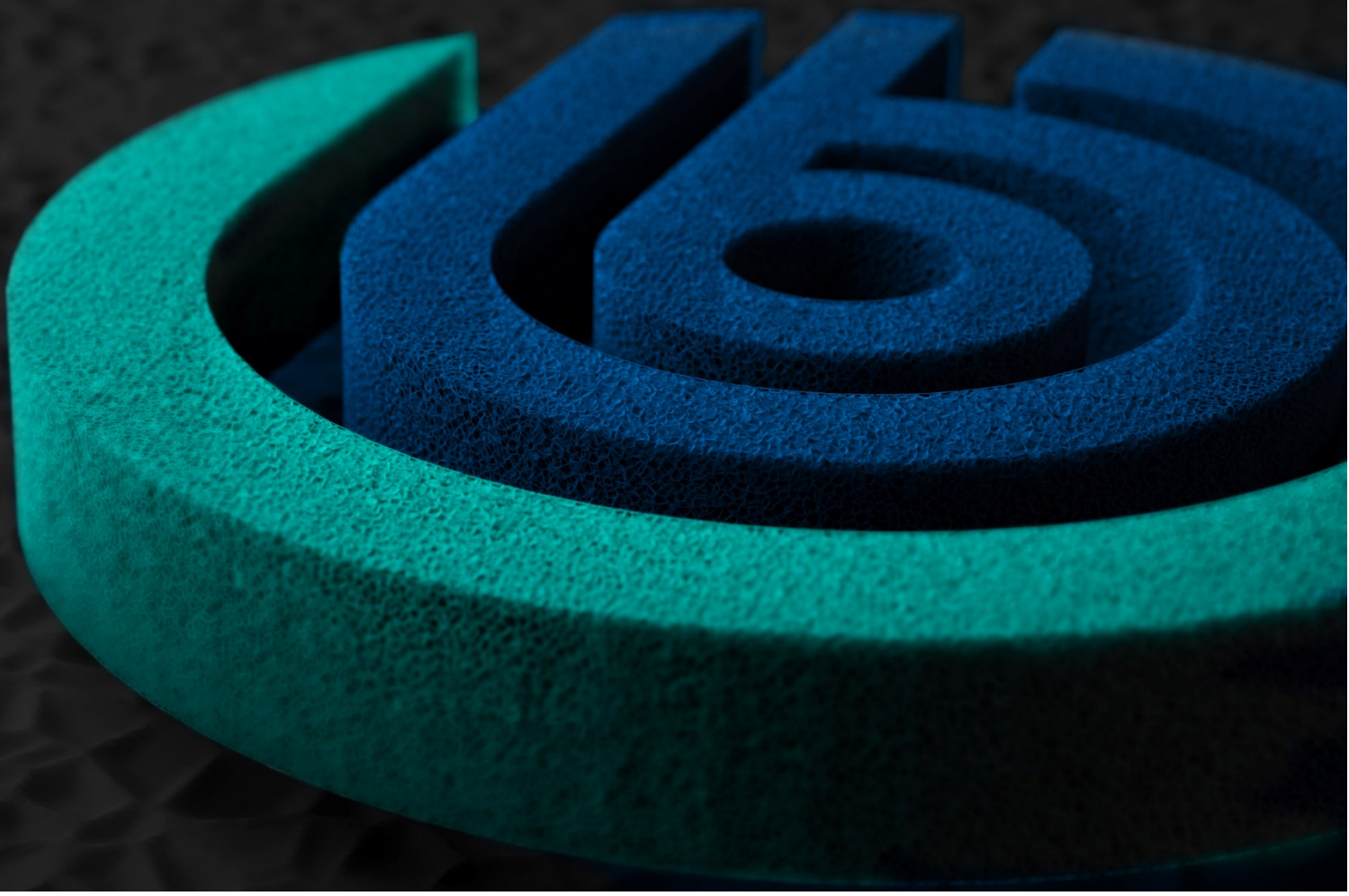




Open Call Guidelines for applicants

European Sustainable Bionanomaterials Community



European Sustainable Bionanomaterials Community

Open Call Guidelines

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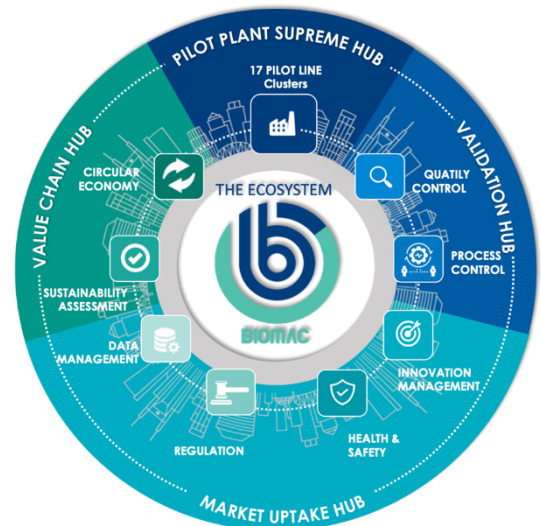
1. Introduction to the BIOMAC open call

BIOMAC (European Sustainable BIO-based nanoMaterials Community) is a Horizon2020 project, which will establish an Open Innovation Test Bed (OITB), a true collaborative ecosystem where technologies and solutions utilising nano-enabled and/or bio-based materials (NBMs) will be upscaled and prepared for market applications.

The overall ambition of BIOMAC is to boost and sustain innovation in the field of European bio-economy industries by reducing the time-to-market of novel nanotechnologies, thus reducing costs and risks.

BIOMAC offers a wide range of services, distributed into 4 hubs. These services include access to 17 Pilot Lines, which cover the whole value chain, starting from biomass and ending in the final plastic-based products, as well as to complementary services of quality control, characterization, standardization, modeling, innovation management, health and safety, regulation, data management, sustainability assessment, supply management and circularity.

More details about the BIOMAC project can be found on the project's website: <https://www.biomac-oitb.eu/>



1.1 Aim of the Open Call

BIOMAC will offer its services free of charge to 5 parties (SMEs or other stakeholders), which will be chosen via the Open Call, aiming to upgrade existing or develop new concepts within the lignocellulosic value chains of nanomaterials and polymers, starting from Technical Readiness Level (TRL) 4-5.

Proposals for test cases can be submitted online using the application form available on the [BIOMAC Open Call platform](#).

The chosen proposals will have full access to the open innovation environment of BIOMAC, which will advance their technology readiness level and bring them **one step closer to the market**.

2. Services offered via the BIOMAC OITB

BIOMAC offers a wide range of services, distributed into 4 hubs. These include access to its 17 Pilot Lines, which cover the whole value chain starting from biomass and ending in the final plastic-based products, as well as complementary services of quality control, characterization, standardization, modeling, innovation management, health and safety, regulation, data management, sustainability assessment, supply management and circularity.

More specifically, the services offered by the BIOMAC ecosystem are:

1. Technological Services
Pre-treatment and conversion of biomass Bio-based polymer and composites production pilot lines Process monitoring Scale up industrialization services
2. Validation services
Quality Control & Characterization Standardization Process Validation – Modelling
3. Value Chain Services
Sustainability Assessment (LCA, LCC) Supply management (Decision Support Tool) Circularity assessment
4. Market uptake Services
Innovation management (business plan, risk assessment, IP management) Health and Safety (Safe-by-Design approach, identification, monitoring and management of risks) Standardization and Regulation Data management

For a full description of the services of BIOMAC, read the BIOMAC Handbook (click [here](#)).

If you have any queries about our services, please contact biomac@chem.auth.gr or our Single Entry Point IBB at info@ibbnetzwerk-gmbh.com

1. Important dates

The deadlines for the BIOMAC open call are:

30th April 2023: First cut-off date. Submission of test case proposals for preliminary evaluation. Inadequate or incomplete proposals **may be resubmitted** until the final cut-off.

15th June 2023: Final cut-off date: Last day for submission of test case proposals. No corrections or amendments possible after this date.

2. How to apply

Proposals may be submitted online, starting December 15th, 2022, and exclusively on the BIOMAC open call platform:

<https://www.biomac-oitb.eu/en/static/open-call>

Proposals submitted by any other means will not be considered eligible for financial support. Each applicant may only fill out and submit one application form. Please register in the platform, fill in the online Application Form, download and fill in the proposal template, save it as a pdf document, and submit it through the BIOMAC system within the deadline (see below).

A draft proposal can be edited and updated as often as needed until submission or the closing deadline of the open call. Please note that any further modification of the application form and proposal will not be possible once you click on 'Submit'. It is the applicant's responsibility to ensure the timely submission of the proposals. Only the documentation included in the application form and in the attachments to the form will be considered by evaluators. The attachments can be in the following formats: PDF, PNG, JPG. Please note - the information from the attachments will not be scored by evaluators (this

is additional information to support the proposal). It is the applicant's responsibility to include all the necessary information in the form.

The official language of the BIOMAC open call is English, and proposals in other languages will not be eligible for evaluation.

2.1 How to use the biomac-oitb.eu open call platform

To apply for the BIOMAC Open Call, you will need to [register with the open call platform](#). After receiving your login details, you can sign in and begin your 2 step application process. You will be asked to complete an online section and provide general information about the applying entity, contact details and your interest in particular BIOMAC services.

2.2 How to fill the word proposal template

After completing the online section, you will reach the proposal upload section. To help the applicants with the process, a Word document template is available on the open call platform. A proposal can be up to 6 pages maximum in length, including figures and references.

By clicking the button, download of the template starts automatically. Here you can find detailed guidelines to help you fill in the sections of the template. Applicants can choose which of the suggested but not mandatory information to include in their proposal.

Section 1: Excellence

This section may include the following:

- Industrial needs and challenges to overcome (Describe the motivation for developing the new product/material and the main challenges that need to be overcome to achieve the scale up)
- Proposed solution (Describe in detail the product and/or service to be developed in collaboration with BIOMAC. Explain how it will solve the challenges described)
- Background of the concept - Technological insight (Describe how your final prototype part/demonstrator goes beyond current state of the art. Provide details on the maturity of the technology and the main milestones that have been achieved so far. Please note the technology should be already at TRL 4-5 (TRL description in

H2020 available [here](#)). Do you have background knowledge including Intellectual Property Rights related to this final prototype part/demonstrator? Freedom-To-Operate: are you aware of external IP that would limit the scope of the proposal?)

Section 2: Implementation

This section may include the following:

- Previous work and operational feasibility (Describe the motivation for developing the new product/material and the main challenges that need to be overcome to achieve the scale up)
- Workplan (Describe the main steps (timeline) for the technical upscaling of the product/material, ideally in reference to the available services of the OITB. Moreover, describe the tests necessary for the validation of the product/materials. Please note that the maximum duration of the implementation is 14 months)
- Expertise and background knowledge (Describe the main expertise and background knowledge required for the development of the proposal)
- Resources, equipment and materials (Briefly describe the resources, equipment/technologies and materials required for this proposal)
- Risk Management (Provide a description of the technological, economic and business risks together with proposed mitigation measures)

Section 3: Impact

This section may include the following:

- Key Exploitable Results (the main expected results of the proposal that can be exploited)
- Market positioning and strategy (an estimation of how this study fits into the current relevant market and a preliminary marketing strategy based on the unique selling points of the new products/materials, the addressed markets and the market expectations)
- Financial projections (preliminary financial projections based on financial feasibility)
- Other expected impacts (e.g. societal, environmental)

After completion of all sections, please save your proposal in PDF format and submit it through the BIOMAC system within the provided deadline.

3. Eligibility criteria

The eligibility criteria for a proposal to qualify as a BIOMAC external Test Case are:

- i. Entity type:
 - SMEs¹ (Small and medium-sized enterprises) as defined in the EU recommendation 2003/361
 - Large enterprises
 - Research and Development organizations
 - Start-ups

The core targeted user group are SMEs.

- ii. Country of origin (Must be included in this [list](#).)
- iii. The entity must be interested in operating in the field of nano-enabled and/or bio-based materials and interested in the concept of open innovation.
- iv. There are no conflicts of interest which might affect the objectivity of the proposal's evaluation.
- ii. The applicant is neither under liquidation nor under difficulty².
- v. The proposal is not excluded under the provisions of article 19 of Regulation (EU) No 1291/2013 of the European Parliament and of the Council of 11 December 2013 (ethics)³.
- vi. Technical readiness level (TRL) entry level 4-5⁴.
- vii. Ability to develop, make, and market the proposed products/processes without legal liabilities to third parties (e.g., other patent holders).
- viii. Completed proposal template, submitted before the deadline.

¹ as defined in the [EU recommendation 2003/361](#)

² as defined in the [Commission Regulation No 651/2014, art. 2.18.](#)

³ [Regulation \(EU\) No 1291/2013](#)

⁴ [as defined by the EU.](#)

4. Evaluation process

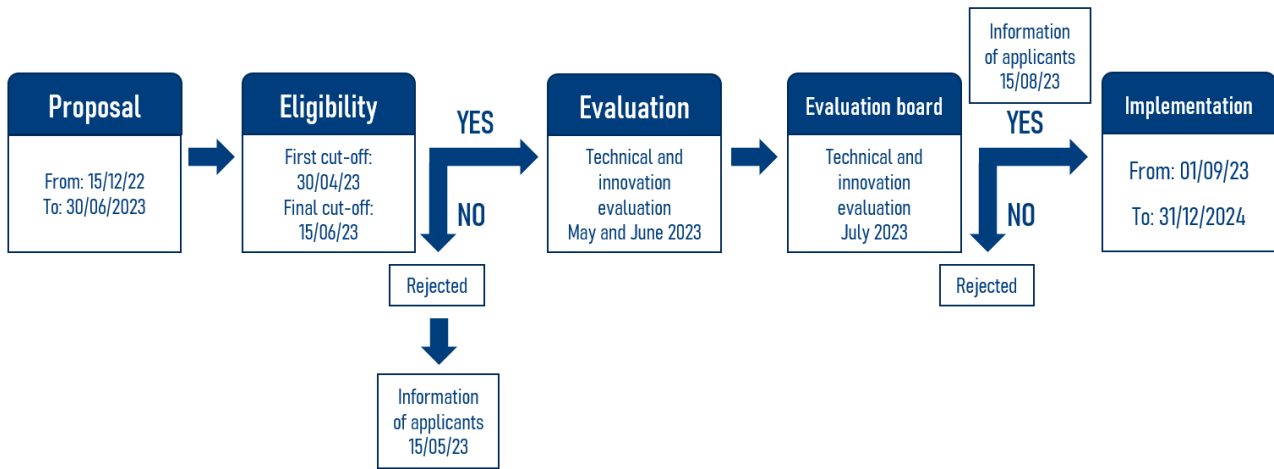


Figure 1. Evaluation flow scheme for the open call of BIOMAC.

The evaluation process will proceed as follows:

1. The eligibility of the proposals will be examined by the SEP IBB and the BIOMAC project coordinator, AUTH, in two stages; the proposals submitted until April 30th, 2023 will be informed if they are ineligible or incomplete until May 15th 2023. The applicants might reapply until the final deadline, which is June 30th, 2023. The eligibility criteria are described in Section 4.
2. The eligible proposals submitted within the deadline of June 30th, 2023 will be evaluated by a Selection Board via the BIOMAC open call platform, consisting of at least three experts from the BIOMAC consortium. They will be chosen by AUTH and IBB based on their expertise. The evaluators will be asked to write brief and meaningful comments for each criterion, including any shortcomings that explain the allocated score. The specific criteria will be:
 - I. Excellence

Motivation for developing the new product/material, the main challenges that need to be overcome to achieve the scale up, the state of the art and proof of TRL, potential PO rights, Freedom-to-Operate, and relevance of the services of BIOMAC.

- II. Implementation

Workplan and its timeline, resources to be committed and potential risks.

III. Impact

KERs, market positioning and marketing strategy, financial projections and other expected impacts (e.g. environmental, social, technological).

Experts score each award criterion on a scale from 0 to 5 (half point scores may be given):

0 – Insufficient. Application fails to address the criterion or cannot be assessed due to missing or incomplete information.

1 – Poor. The criterion is inadequately addressed or there are serious inherent weaknesses.

2 – Fair. The application broadly addresses the criterion, but there are significant weaknesses.

3 – Good. The application addresses the criterion well, but a number of shortcomings are present.

4 – Very good. The application addresses the criterion very well, but a small number of shortcomings are present.

5 – Excellent. The application successfully addresses all relevant aspects of the criterion. Any shortcomings are minor.

The threshold for individual criteria is 3 (out of 5) and the overall threshold is 10 (out of 15). In order to be considered for support, the application must score above both individual and overall thresholds.

3. The evaluations will be collected by the SEP (IBB), who will chair the evaluation panel meeting for the final selection, along with the coordinator (AUTH). The proposals that reach the threshold 10/15 will be prioritised based on the following aspects:
 - I. Distribution of workload among the BIOMAC service providers
 - II. Priority to SMEs
 - III. A maximum of 1 proposal per country

The selection panel will consist of at least 1 person per core partner, and decisions will be made by a simple majority vote.

5. Intellectual Property Rights (IPR)-Confidentiality

All parties (including both the BIOMAC OITB partners and the Open Call applicants) will exhaustively identify the background knowledge assets they will bring to the project and will provide access rights to background for the cooperative implementation of the project. Ownership of project results (including joint results generated by two or more partners) will belong to the parties having generated such results. The successful applicants will sign an NDA with the BIOMAC OITB partners covering all aspects of confidentiality. All personal data and information included in the application submitted via the online submission system will be processed by the selection board on behalf of the BIOMAC project with the purpose of your participation in the BIOMAC Open Call and achievement of BIOMAC objectives. Your data and content of the application will be kept confidential and will be shared internally with BIOMAC partners, evaluators and dedicated members of the European Commission. General data (e.g., type of company or country of origin) will be used to create statistics and reports which will be exploited through the project in terms of communication activities. In addition, the names of the selected organizations and their countries of origin will be published on the BIOMAC website as part of public evaluation reports.

6. Applicant support

For general questions about the OITB and the Open Call application procedures, please contact the Single Entry Point IBB at info@ibbnetzwerk-gmbh.com. In case of technical support regarding the submission platform or the Open Call in general the applicants may also contact the BIOMAC Helpdesk at support@biomac-oitb.eu.

When contacting the BIOMAC Technical Helpdesk, please include the following information in your email message: your username, telephone number and your email address; details of the specific problem (error messages you encountered, bugs descriptions, i.e., if a dropdown list is not working, etc.); and a screenshot of the problem.

7. After the selection

The selected new test cases will be informed by September 2023 about the next steps. All parties will identify their background knowledge and sign an agreement on confidentiality and intellectual properties aspects of the proposal as detailed in section 5.

The individual proposals will then be implemented from September 2023 to December 2024.

8. Frequently Asked Questions

1. What is an OITB?

Open Innovation Test Beds are entities, established in at least three Member States or Associated Countries, offering access to physical facilities, capabilities and services required for the development, testing and upscaling of nanotechnology and advanced materials in industrial environments. The objective of the Open Innovation Test Beds is to bring nanotechnologies and advanced materials within the reach of companies and users in order to advance from validation in a laboratory (TRL 4) to prototypes in industrial environments (TRL 7). Open Innovation Test Beds will upgrade existing or support the setting up of new public and private test beds, pilot lines, and demonstrators to develop, test and upscale nanotechnologies and advanced materials for new innovative products and services in some specific domains. They will be typically run by for profit organisations. Users could be industrial, including SMEs, as well as innovators and start-ups.

2. What type of entities can apply?

While large enterprises, start-ups, research organizations can also apply, the core targeted user group are SMEs.

3. Can small consortia apply for the BIOMAC open call?

Yes, small consortia can apply via their leading organization, as long as all the members have no conflict of interest and are not under liquidation nor under difficulty according to the Commission Regulation No 651/2014, art. 2.18.

4. Will the selected Test Cases receive funding from BIOMAC?

No, BIOMAC does not offer cascade funding, but it will offer its services free of charge to the selected Test Cases.

5. Will the proposals become public?

No, the proposals will be confidential to the BIOMAC consortium. Only general data will be used in the project's deliverables and exploitation activities, after the agreement of the applicants.

6. What does open access to the BIOMAC ecosystem mean?

Open Access means that any interested user, from Europe and beyond, can access the test beds' facilities, capabilities and services independently of whether this user is part of an Open Innovation Test Beds Horizon 2020 consortium or not. Access should be granted at fair conditions and pricing and with transparent and mutual obligations with regards to, for instance, security, safety and intellectual property rights.

7. When will the selected test cases be implemented?

The selected test cases will be developed from September 2023 to December 2024.

8. Do the applicants need to pay the BIOMAC OITB for their services or provide their own materials/technologies?

No, the test cases selected via the Open Call will have the unique opportunity to develop their project free of charge, so that BIOMAC can demonstrate the success of its ecosystem. All materials, technologies and services will be provided by the BIOMAC partners.

9. Is there a limit to the application areas of the concepts of the proposals?

No, as long as they concern nano-enabled and/or bio-based materials (NBMs) and fit the expertise of the BIOMAC services.

10. Is there an OITB's contact person following up on a specific test case?

Applicants may contact the Single Entry Point IBB at info@ibbnetzwerk-gmbh.com for enquiries regarding their test case.

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