

**Federal Ministry of Education and Research**  
**Announcement**  
**Regulations governing the funding of international  
collaborative projects under the  
National Bioeconomy Strategy**  
**“Bioeconomy International 2021”**

of 30 September 2020

**Preamble**

The first module of the present "Bioeconomy International 2021" funding call (cooperation with Brazil) is part of a joint funding initiative of the Federal Ministry of Education and Research (BMBF) and the Federal Ministry of Food and Agriculture (BMEL). The measure consists of two complementary calls to promote research, development and innovation in bioeconomy cooperation with Brazil.

Under this initiative, the BMEL will fund projects in subject area 2 "Medicinal plants" and some of the projects in subject area 1 "Industrial use of renewable resources" as appropriate. The BMBF will solely fund projects in subject area 1 "Industrial use of renewable resources" (see 2. below). The two Ministries will agree on the projects to be funded.

**1 Aim and purpose of funding, legal basis**

**1.1 Aim and purpose of funding**

The BMBF intends to support the implementation of the National Bioeconomy Strategy<sup>1</sup> in an international context by funding collaborative R&D projects which involve foreign partners. The Federal Government's National Bioeconomy Strategy was published in January 2020 and is based on the former National Research Strategy BioEconomy 2030 and the National Policy Strategy on Bioeconomy. It aims to support the transformation of the largely fossil

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<sup>1</sup> [https://www.bmbf.de/files/2020\\_1501\\_National-Bioeconomy-Strategy\\_Summary\\_accessible.pdf](https://www.bmbf.de/files/2020_1501_National-Bioeconomy-Strategy_Summary_accessible.pdf)

resources-based economy into a sustainable bio-based economy that focusses on natural material cycles. In this context, research is regarded as the key to identifying and exploiting the potential of the bioeconomy. The BMBF's corresponding research funding policy focuses on six building blocks of which the first, "Biological knowledge as the key to the bioeconomy", has particular relevance for these funding regulations (see 2. below).

The National Bioeconomy Strategy provides substantial support towards the use of various biotechnological processes in industry. Companies are already increasingly introducing sustainable processes and products in order to remain competitive. Implementing the bioeconomy should, however, not interfere with global food security efforts. Already today, competition for natural resources (land and water) and the use of agricultural products for different purposes (nutrition, industrial material, energy) is increasing in many countries. In addition, there is an increasing global demand for food and feed, timber and various types of agricultural products which directly or indirectly affects global land use, the climate, biodiversity and major ecosystem services.

Realizing the bioeconomy as a sustainable bio-based economy requires not only national and European but also international initiatives. Global cooperation is needed to achieve the objectives set out for establishing the bioeconomy. This is the purpose of the "Bioeconomy International" funding activity. Funding will be provided for research and development projects in close cooperation with relevant foreign partners on core issues of the bioeconomy in order to strengthen international collaborations and to establish active, sustainable partnerships. In the context of the bioeconomy, systemic approaches and socioeconomic aspects are important criteria in addition to technological issues and development goals.

## **1.2 Legal basis**

The Federal Government will award grants in accordance with these funding regulations, sections 23 and 44 of the Federal Budget Code (BHO) and the administrative regulations adopted thereunder as well as the regulations governing applications for expenditure-based grants (AZA) and/or cost-based grants (AZK) of the Federal Ministry of Education and Research (BMBF). There is no legal entitlement to a grant. The granting authority will decide freely after due assessment of the circumstances and within the framework of the budget funds available.

Under these funding regulations, state aid will be granted on the basis of Articles 25 and 28 of the Commission Regulation (EU) No 651/2014 of 17 June 2014 Declaring Certain Categories of Aid Compatible with the Internal Market in Application of Articles 107 and 108 of the Treaty on the Functioning of the European Union (General Block Exemption Regulation – GBER) (OJ L 187 of 26 June 2014, p. 1) in the version of the Regulation (EU)

2017/1084 of 14 June 2017 (OJ L 156 of 20 June 2017, p. 1) and Regulation (EU) 2020/972 of 2 July 2020 amending Regulation (EU) No 651/2014 as regards its prolongation and relevant adjustments (OJ L 215 of 7 July 2020, p. 3). Funding is provided in accordance with the Common Provisions set out in Chapter I GBER, in particular taking account of the definitions given in Article 2 of the Regulation (please refer to the Annex with regard to the requirements of state aid legislation applying to these funding regulations).

These funding regulations apply in conjunction with the National Bioeconomy Strategy and the documents linked therein.

## **2 Object of funding**

Funding will be provided for research, development and innovation projects which are carried out by collaborations involving German and Brazilian (Module 1) or German and Russian partners (Module 2) and which have been selected in a competitive procedure.

International outlines will be submitted for the selected projects to accompany the BMBF's national activities in support of the bioeconomy and help achieve the funding objectives of the National Bioeconomy Strategy. The collaborative projects should relate to at least one of the building blocks for research funding mentioned in the strategy:

- a. Biological knowledge as the key to the bioeconomy (microorganisms, algae, fungi, bacteria, plants, insects, etc.);
- b. Converging technologies and interdisciplinary cooperation (digitalization, artificial intelligence, nanotechnology, automation, miniaturization, etc.);
- c. Possibilities and limitations of the bioeconomy;
- d. Translation into real-life application (value creation networks, etc.);
- e. Bioeconomy and society (interactions, conflicting interests, etc.);
- f. Global research cooperation.

The call focusses on the topics of the "Biological knowledge as the key to the bioeconomy" building block. These topics include among others:

- a. Activities for the understanding and modelling of biological systems;
- b. Project outlines for researching and establishing novel production organisms for primary and industrial production;
- c. Research approaches for the development or further development of innovative biotechnological processes for bio-based production systems; and

- d. Research activities geared towards the sustainable production of biogenic resources.

The Bioeconomy International funding activity focusses on international cooperation within the collaborative projects and the benefit it generates for both countries in the implementation of the National Bioeconomy Strategy. Cooperation must occur on an equal footing with regard to the envisaged sharing of responsibilities, the partners' expertise and the utilization of the project results, allowing all countries involved to benefit equally. The funding activity also provides an opportunity to implement project ideas which were developed as part of measures to prepare collaborations.

The "Bioeconomy International 2021" funding activity is composed of two modules:

### **Module 1 "Bioeconomy Germany-Brazil"**

Cooperation with partners from Brazil.

A parallel call is published by FINEP (*Financiadora de estudos e projetos*) in Brazil on behalf of the Brazilian Research Ministry (MCTI). On the German side, the BMEL is also involved in the funding of joint projects.

Funding for research and development under this joint German-Brazilian initiative will advance and strengthen the bioeconomy in the two participating countries.

The call targets research and development projects in the area of industrial use of renewable resources (biomass)<sup>2</sup> with a special emphasis on :

- Development of products with new or improved functionalities, creating additional value and based on
  - raw materials from major and minor crops of mutual interest for Germany and Brazil
  - agri/silvicultural and industrial residues, as well as coupling products at all levels along value chains of mutual interest for Germany and Brazil including process optimization and intensification
- Development of new or improved products and processes with high added value based on commercially existing biobased value chains with the aim to improve competitiveness and resource efficiency as well as extending business areas

The Brazilian applicants will submit their parts of a corresponding project outline with identical content in Brazil ([www.finep.gov.br](http://www.finep.gov.br)).

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<sup>2</sup> The second subject area "Medicinal plants" in Module 1 "Bioeconomy Germany-Brazil" is governed by a separate BMEL funding call as mentioned in the preamble. Corresponding project outlines on this topic must be drafted in accordance with the terms and conditions specified in this call and submitted to the address mentioned in the BMEL call.

The selection procedure for the project outlines submitted under Module 1 is carried out jointly with the BMEL/FNR (Agency for Renewable Resources) and FINEP in Brazil (see preamble).

## **Module 2 "Bioeconomy Germany-Russia"**

Cooperation with partners from Russia.

A parallel funding call is published in Russia by the Ministry of Science and Higher Education of the Russian Federation.

Funding for research and development under this joint German-Russian initiative will advance progress of the bioeconomy in the two participating countries. The bioeconomy was established as a thematic priority of bilateral research cooperation in the ten-year "German-Russian Roadmap for Cooperation in Education, Science, Research and Innovation" agreed between the BMBF and the Russian Research Ministry in 2018.

Under this module, project proposals can be submitted in the areas of bioindustry and agrobiotechnology:

- Development of value-added products or supply services with new or improved functionalities from renewable resources applying modern biotechnological approaches
- Strategies for reusing intermediate and end-products of degradation of bio-based products thus enabling a circular use of raw materials
- Development of new and improved biocatalysts (enzymes, cells) and microbial strains for innovative and more efficient bioprocesses
- Sustainable production of biomass for food and industrial use by novel smart agricultural production systems and breeding approaches

The following subject areas are explicitly excluded from funding:

- Projects with a focus on energy uses of biomass;
- Biopharmaceuticals, biomedicine and other related "red" biotechnologies;
- Projects focussing on environmental research topics such as water and air pollution control, soil remediation, etc.

The Russian applicants will submit their parts of a corresponding project outline with identical content in Russia. The selection procedure under Module 2 will be implemented jointly with the Russian partners.