

#EUCircularTalks

Construction and Infrastructure value chains and market



Confederation of Danish Industry



# New European Bauhaus



# New European Bauhaus

- What is New European Bauhaus
- The Danish Project – a lighthouse demonstrator
  - The case: Ressource Blokken



### STATE OF THE UNION 2020



*I want NextGenerationEU to kickstart a European renovation wave and make our Union a leader in the circular economy.*

**Ursula von der Leyen**



# Key features

Construction and Infrastructure value chains and market



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## Shaping a movement

- to explore how to **live better together**;
- to make the Green Deal a positive, tangible experience, for people;
- to **connect people** from different professions and backgrounds and weave different the perspectives and cultures;
- to move beyond “forms follows function”, factoring in the planet and social purposes;
- to support the development of **lead markets** in sustainability;



# About

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## Initial scope:

- Beyond buildings: spaces where we live and the way we experience them

## An integration challenge:

- **Sustainability**, including circularity
- **Aesthetics** and quality of experience
- **Inclusion**, including accessibility and affordability





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## Lighthouse Demonstrator Partners:



Dansk  
Design Center



CHART



# The Danish Project

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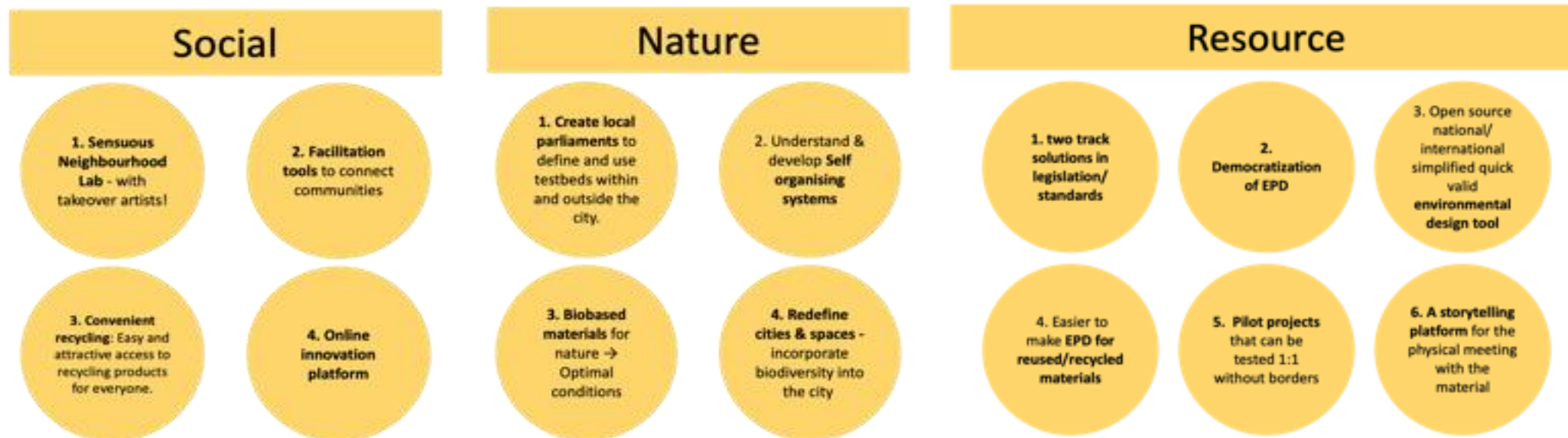


Challenge:

We need to stop **overshooting**

Mission:

*Designing the irresistible circular society*









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# Ressource Blokken

Upcycling Social housing from the 1960s and 70s



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**GXN**  
INNOVATION



Panum  
& Kappel

**SØNDERGAARD**



| **re**  
værk



**jaja**



**SPEKTRUM**

**REGNESTUEN**  
HAUKOHL & KØPPEN



## Construction and Infrastructure value chains and market Ressource Blokken

### Ressource Blokken

Upcycling af 60'erne og 70'ernes almene byggeri



#### Vision

Ensuring sustainable handling of public housing - present and future.



#### Circumstance

A political initiative to demolish social housing in Denmark on a large scale.



#### Stakeholders

Actors within the social sectors, academia, architecture, and construction.



#### Initiative:

Mapping of resource potential in 15 social housing blocks.

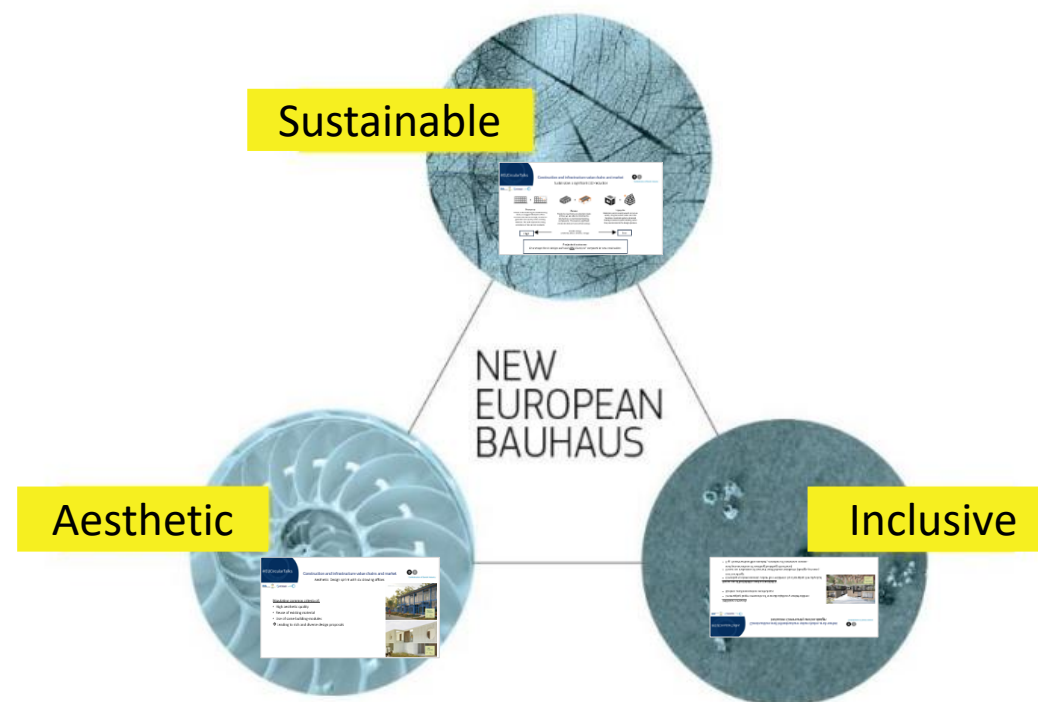
Reusing/upcycling potential in concrete structures in two sites scheduled for demolition.



#### Result

A scalable methodology for up-cycling of concrete structures (with regard to aesthetics, sustainability and inclusion).

## Construction and Infrastructure value chains and market Sustainability, aesthetics, and inclusion



## Construction and Infrastructure value chains and market Inclusion: Community and co-design

### Utilising network

- Leveraging large networks of transdisciplinary stakeholders
- Sprints and innovation workshops

### Focus on affordability and accessibility

- Creating socioeconomic value for residents by changing the physical surroundings
- Focus on inclusion of current and future residents (design process, and preservation of existing building structure)
- E.g. Construction flea market, creation of common rooms.



## Construction and Infrastructure value chains and market Sustainable: a significant CO<sub>2</sub>-reduction



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### Preserve

Instead of demolishing the total building stock, we suggest that parts of the concrete structures are kept, in order to generate new quality of the existing material. This will improve the living conditions of the current residents.



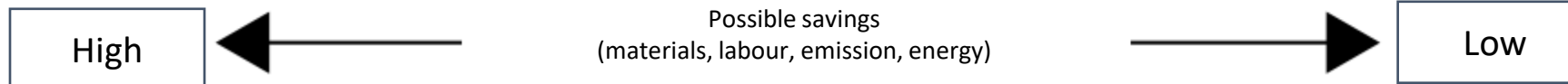
### Reuse

Thanks to new frame construction made of tree, we are able to minimize the intervention on demolished building-components. This leads to significant environmental and economical savings.



### Upcycle

Materials, which usually would end up as waste, are given added value and new functions. Residents get an enhanced feeling of ownership and identity, when they are included in the design-process.



### Projected outcome

*On average the six designs will save **47%** CO<sub>2</sub>-eq m<sup>2</sup> compared to new construction*

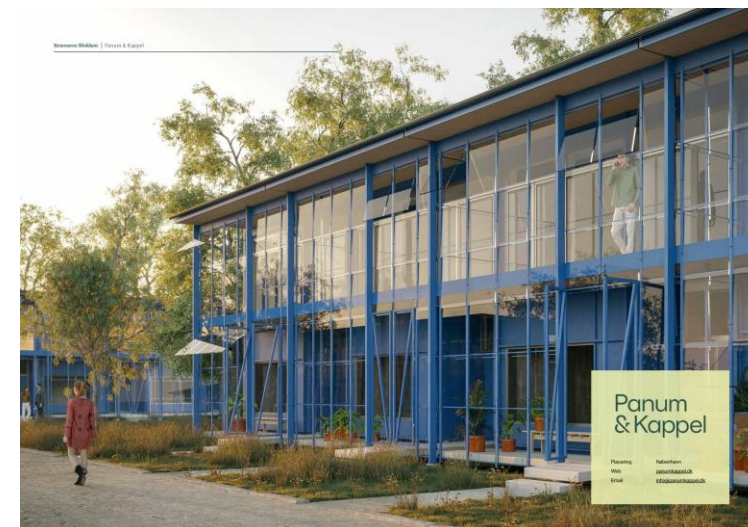


## Construction and Infrastructure value chains and market

### Aesthetic: Design sprint with six drawing offices

### Stipulating common criteria of:

- High aesthetic quality
  - Reuse of existing material
  - Use of same building-modules
- Leading to rich and diverse design proposals



### Designing the irresistible circular society

THANK YOU

Henriette Thuen HTU@DI.DK

#### Relevant links:

- [Irresistible circular society | New European Bauhaus](#)
- [Whitepaper: Designing the irresistible circular society - Creative Denmark](#)
- [Ressource Blokken - Idekatalog.pdf \(3xn.dk\)](#)

