SUSTAINABLE PLACES 2025

8-10 October 2025

*Milano*

REGEN

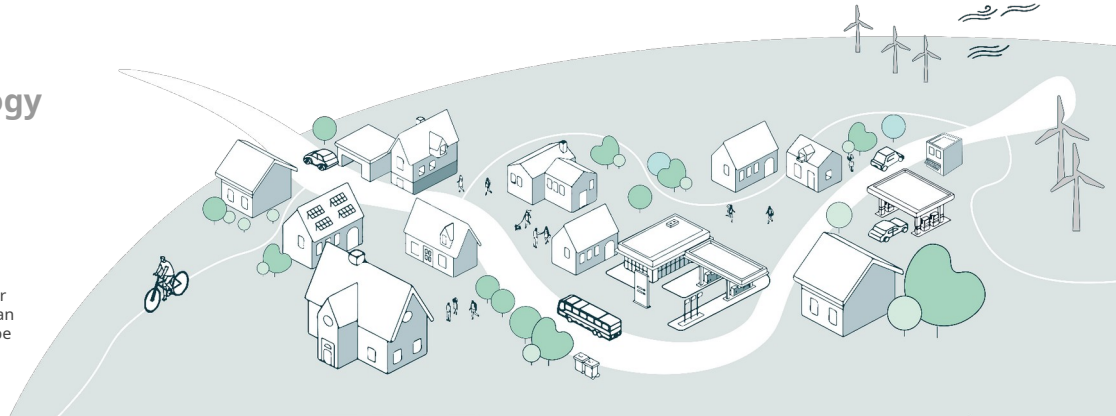
**REGEN**eration of neighbourhoods towards a low-carbon, inclusive and affordable built environment

LUXEMBOURG INSTITUTE OF SCIENCE AND TECHNOLOGY LIST

# USER CENTRIC DESIGN FOR PARTICIPATORY URBAN REGENERATION TOOL

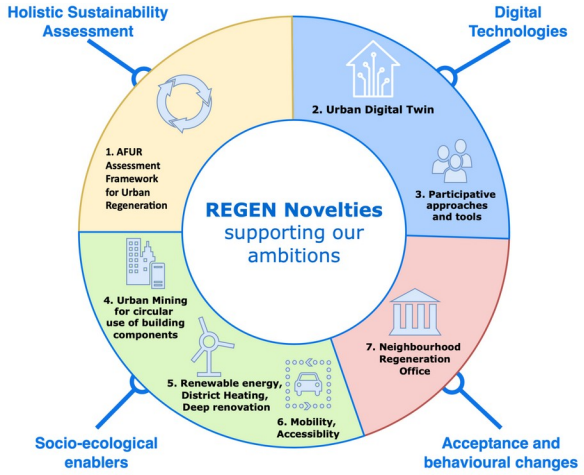
**Derya YILMAZ**
**Luxembourg Institute of Science and Technology**

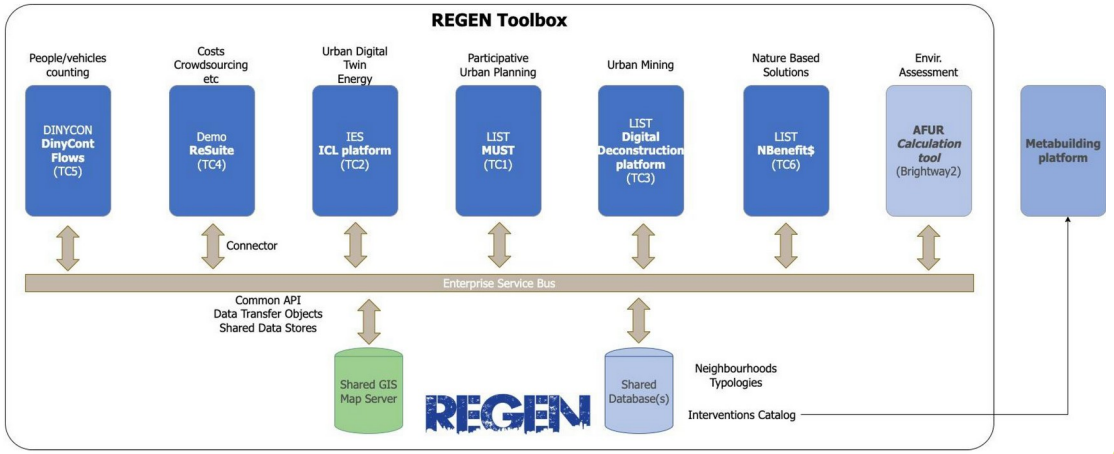
October 9, 2025



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# REGEN: Novelties & Toolbox



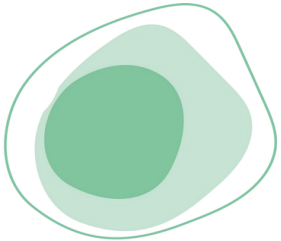

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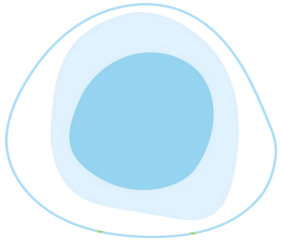
# NEW EUROPEAN BAUHAUS & REGEN

## SUSTAINABLE



*REGEN deploys a **catalogue of neighborhood regeneration interventions**, key to EU decarbonization pathways.*

## INCLUSIVE



*REGEN solutions will be implemented with end-users and all stakeholders in mind, and will be complemented by **participatory design approaches, and living labs**.*

## BEAUTIFUL



*REGEN's supporting tools (MUST) enables the collection of citizen feedback regarding their needs, helping to enhance both their **quality of life and the historical and cultural value of their place**.*

REGEN

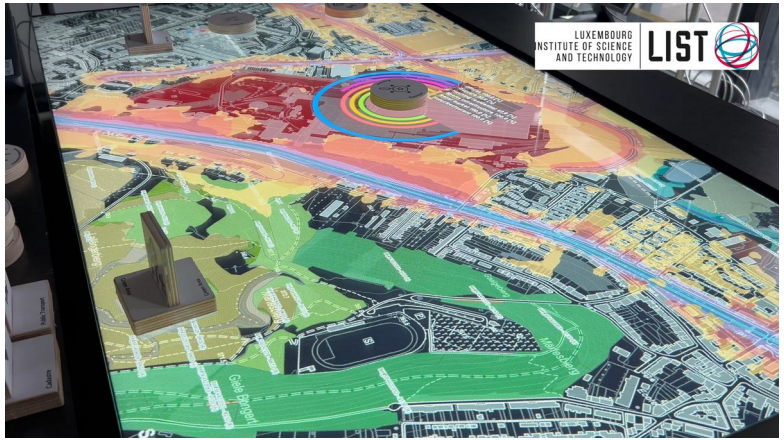
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# Citizen engagement with participatory design digital tool: MUST

## Why public participation?

- strengthens local democracy
- implementation of smart cities
- user satisfaction in design solutions
- reducing inequality
- making cities inclusive, safe, resilient, and sustainable
- enhancing citizen education, awareness, engagement

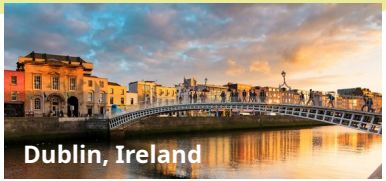



## Next?











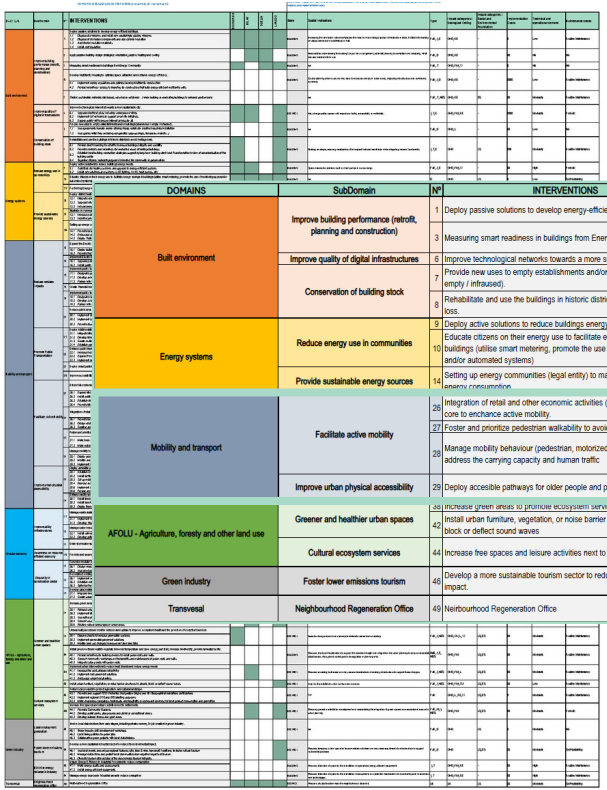


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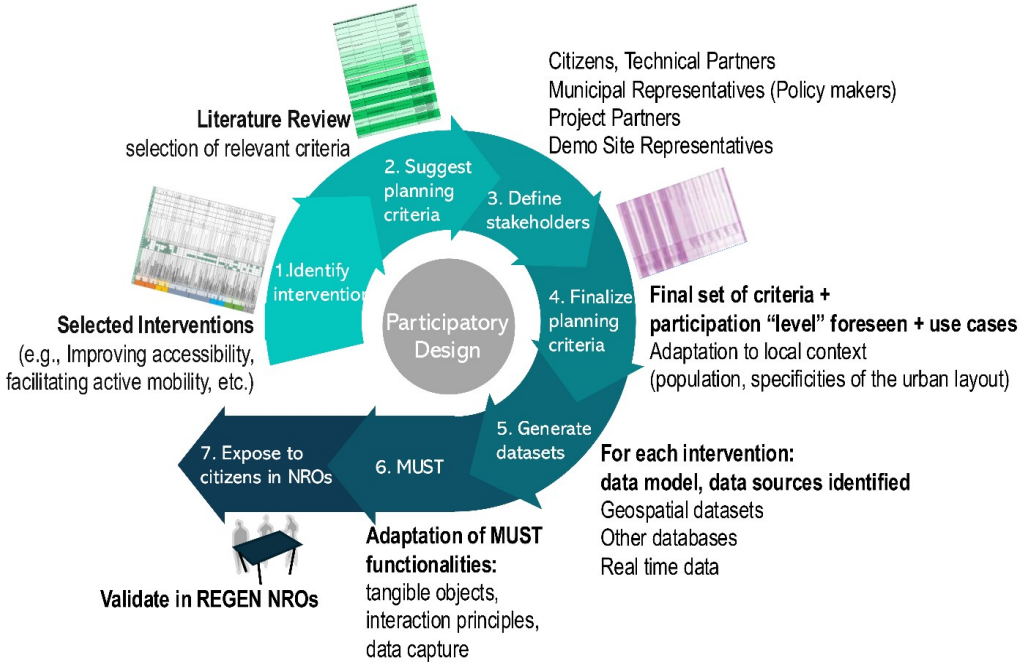
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Yilmaz, D., Urra Uriarte, S., Guerriero, A., Mack,N. N., Usobiaga, E., Villanueva-Merino, A., & Kubicki, S. (2025). A Path Towards Citizen-led Participation for Low-carbon and Affordable Neighbourhood Regeneration Using Participatory Design Digital Tools. *Computing in Construction*.

# Adapting a participative urban planning tool to regeneration



| DOMAINS | SubDomain | Nº | INTERVENTIONS | MUST |
|---|---|---|---|---|
| Built environment | Improve building performance (retrofit, planning and construction) | 1 | Deploy passive solutions to develop energy-efficient buildings. | |
| | | 3 | Measuring smart readiness in buildings from Energy Community | |
| | Improve quality of digital infrastructures | 6 | Improve technological networks towards a more sustainable city. | |
| | Conservation of building stock | 7 | Provide new uses to empty establishments and/or buildings (abandoned / empty / infrausued). | |
| | | 8 | Rehabilitate and use the buildings in historic districts to avoid heritage loss. | |
| Energy systems | Reduce energy use in communities | 9 | Deploy active solutions to reduce buildings energy needs. | |
| | | 10 | Educate citizens on their energy use to facilitate energy savings in buildings (utilise smart metering, promote the use of monitoring apps and/or automated systems) | |
| | Provide sustainable energy sources | 14 | Setting up energy communities (legal entity) to manage the renovable energy consumption | |
| Mobility and transport | Facilitate active mobility | 26 | Integration of retail and other economic activities (e.g. tourism) in urban core to enchance active mobility. | |
| | | 27 | Foster and prioritize pedestrian walkability to avoid vehicle use. | |
| | | 28 | Manage mobility behaviour (pedestrian, motorized, transportation…) to address the carrying capacity and human traffic | |
| | Improve urban physical accessibility | 29 | Deploy accesible pathways for older people and people with disabilities. | |
| AFOLU - Agriculture, forestry and other land use | Greener and healthier urban spaces | 42 | Install urban furniture, vegetation, or noise barrier structures to absorb, block or deflect sound waves | |
| | Cultural ecosystem services | 44 | Increase free spaces and leisure activities next to settlements. | |
| Green industry | Foster lower emissions tourism | 46 | Develop a more sustainable tourism sector to reduce its environmental impact. | |
| Transvesal | Neighbourhood Regeneration Office | 49 | Neirbourhood Regeneration Office | |




7 groups I 18 subdomains I 49 interventions I 4 demo sites

REGEN

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# Neighbourhood Regeneration Offices in REGEN



- **One-Stop Shops (OSS) in many neighborhoods**
  - Informing people about retrofitting solutions, prices, provide techn advice, existing subsidies
  - But limited to technical advice
- **Third Places**
  - “Accessible, playful mood, neutral, conversation”...
- **Defining Neighborhood Regeneration Offices in REGEN**
  - Analyze the demand: diagnosis of the neighborhood to understand the needs and requirements of the local stakeholders
  - Define the NROs : physical location, staffing, required profiles, services, and technologies to be implemented
  - Develop a business model (ongoing)




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# Case study| Laredo demo site



## Tourist destination

Three distinct zones: (i) **Historic core, La Puebla Vieja**, (ii) Newer suburban developments, and (iii) Extension of these suburbs toward El Puntal.

## Old town

Network of **narrow streets** lined with grand residences **dating from the 16th to 18th centuries**. A population of **851 inhabitants**. Steady **population decline** (challenges related to accessibility and habitability). **Municipality of Laredo:** developing a strategy for the regeneration of its historic center to **preserve its cultural character and improve livability.**

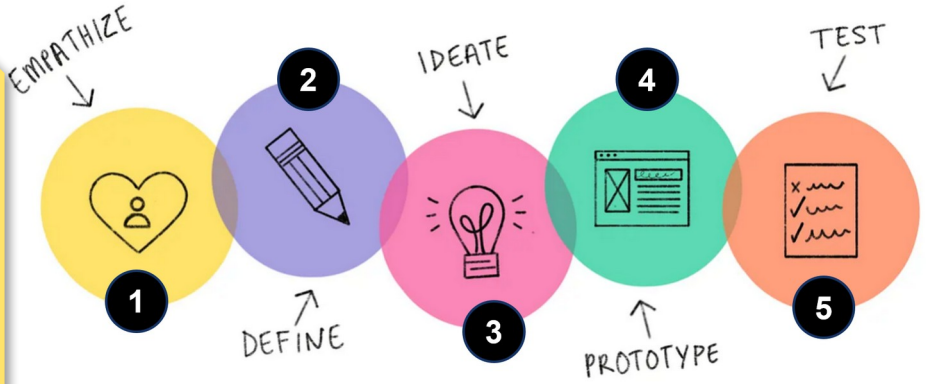
## Topography

**Complex topography:** one of the **main access roads** acting as a **physical barrier**. **Isolation** of La Puebla Vieja. Difficulties for **older individuals**, as well as for people with **reduced mobility or disabilities**. Necessity for **systematic monitoring** of **pedestrian** movement. **Stringent heritage protection** regulations.

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# UX Design Process

1. **Empathise**
   In this phase, the designer observes, engages and discusses with the user about his current experiences and motivations. The **goal is to empathise with the users by getting to know and understand them** and their experience with the application as much as possible.




**5. Test**
**The prototype can be tested with the end-users. At the early stage, this can be a mock-up or a more polished clickable version**. As with all previous phases, this is an iterative process, and we will gain insights with each test that will be conducted. The collected feedback will help us to progressively refine the prototype until its final version.

**2. Define**
The designer **defines the users' needs, frustrations and any other insight they may have gained from the empathise phase**. It is important to analyse the observations, articulate the core issues that have been identified before and highlight them.

**3. Ideate**
Teamwork for this phase is best as we gain outside perspective into our findings. We can **challenge any current assumptions made so far and look for alternative ways to solve the issues we have highlighted. The more "outside-the-box" ideas, the better**. We discuss them all and mark the ones we find most effective.

**4. Prototype**
Once we have our top ideas selected, we need to materialise them. We **sketch out a quick, inexpensive prototype for each**. The development team can iterate and reject prototypes that are not ideal. This is an experimental phase which **aims at finding the best possible solution**.

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REGEN

https://medium.com

# Personas

## Persona 1
**Schmit, Pier**




## Persona 2
**González, Maria**



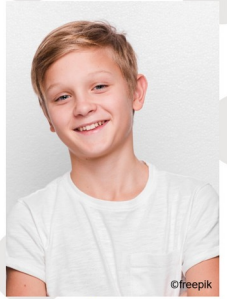

## Persona 3
**Murphy, Liam**




## Persona 4
**Romano, Elena**




## Persona 5
**Rossi, Luca**




Beckerich, Luxembourg

**Laredo, Spain**

Dublin, Ireland

Milan, Italy



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# Personas

## Persona 2
### González, Maria




## Persona
### González, M




**Age** 67

**Profession** Retired teacher

**City** Laredo

**Biography**

Maria is a retired teacher. She enjoys the coastal town's serene environment and has a deep connection to the community.

**Personality**

Compassionate, resilient, friendly, determined.

**Frustrations**

Maria faces difficulties in walking due to knee pain, which limits her ability to move around freely. She also needs to monitor her blood pressure regularly and follow a strict medication regimen.

**Motivations**

Maria loves reading, knitting, and spending time with her grandchildren. She enjoys shopping at the local market, where she finds fresh produce and enjoys chatting with vendors.

**Objectives**

She wants to stay active and continue participating in community activities and spend quality time with her family.

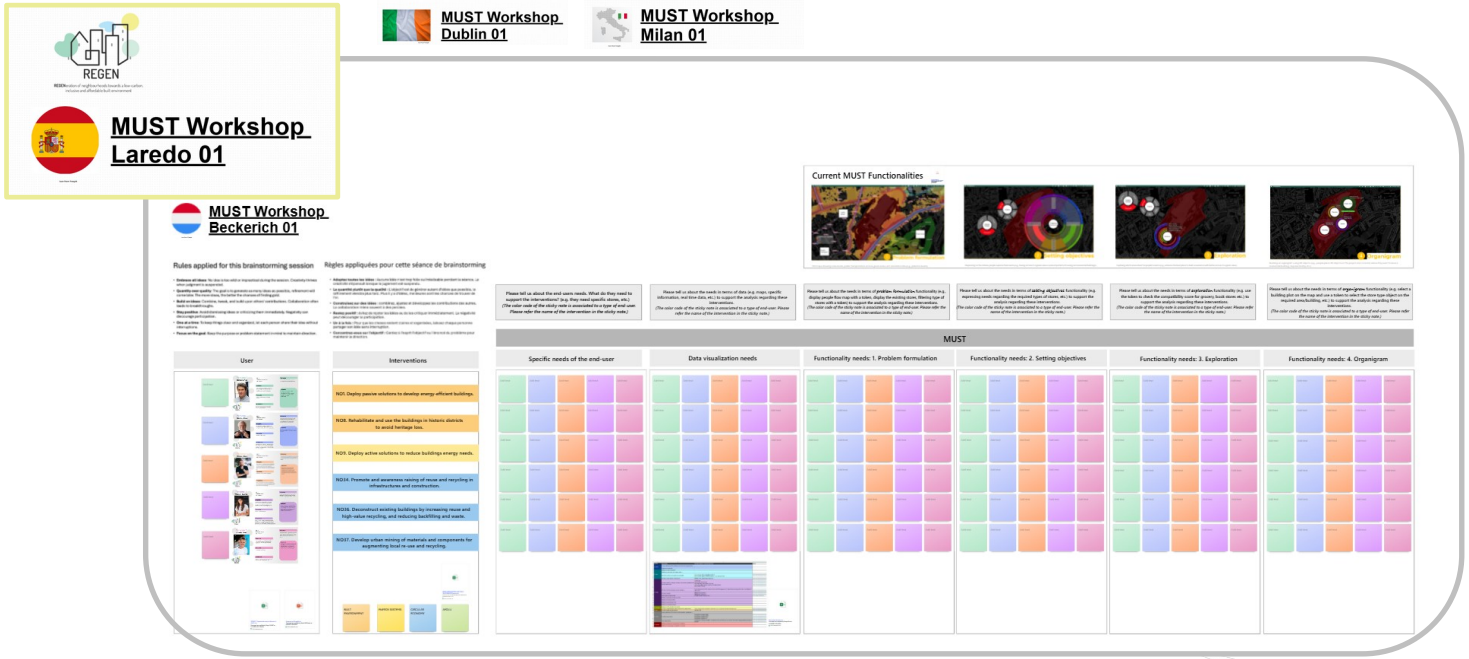
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**Laredo, Spain**

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# Brainstorming using whiteboard




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# Brainstorming sessions: Prioritized functionalities

MUST Workshop Laredo 01

MUST Workshop Dublin 01

MUST Workshop Milan 01

MUST Workshop Beckerich 01




**identifying and recording critical points for the use of public space by citizens for pedestrian mobility (narrow sidewalks, obstacles, etc.)**

**assigning specific interventions (benches, lighting, etc.)**

**marking on a map the areas using subjective sensations (stress, insecurity, etc.)**

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# MUST | Laredo demo site

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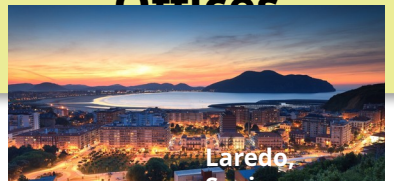



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# REGEN Next Steps

## Neighbourhood Regeneration Offices




## Experiment MUST with Citizens




## Transform & Improve the application




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# Thank you

## Get in touch for more information!

REGEN

**REGEN**eration of neighbourhoods towards a low-carbon, inclusive and affordable built environment

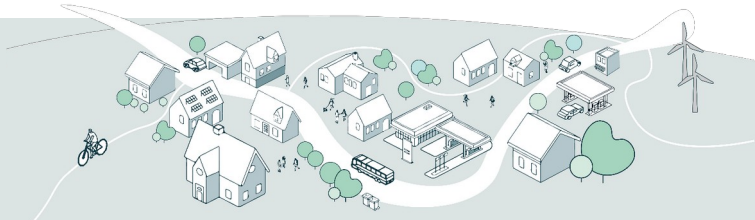

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Esch-sur-Alzette


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# *From Materials to Education: Activating tools to implement NEB principles and learning from co-design challenges*

*Insights from Inguma, Woodstock, NEB Academy, and AEGIR.*

**Florence Kuijl, Communication Manager, InnovaWood**

Funded by the European Union

Sustainable Places 2025, Milan

Circular Bio-based Europe Joint Undertaking

Bio-based Industries Consortium

Co-funded by the European Union



Innovawood

The European network
for **Wood Science,**
**Technology and Education**

# 4 projects forming a value chain of transformation

All translate the NEB principles into **practical, actionable approaches** within the construction sector, from complementary angles.

From material innovation inguma

through participatory design WOOD STOCK

to real-life implementation in demonstrator buildings AEGIR Incremental Renovation Package

& finally to knowledge transfer and skills development New European Bauhaus Academy

**Integrating NEB Values Across INGUMA's Innovation Process**

INGUMA explores bio-based material innovation and public acceptance, promoting the values of NEB through technological and social inclusion.

3 interacting processes that are aligned together:
- In the center is the **materials and products development**.
- Supported by: **co-creation and social engagement**.

Feedback loops: **continuous interaction between processes** ensures public acceptance and innovation alignment.

Funded by
the European Union

## Co-Creation Labs: Embedding NEB Values in Material Innovation

Co-creation is a dedicated work-package in this project !

- **Inclusive participatory approach:** Technical, non-technical, and business stakeholders collaborate in co-creation labs.
- **Continuous societal engagement:** Dialogue throughout all phases to balance different legitimate interests.
- **Understanding end-users:** co-creation helps uncover preferences behind material and product selection.
- **NEB Values in action:** Sustainability, inclusion, and aesthetics guide the process.

Funded by
the European Union

# WoodStock: Promoting Sustainable and Inclusive Wood Construction

WoodStock develops climate-smart solutions to increase the use of underutilised wood in the European construction sector.

Through a Living Lab approach, the project promotes sustainable wood construction practices and advances the circular economy.

Funded by
the European Union

> The six Living Labs will gather collective expertise to develop zero-waste and circular product and building designs, define scenarios, assess human health and aspects of well-being, and co-develop policies and business strategies.



Pasi Aalto
project partner NTNU



## Living Labs: Co-Creation for Real-World Solutions

Living Labs are collaborative innovation environments where real-world experiments. They offer a dynamic space for co-creation, exploration, and implementation.

### Six WoodStock Living Labs



InnoRenew | Slovenia



The Green Village | The Netherlands



Living Lab Galway | Ireland



Resilient Habitat | France



Trondheim Living Lab | Norway



Living Lab TUL | Poland

# Living Labs: Collaborative Innovation in Action

Each of the six Living Labs will run collaborative co-creation sessions, in which participants will: generate new ideas, brainstorm solutions, discuss challenges, share insights and analyse problems together.



### Co-creation session: co-development of storylines and narratives

Develop high-level storylines and narratives for the future of wood in Europe, which include the evolution of wood supply and demand.



### Co-creation session: zero-waste solutions through design: development through co-creation

Co-create zero-waste and circular solutions for innovative and sustainable product and building concepts.



### Co-creation session: zero-waste solutions through design: validation

- validate zero-waste solutions through qualitative and quantitative assessments
- gather the perspectives of key players on the co-creation and development process for product and building designs
- assess the potential trade-offs between environmental, social, and economic values related to the circular concepts and products that are developed



### Co-creation session: assessing wood industry policies, norms and standards

Co-develop a conceptual framework that identifies and analyses the sector's challenges and opportunities for underutilised wood.



### Co-creation session: creating the 'European Wood Construction Observatory'

Create innovative solutions for the European Wood Construction Observatory to ensure its sustainability beyond the lifespan of the WoodStock project.



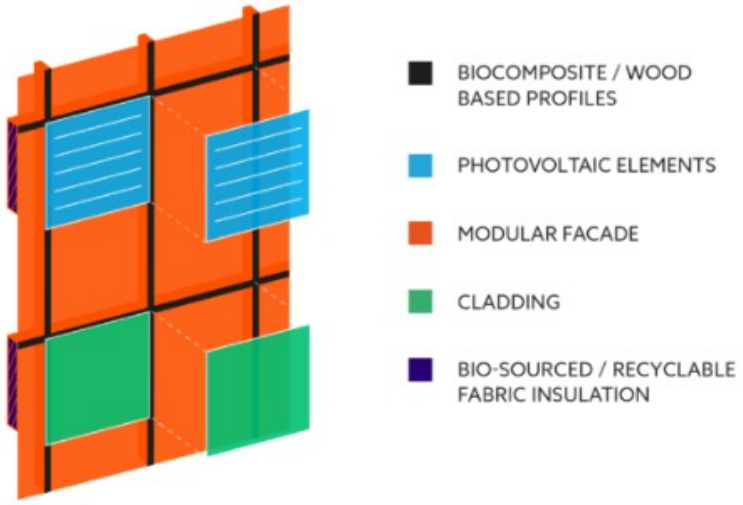
### Co-creation session: stimuli for the analysis of human health and well-being

Develop stimuli for the analysis of human health and well-being, by co-creating building elements made from underutilised wood.

Funded by the European Union

AEGİR

# Developing modular, renewable and industrialised building envelopes for low ener renovation.




## DEMO BUILDINGS

- FRANCE: SENIORS' RESIDENCE
- SPAIN: EDUCATIONAL BUILDING
- DENMARK: RESIDENTIAL BUILDING
- ROMANIA: SINGLE FAMILY BUILDING



Funded by the European Union

**Lessons learnt from real life implementation of innovative solutions in demo buildings across Europe.**

- **Experience:** n one demo site, **limited engagement with inhabitants** highlighted in ensuring local acceptance.
- **Insight:** Stronger interaction between innovators and end-users **helps align technical solutions with real community needs** and expectations.
- **Takeaway:** Early integration of **co-creation and participatory co-design** fosters acceptance, usability, and lasting impact for innovative building solutions.

Funded by
the European Union

New European Bauhaus Academy

Circular Bio-based Europe Joint Undertaking

Bio-based Industries Consortium

Co-funded by the European Union

NEB Academy focuses on education and skills development to support the uptake of bio-based, circular, and digital solutions.




**10 initiatives shaping sustainable, inclusive, and beautiful living spaces through upskilling across Europe.**

New European Bauhaus Academy




FLÂNEUR

ALGAECRETE

Institute for Urban Excellence

urbana

volupte

CENTRUM PRO PODPORU PODNIKÁNÍ A ZAMĚSTNANOSTI

CITY FOR CHILDREN .PL

NEB Forum BiH

BAGACEIRA

Nationaal Kenniscentrum Biobased Bouw

New European Bauhaus Academy

ALGAECRETE



ALGAECRETE explores the use of Gelidium corneum, a red algae species, to **produce ultra-low-carbon insulation panels** through a **hands-on, community-based workshop** format.

New European Bauhaus Academy

CENTRUM PRO PODPORU
PODNIKÁNÍ A ZAMĚSTNANOSTI



CENTRUM PRO PODPORU hosts a series of 8 workshops designed to **empower Ukrainian participants with the tools to build their own social enterprises.**

New European Bauhaus Academy

CITY FOR CHILDREN
.PL



CityForChildren develops an educational course designed to **integrate children's perspectives into urban planning**, fostering more inclusive, accessible, and sustainable urban environments.

New European Bauhaus Academy

# BAGACEIRA



BAGACEIRA develops a modular, hands-on course that teaches how to **identify and repurpose regional bio-based waste streams** into sustainable interior design solutions.

New European Bauhaus Academy

New European Bauhaus Academy

COURSES

# Bio-based, circular, regenerative, long-life and digital courses to train, upskill, and reskill the construction ecosystem to achieve a carbon neutral building sector and a beautiful, sustainable, and inclusive transformation of the built environment.

Bio-based Circular Regenerative Long-live Digital



## Wood First – Strategic Support for Timber Construction

Bio-based

Wood First is a digital training program designed to support Swedish municipalities and regions in developing, updating, or following up on timber construction strategies or roadmaps for climate-neutral building. The program is divided into three sessions: Initiate – Increase knowledge and cre...



## Timber on Top – Digital Course on Vertical Timber Extensions

Bio-based

This free, 30-minute digital course introduces the concept of vertical extensions using timber construction. It explores the opportunities for urban densification by adding new floors atop existing buildings, thereby extending their lifespan and reducing the need to utilize undeveloped land. The c...



## Sustainable Building with Timber

Bio-based TU-Delft

Innovations in architecture, engineering and manufacturing make it t
construct almost any building in timber, including high-rise structure
how this way of building could help solve our climate, resource and h
challenges. Enroll Sustainable forest management al...

# Tools driving NEB Implementation: From Materials to Mindsets

From material innovation

through participatory design

to real-life implementation in demonstrator buildings

& finally to knowledge transfer and skills development

inguma

WOOD STOCK

AEGiR

Incremental Renovation Package

New European Bauhaus Academy

# Tools driving NEB Implementation: From Materials to Mindsets

| Tools / Methods | NEB Principles in Action |
|---|---|
| Co-creation labs for societal engagement - Continuous feedback loops between material R&D, social engagement, and circularity assurance | **Sustainability**, **Inclusion**, **Aesthetics** integrated into material development |
| Living Labs across Europe - Six types of co-creation sessions - Collaborative design among communities, industry & policymakers | Promotes **co-creation**, **circular economy**, and **beautiful, sustainable, inclusive** design |
| Real-life implementation testing - Feedback analysis from users - Lessons learned from lack of co-design | Demonstrates need for **early engagement** and **participatory design** to ensure acceptance |
| Training modules and digital tools - Knowledge exchange networks - Capacity-building for sustainable and circular construction. | Embeds **NEB values** in education, fostering an **inclusive and sustainable mindset** |

inguma

WOOD STOCK

AEGIR
Incremental Renovation Package

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# Thank you for your attention

If you were interested in this presentation or have further questions contact me!



**Florence KUIJL**
Communication Manager

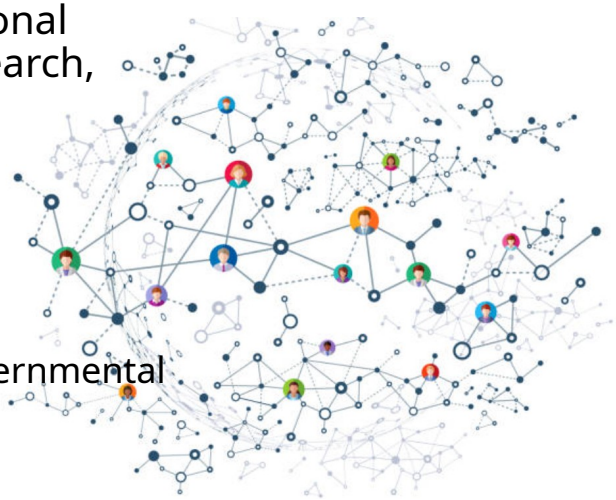
InnovaWood

The European Network for **wood** Research, Innovation and Education

# Indoor Air Quality Society

- **IAQS brings together, industry, academia and regulators in an international collaborative network.**

- We are a partnership of international experts with a long record of research, publication and advocacy in IAQ.
  - Inform,
  - Educate,
  - Enable and support debate,
  - Influence policy-makers and governmental bodies.



- IAQS is a non-profit organization based in Belgium.

Indoor Air Quality Society
IAQS
CURATING OUR AIR

# SUSTAINABLE PLACES – DRIVEN BY INDOOR ENVIRONMENTAL QUALITY (IEQ)

Visualization and introduction to empower professionals and communities for Indoor Air Quality understanding

Chosen application: schools

Project presentation: Arvika, Sweden

Presenter: Mikael Börjesson, Director Future Solutions & Public Affairs – Swegon Group, member of IAQS

# VISUALIZE THE INVISIBLE – INDOOR CLIMATE

Operation carbon
Built in carbon



Indoor climate



# VENTILATION AND INDOOR CLIMATE IN SCHOOLS: RESEARCH-BASED EVIDENCE

Improving school air quality through scientific studies



# WHY VENTILATION MATTERS

## Child Vulnerability to Poor Air

Children breathe more air relative to body weight making them more vulnerable to poor indoor air quality in schools. (Schools for Health, 2021)

## Impact of Poor Ventilation

Indoor air quality (IAQ) and thermal comfort directly impact health and cognitive performance. (Brink et al., 2020)

## Importance of Indoor Environment

Many schools fail to provide sufficient outdoor air supply and are often too warm (Turunen et al., 2014).



# TEMPERATURE AND PERFORMANCE

### Impact of Lower Temperatures

Lowering classroom temperature from 25°C to 20°C improves student speed by 4% in arithmetic and language tests. (Wargocki et al., 2013)

### Math Score Improvement

Each 1°C decrease between 20°C and 25°C increases average math scores by 12 to 13 points. (Wargocki et al., 2013).

### Heat Impact on Exam Failure

Students are 12.3% more likely to fail exams on 32°C days compared to 24°C days, highlighting heat's negative effect. (NYC study, 2013)

# COMFORT, HEALTH AND ABSENTEEISM



## Health Effects of High $CO_2$

Elevated $CO_2$ levels above 1,000 ppm cause fatigue, poor concentration, blurred vision, and panic attacks in students. (Fisk, 2017)



## Ventilation Improves Performance

Increasing ventilation rates correlates with a 2.9% improvement in math and 2.7% in reading scores per 1 l/s per person increase. (Haverinen-Shaughnessy et al., 2011)



## Reduced Absenteeism

Better ventilation reduces student absenteeism by 1.6% per 1 l/s per person increase and up to 20% by lowering $CO_2$ by 1,000 ppm. (Mendell et al., 2013)



## Ventilation and Health

Low ventilation rates increase absenteeism and respiratory problems in school environments. (Chatzidiakou et al., 2012)



## Improved Air Supply Benefits

Doubling outdoor air supply improves schoolwork performance by up to 14% for sensitive tasks. (Wargocki et al., 2016)



# IN PRACTICE

Sweden - Arvika municipality - Minnebergsskolan

"A school for everyone" where all students would feel included and feel good.

Internet of Things for increased student health

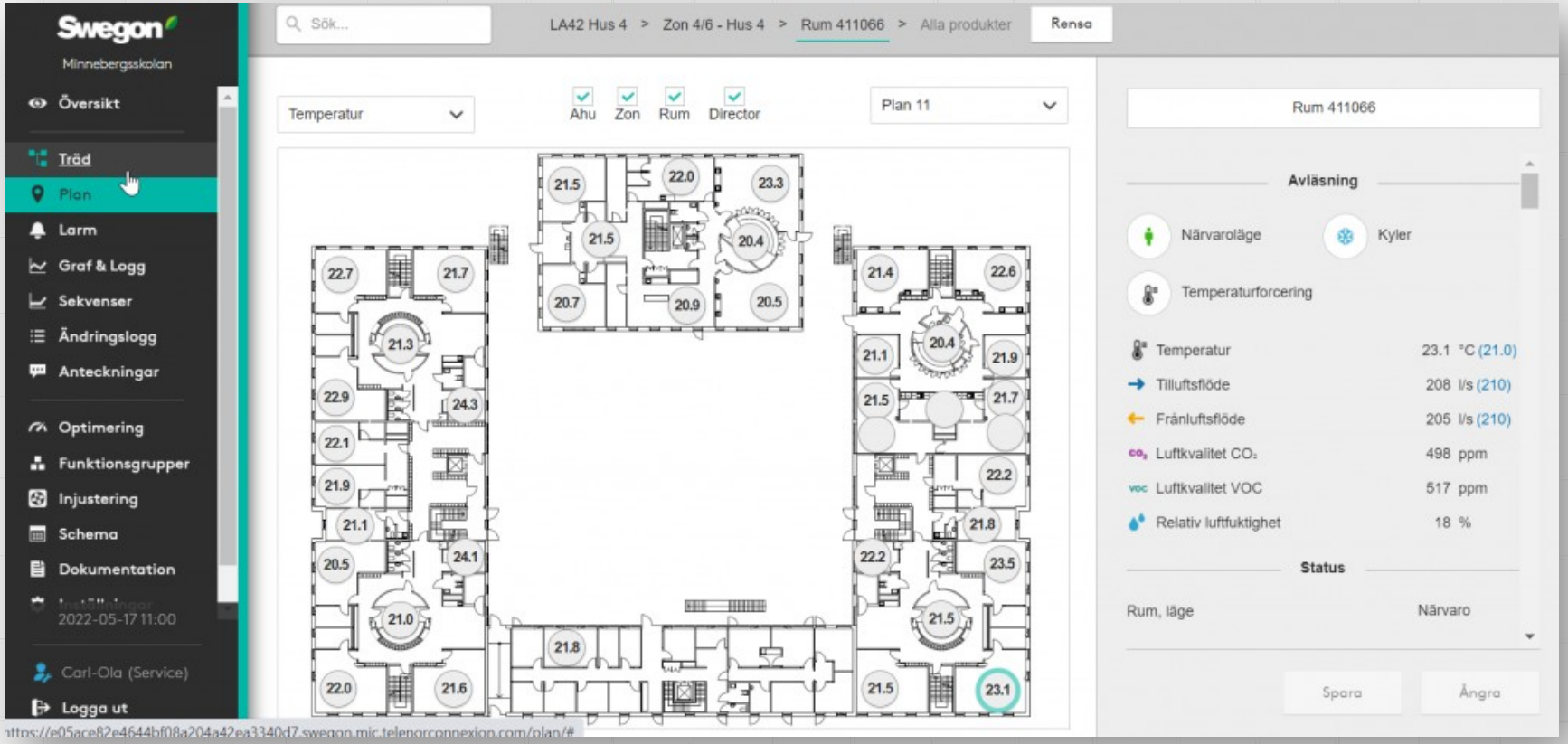
Testbed for IoT

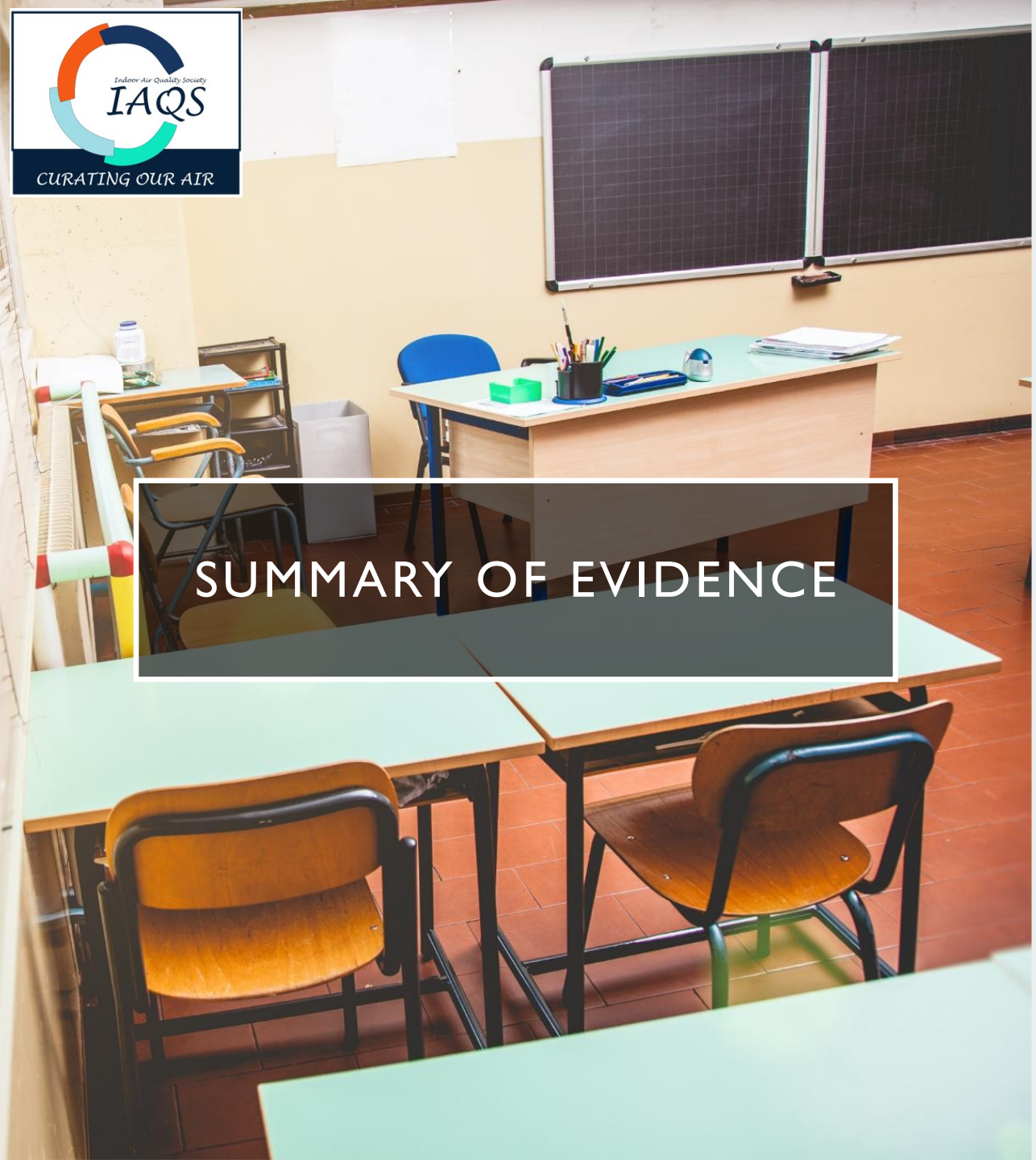
Sensors that measure acoustics, sound, light, heat and CO2 levels



# TOOLS TO VISUALIZE THE INVISIBLE

*"Swegon measures temperatures and occupancy in all halls and some selected rooms are also supplemented with air quality sensors, which provide information about CO2 and volatile organic compounds. All data is collected in the cloud and can be retrieved through an API as a basis for those who want to build applications."*





# SUMMARY OF EVIDENCE

## Healthy Air, Healthy Minds

**Protect Health**: Clean air reduces illness and keeps students in class.

**Boost Learning**: Better air means sharper focus and stronger academic performance.

**Invest Wisely**: Ventilated schools are investments in both public health and future generations.

## What Must Be Done – Now

**Legislation**: Set and enforce strong ventilation standards in schools.

**Incentives**: Highlight and reward successful models to accelerate change.

**Funding**: Prioritize resources—our children's health and education come first.

01/10/2025

# ICONS

INNOVATION STRATEGIES

01/10/2025

# ICONS

## A glimpse into two European projects

Chiara Fonio, Head of Social Innovation

# TIMBERHAUS & GINNGER

TIMBERHAUS

*Climate-smart, circular, and sustainable solutions for use of wood in the construction sector.*
*GA Number: 101182319*

Co-funded by the European Union

GINNGER

*Regeneration of neighborhoods through place-based approaches*
*GA Number: 101123324*

# TIMBERHAUS & the NEB Values







***Sustainable***

- Climate-smart use of wood
- Underutilised wood species
- Decarbonisation strategies for buildings

***Inclusive***

- Place-based, with a focus on three partner cities (Baia Mare, Berlin, Siena)
- Co-creation approach: local summits, strategy games

***Beautiful***

- Consideration of cultural traditions, local crafts & design languages
- Design for wellbeing and human

# TIMBERHAUS

***Climate-smart, circular, and sustainable solutions for use of wood in the construction sector***

***The project focuses on:***

- Climate-smart, circular and sustainable solutions for use of wood in the construction sector
- Increasing the use of different wood species in construction to build beautiful and healthy cities

***This manifests itself through:***

- The integration of cultural and craft design languages
- Exploring the link between our built environment and wellbeing
- Connection between urban and rural populations
- Recognition and promotion of the role of vernacular and its connection to local and national identity
- The role of visualisation and lived experience to bring stakeholders along with us on the journey

**Start date:** November 2024
**Duration:** 48 months
**Consortium: 19** partners led by DTI
**EU funding:** €6.9M

## *Baia Mare (Romania):*



- Historical significance of **forests** in the region providing sustenance, materials, employment, and cultural values
- Strong history of **craftsmen** working in woodworking – wooden gates are a long-standing symbol of pride in the region. Often elaborately carved, they are some of the oldest still in existence in Europe.
- Possible areas for exploration include plans for social housing for the local **Roma community**

## *Berlin (Germany):*

- Ongoing project in the **Schumacher Quartier** will develop more than 5,000 flats from timber for more than 10,000 people.
- Transformation of an **unused concrete space** into a new neighbourhood connected to the forest
- Long history of **building with wood**, but citizen concerns remain around fire safety etc.



# GINNGER

GINNGER aims to develop **new, inclusive processes of neighbourhood regeneration**, supporting the creation of more sustainable and liveable cities.

**Start date:** November 2023
**Duration:** 48 months
**Consortium:** 24 partners led by CIRCE
**EU funding:** €5.7M



# GINNGER key figures

**1**
co-creation methodology

**6**
pilot cities

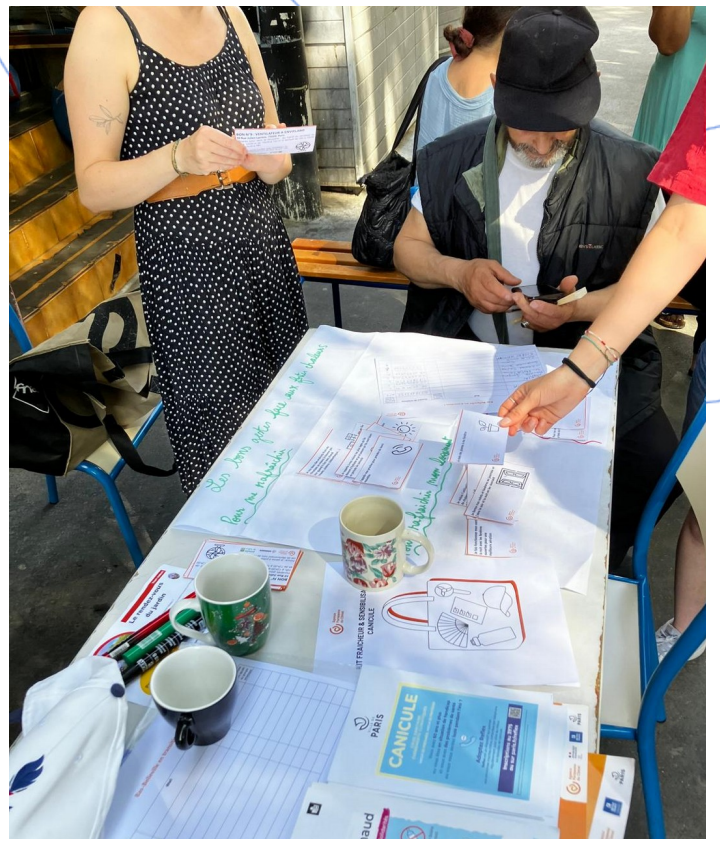
**13**
digital solutions

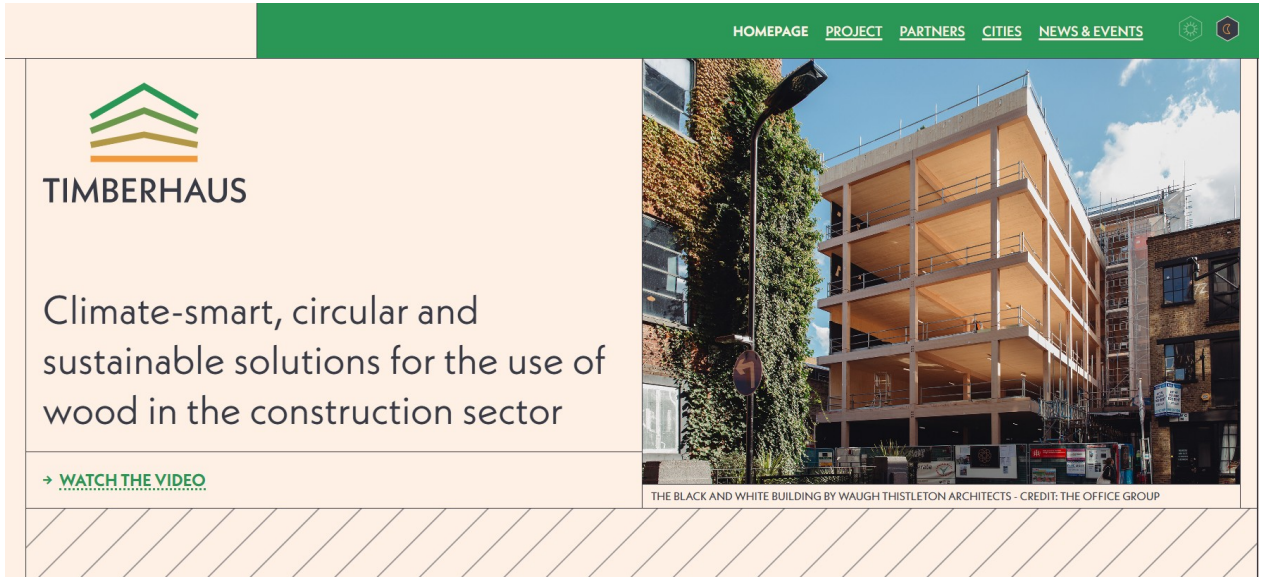
**21**
regeneration actions

**950+**
inhabitants involved

# The co-creation methodology

Co-assessment → Co-decision → Co-planification → Co-implementation → Co-learning



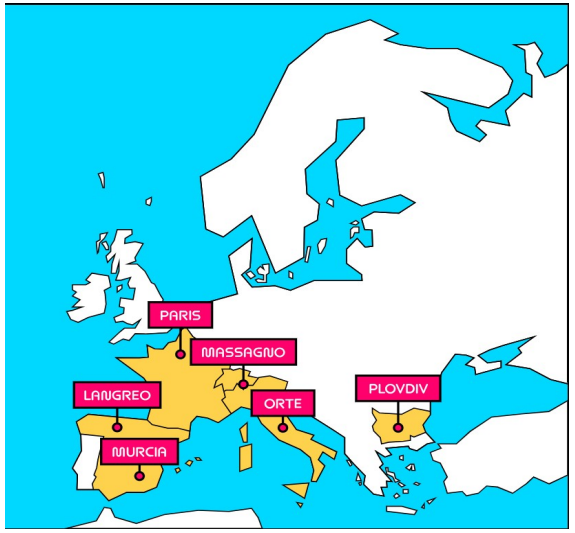



www.timberhaus.eu




www.ginnger-project.eu



SUSTAINABLE PLACES 2025

8-10 October 2025

*Milano*

Comune di Milano

R2M RESEARCH TO MARKET SOLUTION

# NEW EUROPEAN BAUHAUS WORKSHOP

## New European Bauhaus: from principles to reality

- Lessons learnt on what works, what doesn't, and why -

STAR*track A Built4People Project

NEB JUNCTION

NEB Academy

GINNGER

WOOD STOCK

TIMBERHAUS

drop

inguma

Incremental Renovation Package

AEGIR

REGEN

IAQS Indoor Air Quality Smarty

CURATING OUR AIR

STAR*track A Built4People Project

*www.sustainableplaces.eu*

# THE NEW EUROPEAN BAUHAUS

New European Bauhaus
beautiful | sustainable | together

**Re-thinking our living spaces...**

**At the cross road of disciplines**

**Empowering citizens and communities**

# THE NEW EUROPEAN BAUHAUS

New European Bauhaus
beautiful | sustainable | together

**SUSTAINABLE**

**INCLUSIVE**

**BEAUTIFUL**

# CONTEXT & OBJECTIVE OF THIS SESSION

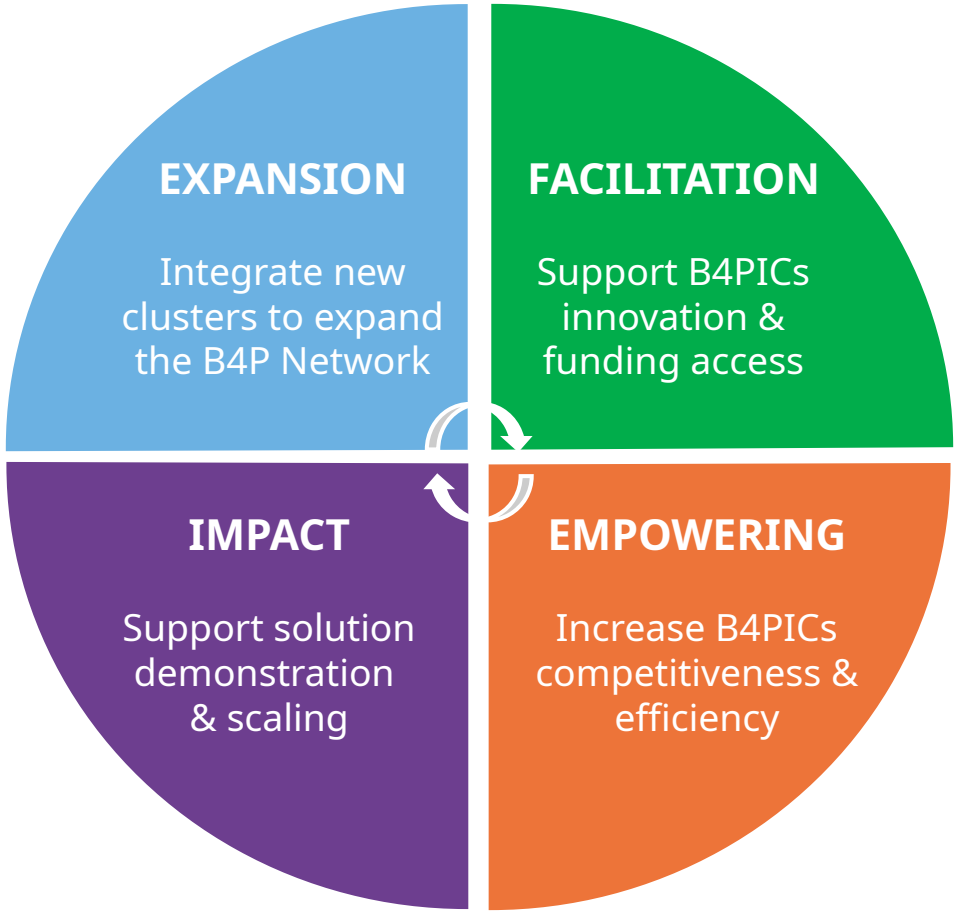
- Organised by **two Coordination and Support Actions**: Star*Track & NEB Junction
- To **exchange about our respective experiences** on **how we integrate and implement the NEB** approach **in our R&D projects**
- Organised in two parts:
  - Some « flash » presentations by R&D projects
  - A time for discussion: what worked, what didn’t, why?

# THE COORDINATION AND SUPPORT ACTIONS HOSTING THIS SESSION

STAR*track
A Built4People Project

**Accelerate the market uptake of innovation for the Built Environment sector…**

**… by expanding and tooling the network of Built4People Innovation Clusters (B4PICs)**




NEB JUNCTION

STAR*track
A Built4People Project

# THE COORDINATION AND SUPPORT ACTIONS HOSTING THIS SESSION

STAR*track
A Built4People Project

**Accelerate the market uptake of innovation for the Built Environment sector…**

**… by expanding and tooling the network of Built4People Innovation Clusters (B4PICs)**

## Research centers

DTU
eurac research
LUXEMBOURG INSTITUTE OF SCIENCE AND TECHNOLOGY
LIST
R-NANO
ZAG
ZAVOD ZA GRADBENIŠTVO SLOVENIJE
SLOVENIAN NATIONAL BUILDING AND CIVIL ENGINEERING INSTITUTE
EBETAM IRTEC

## Public bodies

Région Nouvelle-Aquitaine
EURORÉGION EUROESKUALDEA EURORREGIÓN

## Clusters

BUILD:INN BASQUE CONSTRUCTION CLUSTER
WE BUILD DENMARK
e-CODOMH Cluster for Efficient and sustainable Construction, buildings & infrastructure.
ICONS. CLÚSTER DE LA INDUSTRIALIZACIÓN DE LA CONSTRUCCIÓN DE NAVARRA
odéys

## Consultants

Dowel innovation
ecowise
STAM MASTERING EXCELLENCE

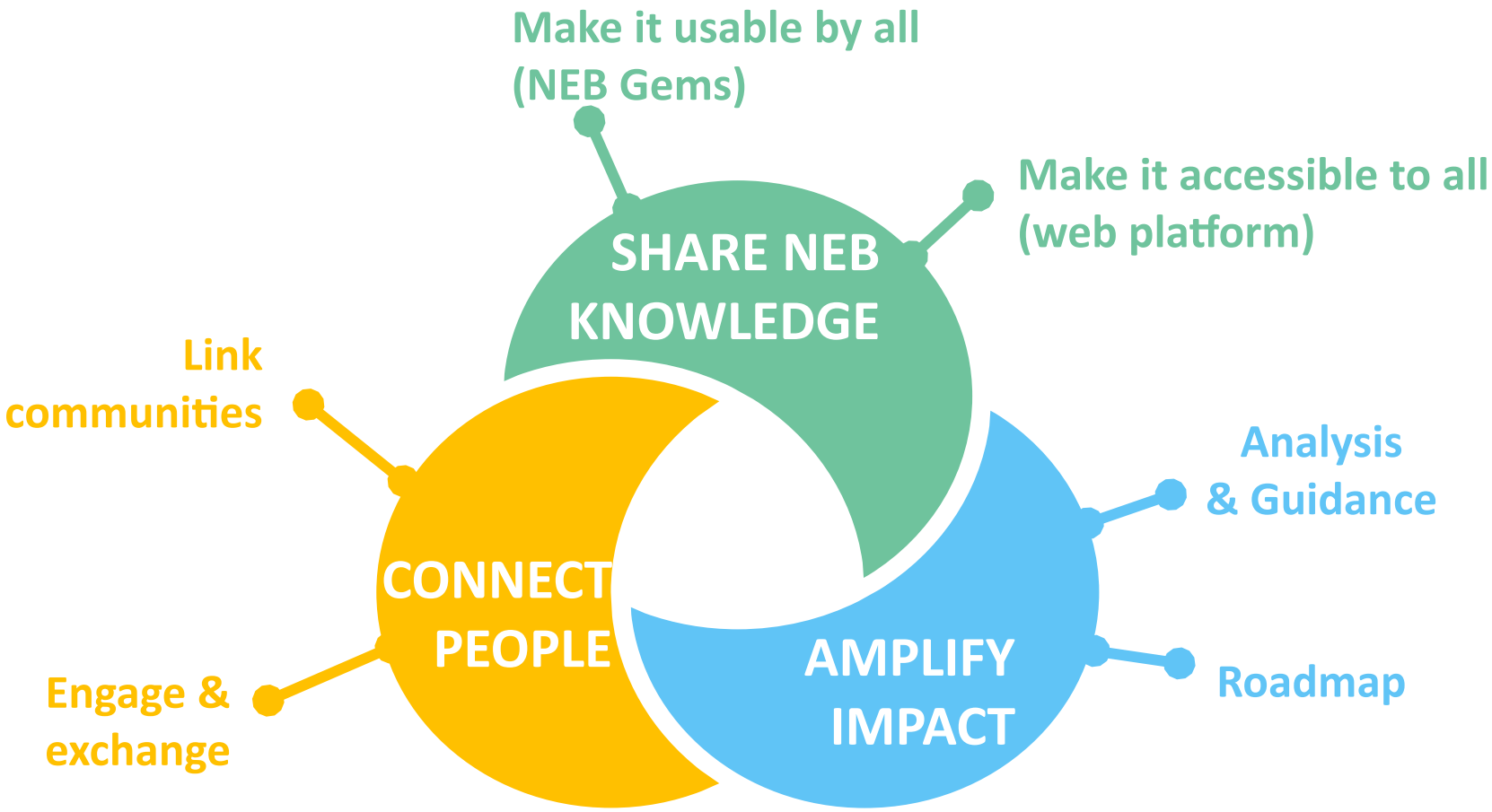
## Associations

ECTP INNOVATIVE BUILT ENVIRONMENT
GATE 21
WORLD GREEN BUILDING COUNCIL
metabuilding
FEDERCOSTRUZIONI

NEB JUNCTION
STAR*track
A Built4People Project

# THE COORDINATION AND SUPPORT ACTIONS HOSTING THIS SESSION

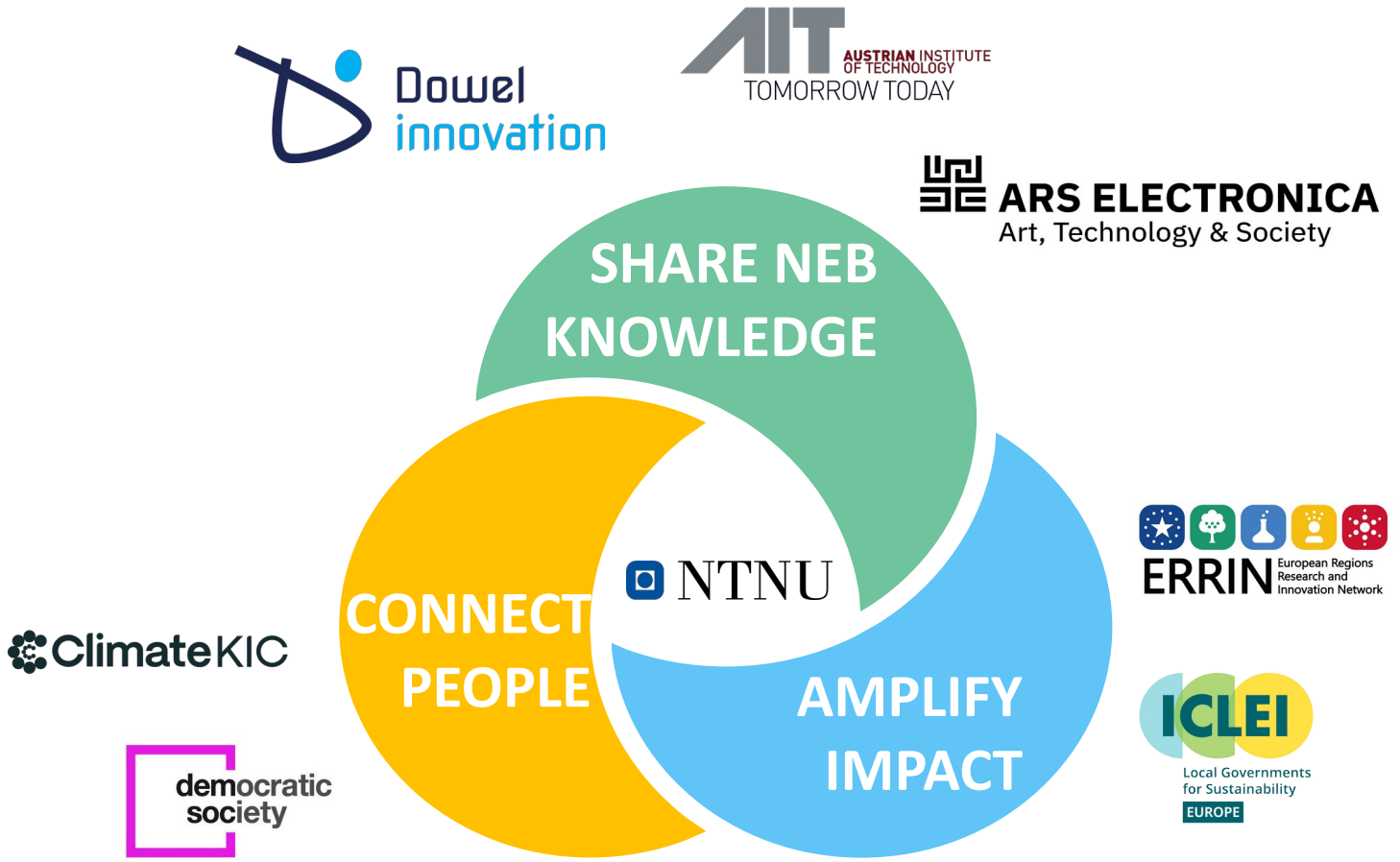
**The hub for NEB results and impacts**



# THE COORDINATION AND SUPPORT ACTIONS HOSTING THIS SESSION

NEB JUNCTION

**The hub for NEB results and impacts**




NEB JUNCTION

STAR*track A Built4People Project

# THE PROJECTS PRESENTING TODAY



# PART 1 – FLASH PRESENTATIONS

- ***Visualization to empower professionals and communities for Indoor Air Quality understanding***, Mikael Borjesson, Swegon, IAQ Society
- ***A glimpse into two European projects – TIMBERHAUS & GINNGER***, Chiara Fonio, Head of Social Innovation, ICONS
- ***Digitally enabled social district renovation processes for age-friendly environments driving social innovation and local economic development***, Silvia Urra Uriarte, PhD., Senior researcher, Coordinator of drOp project, TECNALIA
- ***From Materials to Education: Activating tools to implement NEB principles and learning from co-design challenges | Insights from Inguma, Woodstock, NEB Academy, and AEGIR.*** Florence Kuijl, Innovawood
- ***User centric design for participatory urban regeneration tool,*** Derya YILMAZ, REGEN project coordination team, LIST

NEB JUNCTION

STAR*track
A Built4People Project

# PART 2 – DISCUSSION

*Before we start, we would like to learn a bit about you…*

*mentimeter.com enter the code 8958 8586*

https://www.menti.com/alt2vqy6tcz1

# PART 2 – DISCUSSION

*For the next 30 minutes, we will discuss the following questions:*

- Which methods or tools did you use to integrate the NEB values in your project?
- Which of the three NEB values do you find more difficult to implement?
- Which concrete benefits did you get from integrating the NEB values in your project?
- What challenges did meet in applying NEB principles, and how did you solve them?
- What are you most proud of in your project, that connects with NEB values?
- To conclude: can you formulate a few “dos and don’ts”

# Thank you!

Contacts:

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*silvia.urra@tecnalia.com*

*derya.yilmaz@list.lu*

*mikael.borjesson@swegon.se*

*florence.kuijl@innovawood.eu*

# WORKSHOP OUTLINE

- **Intro + flash presentations: 40 minutes**
- **Discussion: 30 minutes in total**
  - Start with Mentimeter to know the audience. 3 questions: Check profile of participants/ Are you involved in R&D project?/ email address in case they want the synthesis (Florence)
  - Florence & Clémentine bring sticky notes and pens + two pages “most proud” “dos and don’t” with patafix
- **→ 5 min for each of the following question:**
  - *Which methods or tools did you use to integrate the NEB values in your project?*
  - *Which of the three NEB values do you find more difficult to implement?*
  - *Which concrete benefits did you get from integrating the NEB values in your project?*
  - *What challenges did meet in applying NEB principles, and how did you solve them?*
- **→ 10 minutes to address the two following questions in parallel** (attendees fill in sticky notes and comment when they paste it on the wall)
  - *What are you most proud of in your project, that connects with NEB values?*
  - *To conclude: can you formulate a few “dos and don’ts” (in short sentences) as recommendations on how to implement the NEB approach in a project?*
- **10 minutes wrap up if we have time:**
  - Cluster the sticky notes
  - Announce a synthesis of workshop outcome

NEB JUNCTION

STAR*track
A Built4People Project

drOp

Putting the residents at the heart of social district regeneration

# Digitally enabled social district renovation processes for age-friendly environments driving social innovation and local economic development.

## New European Bauhaus: from principles to reality

Silvia Urra Uriarte, PhD. Senior researcher. TECNALIA

SUSTAINABLE PLACES 2025

Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or European Health and Digital Executive Agency (HADEA). Neither the European Union nor the granting authority can be held responsible for them.

# Digitally enabled social district renovation processes for age-friendly environments driving social innovation and local economic development

Topic: HORIZON-CL4-2021-RESILIENCE-01-32: *Social and affordable housing district demonstrator (IA)*

*OCTOBER 2022- ~~SEPTEMBER 2025~~ DECEMBER 2025*

*Grant agreement number: 101080025*

Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or European Health and Digital Executive Agency (HADEA). Neither the European Union nor the granting authority can be held responsible for them.

# Consortium

Ermua

promosa
Ayuntamiento de Ermua

tecnalia
MEMBER OF BASQUE RESEARCH & TECHNOLOGY ALLIANCE

MONDRAGON UNIBERTSITATEA



EESTI KORTERIÜHISTUTE LIIT EKÜL

Institute of Baltic Studies

HOUSING EUROPE

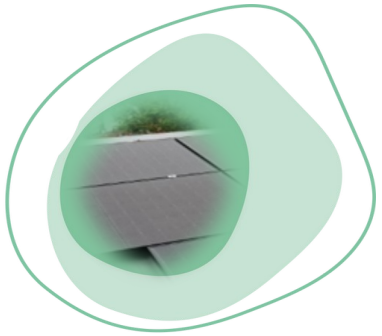
materahub

## Sister projects

ProLight

SUPERSHINE

## SUSTAINABLE



*drOp aims to transform social housing districts into* ***inclusive smart neighbourhoods*** *, more* ***energy efficient, accessible and liveable***

## INCLUSIVE



*drOp has developed an* ***engagement strategy and a co-governance model*** *to ensure their full involvement in the process of making their neighbourhoods more accessible, connected and liveable*

## BEAUTIFUL



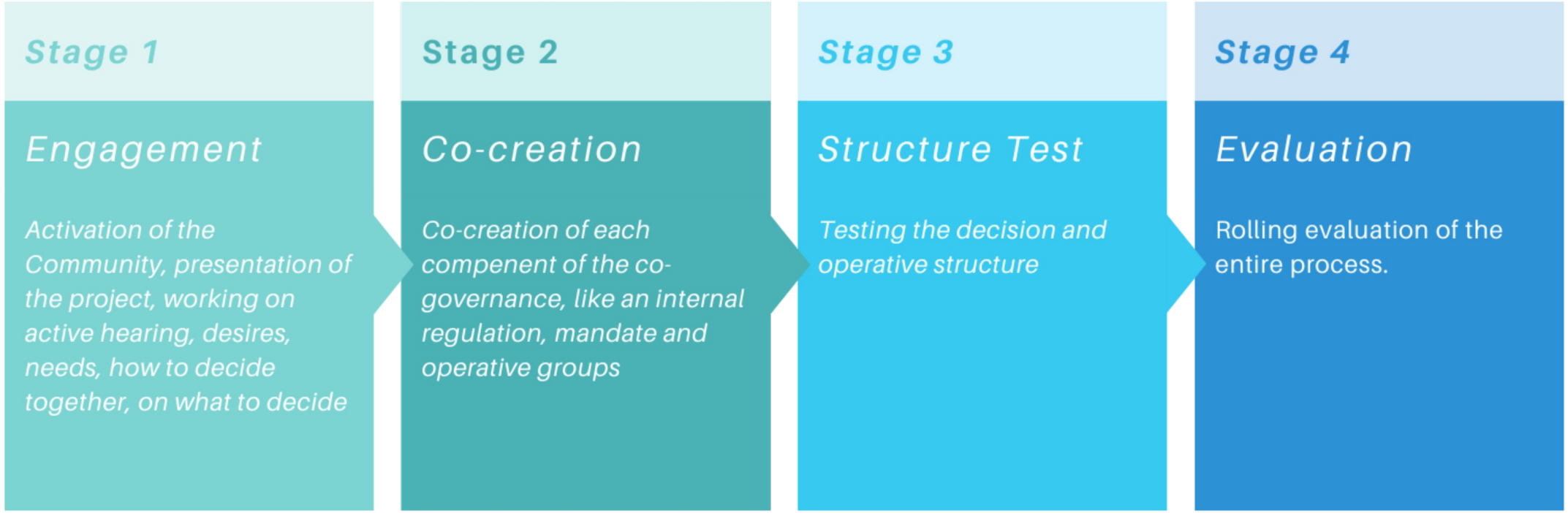
*drOp emphasises transforming public areas into* ***attractive, functional*** *community hubs that foster* ***belonging and togetherness****. These spaces act as reassuring meeting points and support climate resilience by creating adaptable, inclusive environments for sustainable urban living.*

# Santa Ana (Ermua) neighbourhood - Context



- **Built in the 60s and 70s to accommodate the rapid increase of population**
- **Facing issues like:**
  - **lack of accessibility**
  - **lack of quality public spaces**
  - **low levels of energy efficiency**
  - **decrease of local business**

# Co-governance & co-creation Methodology



# Public participation

COMPRENHENSIVE NEIGHBOURHOOD DIAGNOSIS

DEVELOPMENT OF A NEIGHBOURHOOD VISION FOR 2035

PRIORITIZATION OF ACTIONS

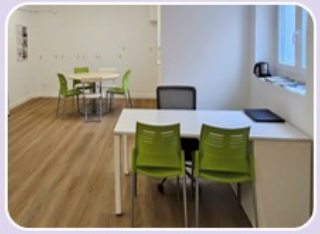
CO-CREATION OF ACTIONS







# Accions defined by the project



**NEIGHBOUR -HOOD OFFICE**



**MAPATHON SESSION**



**ENERGY COMMUNITY**



**CERTIFIED TRAINING COURSE**

# Actions prioritised by the residents



**TACTICAL URBANISM SQUARE**



**PARTY WALL DESIGN**



**ARCHITECTURE COMPETITION SQUARE**



**COMMUNITY CONNECTIONS**



**HEALTH SERVICES FOR AGING POPULARTON**



**RECOVERING SANTA ANA DAY**

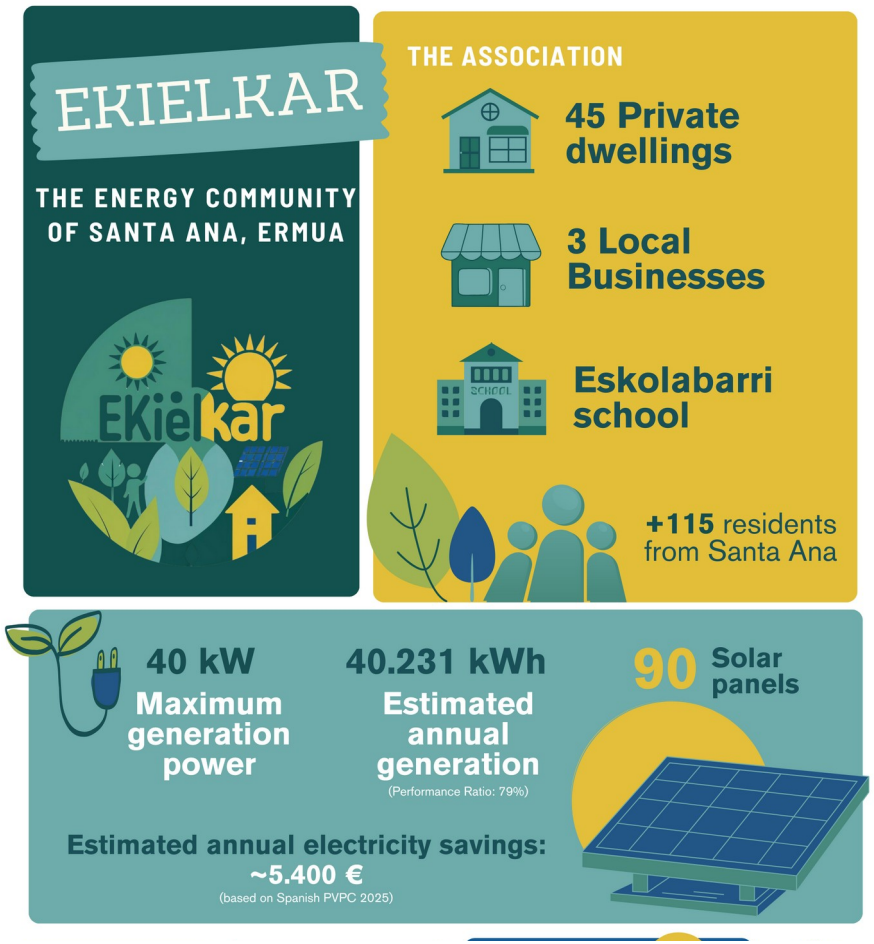
# Social example: The Neighbourhood Office



# Environmental example: Energy Community





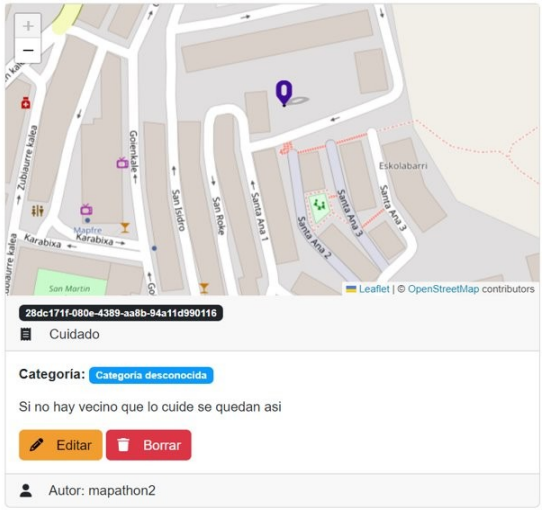


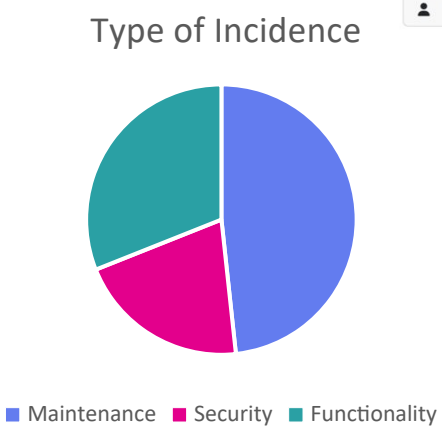

SUSTAINABLE

# Digital example: Mapathon








**Potential sites for drOp transformation identified.**

INCLUSIVE

Putting the residents at the heart of social district regeneration

# Urban example: Tactical Urbanism & Party wall design



BEAUTIFUL

# Impact

1. Neighbourood improvement
2. Creation of community.
3. Increased participatory culture
4. Long-term vision
5. Greater sense of belonging.
6. Moving from individual to collective vision.

**130+** TOTAL NEIGHBOURS INVOLVED

**10** ACTIONS IMPLEMENTED

# DROPS THAT WASH AWAY PROJECT BARRIERS

dr Op
Santa Ana Auzo Bulegoa
Oficina de Barrio Santa Ana

SOLUTIONS

BARRIERS

## BEGIN

MAKING ALL PARTIES AWARE OF THE BENEFITS AND POTENTIAL IMPACTS

BUILD TRUST BY FORMING PERSONAL CONNECTIONS WITH CITIZENS

SETTING REALISTIC AMBITIONS IN PROJECT PROPOSALS

BEING TRANSPARENT WITH CITIZENS FROM THE BEGINNING

HAVING THE COURAGE TO GO THROUGH THE PROCESS

HAVING AN INTERNAL CHANNEL / ALLY IN THE PA

LACK OF TRUST AND EXPERIENCE OF CITIZENS IN PARTICIPATORY PROYECTS

PUBLIC ADMINISTRATION'S FEAR TO PUBLIC PARTICIPATION

MANAGING EXPECTATIONS: MAKING CITIZENS UNDERSTAND WHAT THE PROJECT IS AND WHAT IS NOT

## PLAN

PROVIDE TECHNICAL & FINANCIAL GUIDANCE

ARRANGE STUDY VISITS WITH INVOLVED PARTIES

ESTABLISH NEUTRAL INTERMEDIATION CHANNELS (such as an office)

SECURE REAL COMMITEMENT WITHIN THE PROJECT TEAM

BUILD LEGITIMACY THROUGH EARLY INTERVENTIONS (EVEN IF SMALL)

FACILITATE DIALOGUE AND EXCHANGES BETWEEN PARTIES

POLITICAL INESTABILITY

TECHNICAL AND FINANCIAL LIMITATIONS

DISTRUST IN AND POLITICIZATION OF INTERVENTIONS FROM PUBLIC ADMINISTRATION

MISMATCH BETWEEN POLITICAL AND CITIZEN'S PRIORITIES

## EXECUTE

RELY ON STABLE CITIZEN GROUPS, AS AN ANCHOR

ADAPT THE LANGUAGE TO THE AUDIENCE

SUPPORT CITIZENS TO TAKE OWNERSHIP OF THE PROJECT

SUPPORT CITIZENS IN TAKING OWNERSHIP OF THE PROJECT

CO-DESIGN WITH LEGAL TEAMS AND FIND EXTERNAL PRECEDENTS

GO WHERE PEOPLE ARE AND ENGAGE WITH LOCAL ORGANIZATIONS

BUREOCRACY & L LEGAL REGULATIONS

LOW DIVERSITY AND LACK OF REPRESENTATIVENESS IN PUBLIC PARTICIPATION

LONG PROCESSES= PARTICIPATION FATIGUE AND ENGAGEMENT DECAY

NO EXECUTION OF PROJECT PROPOSALS BY CITIZENS


dr|0p













drop

Putting the residents at the heart of social district regeneration

# Thank you!

Silvia.urra@tecnalia.com

https://drop-project.eu/

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