



THEMATIC SESSION

Construction Innovation Cluster Open Day & Brokerage Event

Day 1 Wed. 08 Oct. 10.30 - 12.30 PM CEST



Comune di
Milano





**SUSTAINABLE
PLACES 2025**

8 October 2025 | 10:30 – 12:30 h.

Monte Rosa 91 Conference Centre, Milan

THEMATIC TRACK



Comune di
Milano

R2M
RESEARCH TO MARKET
SOLUTION

Construction Innovation Cluster Open Day & Brokerage Event

Organised by:



Contributors:



**CLUST-ER
BUILD**
EDILIZIA E COSTRUZIONI



Comune di
Milano

Sponsors:



AGENDA

Part I: Presentation of Clusters and Invitation to join / get Involved

Part II: Mini-Brokerage Event: NEB 2025-01 Calls

Part III: Networking Lunch

Part I

Construction Innovation Clusters: Accelerators for development, advocacy and competitiveness	
Moderator - Thomas Messervey , R2M Solution	
Speaker	Topic
Germain Adell MD Metabuilding ABSL	<i>The state of the art of Innovation Clustering in Europe and Metabuilding as an ecosystem of ecosystems enabler.</i>
Fabrizio Capaccioli President, GBC Italia	<i>GBC Italia 2025, new membership opportunities and how GBC Italia supports open innovation opportunities.</i>
Antoine Dugué R&D Director, Nobatek	<i>The O3BET ecosystem – standardized new testing facilities across Europe and tips for attaining funding to build one.</i>
Silvia Rossi Manger, Cluster-ER BUILD	<i>The building and construction Cluster of the Emilia-Romagna region and now B4P Innovation Cluster.</i>
Alice Bellazzi ITC-CNR/STRESS	<i>ITC-CNR: How research support innovation in building sector.</i>
Luca Lucchese GM Spreentech Ventures	<i>How 25 companies clustered, invested and created a Polo Edilizia 4.0 Open Innovation Accelerator.</i>
Thomas Miorin CEO, Edera	<i>Clustering in the value chain for deep renovation at scale and renovation outlook 2025.</i>

From the moderator: As we brief everything we do (efficiently), let's not forget

What value do you bring to your cluster members / how?

What do cluster members expect / what triggers them to join?

How can our audience get engaged with your cluster?

METABUILDING

Services to Innovation Clusters, the B4PIC network and Invitation to Join

Germain Adell

Architect and General Manager, Clust-ER BUILD





metabuilding labs

EU wide network of Testing facilities & Innovation services for new
building envelope technologies & products

Construction Innovation Clusters Open Day & Brokerage Event

Sustainable Places 2025 - Milano

Germain ADELL – Metabuilding ASBL General Director

08/10/2025



METABUILDING LABS Project has received funding from the European Union's Horizon 2020 Research and Innovation Programme under Grant Agreement No. 953193. The sole responsibility for the content of this document lies entirely with the author's view. The European Commission is not responsible for any use that may be made of the information it contains.

The STAR*track project has received funding from the European Union's Horizon Europe research and innovation programme under grant agreement No 101147509.

Our Open Innovation Test Bed ecosystem



RISE
Bor s
SWEDEN



BAM
Berlin
GERMANY



ITH
Warsaw
POLAND



EMI
Szentendre
HUNGARY



BUILDWISE
Limette
BELGIUM



LIST / NEOBUILD
Bettermbourg
LUXEMBOURG



U. of GALWAY
Galway
IRELAND



NOBATEK / INEF4
Anglet
FRANCE



IDONIAL
Gij n
SPAIN



CARTIF
Boecillo
SPAIN



AIT
Vienna
AUSTRIA



TEKNIKER
Eibar
SPAIN



UNIRC
Reggio Calabria
ITALY



STRESS
Benevento
ITALY



UPV / EHU
Vitoria
SPAIN



- Orange dot: O3BET replication
- Green dot: Living Labs
- Blue dot: Clusters & dissemination point
- Red dot: Testing Infrastructure

Metabuilding Labs 5 highlights in Autumn 2025



- 
- A circular inset image on the left side of the slide showing a close-up of a modern building's facade with a grid-like pattern of windows and structural elements.
1. **Our ecosystem grows:** 40+ project partners; 20+ Metabuilding association members (3 external to project) ; Built4People Innovation Clusters network is over 35 clusters
 2. **Our Digital Open Innovation Platform *metabuilding.com*** now handles a pilot buildings module and Digital Product Passports, Living Labs coming soon!
 3. **Our management entity *Metabuilding ASBL*** in Brussels has a new Board of Administrators with 12 members and is already coordinating proposals
 4. **Our new Affiliate Membership tier** will launch soon, every stakeholder in the value chain will be able to join the association!
 5. **Our 7 O3BET innovative testbenches** are being built, some are already finished

Our extended ecosystem



New ASBL members:



B4PIC network: state of play

The current B4PIC Network geographical coverage

Emerging B4PICs

- Innovation 4 Society (Brussels)
- Green NET Finland (Helsinki)
- Archenerg International (Szeged)
- BUILT CoLAB (Porto)
- Novabuild (Nantes)
- Odéys (Bordeaux)
- NEB Forum BiH (Sarajevo)
- E-CODOMH (Schimnari)
- BUILD:INN (Bilbao)
- ICONS (Pamplona)
- Galicia Construction Cluster (Santiago de Compostela)
- Galician Wood and Design Cluster (Santiago de Compostela)
- AEICE Cluster Habitat Efficente (Valladolid)
- Association of Balkan Eco-Innovation (Novi Sad)
- Clust-ER BUILD (Bologna)
- Habitech (Rovereto)
- STRESS (Naples)
- Venetian Green Building Cluster (Venice)

Prospective B4PICs

- We Build Denmark (Albertslund)
- Slovenian Innovation Construction Cluster (Ljubljana)

+ 15 new clusters!



Also, already
+ 400 registered
organisations &
+ 1300 users in
metabuilding.com
+ 200 SMEs!



Why are SMEs & clusters so important?



1. **SMEs are important**, they represent **99,9 %** of the EU construction sector
2. **95% of those SMEs are micro-companies** of less than 10 people
3. SMEs account for around **80% of the sector economic output**

**Any policy or action reaching out to SMEs should proactively find them where they are:
in regional clusters across the EU**

The **Built4People Partnership** and the **European Commission** have integrated these facts into their programming and funding:

- **3 Open Innovation Test Beds projects** funded (45M€ total) to support **easing the access of SMEs to professional testing & certification services for building envelopes**
- **2 CSAs** funded to support the emergence and growth of the B4PICs: **Nebula & STAR*Track**
- **+ 35 clusters across 17 countries** are in the process of **becoming B4PICs**

The B4PIC Charter contents



1. Whole Built Environment ecosystem:

- Clusters must involve various stakeholders across the entire built environment value chain, from materials and construction to building use and renovation.

2. Multi-objectives:

- Clusters need to address diverse goals, including scientific (holistic innovation), economic (decarbonisation), and societal (behavioural change) objectives.

3. Cross-sectoral:

- Collaboration extends beyond traditional sectors to include a wide range of disciplines, fostering interdisciplinary approaches to innovation.

4. Locally anchored with national and European outreach:

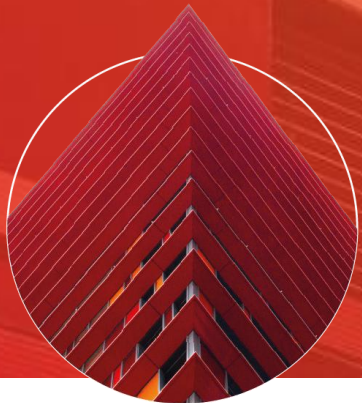
- Clusters have a local foundation and focus but also connect to national and European networks and policies to broaden their impact.

5. Cross-border:

- Collaboration and exchange of good practices occur across different countries, facilitating the adoption of innovative solutions in diverse contexts.

6. Access to testbeds and demonstration spaces:

- Clusters must have the ability to test and showcase new solutions and approaches, enabling demonstration of their effectiveness and feasibility.



Our digital Open innovation platform: metabuilding.com



The platform brings free ecosystem services



The platform serves as a virtual selling point for Metabuilding Labs services



Funding &
Financing



Product &
Technology



Collaboration
Opportunities



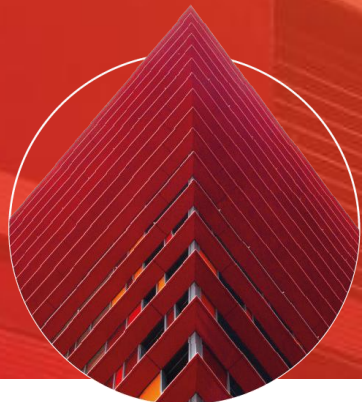
Cluster &
Innovation



Innovation &
Testing Support



Innovation
Coaching



Landing page: metabuilding.com

metabuilding

About News National Networks Search in Ecosystem Login Register English

Metabuilding Ecosystem
Innovating together for a sustainable built environment

Email: info@metabuilding.com

355 Organisations

25 Clusters

176 Opportunities

221 Services

144 Innovations

First operational OSBET Infrastructure, owned by CARIF Technology Center, Valladolid, Spain.

The Metabuilding platform is the digital meeting place for the innovation ecosystem of the European built environment sector. It brings together stakeholders from the construction sector and emerging industrial sectors such as recycling & circular economy, additive manufacturing, nature-based solutions, and the digital industry. The platform allows all the innovation actors in the construction sector to stay updated on latest innovations, find collaboration partners for development or business activities, showcase innovative products and solutions and to get innovation, testing and certification support for their R&D projects.

WHAT THE ECOSYSTEM OFFERS

Innovation and Testing Support
Find and promote innovation and testing services:
From the definition of a

Innovation Coaching
Get tailor-made support from an innovation coach:
From ideation

Product and Technologies
Explore and showcase innovative solutions for construction:
Technologies under

Funding and Financing
Find and offer financial support opportunities:
Public and private funding.

Collaboration Opportunities
Discover and promote collaboration opportunities:
Partners for innovation

Clusters & Innovation System
Find an innovation cluster in your region/country:
Meet other innovators,

Metabuilding Association in Brussels



→ Our active members to date



→ A new partner in EU funded projects



The Single Entry Point for easy access to all our services is now a permanent and proactive organisation in Europe!

Open also to external new memberships

Metabuilding Association in Brussels



→ Our new Board of Administrators

	Organisation	Representative	Country
1	NOBATEK	Julien SZABLA	France
2	STRESS Scarl	Carmine PASCALE	Italy
3	FUNDACIÓN CARTIF	Sergio SANZ HERNANDO	Spain
4	University of Galway	Magdalena HAJDUKIEWICZ	Ireland
5	LIST	Sylvain KUBICKI	Luxembourg
6	Laboratorio de Control de Calidad de la Edificación	Juan Maria HIDALGO	Spain
7	R2M Solution	Thomas MESSERVEY	Italy
8	EcoWise	Emre YONTEM	UK
9	BE Commons	Alejandro ADELL	France
10	Basaksehir Living Lab	Omer ONUR	Türkiye
11	PTEC	Carlos MARTINEZ BERTRAND	Spain
12	FEDCO	Luigi PERISSICH	Italy



Our New Affiliate Membership tier coming soon!

Your Gateway to Europe's Premier Built Environment Ecosystem



Is This Membership For You?

This tier is for forward-thinking organisations of all sizes within the European construction value chain, including:

- Ambitious SMEs & Contractors
- Innovative Architectural & Engineering Firms
- Cutting-edge Materials Suppliers
- Technology Startups poised for growth

Your Benefits: A Catalyst for Growth

- **Amplify Your Visibility:** Gain credibility with the "Metabuilding Affiliate Member" logo and a listing in our public Member Directory.
- **Gain Exclusive Intelligence:** Access a members-only hub with curated industry reports, market analysis, and strategic briefings.
- **Engage with Leaders:** Receive significant discounts on all Metabuilding conferences, workshops, and webinars to network with key decision-makers.
- **Unlock Opportunities:** Leverage our matchmaking platform to find project partners and be discovered by major industry players.
- **Accelerate Your R&D:** Get streamlined access to Metabuilding Labs services—including innovation coaching, testing, and certification—plus support for securing EU funding and joining R&D proposals.

A Simple Path to Partnership

An annual investment provides year-round access to all affiliate benefits.

- Affiliate - SME: €250 / year (For SMEs and SME-sized Associations)
- Affiliate - Corporate: €1,000 / year (For Medium and Large Companies)

This is a non-voting membership, allowing you to focus 100% on leveraging the ecosystem for your business growth.

Be the First in Line.

The official launch of the Metabuilding Affiliate Membership is just few weeks away.

By registering your interest today, you will be placed on our priority list. You will be the very first to receive the official invitation to join, securing your place in the ecosystem before the public announcement.

Don't miss this ground-floor opportunity to connect your business to the future of construction



Join the Metabuilding Association
as Affiliate Member



Register in our innovation
platform for free

Contact us: contact@metabuilding.com

Visit us at metabuilding.com



An Exclusive Preview for
Sustainable Places 2025.



Connect. Innovate. Build.



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As a leader shaping the future of the built environment, you understand that collaboration is the key to progress.

Metabuilding, Europe's premier innovation ecosystem for the construction sector, is excited to offer you, the insiders and innovators at Sustainable Places 2025, an exclusive preview of our next major evolution: the **Metabuilding Affiliate Membership** tier.

This is a new tier designed for the dynamic companies that drive our industry forward. At present, our association is made exclusively of testing facility operators and governance organisations. However, requests from industry have led us to understand that companies and associations want access to the brand and body of knowledge being constructed every day – so we are adapting.

The official launch is just weeks away, but we are giving you the first opportunity to be part of it.



Your Exclusive Advantage: A Glimpse of What Awaits

Becoming a **Metabuilding Affiliate Member** places your organization at the heart of European construction innovation. This new, accessible tier is designed to deliver tangible value and a direct catalyst for growth.

As a future member, you will be able to:

- ➔ **Elevate Your Profile:** Gain instant credibility with the official Metabuilding affiliation and increase your visibility through our exclusive European member directory.
- ➔ **Access Insider Intelligence:** Tap into a members-only hub of market analysis, strategic reports, and curated insights that will keep you ahead of the curve.
- ➔ **Connect with the Community:** Enjoy privileged access and discounts for our high-level conferences, workshops, and networking events, putting you in the room with key decision-makers.
- ➔ **Forge Strategic Partnerships:** Leverage our powerful digital platform, metabuilding.com, to find project collaborators, discover new clients, and be found by major industry players seeking your expertise.
- ➔ **Supercharge Your Innovation:** Get streamlined access to the **Metabuilding Labs Technical Services Network**. Benefit from innovation coaching, world-class testing and certification services, and receive expert support to secure EU funding and join collaborative R&D proposals.

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An Exclusive Preview for
Sustainable Places 2025.



Con

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Thank you for your kind attention

Contact: g.adell@metabuilding.com



**Join the Metabuilding Association
as Affiliate Member**



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GBC ITALIA 2025, NEW MEMBERSHIP OPPORTUNITIES AND HOW GBC ITALIA SUPPORTS OPEN INNOVATION OPPORTUNITIES.

Fabrizio Capaccioli

President, Green Building Council Italia



Green Building Council Italia



Green
Building
Council
Italia

GBC Italia is a non-profit association

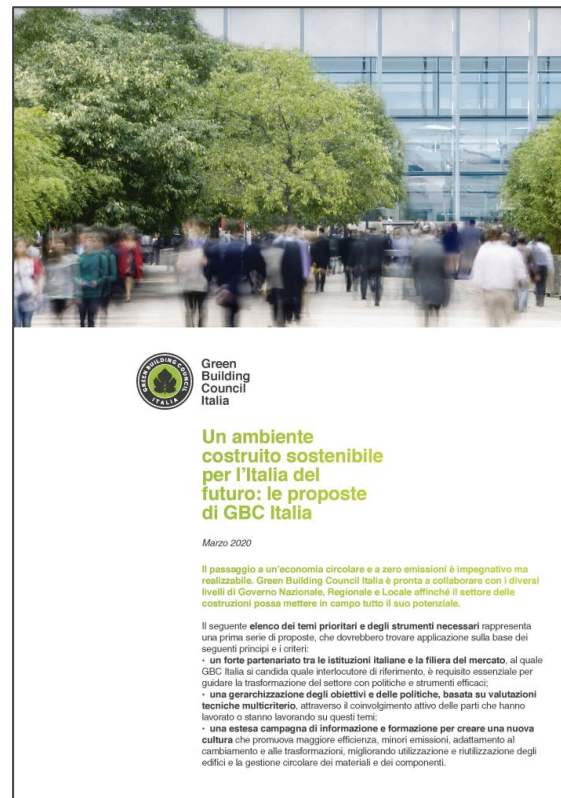
Mission:

Leading the entire construction supply chain in the sustainable transformation of the built environment

for a healthier, safer, more comfortable and efficient living space.

Vision:

To allow everyone to live in an environment that respects the needs of man and the environment

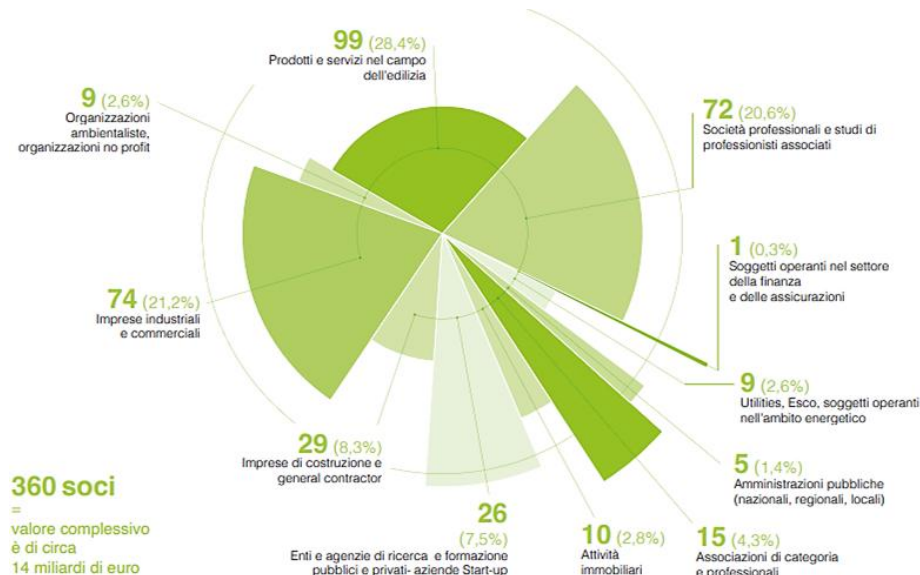


Green Building Council Italia

GBC Italia represents the entire construction supply chain:

> 400 Members

> 250 Participating professionals



The Objectives of Green Building Council Italia

Objectives

- To foster and accelerate the spread of a sustainable building culture, **driving the transformation of the market**,
- To raise awareness among the public and institutions of the impact that the design and construction methods of buildings have on the **quality of life of citizens**,
- Provide clear **benchmarks to industry players**,
- Encourage discussion between operators in the sector by creating a **sustainable building community**.

Areas of action



Certification



Formation



Innovation



Advocacy



Communication

World Green Building Council



75+

Green Building Councils
accelerating action and
implementing solutions
across the globe

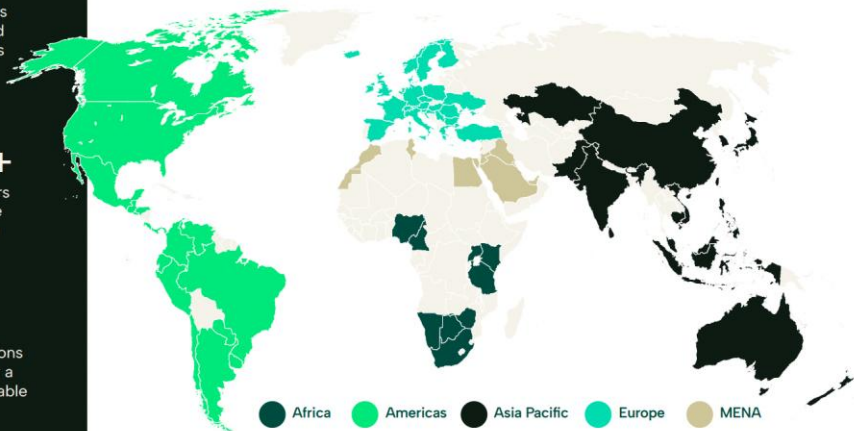
48,000+

Private sector members
acting and driving the
sustainability agenda

70+

Other partner organisations
collaborating to deliver a
holistic vision for sustainable
built environments

**For over 20 years
WorldGBC has worked
with the global network
to unite stakeholders
across the value chain
and deliver meaningful
systemic change at scale.**



Our network covers



GBC Italia is a permanent member of the World Green Building Council, the largest organization in the world to promote sustainability in the construction sector, with an international community of 70+ national GBCs, of which 25 in Europe

Sustainable buildings

FOR EVERYONE, EVERYWHERE

#BEBOLDONBUILDINGS

Our view of the future

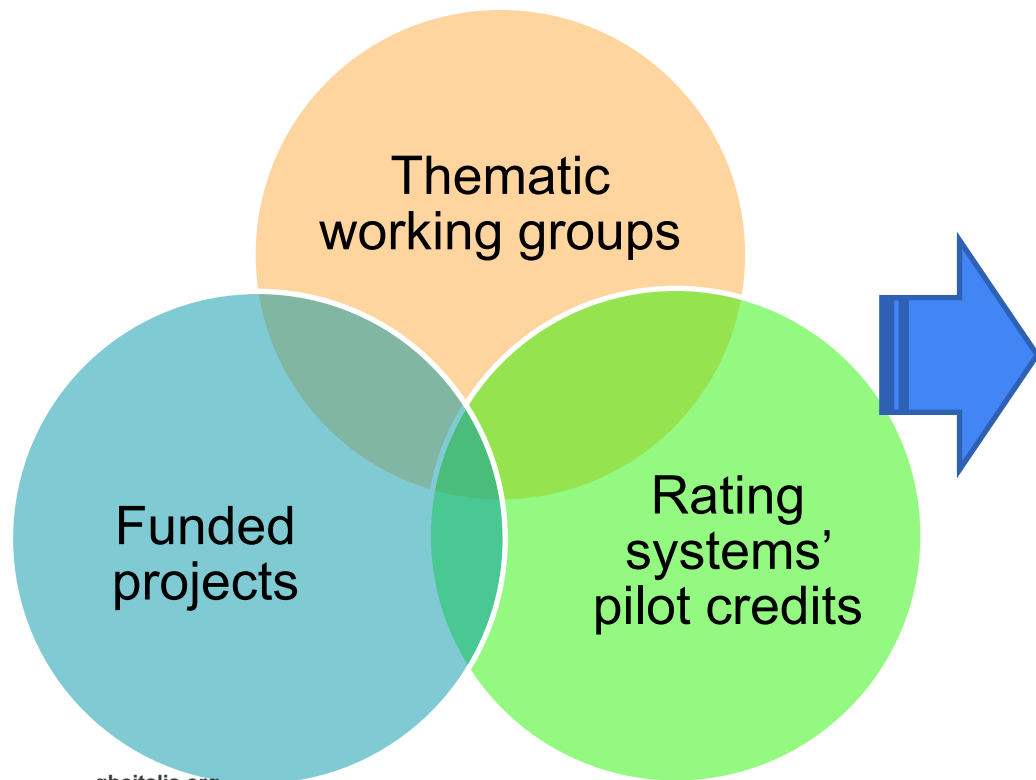
As technology advances, markets develop, and climate change challenges the status quo, the latest thinking on sustainable buildings is sure to evolve and adapt to regional and local needs.

Acknowledging the complexity and nuance of such a transformation, our strategy puts forward our view of future sustainable built environments.

The deep green transformation will always need to be holistic and put people at its centre.



Open Innovation



- Advocacy actions
- Piloting innovation
- Supporting market uptake

Catalyzing funding from private and public sector to implement Innovation at national level



#BUILDING LIFE II



- Implementing roadmaps for net zero whole life carbon. Participating GBCs: Croatia, Czech Republic, Finland, France, Germany, Hungary, Ireland, Italy, Netherlands, Poland, Spain, UK.
- Capacity Building and Pre-roadmap Analysis: Bulgaria, Greece, Serbia, Slovenia.

INDICATE LIFE



- Delivering WLC benchmark data at national level. Participating GBCs: Croatia, Italy, Luxembourg, Austria. Follower country: Hungary

TOPCLEVER (led by GBC Italia)

- Developing training on WLC for professionals and trades. Participating GBCs: Italy, Spain, Poland, Slovenia, Croatia, Hungary.

Laudes ———
—— Foundation
IKEA Foundation




From private
philanthropies
support

To EU public
funding

Transposing European relevant topics into the national context

Bringing global and european knowledge and expertise at national level

Taking part to international movements through the GBC network initiatives

Direct membership opportunities on innovative projects



Involving the WorldGBC EU regional network in consortia for projects proposals

Taking part to project proposal together with GBC Italia

Receiving support for national networking activities and forming consortia at the national level

Taking part to international initiatives (such as #Buildinglife, Net zero Cities) through the GBC Italia activity

We are here to shape a future where every building becomes a tool for health, equity and climate resilience. GBC Italia is here to ensure that our buildings and cities are not just efficient, not just smart, but human. These are the future that we want to built together.

The O3BET Ecosystem

A new European Testing Facility – and an invitation to use and/or build one.

Antoine Dugué

Director R&D, Nobatek





metabuilding labs



EU wide network of Testing facilities & Innovation services for
new building envelope technologies & products

The O3BET ecosystem standardized new testing facilities

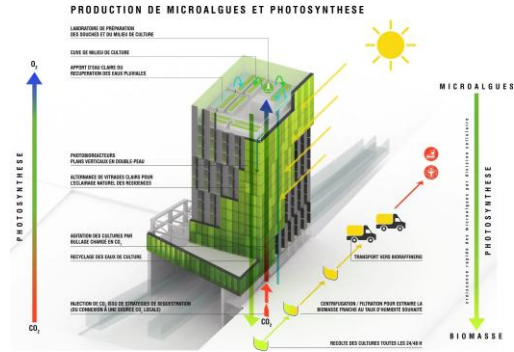
Antoine Dugué– R&D resp. NOBATEK

10/08/2025



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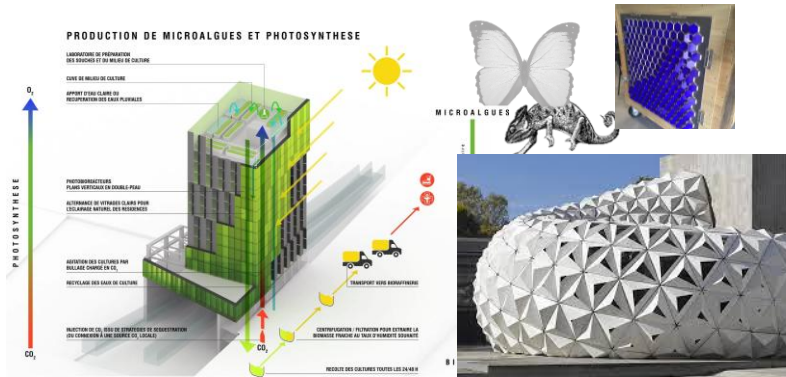
European Construction sector Innovation vs regulation



VS



European Construction sector Innovation vs regulation



VS

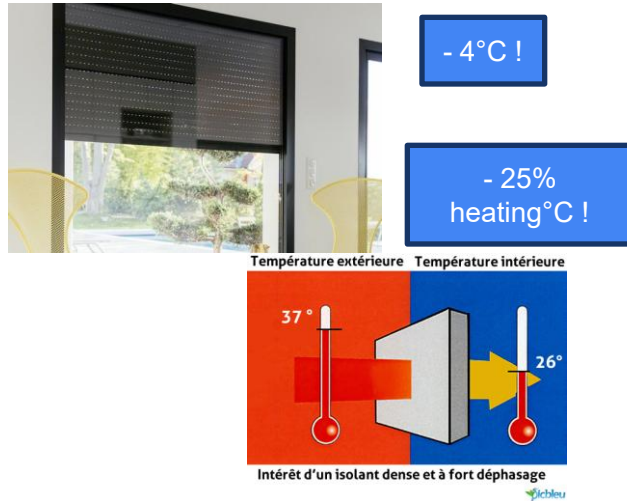


Race for innovation or for regulation ?

European Construction sector

Innovation vs regulation

Unproven claims

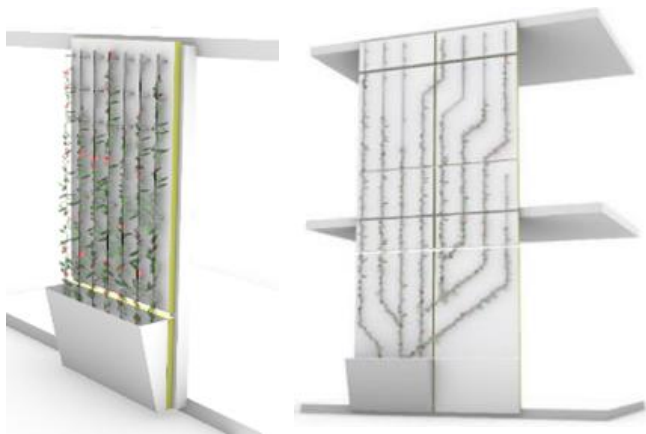


Ecodesign for Sustainable
Products Regulation



Real case example – manufactures needs

A green wall for
renovation



Initial discussion



- System for renovation
- It impacts comfort, cooling loads
- Most often not modeled
- No standards to describe

Market objectives

- What is the impact on cooling loads or summer comfort for residential & office buildings?
- On what walls should it be installed? All orientations ?
- Can it be modeled in business as usual modeling & simulation platforms ?

Our solution

O3BET

Open Source
Open Data
Open Access

Building Envelope Testbench



O3BET Benefits

- A 1:1 scale
- Standardised and fully replicable
- Cost-effective
- Timber based and industrialised
- Mountable/dismountable low environmental impact kit
- Digital twin enabled
- Including all necessary sensors/hardware for virtual testing

Our solution

Service



Initial
analysis

experimental protocol

Energy model

Targeted Building
stock

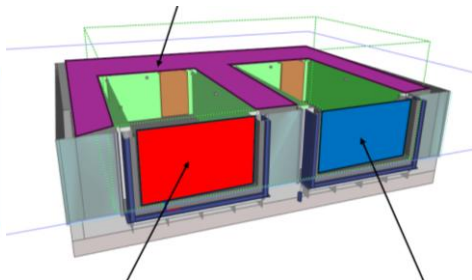
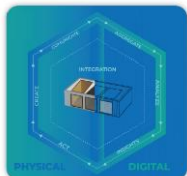
Installation on
a O3BET
6-12 weeks

Exploitation

- 4 months
- 15-25 k€

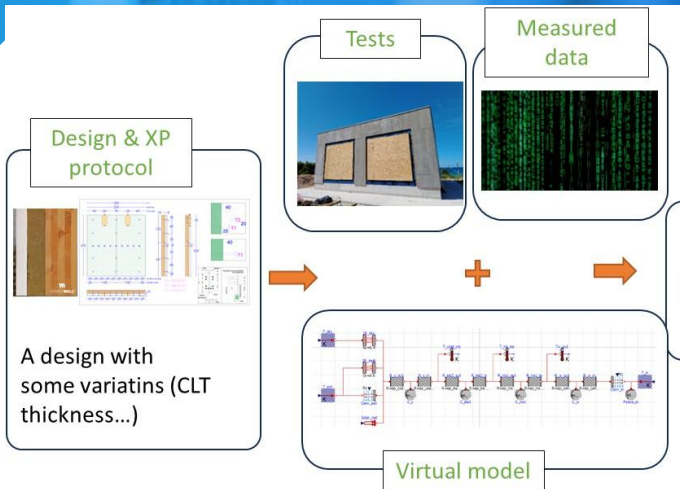
O3BET feedbacks

- Installation/implementation
- Airtightness
- Acoustic
- (Almost) standardised test to assess thermal characteristics
- Evaluate impact of piloting



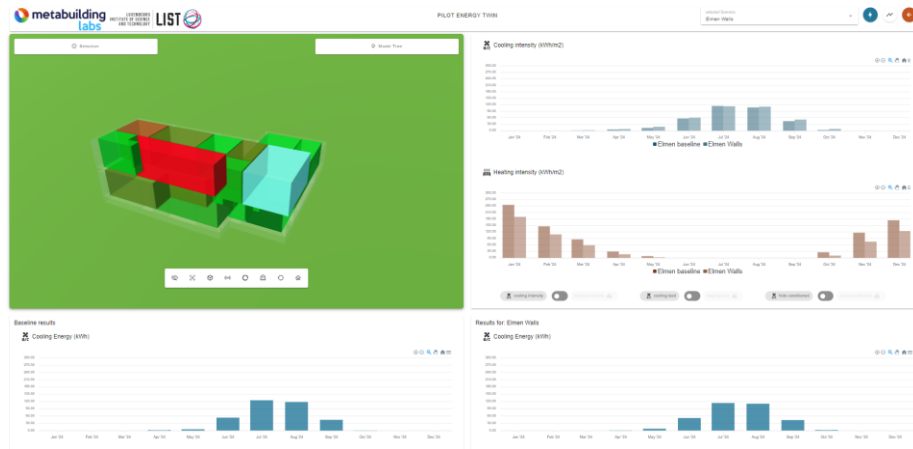
- Validity ?

Our solution – a semi virtual test bench



From the test an energy model

And then with simulation, analysis of all potential cases



First O3BET in CARTIF, Valladolid, Spain



First O3BET in CARTIF, Valladolid, Spain



Our O3BET innovative testbench network

→ How many are being built and where

A starting network of **8 digitally connected O3BETs**:



CARTIF O3BET: Boecillo, **SPAIN** [BSk]*



STRESS O3BET: Térmoli, **ITALY** [Cfa]*



ITB O3BET: Katowice, **POLAND** [Dfb]*



NOBATEK O3BET: Bordeaux, **FRANCE** [Cfb]*



RISE O3BET: Borås, **SWEDEN** [Dfb]*



UoG O3BET: Galway, **IRELAND** [Cfb]*



EMI O3BET: Budapest, **HUNGARY** [Dfb]*



UPV/EHU PASSYS CELLS: Vitoria-Gasteiz, **SPAIN** [Cfb]*

*Köppen climate classification.



Our technical services

- **Testing facilities (>100)**
 - Standardised laboratory testing
 - Development testing
 - Regulation compliance reporting
- **Strategy & Management**
 - Coaching services
 - DPP based management



RISE
Borås
SWEDEN



BAM
Berlin
GERMANY



ITH
Warsaw
POLAND



EMI
Szentendre
HUNGARY



BUILDWISE
Limette
BELGIUM



LIST / NEOBUILD
Bettermbourg
LUXEMBOURG



U. of GALWAY
Galway
IRELAND



NOBATEK / INEF4
Anglet
FRANCE



IDONIAL
Gijón
SPAIN



CARTIF
Boecillo
SPAIN



AIT
Vienna
AUSTRIA



TEKNIKER
Eibar
SPAIN



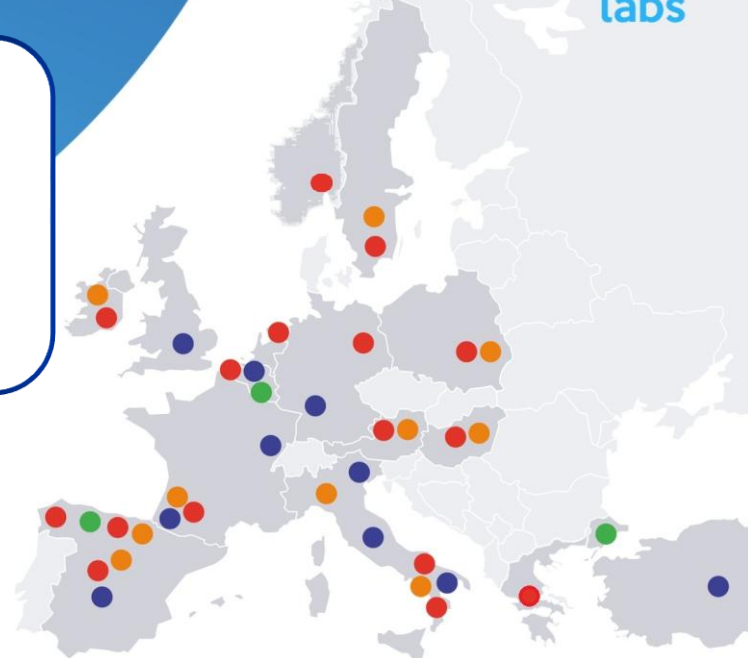
UNIRC
Reggio Calabria
ITALY



STRESS
Benevento
ITALY



UPV / EHU
Vitoria
SPAIN



- Orange dot: O3BET replication
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- Blue dot: Clusters & dissemination point
- Red dot: Testing Infrastructure

Ecosystem

O3BET



- **O3BET:** open → BIM model, list of sensors, models are all shared
- **Cost:** 250 k€
- Network about to be activated (end of the project in July 2026)

Ecosystem benefits

- **Access** to local companies (often SMEs)→ First contact is key, importance of local communication activities.
- Align with commercial practices: documentation, templates, costs...
- **High quality standards:** calibration, reports...
- Benefit from **shared development:** DPP based management, advanced energy mode, design & installation of O3BET

Thank you for your kind attention



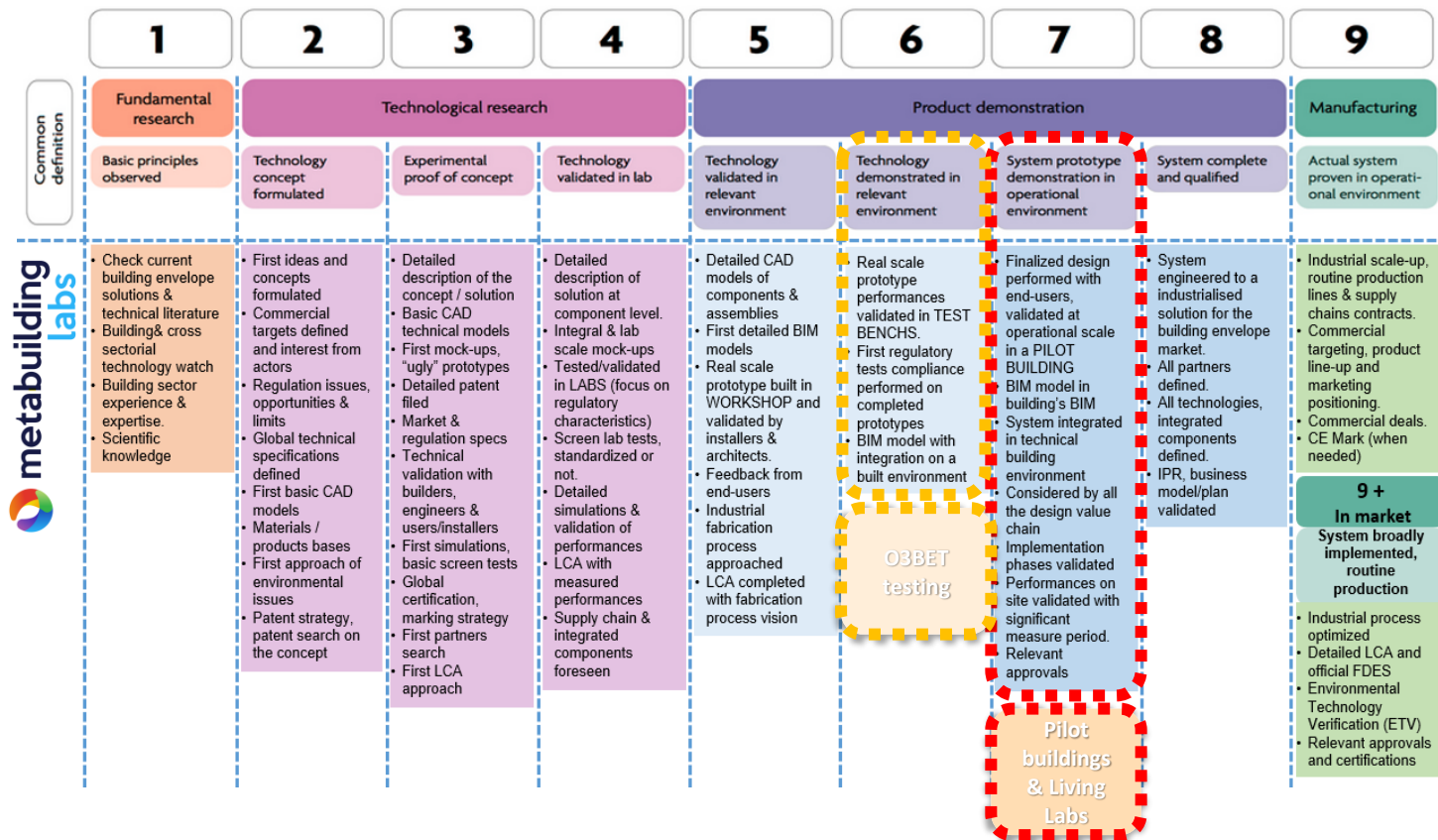
The Project
www.metabuilding-labs.eu



The Platform
www.metabuilding.com



METABUILDING LABS Project has received funding from the European Union's Horizon 2020 Research and Innovation Programme under Grant Agreement No. 953193. The sole responsibility for the content of this document lies entirely with the author's view. The European Commission is not responsible for any use that may be made of the information it contains.



Clust-ER BUILD

Emilia-Romagna region Cluster and B4P Innovation Cluster

Silvia Rossi

Managing Director, CLUSTER-ER BUILD



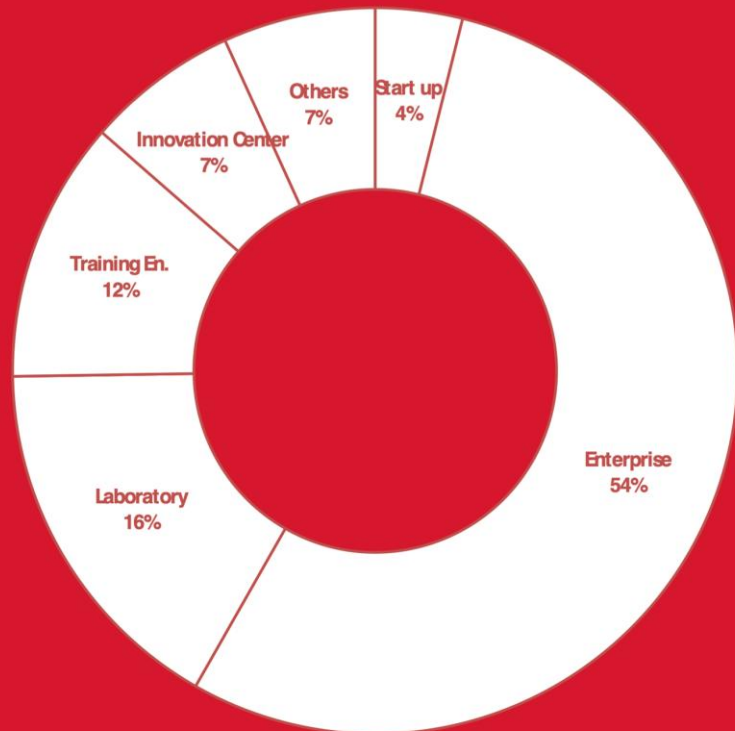
Quadruple Helix

Community of public and private subjects (research centers, companies, training institutions)

Innovative start up with interdisciplinary teams: engineering, architects, computer scientists

Access to innovations, resources, subsidies and tools necessary to carry out projects.

Value Proposition



To be the leading cluster in the construction field: from design to the built asset, guiding our members towards a high level of innovation for a new asset in the construction sector.

Clust-ER BUILD aims:

BE THE MAIN REFERENCE POINT FOR THE CONSTRUCTION SECTOR

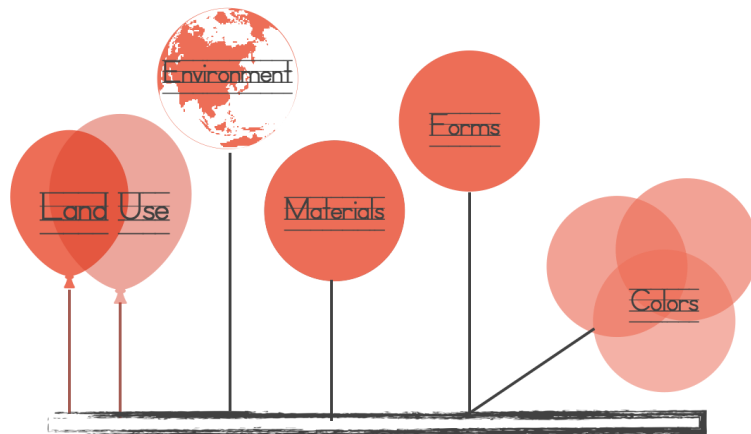
Provide support from the project's inception to the realization of the built asset.

PROMOTE INNOVATION

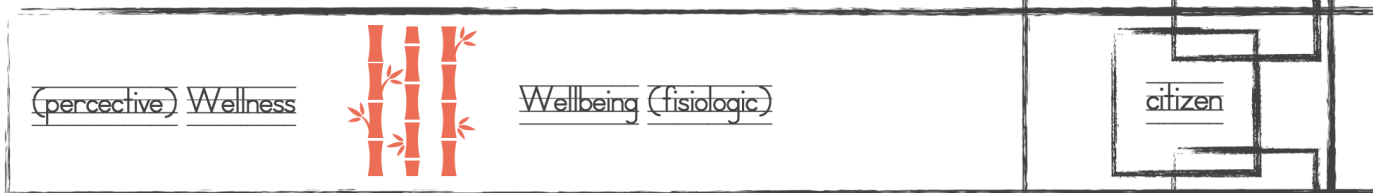
Help cluster members achieve a high level of innovation in the construction field.

SUPPORT THE DEVELOPMENT OF NEW ASSETS

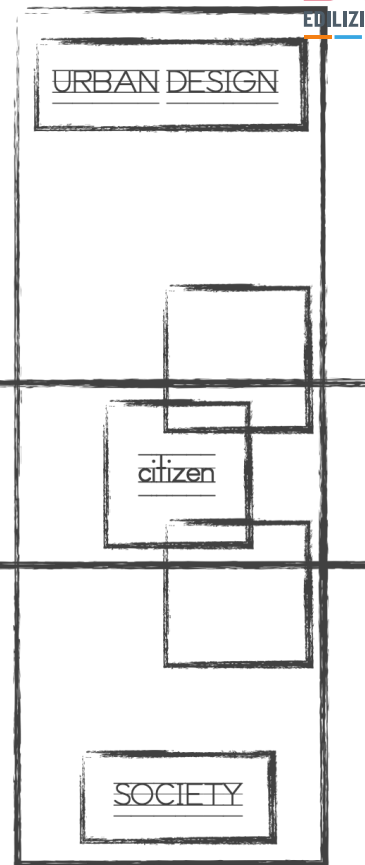
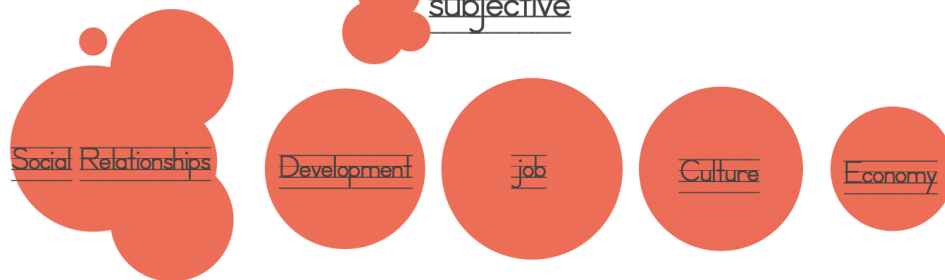
Facilitate the creation and implementation of new assets in the construction sector, integrating the latest technologies and innovative solutions.



 objective



 subjective



Value Chain



INNOVA CHM

Conservazione e valorizzazione del patrimonio costruito, storico e artistico per il recupero, il restauro ed il riuso intelligente, mediante innovazioni tecnologiche e di processo.

Conservation and valorization of built heritage toward the improvement and smart reuse, by means of technological and process innovations.



SICUCI

Sicurezza delle costruzioni e delle infrastrutture civili, per ridurre la loro vulnerabilità e mitigare il rischio ambientale (sismico, idraulico ed idrogeologico).

Safety of buildings and civil infrastructures, to mitigate vulnerability and environmental (seismic, hydraulic and hydrogeological) risks.



GREEN 2 BUILD

Efficienza energetica e sostenibilità in edilizia, per edifici energeticamente efficienti, resilienti e sostenibili.

Energy efficiency and sustainability in buildings, for energyefficient, resilient and sustainable buildings.



RIGENERA

Strumenti e metodi innovativi di innesco di pratiche rigenerative nella città e nel territorio, per il benessere ambientale, economico e sociale della comunità.

Instruments to support virtuous pathways of triggering regenerative dynamics that intervene on physical, economic and social aspects of the process.



Working Group



SUSTAINABLE MOBILITY

The use of artificial intelligence in the mobility sector starting from the right to mobility of people, the need to plan the **transformation of cities**....

TRAINING

Training is a central driver for development and **innovation**, which in the construction sector are guided in a closely combined way by the needs for a **sustainable transformation** of the building heritage, ...

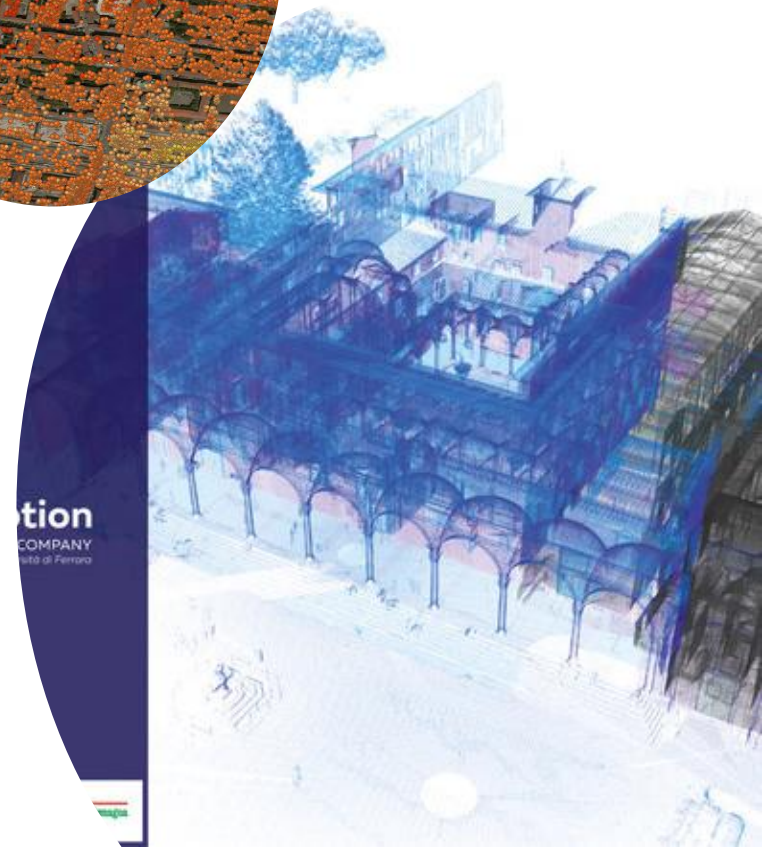
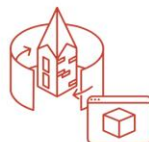


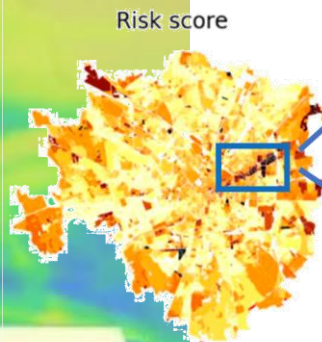
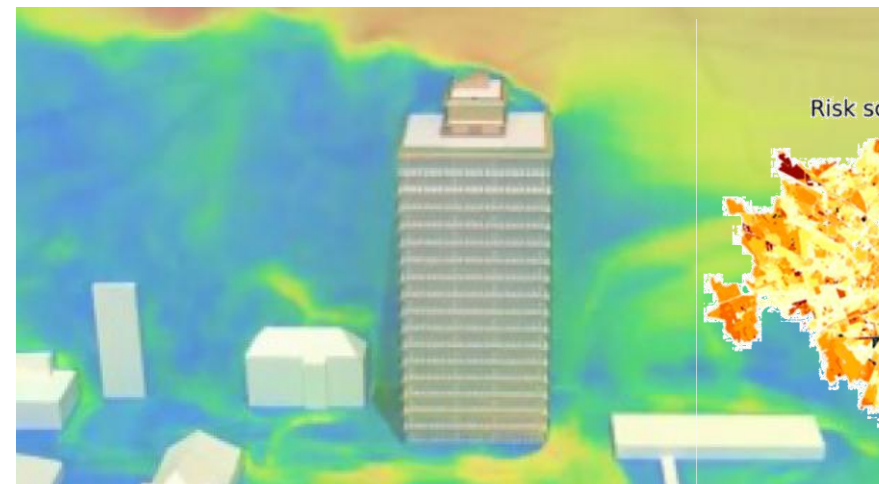
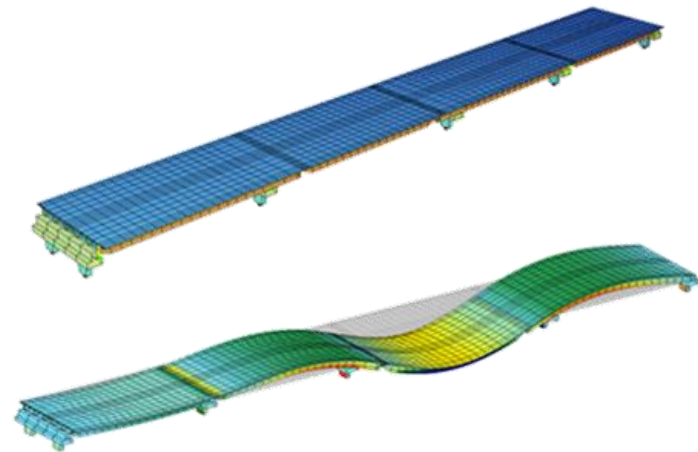
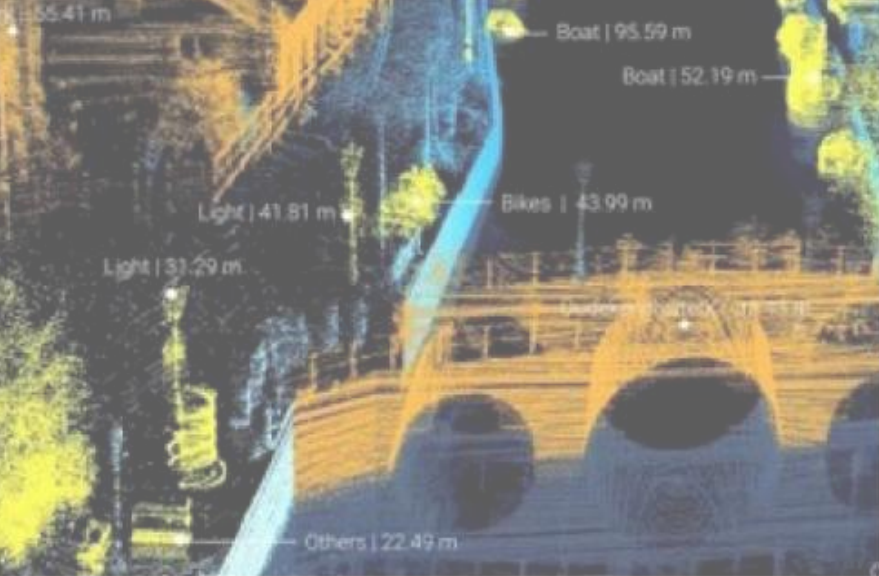
INNOVATION

Presentation to institutions/administrations of **the cycle of regeneration, reactivation** and 'monitoring' of public heritage as generators of 'value' and hospitality...

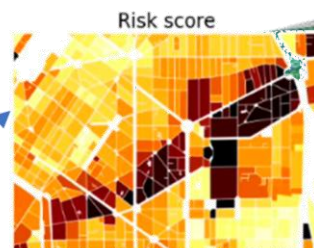
TECH3D DEVELOPMENT FOR CULTURAL HERITAGE

Promotion, discussion and debate initiatives aimed at tracing, in the specific field of **3D Digitization Technologies**

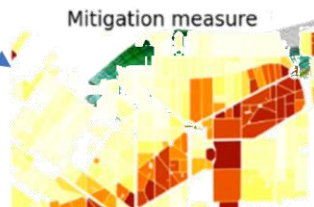




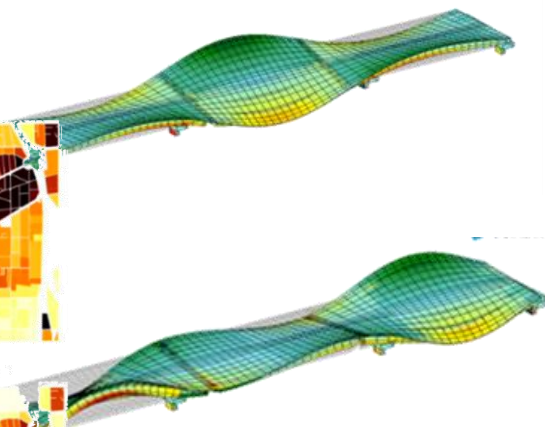
Risk score



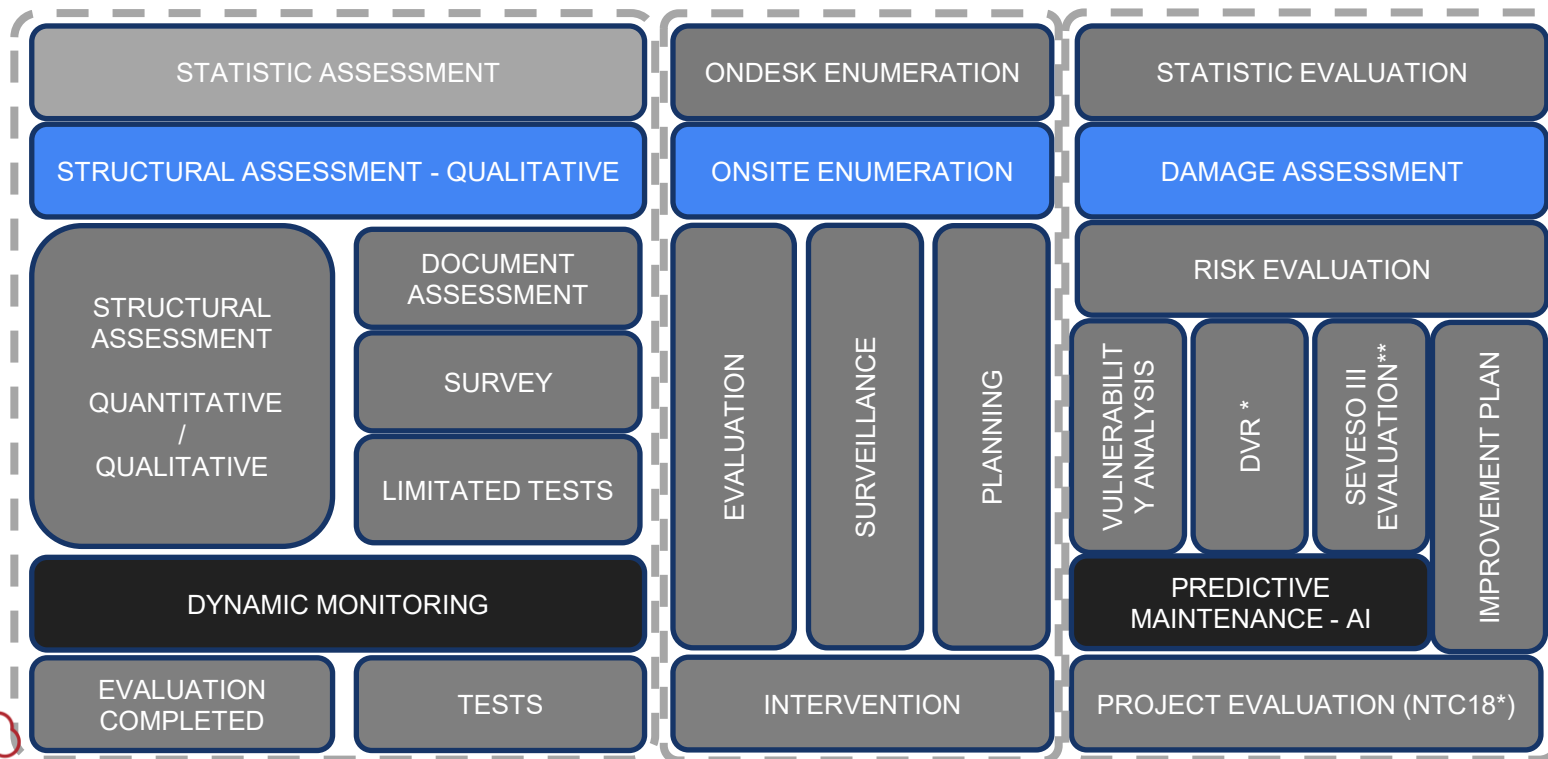
Risk score



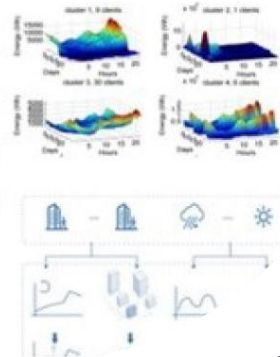
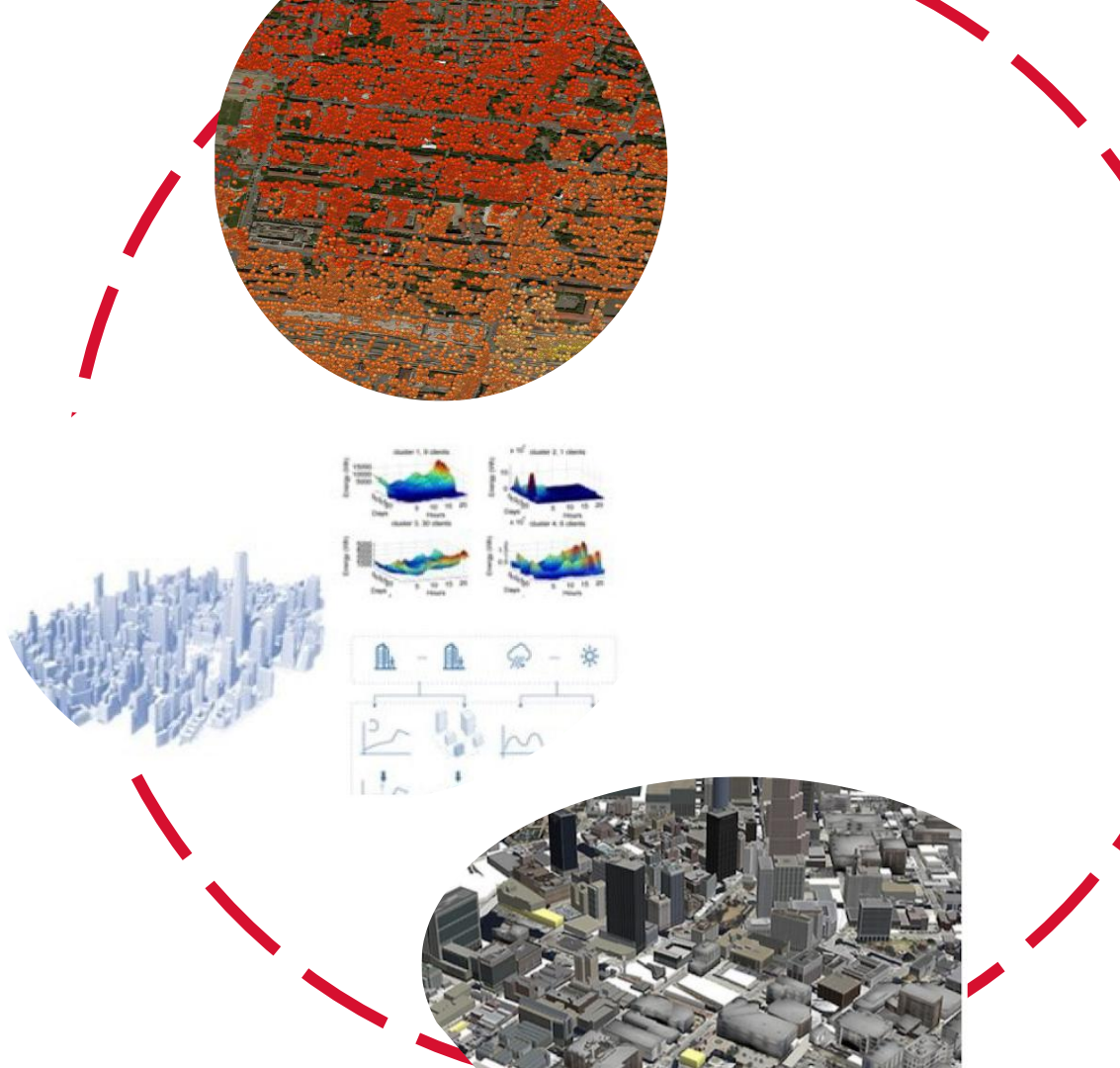
Mitigation measure



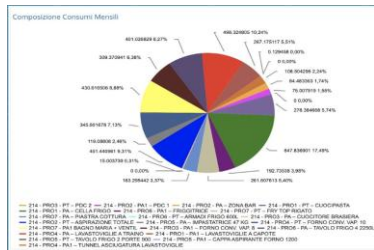
Structural Risk Assessment



Open Innovation







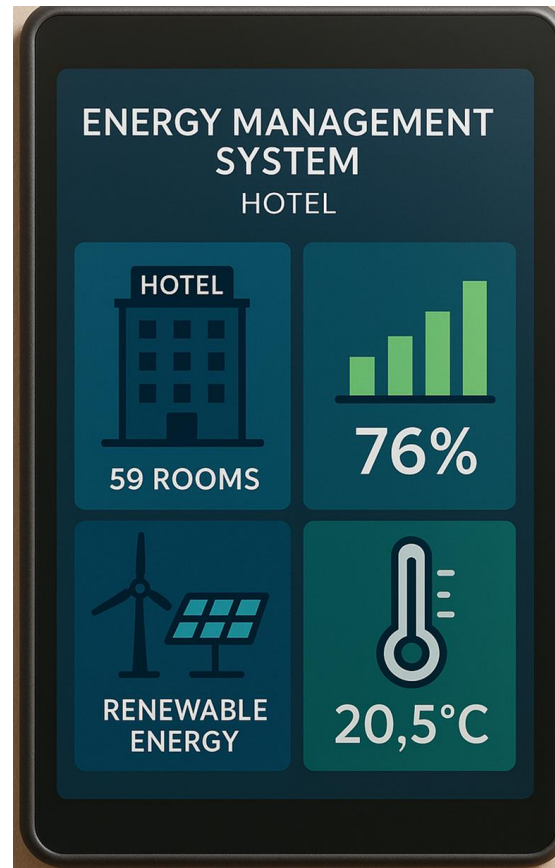
Scomposizione
Consumi
**Piattaforma
ISO27001:
Sicurezza del dato**

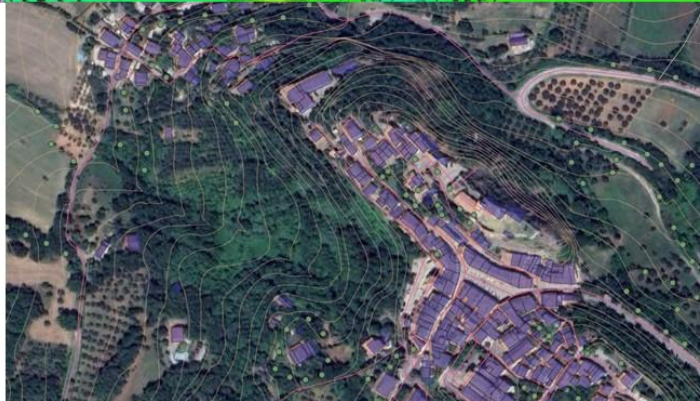
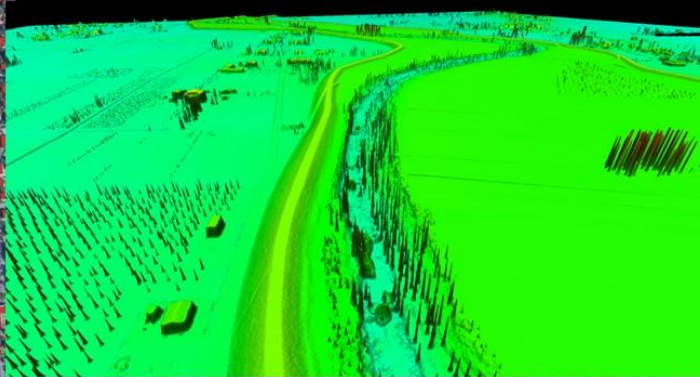


Analisi per KPI e
Report



- Alert statici e dinamici
- Gestione Manutenzione
- Alert di diversi livelli
- Report e KPI
- Analisi su vari frame (giorno, ora, settimana, periodi personalizzati)





Partner

CICCREI – Interdepartmental Research Center for the Conservation, Construction, and Regeneration of Buildings and Infrastructures – University of Parma

UNIFE – TekneHub Laboratory – University of Ferrara

UNIBO – CIRI EC Interdepartmental Center for Industrial Research in Building and Construction – Alma Mater Studiorum – University of Bologna

CRICIT – Interdepartmental Research Center and Services for the Construction and Territory Sector

University of Modena and e Reggio-Emilia

Certimac Scarl – Certification of Building Materials

Companies participating in the project

CON.AMI – Consortium of Intermunicipal Multi-Services Company

Confabitare – Association of Property Owners

ICIE – Cooperative Institute for Innovation, Soc. Coop.

BUILT S.r.l.

PERFORMA – Architecture + Urban Planning

ALLODI srl

Officina Meme Architetti

Raise>Up srl

A key planning vision

The **pursuit of resilience** in the face of new threats necessarily involves acquiring **new skills, identifying specific focal points on such issues, and implementing a systematic process** for gathering information that adequately integrates **climate risk** into the organization's existing risk management system.

**forecasting capabilities for
phenomena**

**continuously monitor
potential threats**

**develop specific cross-
organizational practices**



CLUST-ER
BUILD
EDILIZIA E COSTRUZIONI

Phone +39 347 4503560

Web: build.clust-er.it

Mail: silvia.rossi@build.clust-er.it

C.F. 91399960375

ITC-CNR: HOW RESEARCH SUPPORTS INNOVATION IN THE BUILDING SECTOR

Collaboration with STRESS-B4PIC

ALICE BELLAZZI

Researcher, ITC-CNR



ITC-CNR Construction Technologies Institute of National Research Council of Italy

The Institute carries out applied research, technical evaluation and certification, training and information activities related to the construction process.

Sustainable Construction Innovation

Research on evaluation and verification methods of advance construction technologies, sustainability and energy efficiency, envelope materials and components assessment.

Energy and Environmental Performance in HVAC

Design and testing of systems and components to enhance energy efficiency and sustainability in air conditioning and refrigeration.

Seismic Risk and Vulnerability Assessment

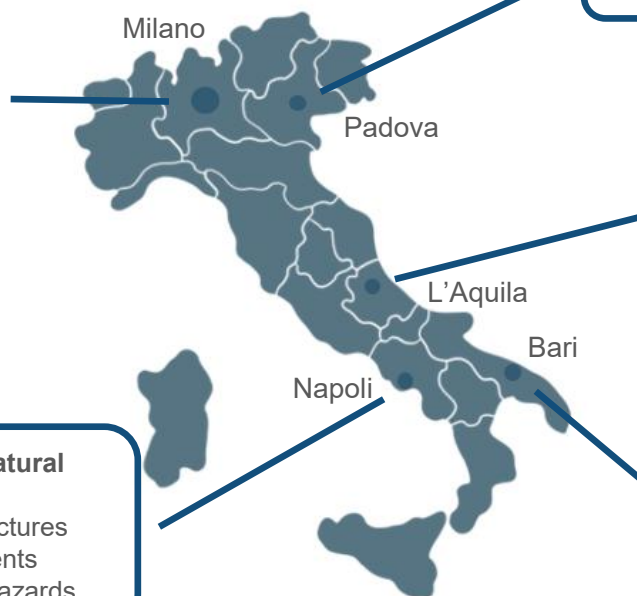
Analysis and mitigation of seismic vulnerability in historic, public and school buildings, with strategies for emergency planning.

Digital Heritage and Ecological Transition of the Built Environment

Development of digital models and virtual tours for architectural assets, supported by online geographic information systems. Ecological transition for the sustainable and resilient development of the environment and territories.

Structural Safety under Natural and Human Risks

Assessing the safety of structures and non-structural components exposed to environmental hazards



Who we are

STRESS Scarl

Innovation Hub for sustainable, connected and digital cities

STRESS is a non-profit public-private consortium company was established in Naples in 2010

Our numbers

2

National and Regional Innovation Projects

58 mln€

2

European Projects

3,5 mln€

7

Vocational Training Projects

4 mln€

Our mission

Promote **innovation** in the construction value chain, creating **collaborative ecosystems** that connect research, business and territory.

Sectors:

Smart Cities – Buildings and Cultural Heritage – Infrastructures - Digitalization - Energy - Sustainability

What we do

- **Innovation projects** at Regional, National, and European levels
- **Scouting and support services** for funded projects
- **Technical services** for engineering and architecture
- **Professional training** for new digital and sustainable skills

Shareholders

PUBLIC RESEARCH BODIES
46%

ENTERPRISES
54%



Università degli Studi di Napoli Federico II



CNR - Consiglio Nazionale delle Ricerche



Università degli studi del Sannio



Università degli Studi di Padova



Università degli Studi del Molise



MAPEI S.p.A.



Consorzio Integra



SEA Costruzioni S.r.l.



Brancaccio Costruzioni S.p.A.



GeneGIS Holding S.r.l.



Tecno in S.p.A.



TecnoSistem S.p.A.



GeneGIS GI S.r.l.



Arethusa S.r.l.



ETT S.p.A.



GRADED S.p.A.



Services and
digital
infrastructures



The EU Network



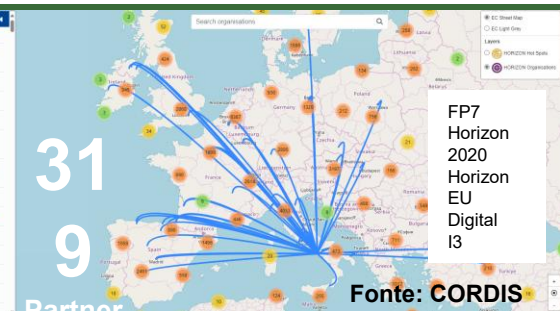
Professional
Training



SVILUPPO TECNOLOGIE E RICERCA PER

Collaboration Network

- CLIMATE GUIDANCE DE COORDINATION DE L'UNIVERSITAT SOCIAL AGRI
- STERNES INNOVATION GEMH
- ANALYSIS PARTNERS
- EDUWING
- FUNDACION PLATAFORMA TECNOLÓGICA ESPAÑOLA DE LA CONSTRUCCION
- AIT AUSTRIAN INSTITUTE OF TECHNOLOGY GIBR
- UNIVERSITY OF GABRI
- EUROPEAN NETWORK OF LIVING LABS NOW
- HORMANESIA MEC SL
- FUNDACION TEINKE
- IC BASQUESTRY BELLEVED
- INSTITUT TECHNICAL BUDOWLANE





Materials, Components and Innovative Technologies for Safe and High-Performance Construction

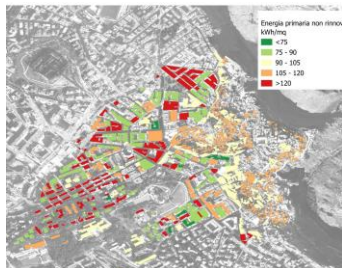


Sustainable Solutions and Technologies for Energy Efficiency, Environmental Quality and Acoustics in Buildings and Urban Areas

Research topics/activities



ENERGY
EFFICIENCY



SUSTAINABILITY
AND CLIMATE
ADAPTATION



THERMAL
MEASUREMENT
AND TESTING



APPLIED
ACOUSTIC



INDOOR
ENVIRONMENTAL
QUALITY

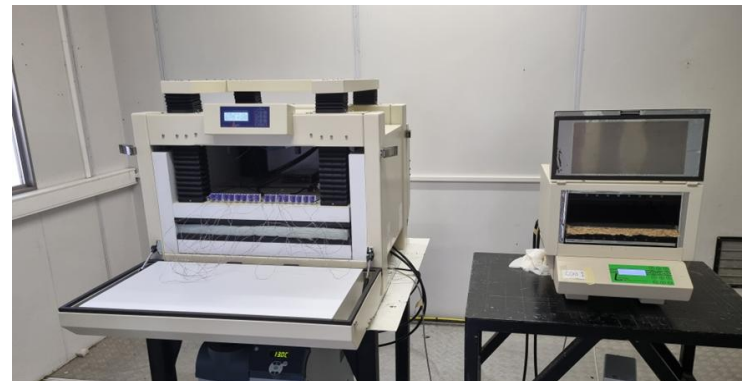
Thermal Energy Lab



Guarded hot box for Thermal Transmittance / Thermal Resistance of opaque components and glazing system



Hygrothermal performance of ETICS



Heat flow meters for Thermal Conductivity / Resistance of materials

Acoustic Lab



Reverberation chamber
to measure the sound
absorption and the
noise of small
components of plants



Coupled test chambers for
sound reduction index
of envelope components
and sound insulation.



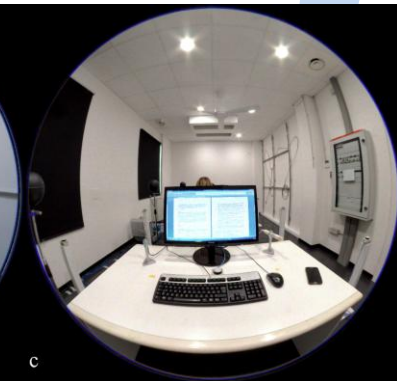
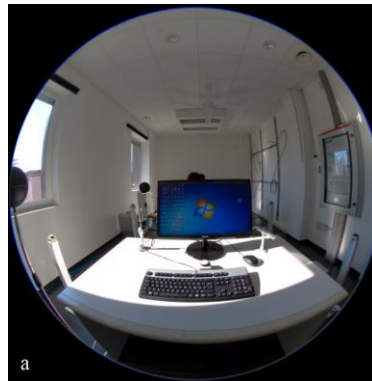
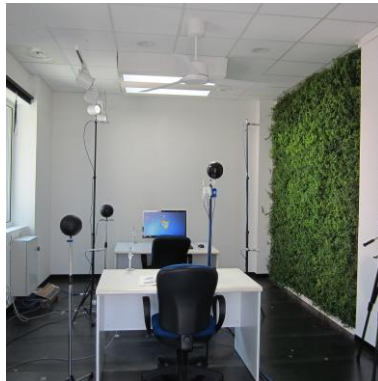
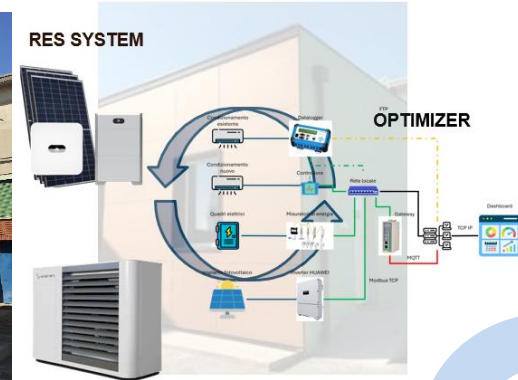
Measurement of the random-incidence
scattering coefficient



Facilities

ZEB-LAB

- Extended testing on innovative envelope and systems components and optimization
- Analysis of user perception: comparison between objective and subjective data



Facilities

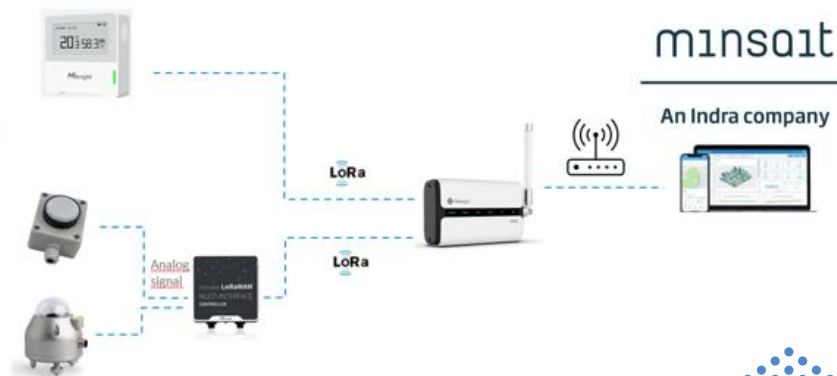
OUTDOOR TEST CELLS AND FULL SCALE TEST BUILDING

- Extended testing on vented façade, green walls and innovative systems
- Comparison between innovative and traditional envelope components
- Assessment of the acoustic performance of roof coverings and pitched roof structures



Metabuilding LABS

Design of the monitoring of real performance of innovative envelope systems to improve the energy performance of existing buildings within a network of pilot sites (Vipasa, Hormipresa, Başakşehir Living Lab, Polylogis, Room2030). Assistance in defining a standardized procedure for performance monitoring and analysis.



THANK YOU

ALICE BELLAZZI

Researcher, ITC-CNR
a.bellazzi@itc.cnr.it

SPREENTECH VENTURES: A STARTUP ACCELERATOR

LUCA LUCCHESI

General Manager, Spreentech Ventures



Spreentech Ventures: A Private Startup Accelerator



- ❑ **Spreentech Ventures S.r.l. – S.B.** was founded in Rovereto (TN), Italy, in 2022 as an initiative of **Polo Edilizia 4.0** and with capital from 25 private companies; it now has 39 shareholders
- ❑ Its objective is to develop **competences**, to disseminate **know-how**, and to foster **innovation** in the **costruction & green economy** sectors, with a **special focus on sustainability**, in collaboration with the various players involved in this field
- ❑ It pursues this objective:
 1. by selecting **innovative startups** which it supports financially and accelerates with ad hoc programs
 2. by organizing **conventions & training courses**

Spreentech Ventures' Verticals of Interest



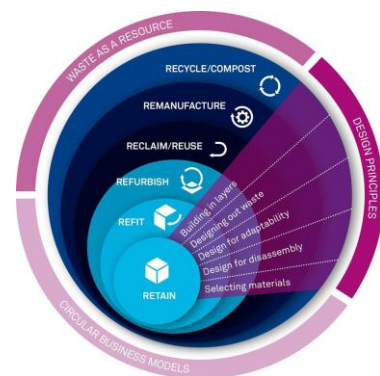
CONSTRUCTION 4.0



GREEN BUILDING,
TECH & MOBILITY

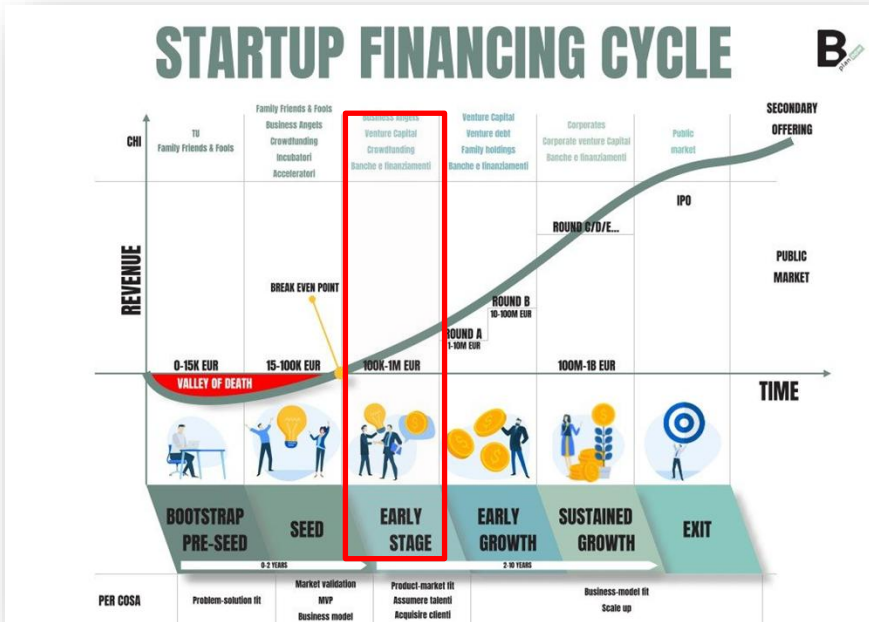


SMART CITY
& SMART BUILDING



CIRCULAR ECONOMY
& ESG IMPACT

Which Types of Startups?



Early Stage

- The startup team has developed a rudimentary but working product/service (**Minimum Viable Product – MVP**)
- First revenues
- Challenges:
 1. **Product-Market Fit** (to adapt the product/service to the market)
 2. **To secure customers**
 3. **To scale up the business model**
 4. **To achieve economical sustainability**

Our Major Shareholders



Board of Directors



Andrea Basso
Presidente



Enrico Frizzera
Consigliere



Francesco Gasperi
Consigliere



Alfredo Maglione
Vicepresidente



Stefano Nicolini
Consigliere



Spreentech Ventures' Collaboration Network

TRENTINOSVILUPPO
IMPRESA INNOVAZIONE MARKETING TERRITORIALE

**eurac
research**


**CASSA
CENTRALE
BANCA**
CREDITO COOPERATIVO
ITALIANO

INDUSTRIO

 **SPREENTECH**
Green accelerator



 **UNIVERSITÀ
DI TRENTO**


Polo Edilizia 4.0


**FONDAZIONE
BRUNO KESSLER**

 **habitech**
IL DISTRETTO ENERGIA AMBIENTE

Our Acceleration Support to Startups

- 1) **Up to 100K Investment - equity or semi-equity (e.g. SAFE)** – exit expected in 5-6 years
- 2) **Governance support** in case of equity
- 3) **Mentoring & consulting services (charge of 30K)** for finance, marketing, legal, IP management, etc.
- 4) **Access to our collaboration network**
- 5) **Advising & support for follow-on rounds**
- 6) **«Go To Market» support**



Our Startup Portfolio: Sustainability-Driven

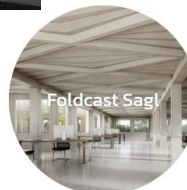
Sustainability in Mobility

SWITCH



Sustainability through CO2 reduction

Foldcast



AI-based Human-centric intelligent indoor lighting



iotilize.me



Share Capital Increase

Call for Investors!

- ☐ **Spreentech Ventures** started with 25 founding companies in 2022
- ☐ Other 14 companies became shareholders in 2024 through a first operation of capital increase
- ☐ A new capital increase is ongoing and we actively looking for new partners in our venture
- ☐ Deadline: November 14th, 2025

Spreentech Ventures

Thanks for Your Attention!

Luca Lucchese

cell. +39 388 807 3936

luca.lucchese@spreentech.it

www.spreentech.it

EDERA

A deep renovation innovation cluster and value chain

THOMAS MIORIN

CEO, EDERA





CLUSTERING FOR DEEP RENOVATION AT SCALE

Thomas Miorin

EDERA CEO & co-founder



EDERA is the Italian innovation centre
for built environment decarbonization and regeneration

We research, experiment and disseminate innovative building solutions
to reduce construction time, cost and environmental impact

Funded by



What we do



MAKET DEVELOPMENT INITIATIVES

Energiesprong: open innovation path for a deep redevelopment on the big

- Over 65 involved organizations
- 150.000 housed activated portfolio



SERVICES

Competence and services center for the offsite technologies

- Product innovation and technical consulting
- Training and support for offsite process adoption



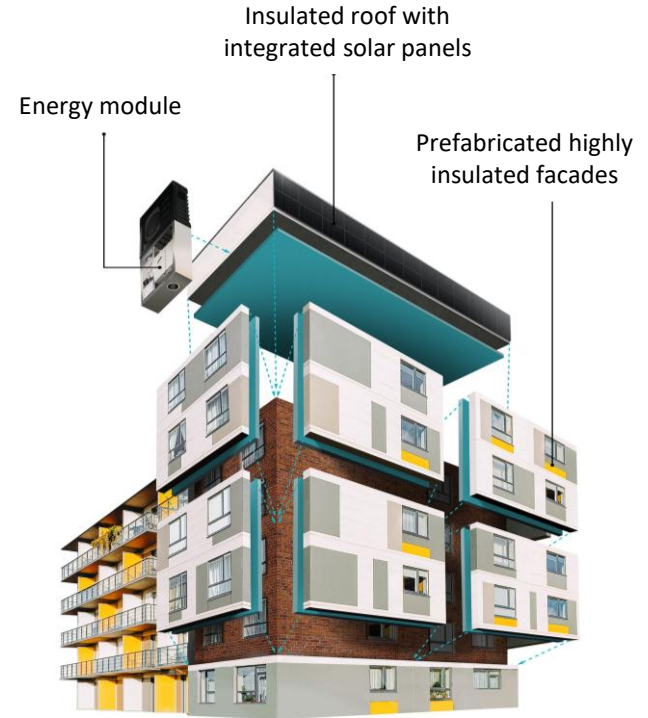
EnergieSprong: retrofit for all



An international open innovation program to provide zero-energy retrofit at scale with fast and replicable interventions thanks to digitalisation and industrialisation.

Over 15.000 renovations with the important benefits:

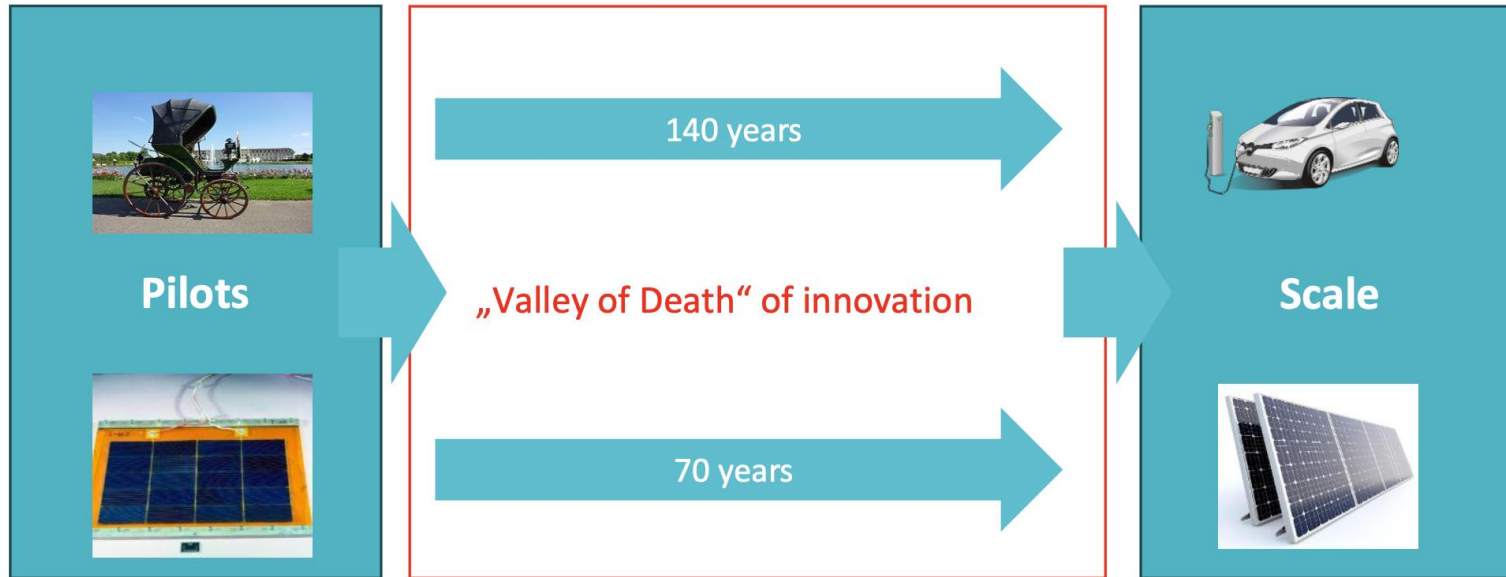
- Cost reduction up to 40%
- Intervention time reduction 50%
- NZEB performance guaranteed for 30 years
- Anti-seismic renovations



Task to solve



Climate protection innovations have taken many decades from pilot to reach scale.

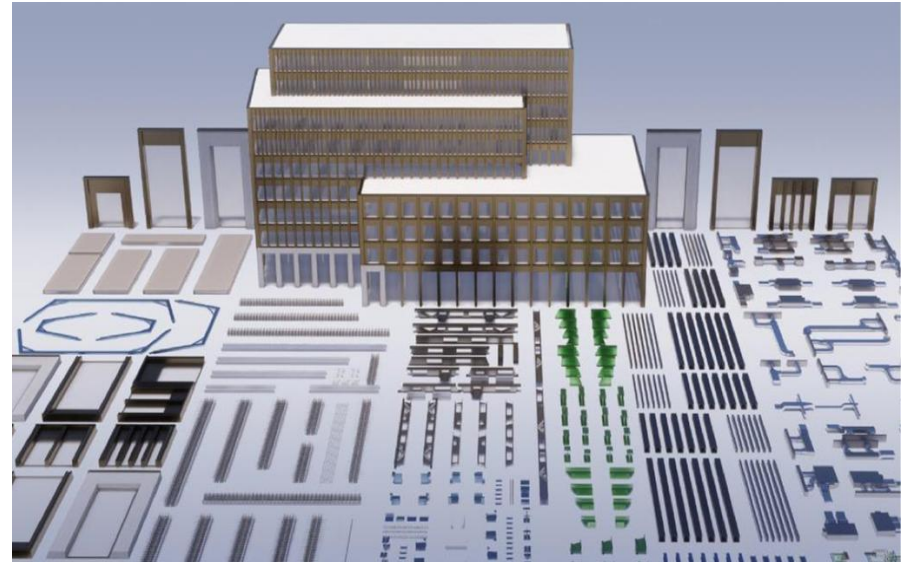


To retrofit the built environment by 2050 we need retrofit innovations at scale within 5 years.

Manufacturing in construction



Industrialized construction processes (offsite) consent to reduce time, costs and increase sustainability, quality, productivity and profitability.



Prefab NetZero Retrofits: triple speed and productivity through standardised products and processes



Quelle: Gewobau Erlangen/ Klaus Dieter Schreiter



Quelle: Opitz Holzbau



Quelle: Tamara Pribaten/dena



Quelle: VBW Bochum

3D-Scan+ automatic
planning

Prefab roof, facade,
heating system

Installation of
elements

NetZero retrofitted
building



Quelle: Gewobau Erlangen, Klaus Dieter Schreiter



Quelle: FactoryZero

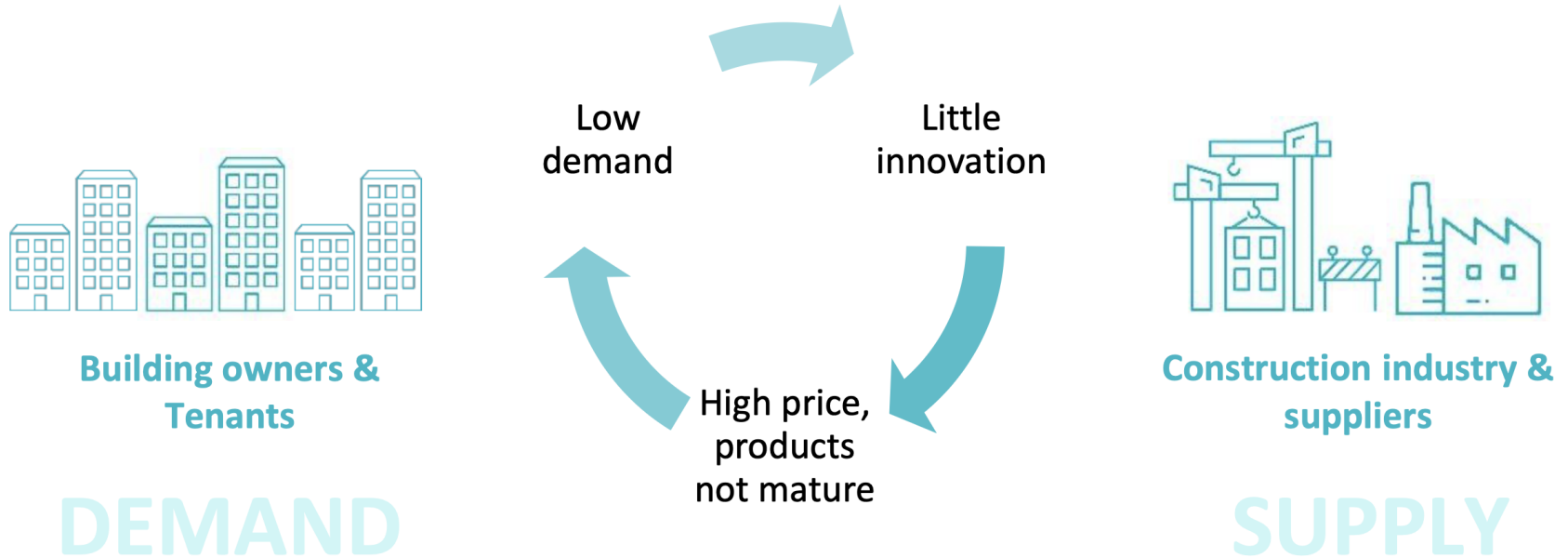


Quelle: Tamara Pribaten/dena

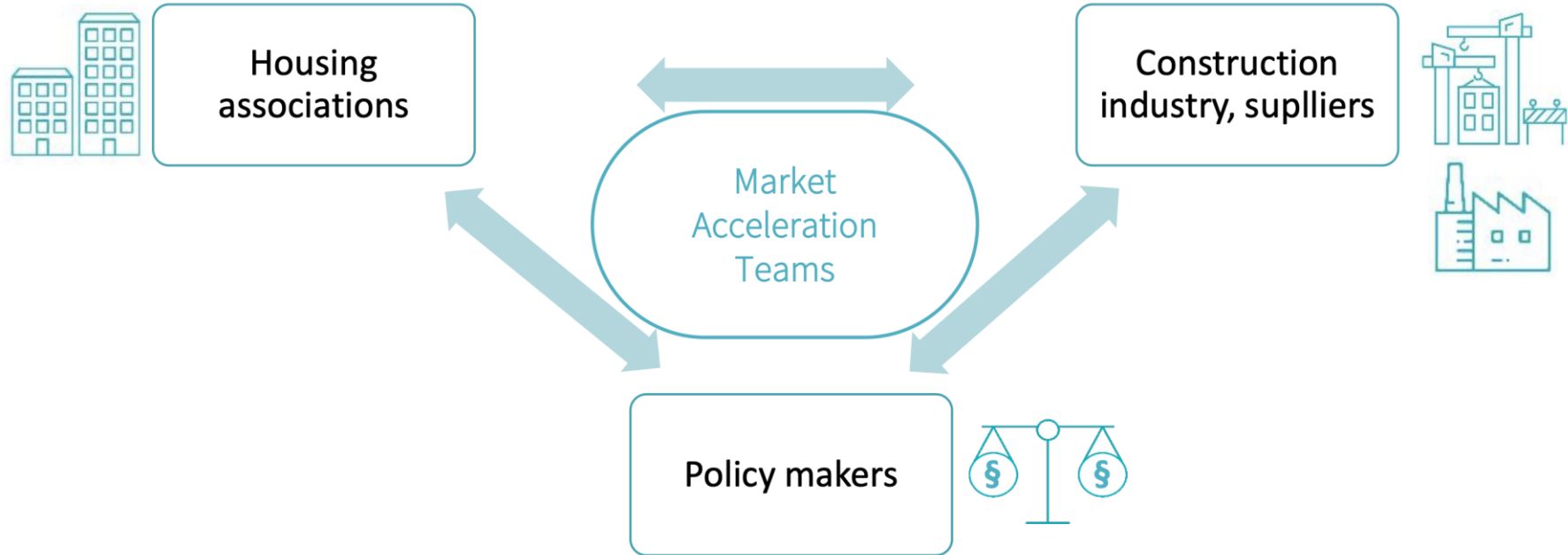


Quelle: Tamara Pribaten/dena

Innovations need to solve the "chicken-and-egg" problem.



Neutral **Market Acceleration Teams** connect stakeholders and remove barriers.



Tasks of Market Acceleration Teams

- adopted to specific building segments



Inspire, Activate

- Acquisition of innovators and first movers



Networking & Matchmaking

- Matching suppliers and building owners



Pilots & First Markets

- Organising first demonstrators
- Creating demand
- Brokering volume deals



Consulting

- Supporting change within companies
- Business case and financing schemes



Know-How Transfer

- Evaluation and dissemination of best practices and learnings



Product Development

- Innovation scouting and networking
- Workshops and competitions to improve quality and reduce costs



Policy Making

- Organising subsidies
- Reducing bureaucracy to lower costs



Communication

- Publishing success stories

International results

>15.000 renovations + 25.000 in pipeline



Netherlands: renovations in the catalogue



Balcony access buildings – 60s/70s

	ERAFLATS	WILMA	triplicat	triple solar	triple solar
Costi di investimento	€ 44.800	€ 48.000	€ 25.000	€ 80.000	€ 80.000
Costi di investimento + manodopera	●	●	●	●	●
TEMPERATURA A REGIME					
Alta temperatura (75°C)	●	●			
Temperatura media (55-75°C)	●				
Bassa temperatura (<55°C)			●	●	●
VALUTAZIONE DA CONSULENTE ESTERNO					
Riduzione del fabbisogno di calore	★★★★	★★★★	★★★★	★★★★	★★★★
Riduzione delle emissioni di CO ₂	★★★★	★★★★	★★★★	★★★★	★★★★
Pronto per la neutralità CO ₂	★★★★	★★★★	★★★★	★★★★	★★★★
Comfort	★★★★	★★★★	★★★★	★★★★	★★★★
Investimento da €0 a €100.000	●	●	●	●	●
Costi energetici mensili <€200	●	●	●	●	●

France: PNRR Energiesprong

- Regional scale renovation programs
- French National Renovation Plan, social housing investment with EnergieSprong renovations to reduce the retrofit cost in 5 years



England: 1 million retrofit/year plan

- London: Accelerator for urban renovation (Retrofit Accelerator)
- Transform-ER : national plan to enable 1 million retrofit/year



Germany: ¼ renovations is offsite

- Governmental program managed by the Energy Agency
- 15% bonus on top for EnergieSprong retrofit
- In 2 years, EnergieSprong deep retrofit from 2% to 23%





Italian cluster

Energiesprong Italy: an open ecosystem

Services providing companies



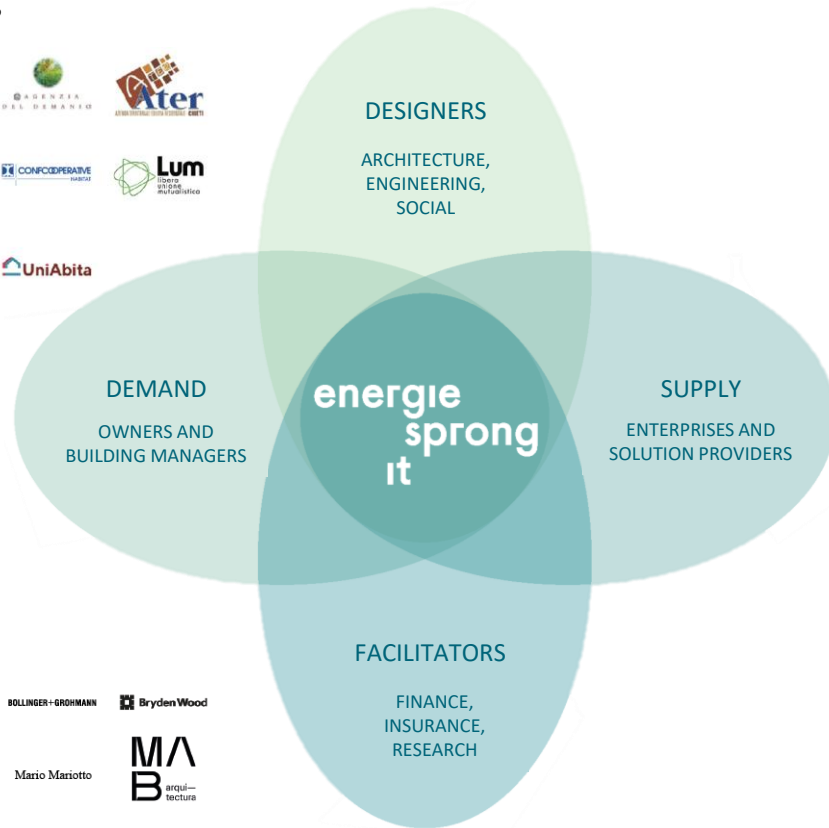
Facilitators



Owning and managing institutions



Design studios



The Energiesprong renovated ERP towers



BUILDING DATA

- ALER Milan property
- 4 towers and 187 ERP (Public residential building) housings

MAIN INTERVENTIONS

- Façade thermic insulation
- Roof insulation and green roof
- Fixtures and roller shutters replacement
- Thermal plant revamping and cost allocator installation
- New PV plant with storage

PROCUREMENT

- Public Private Partnership for retrofit and 10 maintenance years



Speed and efficiency

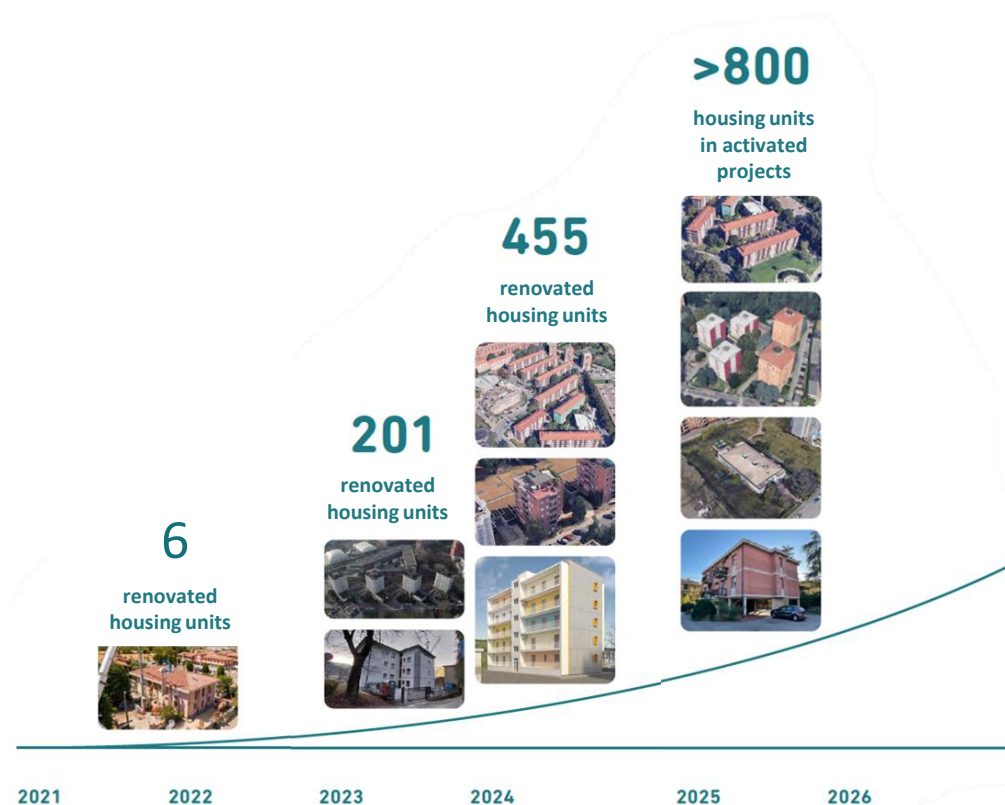


1 FLOOR PER DAY WITH 4 PEOPLE



- Offsite façade use for the energetic retrofit, installed without use of scaffolding
- Executive time reduction, logistic optimization and reduction of the traffic caused by the construction site

EnergieSprong interventions in Italy

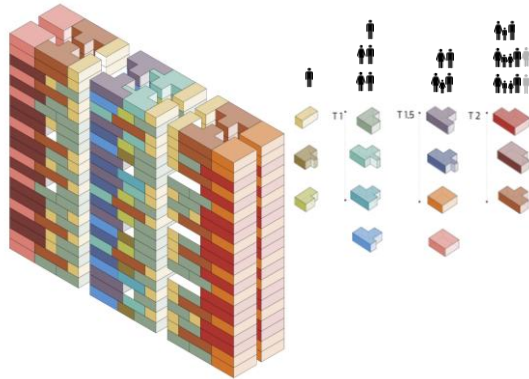


A new platform to make new housing affordable

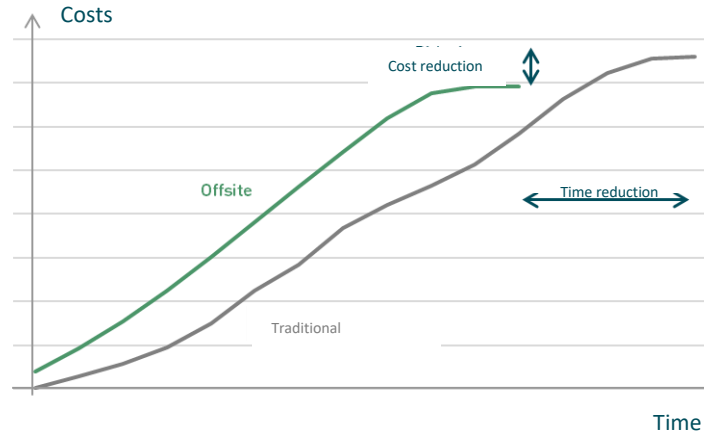


We analyse and create conditions to make new housing interventions cheaper, quicker and greener through offsite solutions

Modularity



Total Cost of Ownership



Quality



Different fields of innovation



H2020 Infinite

«Kit» for deep and industrialized renovation

MAIN PARTNERS



LIFE Giga Regio Factory

Scalability of industrialized solutions for renovations

MAIN PARTNERS



LIFE Cosme Reno

Preparation of SME for EnergieSprong retrofits

MAIN PARTNERS



LIFE Street HP Reno

Purchase models and urban-scale application of heat pumps

MAIN PARTNERS



LIFE RenoVa

Support Public sector in the energy efficiency challenge



MAIN PARTNERS

eurac
research



ENEA

SINLOC
Sistema Iniziative Locali

Di.T.N.E.

elanea



LIFE BuildUPspeed

Accelerate deep renovation

MAIN PARTNERS

HUYGEN



ENER2CROWD

eurac
research



LIFE Arec

collective purchase schemes with bio-based materials

MAIN PARTNERS

door

ressorts

THE 2B COLLECTIVE

KORE RETROFIT **DEPACT**

SHIFT UP

dorémi

Gideon

cltb

sonergia

LIFE RenoTides

Support multi-stage retrofits

MAIN PARTNERS

SAXION

energie sprong

RENEWAVE.AT

DEPAC

BURO DE HAAN

Lum
Licht voor de toekomst

aster

ressorts

pouget
Consultants

Key points



CLUSTER:

- Open innovation: coopetition
- A totally new market -> new value chains

EDERA:

- Work national but speak international
- Be neutral (no profit)
- Balance market initiatives (EU projects) and services

Join us

To innovate

To exchange best practice

To scale up

To enter in the offsite world

Meet Chiara Friday 10^o morning

@Sustainable urban design track



Part II

NEB 2025-01 Calls Brokerage Session

Moderator – **Germain Adell**, MD Metabuilding Association

Germain Adell

Call Topic NEB 2025-01 Overview

Marco Mazzioti

Director - EU Funding, Milan

Call topic perspectives from the city perspective.

Attendees

Remarks and Interventions and conversations carried over to the networking lunch.



metabuilding labs

EU wide network of Testing facilities & Innovation services for new
building envelope technologies & products

New European Bauhaus topics Brokerage Event

Sustainable Places 2025 - Milano

Germain ADELL – Metabuilding ASBL General Director

08/10/2025



METABUILDING LABS Project has received funding from the European Union's Horizon 2020 Research and Innovation Programme under Grant Agreement No. 953193. The sole responsibility for the content of this document lies entirely with the author's view. The European Commission is not responsible for any use that may be made of the information it contains.

The STAR*track project has received funding from the European Union's Horizon Europe research and innovation programme under grant agreement No 101147509.

HORIZON-NEB-2025-01 Call for Proposals

Call: HORIZON-NEB-2025-01 - A research agenda for a beautiful, inclusive and sustainable transformation of neighbourhoods

Deadline for all topics: 12 November 2025

Destination	Topic ID	Topic Title	Action Type	Total Budget	Budget/Project
1. Participation	PARTICIPATION-01	The impact of common space on neighbourhood communities	RIA	€10.5M	~ €3.5M
	PARTICIPATION-02	Fostering and maintaining the social fabric for the green transition	RIA	€9M	~ €3M
	PARTICIPATION-03	Beautiful, sustainable and inclusive street furniture	IA	€10.4M	~ €5.2M
	PARTICIPATION-04	Network of neighbourhoods for innovative policies on gentrification	CSA	€2.5M	~ €2.5M
2. Regeneration	REGEN-01	Applying regenerative design to the built environment	IA	€16M	~ €8M
	REGEN-02	Bio-fabricated materials for sustainable and beautiful construction	RIA	€10M	~ €5M
	REGEN-03	Sufficiency measures in the built environment	RIA	€8M	~ €4M
	REGEN-04	Innovative approaches for social and affordable housing	IA	€16M	~ €8M
3. Business Models	BUSINESS-01	Renovating through design for adaptability and disassembly	IA	€12M	~ €6M
	BUSINESS-02	Bottom-up social entrepreneurship for co-creation of neighbourhoods	IA	€12M	~ €4M
	BUSINESS-03	Reverse local construction supply chains for re-assembly	RIA	€12M	~ €4M

The impact of common space on neighbourhood communities

- **Action Type:** Research and Innovation Action (RIA)
- **Total Budget:** €10.5 Million
- **Budget per Project:** ~ €3.5 Million

Expected Outcomes

- Better understanding of how the design, aesthetics, and features of common spaces affect inhabitants' behaviour, health, sense of belonging, and security.
- Enhanced capacity for public administrations to integrate these insights into policies for the regeneration of common spaces.

Scope

- Analyse the medium and long-term impacts of common spaces on community cohesion, social interaction, and civic participation.
- Investigate how the design process (e.g., participatory approaches) and cultural heritage preservation influence these effects.
- Examine how different groups (women, children, older adults, people with disabilities) use and experience common spaces.

HORIZON-NEB-2025-01-PARTICIPATION-02

Fostering and maintaining the social fabric for the green transition in neighbourhoods

- **Action Type:** Research and Innovation Action (RIA)
- **Total Budget:** €9 Million
- **Budget per Project:** ~ €3 Million

Expected Outcomes

- Better evidence for public authorities on how cultural participation can reinforce the social fabric and support the green transition.
- Improved methods to increase inhabitants' sense of belonging and collective ownership in the transformation of their neighbourhoods.

Scope

- Study the interplay between cultural participation, social connections, and civic engagement.
- Propose, demonstrate, and monitor at least three evidence-based methods in at least three different neighbourhoods to foster the social fabric.
- Provide recommendations for public authorities on facilitating cultural participation.

Beautiful, sustainable and inclusive street furniture for the transformation of neighbourhoods

- **Action Type:** Innovation Action (IA)
- **Total Budget:** €10.4 Million
- **Budget per Project:** ~ €5.2 Million

Expected Outcomes

- Better evidence on the uses of street furniture and the role of co-creation to inform public procurement.
- Improved quality of experience, safety, and inclusiveness in neighbourhoods through innovative street furniture.

Scope

- Develop and demonstrate innovative designs for sets of street furniture that are functional, resilient, and improve environmental performance (e.g., using nature-based solutions and sustainable materials).
- Ensure designs strengthen the aesthetic and cultural integrity of the space and meet the needs of diverse population groups.
- Apply participatory methods for co-designing and prototyping.

HORIZON-NEB-2025-01-PARTICIPATION-04

Network of neighbourhoods for innovative policies on gentrification

- **Action Type:** Coordination and Support Action (CSA)
- **Total Budget:** €2.5 Million
- **Budget per Project:** ~ €2.5 Million

Expected Outcomes

- Increased use of policies to mitigate the negative consequences of gentrification (e.g., displacement) while enhancing positive impacts.
- Increased capacity of local policymakers to anticipate and address gentrification in line with NEB values.

Scope

- Create a bottom-up network of at least 15 neighbourhoods at risk of gentrification to exchange knowledge and innovate in policymaking.
- Map needs, identify best practices, and support local decision-makers in understanding the drivers and effects of gentrification.
- Develop or revise local policies or regeneration strategies to mitigate gentrification risks.

HORIZON-NEB-2025-01-REGEN-01

Applying regenerative design to the built environment in neighbourhoods

- **Action Type:** Innovation Action (IA)
- **Total Budget:** €16 Million
- **Budget per Project:** ~ €8 Million

Expected Outcomes

- Make tested and proven principles of regenerative design available to the construction ecosystem.
- Develop improved tools and technologies that enable the application of regenerative design.
- Contribute to the regeneration of natural ecosystems and biodiversity.

Scope

- Analyse at least 10 existing examples of regenerative design in buildings.
- Develop and demonstrate at least one innovative solution (tool or technology) that facilitates regenerative design.
- Demonstrate the solution(s) in at least three diverse neighbourhoods in at least three different countries.
- *Includes the possibility of Financial Support to Third Parties (FSTP).*

Bio-fabricated materials for sustainable and beautiful construction

- **Action Type:** Research and Innovation Action (RIA)
- **Total Budget:** €10 Million
- **Budget per Project:** ~ €5 Million

Expected Outcomes

- Increased market acceptance of bio-fabricated construction materials among professionals.
- Demonstrated pathways to produce innovative, sustainably sourced, and beautiful bio-fabricated materials at mass scale and competitive cost.

Scope

- Develop and test at least two innovative sustainable bio-fabricated materials with novel features (e.g., self-repair, carbon storage).
- For each material, assess its properties (structural, thermal, aesthetic, etc.) and study the feasibility of mass-scale production using high-tech manufacturing (e.g., 3D printing, AI).
- Analyse the environmental, social, and economic impacts using life cycle assessment (LCA) approaches.

Sufficiency measures in the built environment

- **Action Type:** Research and Innovation Action (RIA)
- **Total Budget:** €8 Million
- **Budget per Project:** ~ €4 Million

Expected Outcomes

- Better mapping of vacant and under-utilised spaces to enable more effective decision-making.
- Validated sufficiency measures that lead to an absolute reduction in demand for energy, materials, land, and water.
- Better understanding among professionals of the impacts and barriers related to sufficiency measures.

Scope

- Test and validate an approach to map and quantify vacant and under-utilised spaces.
- Test and validate at least two sufficiency measures that optimise, repurpose, or expand the use of space.
- Test these measures in at least three diverse neighbourhoods in at least three different countries.
- Propose and validate solutions to overcome non-technical barriers (e.g., regulatory barriers, social acceptance).

Innovative approaches for sustainable, inclusive and beautiful social and affordable housing

- **Action Type:** Innovation Action (IA)
- **Total Budget:** €16 Million
- **Budget per Project:** ~ €8 Million

Expected Outcomes

- Reduced costs for both new construction and renovation of social and affordable housing without sacrificing quality.
- Increased availability and affordability of quality housing for diverse and vulnerable populations.
- Significantly reduced energy consumption, carbon emissions, and resource use.

Scope

- Develop innovative approaches for how construction and renovation services are defined, procured, delivered, and financed.
- Implement two ambitious packages of market-ready technologies in two social/affordable housing projects: one new construction and one renovation.
- Use existing technologies (e.g., off-site construction, digital twins) and sustainable practices (e.g., nature-based solutions).
- *Includes the possibility of Financial Support to Third Parties (FSTP).*

Renovating the built environment through design for adaptability and disassembly

- **Action Type:** Innovation Action (IA)
- **Total Budget:** €12 Million
- **Budget per Project:** ~ €6 Million

Expected Outcomes

- Availability of processes, methods, and techniques for the modular adaptation and repurposing of existing buildings.
- Clear evidence for stakeholders on the business case and multi-faceted impacts of this type of renovation.

Scope

- Develop at least two renovation processes, methods, or techniques based on "design for adaptability and disassembly."
- Demonstrate the solutions in at least two pilots in at least two different countries (one building, one common space/infrastructure).
- Assess barriers to market uptake and propose solutions to overcome them.
- Quantify the environmental, economic, social, and cultural impacts of the solutions.

Bottom-up social entrepreneurship for the co-creation of neighbourhoods in line with the New European Bauhaus

- **Action Type:** Innovation Action (IA)
- **Total Budget:** €12 Million
- **Budget per Project:** ~ €4 Million

Expected Outcomes

- New scientific evidence on how bottom-up social entrepreneurship contributes to co-creating NEB-aligned neighbourhoods.
- Empowered inhabitants and civil society actors with the capacity to engage in social entrepreneurship.
- Increased quality of life, social cohesion, and new employment opportunities.

Scope

- Deliver at least three bottom-up social entrepreneurship pilots in at least three different countries.
- Analyse local barriers and drivers for each pilot and assess the business case for attracting impact investment.
- Demonstrate how cooperation between inhabitants and civil society can build capacity and foster a shared sense of belonging.

Reverse local construction supply chains for the beautiful re-assembly of reclaimed construction products

- **Action Type:** Research and Innovation Action (RIA)
- **Total Budget:** €12 Million
- **Budget per Project:** ~ €4 Million

Expected Outcomes

- Innovative approaches for the safe, sustainable, and beautiful re-assembly of reclaimed construction products.
- Increased re-assembly of construction products at the local and regional level.
- New scientific evidence on the social, cultural, economic, and environmental benefits of these reverse supply chains.

Scope

- Explore at least one innovative approach to re-assemble construction products in a way that increases their economic, environmental, and aesthetic value.
- Consider the environmental footprint and local availability of reclaimed materials, building on existing circular construction platforms where possible.
- Validate how the proposed solutions create new value, revenue streams, and business opportunities.

A People-Centric Ecosystem for the Future of Social Housing

Answering the call: **HORIZON-NEB-2025-01-REGEN-04** *Innovative approaches for sustainable, inclusive and beautiful social and affordable housing*

Brokerage Event for HORIZON-NEB-2025 Calls

The Strategic Context: Why This Topic Matters

This call is not just about buildings; it's about implementing Europe's core policy goals at the neighbourhood level.

- **The European Green Deal & Renovation Wave:** The topic is a key instrument for the Renovation Wave, which aims to decarbonise Europe's building stock. Social housing is a critical lever for achieving this at scale.
- **The New European Bauhaus (NEB) Imperative:** The call explicitly integrates the three NEB pillars, moving beyond purely technical solutions. It demands projects that are:
 - **Sustainable:** Addressing climate goals, circularity, and resource use.
 - **Inclusive:** Focusing on affordability, accessibility, and quality of life for all, especially vulnerable groups.
 - **Beautiful:** Recognizing the importance of aesthetics, cultural value, and creating a sense of belonging.
- **A Just Transition:** By targeting the social and affordable housing sector, the call aims to ensure that the green transition is fair and improves the lives of all citizens, tackling issues like energy poverty and housing quality.

This topic is a unique opportunity to demonstrate how the green transition can deliver direct social benefits.

Decoding the Call: What you need to have

The topic text sets out clear, ambitious goals. A successful project must deliver on all of the following

Expected Outcomes:

- **Reduce Costs without Sacrificing Quality:** Develop innovative approaches that lower the costs of both new construction and renovation, making high-quality, sustainable housing more accessible.
- **Increase Availability & Affordability:** Directly contribute to providing more and better housing options for diverse and vulnerable populations across Europe.
- **Drive Deep Sustainability:** Achieve significant reductions in energy consumption, carbon emissions, and resource use, while also improving climate resilience.
- **Create Market Awareness:** Ensure that the innovative approaches developed are visible and understood by the entire construction ecosystem and real estate sector, paving the way for wider market uptake.

Any proposal must provide a credible pathway to achieving all four of these interconnected outcomes.

The Core Challenge: A Trilemma for Social Housing

To meet the call's objectives, a project must solve a fundamental trilemma that currently hinders progress in the social housing sector:

- **The Economic Challenge:** How can we implement high-quality, beautiful, and deeply sustainable solutions while respecting the strict budget constraints and long-term affordability requirements of social housing providers?
- **The Social Challenge:** How do we move from a top-down, technology-first approach to a truly inclusive, co-creation process where residents are active partners, ensuring the solutions meet their real needs and foster a sense of community and belonging?
- **The Innovation Challenge:** How do we bridge the "valley of death" for promising construction innovations? The market is fragmented, and housing providers lack trusted, reliable methods to discover, validate, and procure new solutions without taking on excessive risk.

A successful project must present an integrated model that solves the economic, social, and innovation challenges simultaneously.

Open Discussion

Thank you for your kind attention

Contact: g.adell@metabuilding.com



**Join the Metabuilding Association
as Affiliate Member**



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Q&A



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