

Pre - Announcement

ERA CoBioTech 3rd Call

Bio-based replacement products, technologies and processes

Deadline: Mid-June 2020

The ERA-Net Cofund on Biotechnologies is an ERA-NET Cofund Action under Horizon 2020, building on the achievements of ERA-IB2 (ERA-NET for Industrial Biotechnology 2), ERASysAPP (ERA-NET for Applied Systems Biology) and ERASynBio (ERA-NET for Synthetic Biology).

The key mission of ERA CoBioTech is to

- maximize synergies between current mechanisms of biotechnology research funding in Europe
- foster the exchange of knowledge across borders
- demonstrate how a bio-based economy can be beneficial for different groups in society
- maintain and strengthen Europe's competitiveness in biotechnology

ERA CoBioTech pre-announces the upcoming third call for transnational research projects in the field of "Bio-based replacement products, technologies and processes". The scope of this Joint Call has been developed based on the ERA CoBioTech strategic process taking into account the key stakeholders of the European biotechnology community. For further details, please refer to the [ERA CoBioTech's Strategic Agenda](#) and the [European BioTech Hub platform](#). The indicative budget of this call is approximately 7.3 M€, in which 9 funding organisations from 9 countries are contributing to this single-stage call (incl. "rebuttal" stage).

The Joint Call is expected to open in **the second half of March** with a closing date in **mid-June 2020**.



Objectives of the joint call

The third ERA CoBioTech call “**Bio-based replacement products, technologies and processes**” focuses on sustainability throughout the entire value chain.

Outputs

Research projects are expected **to facilitate the replacement of a specific product, technology or process** which involves either:

- (i) **fossil-based or other unsustainable feedstocks** (e.g. high ILUC and food/feed crops) or
- (ii) **unsustainable industrial processes**, such as intensive production methods (e.g. involving carbon-intensive energy consumption and/or transportation).

The anticipated outputs are expected to fall within the range of commodity chemicals, intermediates and finished products/consumer goods. These can include, but are not limited to, bio-based materials¹, biomedical products, flavours/fragrances, food/feed ingredients, pharmaceuticals, biofuels, platform chemicals, pulp/paper products, textiles, upstream and downstream design, scale-up of biotechnological processes, systems approaches to bioprocesses and process development and/or gas fermentation.

Feedstocks

The research consortia are required to sustainably enhance biomass utilisation or make use of **innovative feedstocks** derived from sources commonly recognised as sustainable. The focus should be on the conversion of feedstock rather than the production of new biomass. Feedstocks can include waste (agricultural, municipal, forestry, marine etc.) or other currently underutilised biomass. Feedstocks should not be derived from fossil-based sources, sources producing high amounts of greenhouse gasses (GHG) or other sources and production methods commonly recognised as unsustainable. Feedstocks should adhere to the sustainability and land use criteria for biomass issued by the EC².

Industrial processes, industrial translation and social integration

Projects need to be focused on research but the potential route to future application/translation should also be considered during proposal preparation. This includes the need to address necessary future or already planned scale-up activities. Therefore, depending on the technology readiness level (TRL) of the project, participation of an industrial partner or technology transfer office (or equivalent) is strongly recommended. Projects should start at a minimum of TRL₂ and increase their TRL by 2 points (not exceeding TRL₆) during the lifetime of the project.

Additionally, the environmental, societal and economic impacts of the project should be considered in order to demonstrate the benefits of the expected product, technology or industrial process compared to the conventional product, technology or industrial process. To achieve this,

¹ This also includes products replacing unsustainable animal-based products e.g. vegan leather.

² <https://ec.europa.eu/energy/en/topics/renewable-energy/biomass>



Responsible Research and Innovation (RRI) components, including Communication and Dissemination activities, should be firmly integrated into the research projects, but respect any confidentiality aspects with regard to IPR issues. These components will be evaluated as integral components in scope of all evaluation criteria (Excellence, Impact, and Implementation). Collaboration with scientists and/or organisation providing RRI expertise is advisable. This full integration should lead to improved awareness of the benefits and potential risks of biotechnology as part of the bioeconomy across all groups of society.

As with previous funding calls, all projects are expected to include aspects relating to Communication and Dissemination, Data Management and “Responsible Research & Innovation” (RRI). Relevant annexes with guidelines about the expected scope and length will be included in the Call Announcement.

Proposals must be multidisciplinary and are expected to incorporate at least two of these approaches:

- Synthetic biology: design and construction of new biological parts, devices and systems, or re-design of existing, natural biological systems for useful purposes by use of (but not limited to) orthogonal bio-systems, regulatory circuits, minimal genome approaches and protocells.
- Systems biology: optimisation of biological processes, including investigation of regulatory mechanisms within intra- and intercellular processes for bio-production, modelling, development of new computational methods and other new methodologies.
- Bioinformatics tools (e.g. data standardisation, modelling, open repositories): identification and utilisation of metabolic pathways; mapping and exploitation of cellular processes and metabolic capacities for bioproduction and for strain/variety improvement; appropriate datasets of different origins (e.g. on genomics, phenomics, proteomics, metabolomics, transcriptomics etc., digitalisation, AI and machine learning are included).
- Biotechnological approaches (where appropriate in combination with chemical ones): sustainable transformation of bio-based building blocks into target molecules.

Previously unsuccessful ERA CoBioTech grant proposals must not be directly resubmitted in their original form. Resubmissions must be declared as such and will only be considered if the proposal is substantially improved and will be accepted at the discretion of the ERA CoBioTech involved funders and the Call Office. Any undeclared resubmission will be rejected. Resubmitted proposals must include details on the modifications made to merit their re-consideration.



Intended timeline

Full proposals (One stage)	Call opening	Second half of March 2020
	Deadline for submission of proposals	Mid-June 2020
Rebuttal phase	Letters to applicants	Mid-September
	Opportunity for rebuttal (Deadline for submission comments to issues raised by IEP's reviews)	End-September
Funding decisions & project start	Communication of the funding decisions	November 2020
	Projects start	From January 2021

Eligibility

In this call, ERA CoBioTech expects proposals for collaborative research, development and innovation from transnational consortia composed of universities, higher education institutions, public research institutes, industries, large companies and small and medium-sized enterprises (SME). Where appropriate (according to national regulations), other partners such as not-for-profit organizations or civil society organizations are also encouraged. **The participation of one or more industrial partner(s) in the consortium is strongly recommended.** National and regional eligibility rules, including the potential eligibility of the private sector, e.g. SMEs, must be followed and will be published together with the Call Announcement at <http://www.cobiotech.eu>.

Only proposals which meet all eligibility criteria will be considered for evaluation. If a proposal does not meet the minimum number of partners (see below general rules for eligible consortia), exceeds the eligible maximum number of partners, or if one of the partners requesting funding is considered ineligible, the proposal will be rejected prior to entering the evaluation phase.

- **Minimum:** 3 partners requesting funding from 2 countries
- **Maximum:** 2 partners requesting funding from the same country
- **Maximum:** 6 partners in total, 8 partners are acceptable if the additional 2 partners come from the following countries: Estonia, Russia, Slovenia and Turkey

Funding is provided according to the "nationality principle". This means that each participating national/regional funding organisation supports its respective national/regional researcher(s) in a particular project consortium. Funding is subject to national or regional regulations and guidelines and eligibility criteria (to be published in the Call Announcement). **ALL project partners must check their eligibility for funding with their national contact person (NCP) prior to submission.**

Projects with applicants (coordinators and partners) deemed ineligible will not be considered in the main evaluation process and will be informed of the fact.



After receiving a notification of ineligibility, the coordinator of the proposal will have one week to submit a justified written request for a re-evaluation of the eligibility or to supplement their application with any of the missing obligatory documents as defined in the Call Announcement or by the respective NCP.

Partners from countries not participating in the call may participate in a project at their own expense if their contribution is important to achieve the project goals. The coordinator should take steps to ensure that sufficient funds are secured from these additional partners, and evidence of the availability of funds should be provided prior to project submission (letter of support/commitment, template available at www.submission-cobiotech.eu). The same applies to partners of participating countries not requesting funding. **Partners participating at their own expense count towards the maximum number of partners but not to the minimum number of participants.**

Application procedures & Evaluation

The call follows a single phase-submission process. The eligible proposals will be evaluated by a panel of independent experts, following the evaluation criteria “excellence”, “impact” and “implementation”. More details on these will be published in the Call Announcement. Projects are expected to start from January 2021, depending on grant negotiations with the relevant regional or national funding organisations.

Call Secretariat:

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Spain



The following funding organisations participate in this joint call for multilateral research projects
(Please note that this list is preliminary and will be updated in the Call Announcement):

Country	Funding Organisation	National Contact Person (NCP)	Indicative budget (up to - M€)
BE 	SPW-DGO6	Thomas Gerards thomas.gerards@spw.wallonie.be +32-32-81-33-45-57, Nicolas Delsaux nicolas.delsaux@spw.wallonie.be +32 81 33 45 20	1
EE 	ETAg	Katrin Saar katrin.saar@etag.ee +372-731-7361	0.1
FR 	ANR	Liz Pons +33-1-78-09-80-49 liz.pons@anr.fr Mélanie Lorion Melanie.LORION@anr.fr +33-1-73 54 82 37	1
DE 	SMWK	Gabriele Süptitz +49-351-564-6422 gabriele.sueptitz@smwk.sachsen.de or cobiotech@smwk.sachsen.de	1.5
NO 	RCN	Øystein Rønning +4791623960 oro@rcn.no	1
RU 	FASIE	Olga Levchenko +74952313851 levchenko@fasie.ru	0.4
SI 	MIZS	Katja Ceglar +386(1)4784736 katja.ceglar@gov.si	0.42
ES 	AEI	Manuel Sánchez-Blanco +34 916038447 Jesús M. Sanz (scientific issues) era-ib@aei.gob.es	0.4
TR 	TUBITAK	Dilek Sahin +90-312-298 94 91 dilek.sahin@tubitak.gov.tr	1.5

Applicants are **strongly recommended** to contact their funding organization before submitting an application.

