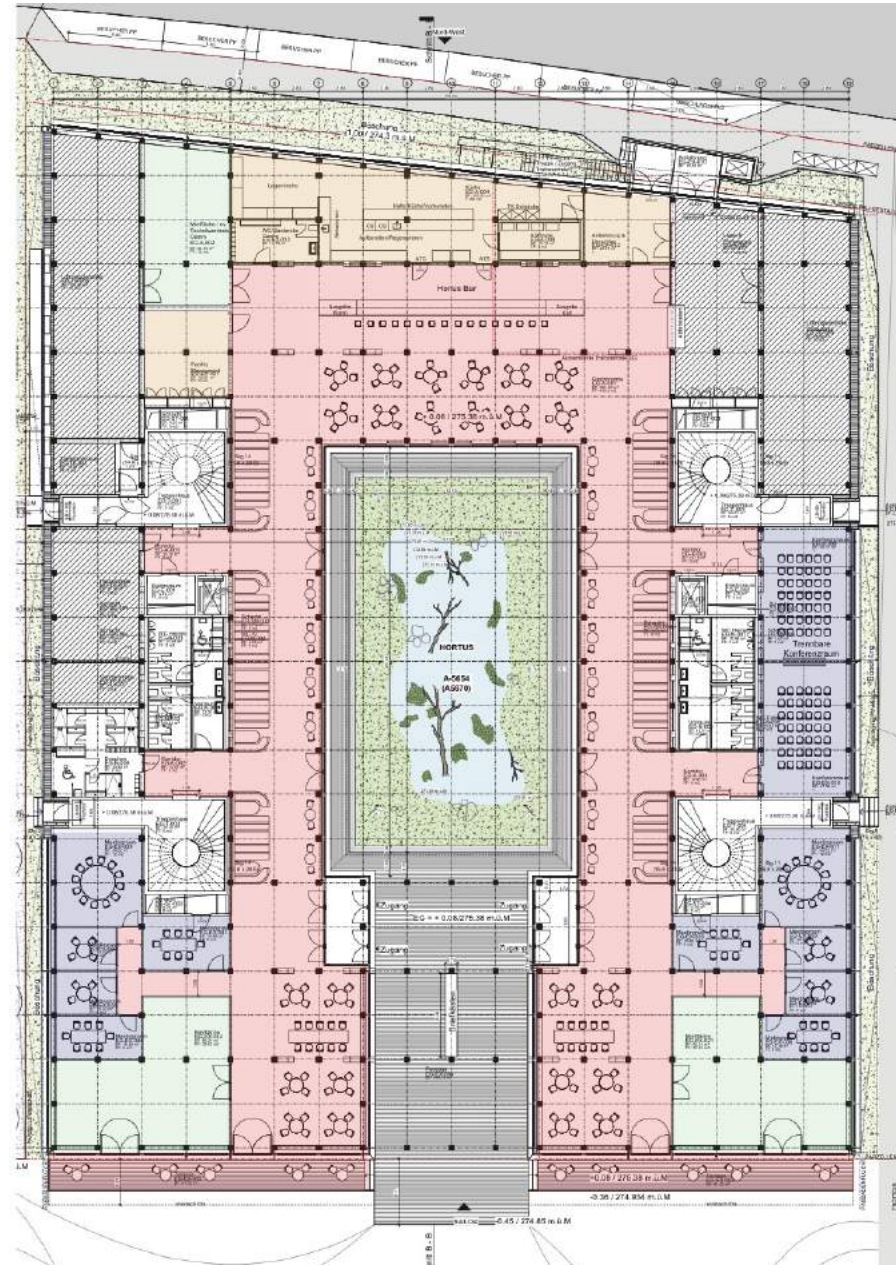


Business Positive

Public ground floor
working lounge (pink)
with meeting center (purple)
and services (green),
furnished, catered and operated.

For tenants an integral part
of their working environment.
Maybe more important
than the office itself.

Ground Floor



The use of the ground floor is factored in the tenant's lease agreement per quota, at around 20% of their rented space.

The entire working lounge (pink) is at the disposal of tenants' employees – to work, meet and eat (if they choose to). Rooms at the meeting center (purple) can be booked/rented per use.

The host has a management contract and is at the service of HORTUS tenants.



Business Positive



Human Positive

Your space includes the ground floor, which is an expansive, catered working and meeting lounge for tenants and visitors



Further Information.

www.hortus.ch

The full dossier, films and images

www.hochparterre.ch/hortus

An outside perspective by Switzerland's premier architecture and design magazine.

www.sip-baselarea.com

Introduction to Switzerland Innovation Park Basel Area.

www.maincampus.ch

Introduction to Switzerland Innovation Park Basel Area.

www.senn.com

Everything you need to know about SENN

Thank you.



