Change Machine

MIND Studio 1, Viale 16, 20157 Milan (IT) | Friday, 16th September 2022
No matter what is the system used, timber has the potential to bring benefits.

Timber needs to be used in an appropriate manner for benefits to be maximized.

For timber to be used in an appropriate manner, the user needs to have an appropriate level of knowledge.

Jose Torero Cullen, Professor of Civil Engineering and Head of the Department of Civil, Environmental and Geomatic Engineering - University College London
About the project

To develop our cities in a more sustainable manner, we need to decarbonise our approach to the way we build; by using more renewable resources, such as timber.

Italy is actively looking at measures to reduce carbon emissions. The City of Milan, as vice chair of C40, is helping to lead the way and committing to zero carbon targets to reduce embodied carbon emissions from the construction industry.

While the material science behind using bio-based construction materials and engineered timber continues to advance, we have found that outdated perceptions and myths still act as barriers to adoption.

Qualitative and quantitative economic, social, and environmental data points created by the Perception of Timber project sponsored by Built by Nature will build a robust and accurate, evidence-based learning that demonstrates timber’s social and economic feasibility in the Milan context and challenge (refute) uncertain and/or negative industry perceptions.

We are glad to present you the second report from a series of workshops to establish, address and propose methods to overcome these barriers and influence the accelerated adoption of Mass Timber in Italy and the EU.
In the first workshop on June 16th 2022, we focused on WHY cities need circular, timber buildings. We identified dreams, barriers and solutions.

In the second workshop on September 17th we developed key initiatives across 5 thematic sectors to show WHAT can be done to move value chains in Italy towards the use of circular timber.

In the third workshop on December 16th we will align on the WHO, WHEN, and HOW the key initiatives are to be implemented.

In this report, we present the outcomes of the second workshop, in which 44 people from 28 organizations were invited to discuss 5 thematic pathways to solutions:

- Regulatory / political
- Technical
- Financial
- Environmental
- Social

The 5 breakout groups are joining 1 moderated debate towards a shared ROADMAP to overcome perception barriers to the use of timber in buildings in Italy.
Executive summary – key initiatives towards a ROADMAP to overcome perception barriers to the use of timber in buildings in Italy

P.1 – Local competency standards and pathways to professional certification to recognize and identify competent professionals in matters pertaining the safe and efficient design of timber buildings.

P.2.1 - A systematic audit of current policies to identify and define gaps and counterproductive policies.

P.2.2 – A feasibility study to support a successful pro-timber policy portfolio, including key points clear criteria, clear short/medium/long term targets and objectives, and provisions for robust enforcement.

P.3.1 - Simple, immediate and unbureaucratic best practices, drafted considering EU examples.

P.3.2 - A model building addressing regulatory, insurance, and other key stakeholders requirements (agreed upon among a panel of representatives from all parties), in the most efficient manner, as a first step towards developing a local timber guidance/code.

F.1.1 - A collaborative white paper proposal which identifies criteria for timber building projects aligned with ESGs, EU Taxonomy, and SFDR, with the purpose of certifying compliance.

F.1.2 - Analysis / research of data availability to quantify loss of value of unsustainable investments based on criteria identified by F1.

F.2 - A model proposal for alternative insurance financial risk assessment.

F.3 - An investment model, e.g., a ‘timber fund’ for timber buildings in Italy (e.g., ICAWOOD by Wo2) considering S.A.L.E. protocol and any other available assurance means.

E.1 - A dedicated software to reduce time and costs for producing EPDs and carbon footprint assessments, helping Italian companies involved in the mass timber supply chain.

E.2 - Gather lessons learned from other countries on how to improve the social, environmental and economic value of timber in construction and conduct a feasibility study of a dedicated business model for the Italian market, involving industry association FederLegnoArredo.

E.3 - Review of the actual Energy Performance Certification scheme and implementation of a computational model based on the process-based LCA method, considering both the embodied and the operational emissions.

E.4 - Workshops and coordination meetings to develop a new proposal about the dynamic modelling for the calculation and to write an EU community-level position paper with stakeholders.

S.1 – A campaign aimed at attracting political figures as well as the public, building on the Perception of Timber (PoT) project in its current first phase and the exhibition at MIND timber prototype, but expanded to get wider public attention and with a look towards a second phase which will include several initiatives under one aligned programme.

S.2 - Content and curated engagement piece for city officials building from the work develop in the current phase of the Perception of Timber programme.

S.3 - Hackathon or contest launched by Federlegnoarredo on a timber challenge, with a reward for winners; one-week workshop for students at the School of Architecture or Engineering of Polimi (in collaboration with a sponsor company); proposal to use timber building as a lab topic in one of the courses of the School of Architecture or Engineering.

S.4 - A special project by the Federated Innovation, whose first action is a collective call for funds aimed at financing the project itself. Stakeholders collaborate at writing the proposal to be submitted, clarifying the role each one will play.

S.5 - A communication strategy (e.g., presentation at conferences, events, news by professional associations, etc.) to promote and invite people to participate in the call for best practices already open in our website.

T.1.1 – Model building / playbook with Design for Manufacturing And Disassembling (DfMAD) process that can be agreed upon across key value chain stakeholders. T.1.2 – DfMAD-BIM Quality Control to facilitate the generation of a manufacturing digital 3D model – digital section in the playbook.

T.2.1 – Practical examples of circular End of Life (EoL) from research institutions and manufacturers through the Timber Living Lab. T.2.2 – EoL theoretical models, such as leasing of timber from manufacturer.

T.3.1 – Insurance rulebook based on the UK experience applied to the Italian market. T.3.2 – Investigate how the S.A.L.E. protocol (or any other assurance certification protocol) meets the needs of insurers and designers, and define improvement opportunities.
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<thead>
<tr>
<th>Time</th>
<th>Activity</th>
<th>Location</th>
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<tbody>
<tr>
<td>09:30 - 10:00</td>
<td>Registration, coffee, and group picture</td>
<td>Studio 1, MIND Milano Innovation District Via Cristina Belgioioso, 171, 20157 Milano MI</td>
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<tr>
<td>10:00 - 10:10</td>
<td>Welcome – workshop goals and context</td>
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<td>10:10 - 10:50</td>
<td>Keynote speaker</td>
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<td>10:50 - 11:10</td>
<td>Launch of Living Lab</td>
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<td>11:10 - 11:30</td>
<td>PAUSA CAFFE</td>
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<td>11:30 - 11:50</td>
<td>‘Change machine’ Showing in detail where we think the obstacles are and how they could be overcome.</td>
<td>The Hive, MIND Milano Innovation District V.le Decumano, 36, 20157 Milano MI</td>
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<tr>
<td>11:50 - 13:00</td>
<td>Break out groups: five groups of five individuals with different professional backgrounds + moderator and rapporteur - to discuss solution in the ‘change machine’ categories regulatory &amp; political, technical, societal, financial, environmental.</td>
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<td>13:00 - 14:00</td>
<td>LUNCH</td>
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<td>14:00 – 15:15</td>
<td>Plenary presentation of priority list and any conflicts or synergies encountered</td>
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<td>15:15- 15:45</td>
<td>Plenary with voting selection to come up with top 10 actions/mechanisms/outcomes</td>
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<td>15:45 – 16:00</td>
<td>Summing up, next steps thank you and close</td>
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<tr>
<td>Name</td>
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<tr>
<td>Manuela Ojan</td>
<td>Agenzia Mobilita e Territorio</td>
<td>Research and Academy</td>
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<tr>
<td>Paolo Cresci</td>
<td>ARUP</td>
<td>Designer</td>
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<td>Tecla Caroli</td>
<td>ARUP</td>
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<tr>
<td>Alessandro Sassi</td>
<td>ASUNITS</td>
<td>Designer</td>
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<tr>
<td>Tommaso Pagnacco</td>
<td>Bollinger+Grohmann Ingegneria S.r.l.</td>
<td>Designer</td>
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<tr>
<td>Roberta Simone</td>
<td>Bollinger+Grohmann Ingegneria S.r.l.</td>
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<tr>
<td>Cecile Faraud</td>
<td>C40</td>
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<td>Gianluca Padula</td>
<td>CBRE</td>
<td>Investor</td>
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<tr>
<td>Mauro Savoldelli</td>
<td>CEAS</td>
<td>Designer</td>
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<tr>
<td>Umberto Galli</td>
<td>Coima</td>
<td>Developer</td>
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<tr>
<td>Raffaello Pinto</td>
<td>Cushmanwakefield</td>
<td>Asset Owner</td>
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<td>Mira Conci</td>
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<td>Kirsten Dunlop</td>
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<td>Matteo Izi</td>
<td>FederlegnoArredo</td>
<td>Trade Association/Cities consultant</td>
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<td>Giuseppe Amaro</td>
<td>GAE</td>
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<td>Riccardo Gentile</td>
<td>Galimberti Legno e Bioedilizia</td>
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<td>Gabriele Galimberti</td>
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<td>Gabriele Frigerio</td>
<td>Helvetia</td>
<td>Insurer</td>
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<td>Elsa Galassi</td>
<td>HOPE</td>
<td>Investor</td>
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<td>Simone Santi</td>
<td>Lendlease</td>
<td>Developer</td>
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<td>Nadia Bosch</td>
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<td>Carlo Benigni</td>
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<td>Mario Ledermann</td>
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<td>Eneida Lila</td>
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<td>Susan Constantine</td>
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<td>Daniele Bovolenta</td>
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<td>Anna dalla Valle</td>
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<td>Piergiorgio Sacchetti</td>
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<td>Maria Milia</td>
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<td>Lorenzo Gervasoni</td>
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<td>Jose Torero Cullen</td>
<td>University College London</td>
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<td>Deobora Nezosi</td>
<td>WoodBeton</td>
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<td>Andrew Waugh</td>
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<td>Albino Angeli</td>
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<td>Sergio Beretta</td>
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Official welcome

Simone Santi
Development Director
/ Head of Offices - Italy at Lendlease

José L. Torero
Fire Engineer, Professor of Civil Engineering and Head of the Department at UCL
In occasion of the second workshop, a website dedicated to the project has been created, to give participants a point of reference for the work done together and to provide them with a platform where to start gathering knowledge on the topic.

In fact, from the website it is possible to find more information about the barriers toward timber building and to download the reports of the workshops.

Link: https://timberperceptionlab.org

Also, people can share their best practices through a dedicated format and access the virtual Timber Living Lab, better described as follows.
Toward the first Timber Living Lab in Italy

One of the objectives of the Perception of Timber project is to engage a wide network of stakeholders from the Italian Timber industry in co-creation activities aimed at building a collaborative Living Lab, to overcome the compartmentalized way of working in the business-as-usual scenario.

During the second workshop, participants have been presented with the opportunity to join an Interest Group dedicated to the co-creation of the first Timber Living Lab in Italy.

People who expressed such interest have been invited to take part in two online sessions aimed at exploring a possible action to develop together, among those emerging from the workshop and illustrated as follows. This action wants to represent the first concrete step toward the set up of the Living Lab and a demonstrator that can attract further stakeholders.
What is a Living Lab?

- Practice-driven organisations that facilitate and foster open innovation
- Real-life environments where both open and user innovation processes can be studied and experimented, and where new solutions are developed.
- Living Labs operate as intermediaries among citizens, research organisations, companies, cities and regions for joint value co-creation, rapid prototyping or validation to scale up innovation and businesses.

Definitions by ENoLL - European Network of Living Labs
https://enoll.org/
Why a Timber Living Lab?

The Timber Living Lab aims at lifting perception barriers that accelerate demand for sustainable timber in buildings in the testbed location MIND at first, and with the concrete potential to scale up impact thanks to key industry players engaged in the process.

**HOW?**
**Through a virtual + physical space**

The Timber Living Lab will entail a virtual space where stakeholders can discuss and build their joint experiments, and a physical space, built around the MIND Prototype, where such experiments could take place.

The [beta version of the virtual Timber Living Lab](https://build-in-wood.eu/) is hosted by the [Build-in-Wood Community](https://build-in-wood.eu/), an Horizon 2020 project aimed at developing new solutions for building with wood.

The physical Timber Living will be co-created by stakeholders who expressed interest in joining the group, starting from 2 online co-creation sessions in October and November 2022.
The MIND timber prototype is a single floor 9x9 m engineered timber module, with glulam beams and columns, and CLT ribdeck panels. This prototype represents a typical module for office buildings, and fulfills space flexibility requirements.

During the welcoming address, Lendlease’s Development Director Simone Santi officially awarded the timber prototype to the initiative. We launched a Call for Ideas to the participants to propose what you would like to test or use the timber prototype for.

This is the right time and the right opportunity to bring forward innovative tools and methodologies, and move towards a new ‘life’ for our cities’ buildings.

Following the conversations in the break-out rooms, we received many interesting inputs, and the exhibition will be the first step to realizing some of them.
In response to one of the key initiatives identified during the workshop, the exhibition will provide the physical space to develop a public-facing campaign around the need to create awareness of the benefits of timber construction. Political leaders and figures in the Milan Municipality will be both key co-design partners as well as one of the main audiences for the exhibition.

The exhibition will take place in December in and around the MIND timber prototype. Our vision is to describe why and how to build in timber, through physical models, virtual experiences, but above all the outcomes of the work done so far by the Perception of Timber team. The prototype itself will remain clear for presentations and events, with exhibition stands made from recycled materials arranged around the outside, allowing visitors to both interact with and contextualise our work so far.
From 5 thematic pathways to solutions
... to a shared roadmap of key initiatives.

In the second part of the workshop, 5 thematic breakout groups were assigned a ‘best practice’ proposal consisting of key questions and a ‘path to a solution’ synthetized from the insights of the first workshop. The task of the group was to discuss the material provided to come up with key initiatives for concrete action.
Best practice proposal discussion for REGULATION and POLICY table

KEY QUESTIONS

Are there any national standards for the use of mass timber in construction?

What could the public administration do to help the uptake of mass timber construction systems?

PATH TO A SOLUTION

- Category associations - Interested stakeholders
- Creation of a group with the same objective and intent
- Detailed list of potential bottlenecks in the standards that limit the use of timber
- List and participation to common actions:
- NTC 2018 - Regolamento Edilizio - PGT/PRG - D Lgs 42/2004 - Others...

Ideal actions: Participation to urban regeneration actions (Reinventing Cities)
Ideal actions: Participation to urban regeneration actions (Carbon Neutral Areas)
Participation and financing of research projects (Horizon)
Alternative and justified proposal to modify the actual regulations
Key INITIATIVES from the REGULATION and POLICY table

Action P.1 - Implementation of a national framework of competency that not only is consistent with the requirements of building regulations, but that delivers professionals that can creatively and safely deliver timber buildings.

Initiative P.1 – Establishment of local competency standards and pathways to professional certification that will enable to recognize and identify competent professionals in matters pertaining the safe and efficient design of timber buildings.

Action P.2.1 - Implementation of a national framework of regulations with clear obligations, incentives, and penalties (e.g., carbon taxation, fiscal incentives, etc.), to foster use of low-carbon construction materials. Action P.2.2 - Require a minimum quantity of timber to be used in new developments, on the example of other EU countries.

Initiative P.2.1 - A systematic audit of current policies with the aim to identify and define gaps and counterproductive policies. Initiative P.2.2 – A feasibility study to support a successful pro-timber policy, including key points clear criteria, clear short/medium/long term targets and objectives, provisions for robust enforcement.

Action P.3.1 - Development and use of clear, solid, unified environmental documentation describing production of materials and reuse of buildings components and materials (end of life). Action P.3.2 - Address the limiting factors of the regulatory environment that lead to an increase in the price of a timber building compared to a concrete building, because of increased complexity of design and construction, for example through the unification of the different interpretations of fire safety that create uncertainty among investors, developers, and construction companies.

Initiative P.3.1 - Draft of simple, immediate and unbureaucratic best practices, taking into account EU best practices, where applicable. Initiative P.3.2 - As a first step towards developing a local timber guidance/code, design a model building that address regulatory, insurance, and other key stakeholder requirements (agreed upon among a panel of representatives from all parties), in the most efficient manner.
Best practice proposal discussion for FINANCE table

KEY QUESTIONS

How can the risks of mass timber be mitigated from an insurance perspective?

How can the lack of open-source testing data for mass timber construction be addressed?

PATH TO A SOLUTION

- Category associations, interested stakeholders.
- Creation of a group with the same objective and intent
- Insurance providers, insurance companies
- Development of research projects or Horizon Projects
- Development of a new analytic model based on semi-probabilistic approach
- Based on Monte-Carlo approach and theory of error propagation
- Not based on statistical evaluation of previous projects
- From a statistical to an analytical view of every single project

Co-funded by the European Union
Key INITIATIVES from the FINANCE table

Action F.1.1 - Identify criteria for timber building projects in Environmental, Social, and Governance (ESGs), European Union Taxonomy (the Taxonomy includes five parameters for buildings, out of which, one concerns the use of timber), and EU Sustainable Finance Disclosure Regulation (SFDR): Declaration of objectives of economic activities. Action F.1.2 - Find data to benchmark criteria from F.1 (click here for a reference example), and their influence on financial value of the project.

Initiative F.1.1 - Write a collaborative white paper proposal which identifies criteria for timber building projects aligned with ESGs, EU Taxonomy, and SFDR, with the purpose of certifying compliance. Initiative F.1.2 - Analysis / research of data availability to quantify loss of value of unsustainable investments based on criteria identified by F1.

Action F.2 - Model how the loss of value of unsustainable investments as benchmarked by F.2 enters the risk calculation (climate, physical, transition) to guide investment, e.g., wood use and circularity as risk reduction strategies.

Initiative F.2 - Model proposal for alternative insurance financial risk assessment.

Action F.3 - Setup co-investing models for certified projects.

Initiative F.3 - Develop an investment model, e.g., a ‘timber fund’ for timber buildings in Italy (e.g., ICAWOOD by Wo2) considering S.A.L.E. protocol and any other available assurance means.
Best practice proposal discussion for TECHNOLOGY table

KEY QUESTIONS

How important is the standardisation of materials and components in the mass timber industry?

Is it possible to verify the source and quality of mass timber products?

What are the end-of-life scenarios for mass timber products?

PATH TO A SOLUTION

Reliability of the supply chain (information are not traceable)

Private blockchain system to share and diffuse the information between the stakeholders

- Category associations - Interested stakeholders

Creation of a group with the same objective and intent

Problems in emphasizing the real advantages of timber constructions

Extension of existent certification (which one?) to have a tool that guarantees the sustainability of the entire building

Reward system that certifies the process cradle-to-grave
**Key INITIATIVES from the TECHNOLOGY table**

**Action T.1** – Change the perception of used timber as waste, promote and drive the use of existing tools and practices in the sector for further development.

**Initiative T.1.1** – Model building / playbook with Design for Manufacturing And Disassembling (DfMAD) process that can be agreed upon across key value chain stakeholders (model building design with key DfMAD process embedded, kit of parts). **Initiative T.1.2** – Collaborate with designers and suppliers to establish a DfMAD-BIM Quality Control to facilitate the generation of a manufacturing digital 3D model – digital section in the playbook.

**Action T.2** – Development of circular end-of-life (EoL) scenarios.

**Initiative T.2.1** – Collect practical examples of circular EoL from research institutions and manufacturers through the Timber Living Lab (e.g. ARUP: [https://www.arup.com/perspectives/publications/research/section/rethinking-timber-buildings](https://www.arup.com/perspectives/publications/research/section/rethinking-timber-buildings)). **Initiative T.2.2** – Develop end of life theoretical models, such as leasing of timber from manufacturer.

**Action T.3** – Promote and drive the use of existing tools and practices in the sector for the certification of material quality.

**Initiative T.3.1** – Investigate the insurance rulebook already being worked on the UK and see how it might apply, or not, to the Italian market. **Initiative T.3.2** – Investigate how the S.A.L.E. protocol (or any other assurance certification protocol) meets the needs of insurers and designers, and define improvement opportunities.
Best practice proposal discussion for SOCIAL table

KEY QUESTIONS

Can new training programs be developed to support the uptake of specialized construction techniques?

How can collaboration between stakeholders and associations be nurtured?

How could a synergic approach to data sharing and data collection be encouraged?

PATH TO A SOLUTION

- Category associations - Interested stakeholders

Creation of a group with the same objective and intent

Universities and research groups

Call for Living Lab and best practice

Postgraduate training school on structural timber run by trade associations

Creation of a website to share open-access information, publications etc...

One-year formation to train timber building engineers
Key INITIATIVES from the SOCIAL table

Action S.1 – Create awareness of the benefits of timber construction through elevating the topic to the attention of political leaders / key figures in the Milan Municipality.

Initiative S.1 – Develop a campaign aimed at attracting political figures as well as the public, building on the Perception of Timber (PoT) project in its current first phase and the exhibition at MIND timber prototype, but expanded to get wider public attention and with a look towards a second phase which will include several initiatives under one aligned programme.

Action S.2 – Communicate the benefits timber construction offers to society, such as environmental impacts and other co-benefits influencing pressing challenges, such as the energy crisis, as well as the process to design and delivery these buildings safely and resiliently.

Initiative S.2- Develop content and curate an engagement piece for city officials building from the work develop in the current phase of the Perception of Timber programme.

Action S.3 - Structure an effective training/dissemination program by: distinguishing the different targets (clients, investors, architects, engineers, buyers, etc.); defining the best channel to reach each target; opting for 'learning by doing' strategies.

Initiative S.3 - Hackathon or contest launched by Federlegnoarredo on a timber challenge, with a reward for winners; one-week workshop for students at the School of Architecture or Engineering of Polimi (in collaboration with a sponsor company); proposal to use timber building as a lab topic in one of the courses of the School of Architecture or Engineering – Politecnico di Milano.

Action S.4 - Overcoming the barrier of competition by uniting companies' efforts on a real project that brings benefits to both them and the community.

Initiative S.4 - Launch of a special project by the Federated Innovation, whose first action is a collective call for funds aimed at financing the project itself. Stakeholders collaborate at writing the proposal to be submitted, clarifying the role each one will play.

Action S.5 - Building a collective case history where companies can share their projects and solutions without revealing sensitive data.

Initiative S.5 - Definition of a communication strategy (e.g., presentation at conferences, events, news by professional associations, etc.) to promote and invite people to participate in the call for best practices already open in our website.
Best practice proposal discussion for ENVIRONMENTAL table

KEY QUESTIONS

Which are the environmental impacts used to assess the environmental sustainability of timber (e.g., Global Warming Potential, Primary Energy Non-Renewable)?

How it is possible to quantify the environmental benefit of the use of timber?

PATH TO A SOLUTION

- Category associations, - Interested stakeholders.

- Creation of a group with the same objective and intent

- Development of research projects or Horizon Projects

- Universities Public Administration

- Revision of EPCs (Energy Performance Certificates) system inserting a way to evaluate the embodied carbon (Horizon projects and experimentations)

- EPCs would consider also environmental aspects

- Evaluation cradle-to-grave of the intervention

- Embodied carbon will modify the class of the building
Key INITIATIVES from the ENVIRONMENTAL table

Action E.1 - Facilitate obtaining Environmental Product Declarations (EPDs) for participating in green public procurement and carbon credit removals projects.

Initiative E.1 - Develop a dedicated software to reduce time and costs for producing EPDs (or carbon footprint assessments), helping Italian companies involved in the mass timber supply chain.

Action E.2 - Support the industry association Assolegno - FederLegnoArredo (FLA) to investigate how to improve the environmental, social, and economic benefits from mass timber constructions, expanding the national production (e.g., using abandoned land - Apennine territory, which is currently being depopulated). Part of the proposal is explained in the position paper for the Italian policy makers “La sostenibilità integrata nel piano industriale del Paese”.

Initiative E.2 - Gather lessons learned from other countries on how to improve the social, environmental and economic value of timber in construction and conduct a feasibility study with a dedicated business model.

Action E.3 - Promote sustainable constructions through the mandatory assessment of GHG emissions generated over the building’s life cycle (including both construction materials and energy systems).

Initiative E.3 - Review the actual Energy Performance Certification scheme (based on Legge 90/2013) and implement a computational model based on the process-based LCA method, considering both the embodied and the operational emissions.

Action E.4 - Investigate the inclusion of Dynamic Life Cycle Assessment (DLCA) modelling as a mandatory step for the standardization, eventually including French players (pioneers in Europe with the Réglementation Environnementale 2020) to promote the initiative in Europe, or interested stakeholders to make DLCA an acceptable tool also in Italy.

Initiative E.4 - Organize workshops and coordination meetings to develop a new proposal about the dynamic modelling for the calculation, and write a European community-level position paper with stakeholders.
Conclusions and next steps

Participants to ‘Change Machine’, the second workshop of the MIND Perception of Timber project sponsored by Built by Nature and coordinated by Climate-KIC for LendLease, POLIMI, WTA, ARUP, UCL and StoraEnso, came together in an intense and productive work session, that brought new focus and insights to this project.

This second workshop tried to give an understanding of the concrete challenges that lay ahead to achieve the change that we need.

We presented the list of solutions from the first workshop, and the thematic groups brought renewed energy to refining them into actionable initiatives. This feedback document tries to represent the outputs of the breakout sessions. Please take the time to go through it and let us know what we have missed or what you would add having had time to digest the day’s events.

We look forward to meeting again in December having pulled all the differing threads together in a way that can be effectively communicated to all of you, the participants to the project, but also the wider industry and general public. We hope to be able to outline the exhibition and get validation on our collective endeavors – see you all for the concluding workshop “DID WE GET THIS RIGHT?”

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**Workshop 1**
**June 17th 2022**
- **Framing**
  - Participants will engage in workshops to establish the challenges and the gaps in the current practice and reframe the issues.

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**Workshop 2**
**September 16th 2022**
- **Engagement**
  - Participants will engage in workshops to understand the drivers and their interlinking effects, develop narratives for systems change.

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**Workshop 3**
**December 16th 2022**
- **Transformative**
  - Participants will engage in workshops to demonstrate development effect, and develop distinctive service offering for governments and funding partners.

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**Dates**

- **May 22**
  - Preparatory workshop on barriers to timber use
- **June 22**
- **July 22**
- **August 22**
- **September 22**
- **October 22**
- **November 22**
- **December 22**

**Key Events**

- **25 March**
  - Preparatory workshop on barriers to timber use
- **Launch of the Living Lab**
- **19 October**
  - First co-creation session
- **16 November**
  - Second co-creation session
- **Final exhibition @MIND**
Man announces he will quit drinking by 2050

A Sydney man has set an ambitious target to phase out his alcohol consumption within the next 20 years, as part of an impressive plan to improve his health.

His program will see Greg Taylor, 73, continue to drink as normal for the foreseeable future, then reducing consumption in 2049 when he turns 101. He has assured friends it will not affect drinking plans in the short or medium term.

Change is difficult. Not changing is fatal.
Did we get this right?
Please tell us anything we may have missed
Contact: mira.conci@climate-kic.org