

THIS USED TO BE  
MY HOUSE

P  
U  
R  
N



Euroopa Liit  
Euroopa  
Regionaalarengu Fond



Eesti tuleviku heaks



1.

Steigereiland 1.0

2.

Status quo

3.

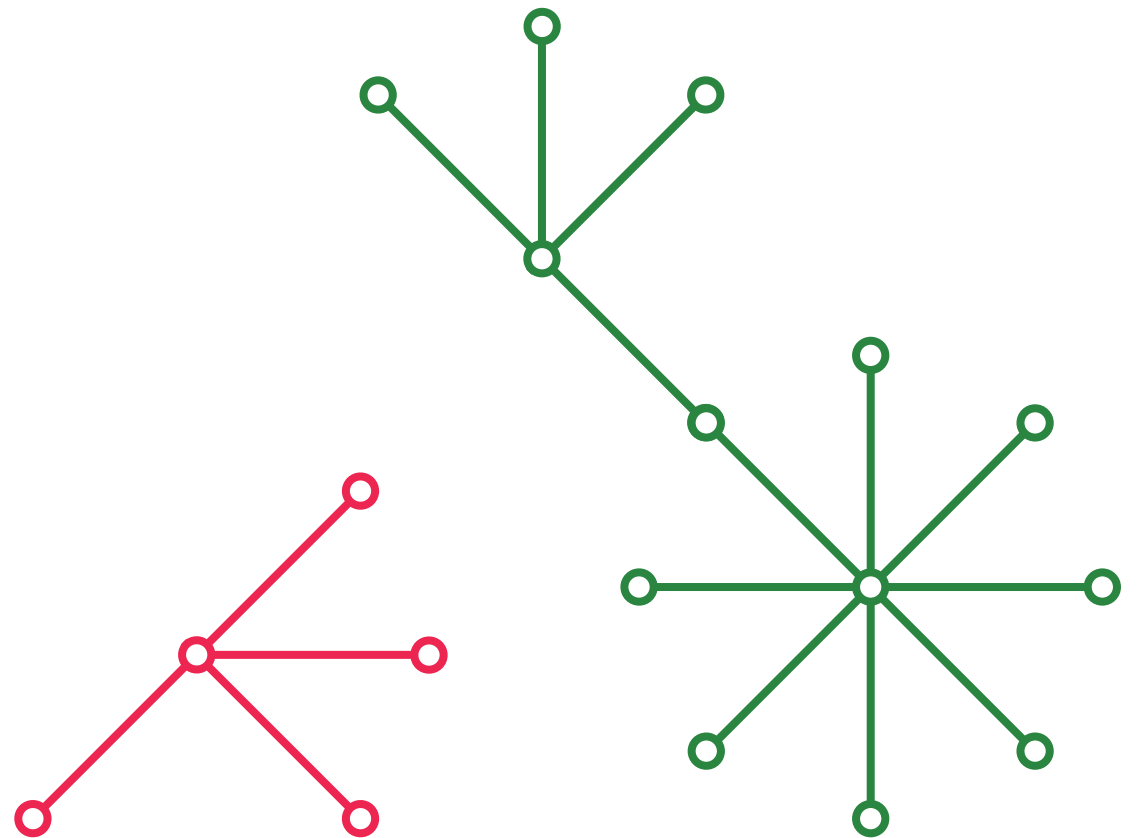
Upfrnt

4.

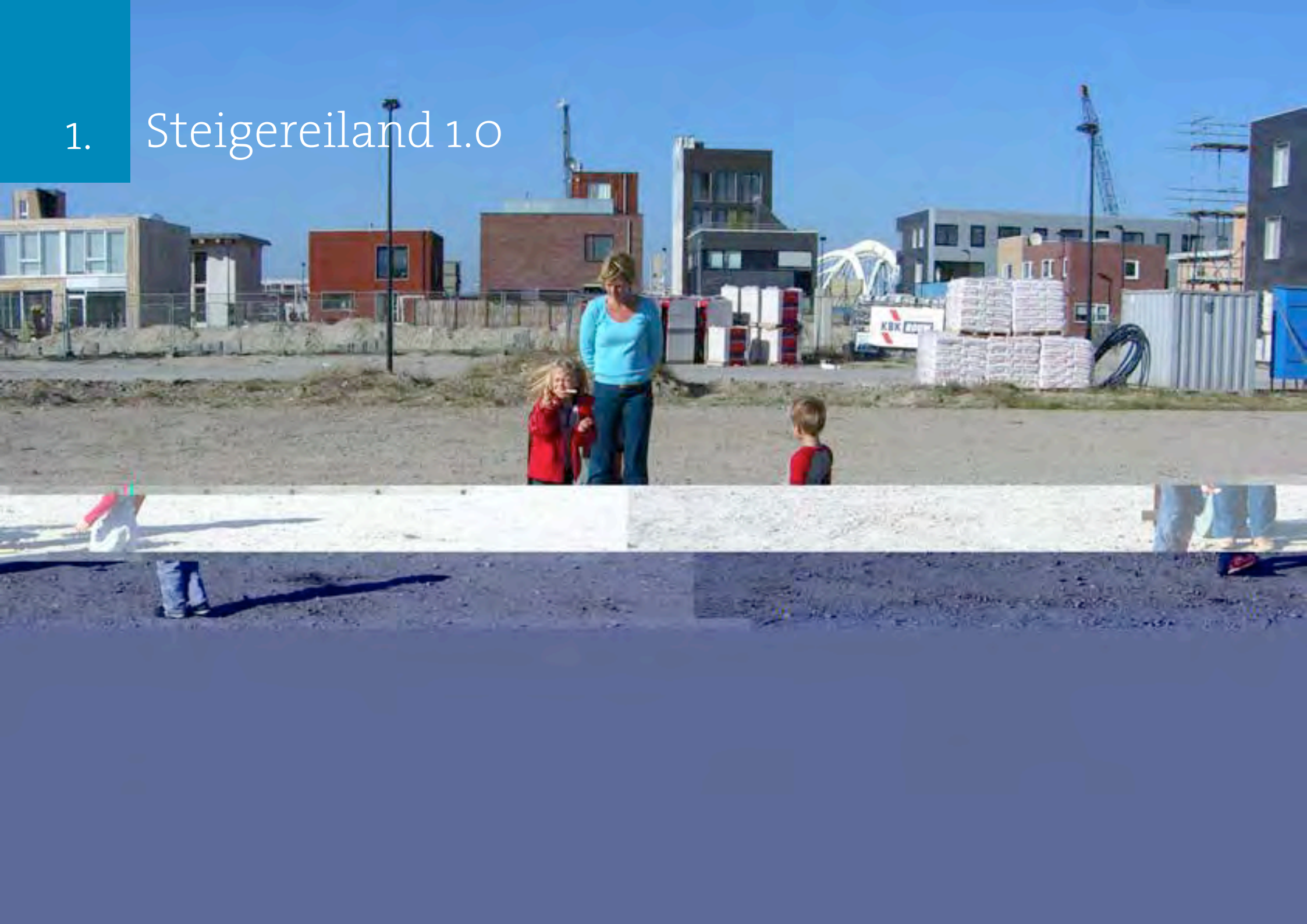
Steigereiland 2.0

5.

The next generation



# 1. Steigereiland 1.0



1.

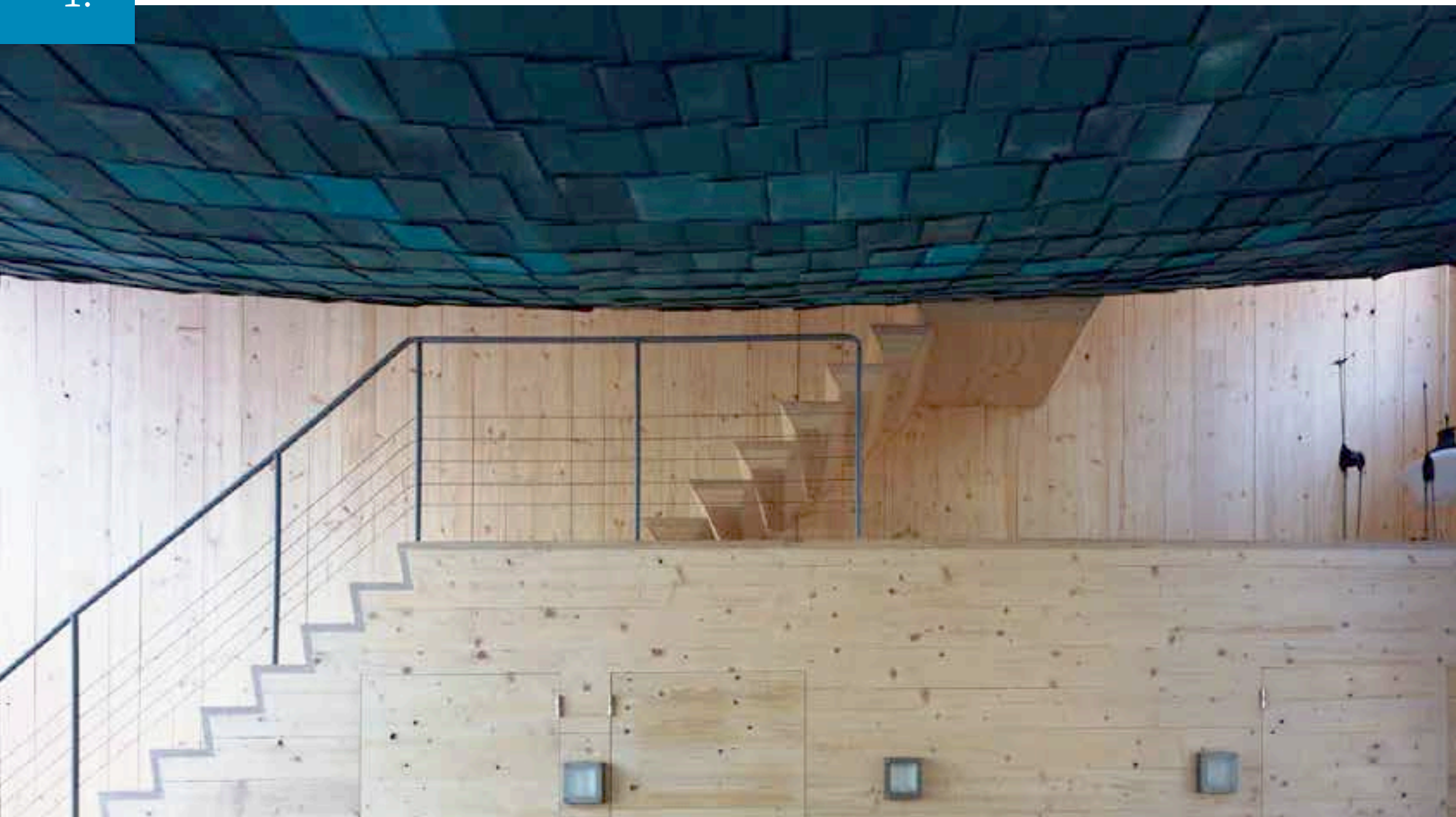




1.



1.



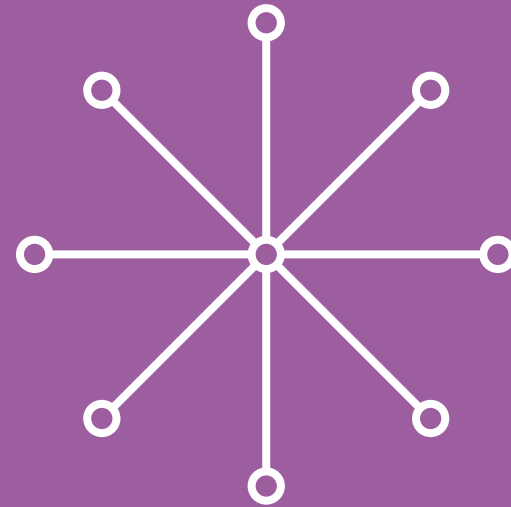


1.

Architecture =  
built environment



## 2. .Status quo





use of our earth

2.





1 ha.

1 ha.

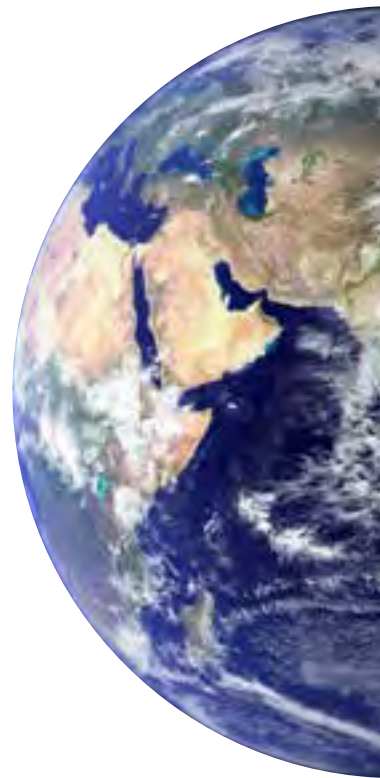


available: 11,9 biljoen gha

neccesary :18 biljoen gha

world

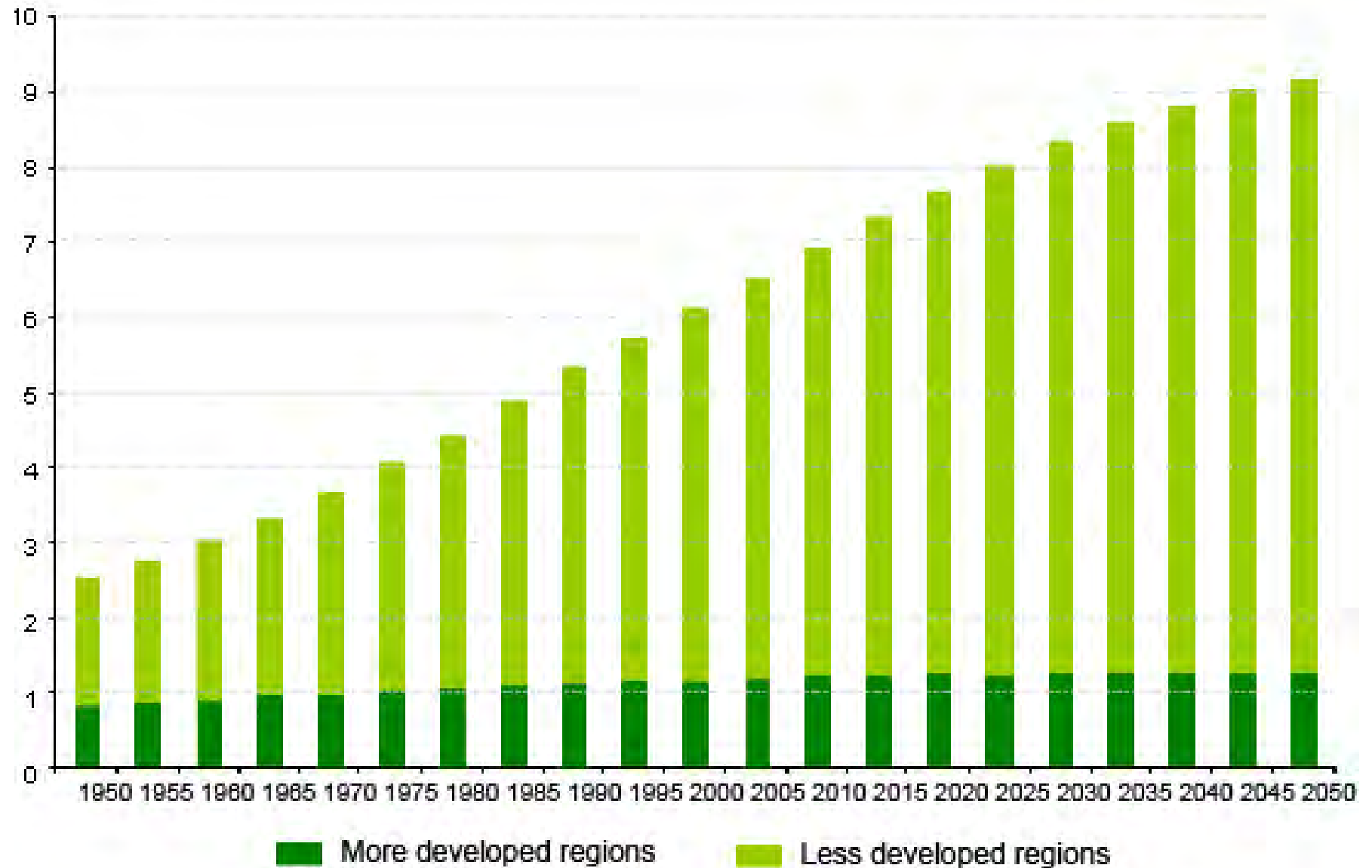
2.





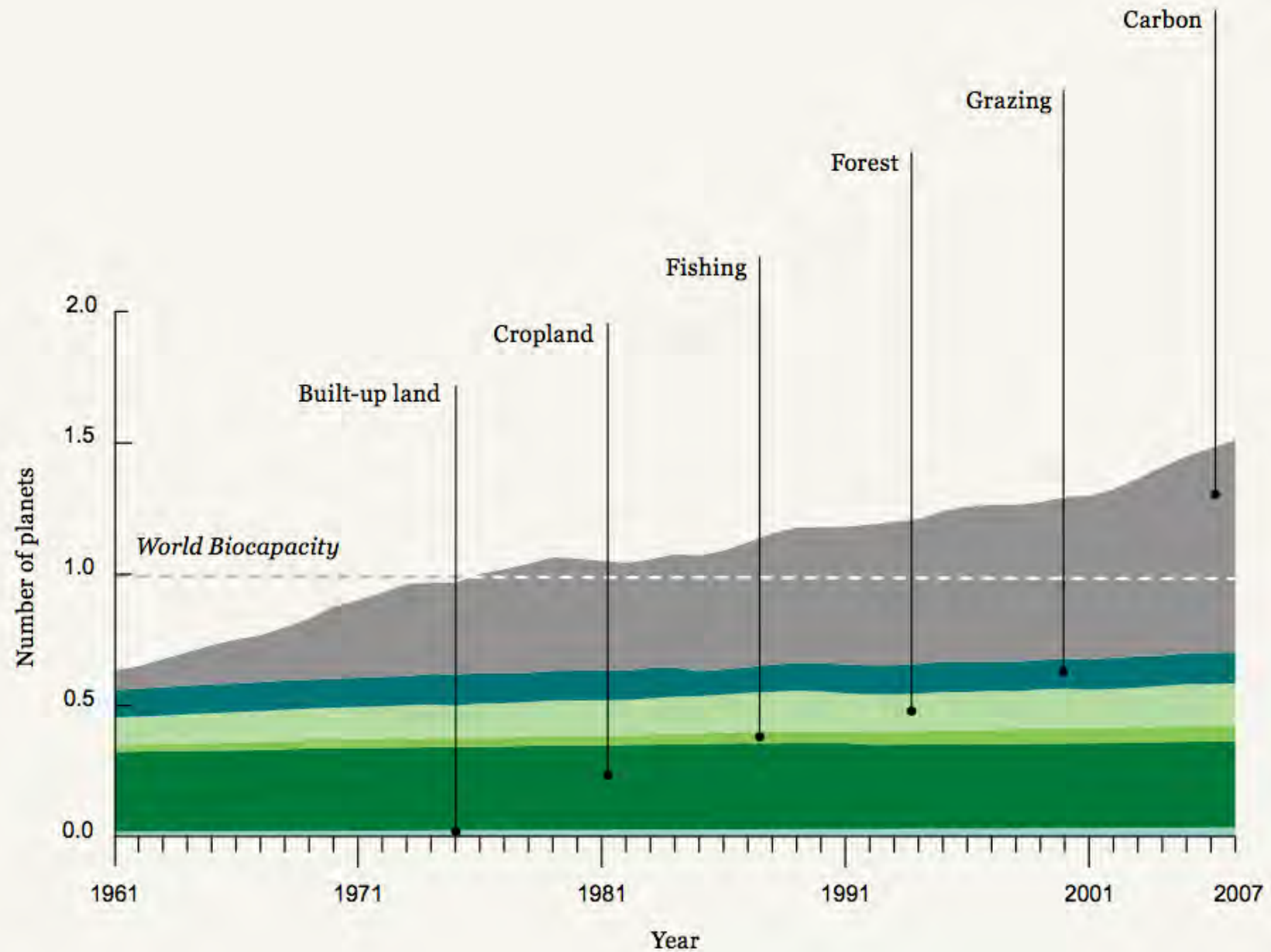
# world population

2.



# Growth Ecofootprint

2.





# Growth Economy

2.





1 ha.

1 ha.

1 ha.

1 ha.

1 ha.

1 ha.

NL

6 gha. / inhabitant NL

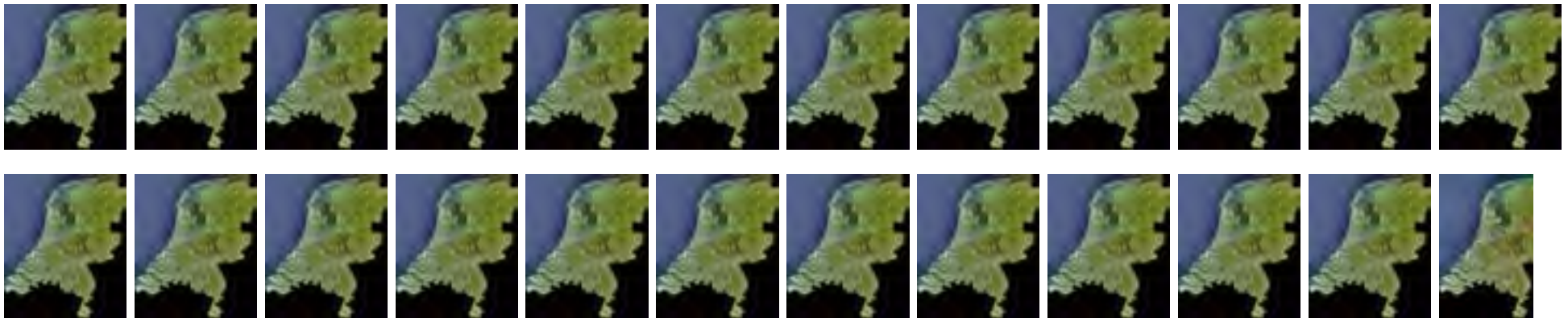
NL 4.152 .800 ha.

16,4 mill inhabitants (2007)

98.400.000 gha. necessary

23,7 x NL

2.







1 ha.

1 ha.

1 ha.

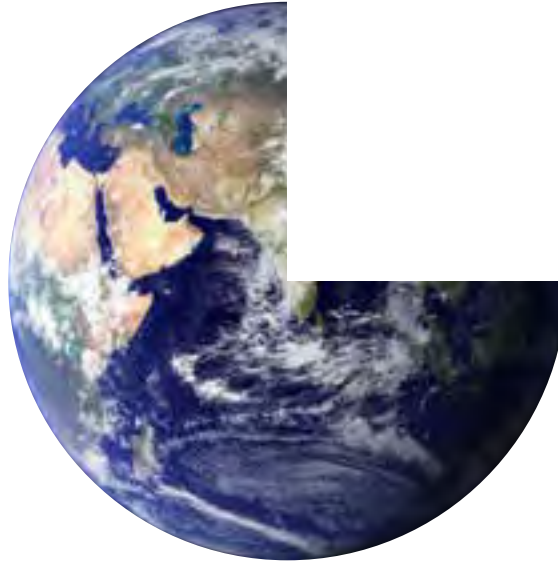
1 ha.

1 ha.

1 ha.

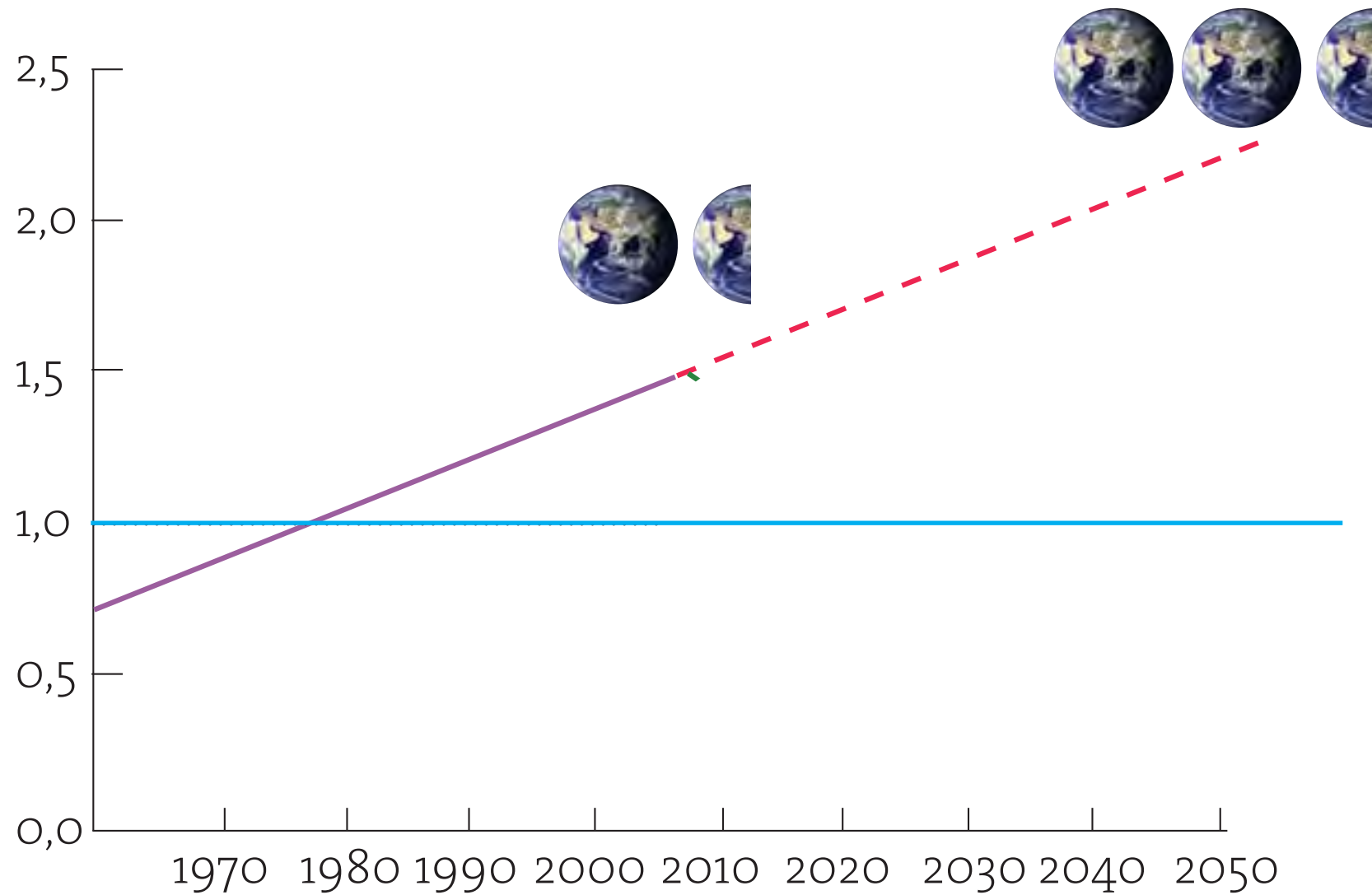
NL

2.



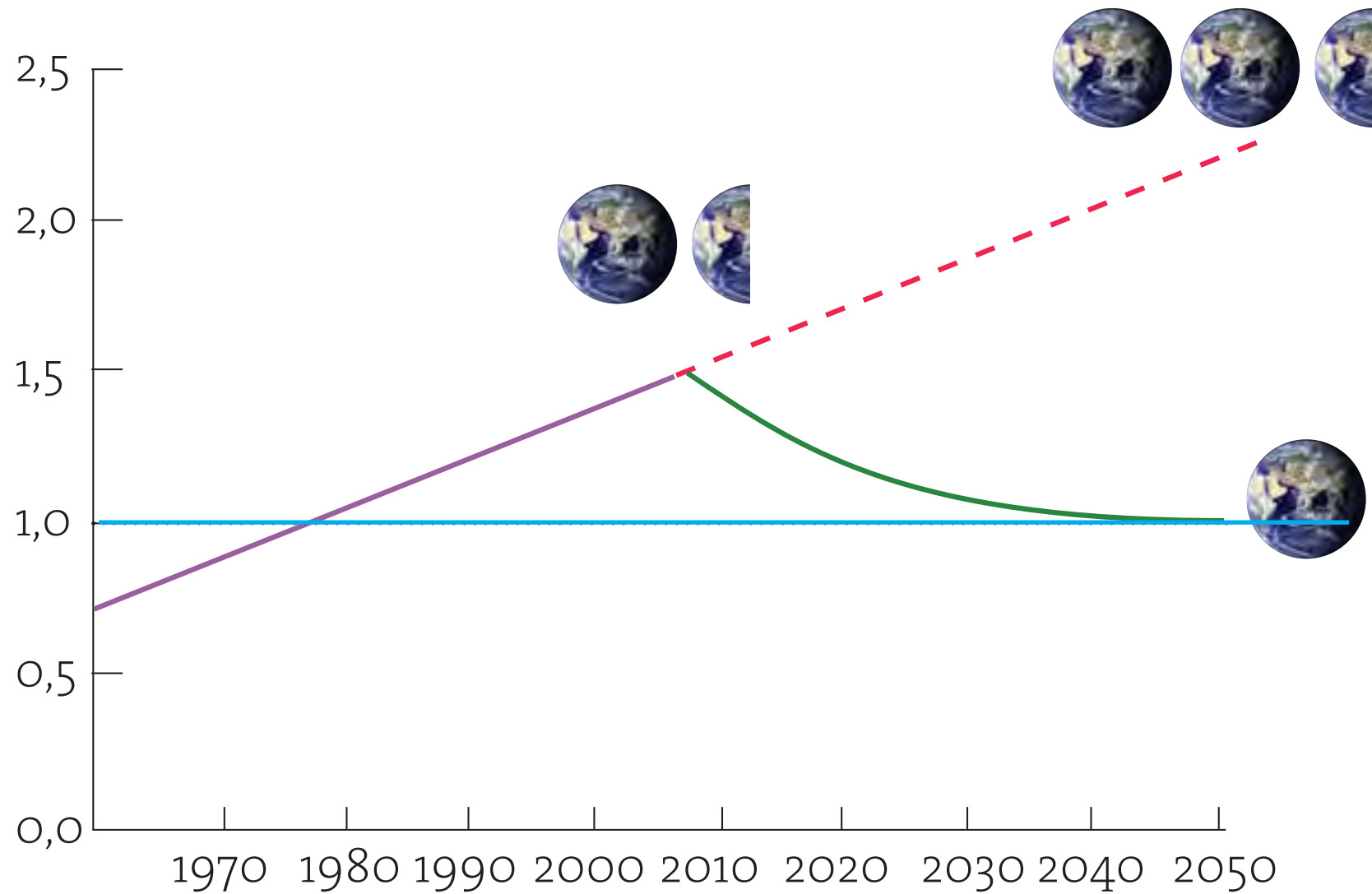
# global eco footprint

2.



# global eco footprint

2.





# economy, ecology & morality compete

2.



less terrible

less bad

improve within field of problem



economy, ecology & morality  
**compete**

2.



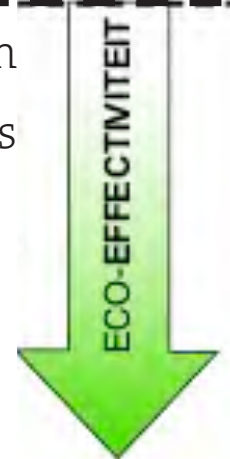
less terrible

less bad

improve within field of problem

solve outside field of problem

inter-generative solutions



economy, ecology & morality  
**strengthen each other**

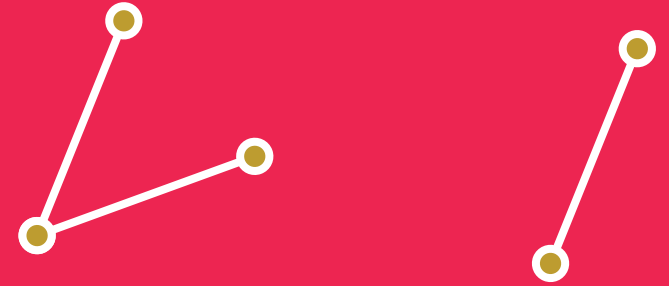
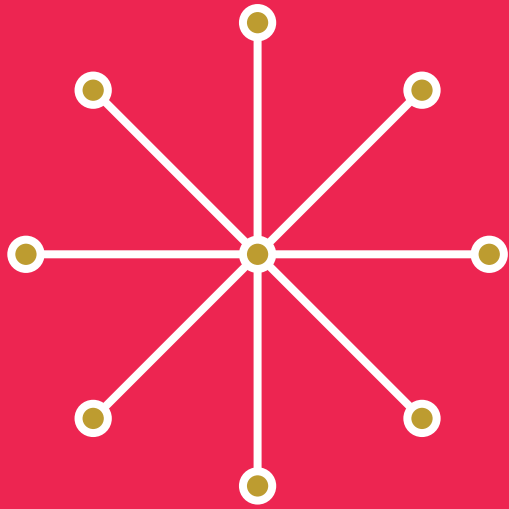
2.

impuls response

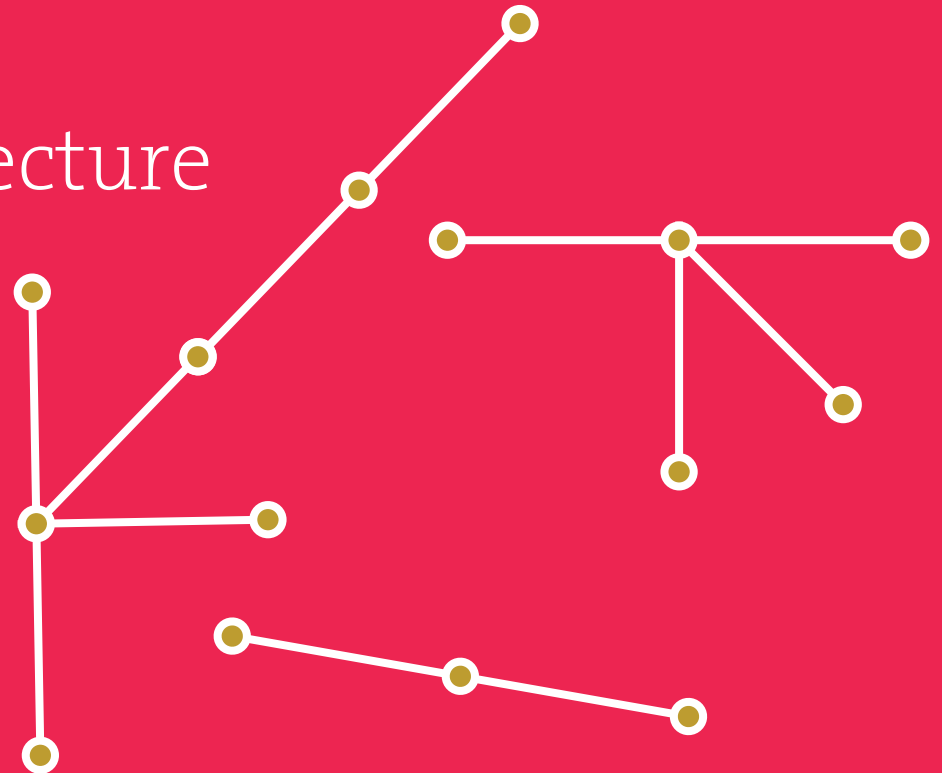


2.

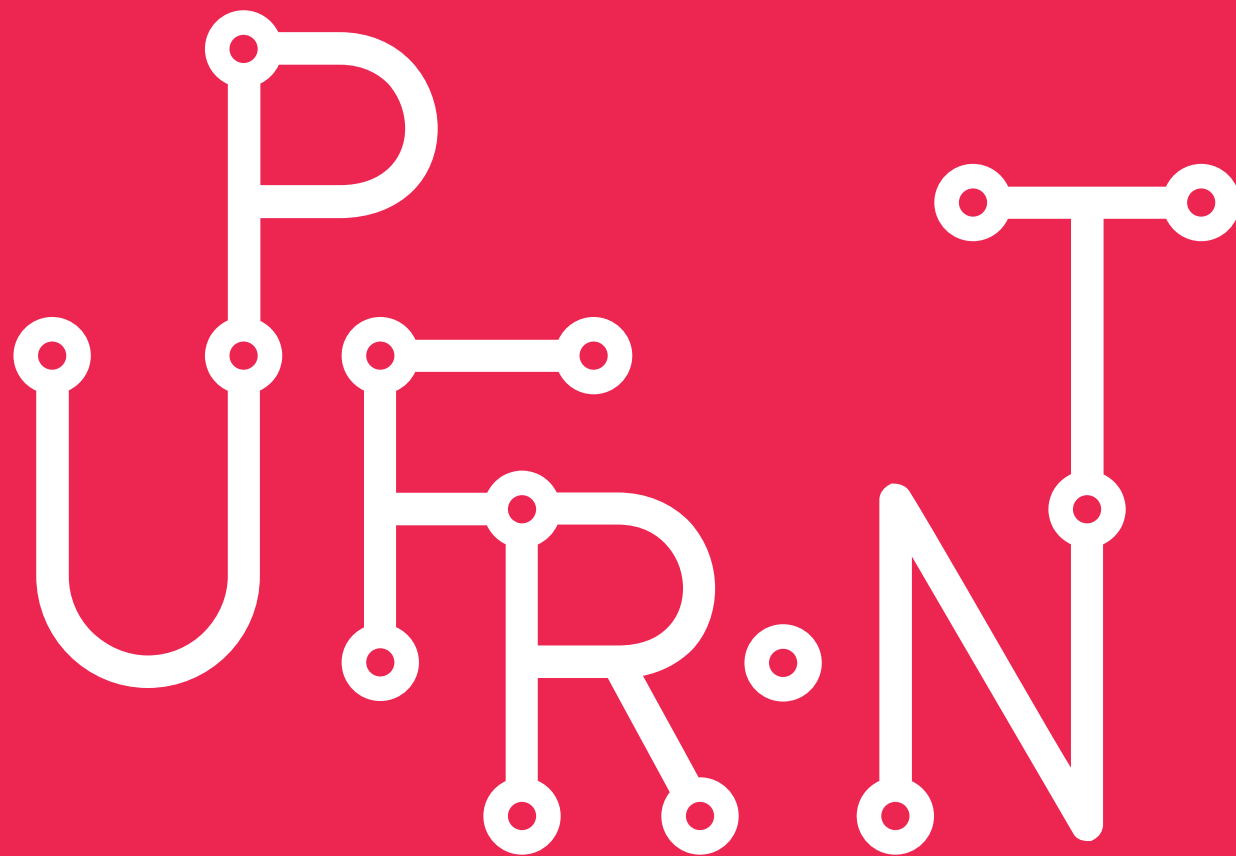
impuls   choice   response



### 3. The up-movement in architecture



3.





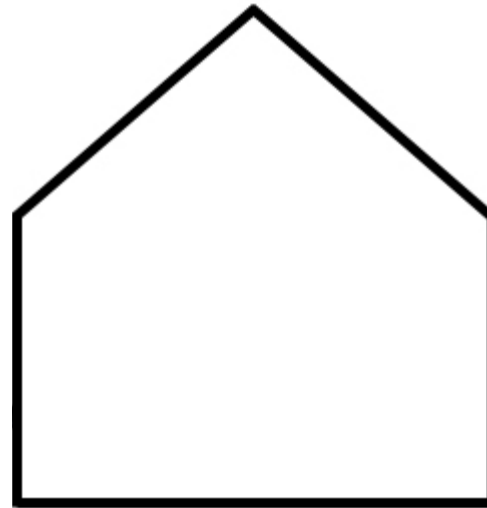
# needs and waste

energy → heat  
→ cold  
→ electricity  
→ gas

light → (day)light  
air → fresh air

drink water → drinkwater  
rain water → flushwater

food →



heat →  
cold →

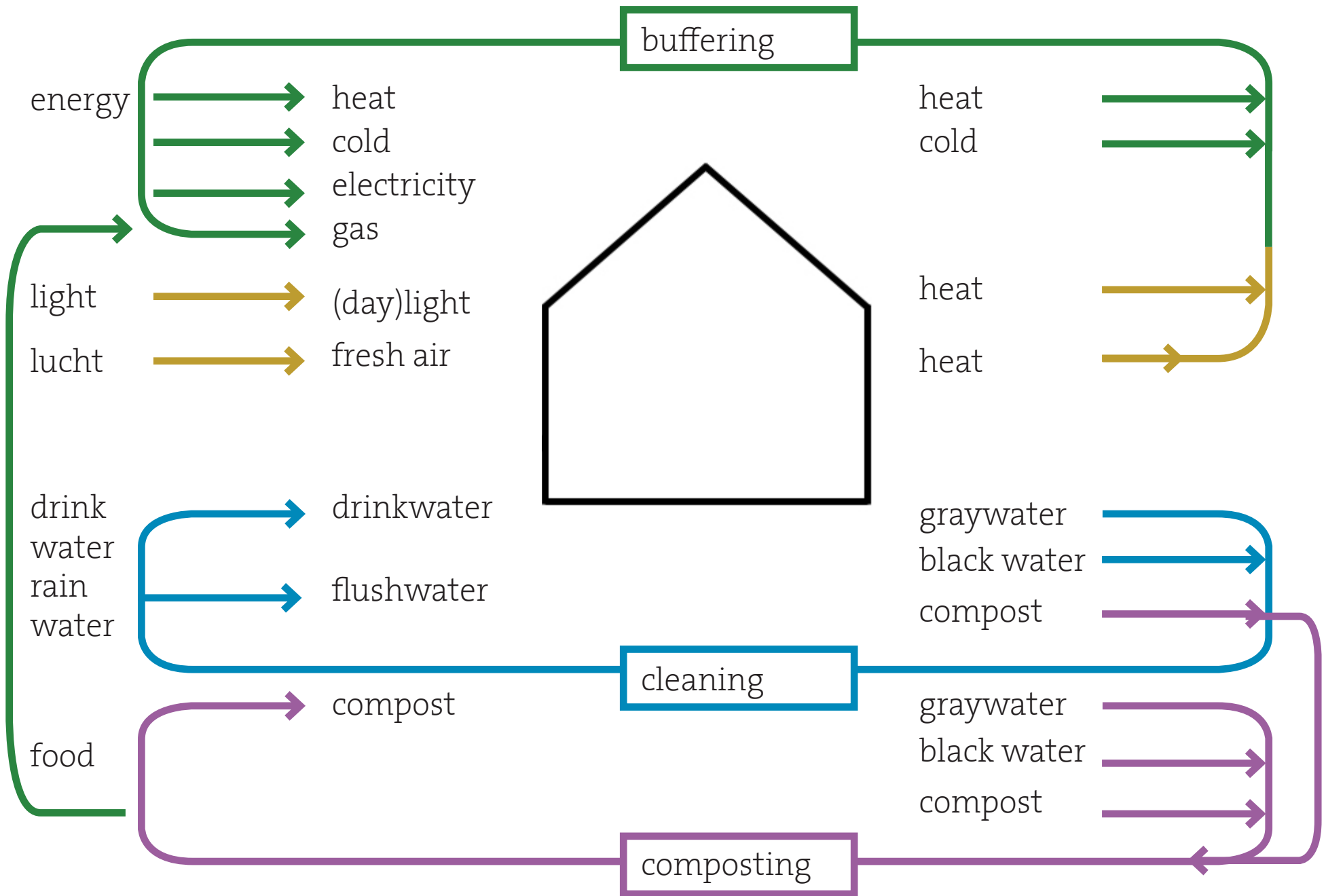
heat →  
heat →

graywater →  
black water →  
compost →

graywater →  
black water →  
compost →

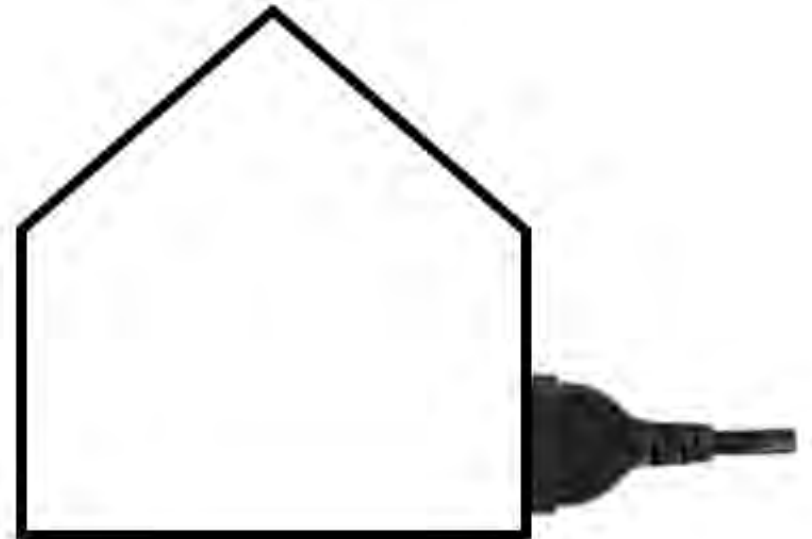
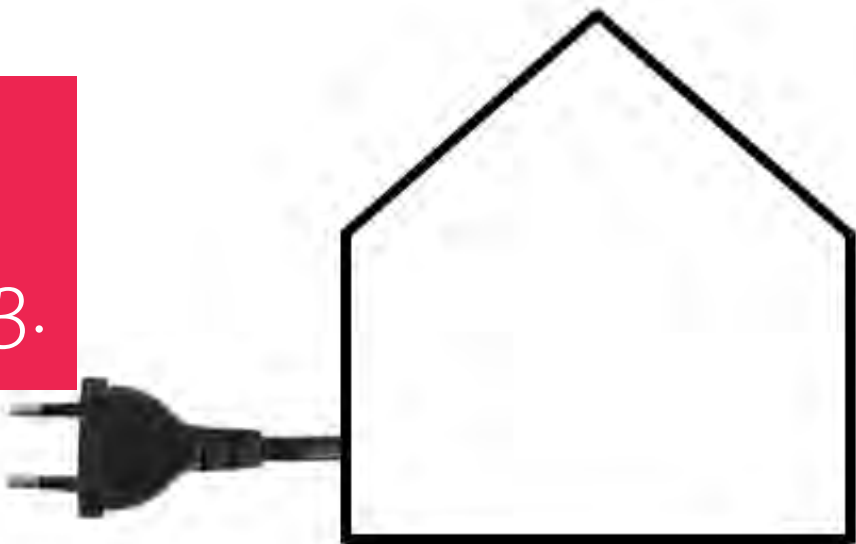
# closing circles

3.



# Ambition energy delivery

3.



business as usual

investment + energy



3.

today

20jr.



passive

investment + energy



today

20jr.

3.

investment

+ shadowcosts



today

20jr.

3.

investment



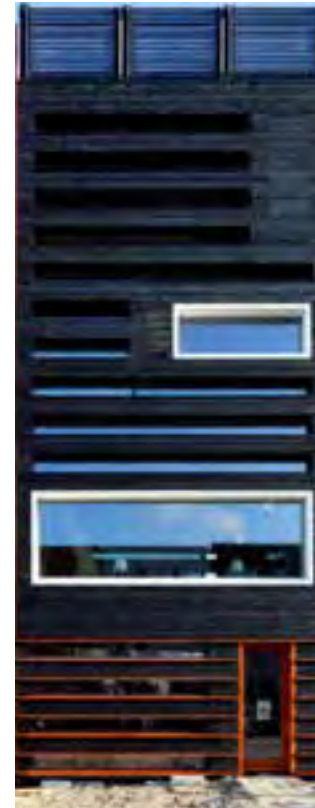
+ shadowcosts



3.

today

20jr.



## 4. Steigereiland 2.0

cradle 2 cradle

passive

energy neutral



spacial:

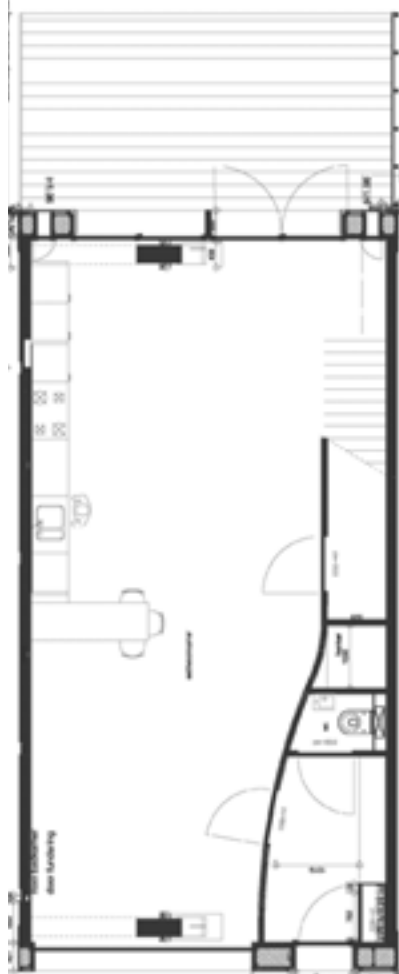
- proportion (1m longer)
- different floors
- different views

technical:

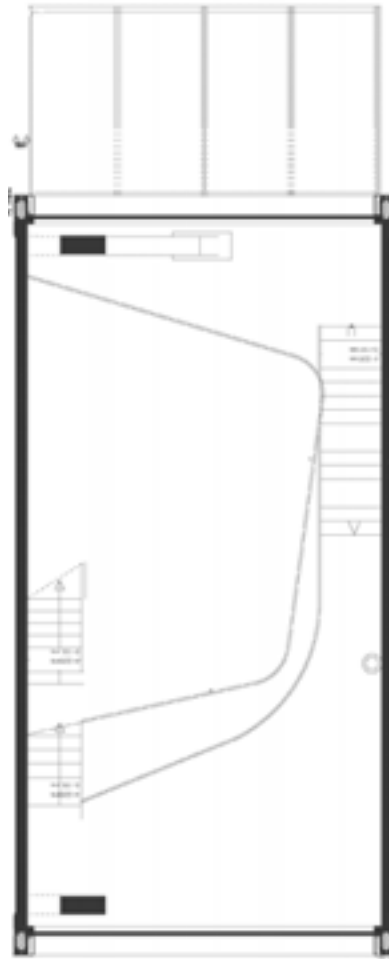
- better insulation
- reusable materials / flexibel
- passive cooling (ventilation / pcm)
- efficient ventilation / heating
- sustainable tapwater heating
- energy use compensation



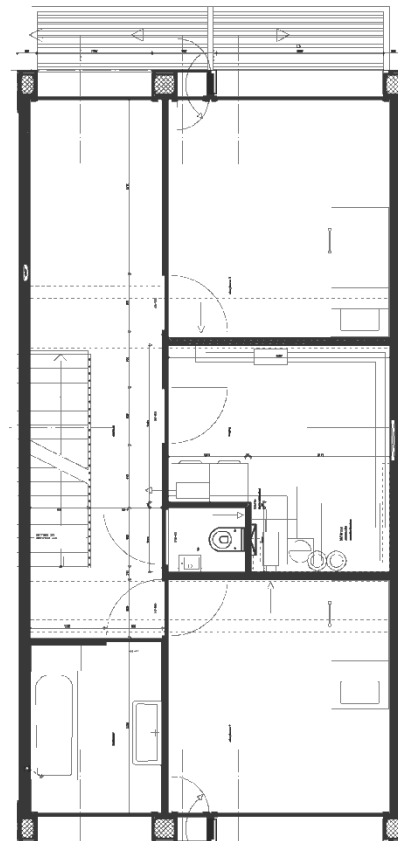
4.



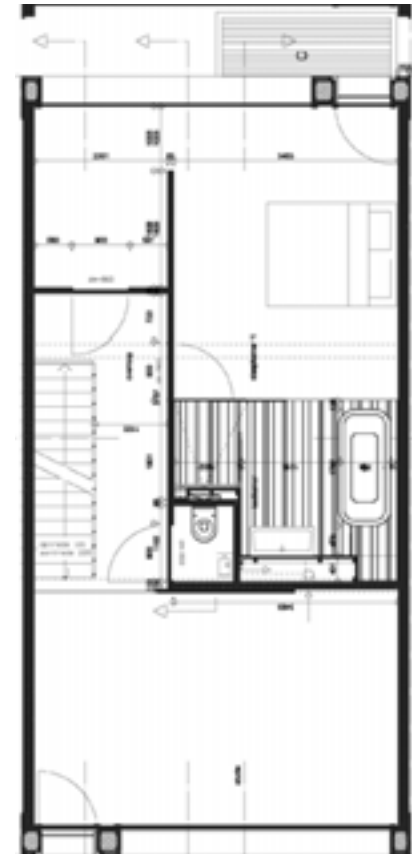
ground floor



1st floor

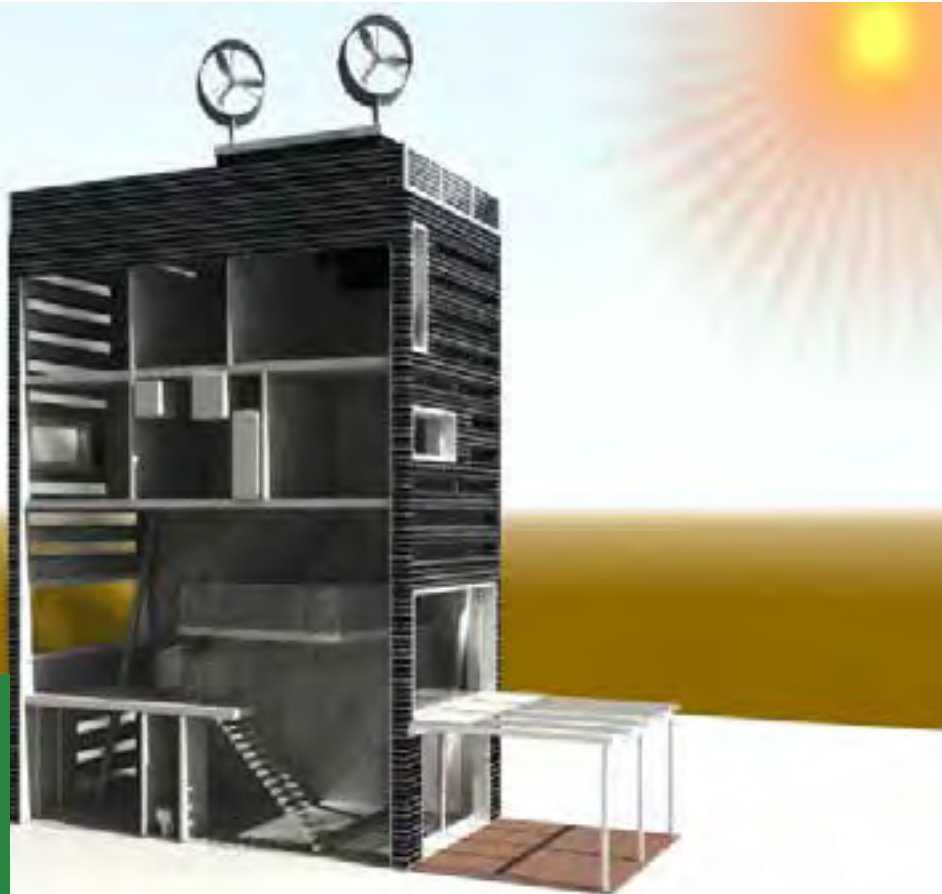


2nd floor

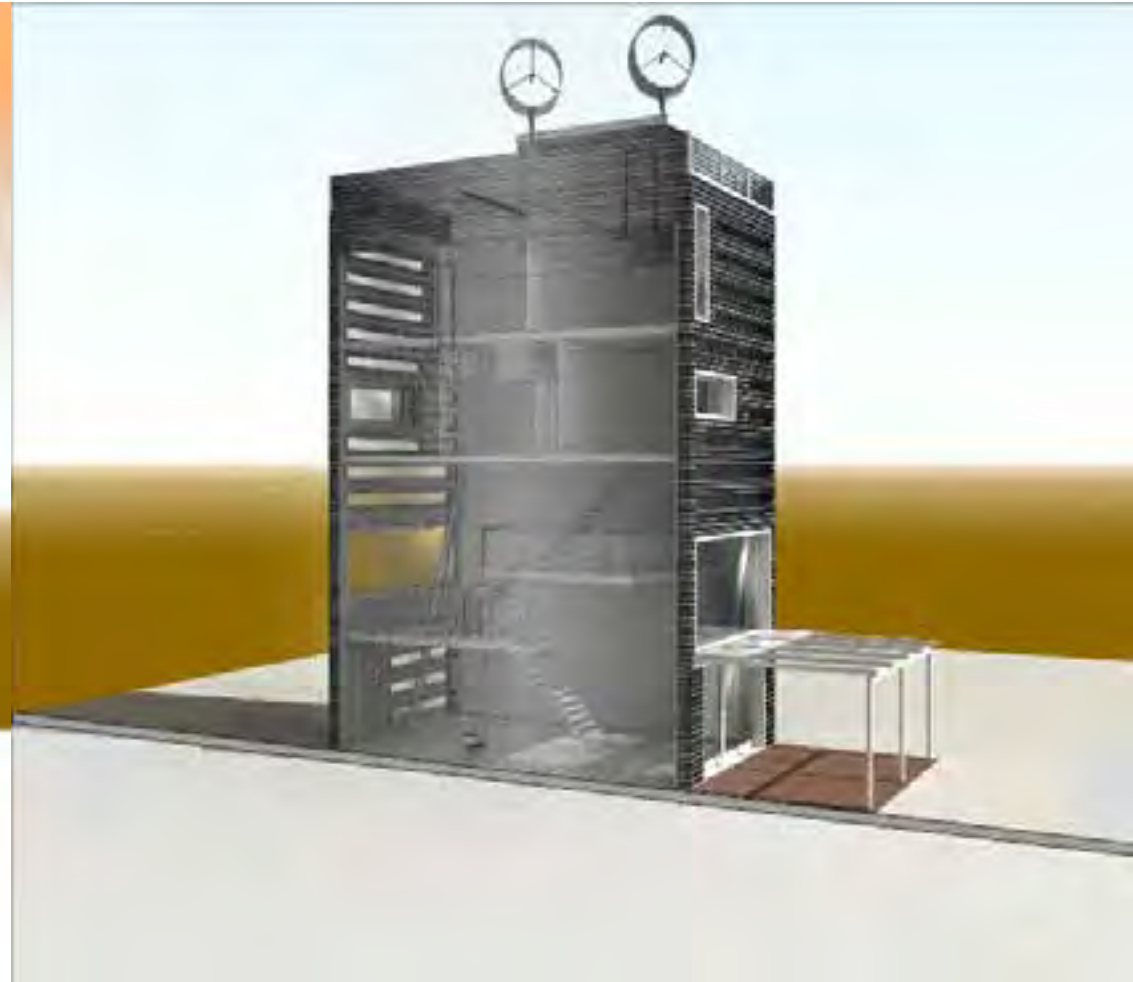


3rd floor

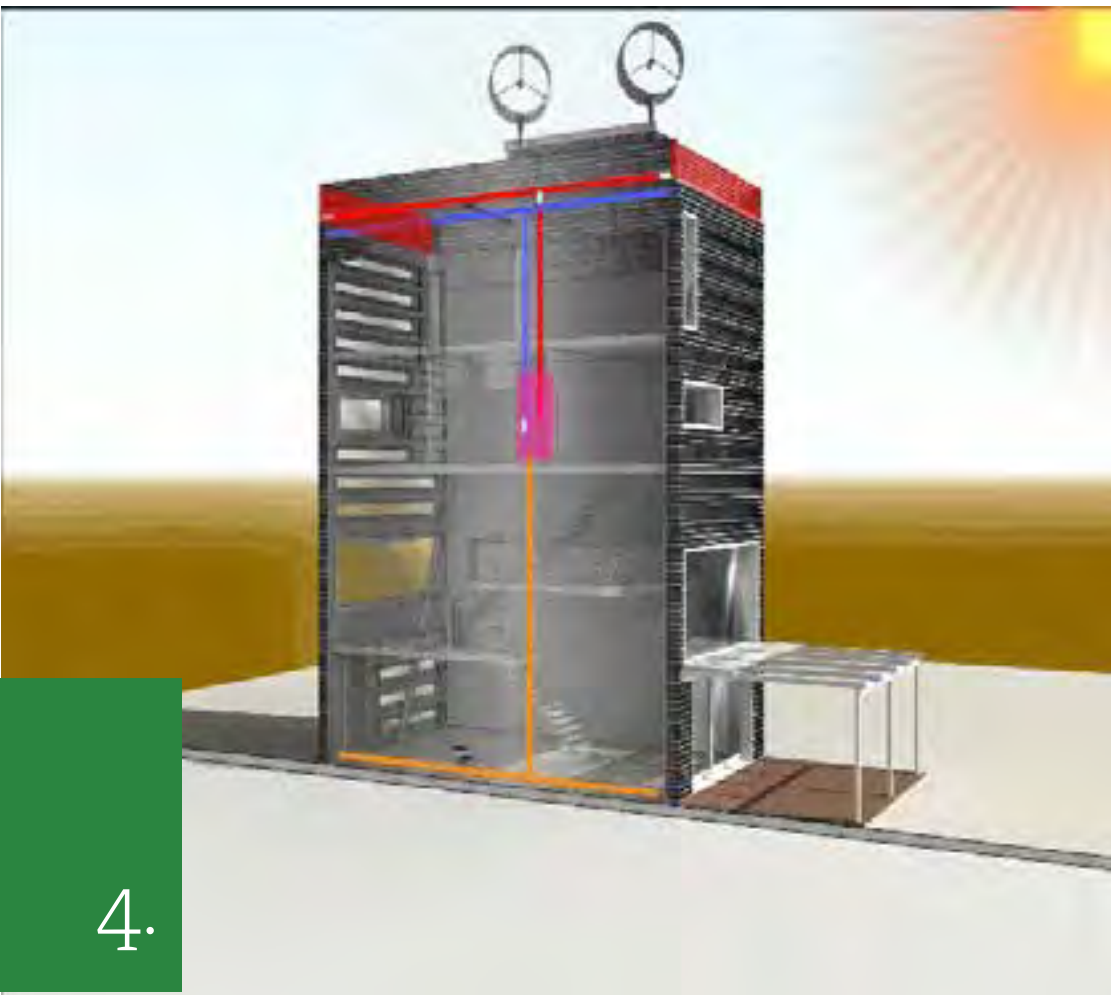
4.



passive sunheating

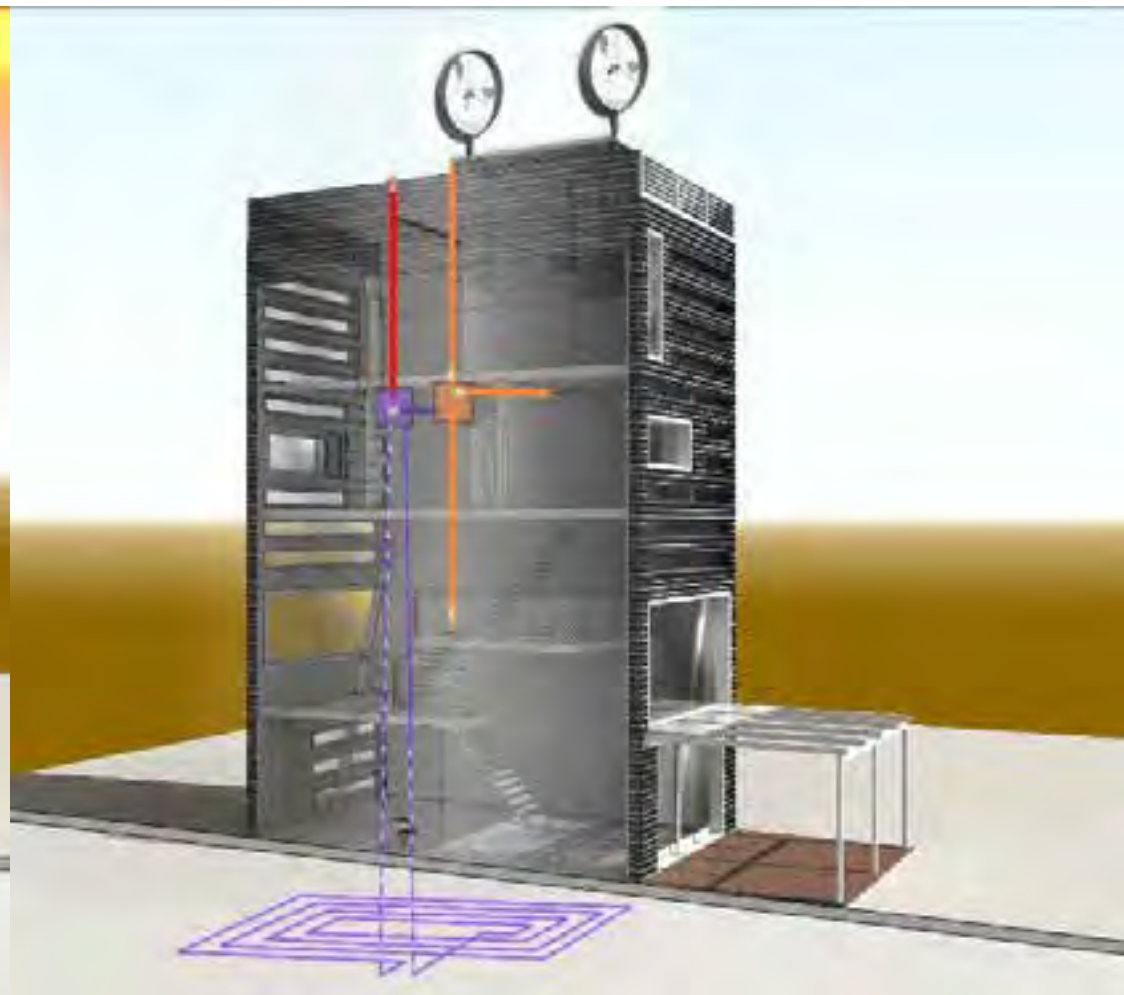


day-night ventilation



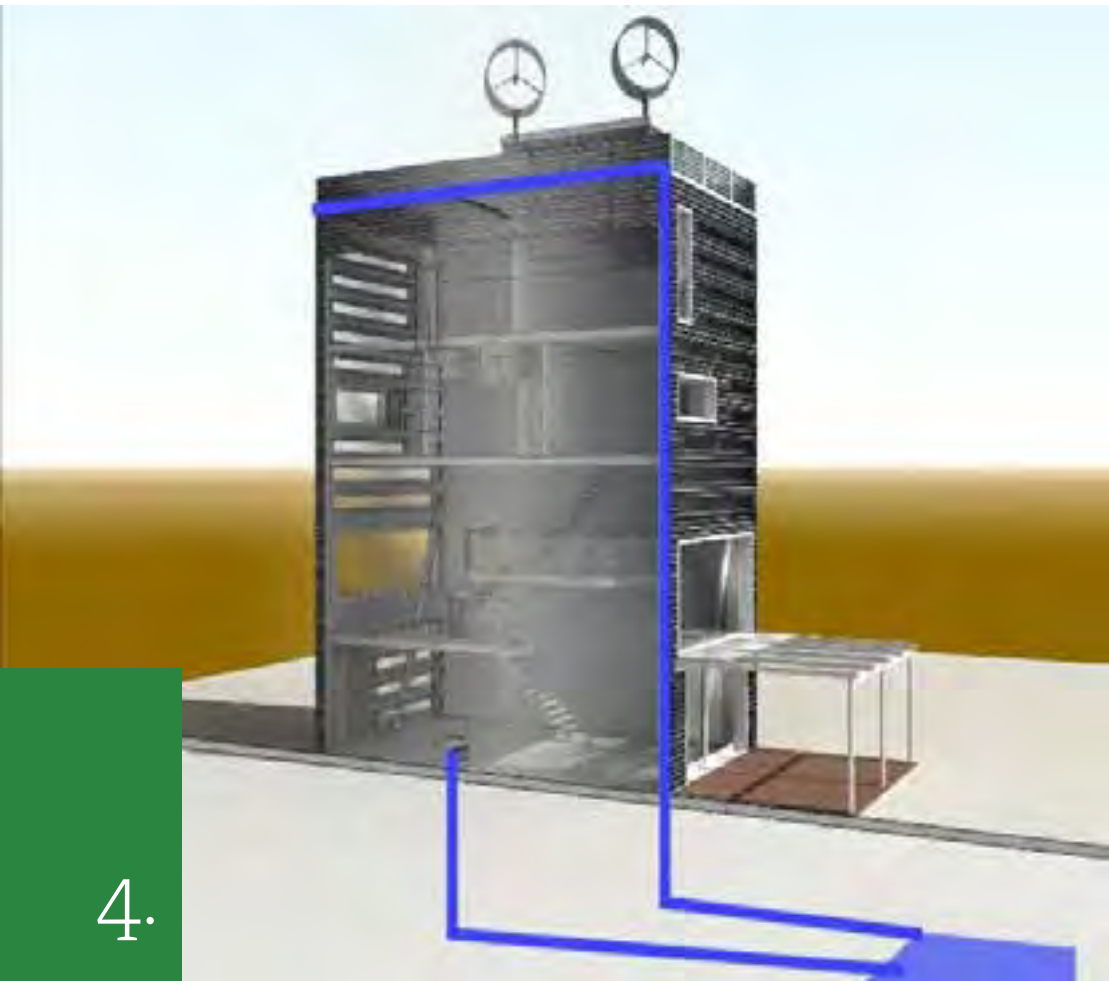
4.

active sunheating



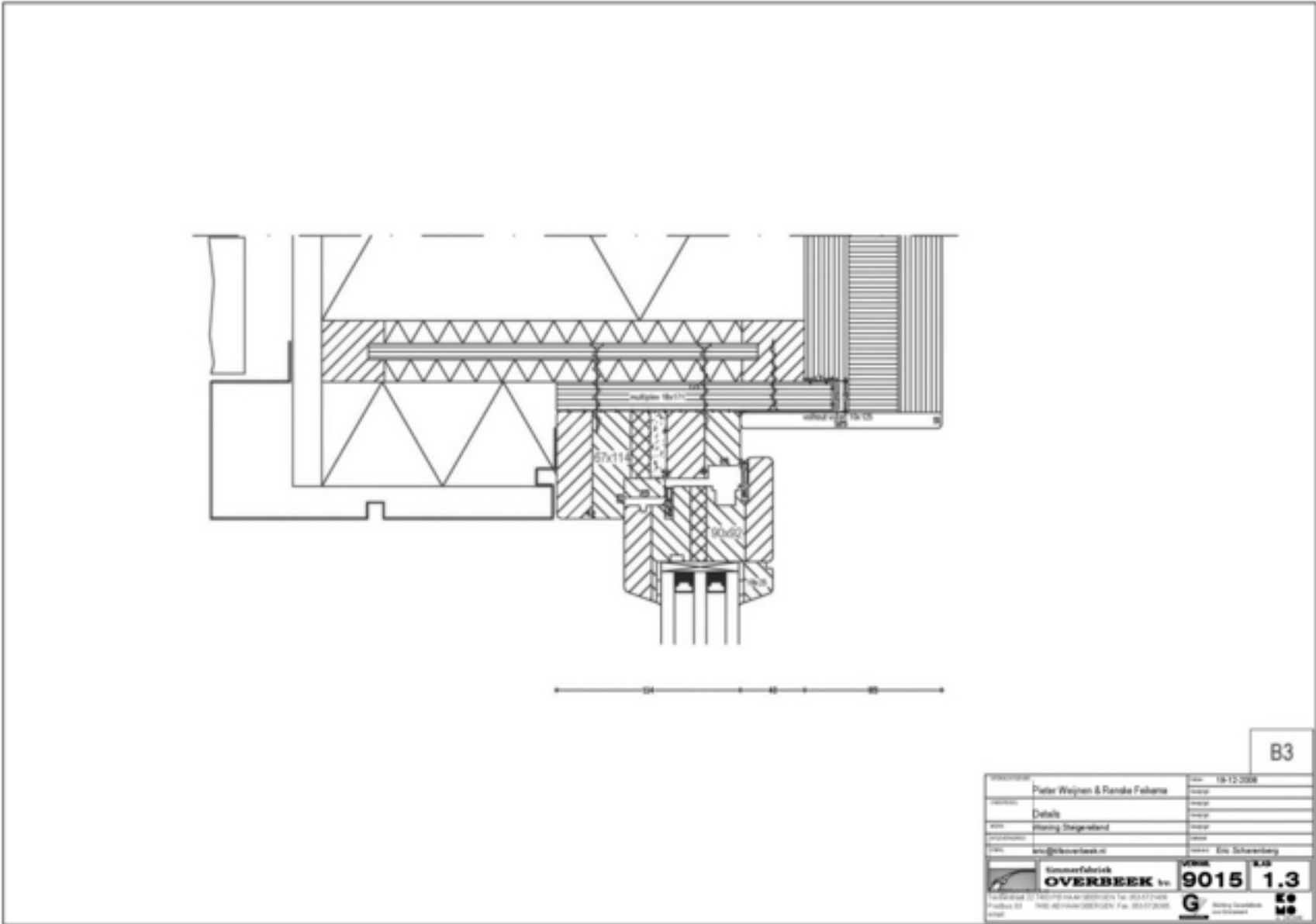
heat-exchange





4.

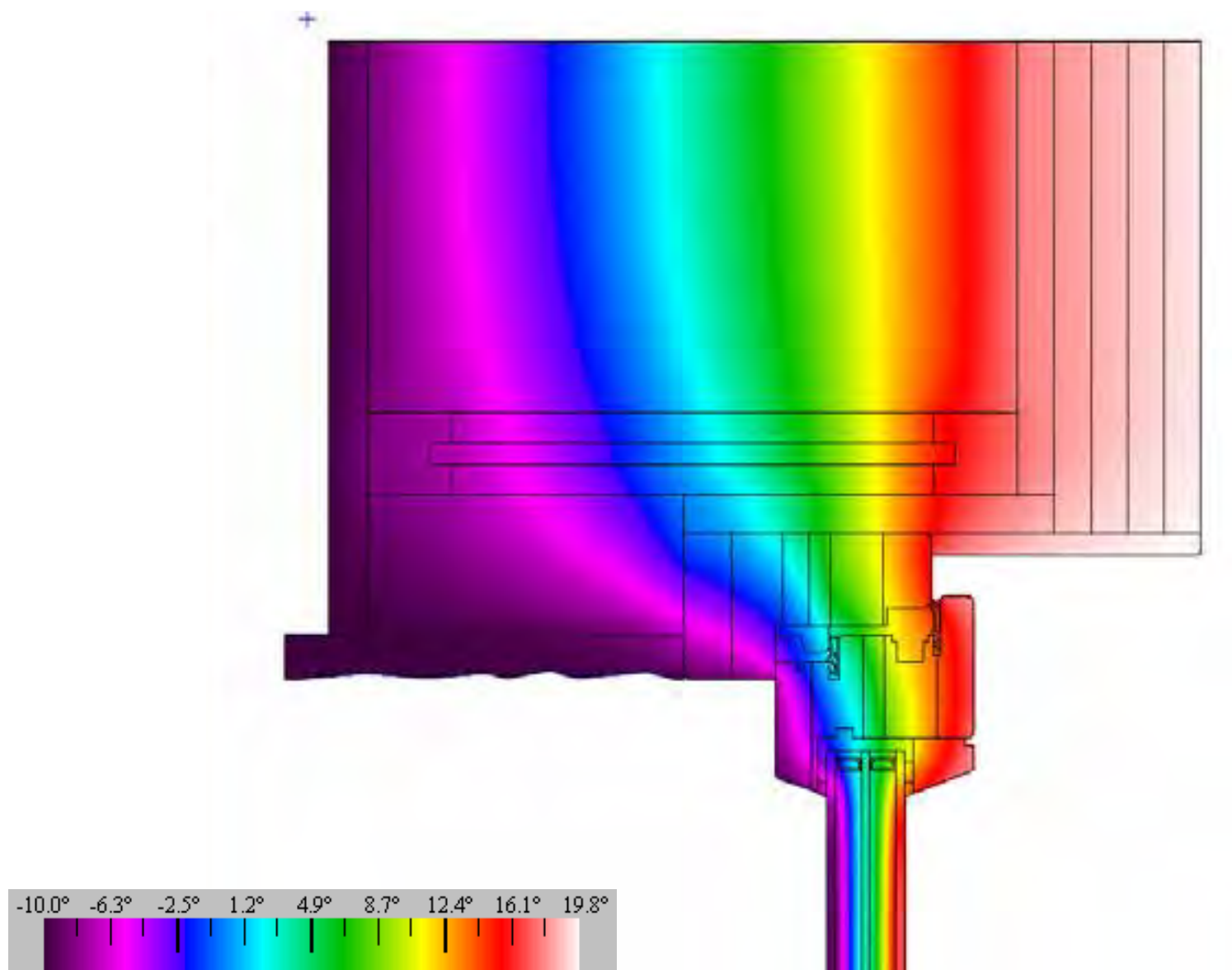
re-use of rainwater



B3

Website	Patier Weijnen & Rensde Fokema	Date	18-12-2008
Product		Material	
Details		Material	
Room	Storing Stingerwoud	Material	
Manufacturer		Material	
E-mail	info@schuermans.nl	Owner	Eris Schuermans
 <b>KrommerFabriek OVERBEEK</b>		<b>9015</b>	<b>1.3</b>
Tel: 06-4300 1234   Fax: 06-4300 1235 E-mail: info@schuermans.nl		<b>G</b>	<b>KOM</b>

4.

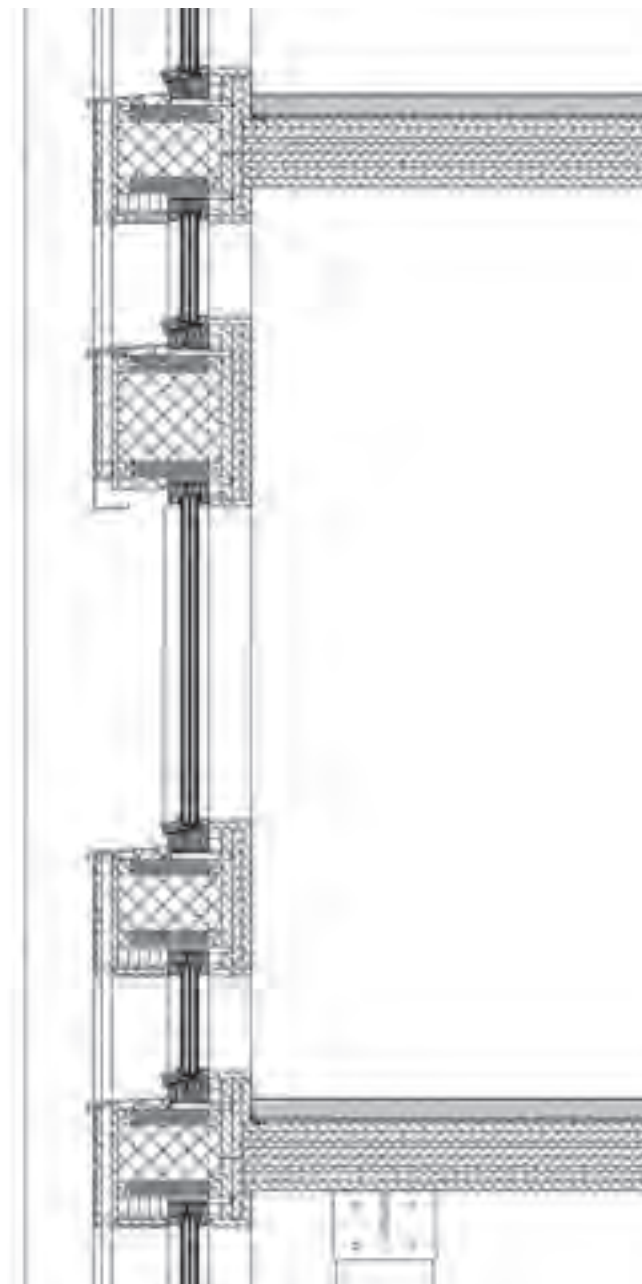


4.





4.



4.



use of wood  
walls: Lenotech  
facades: leno-kerto,  
FinnJoist with  
insulation  
floors: Lenotech  
cladding: charred larch



storage CO<sub>2</sub>  
less primair energy  
light material,  
handleable



See For You • Föllmi Photography





Insulation : woodfiber

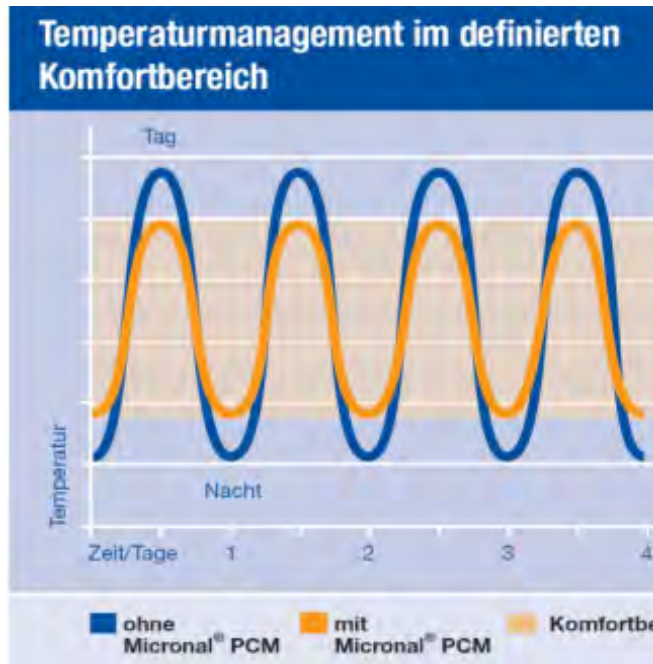
organic insulation material  
- temperature balancing  
effect

$\lambda = 39 \text{ mW/m}^2\text{K}$   
open damp diffusion

use in facades (30 cm)

4.

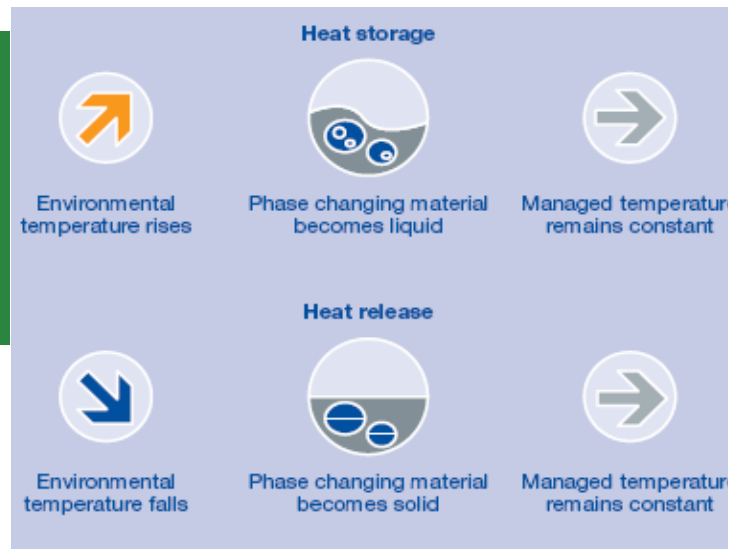




Lebast

Limestuc with PCM  
(Phase Changing  
Material)

based on paraffine  
melts by 21 degrees  
celcius  
accumulates heat  
mixed in limestone  
panels  
used on highest floor





# Blower door test

4.



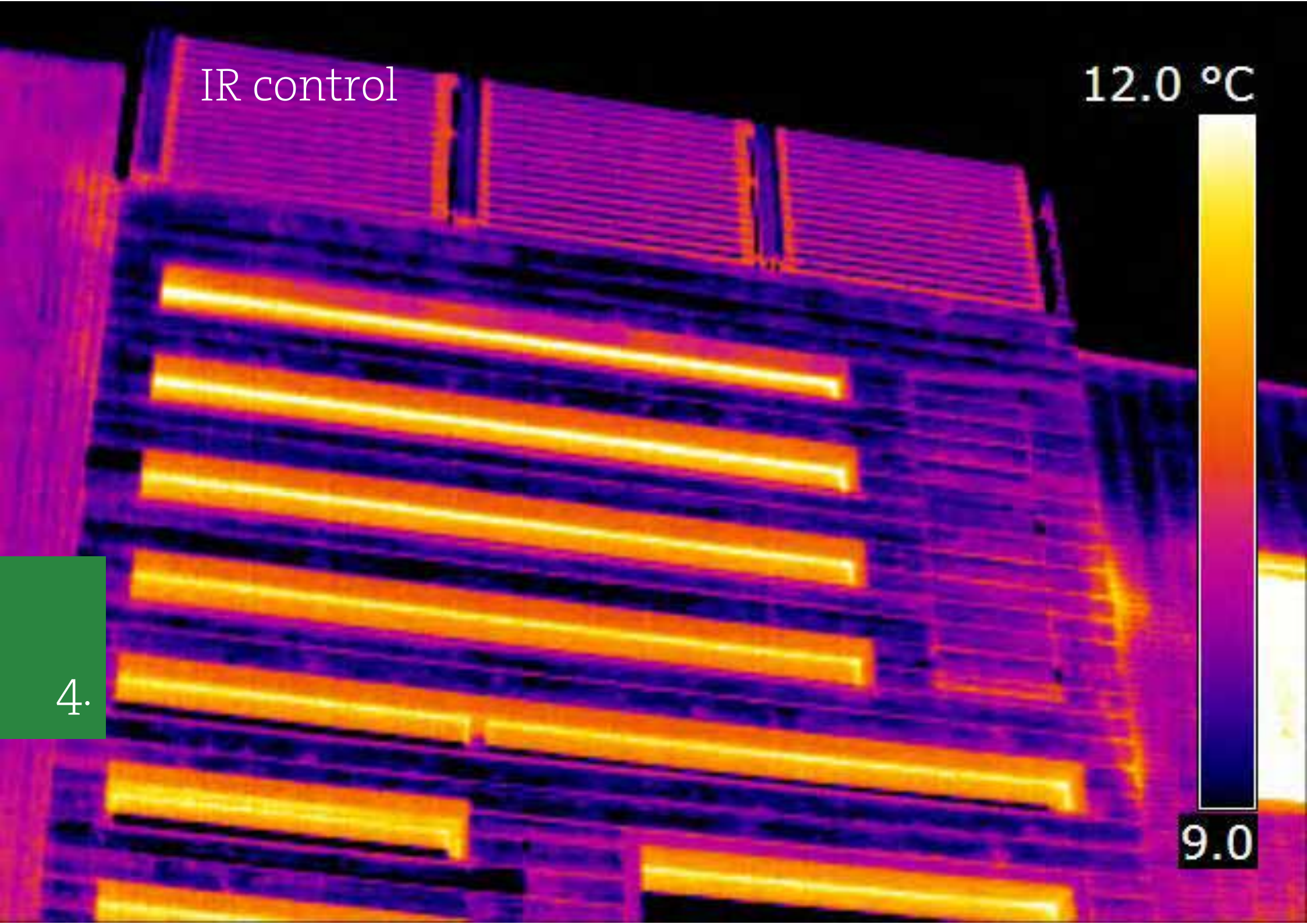


IR control

12.0 °C

4.

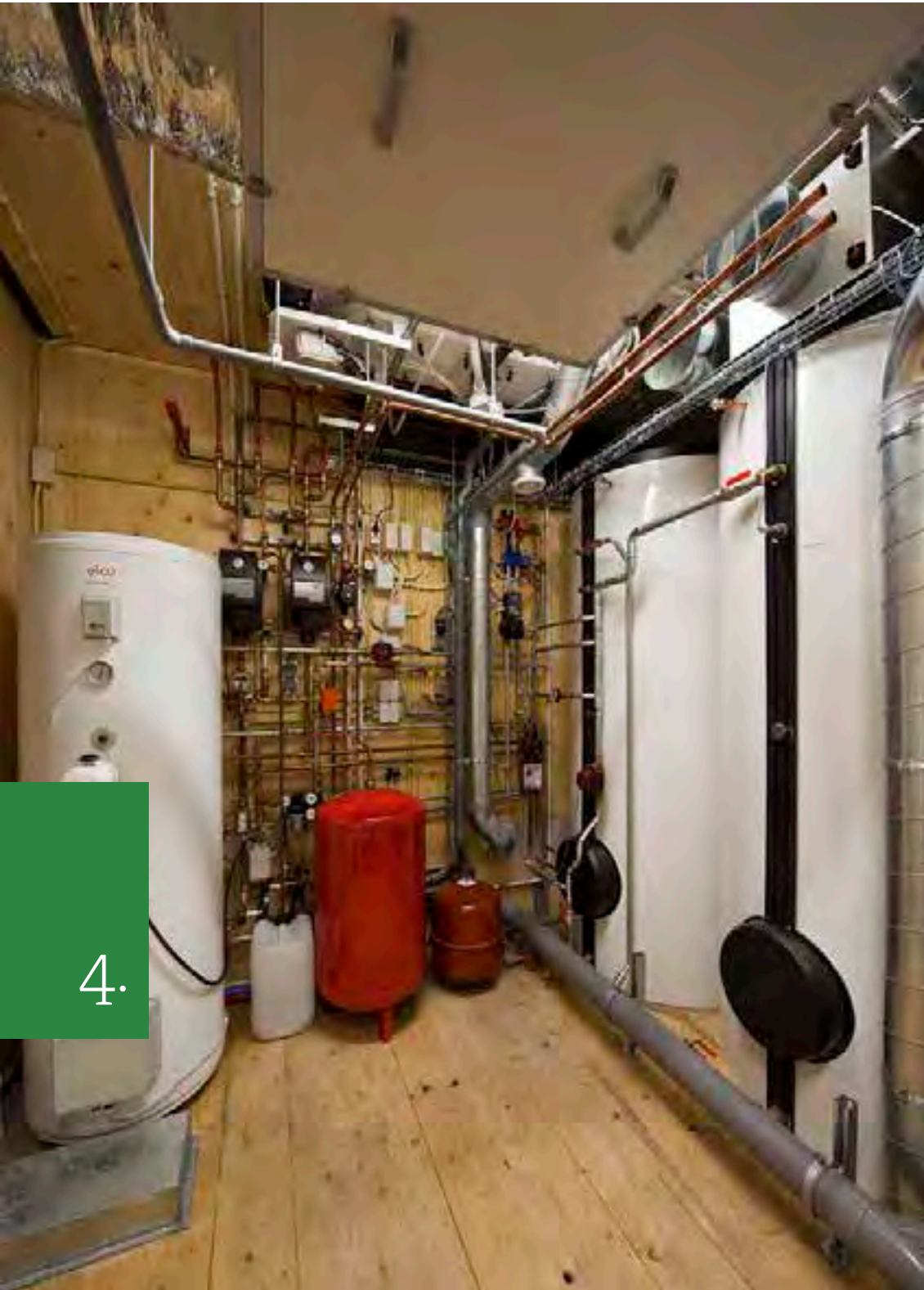
9.0



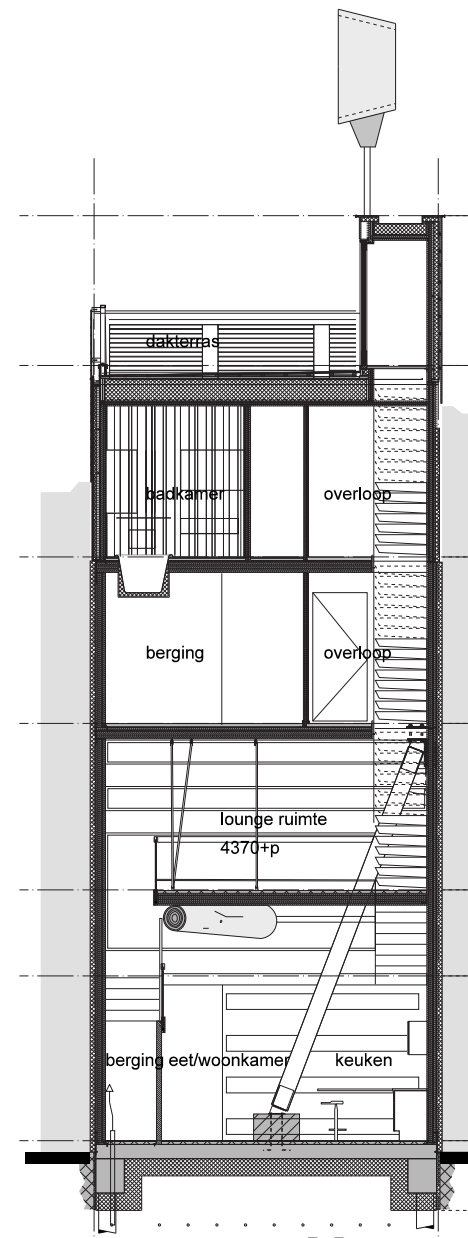
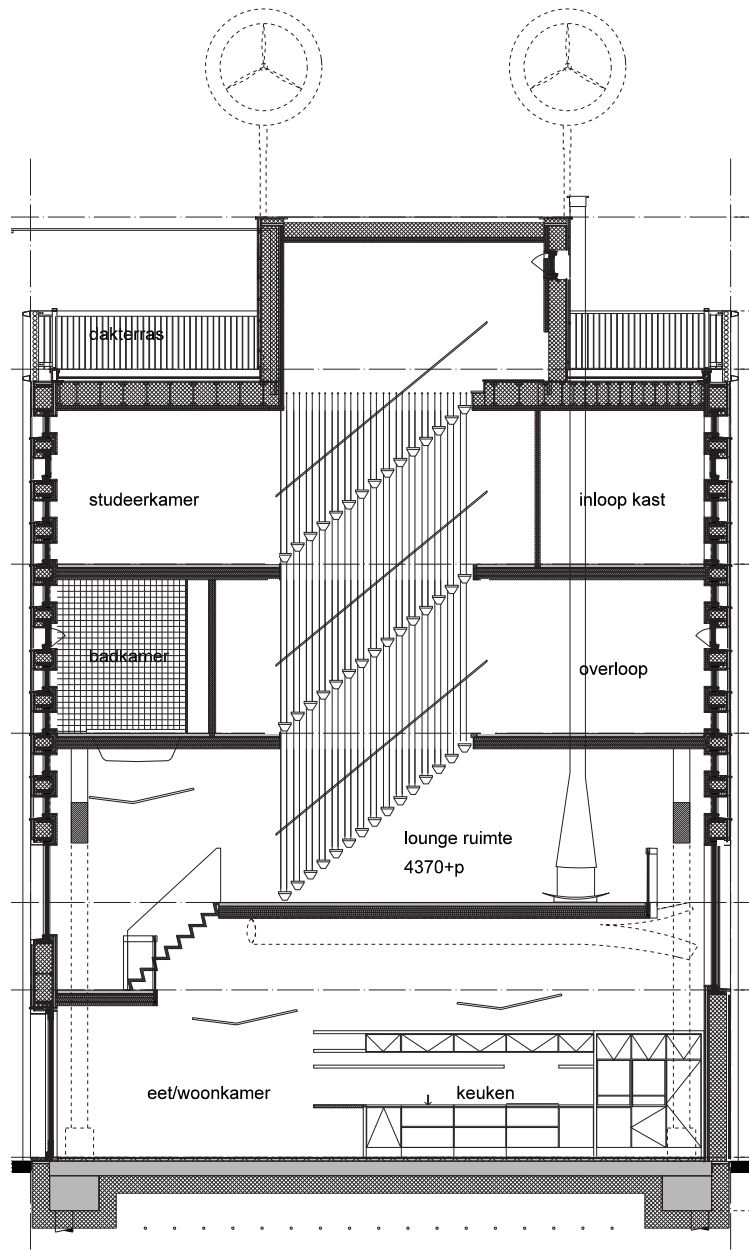








4.











4.





4.





4.







4.



4.





4.

4.





4.





4.



# Terunobe Fujimori

4.





4.



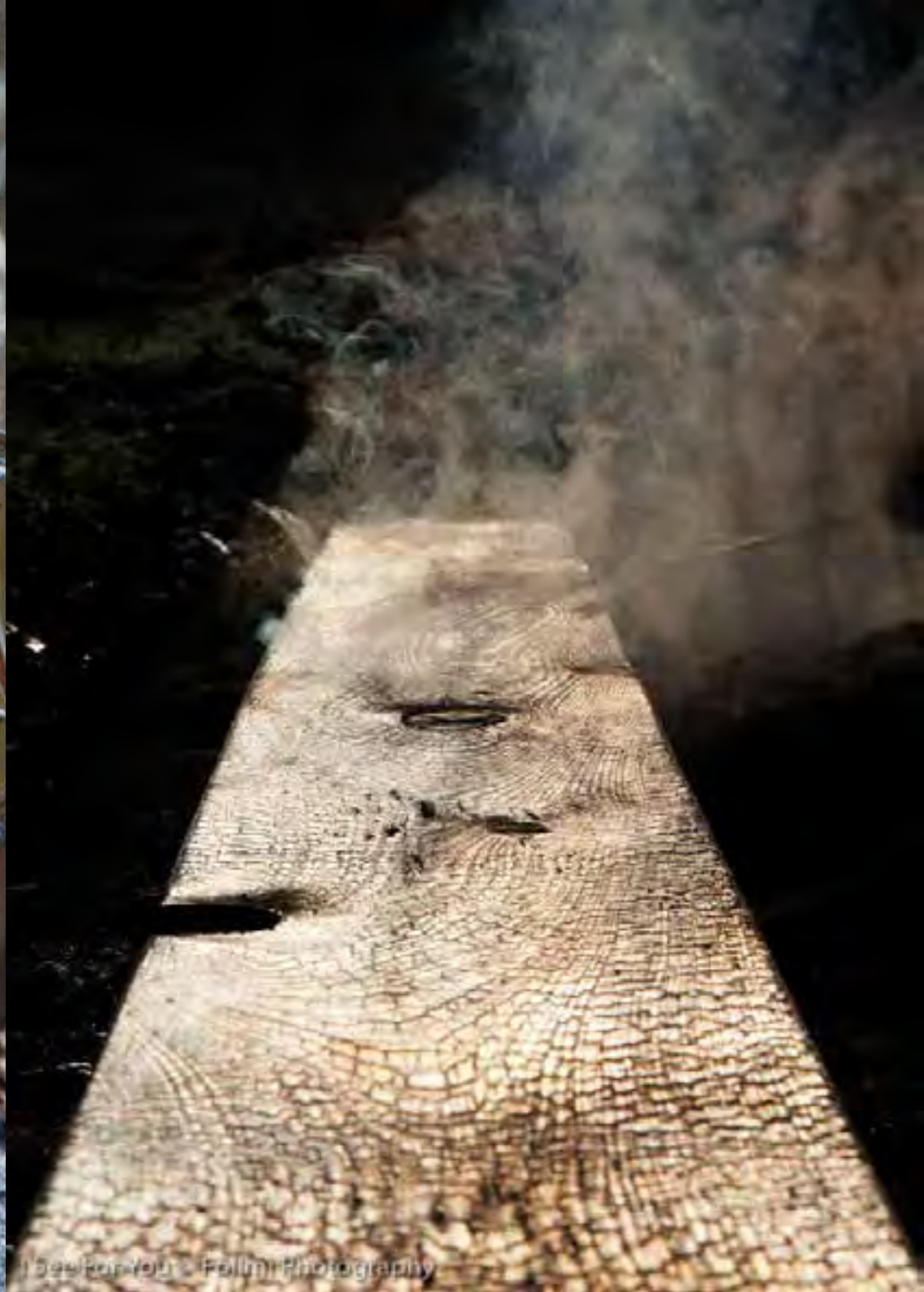


4.





4.







4.





4.

4.





4.



4.



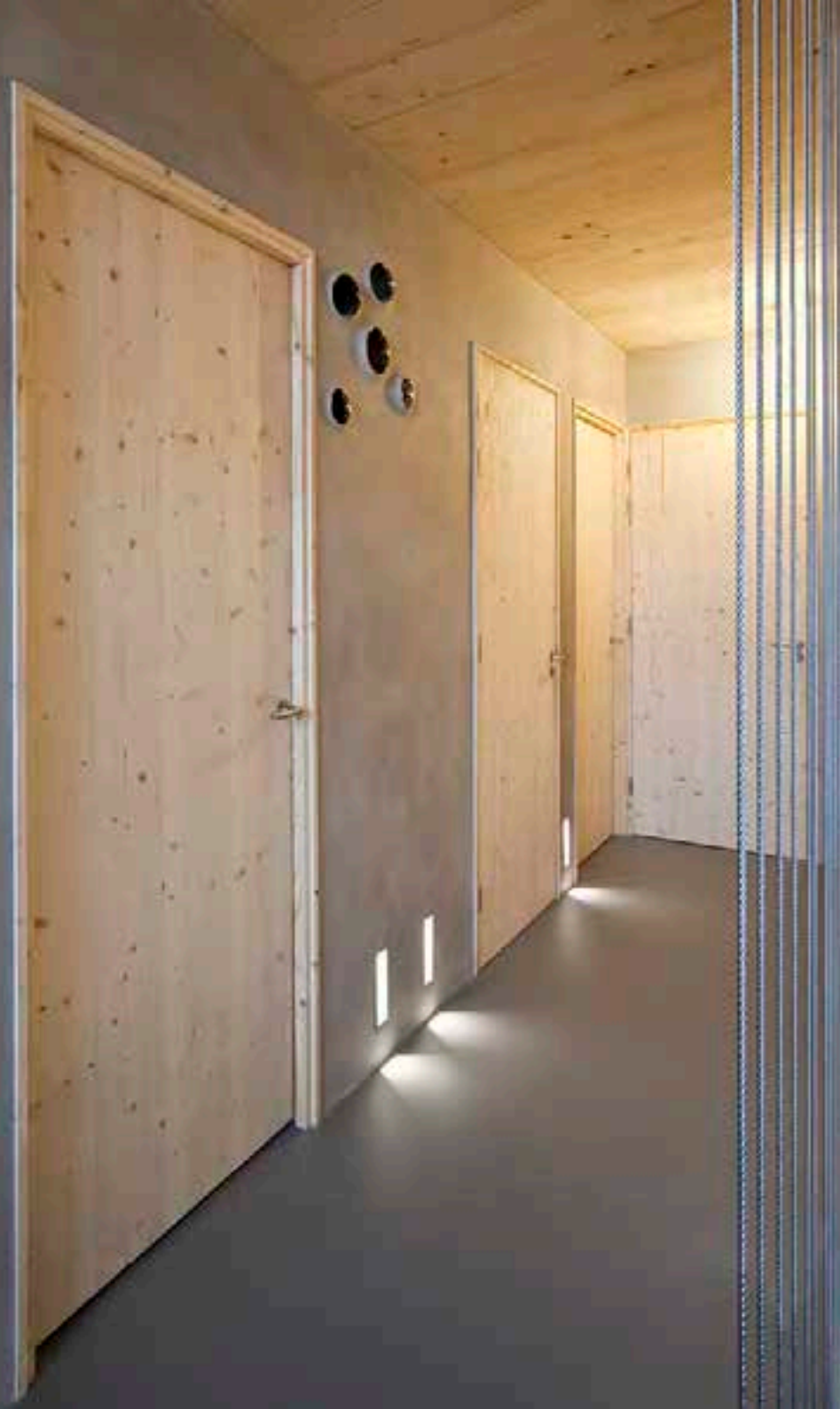


4.



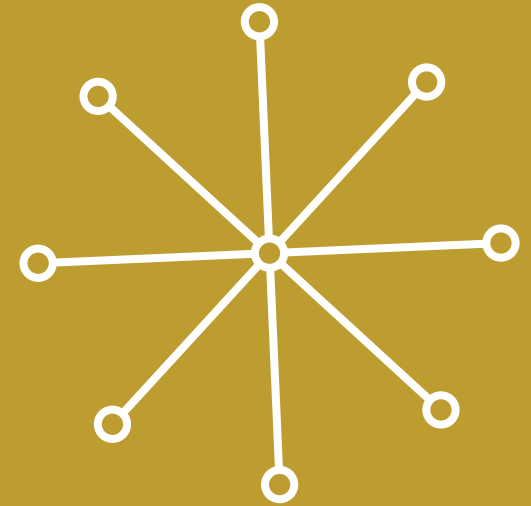
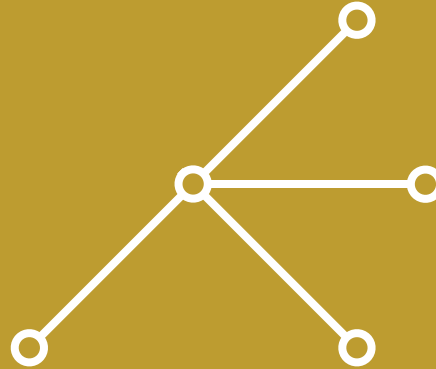
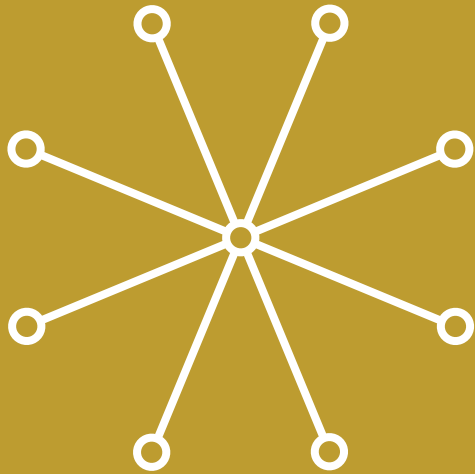


4.





4.



5. next generation





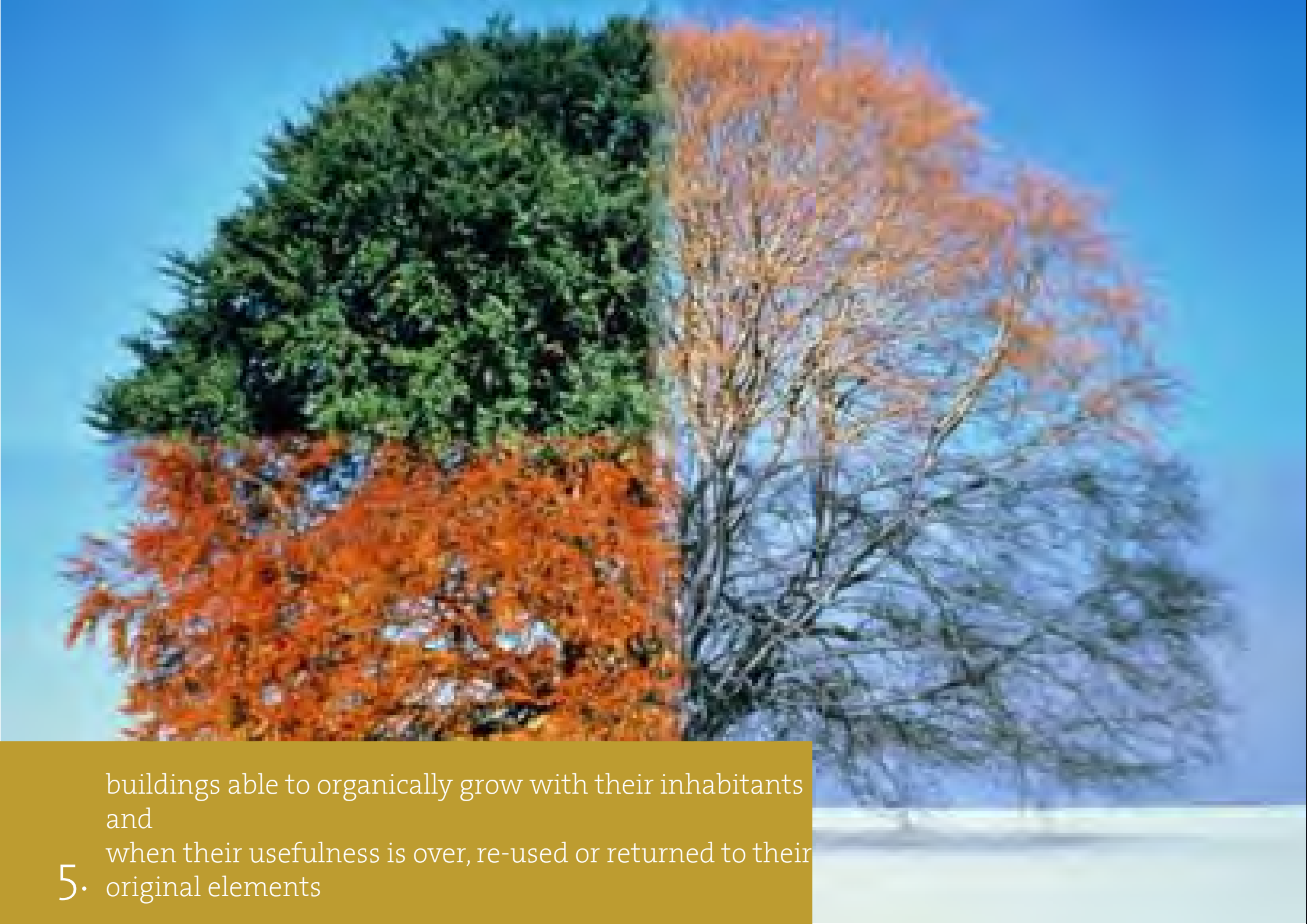
We create

5. architecture with a positive effect on our environmental systems





5. societal value with inspired, up-sustainable beauty,  
healthy and  
diverse architecture

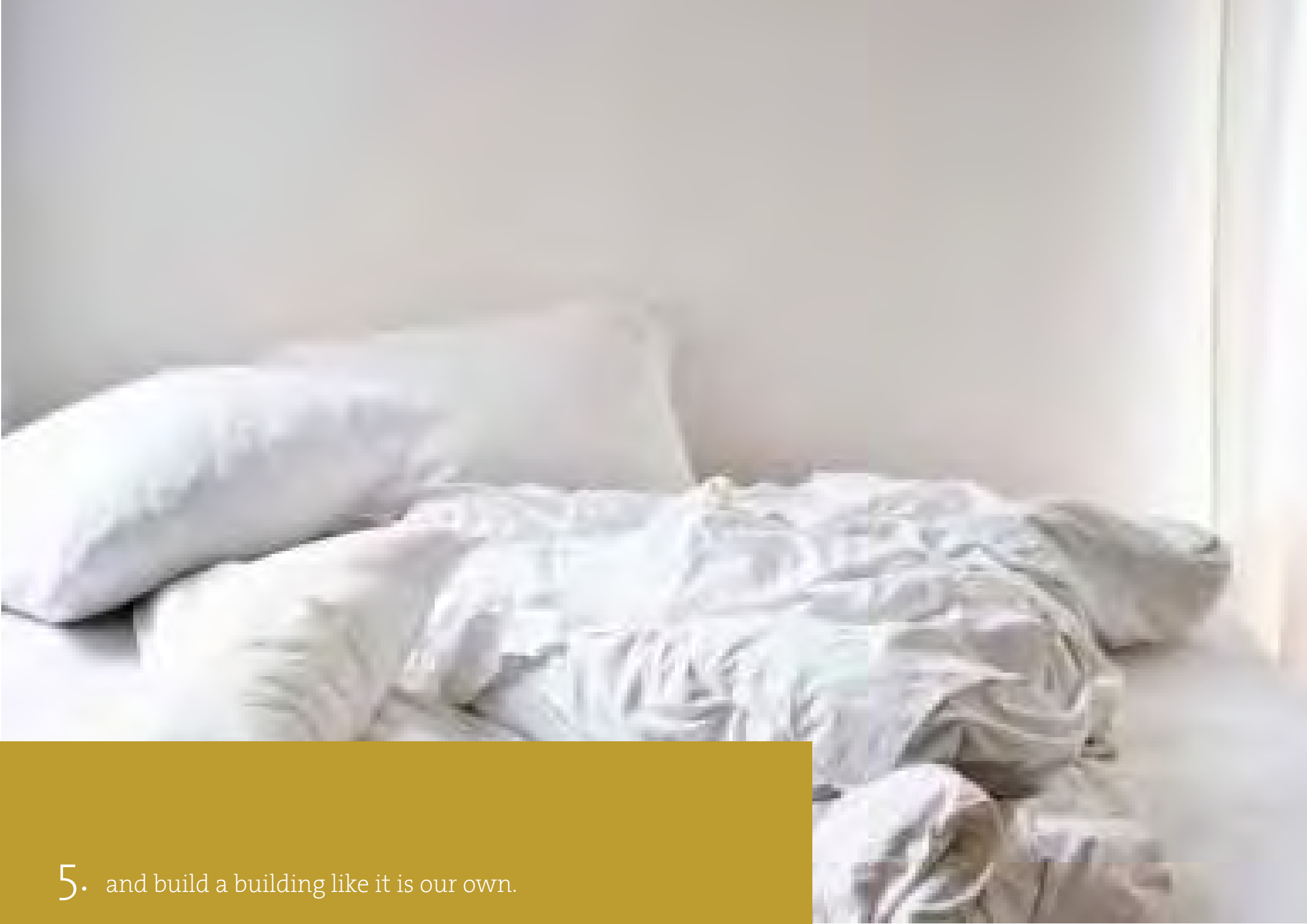


5. buildings able to organically grow with their inhabitants  
and  
when their usefulness is over, re-used or returned to their  
original elements





5. to deliver well-being to the world.



5. and build a building like it is our own.



THIS USED TO BE  
MY HOUSE

P  
U  
R  
N