



*Innovation Funding and Support for SMEs of the Built Environment Sector*

## 1<sup>st</sup> SEED CALL RESULTS

The European H2020 METABUILDING project aims to encourage innovation in the building industry by supporting and promoting SMEs innovative efforts, by funding feasibility studies, collaborative projects and by providing a digital open innovation platform ([www.metabuilding.com](http://www.metabuilding.com)).



The primary objective of the project is to co-build, until its end in May 2023, an innovation ecosystem with a dedicated space where SMEs from the construction sector, as well as SMEs from the 4 other industrial sectors associated with the project (additive manufacturing, digital industry, nature-based solutions, and circularity and recycling) will have access to tools and services to support their innovation projects and increase their visibility.

**The result will be the establishment of a European platform for open collaborative innovation.**

Over the entire duration of the project, METABUILDING will be launching 4 calls at different levels, SEED & GROW/HARVEST. This support for feasibility studies and collaborative projects will support 140 SMEs (over the entire project) from the 6 European target countries (Austria, Spain, France, Hungary, Italy, Portugal).

Visit METABUILDING Project website!

## THE 1<sup>st</sup> SEED CALL IN NUMBERS

The first SEED CALL launched in December 2020 aimed to provide an “innovation voucher” to 30 SMEs in the 6 target countries. From the 159 SMEs that responded to this first call, 30 proposals will receive funding for a total amount of 148.980 EUR.

### *It's been a great success!*

The proposed projects were then carefully studied by juries, involving independent experts at national and European level.

For this first call, that reached a remarkably high level, has been strongly requested to the national and European juries to nominate the first SMEs, according to a selection criterion that took into account:

- the innovative nature of the proposed solution
- its impact on the construction sector
- its relevance to the regional scope

but also, the opportunity to develop these solutions at larger scales, and possibilities to grow accordingly.

Under the rules of this 1<sup>st</sup> SEED CALL, 131 SMEs were pre-selected following the deliberations of the national jury, and then they have been presented to the European jury. Finally, 30 SMEs were selected to receive the innovation vouchers.

<b>Austria</b> 6	<b>France</b> 6	<b>Hungary</b> 3	<b>Italy</b> 4	<b>Portugal</b> 6	<b>Spain</b> 5
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The national jury also wanted to give a special mention to certain projects, distinguishing some SMEs.

***Congratulations to all of them!***

# MEET METABUILDING WINNERS !!!

## DISCOVER THE 30 INNOVATIVE PROJECTS SELECTED BY THE JURIES

The 30 projects were selected for the impact they may have on the construction sector. With this € 5,000 funding, each of them now must study the possibilities of developing their idea, and potentially making it grow on larger scales.



### Awardee from FRANCE

## GWILEN TRANSFORMS MARINE SEDIMENTS INTO BUILDING MATERIALS

Sediments inevitably accumulate in harbours which must be dredged regularly. At the same time, the construction sector is one of the most polluting industries, due to the use of energy-intensive construction materials and the consumption of finite resources.

The Gwilen project makes it possible to link these two territorial expectations, by initiating the development of an onshore recovery sector for port sediments, transformed into materials for design and architecture. ([www.gwilen.com](http://www.gwilen.com))



**SECTORS INVOLVED :** #Construction #NatureBasedSolutions #CircularEconomy

### Awardee from AUSTRIA



## Energy4rent WITH THE PROJECT MOBILE HEATING UNITS

As a leading Austrian provider of smart mobile energy rental solutions for heating, cooling, steam and electricity, our R&D focus lies specifically on the field of IoT, which will be one of the most important success factors in the future.

"I am very pleased to be able to work together with our long-standing development partner, the Austrian Institute of Technology, additionally supported by GRÜNSTATTGRAU Forschungs- und Innovations GmbH. This allows us to continue to create new markets and to inspire our customers with innovative solutions." ([www.energy4rent.at](http://www.energy4rent.at))



**SECTORS INVOLVED :** #Construction #DigitalIndustry

# MEET METABUILDING WINNERS !!!

## Awardee from SPAIN



### 3D CONCRETE, S.L FOCUSES ON DESIGN, DEVELOPMENT AND MANUFACTURE OF 3D PRINTING MACHINERY AND MATERIALS

Concrete 3D printing permits building homes between 3 and 4 floors "on site". This development is the evolution of the line of printers that BEMORE3D has been developing; the current BEM1PRO would evolve to a printer with the capacity to build homes with a new collection of sustainable raw materials concrete based now in study. ([www.bemore3d.com](http://www.bemore3d.com))

The main benefits are:

- Modularization, versatility and flexibility of an easy assemble system.
- 35% cost reduction, comparing to conventional construction.
- Reduce the printing time of a complete unit (structure, enclosures and partitions) to 24 hours.
- 85% reduction on waste generation, noise, dust and emissions (a typical townhouse generates 3 to 7 tons of waste).
- The main innovation to add value lies on allowing to build up to 4 levels (standard concrete-based 3D printing technologies does not print more than one).
- Development of new specific materials (concrete based) for this new construction system.



**SECTORS INVOLVED :** *#Construction #DigitalIndustry*



ArchLiving

## Awardee from ITALY

### ROBOTIC AUTOMATION ON CONSTRUCTION SITES

*· ArchLiving in collaboration with Alessandro Tassinari ·*

- The project proposes experimentation using the Spot agile robot produced by Boston Dynamics, equipped with movement on four robotic limbs and a horizontal body. Far from other existing robotic systems, many of which are specialised in certain processes, this specific model of agile robot can be used for a wide variety of purposes thanks to its ability to accommodate different types of technical supports.
- The project imagines its use on two very different case studies - the consolidation of a railway line and the restoration of a small village, both damaged by seismic events - comparing the criticalities and benefits between traditional surveying techniques and the possibilities offered by the agile robot and the digitisation of its activities.

The research team was multidisciplinary to improve the spectrum of different points of view. ([www.archliving.it](http://www.archliving.it))

**SECTORS INVOLVED :** *#Construction #DigitalIndustry*

# MEET METABUILDING WINNERS !!!



## Awardee from PORTUGAL

### EcoHuT Project, ECOLOGICAL HUTS USING 3D PRINTING TECHNOLOGY AND LOCAL SOILS AS MAIN RAW MATERIAL

EcoHuT Project will assess the feasibility of designing and building ecological huts in the Douro Demarcated Region using the large-scale AM constructive technique, and using local soil as the main raw material. It is a truly innovative design that may have great viability, not only because it allows for different architectural forms, but also because it involves light equipment, as well as the use of ecological and proven raw materials. It is a project that combines innovative and traditional constructive processes. AM represents a revolutionary way of constructing small buildings that may soon open doors to make the construction sector more efficient and sustainable. The use of land as construction material has proven to be a good solution, both in thermal, architectural and environmental terms. This idea can be of great value for the region, not only for the country, where the construction sector needs innovation, but also for the Douro micro-region. It fits entirely into the National Plan of Energy and Climate goals.

*SECTORS INVOLVED : #Construction #NatureBasedSolutions #AdditiveManufacturing*



## Awardee from HUNGARY

### MODULAR GREEN ROOF TECHNOLOGY 2.0

The innovation offers an eco-friendly and faster to implement technology for creating a feasible natural environment, providing 100% protection to insulation. The green roof modules, made of recycled polyethylene plastic granules, and the mineral-based growing medium used to fill them, are fully integrated into the circular economy.

This modular system retains all advantages of green roofs, while addressing the limitations of built-in systems. It provides immediate green coverage and larger design flexibility. Due to its low weight, it offers a practical, quick, and safe option for the installation of green roofs on industrial halls and buildings with light support structures. The technological innovation is generally in line with the building codes of municipalities and the national requirements on the ratio of green surfaces.



It offers a solution for the installation of green roofs on existing tower blocks, reducing the urban heat island effect, the concentration of airborne dust on the streets, and greatly reduces the load on the urban drainage network due to its water retention properties. ([www.zoldtetoepites.hu](http://www.zoldtetoepites.hu))

*SECTORS INVOLVED : #Construction #NatureBasedSolutions #CircularEconomy*

## A BIG THANK YOU TO ALL!

We would like to send a big thank you to all those who have spared no effort to mobilize and encourage SMEs to participate, but also to the **159 European SMEs who participated**, even if sometimes, due to the European nature of this call, it must have required administrative and linguistic efforts to write their project in English!

## WHAT ABOUT THE OTHER CALLS ?

As indicated, all participating SMEs will naturally find their place on METABUILDING open innovation digital platform, allowing them to **gain visibility, create links, highlight their actions, find partnerships, and access to the platform innovation support tools.**

**IMPORTANT NOTE:** a 2<sup>nd</sup> SEED CALL will be launched at the end of 2021 where these SMEs will be able to apply again and benefit from their first participation.

***There are no losers in METABUILDING!***

## METABUILDING PROJECT CONTINUES

**The "1st METABUILDING GROW/HARVEST CALL"  
opens on June 15<sup>th</sup>, 2021.**

**"Up to 60.000 € for SMEs innovative  
and collaborative projects"**



The poster features the Metabuilding logo (a colorful circle) and the text "1st GROW / HARVEST CALL". Below this is the European Union flag and the text "H2020 G.A. N° 873964". The central image shows four small green plants growing out of stacks of coins of increasing height. At the bottom, it says "Innovation Funding and Support for SMEs". On the right side, there are three green boxes with white text: "Opening 15 JUNE 2021", "Up to 60.000 € per collaborative project", and "Deadline 15 SEPTEMBER 2021 17:00h. (Brussels time)".

METABUILDING project aims at boosting SME innovation in the Construction sector, by encouraging cross-sectoral and cross-border collaboration.

The 1st GROW/HARVEST CALL will be **challenge-based**, and focus on the following challenges for the Construction Sector:

- **ICT challenge**
- **Nature-Based Solutions challenge**
- **Circular Economy & Recycling challenge**
- **3D Printing challenge**

Proposal for collaborative projects of 2 partners or more (including at least 1 SME) can be submitted between June 15, 2021 and September 15, 2021 on:

<https://www.metabuilding.com/grow-harvest-call/>

960.000 € in total will be distributed to SMEs from 6 target countries: Austria, France, Hungary, Italy, Portugal, and Spain or eligible for of their affiliation to one of the participating European platforms to finance innovation and collaboration projects.

The proposals will be evaluated by an international panel of **independent experts** with regards on how they address the respective challenges.

## “Save-the-date” for next WEBINARS!

Along the month of June this call will be presented on the 6 target countries during an online webinar supported by NOBATEK/INEF4 as project coordinator:

- **SPAIN: June 7th**, 10:00 to 12:00 (CET), presented by PLATAFORMA TECNOLÓGICA ESPAÑOLA DE LA CONSTRUCCIÓN (PTEC) <https://bit.ly/3yDar1Y>
- **FRANCE: June 8th**, 11:00 to 12:30 (CET), presented by CERCLE PROMODUL/INEF4 <https://bit.ly/3i06H50>
- **AUSTRIA: June 9th**, 10:00 to 11:00 (CET), presented by GRÜNSTATTGRAU <https://bit.ly/3i7pf37>
- **ITALY: June 11th**, 11:30 to 13:00 (CET), presented by FEDERCOSTRUZIONI <https://bit.ly/3wHRDwE>
- **HUNGARY: June 15th**, 14:00 to 16:00 (CET), presented by PANNON BUSINESS NETWORK <https://bit.ly/3yWdSBg>
- **PORTUGAL: June 15th**, 10:30 to 12.00 (CET), presented by PLATAFORMA TECNOLÓGICA PORTUGUESA DE CONSTRUÇÃO (PTPC) <https://bit.ly/3vwXvj3>

Visit **METABUILDING Platform** for **FREE REGISTRATION**

[www.metabuilding.com](http://www.metabuilding.com)

# METABUILDING PROJECT CONTINUES

A 2<sup>nd</sup> "SEED CALL" will be launched in the 3<sup>rd</sup> quarter of 2021, with an innovation support of € 5,000 per winning SME.

## More information in the coming months!

The national representatives of the 6 target countries will continue communicating on the various calls, and accordingly to their fields of action, set up initiatives to continue promoting and supporting the emergence of European SMEs innovative ideas.

Visit:

[www.metabuilding.com](http://www.metabuilding.com)

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