



cepezed 50

develop | design | build

menno rubbens, msc architect

director cepezedprojects

member

transitionteam circular construction economy

designing for disassembly

'circular ready' projects by cepezed

metrex

november 14th 2024



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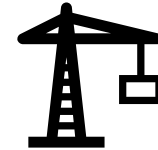
develop | design | build



initiative



design / engineering



execution



cepezedprojects

cepezed
cepezedinterieur

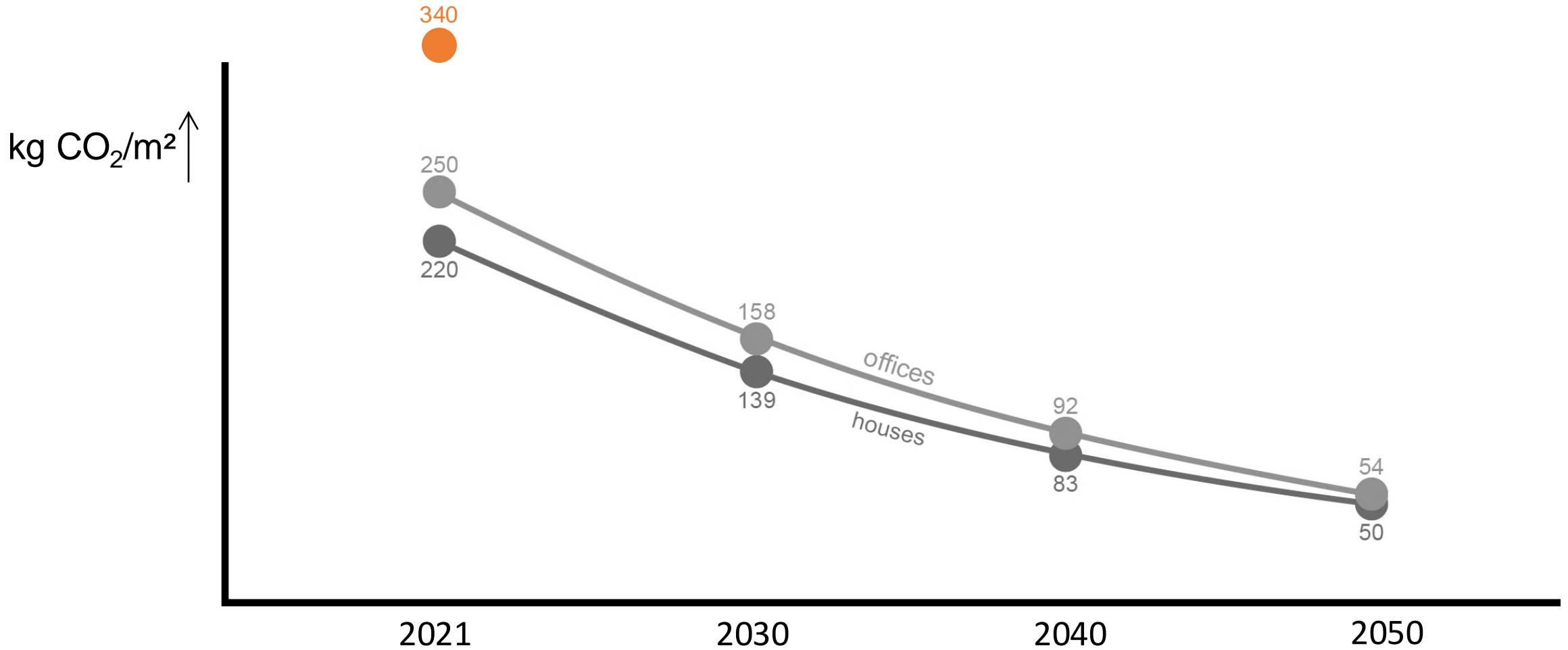
cepezedbouwteam



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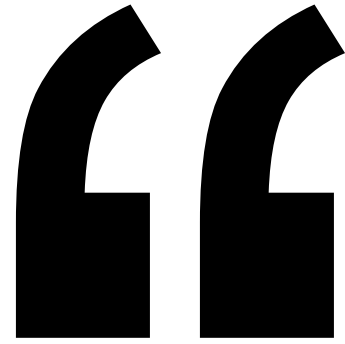
urgency

carbon budget (2020)



bron: 'whole life carbon' dgbc

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sustainable
development



**meet the needs
of the present**

**without compromising
future generations**

brundtland commission, 1987

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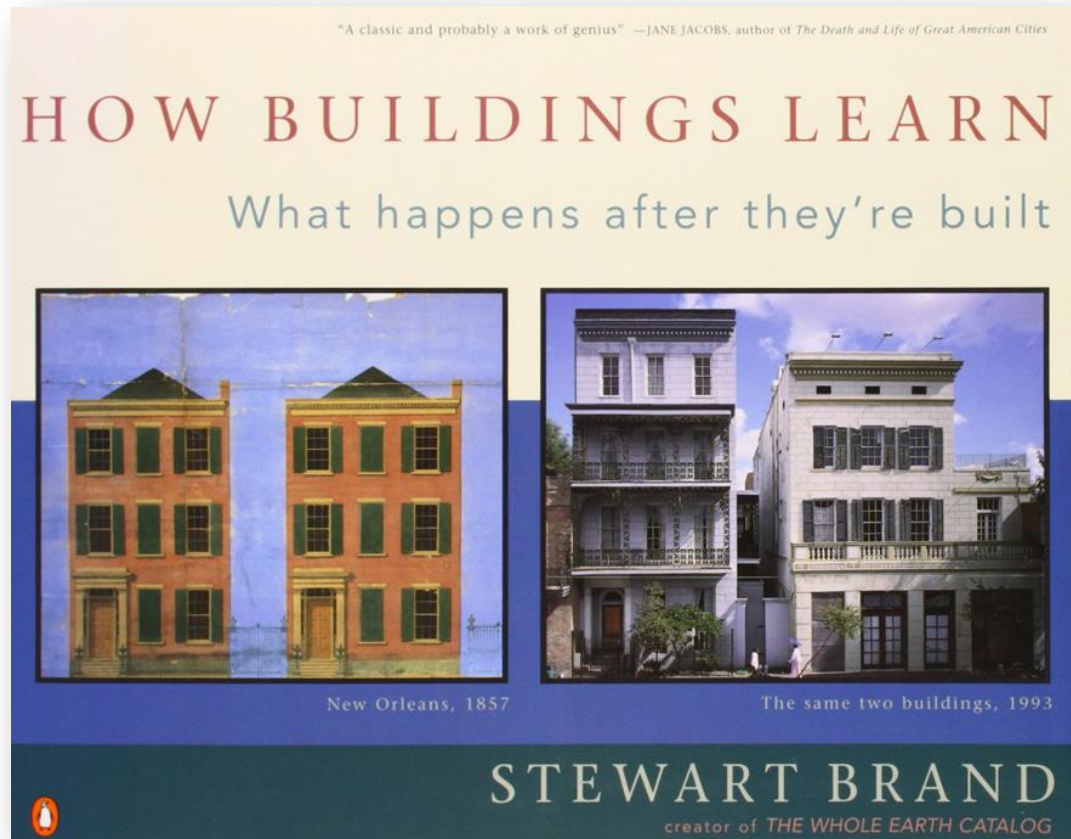
stewart brand

how buildings learn (1994)

buildings are predictions

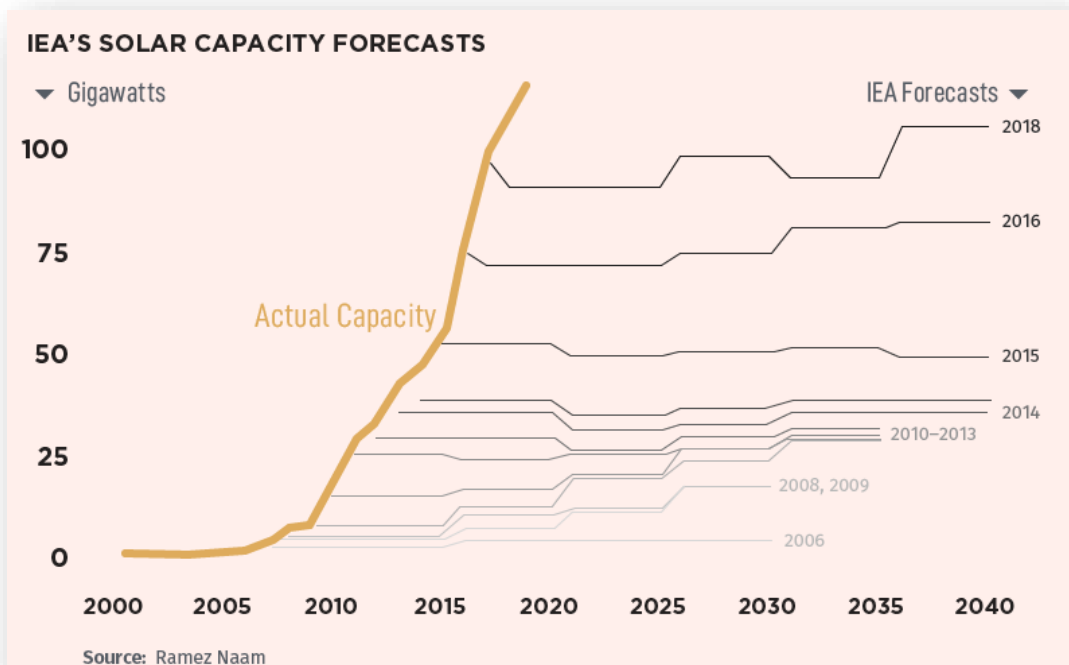
premature complexity

shearing layers





**all buildings
are predictions**



**all predictions
are wrong**

stewart brand, 1994

“

**buildings suffer from
premature complexity**

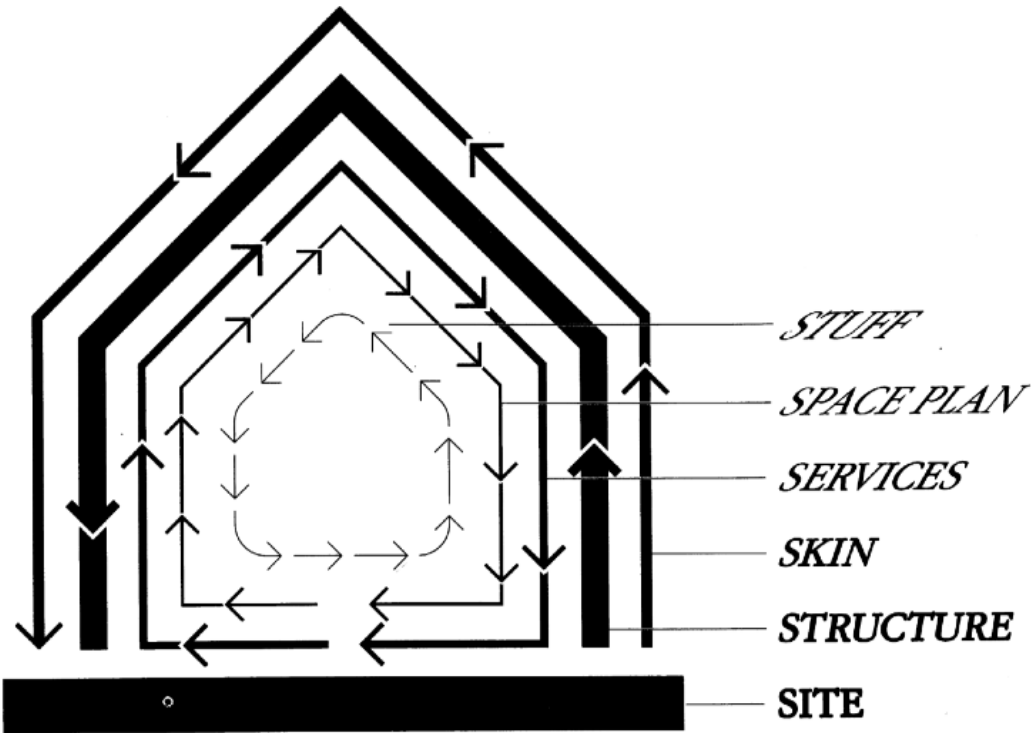


stewart brand, 1994

cepezed 50



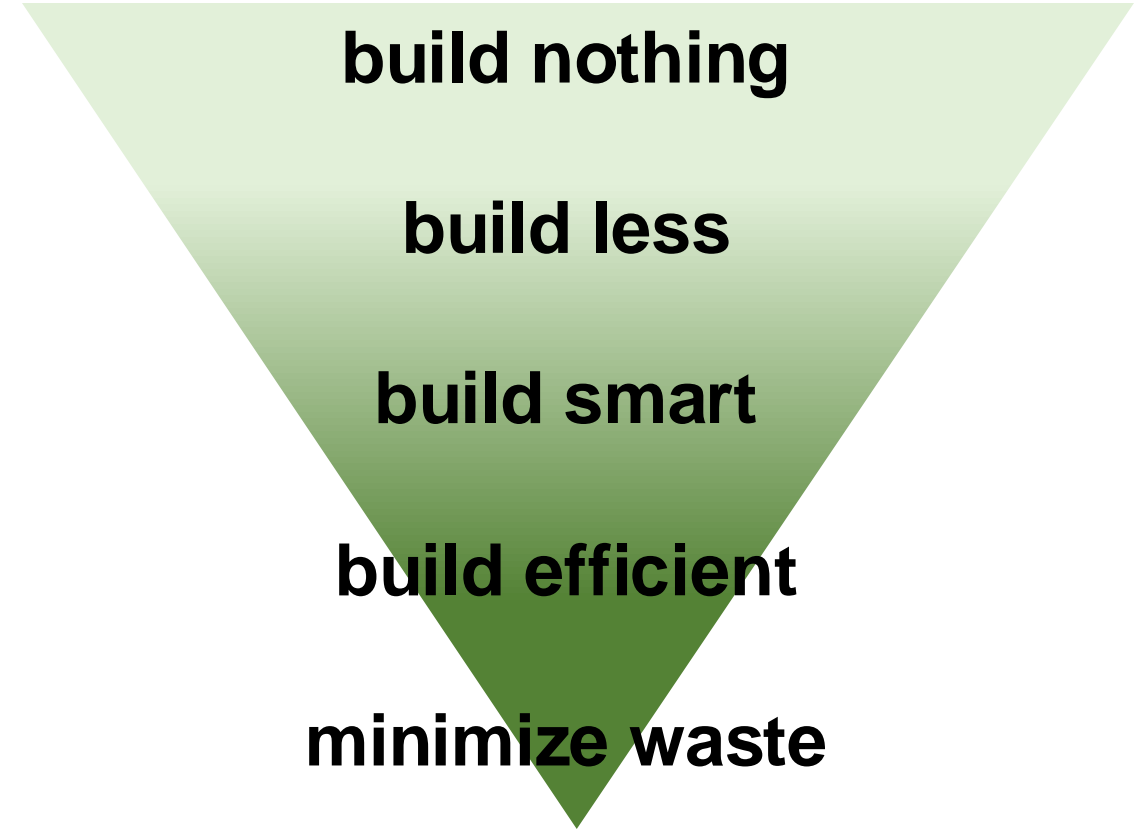
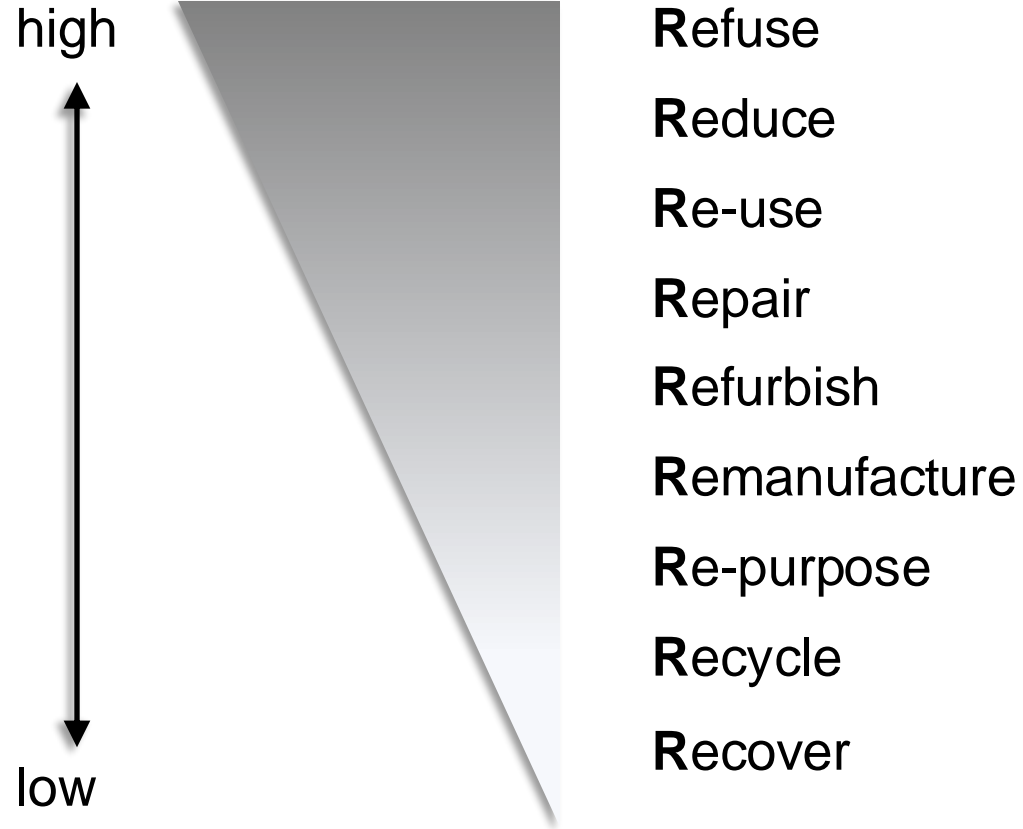
shearing layers



stewart brand, 1994

circular construction

R-priority



circular construction

R-priority

high



low



- Refuse
- Reduce
- Re-use
- Repair
- Refurbish
- Remanufacture
- Re-purpose
- Recycle
- Recover



...what we build







circular construction

cepezed 50

circular economy

reality

cepezed 50



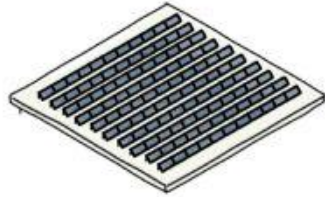
circular economy

reality

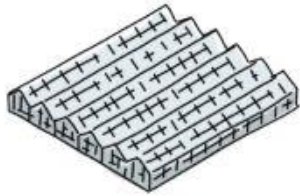


circular economy

reality



energy



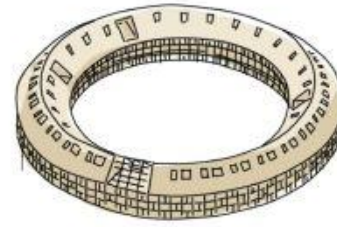
greenhouses



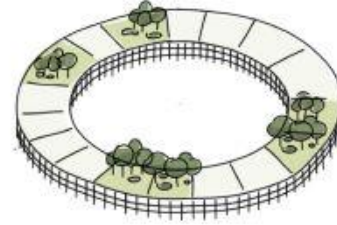
crops



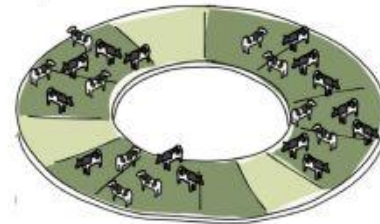
floating blade structure



housing



offices



agriculture



floating blade structure

circular economy

reality



circular economy

reality



circular economy

reality



cepezed 50

circular construction



circular construction

zero waste

recycling



circular construction





circular projects

provinciehuis arnhem > heerde

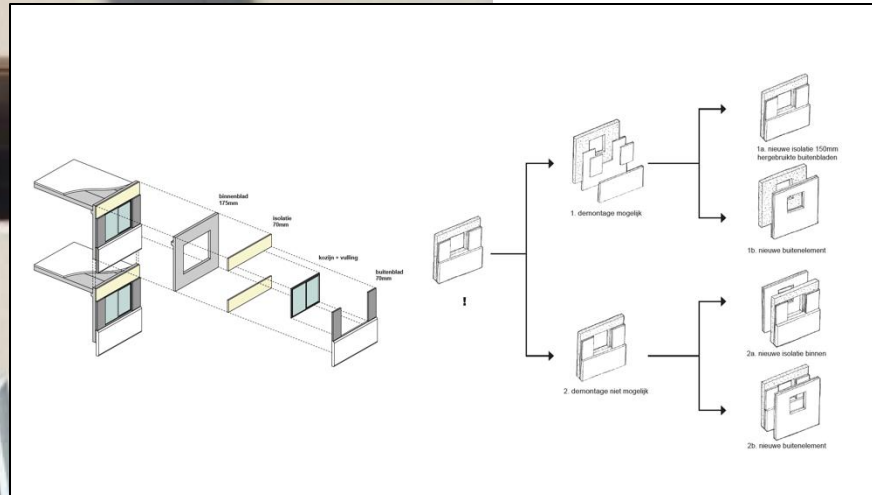
build in 1984

permanent building

modular design

prefab elements

not designed for re-assembly



circular projects

zuiderstrandtheater scheveningen > oss



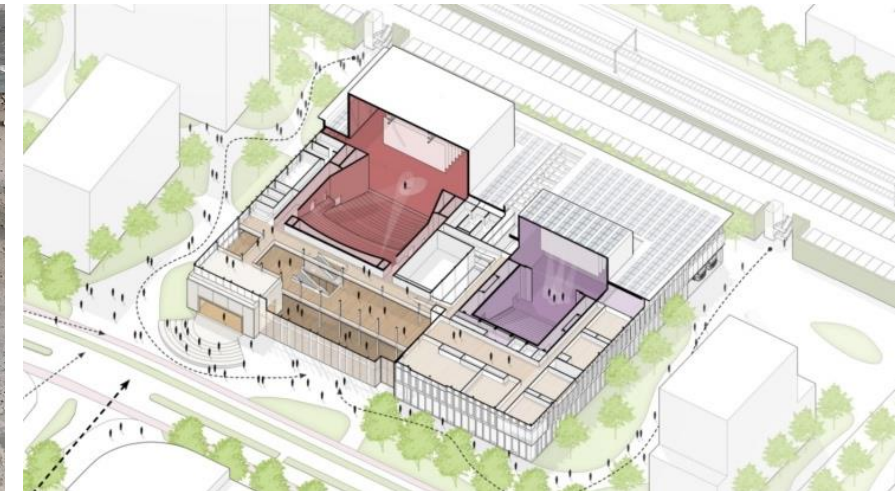
build in 2015

temporary building

temporary permit

hybrid construction

limited design for re-assembly



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circular projects

circl amsterdam > ???

gebouwd in 2017

permanent building

permanent permit

specific function and location

designed for re-assembly



cepezed 50

circular projects

tijdelijke rechtbank amsterdam > enschede

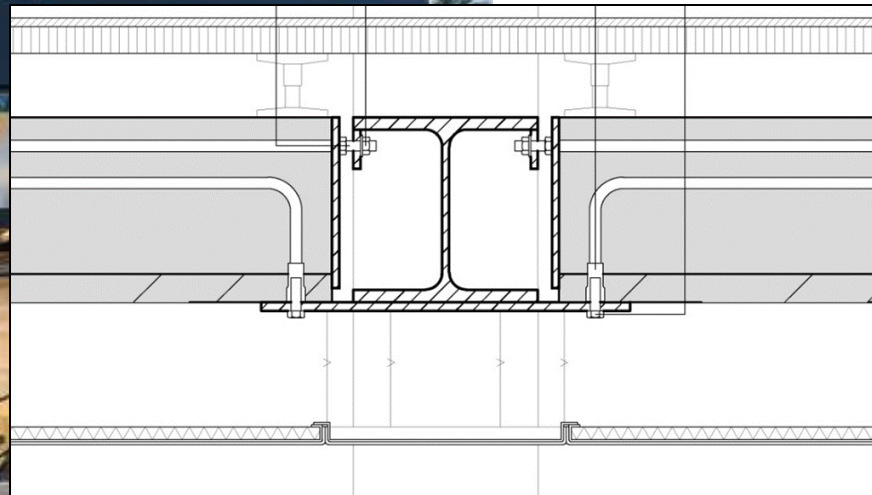
build in 2016

permanent building

permanent permit

function- and locationfree design

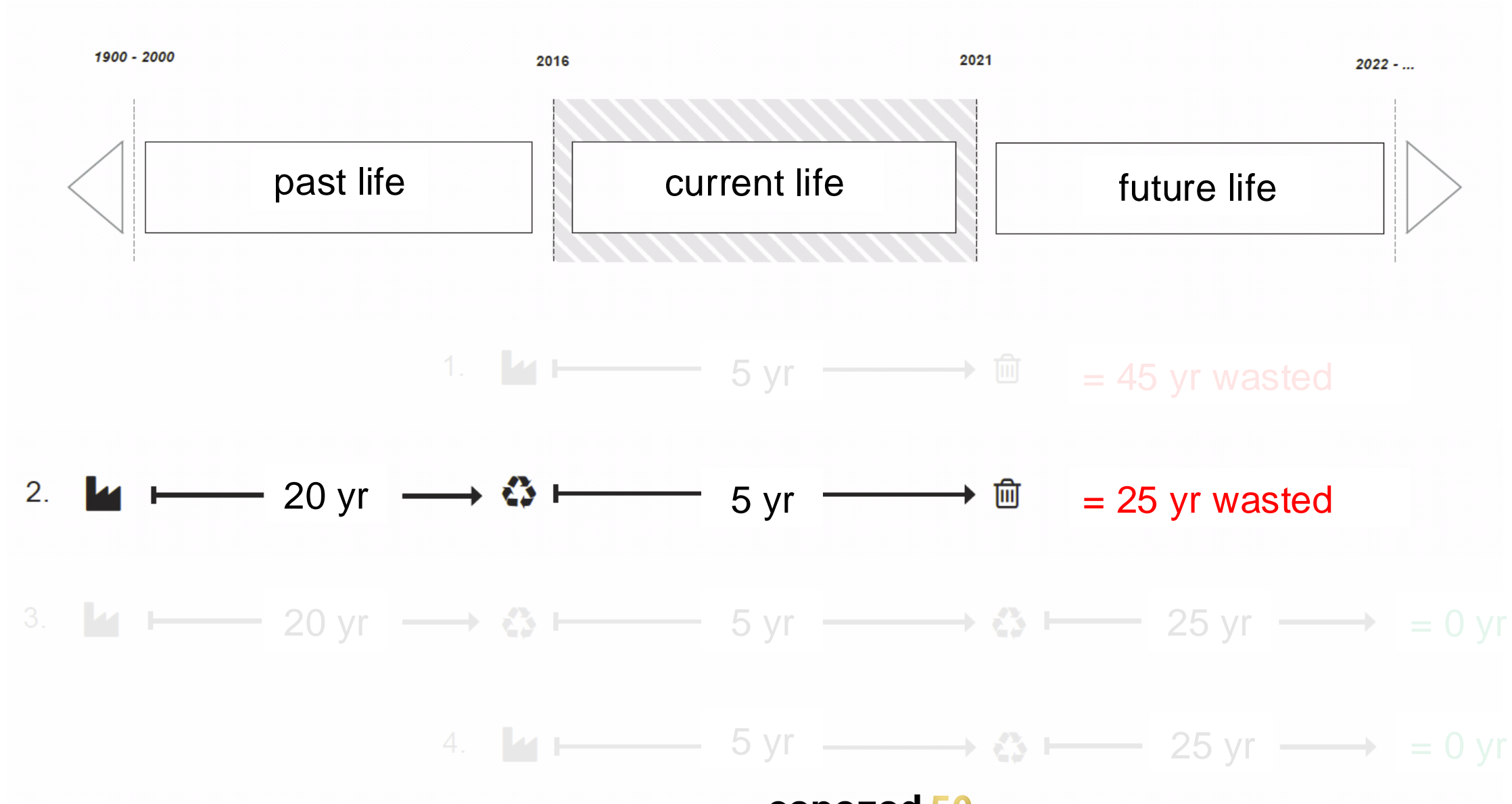
designed for re-assembly



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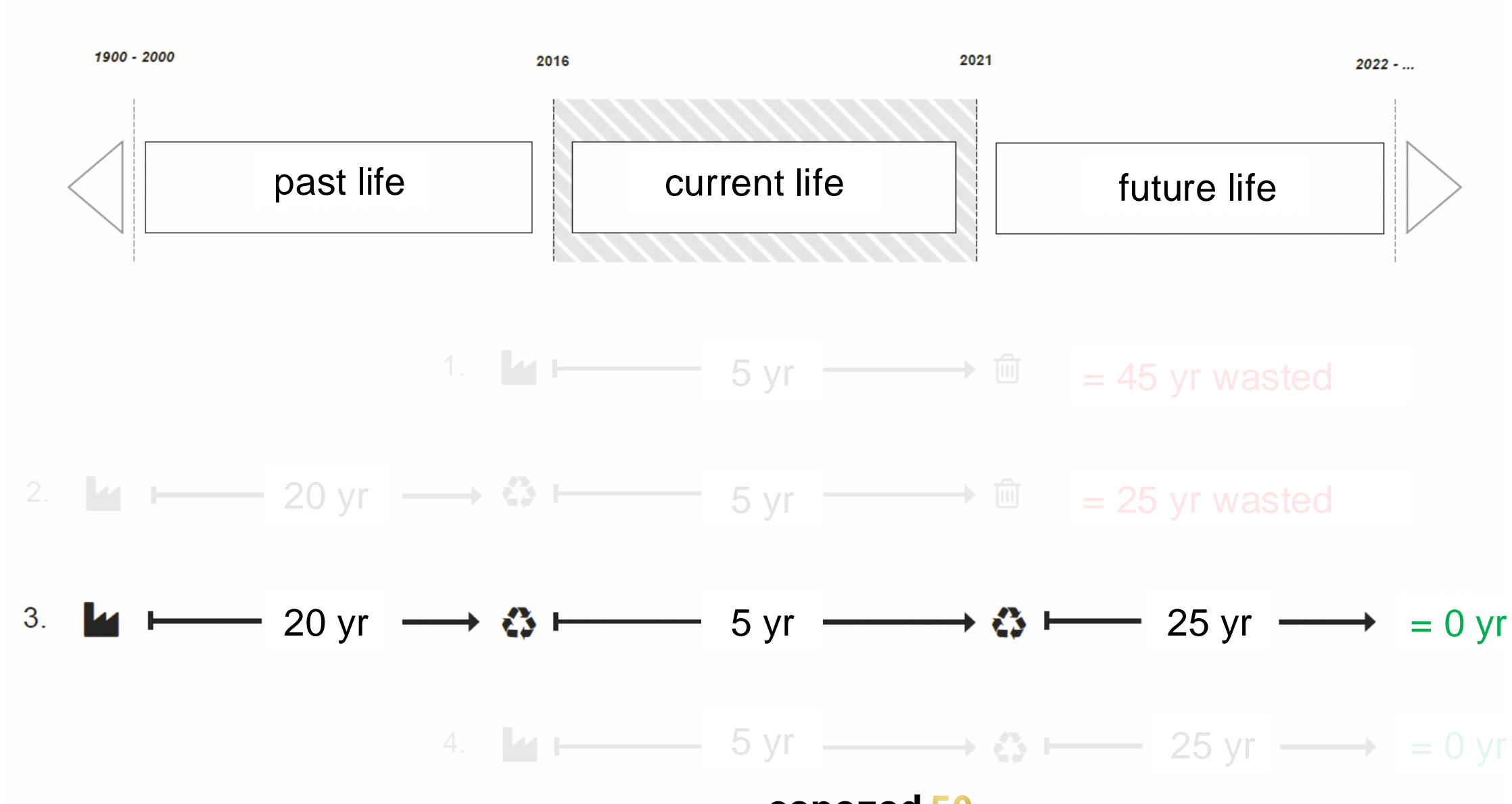
temporary courthouse

amsterdam



temporary courthouse

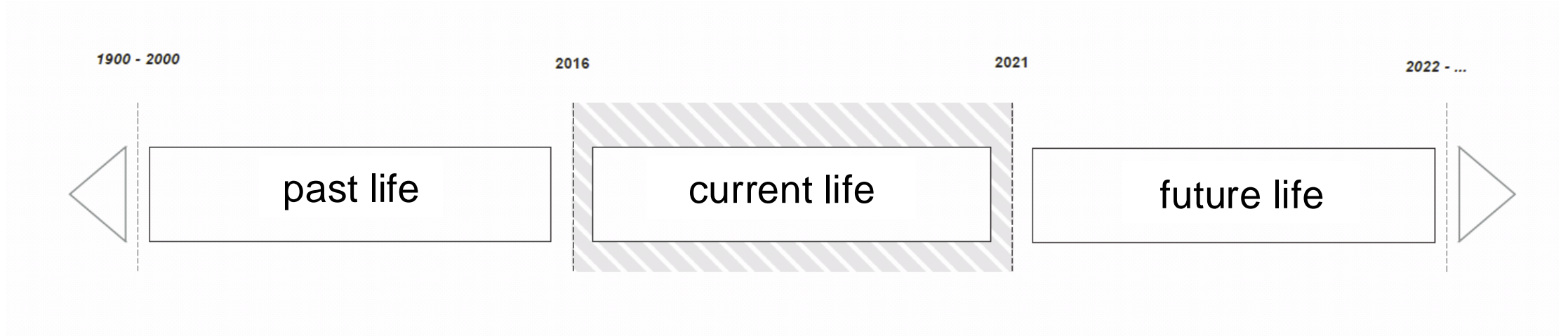
amsterdam



cepezed 50

temporary courthouse

amsterdam



1.   5 yr   = 45 yr wasted

2.   20 yr    5 yr   = 25 yr wasted

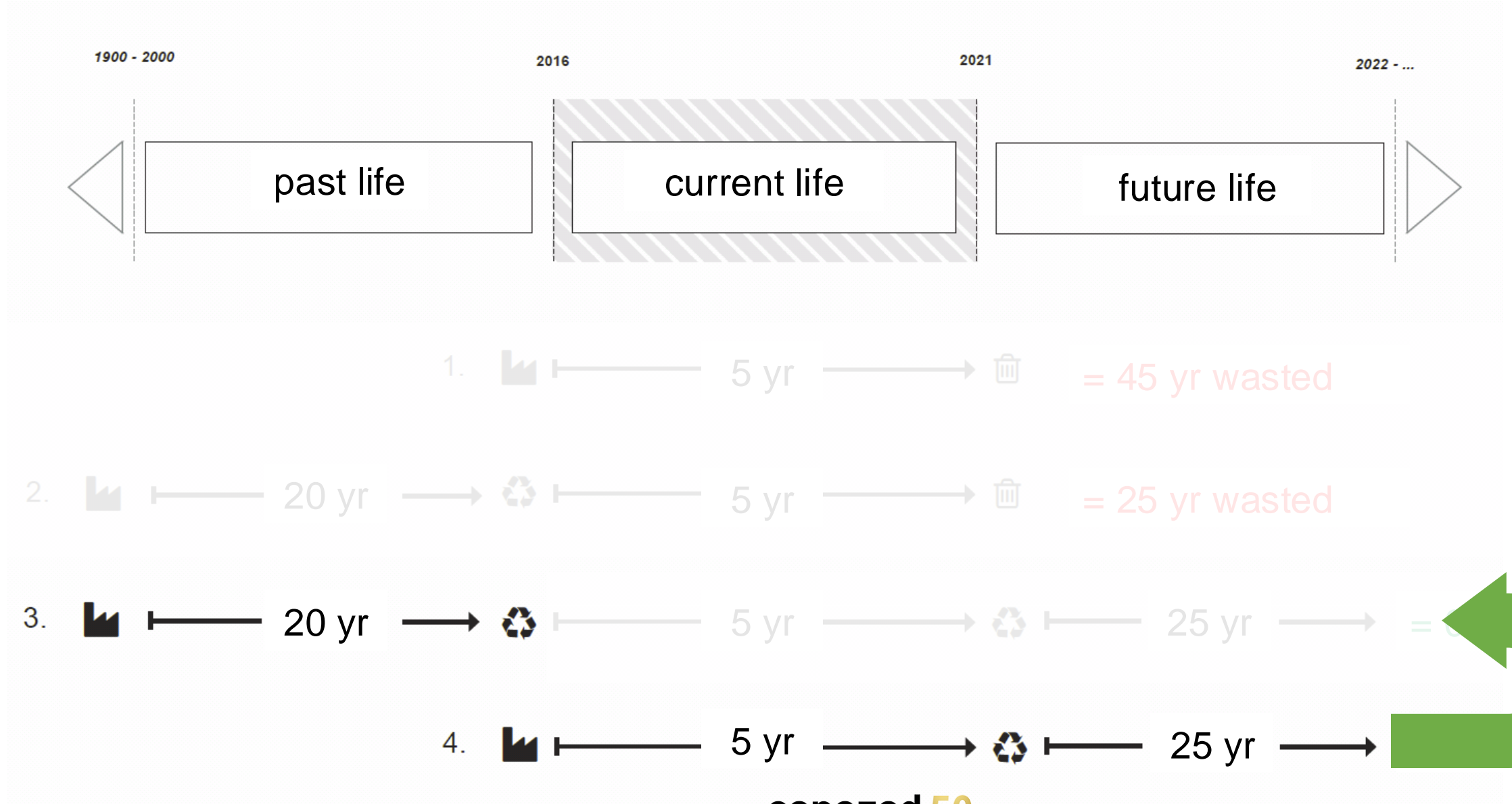
3.   20 yr    5 yr    25 yr  = 0 yr

4.   5 yr    25 yr  = 0 yr

cepezed 50

temporary courthouse

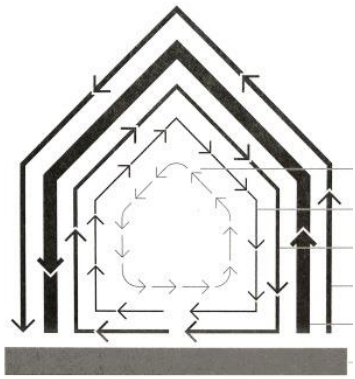
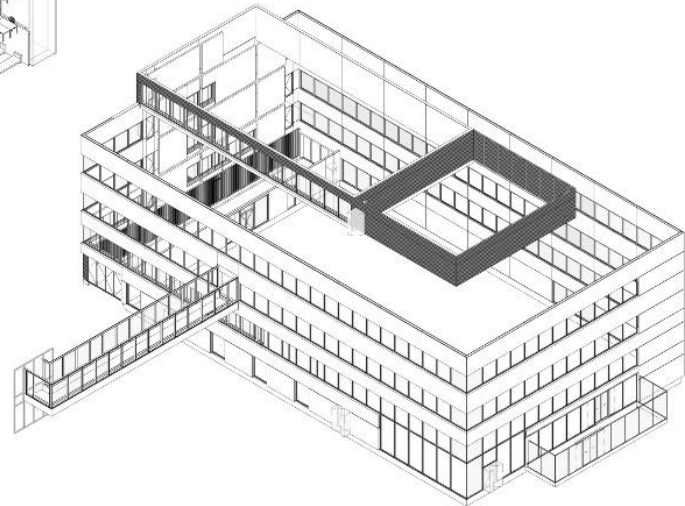
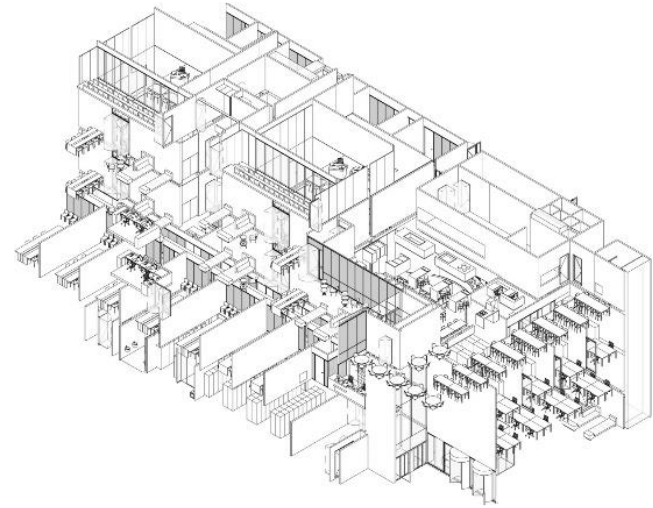
amsterdam



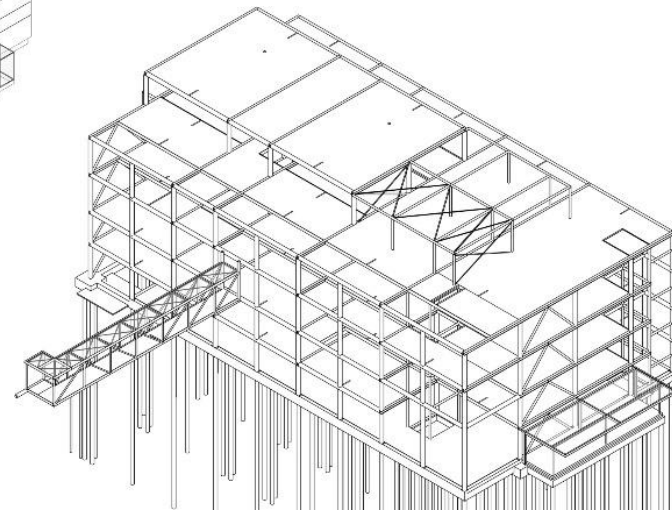
cepezed 50

temporary courthouse

amsterdam



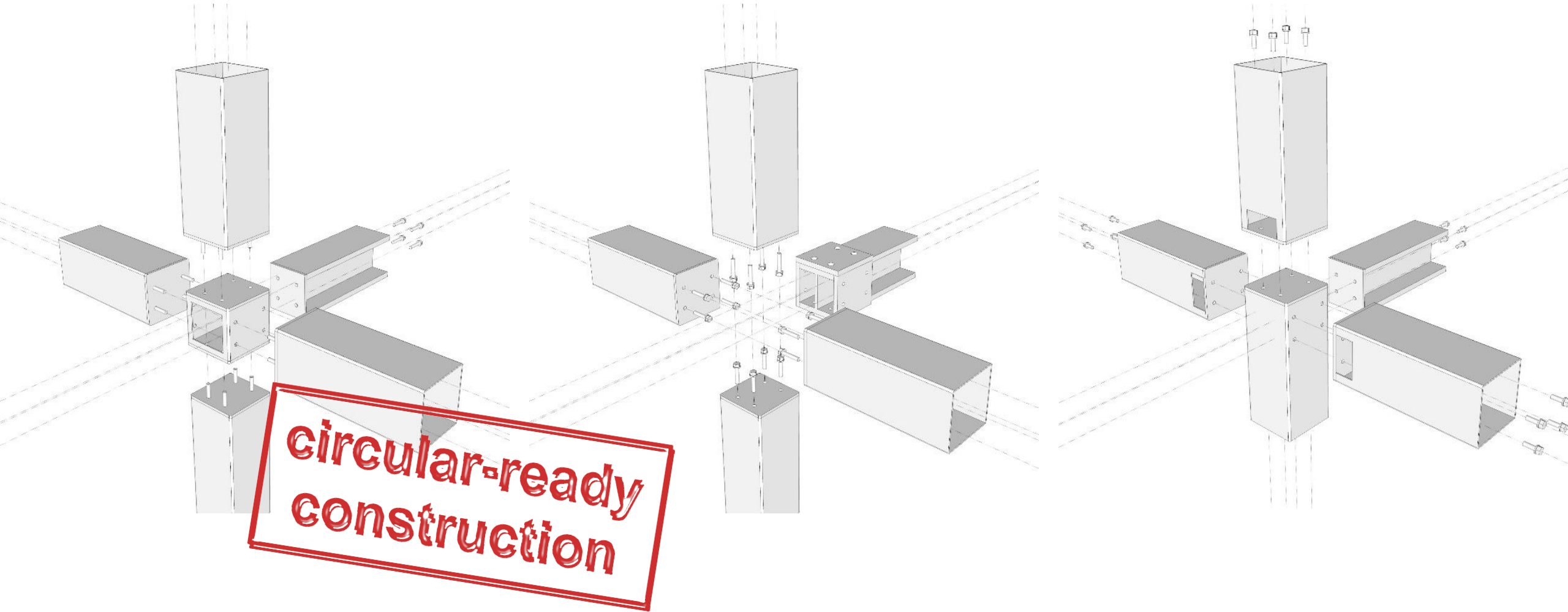
Stewart Brand



cepezed 50

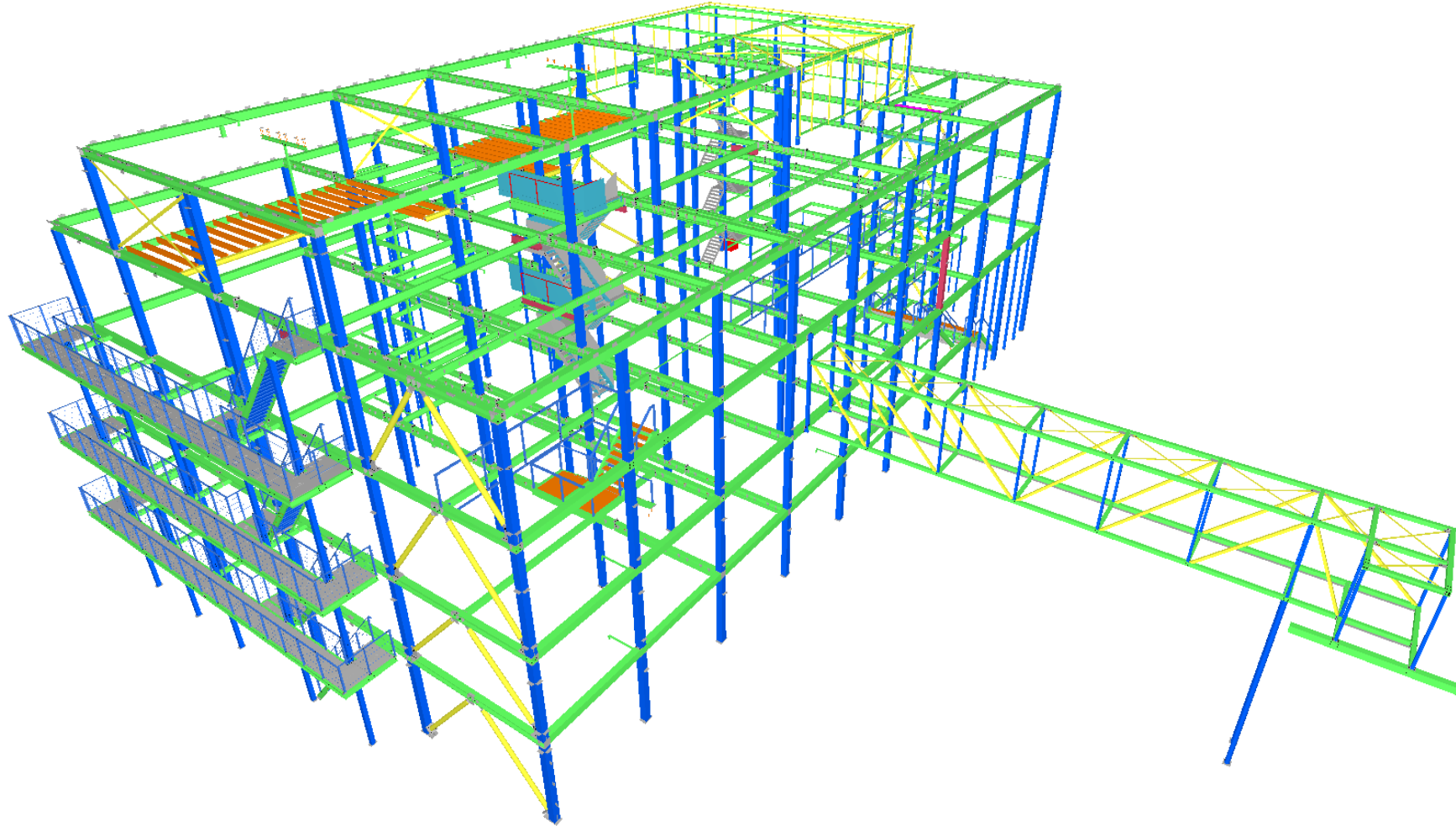
temporary courthouse

amsterdam



temporary courthouse

amsterdam

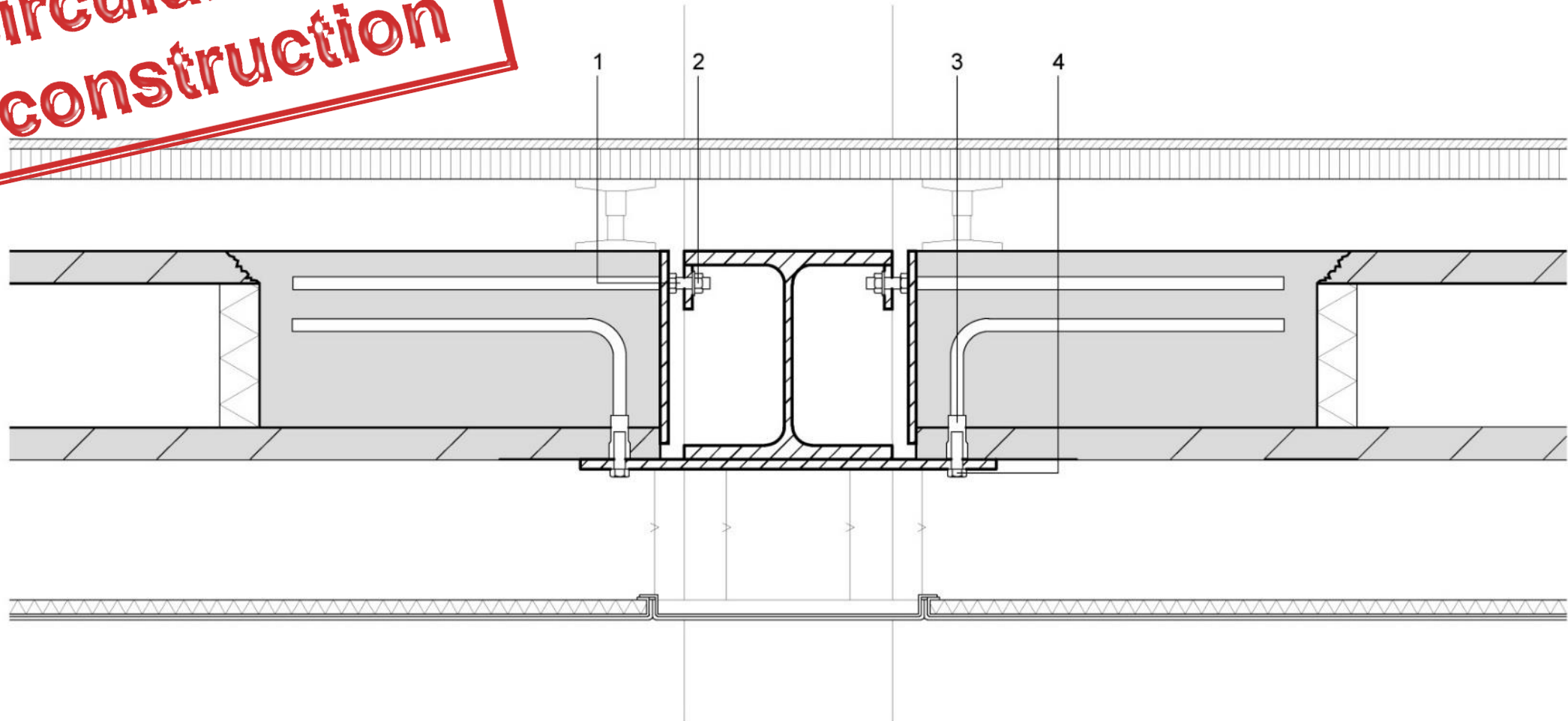


cepezed 50

temporary courthouse

amsterdam

**circular-ready
construction**



cepezed 50

temporary courthouse

amsterdam





temporary courthouse

amsterdam

cepezed 50

temporary courthouse

amsterdam, kit of parts





remolition

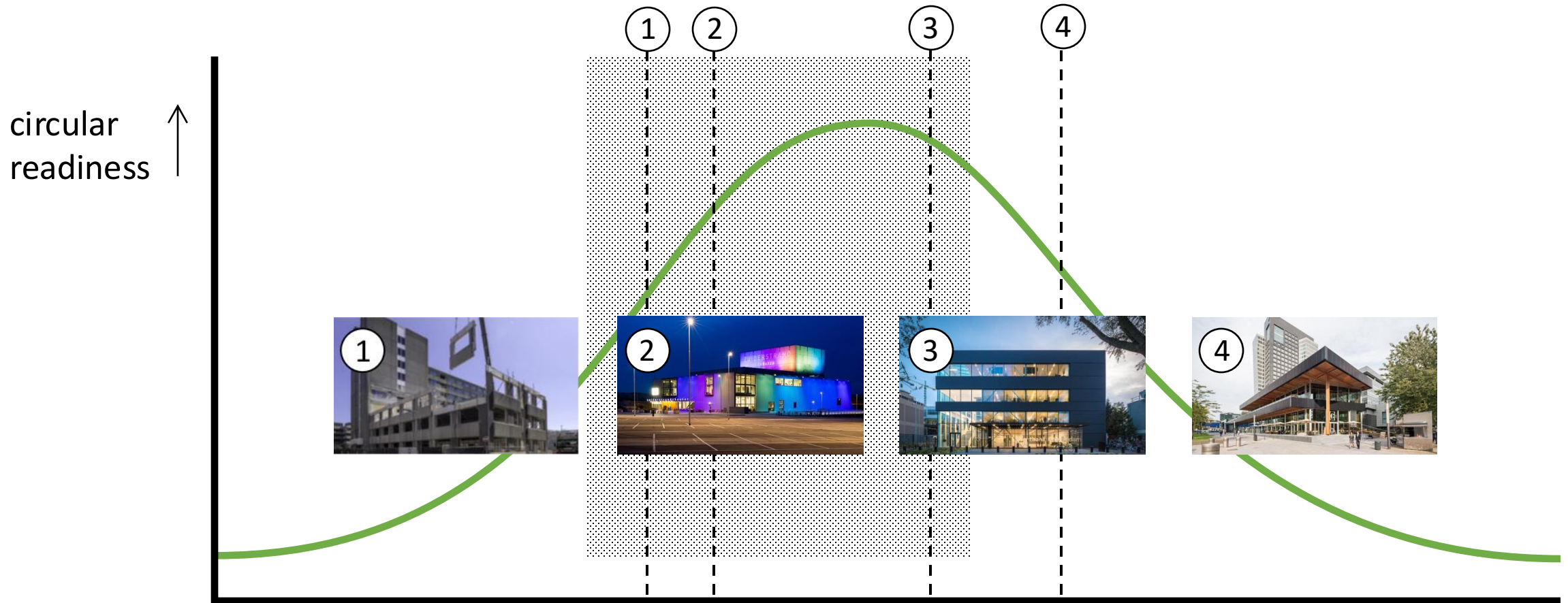
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new location - function

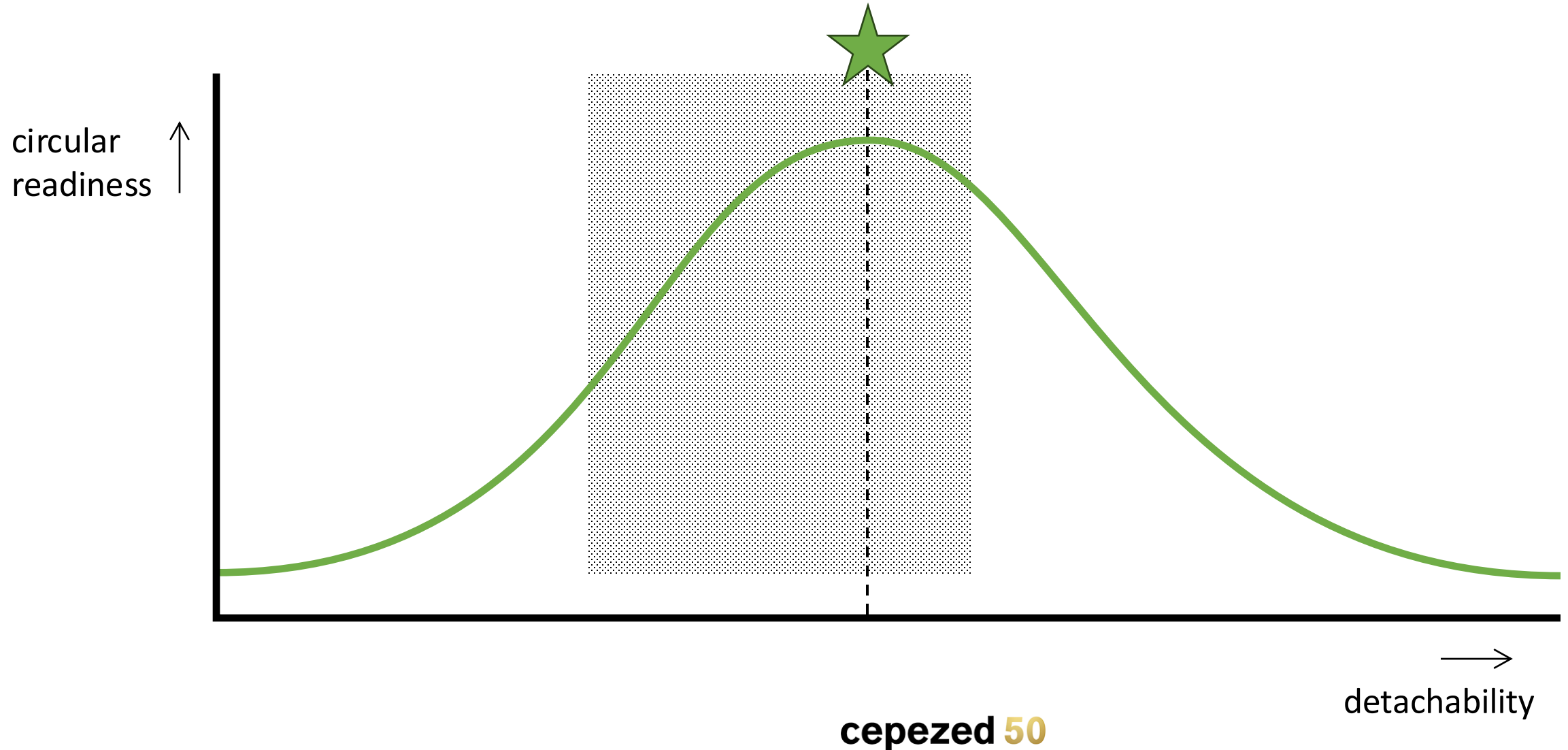
enschede



law of diminishing circular readiness



law of diminishing circular readiness



circular construction



circular ready

ensure your designs are ready for the circular economy

impact

focus on the components with the greatest environmental impact

design for re-assembly

ensure that the value of building components remains accessible for a long time



lop circulair
lagemaat &
cepezedprojects

zuidstrandtheater

scheveningen



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