# SensiParti

Circulair bouwen haalbaar maken voor particulieren

een project van:

VIBE

BOND BETER LEEF VOOR DE TOEKOMST MILIEU

VUB æ ARCHITECTURAL ENGINEERING

met de steun van:

VLAANDEREN CIRCULAIR



# SensiParti

Circulair bouwen haalbaar maken voor particulieren

Jeroen Poppe, Stijn Brancart, Jurgen Naets
3 jun. 2021

een project van:

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æ ARCHITECTURAL ENGINEERING

**Praktisch**

- Camera aan, micro uit tijdens het plenaire gedeelte
- Hand opsteken voor tussenkomst

- Vragen zijn welkom via de chat

- De sessie wordt opgenomen

# SensiParti

Circulair bouwen haalbaar maken voor particulieren

| | |
|---|---|
| 12:30 | Verwelkoming |
| 12:35 | **SensiParti**: projectdoelstellingen en user scenario’s |
| 12:55 | **Meerwaarde creëren met circulaire strategieën** (break-out sessie in Miro) |
| 13:35 | Terugkoppeling uit de verschillende groepen<br>Takeaways, tip en top |
| 13:50 | **Outlook**: wat te verwachten van SensiParti in de toekomst |
| 14:00 | Einde van de sessie |

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# Hoe overtuig je de particuliere bouwer om circulair te bouwen?

**Kansen …**

Er zijn ***heel wat noden en wensen*** bij particuliere bouwers die een kans zijn om circulair en veranderingsgericht te bouwen

- Gedeeld woninggebruik
- levenslang wonen,
- onderhoudsvriendelijk bouwen,
- thuiswerken
- ….

**In de praktijk …**

Het blijkt dat deze bezorgdheden vaak ondergesneeuwd geraken doorheen het bouwproces. Er wordt ***teruggegrepen naar vertrouwde conventionele technieken en oplossingen*** die op korte termijn kwalitatief zijn, maar niet toekomstbestendig of aanpasbaar zijn.



## Sensiparti

**Doelstellling**

Circulaire bouwmarkt voor particulieren aanzwengelen door te vertrekken vanuit hun noden.

**Wat leeft?**

- **Welke noden zijn er** bij particuliere bouwers waar we met circulaire bouwoplossingen kunnen op inspelen?
- **Welke circulaire bouwoplossingen worden reeds toegepast** in de Vlaamse woningen?
- **Wie zijn de voorlopers** en wat zijn hun ervaringen en leerlessen?

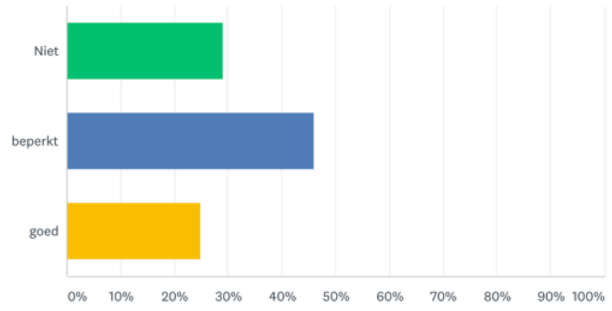




# Wat leeft er?

## In welke mate is je woning aanpasbaar aan een veranderende gezinssamenstelling? (Bv. een inwonende ouder, kinderen uit huis,...)

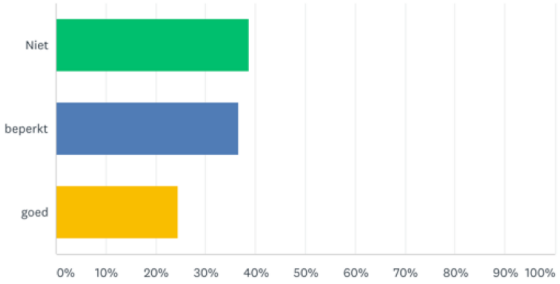
Beantwoord: 430 Overgeslagen: 44




| ANTWOORDKEUZEN | REACTIES | |
|---|---|---|
| Niet | 29,07% | 125 |
| beperkt | 46,05% | 198 |
| goed | 24,88% | 107 |
| TOTAAL | | 430 |

## In welke mate is jouw woning aangepast aan je oude dag?

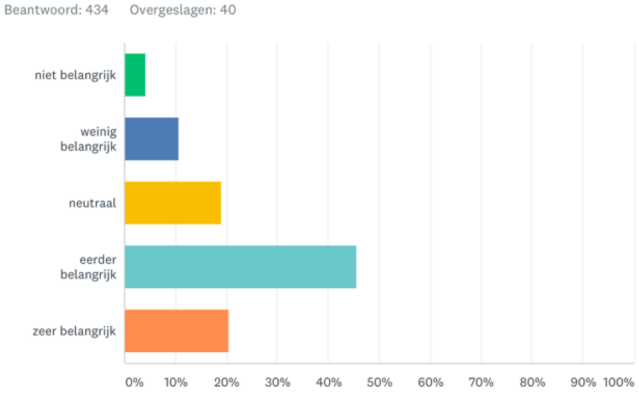
Beantwoord: 436 Overgeslagen: 38




| ANTWOORDKEUZEN | REACTIES | |
|---|---|---|
| Niet | 38,76% | 169 |
| beperkt | 36,70% | 160 |
| goed | 24,54% | 107 |
| TOTAAL | | 436 |

## Vind je meegroeiwonen of levenslang wonen belangrijk voor jezelf?

Beantwoord: 434 Overgeslagen: 40




| ANTWOORDKEUZEN | REACTIES | |
|---|---|---|
| niet belangrijk | 4,15% | 18 |
| weinig belangrijk | 10,60% | 46 |
| neutraal | 19,12% | 83 |
| eerder belangrijk | 45,62% | 198 |
| zeer belangrijk | 20,51% | 89 |
| TOTAAL | | 434 |

# Sensiparti: circulair bouwen

**Hoe?**

- We brengen het **verhaal van de gebruiker**, laten **het antwoord van de ontwerper** zien, en geven **concrete voorbeelden van oplossingen**

- Via inspiratietours, huisbezoeken, peer-to-peer uitwisseling en info op maat **tonen** we **hoe bouwheren zelf aan de slag kunnen gaan** met circulaire principes en met wie.



# What’s in it for me ?

A **user stories** approach
for scaling circular building.

Jeroen Poppe, Waldo Galle, Niels De Temmerman





# ATELIER CIRCULAIR

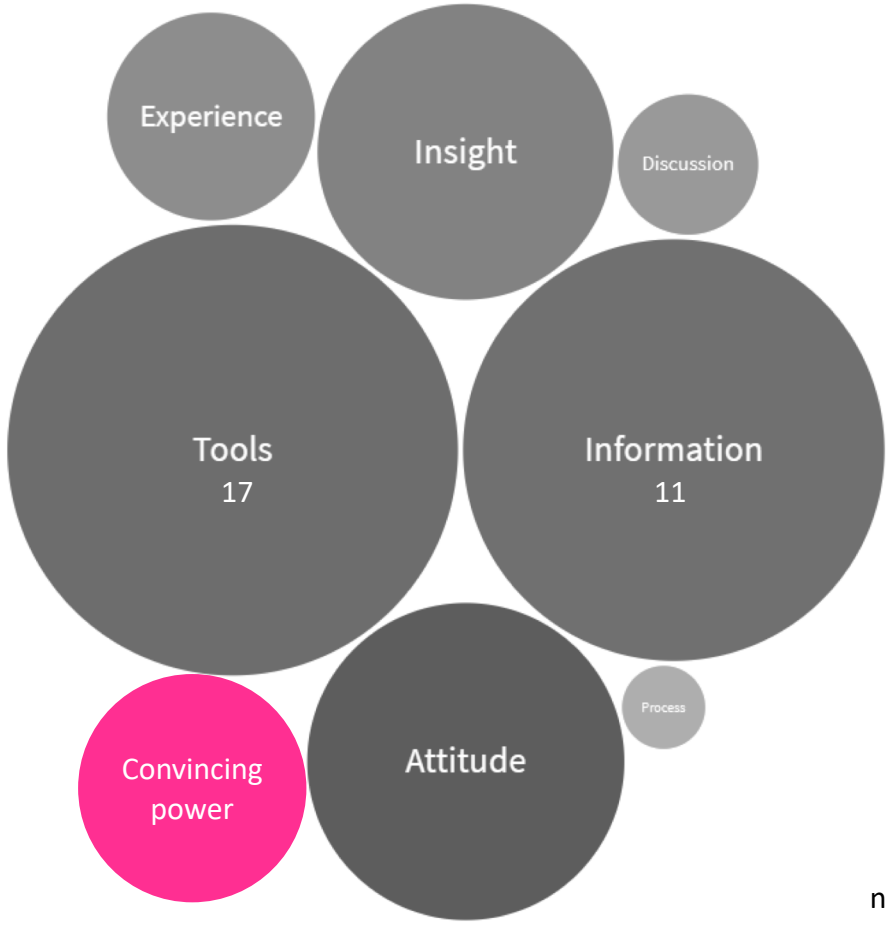
A **learning network**
for building professionals




Canvas exercise Atelier Circulair - Februari 2021

## Looking ahead

What do you need to accelerate your circular journey?




n = 48

https://public.flourish.studio/visualisation/5561570

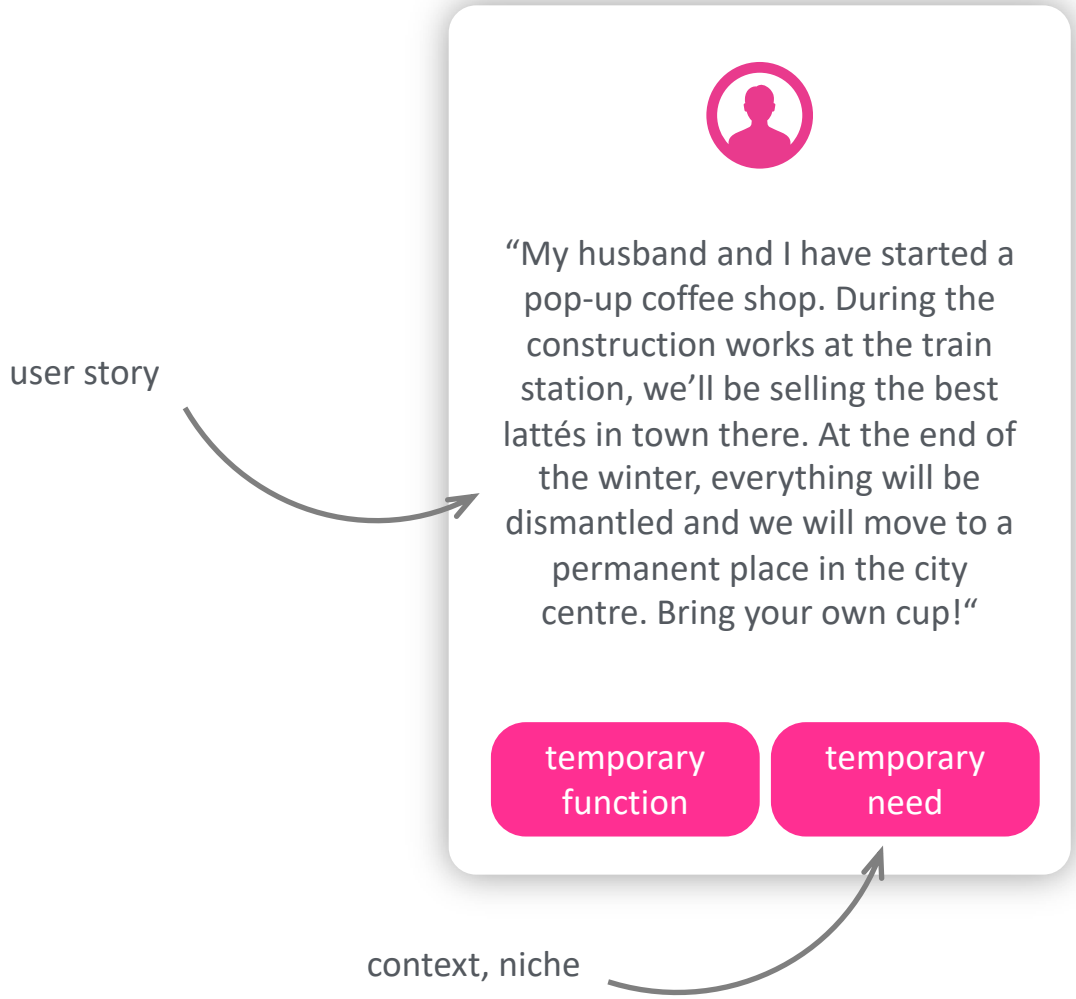
Canvas exercise Atelier Circulair - februari 2021

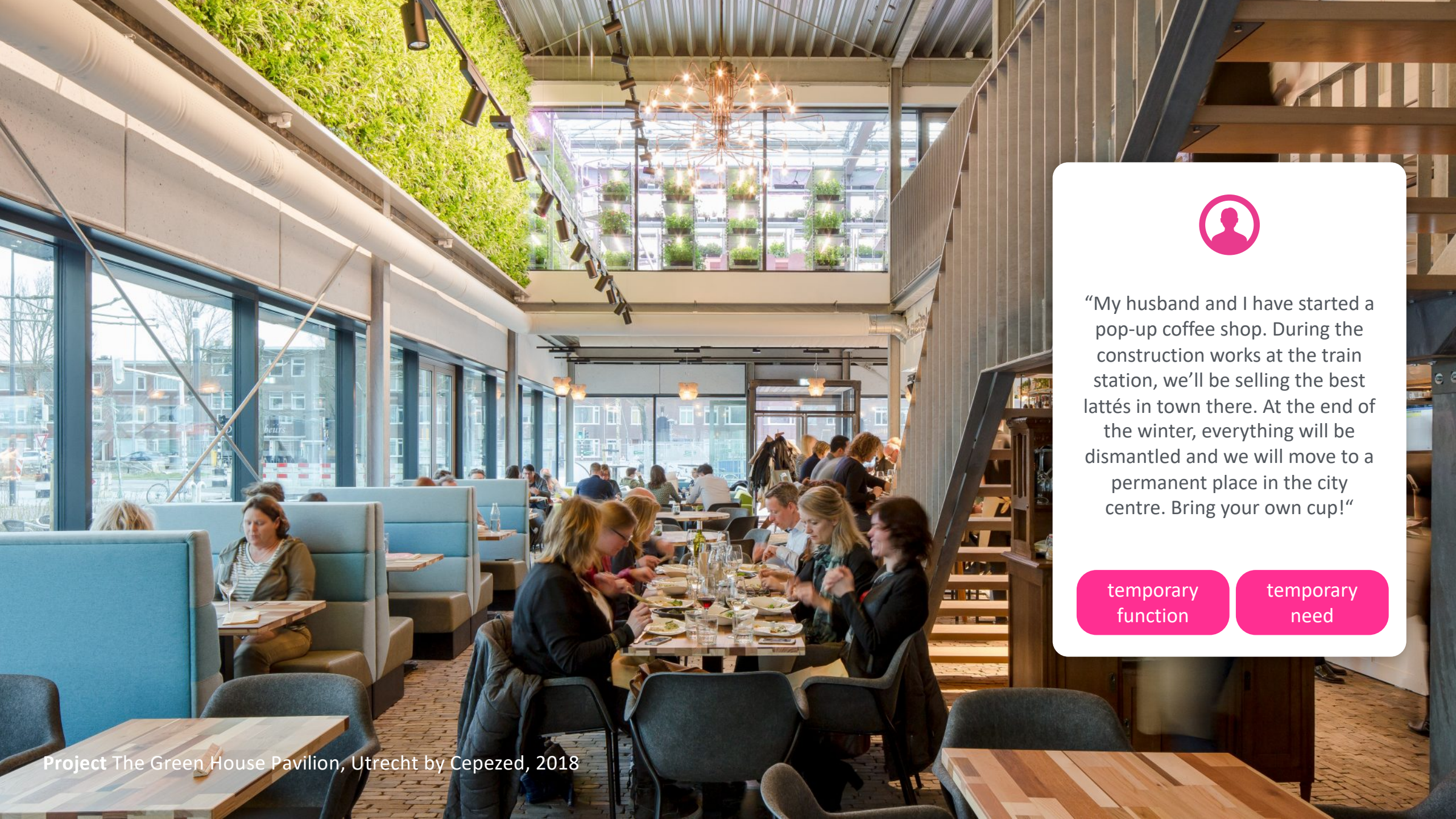

Convincing the client
takes more than this

# User stories

make underlaying needs concrete, and facilitate through dialogue and synthesis the definition of more relevant interventions.

- User Stories relate directly to every-day practices and are therefore easy to identify with.
- They allow to harvest the diversity of individual needs that characterise complex challenges
- Synthesising user needs and outcomes give rise to the definition of more relevant interventions.
- The stories bridge system and individual scale and help to convey the added value of a leverage.



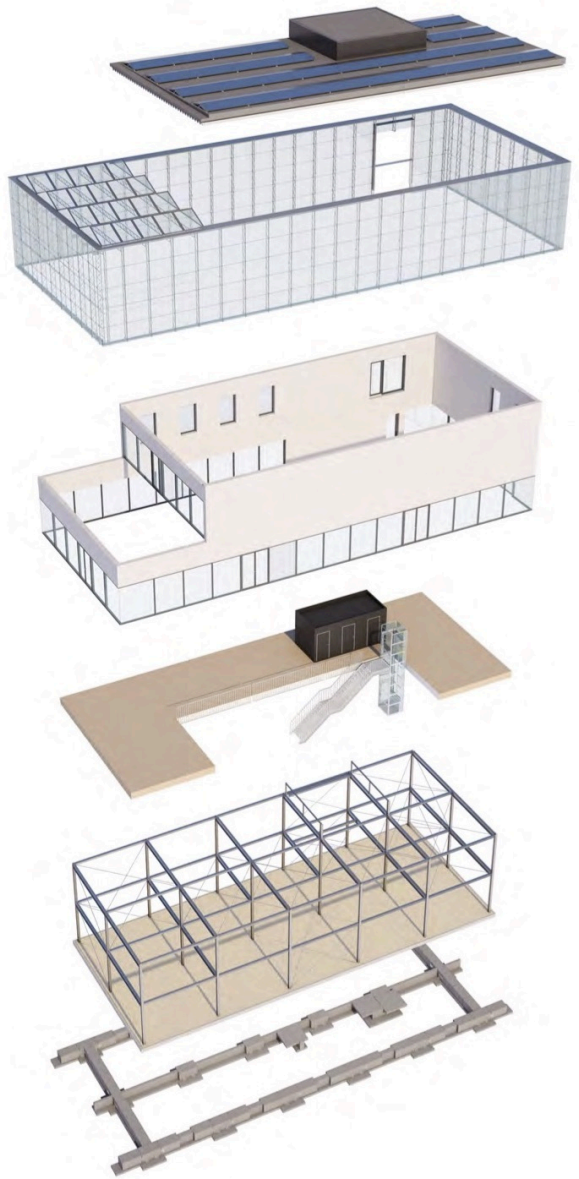


“My husband and I have started a pop-up coffee shop. During the construction works at the train station, we’ll be selling the best lattés in town there. At the end of the winter, everything will be dismantled and we will move to a permanent place in the city centre. Bring your own cup!“

temporary function

temporary need

**Project** The Green House Pavilion, Utrecht by Cepezed, 2018



PV panels provide the pavilion with a large share of the energy requirement

glass plates from the old Knoopkazerne form the façade cladding

biobased materials also in the timber frame construction façade elements

biobased wooden floor for the 1st floor. the toilet block and the lift are separate units that are lifted out for new use

steel skeleton consists of a square grid and is completely remontable

floor consists of beautiful recycled bricks

the green house stands on standard concrete blocks that are reused

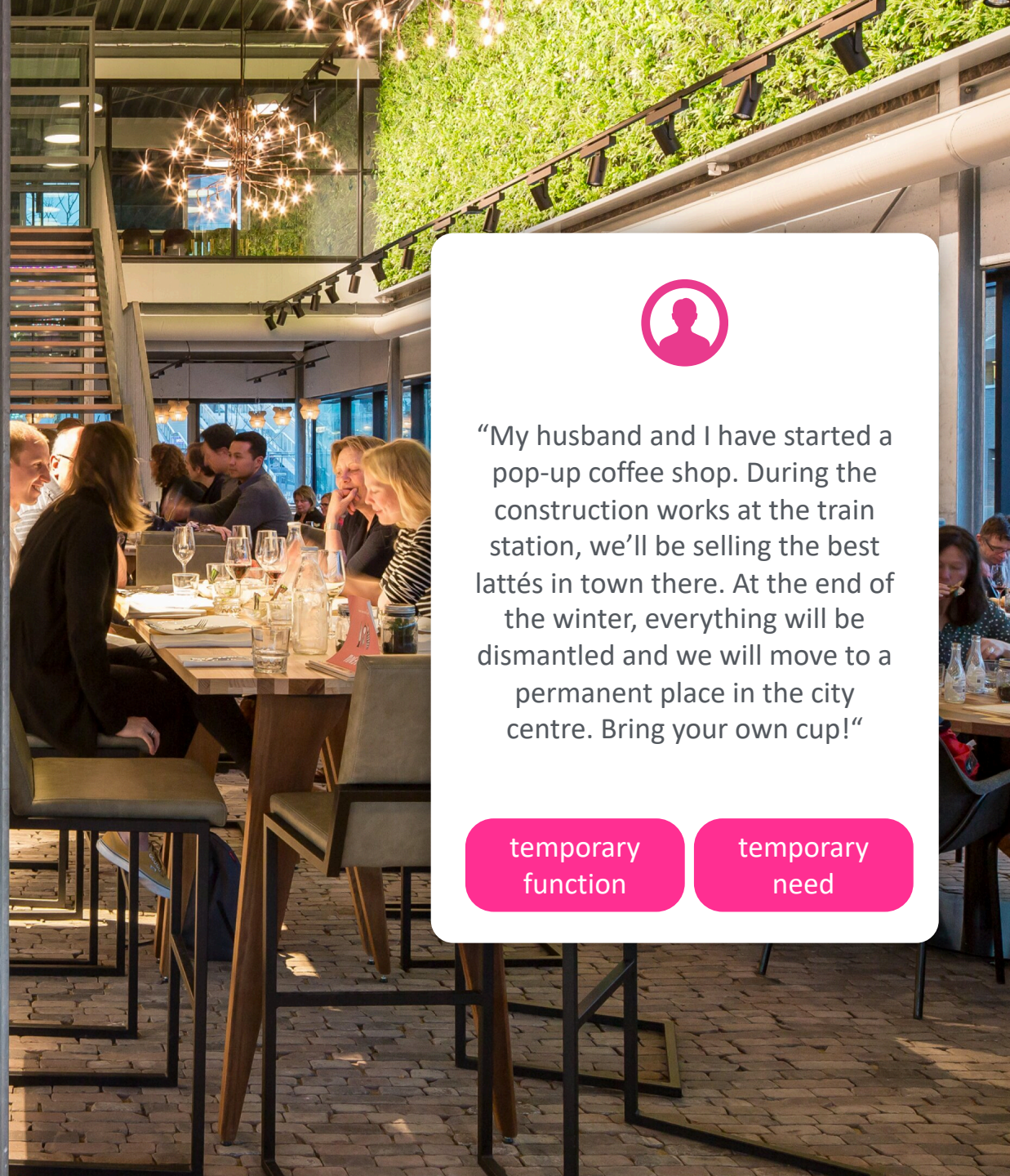
**Project** The Green House Pavilion, Utrecht by Cepezed, 2018

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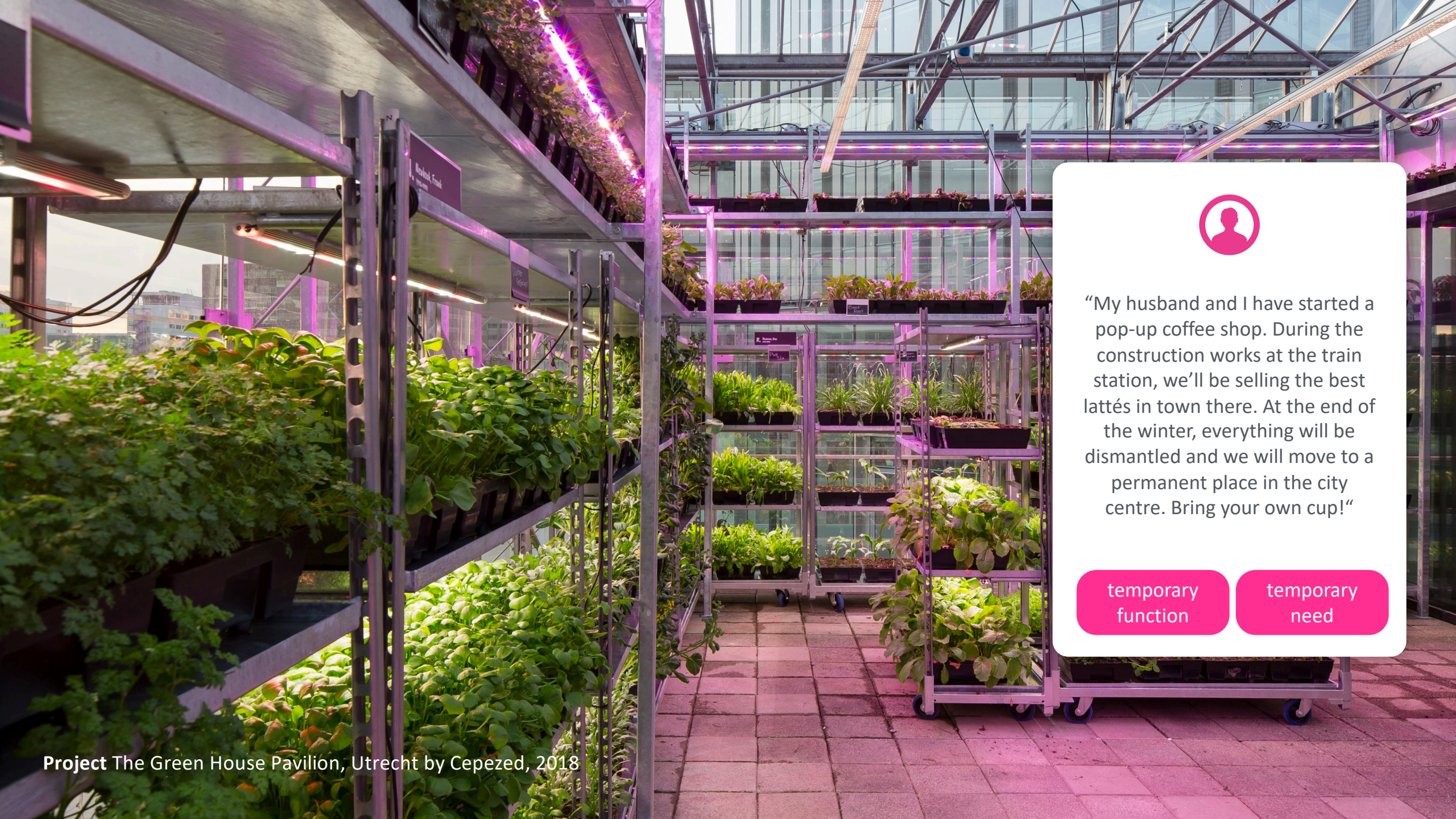


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**Project** Prefab House, Zomergem by BAST architects & engineers, 2018 | **Picture** Johan Van Der Hasselt

“We’re building a new house for my mother. It has a bathroom on the ground floor and, with a few minor adjustments, there will be enough room for a live-in carer to support her.
It’s nice and lofty with a lot of natural materials. I hope she can live in it for many years to come.“

lifelong living

expandable housing



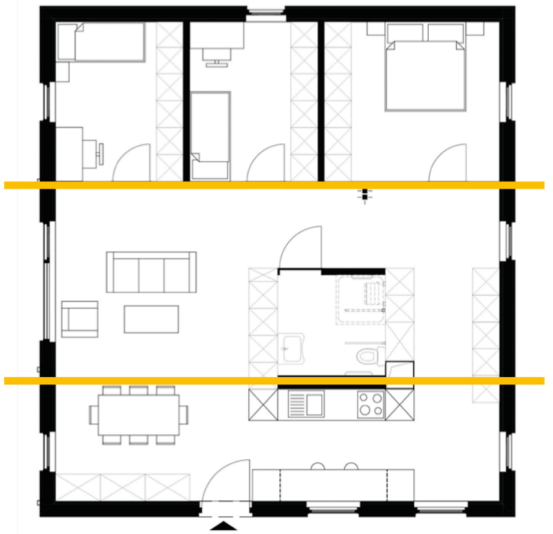

**Project** Prefab House, Zomergem by BAST architects & engineers, 2018 | **Picture** Johan Van Der Hasselt

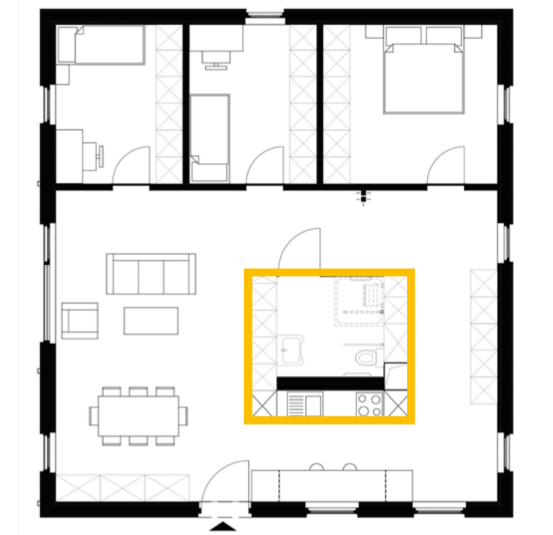
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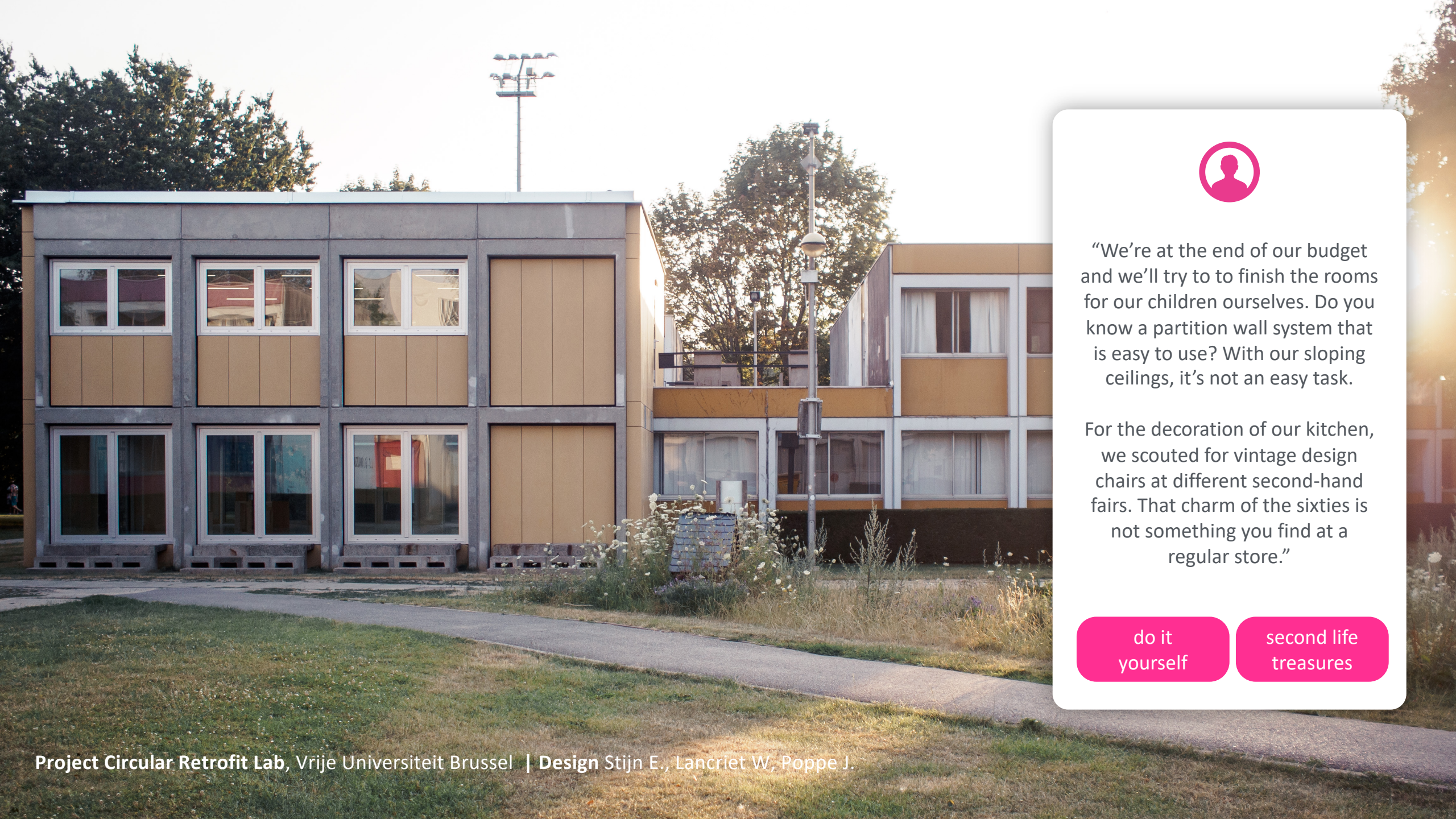
“We’re at the end of our budget and we’ll try to to finish the rooms for our children ourselves. Do you know a partition wall system that is easy to use? With our sloping ceilings, it’s not an easy task.

For the decoration of our kitchen, we scouted for vintage design chairs at different second-hand fairs. That charm of the sixties is not something you find at a regular store.”

do it yourself

second life treasures

**Product** JuuNoo, demountable partition walls with a take-back guarantee, 2019



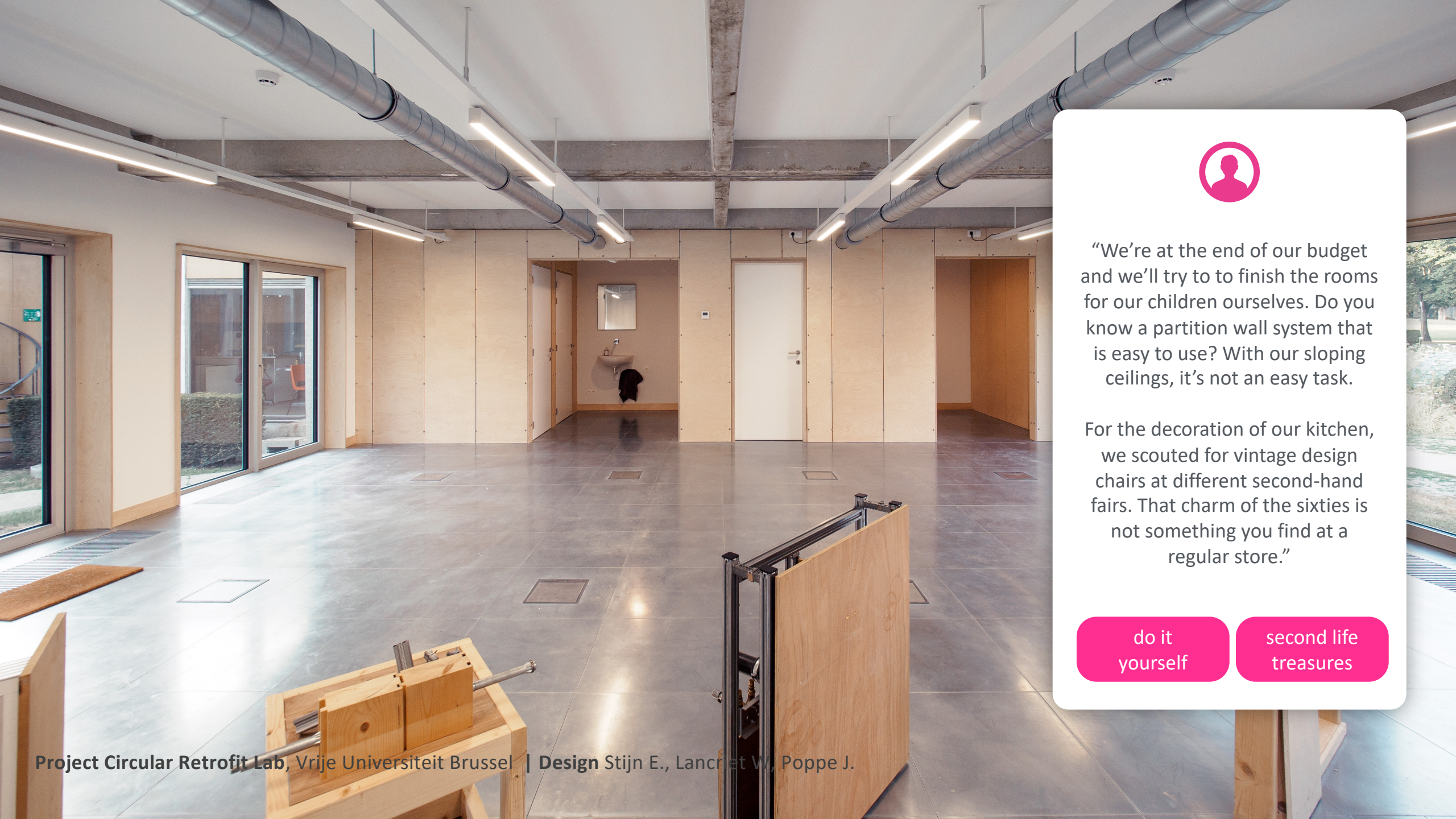
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**Project Circular Retrofit Lab**, Vrije Universiteit Brussel | **Design** Stijn E., Lancriet W, Poppe J.



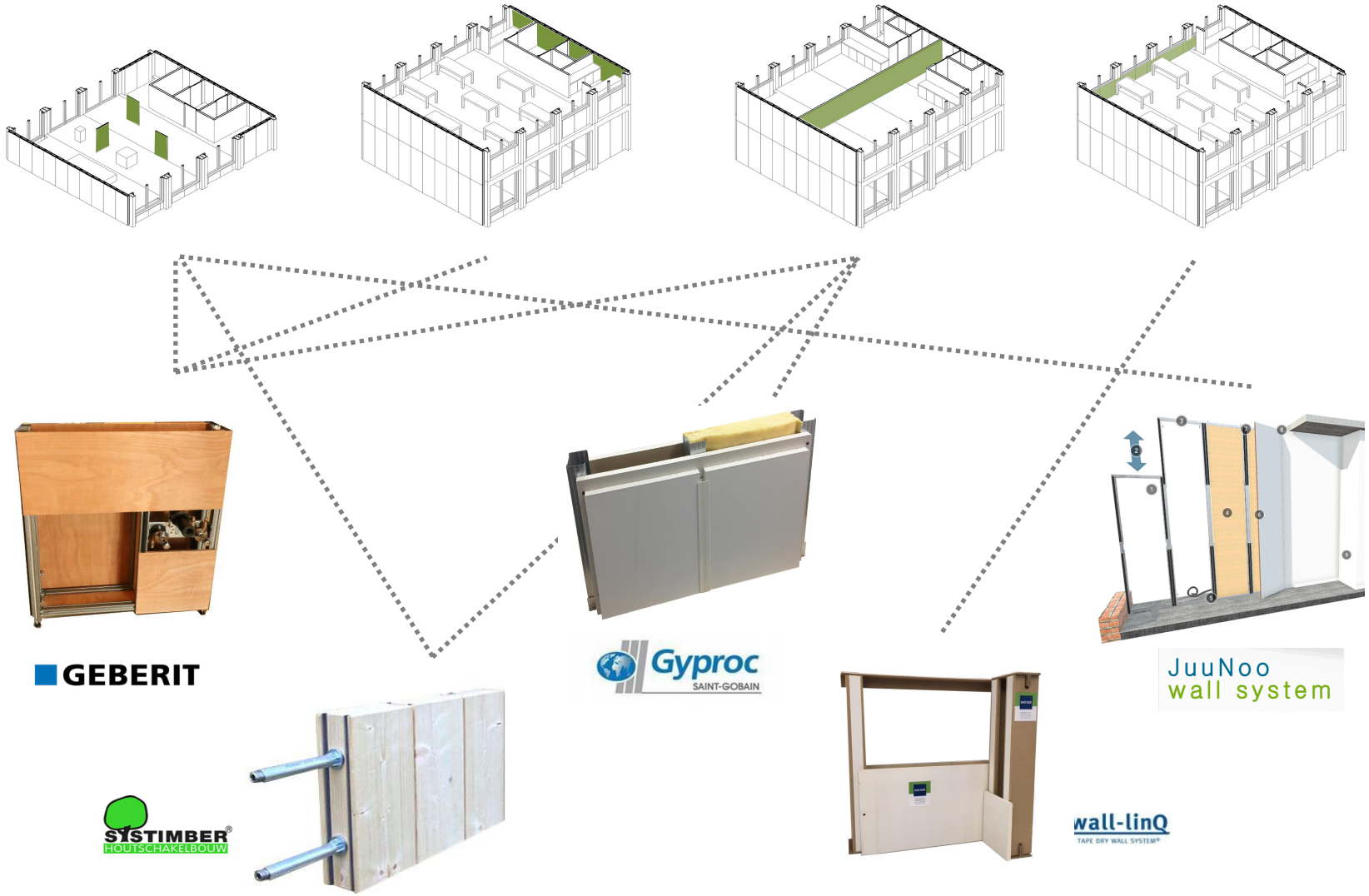
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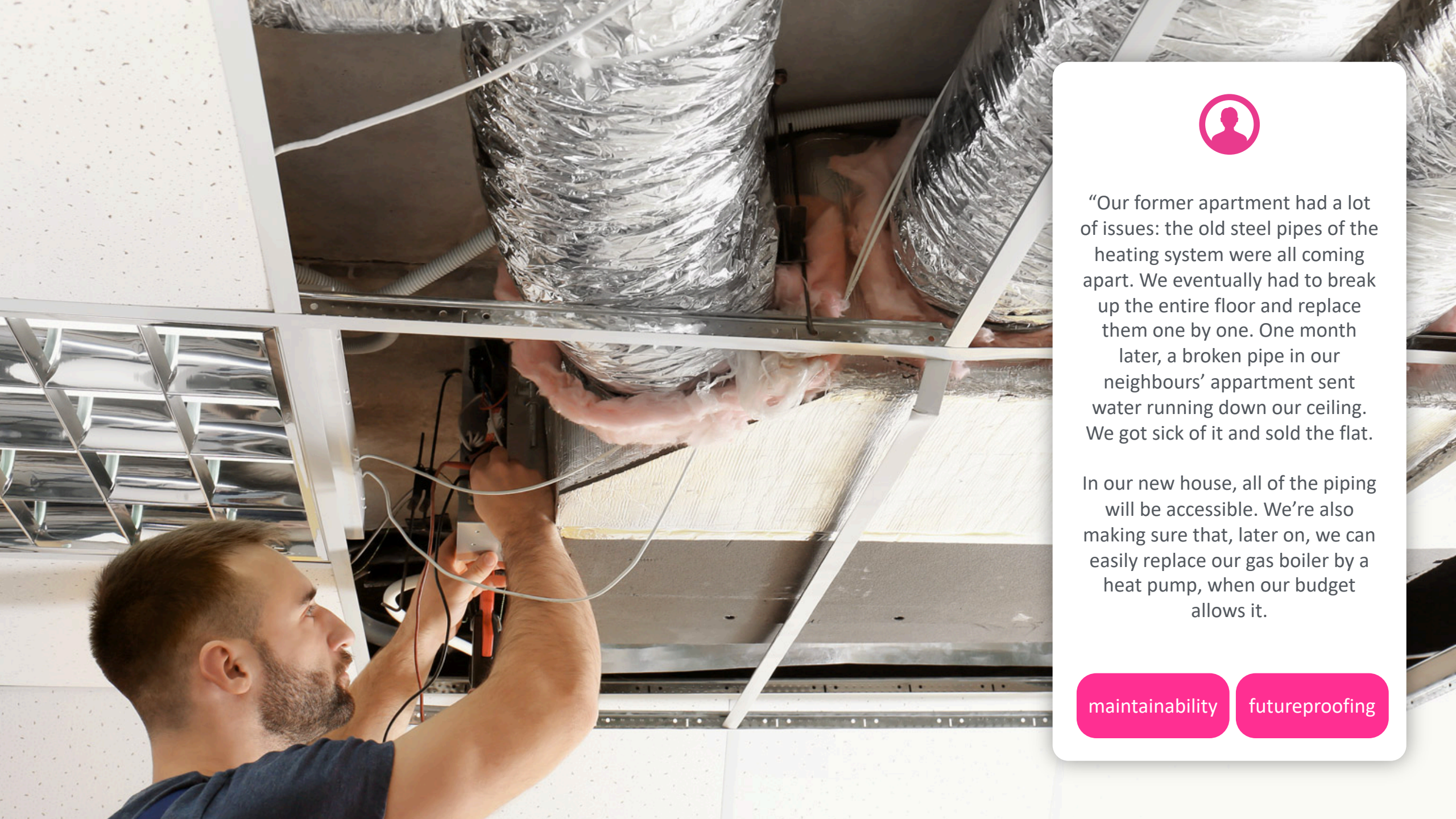

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“Our former apartment had a lot of issues: the old steel pipes of the heating system were all coming apart. We eventually had to break up the entire floor and replace them one by one. One month later, a broken pipe in our neighbours’ appartment sent water running down our ceiling. We got sick of it and sold the flat.

In our new house, all of the piping will be accessible. We’re also making sure that, later on, we can easily replace our gas boiler by a heat pump, when our budget allows it.

maintainability

futureproofing




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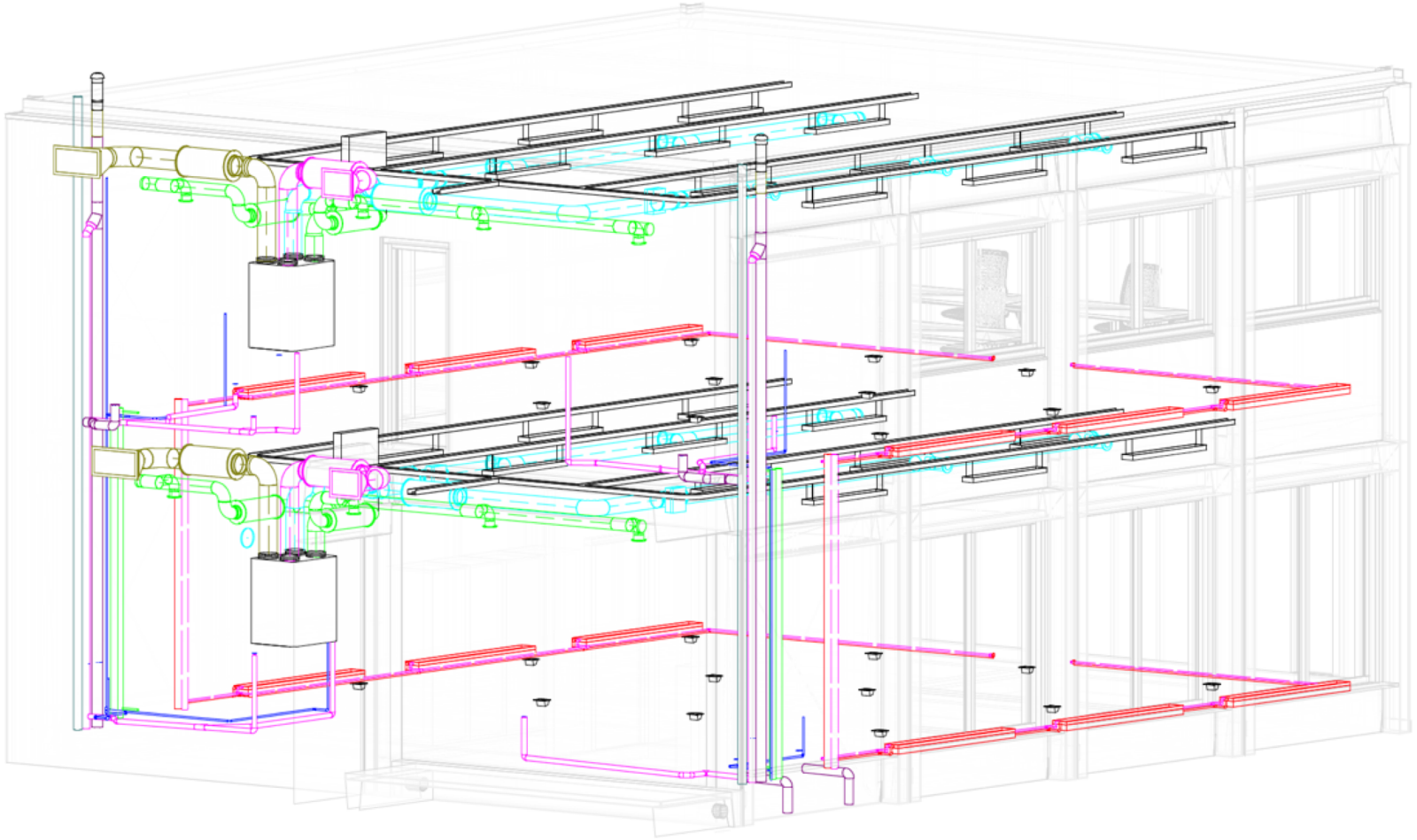


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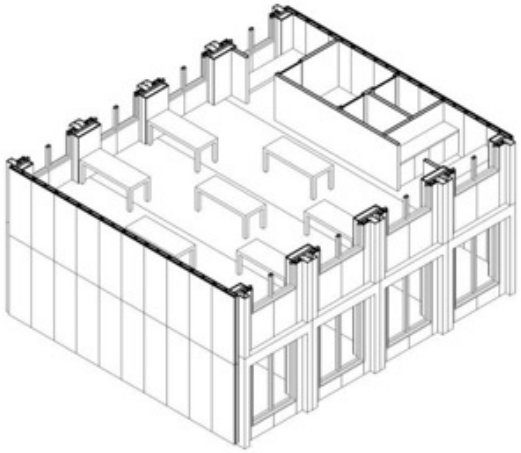


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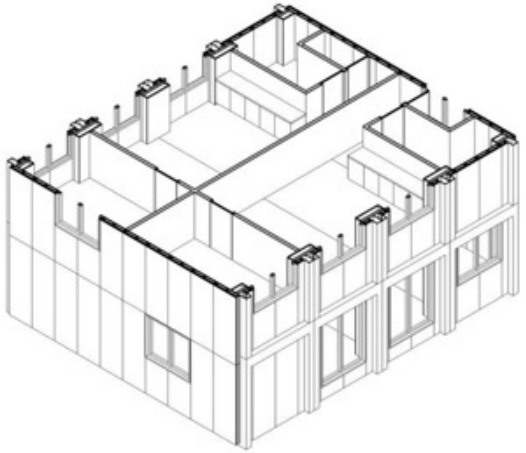
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**Plug-in Offices (professional)**

>





**Guesthouses (residential)**



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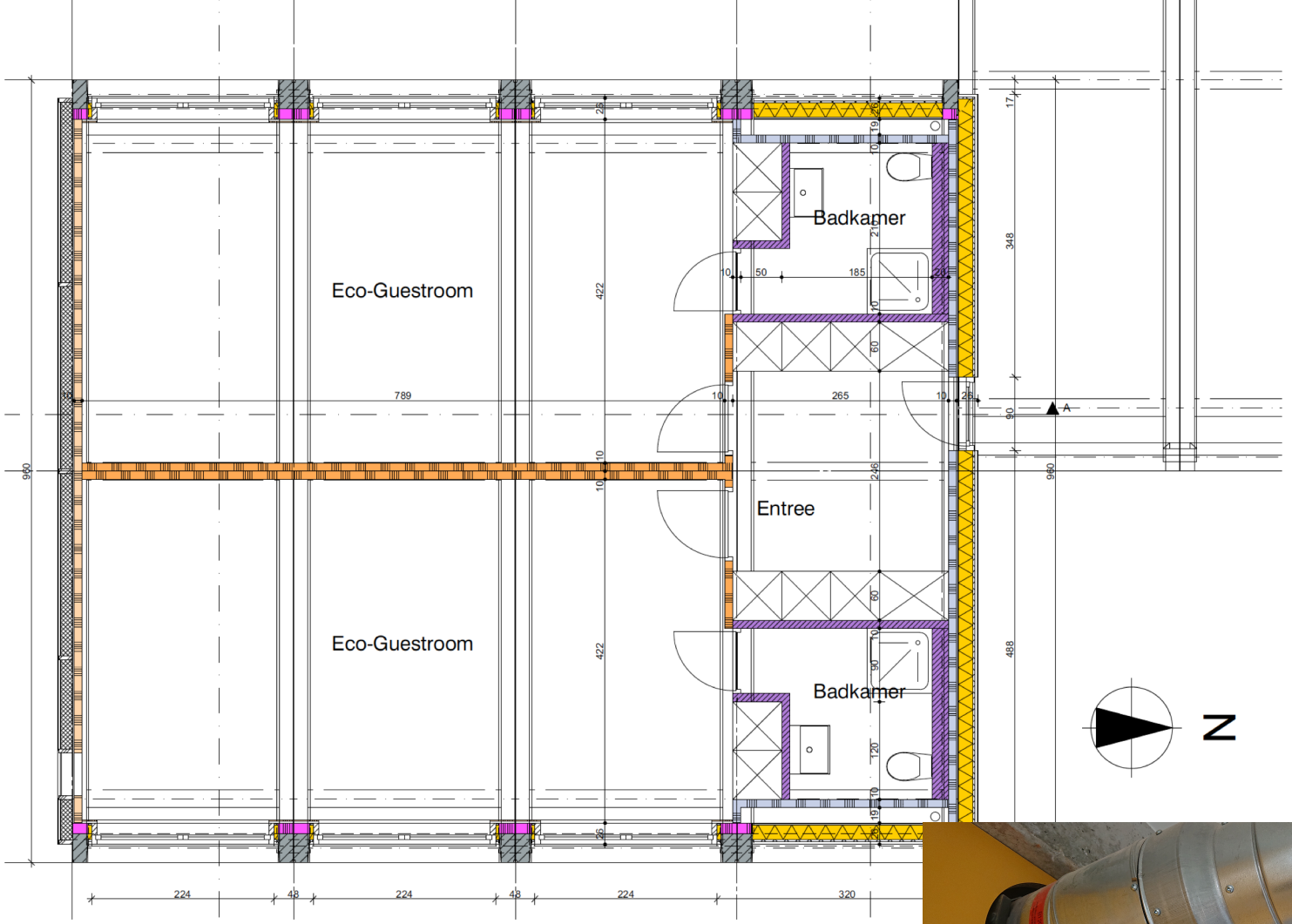


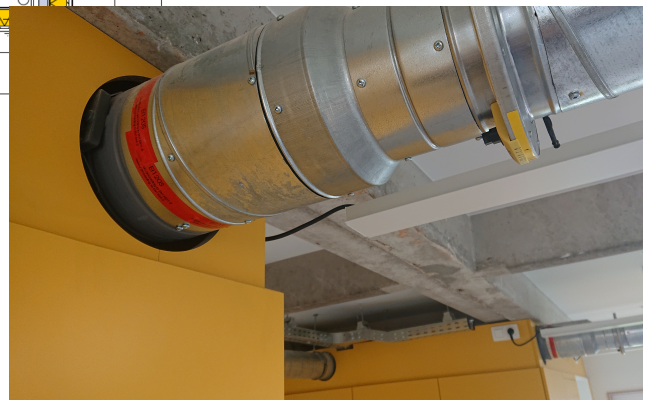
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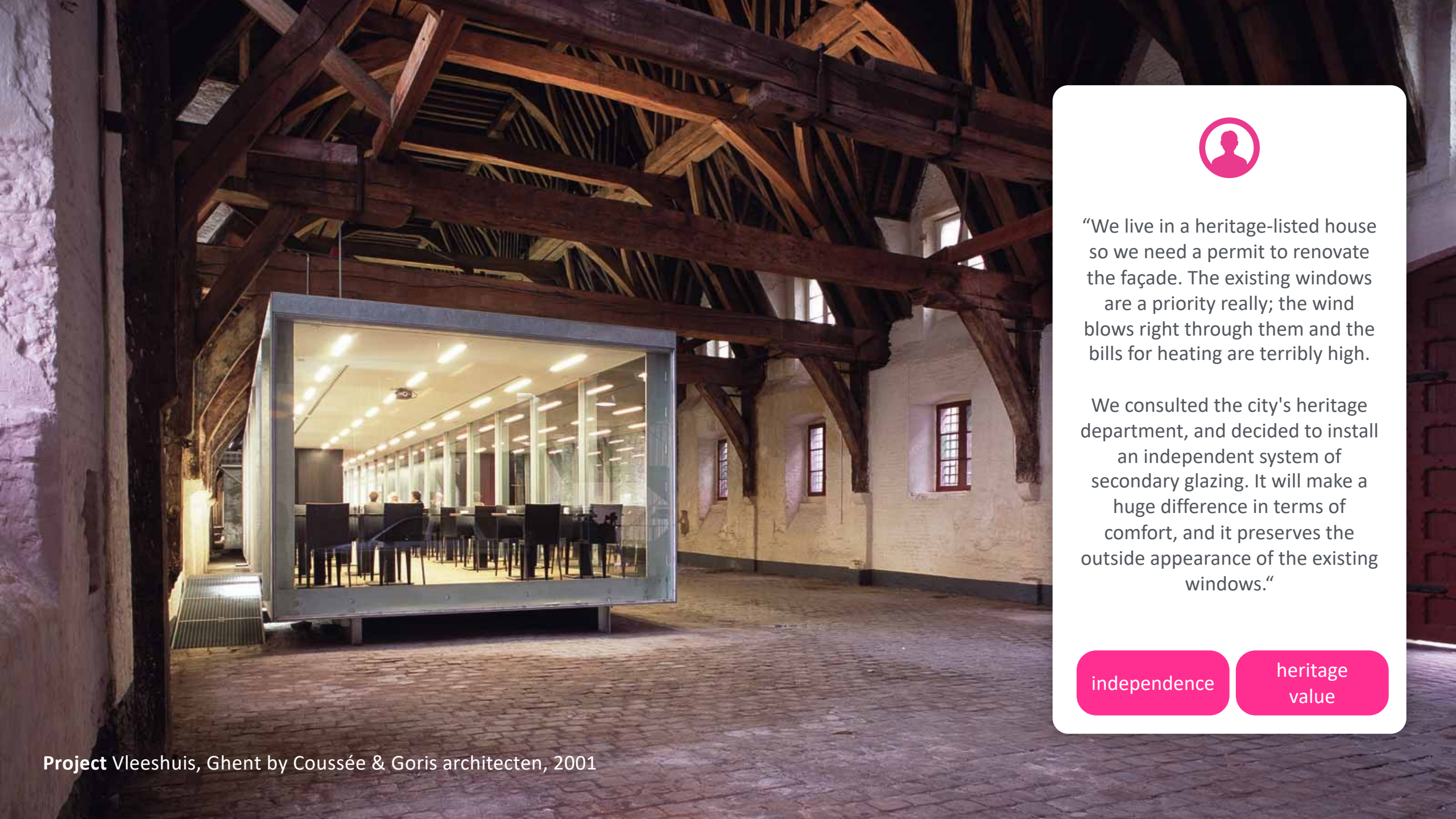



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“We live in a heritage-listed house so we need a permit to renovate the façade. The existing windows are a priority really; the wind blows right through them and the bills for heating are terribly high.

We consulted the city's heritage department, and decided to install an independent system of secondary glazing. It will make a huge difference in terms of comfort, and it preserves the outside appearance of the existing windows.“

independence

heritage value

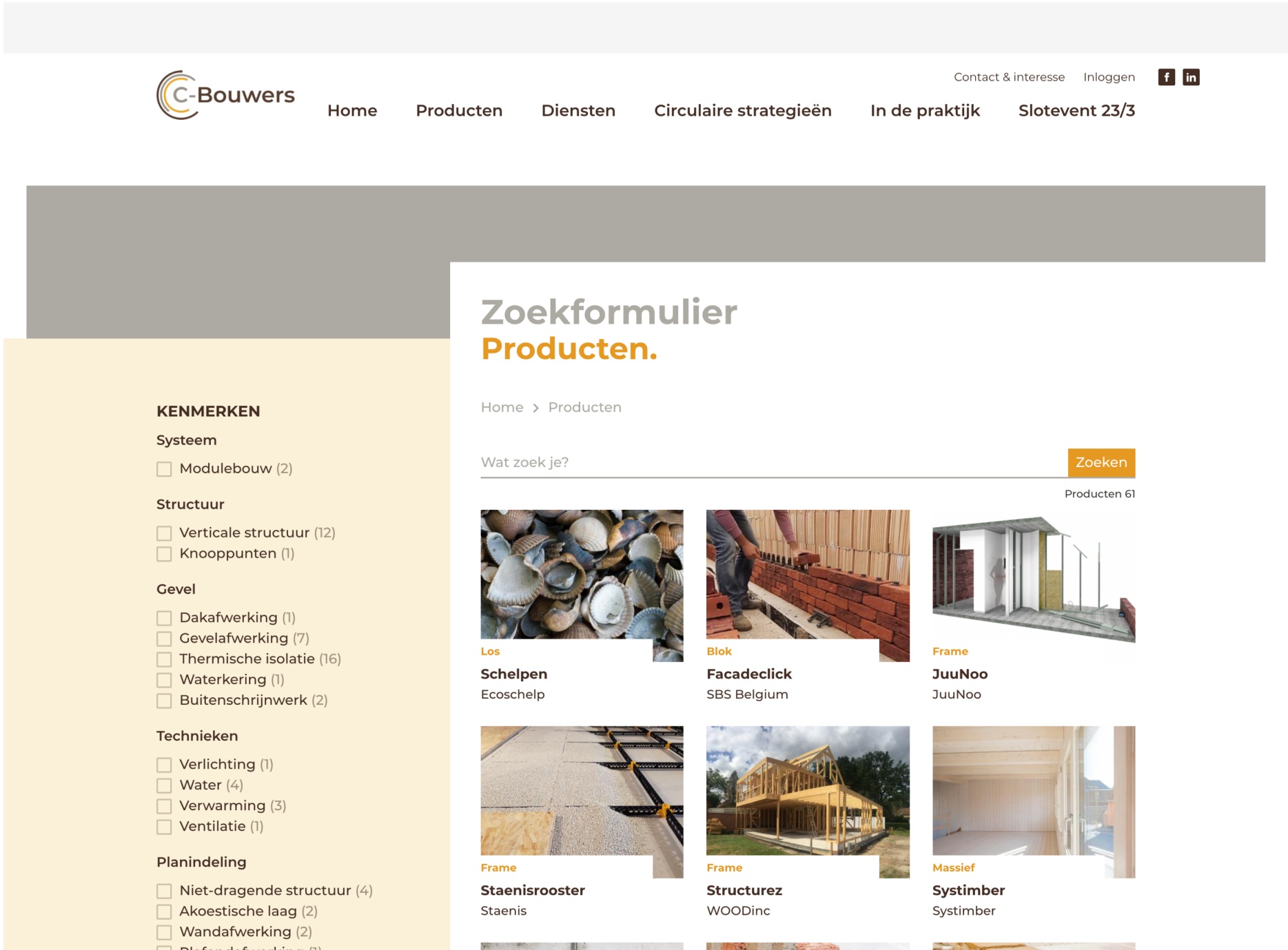
**Project** Vleeshuis, Ghent by Coussée & Goris architecten, 2001

## Conclusions ...

- Circularity is not and end in itself.
- It is **a means to create added value** for (all) stakeholders, beyond the envisioned reductions in environmental impact
- we need to keep track of the **context and the story** behind every project, actively relate to stakeholder needs to make circular building (more) successful.
- **customer-centricity**

# And implementations

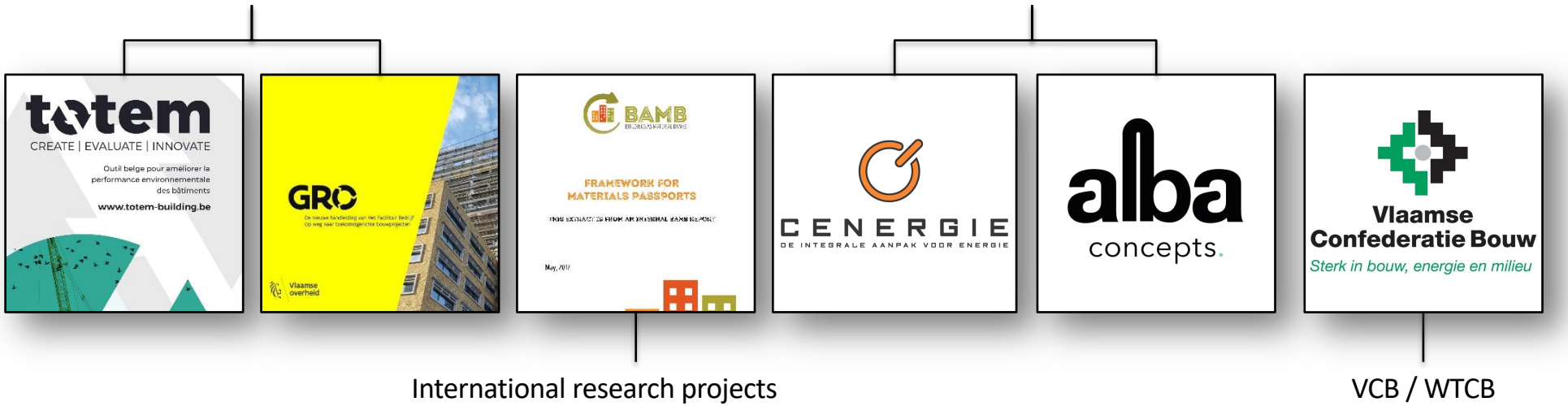
communication on circularity




**Project** C-Bouwers, database categorisation based on user stories, 2021

## And implementations

Tools and evaluation schemes




**Reference** Galle et al. (2018) The Dynamic Design Matrix: a major review of the Flemish design principles for closed material loops (programme.exordo.com/wascon2018/delegates/presentation/35/).

## Acknowledgments

The authors wish to express their gratitude for this learning opportunity to **Circular Flanders, OVAM** who supported **Atelier Circulair**, the Flemish learning network for architects and consulting engineers established by Netwerk Architecten Vlaanderen (NAV) and VUB Architectural Engineering. We also wish to thank the building professionals participating to the network for their valuable input and reflection.

With the support of **Circular Flanders, OVAM**, further research on the role of user scenarios is conducted within the **SensiParti** project by Bond Beter Leefmilieu Vlaanderen (BBL), VUB Architectural Engineering and Vibe vzw.

A project by:

VUB æ ARCHITECTURAL ENGINEERING nav.:

With the support of:

VLAANDEREN CIRCULAIR



# Break-out sessie (Miro)




https://miro.com/app/board/o9J_lC6Vxd0=/

# Wat mag je nog verwachten van SensiParti?

Publicatie

**‘Toekomstgericht (ver)bouwen,**
**Oplossingen voor een meer circulaire en toekomstgerichte woning’**

- **Oplossingenfiches** tonen mogelijk oplossingen voor een meer circulaire woning
- Een **laagrempelig document** dat wijst op de voordelen en mogelijkheden van o.a. hergebruik, aanpasbare planindeling, toegankelijke technieken…
- Geïllustreerd met **inspirerende voorbeelden**



hergebruik

## Recuperatiematerialen gebruiken

Bij een verbouwing maar zeker ook bij nieuwbouw kan je gerecupereerde bouwmaterialen hergebruiken. Die leg je zelf opzij tijdens afbraakwerken, haal je uit andere projecten of koop je aan via de tweedehands bouwmarkt. Dat ze minderwaardig zouden zijn is natuurlijk niet waar. Veel bouwmaterialen hebben bij afbraak het einde van hun gebruiksduur nog lang niet bereikt.

### Waarom?

- Je vermijdt niet enkel afval, maar spaart ook nieuwe materialen uit. **Zo verlaag je meteen de ecologische impact van jouw bouwproject**
- Je gebruikt **historische en karaktervolle materialen** die hun deugdelijkheid hebben bewezen
- Je krijgt toegang tot **waardevolle materialen en dat vaak aan een verlaagde kost**

Wil je bij afbraakwerken een deel van de bouwmaterialen recupereren? Bespreek het tijdig met jouw **aannemer** of zoek een afbraakaannemer die er ervaring mee heeft.

Wees **creatief** met recuperatiematerialen. Geef ze een tweede leven in een heel andere toepassing, knap ze op of combineer ze met moderne of nieuwe materialen.

Start **op tijd** met het zoeken van tweedehands bouwmaterialen. Voor sommige materialen is het aanbod nog beperkt.

Bezoek **opalis.eu** voor voorbeelden en voor een overzicht van lokale handelaars in tweedehands bouwmaterialen.



Dakpannen en gevelstenen, maar ook binnenschrijnwerk en sanitair zijn uiterst geschikt voor hergebruik. Het aanbod is dan ook groot.



Steeds vaker kan je terecht in fysieke winkels en magazijnen, zoals bij Rotor DC in Anderlecht.



Denk na over de manier waarop je de recuperatiematerialen plaatst. Door een kalkmortel te gebruiken, kan je gevelstenen later nog eens gebruiken.

# Wat mag je nog verwachten van SensiParti?

**Inspirerende voorbeelden**

- Oplossingen in beeld, maar vooral vanuit de **noden en het perspectief van de bewoners**
- Ecobouwers.be
- C-bouwers.be





C-bouwers.be

C-Bouwers

Contact & interesse Inloggen

Home Producten Diensten Circulaire strategieën In de praktijk

Home > Producten

Wat zoek je? Zoeken

Producten 61

## KENMERKEN

### Systeem

- [ ] Modulebouw (2)

### Structuur

- [ ] Verticale structuur (12)
- [ ] Knooppunten (1)

### Gevel

- [ ] Dakafwerking (1)
- [ ] Gevelafwerking (7)
- [ ] Thermische isolatie (16)
- [ ] Waterkering (1)
- [ ] Buitenschrijnwerk (2)

### Technieken

- [ ] Verlichting (1)
- [ ] Water (4)
- [ ] Verwarming (3)
- [ ] Ventilatie (1)

### Planindeling

- [ ] Niet-dragende structuur (4)
- [ ] Akoestische laag (2)
- [ ] Wandafwerking (2)
- [ ] Plafondafwerking (1)
- [ ] Vloerafwerking (5)
- [ ] Dekvloer (3)

## PRODUCTGROEP

- [ ] Blok (10)
- [ ] Deken (4)
- [ ] Flexibel (2)
- [ ] Folie (1)
- [ ] Frame (10)
- [ ] Hol (1)
- [ ] Los (6)
- [ ] Massief (3)
- [ ] Pan (2)



Los

**Schelpen**

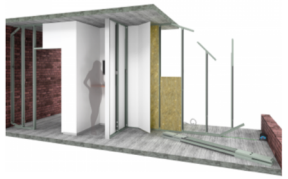
Ecoschelp



Blok

**Facadeclick**

SBS Belgium



Frame

**JuuNoo**

JuuNoo



Frame

**Staenisrooster**

Staenis



Frame

**Structurez**

WOODinc



Massief

**Systimber**

Systimber



Massief

**Brickette**

BC Materials



Massief

**Kastar**

BC Materials



Pleister

**Brusseleir**

BC Materials

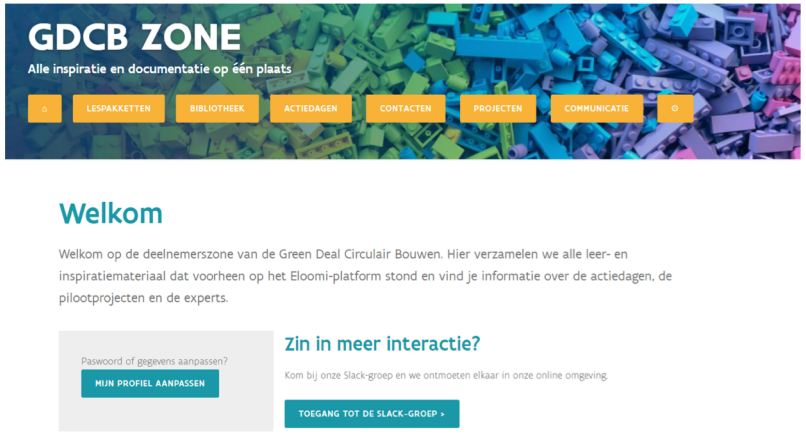




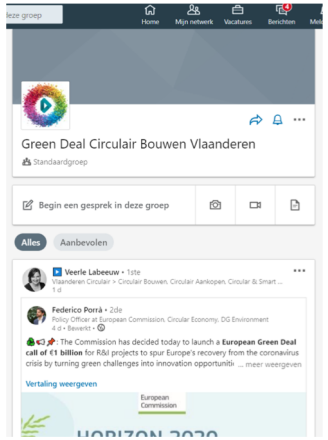


# Vergeet niet…

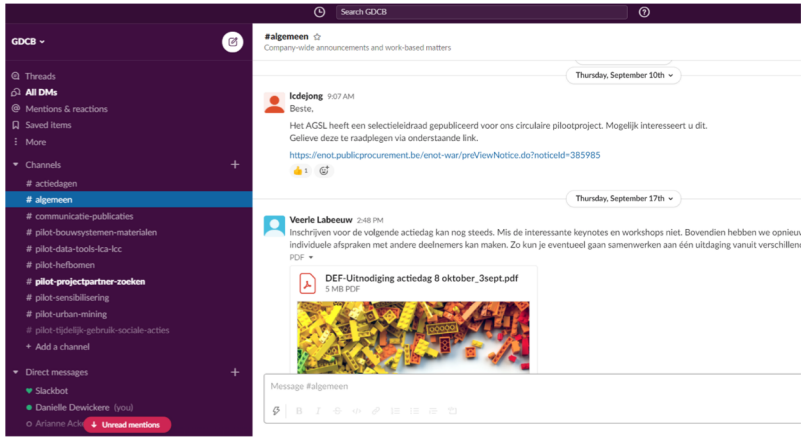
- … om 1 tip en 1 top te geven via de chat
- … om het verslag (dit ontvang je binnenkort door via een nieuwsflash) te delen met je collega's
- … om het moment van de volgende actiedag – op 5 oktober - vrij te houden




De deelnemerszone met het verslag, video's en presentaties




De LinkedIn groep voor communicatie naar niet-deelnemers




De Slack groep voor communicatie tussen deelnemers onderling, voor vragen aan elkaar en aan het GDCB-team