**YouRban** - Large Urban co-creative, sustainable and inclusive ecosystem, for the recycling of reinforced polymers on-the-truck

This project has received funding from the European Union’s Horizon Europe Framework Programme   
HORIZON-CL4-2023-HUMAN-01-53  
Project Number: 101135997

**Open call 2**

**Innovate with Recycled Reinforced Polymers: Open Call for Urban Factories**

Open call proposal template

# Instructions

*The structure of this template must be followed when preparing your proposal. It has been designed to ensure that the important aspects of your planned work are presented in a way that will enable the experts to make an effective assessment against the evaluation criteria.*

*Please be aware that proposals will be evaluated as they were submitted, rather than on their potential if certain changes were to be made. This means that only proposals that successfully address all the required aspects will have a chance of being funded. There will be no possibility for significant changes to content, budget and consortium composition during grant preparation.*

***Page limit****: Sections 2 should* ***not be longer than 15 pages****. Page 1 (cover page) and Section 1 (proposal and beneficiary details) are excluded by the 15 pages limit. All tables, figures, references and any other element pertaining to Sections 2 must be included as an integral part of these sections and are thus counted against this page limit. The number of pages included in each section of this template is only indicative.*

*If you upload a proposal longer than the specified limit, excess pages (in over-long proposals/applications) will not be taken into consideration by the evaluators. Evaluators will be instructed to ignore hyperlinks to information that is specifically designed to expand the proposal, thus circumventing the page limit.*

*Please, do not consider the page limit as a target! It is in your interest to keep your text as concise as possible, since experts rarely view unnecessarily long proposals in a positive light.*

*The following* ***formatting conditions*** *apply.*

* *The reference font for the body text of proposals is Arial (Windows platforms), Verdana (Apple platforms) or Helvetica (Linux distributions).*
* *The use of a different font for the body text is not advised and is subject to the cumulative conditions that the font is legible and that its use does not significantly shorten the representation of the proposal in number of pages compared to using the reference font (for example with a view to bypass the page limit).*
* *The minimum font size allowed is 11 points. Standard character spacing and a minimum of single line spacing is to be used. This applies to the body text, including text in tables.*
* *Text elements other than the body text, such as headers, foot/end notes, captions, formula's, may deviate, but must be legible.*
* *The page size is A4, and all margins (top, bottom, left, right) should be at least 15 mm (not including any footers or headers).*

*These pages of instructions in italics have to be deleted from the template.*

*Once Section 1 and 2 are completed, the file must be converted into a single PDF document (max. 10MB) before being uploaded to the online platform.*

# Applicant profile (fields with \* are mandatory)

|  |  |
| --- | --- |
| **Title (Mr/Ms/Mrs/Dr/Prof) \*** |  |
| **First Name\*** |  |
| **Last Name\*** |  |
| **Organization Name\*** | *Please specify the name of the organization you are applying for* |
| **Position at the organization\*** | *Not applicable if you are applying as natural person or single professional* |
| **Identifier\*** | *VAT identification number* |
| **E-mail\*** |  |
| **Country\*** |  |
| **Phone No.\*** |  |
| **Address\*** | *Please specify the address of the organization you are applying for* |
| **Short profile\*** | *Max. 500 characters including spaces*  *Please describe the profile of the organization you are applying for* |
| **Link** | *Company website* |

# Second Applicant profile (fields with \* are mandatory) – ONLY in case of a small consortia

*In the case of small consortia, if the following fields are left blank, only the first applicant will be considered.*

|  |  |
| --- | --- |
| **Title (Mr/Ms/Mrs/Dr/Prof) \*** |  |
| **First Name\*** |  |
| **Last Name\*** |  |
| **Organization Name\*** | *Please specify the name of the organization you are applying for* |
| **Position at the organization\*** | *Not applicable if you are applying as natural person or single professional* |
| **Identifier\*** | *VAT identification number* |
| **E-mail\*** |  |
| **Country\*** |  |
| **Phone No.\*** |  |
| **Address\*** | *Please specify the address of the organization you are applying for* |
| **Short profile\*** | *Max. 500 characters including spaces*  *Please describe the profile of the organization you are applying for* |
| **Link** | *Company website* |

# Project description

## Your innovative solution for the processing of recycled reinforced polymers into new artifacts

*Brief description of your organization and your innovative solution to process the recycled material made available to you by the YouRban consortium (see the Guide for Applicants, Section 2.1), by a brief narrative explaining the inspiration, purpose, and potential impact of your manufacturing process focusing on sustainability and circularity.*

*A clear value proposition should be included, explaining* − *how the plant, machineries, and process solves designers’ problems or improves their situation while prototyping artifacts.*

*Specify the progress beyond the state of the art of your solution.*

*Briefly demonstrate the relation between the solution and the objectives of YouRban.*

*Explaining why potential designers should choose you to realize their artifacts.*

### Equipment

*Explain how your facility will address the minimum equipment requirements (see the Guide for Applicants, Section 2.5), and eventually how you will adapt or upgrade it to do so. Describe also the upgrades you would implement to effectively deal with recycled reinforced polymers manufacturing. Please consider also additional safety devices, related especially to the processes generating fine particles (e.g. milling). Include at least one photo of each area in which the fabrication activities with the assigned designers and artists will take place.*

### Softwares

*Explain how you will address the minimum software availability and knowledge requirements for design/simulation and fabrication (see the Guide for Applicants, Section 2.6). Describe also the upgrades you would implement to effectively deal with recycled reinforced polymers manufacturing.*

## Operational capacity

*Describe the team you will make available to the designers/artists to support them through the realization of their prototypes, and the competences you can provide.*

## Business model

*Describe the economic impact that participating in YouRban could generate. Quantify, where possible, the economic impact and provide a business model for future exploitation of the equipment, process, experience.*

*Identify the new potential customers.*

## Activity plan

*Provide a detailed description of your intended activities, including clearly identified objectives. The development plan must demonstrate that the timescale and resources are appropriate for the implementation and feasibility of the project. For the general guidelines, please refer to the Guide for Applicants, Sections 2.7, 2.8. Include a Gantt chart, or similar, with the main phases of the project.*

*Remember: the whole duration of your project must be 8 months.*

*The following activity structure is an example of what you are required to describe. Please, add, remove or modify the example activities, where needed.*

***Activity 1:***

***Activity type:*** *Reprocessing Demonstration.*

***Action description:*** *Live demonstration of composite granules transformation into usable artifacts using open mold casting. The activity will showcase the step-by-step preparation of recycled BMC (bulk molding compound), mold filling, curing, and demolding.*

***Objective:*** *To provide the public with a tangible understanding of the recycling pipeline from granulate to final product, emphasizing hands-on materiality.*

***Target:*** *N° of people, age, experience, etc. General public and creators; 16+ age group, with or without technical background.*

***Duration:*** *3 or 4 hrs; once every 2 days.*

***Activity 2:***

***Activity type:*** *Public Talk / Micro-lecture Series.*

***Action description:*** *Short talks delivered by the Urban Factory team and YouRban experts explaining the environmental benefits of circular polymer use, challenges of working with GFRP/CFRP, and creative reuse models.*

***Objective:*** *Educate the audience on circular design and urban upcycling opportunities.*

***Target:*** *Designers, sustainability professionals, citizens.*

***Duration:*** *30–45 min, once every 2 days.*

***Activity 3:***

***Activity type:*** *"Meet the Maker" Sessions.*

***Activity description:*** *Informal one-on-one or small group sessions where the public can ask questions to OC1 artists and Urban Factory technicians about process, material, and ideas.*

***Objective:*** *Create opportunities for storytelling, skill transmission, and soft mentoring.*

***Target:*** *Curious citizens, aspiring makers, artists, artisans, designers, ...*

***Duration:*** *1–2 hours; once every 2 days.*

***Activity 4:***

***Activity type:*** *Exhibition of OC1 Creations.*

***Activity description:*** *Display of prototypes and concept artifacts developed by OC1 artists, produced in collaboration with the Urban Factory.*

***Objective:*** *Promote the diversity of applications for recycled composites and inspire local communities.*

***Target:***  *All ages, including policymakers and municipal/Country representatives.*

***Duration:*** *Permanent display throughout the 10-day event. / 3-4 days towards the end of the 10-days Live Pilot event.*

***Activity 5:***

***Activity type:*** *“Open table” sessions on custom workflows.*

***Activity description:*** *CNC machining of GFRP molds, pigmenting recycled BMC pastes, or using recycled composite sheets for signage or small structures. Materials and processes will be explained hands-on.*

***Objective:*** *Share usable know-how with local artists, FabLab residents, and interested public.*

***Target:*** *Designers, Makers, artists, FabLab members, tech educators.*

***Duration:*** *Drop-in, 2–3 hours/day // 3-4 hours, once every 2 days.*

*It is suggested to use a GANTT chart as that reported below or similar.*

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Activities** | **M1  (MS1 Residency start)** | **M2** | **M3** | **M4 (MS2 intermediate check)** | **M5** | **M6** | **M7** | **M8  (MS3 Residency close)** |
|  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |

*Suggested length: 2 pages (including GANTT chart or similar, and eventually other figures).*

### Facility preparation

*Describe how you would organize the preparation phase, in terms of timeline and resources, that your facility will require, in relation to what you have described in Section 2.1. Please consider also the effort that should be devoted to experimentation and tuning for process validation (Guide for Applicants, Section 4).*

*Below a suggested investment plan for upgrades as an example to follow for your submission proposal.*

### *Investment Plan baseline example (these figures serve as an illustration of possible spending patterns, and do not constitute minimum or expected targets for your investment plan).*

### *Tool Upgrades (~€20k):*

* + *High-performance CNC spindle upgrade (capable of >18k rpm)*
  + *Dust-safe housing and air filtration*
  + *Enhanced / more powerful vacuum pump*
  + *Resin mixing tools and pressure-casting accessories*
  + *Custom extruder and hopper for “clay-like” materials*

### *Material Handling Infrastructure (~€6k):*

* + *Controlled environment (T° & humidity) storage cabinet*
  + *Drying cabinets or mini oven*

### *Process R&D & Prototyping Support (~€3k):*

* + *Engineering support for new FRP paste formulations*
  + *Mold development and reuse studies*
  + *Design support software licensing*

### Artistic residencies

*Explain how you plan to develop the collaboration with the n°8 assigned designers and artists that won OC 1 during the residency period. You are required to fully support them with your laboratories, staff and capacity building competences both through remote training and in-presence experimentation (Guide for Applicants, Section 2).*

*Please also use the tables provided below to outline the activities you would organize.*

*Please remember that you are asked to provide the materials required for prototypes and artifacts production, outside of the recycled material made available by YouRban Consortium (see Guide for Applicants, Section 2.4).*

### 10- day event

*Propose a set of activities to run in collaboration with the YouRban consortium during the YouRban pilot event taking place at your city (Milan or Barcelona), using the tables provided below. Please be aware that this is just a proposal; the definitive activities will be then agreed with YouRban consortium.*

### Milestones and deliverables

*You are expected to provide 1 deliverable (report) at the reaching of each project milestone (MS):*

* **MS 1:** Month 1 - Individual Mentoring Plan

*Single applicants and small consortia will be required to detail the budget in the IMP.*

* **MS 2:** Month 4 - Midterm Activity Report
* **MS 3:** Month 8 - Final Activity Report

***Final remarks****: The budget will not be used to monitor the project progress, because the funding scheme is a lump-sum. Please be aware, when considering project costs, you are expected to physically visit the other Urban Factory funded in this open call and run the activities planned for the 10 days event of the YouRban Truck (e.g. training, creation of the artifact, etc.) as specified in the Individual Mentoring Plan.*

## Potential risks

*Describe which are the aspects that may be difficult to overcome or what are the features that might require further development. For each identified risk, please provide a mitigation strategy.*