MALMÖ BYGGER HÅLLBART
BUILDING MALMÖ SUSTAINABLE

Malmö 2030

SVERIGES KLIMATSMARTASTE STAD
SWEDEN'S MOST CLIMATE FRIENDLY CITY

Presentation – Building Malmö Sustainable, 2019-10-24
The Passive House and Sustainability Conference 2019
Christian Björneland, Process Leader and Project Manager

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The great transformation

BO01– FROM HAS-BEEN TO WORLD RENOWNED

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INSIGHTS

2016
62%

2020
94%

2020
Alt 98-99%

Electricity
Heat
Transports

ENVIRONMENTAL PROGRAMME

By 2020, the City of Malmö will be climate neutral and by 2030 the whole municipality will run on 100% renewable energy.

The proportion of renewable energy will be 100% in the City of Malmö by 2020.

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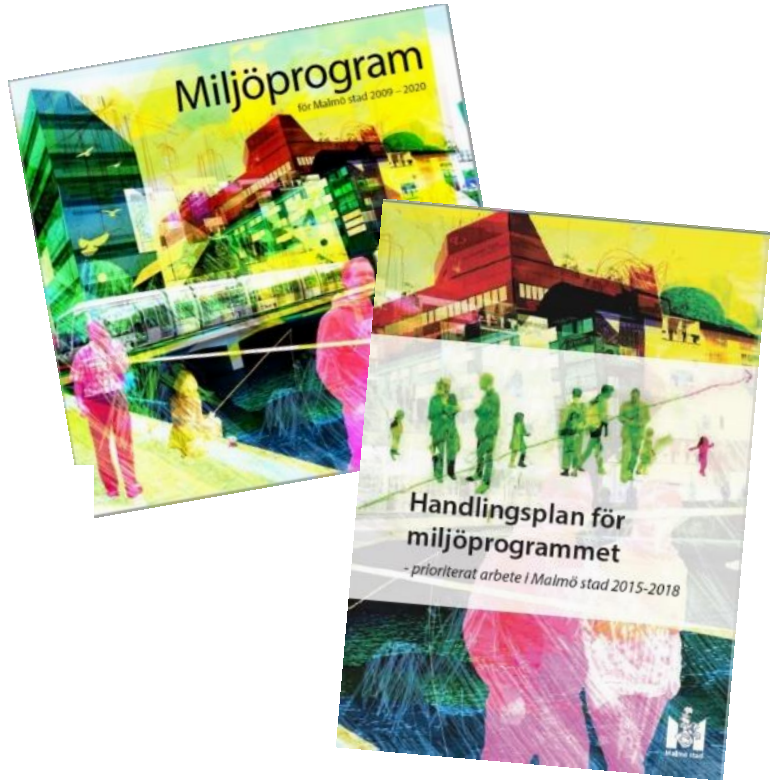
INSIGHTS

SWEDEN'S MOST CLIMATE FRIENDLY CITY

	2015	2016	2017	2018	
Effektivare användning av energi					Energy efficiency
Mer förnybar energi					Increased share of RE
Minskade utsläpp					Reduced emissions
Omställning av transporter och resvanor					Modal transportation shift
Anpassning till klimatförändringarna					Adapting to climate change



Malmö is moving in the right direction – too slowly

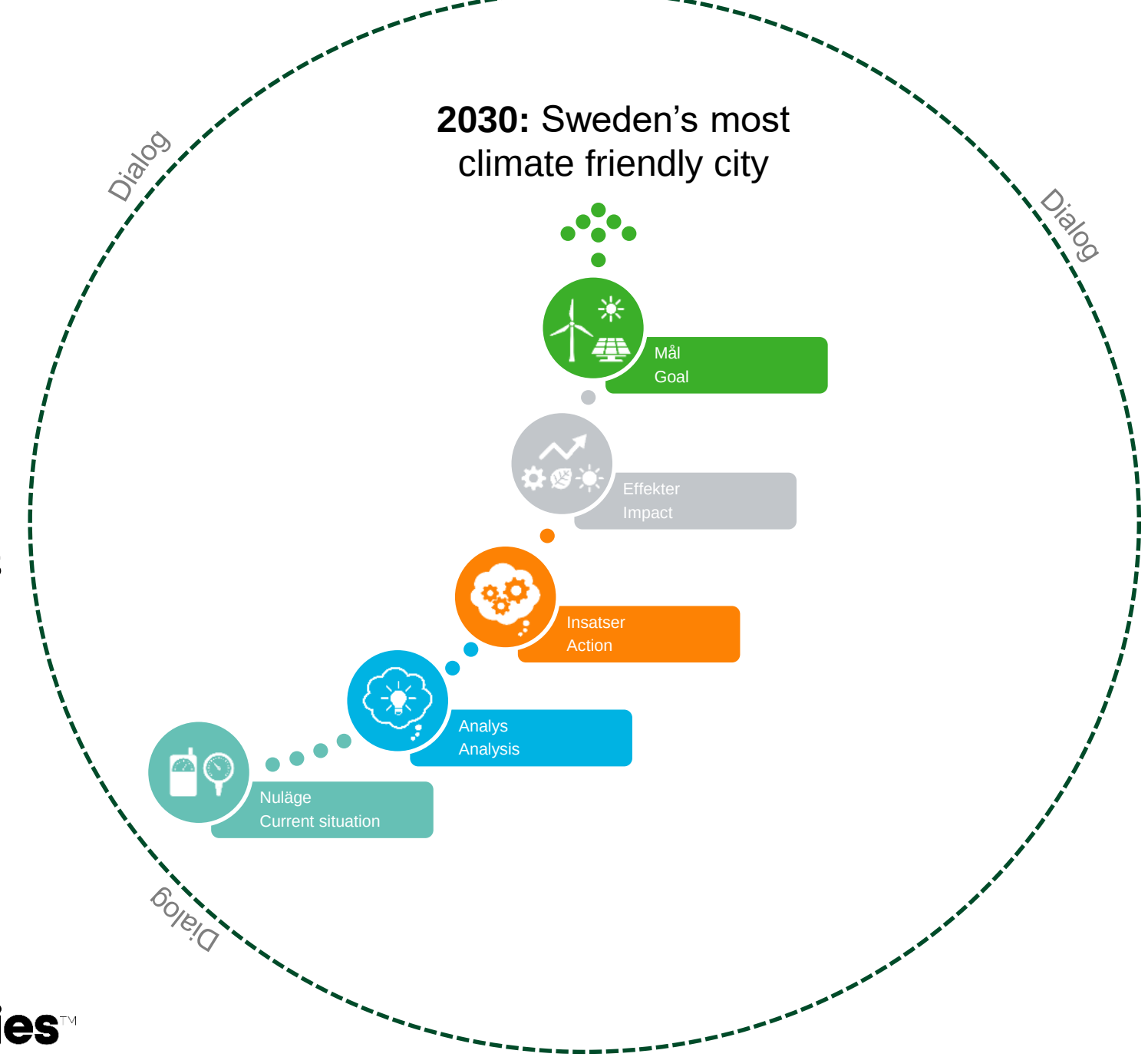
Response to the challenge

- **The acceleration process** for Malmö 2030: Sweden's most climate friendly city
- The building sector as example of **sector transformation**
- **Testbeds** – the Sege park example

How can we create a mutual understanding of what the mission looks like, and what we should prioritise?

How can we organise our efforts to get the largest impact?

We need to move from pilot projects to real transformative system change!



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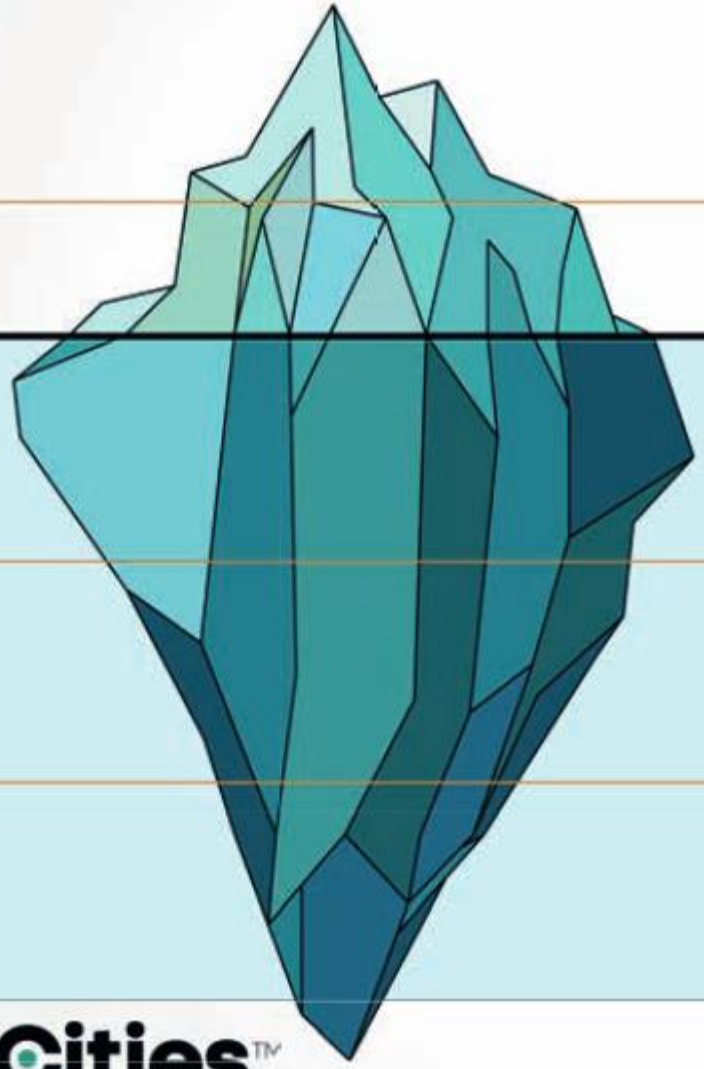
Transformative innovation is like icebergs



Innovative solutions

Actors and collaborations

Financial instruments

Policy

Missions

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Proactive way of working

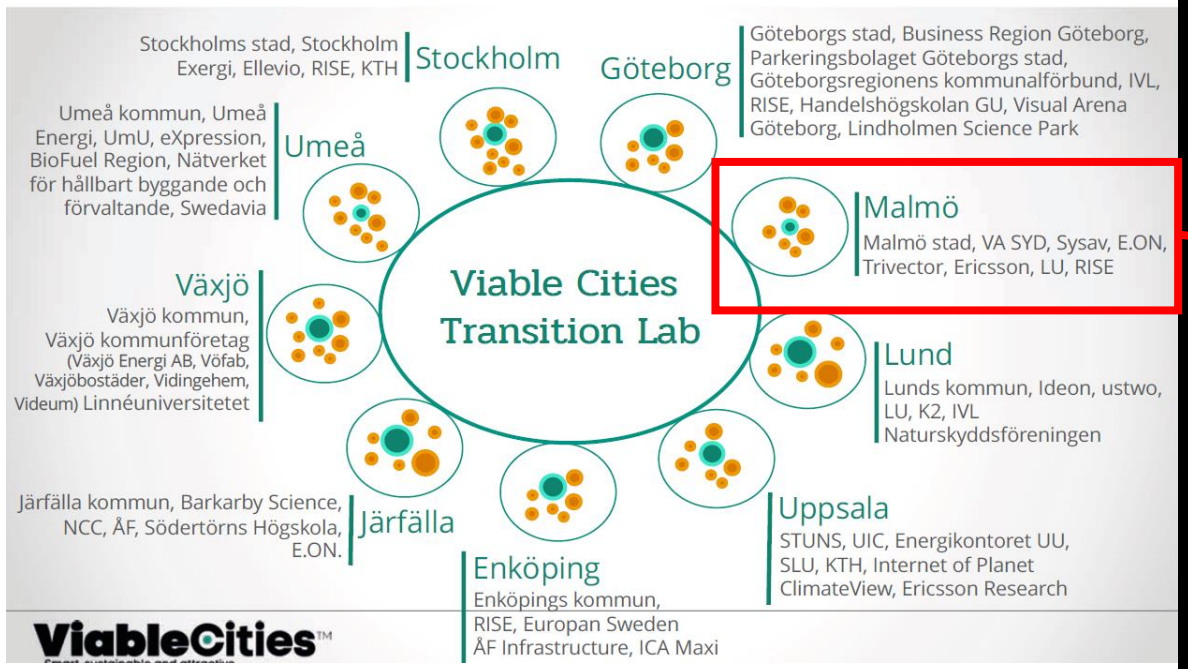
The acceleration process for
Malmö 2030: Sweden's most climate friendly city

Dialogue with financiers → Policy → Needs analysis → Calls → Process → Impact in Malmö → Malmö's goals

Description of Malmö's needs

- Klimatneutrala städer 2030
- Deep demonstration: Clean, healty cities

Scale



2019	2020	2021	2022
5-10 Cities	20-25 Cities	50 Cities	100 Cities

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The acceleration process

Malmo 2030: Sweden's most climate friendly city

The Democratic Society

Impact mapping

Ideas → Behaviour change → People → Goal: Action

Mål
Goal

Effekter
Impact

Insatser
Action

Analys
Analysis

Nuläge
Current situation

Dm

Partnerships
Projects
Financing

CO_2 roadmap
Economic case
Co-benefits

BwB
"Bankers Without Boundaries"

MATERIAL ECONOMICS

VASYD · E.ON · SYSAV · IIIEE · ERICSSON · Trivector · RI.SE Research Institutes of Sweden

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SECTOR TRANSFORMATION – THE BUILDING SECTOR

BUDGET ASSIGNMENT *"CLIMATE-NEUTRAL CONSTRUCTION – STRATEGIES FOR CLIMATE-NEUTRAL CONSTRUCTION WITHIN MALMÖ CITY'S PLANNING AND CONSTRUCTION ADMINISTRATIONS"*

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Two tracks:

- **Track 1**, Focus on Malmö city internally - coordinated by environmental construction strategist Maria Olsbäck (SBK)

  The City of Malmö's planning and construction administrations co-create and will develop a cross-border management strategy with the aim of enabling transformation towards a climate-neutral construction within the municipalities sphere of influence.

  The strategy covers not only new construction but also reconstruction/renovation and infrastructure.

Two tracks:

- **Track 2**, Focus on the local building sector – urban development strategist Josephine Nellerup (SBK) is representing the city of Malmö

  A building actor driven process supported by the City of Malmö, with the purpose to develop a "Local Roadmap for a climate-neutral construction and civil engineering sector in Malmö 2030" (LFM30).

  LFM30 forms the basis for the collective movement for Malmö as a geography to go from conventional construction to climate neutral construction. The city's internal work within track 1 intends to meet the agreements within LFM30 as far as possible.

  Focus on the entire value chain - Over 100 companies participate.
  LFM30.SE

Initiative and coordination

LFM 30
LOKAL FÄRDPLAN FÖR EN KLIMATNEUTRAL BYGG- OCH ANLÄGGNINGSSEKTOR I MALMÖ 2030

MIDROC

OTTO MAGNUSSON

VASAKRONAN

Wihlborgs

Sustainable innovation

SVERIGES TRÄBYGGNADS KANSLI

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Working process

Testing the roadmap

Start up the partnership and process work

Dialogue meetings and workshops

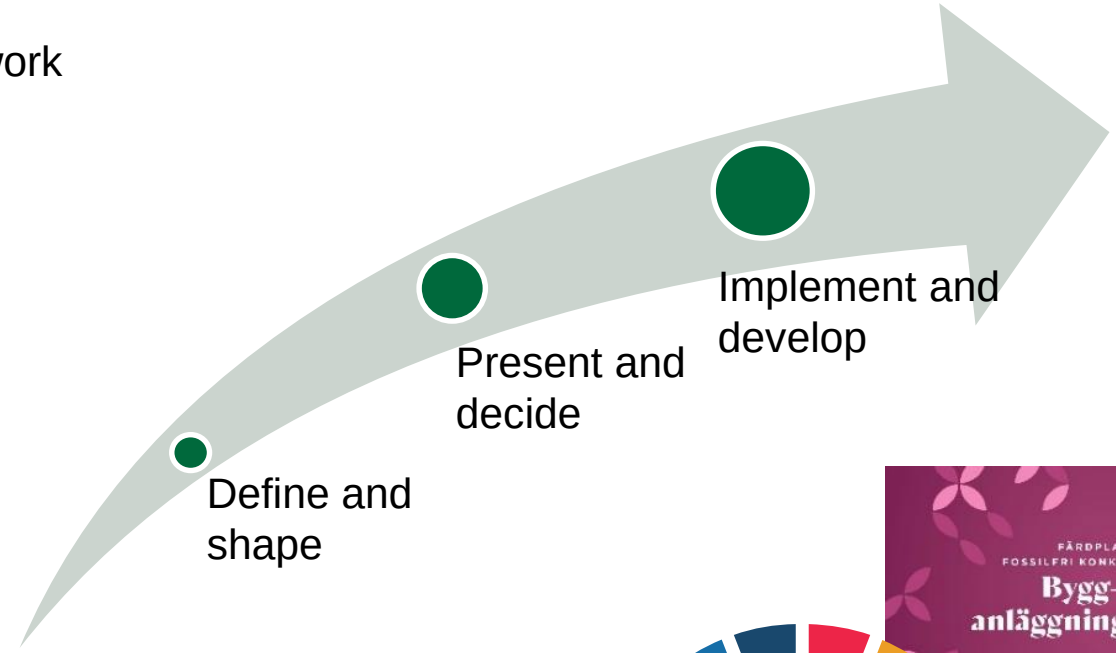
Lectures

Study trip

Anchoring within each company

Public events

Business-driven development



Goal: A climate neutral value chain with net zero CO2 by 2030

Focus areas

LFM 30
LOKAL FÄRDPLAN FÖR EN KLIMATNEUTRAL BYGG- OCH ANLÄGGNINGSSEKTOR I MALMÖ 2030

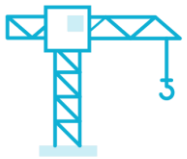
Business models, incentives and collaboration

Climate-neutral building materials

Circular economy and resource efficiency

Climate neutral management, operation and maintenance

Design, process and climate calculation



Climate neutral construction site and transport

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Sege park - a testbed site for development of new concepts, innovations, pilot projects etc.

Parking for power: Charge and avoid shortage in the grid

Deadline: 20 March 2019, 12:00 noon CET

Aim of the Open Innovation Call

The challenges in this Open Innovation Call target how cities can introduce a drastically larger number of charging stations for electric cars in new parking garages without causing power shortage in the distribution grid. The solution should allow for as many charging stations as possible, with as low power outtake from the grid as possible. The solution should also allow the parking garage to be a flexibility provider for the distribution grid. It should be a user-friendly and environmentally excellent solution as well as an economic win-win situation for both the owner of the parking garage and the grid operator.

Today´s multi-storey parking house – tomorrow´s mobility and sharing hub

Rendering of Parking Malmö mobility hub (Lloyd's arkitektkontor)

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“A **testbed** is a physical and/or virtual environment where companies, academia and other organizations can collaborate to develop, test and implement new products, services, processes or organizational solutions within specific topics” (e.g. Sharing)

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"A testbed is a physical and/or virtual environment where **companies**, **academia** and **other organizations** can **collaborate** to develop, test and implement new products, services, processes or organizational solutions within specific topics" (e.g. Sharing)

Among others...

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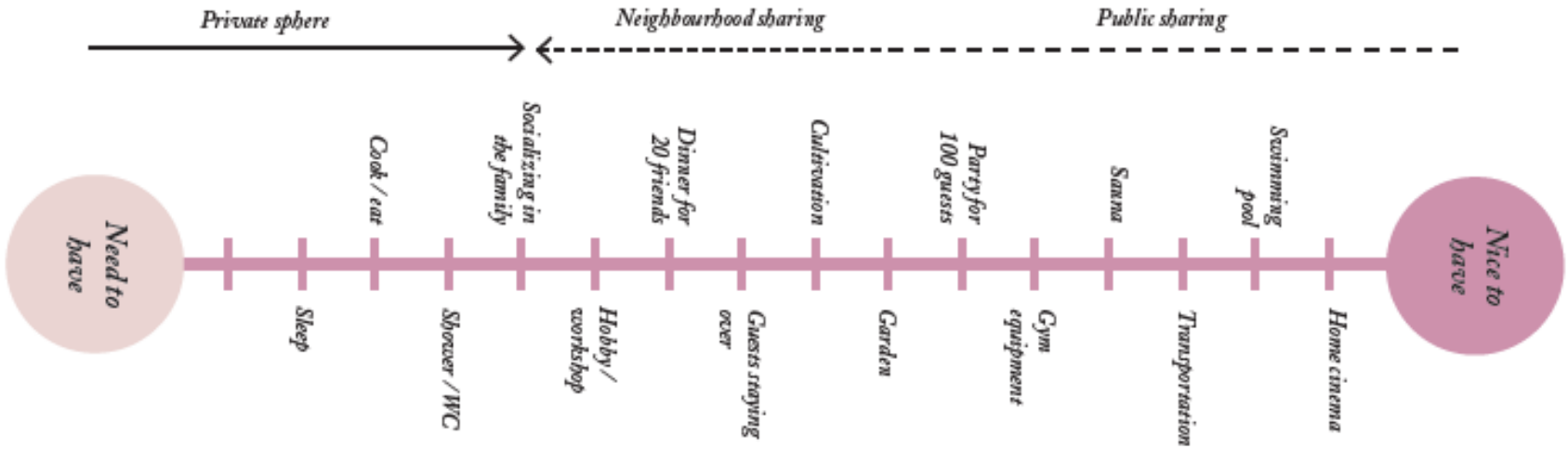

SWECO-"Having less to live more"

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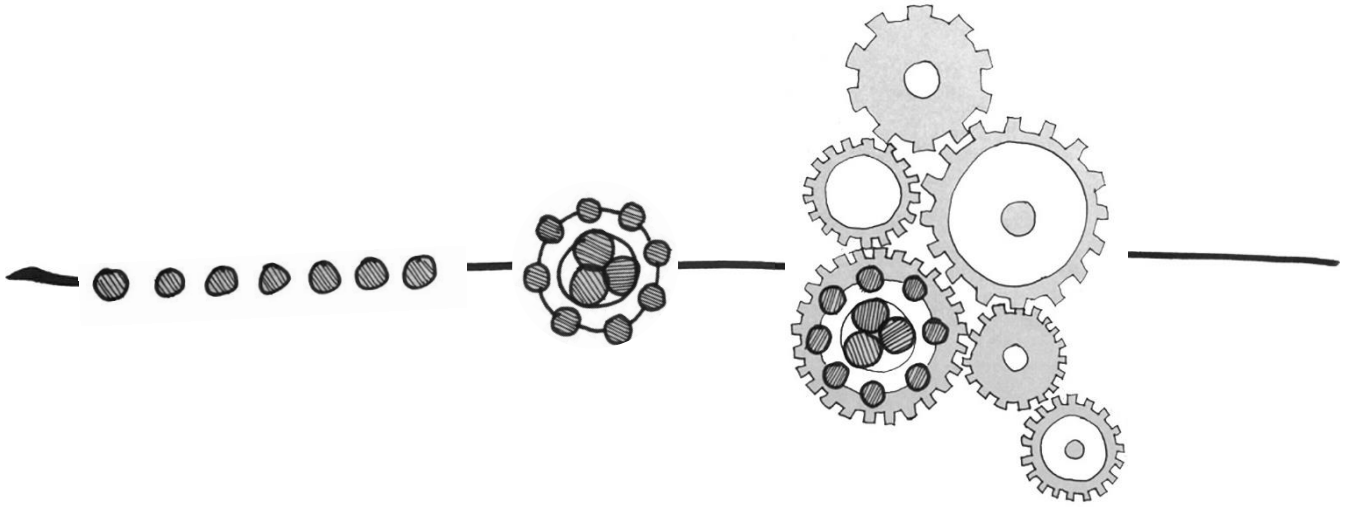

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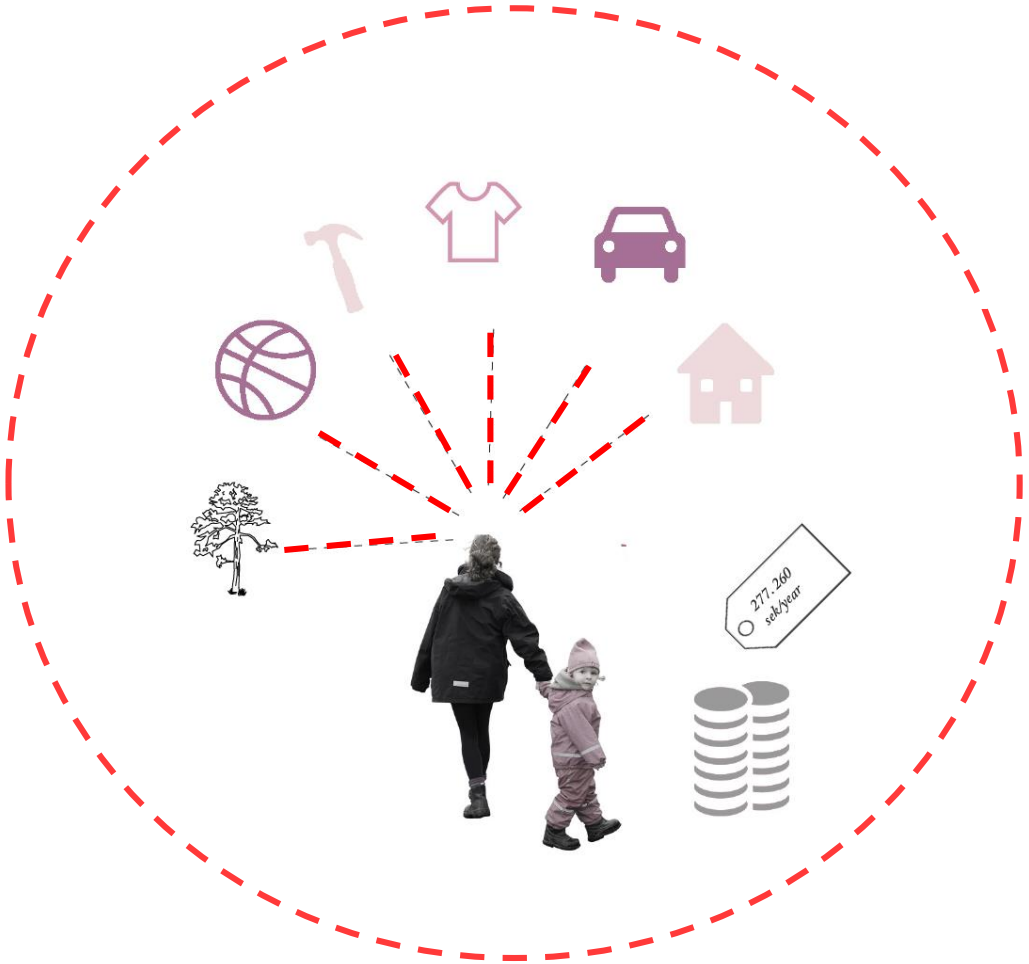

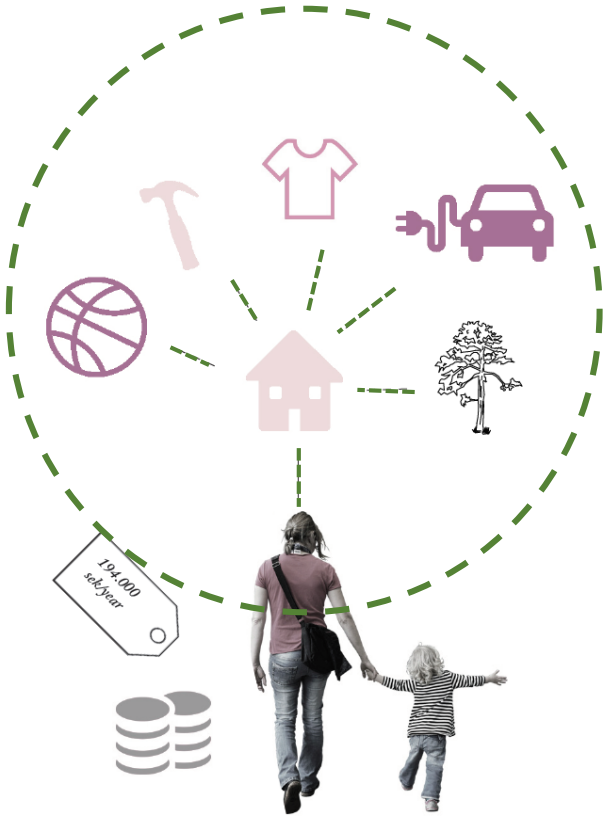

SWECO-”Having less to live more” [modified]

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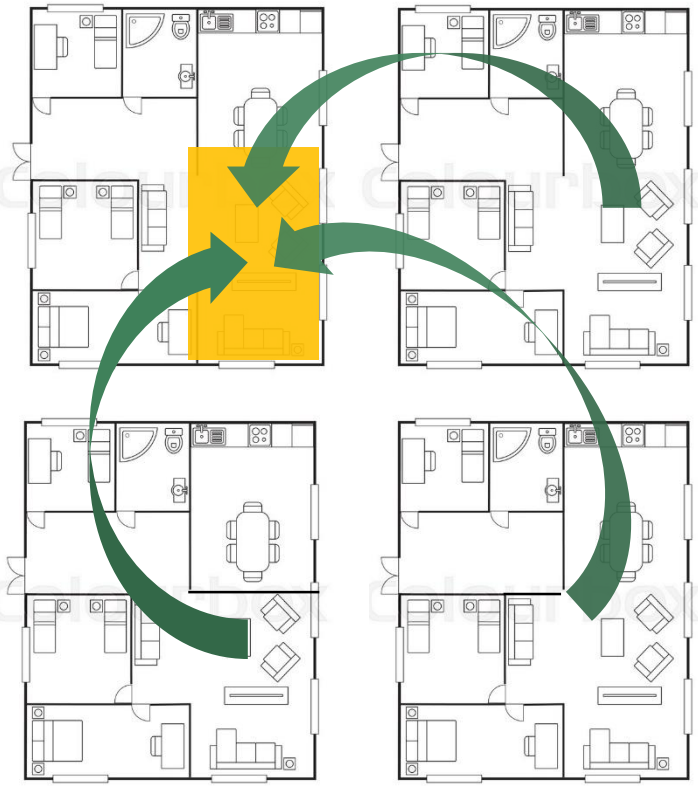

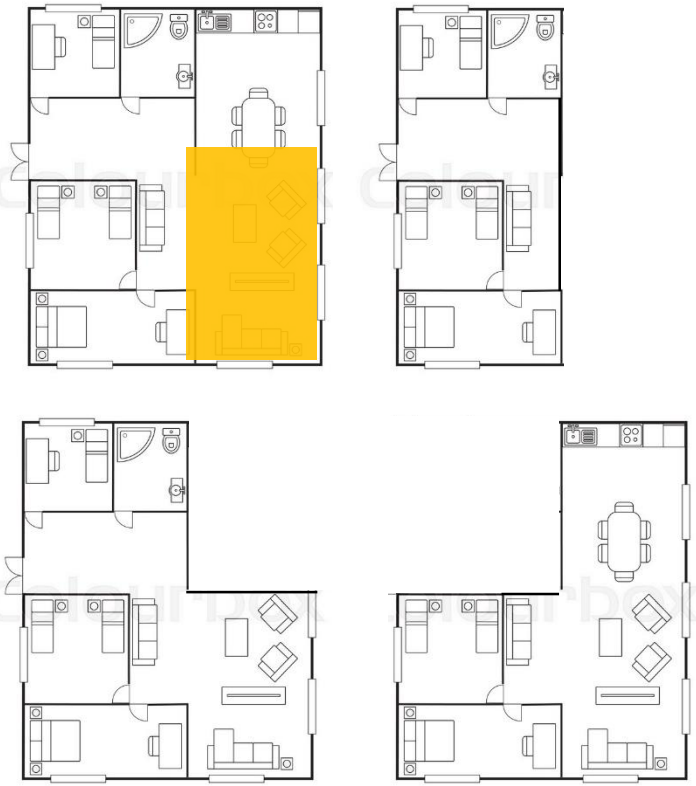

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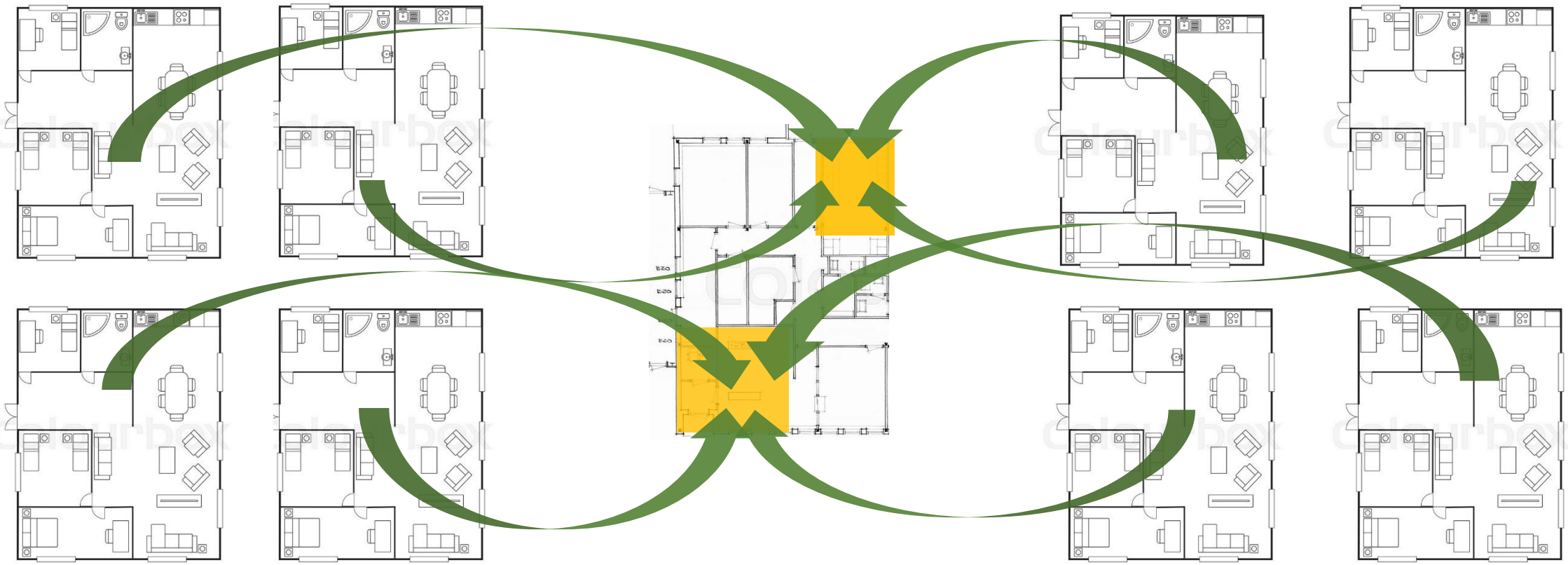

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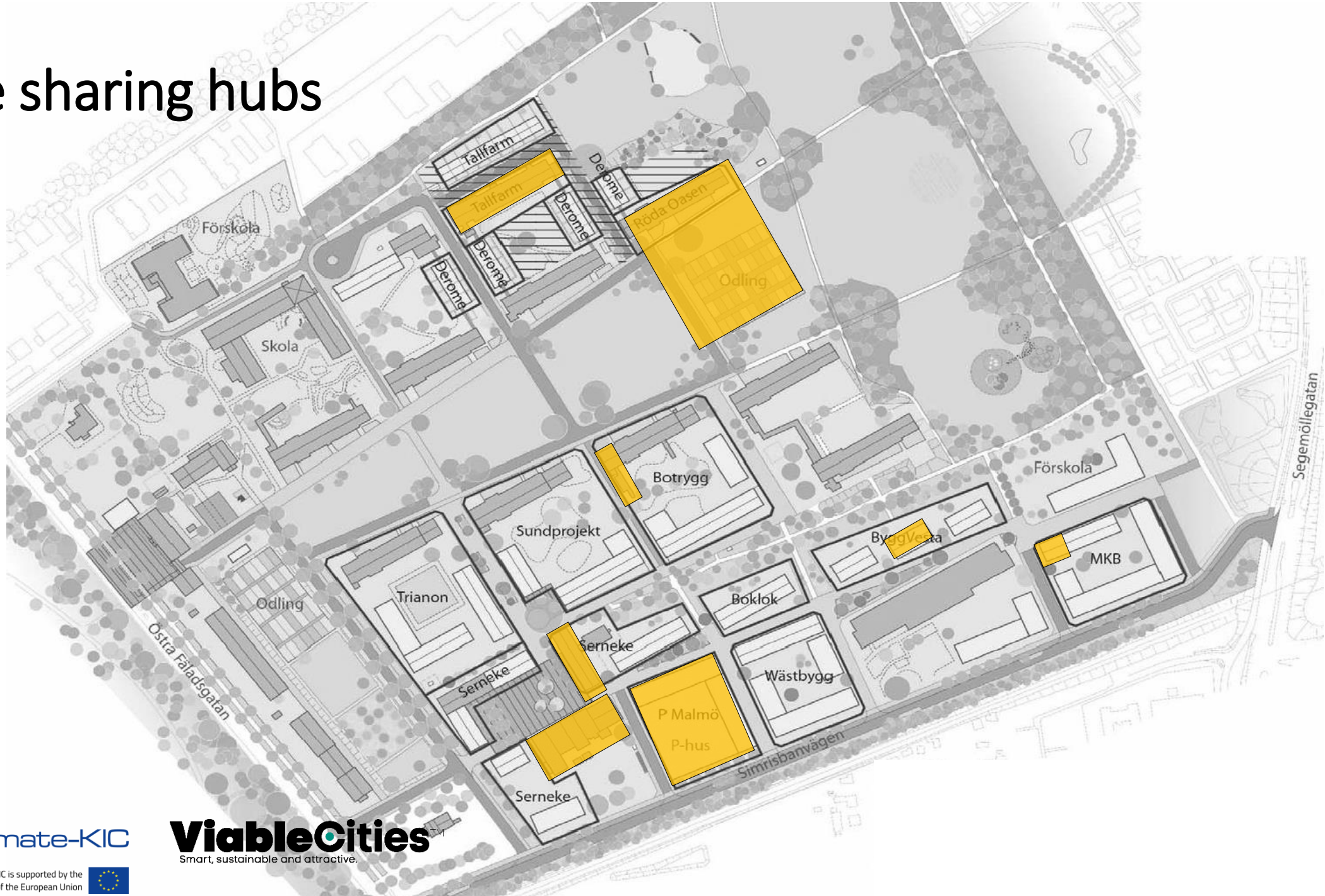
The sharing hubs



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The sharing hubs

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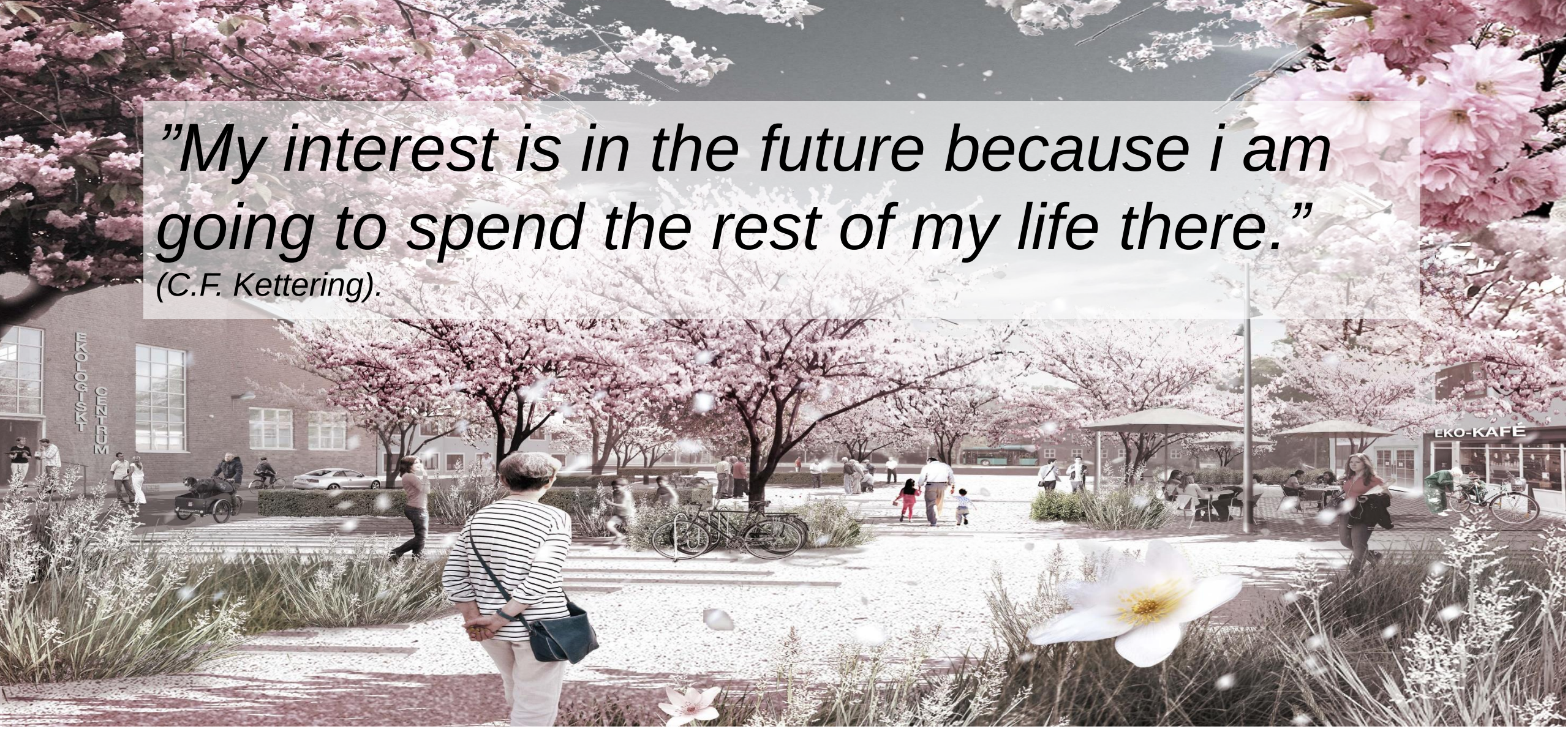

”My interest is in the future because i am going to spend the rest of my life there.”
(C.F. Kettering).

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