

CALL: [The New European Bauhaus – shaping a greener and fairer way of life in creative and inclusive societies through Architecture, Design and Arts](#)

TOPIC ID: HORIZON-CL2-2022-HERITAGE-01-10
Deadline model: single-stage
Planned opening date: 20 January 2022
Deadline date: 20 April 2022 17:00:00 Brussels time

Project title: **Modular and Adaptive Green Solutions for Integrated Urban Recovery**

Brief project description: A French-Spanish-Polish consortium is looking for a leader/partner of the project, planned to apply to New European Bauhaus program (HORIZON EUROPE), related to the program: [The New European Bauhaus – shaping a greener and fairer way of life in creative and inclusive societies through Architecture, Design and Arts](#) possibly a municipality (bigger municipalities are ideal target but we consider the offer of smaller one as well), located in Europe and interested in developing innovative spatial green infrastructure but also SME's, research centers etc.

Objective and Ambition The main axis of the proposal is to provide an advantageous local microclimate thanks to air purification, cooling and humidification by plants incorporated into specially designed, possibly locally fabricated structures. It will test innovative modular green technologies through the construction of adaptive architectural forms alleviating the effects of climate change and feasible under difficult climate or urban conditions in year-round mode supporting an integrated social, economic and environmental recovery in European cities. Through adaptations in different climatic and socio-cultural settings in Europe, Panel Modular System (PMS) solution will leverage the potential of new green infrastructure of Layered Green Wall to provide solutions for urban microclimate improvement and productive social spaces. Architectural forms planned within the project including separate structures produced in different locations in EU using PMS, based on modular solution rich in plants will be a result of cooperation with the local communities, different specialists, CCIs and youth. Due to flexibility and potential creativity that offers the system, they will also be objects of design, educational and recreation value, with positive impact on the urban environment, improving the quality of living conditions. It relates to existing Green Wall solutions but while it goes further into open space creates opportunity for a new social space.

Technical Solution and Innovation The PMS system is an innovative architectural and design solution which is a combination of spatial modular structures and the plant material that fills them, which together form the concept of a Layered Green Wall. The six basic variants of the solution makes possible to generate complex free standing structures of closed, semi closed and open form but it's also possible to place and incorporate PMS structures into existing architectural vicinity. PMS in public urban space or outside the city will be an oasis with attractive spatial and functional effects and microclimate parameters advantageous to human health.

The development of the system proposed, due to the fact that is focused on layered structure and vegetating plants, will be of interest to specialists in various fields, apart from designers, architects, engineers, people involved in plant production, as well as botanists, biologists or zoologists dealing with animal enclaves in cities, as PMS makes possible to create massive excellent habitats for certain species of birds or insects. The proposed PMS solution will work in any European location regardless of climate, including dry and hot locations in southern Spain or Greece, or contrary cool locations e.g. in Scandinavia. One of the goals of the project

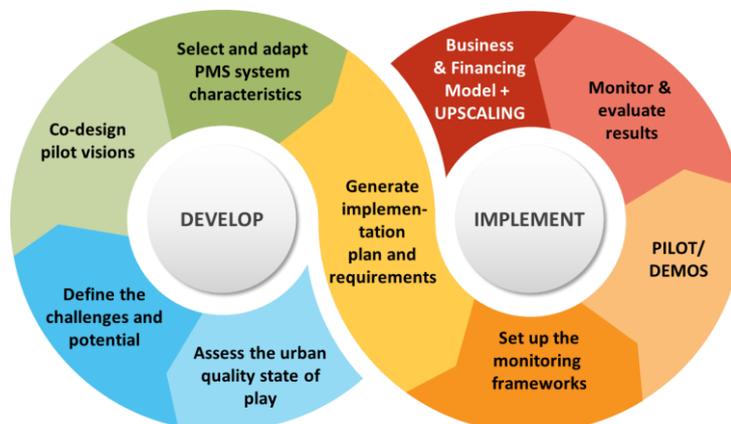
is to test PMS structures under different social, economic and climatic conditions in Europe to create a multifunctional design that can be applied anywhere on the globe.

Approach The objectives will be achieved thanks to the cooperation of several teams of the coordinating beneficiary and associated beneficiaries, specialists with considerable practical experience and extensive architectural and scientific knowledge. In the first stage, on the base of the PMS modular system, the design of the spatial form of the structure will be prepared, adapted to designated location and in cooperation with the local communities. Moreover, the choice of plants, cultivation technologies, plant irrigation and nutrition will be described. The social impact of the project will be evaluated, i.e. from the beginning the reaction of citizens to PMS as a source of recreation and its influence on the strengthening of place identity and the development of social bonds. Planned architectural forms may serve all users, including families with children, teenagers, the elderly and disabled. It is planned to develop two modular variants of the PMS - a variant for the production of large structures and a scalable consumer variant, where the produced components of the system will be used to assemble the installation around a private property.

The consortium consists of:

- municipality of Saint Germain, Ile de France.
- city of Katowice, Silesia, Poland.
- CIEMAT (Spanish Public Research Institution), Spain.
- Technical University of Cartagena, Spain.
- Fundacja Artystyczna im.Tadeusza Kalinowskiego, Poland

Leader/Partner sought: municipality located in: Spain, Portugal, France, Italy, Germany, Czech Republic, Hungary, Slovakia, Romania, Bulgaria, Austria, Estonia, Belgium, Netherlands, Luxembourg, Latvia, Lithuania, Greece, Denmark, Finland, Sweden, UK, former Yugoslavia countries.



Proposal total budget: 3 Mil. EUR

Project duration: 36 months

Deadline for expression of interest: (15.02.2022)

Contact: Adam Kalinowski, tel. +48607326182, email: neb@tadeuzkalinowski.com