

Invitation to a

JOINT CALL FOR PROPOSALS

**TOPIC: BIOBASED ECONOMY PROJECTS
FOCUSING ON ENERGY USE/WITH ENERGY
COMPONENT**

**10th Joint Call for Research and Development Proposals
of the ERA-NET Bioenergy**

Deadline for submission of pre-proposals: 22.01.2016, 13:00CET

1 Summary

The ERA-NET Bioenergy aims to fund innovative, transnational research, development and innovation (R&D&I) projects in the field of bioenergy.

Funding will be offered to excellent proposals that provide clear added value through cooperation of partners in at least two (preferably more) participating countries. Novelty beyond the state of the art in the bioenergy value chain addressed must be significant, and evidence of exploitation potential must be provided (e.g. by way of tangible industry commitment).

Public funding is available for this 10th call from funding bodies in Austria, the Netherlands, Poland, Sweden and Switzerland.

Key call dates

Call opens	12 October 2015
Deadline for submitting pre-proposals	22 January 2016, 13:00 CET
Deadline for submitting <u>full proposals</u>	30 May 2016, 13:00 CET
Expert panel meeting	13/14 September 2016
Expected project start	Late 2016 / early 2017
<p>This call is published on the ERA-NET Bioenergy web page and on the web pages of the participating funding agencies.</p> <p>See: www.eranetbioenergy.net</p>	

PLEASE NOTE!

*ERA-NET Bioenergy is focussed on bioenergy research at the **Technology readiness levels 2-5**.*

*In case you have an idea for a public-private project on bioenergy technologies at **demonstration scale (TRL 6-8)** please check the funding possibilities of the coming BESTF3 call at www.eranetbestf.net!*

2 Background

Bioenergy – defined as the generation of heat and/or electricity and/or transport fuels from biomass¹ – will be a significant provider of renewable energy in the future.

However, biomass is used for food, feed and materials as well as for energy, and these different end uses currently compete with or are perceived to compete with each other in many cases. With the planned shift from a fossil-based to a bio-based economy, such tendencies are expected to become even more prevalent.

It is therefore vital to find the best systems for certain conditions, i.e. specific combinations of available resources and products in demand.

The ERA-NET Bioenergy is a network of national funding organisations which support bioenergy projects. It was funded by the European Commission under FP6 between October 2004 and December 2010, but is now self-sustained (membership model). Further ministries or R&D funding agencies from other countries are always welcome to join the network or individual calls.

ERA-NET Bioenergy has so far funded nine calls: on small-scale combustion, on cleaning of product gas from biomass gasification, on short rotation coppice, on clean biomass combustion, on sustainable forest management and optimised use of ligno-cellulosic resources (together with WoodWisdom-Net, an ERA-Net on wood material science), on biogas and energy crops, on small-scale heat and power production from solid biomass, on integrated biorefinery concepts and on innovative bioenergy solutions.

The purpose of the ERA-NET is to provide additional value compared to national funding by supporting transnational research and knowledge exchange, and to thus increase the use of biomass for energy.

The approach of ERA-NET Bioenergy differs from e.g. the Framework Programmes in that our focus is on medium-sized consortia (typically, three to eight partners) with excellent individual merits as well as complementarity.

Position of call within the European landscape

The promotion of *innovative bioenergy solutions* is vital to realise the bio-based economy. As Europe strives to decrease its dependency on fossil-based raw materials, using bio-based ones instead will put greater pressure on the available resource base.

It is therefore not only important to maintain and increase the amount of renewable resources that can be harvested on a sustainable basis, but also to use the available biomass as efficiently as possible. The ERA-NET Bioenergy call will thus support national as well as EU strategies. Care is also taken to align it with on-going initiatives in related areas, such as JPI FACCE, neighbouring ERA-Nets, the JTI Bio-Based Industries and the Collaborative Working Group (CWG) on integrated biorefineries, who will be kept informed for mutual benefit and mutual support.

¹All organic material, *excluding* such that has been transformed to fossils.

3 Scope of the joint call

3.1 Aim of the call

The aim of the call is to fund innovative, collaborative pan-European, R&D&I projects on novel bioenergy concepts. The public funding for this call comes from the participating national R&D funding programmes and differs from country to country – see the National Annexes (Annex I).

Proposals may focus on different bioenergy value chains or energy uses (heating/cooling, electricity, transport biofuels), but in all cases, the question of economic, environmental and social sustainability of the concept/value chain must be addressed in the proposal.

All proposals must be put in context of the national political/legal framework, available raw materials, and techno-economic as well as socio-economic market situation in the countries in which work will be carried out.

Ideally, concepts enable full or improved usage of the raw material and/or put the focus on residues, by-products and other forms of raw material that minimise competition with food production.

Concepts that integrate the production of a range of different products/intermediates (chemicals, compound materials, bioenergy incl. transport biofuels) may *also* be addressed, but projects relevant to this call are expected to *focus* on added value of *energetic uses* (bioenergy incl. transport biofuels).

Projects must have at least 2 partners from two different countries with funding agencies participating in the call (although it may be easier for applicants to show the added European value of their proposed work if more than two countries are involved), with the project's outputs and benefits shared between all parties. Partners from other countries are welcome to join consortia on their own resources. Projects should contribute to increasing the economic competitiveness and/or environmental compatibility of bioenergy concepts through measures as described in the following chapter.

3.2 Expected projects

Projects funded in the frame of ERA-NET Bioenergy will increase:

- economic feasibility
- resource efficiency
- environmental compatibility (e.g. protection/increase of biodiversity, protection of water or soil, significant CO₂ savings)
- positive social impacts, e.g. by generating additional income, business opportunities or jobs for/in the sector
- public acceptance of bioenergy pathways and concepts.

Funding is available only for innovative, industrially relevant research and development projects.

This means that a significant step beyond the state of the art is an absolute pre-requisite.

Proposals must derive added value from the international cooperation, in comparison to national projects. This should be evident in the layout and execution of the work packages.

Please note that some **specific topics** may be **out of scope** of a certain **national programme!** You should ***always check with all relevant funding organisations before*** handing in a proposal.

4 Guide for applicants

4.1 General

- Please note that individual national funding organisations may be limited in the kind of project they could support.
- These restrictions, as well as other important national regulations, can be found in Annex I at the end of this document.
- In case of any further questions, please contact your national funding organisation prior to submitting a pre-proposal

4.2 Consortia

Proposals are invited from transnational consortia which include large companies, SMEs, research groups/organisations and/or stakeholder associations, depending on national funding rules.

Proposals must include partners from **at least two of the countries** involved in the call. One of the project partners should apply for public funding.

The work plan must show real cooperation between the partners. Project outputs are expected to provide benefits to all partner countries. Consortia also need to be balanced between countries both in terms of number of partners and distribution of budget; such that all project partners contribute to and benefit from an equitable and balanced cooperation. To address this, the contribution of one country to the collaborative project must not exceed 70% of the total budget. The number of partners per consortium is not limited, but the manageability of the consortium must be demonstrated.

Partners from countries which are not participating in the call are also encouraged to join a consortium (as additional partners; the minimum number of two partners from ERA-NET Bioenergy countries participating in the 10th call remains). These so-called “third country” partners must finance their activities from other sources, as the ERA-Net Bioenergy members will not provide such funds, and projects must ensure that the exploitation of results focuses on the ERA-NET Bioenergy partner countries.

As projects are expected to be market-oriented, **it is strongly recommended that one or more industrial partners** participate in the consortium. If industry participation is not feasible due to the scope/outlay of the envisaged work, the reasons for this decision should be explained in the proposal. Note that detailed exploitation and dissemination plans are an important feature of every proposal.

4.3 Funding arrangements

Research will be **funded from national sources**, i.e. each participating national or regional funding agency funds their respective national research partners in a particular project consortium. The total funding as well as the funding available in each country is limited. For details please contact your national funding agency. Additional co-financing from stakeholders (own contributions) may be expected following national and European rules for R&D funding.

Funding is always subject to national rules (see Annex I).

If a proposal is selected for funding, the partners are required to sign a consortium agreement which specifies Intellectual Property Rights (IPR) and other issues regarding responsibilities within the project and exploitation of results.

The consortium agreement must be signed before the first payment can be made.

4.4 Project duration

The maximum project duration will be three (3) years. Projects are expected to start in late 2016/early 2017, and the end date should be the same for all partners in a consortium.

4.5 Deadline for submission

Pre-proposals must be received via e-mail by the central **Call Secretariat at the Netherlands Enterprise Agency (RvO, Mr. Matté Brijder, matte.brijder@rvo.nl)** by **January 22nd 2016, 13:00 CET** at the latest.

In case you do not get a confirmation that your proposal was received, you should immediately contact Mr. Brijder!

It is the responsibility of each applicant to ensure their documents are submitted on time.

In case of late submission (after 13:00 CET) the proposal will **not be taken into account** in order to ensure the fairness towards other applicants

4.6 Submission of proposals

Pre-proposal:

- The pre-proposal consists of one common document following the structure of the template available from 12 October 2015 on www.ernetbioenergy.net.

Full proposal:

- In the beginning of April 2016, only consortia whose pre-proposals pass the first evaluation stage will be invited to submit full proposals.
- These full proposals should follow the structure of the template which will be available on the ERA-NET Bioenergy website by January 2015.
- A non-confidential abstract of the description of work is required (for later publication in case of success only).
- The deadline for submitting full proposals is 30th May 2016, 13:00 CET.
- Some national funding bodies *may* also require specific national documents (application forms or similar) from “their” applicants at this stage. Such national documents are NOT submitted centrally, but directly to the relevant ministry or agency. Please consult the relevant National Annexes at the end of this document for further details.
- All proposals should be written using ARIAL, font size 10 minimum.

4.7 Evaluation of proposals

Proposals will be evaluated against the following criteria:

- Contribution to the goals of the call
- Technical and scientific quality; innovation
- Quality of the consortium
- Project Management
- Outputs and exploitation

The full criteria for **full proposals** can be found under Annex II. Evaluation of full proposals will be performed by an international evaluation jury, selected by the funding organisations involved in the call. The international evaluation jury will provide recommendations for funding. The final decisions will be taken by the ERA-NET Bioenergy partners.

The evaluation of full proposals will take place between June and August 2016, and the panel's funding recommendations will be communicated by the end of September 2016. Projects are expected to start in late 2016/early 2017.

Beyond these instructions above, your participating national funding agency's guidelines should be followed.

4.8 Project monitoring and expected deliverables

In addition to the standard requirements of your funding agency, ERA-NET Bioenergy requires the following:

1. Participation in and presentation at two joint ERA-NET status seminars (mid-term and final seminar).
2. Depending on the project duration, *at least* one common interim report following the template which will be provided in due time. This interim report will be available to the funding organisations involved, but will not be made public. Be aware that national regulations will apply to interim reports. Care will be taken by all funding bodies to minimise the bureaucratic workload for the consortia.
3. A common publishable and public Final Report (written in English), describing the main activities and outcomes of the work including an exploitation plan stating how the results of the project will be implemented. Confidential results will be presented in a separate confidential report. National guidelines have to be followed as well. Detailed requirements for this report will be distributed to successful applicants once the projects have started.
4. An abstract of the main results of the project, to be published in a “joint call brochure” after the end of the projects.

5 Participating countries / National contact points

Austria

Austrian Ministry for Transport, Innovation and Technology (BMVIT)

René Albert

+43 1 71162 652921

rene.albert@bmvit.gv.at

Funding Organisation : The Climate and Energy Fund <https://www.klimafonds.gv.at/>

The Netherlands

NEA Netherlands Enterprise Agency (RVO)

Matté Brijder

+ 31 88 602 7954

matte.brijder@rvo.nl

<http://english.rvo.nl/>

Poland

National Centre for Research and Development

Karolina Janczykowska

+48 515 061 554

karolina.janczykowska@ncbr.gov.pl

<http://www.ncbr.gov.pl>

Sweden

Swedish Energy Agency; Research and Innovation Department

Anette Rothberg

+46 (0)16 544 23 16

anette.rothberg@energimyndigheten.se

www.swedishenergyagency.se

Switzerland

Swiss Federal Office of Energy; Energy research section

Sandra Hermle

+41 58 465 89 22

sandra.hermle@bfe.admin.ch

<http://www.bfe.admin.ch/forschung/biomasse>

Annex I: Specific National Rules

Austria

Funding Organisation	Austrian Climate and Energy Fund in cooperation with the Federal Ministry for Transport, Innovation and Technology (bmvit)
Agency	Austrian Research Promotion Agency (FFG), Thematic Programmes
Programme name	Energy Research Programme 2015
Contact	<ul style="list-style-type: none"> • Maria Bürgermeister-Mähr (for administrative questions) maria.buergermeister.maehr@ffg.at, +43 5 77 55 5040 • René Albert (Contact person, Federal Ministry for Transport, Innovation and Technology (bmvit)) rene.albert@bmvit.gv.at, +43 1 71162 652921
Type of research funded	The Agency potentially supports the following types of RTD, namely: <ul style="list-style-type: none"> • Industrial / applied research • Experimental development
Separate national application required	Yes
Funding conditions	see www.ffg.at/ausschreibungen/ERA-NET-Bioenergy/Call_10 * - „National Guideline of the transnational 10th Call ERA-NET Bioenergy Austrian participation within the Energy Research Program 2015” * - „Technical Guidelines for Cooperative R&D Projects transnational “ * * available only in German
Funding commitment	€ 1 Mio. (indicative)
Further specifications	The amount of funding requested from Austrian project partners per project is between € 100,000 and € 1 Mio. The minimum value shall be seen as a guiding value. The ceiling of € 1 Mio. is fixed and must not be exceeded. FFG conducts a formal review of all nationally relevant project proposals including the examination of the application formalities, especially the fulfilment of prerequisites specific to the offered funding instruments; reporting on relevant projects previously funded by FFG programmes; examining the financial aspects of the proposal; financial audit of applicants. The Executive Board of the Climate and Energy Fund takes the funding decision.

The Netherlands

Requirements for Participants

Partners: Netherlands Enterprise Agency (RVO) and the Ministry of Economic Affairs

The funding conditions and amounts of subsidies will be as high as in the programmes 'Hernieuwbare Energie' and 'BBE Innovatie', see <http://www.rvo.nl/subsidies-regelingen/subsidieregelingen-tse>

The Ministry of Economic Affairs will decide on the 2016 budget and conditions for these programmes in December 2015 the latest.

An application for support for Dutch partners should be sent to RVO parallel to the full proposal of the consortium.

Consortia focusing on the production of electricity, heat and/or SNG ('green gas') will be requested to hand in an application for the programme 'Hernieuwbare Energie'. Consortia focusing on the production of biofuels will be requested to apply for funding from the programme 'BBE innovatieprojecten'.

Funding commitment: to be decided in December 2015. The maximum funding commitment equals the maximum funding of the Dutch subsidy programmes mentioned.

Contact person: Matté Brijder
Netherlands Enterprise Agency (RVO)
+ 31 88 602 7954
matte.brijder@rvo.nl
<http://english.rvo.nl/>

Poland

Funding Organisation	National Centre for Research and Development (Narodowe Centrum Badań i Rozwoju) www.ncbr.gov.pl
National Contact Point	Karolina Janczykowska Section of Management of Applied Research Programmes INFOTECH e-mail: karolina.janczykowska@ncbr.gov.pl phone: +48 22 39 07 293 mobile: +48 515 061 554
Eligible institutions	Following entities are eligible to apply: <ul style="list-style-type: none"> • Research Organisations; • Micro, Small, Medium and Large Enterprises <p>Organization must be registered in Poland.</p>
Additional eligibility criteria	All proposals must be aligned with National regulations, inter alia: <ul style="list-style-type: none"> • The Act of 30 April 2010 on the Principles of Financing Science, published in Journal of Laws No. 96 item 615, 2010; • The Act of 30 April 2010 on the National Centre for Research and Development, published in Journal of Laws No. 96 item 616, 2010; • The Regulation of the Minister of Science and Higher Education of 28 October 2010 on criteria and rules on granting state aid and “de minimis” aid by the National Centre for Research and Development, published in Journal of Laws No. 215 item 1411, 2010. <p>The project consortium with Polish participation must contain at least one Polish enterprise to be eligible for funding.</p>
Eligible costs	The eligible costs shall be the following: <ol style="list-style-type: none"> 1. personnel costs (researchers, technicians and other supporting staff to the extent employed on the research project); 2. costs of instruments and equipment, technical knowledge and patents to the extent and for the period used for the research project; if such instruments and equipment are not used for their full life for the research project, only the depreciation costs corresponding to the life of the research project, as calculated on the basis of good accounting practice, shall be considered eligible; 3. costs for buildings and land, to the extent and for the duration used for the research project; with regard to buildings, only the depreciation costs corresponding to the life of the research project, as calculated on the basis of good accounting practice shall be considered eligible; for land, costs of commercial transfer or actually incurred capital costs shall be eligible; 4. cost of contractual research, costs of consultancy and equivalent services used exclusively for the research activity; the subcontracting can be obtained from consortium partner only in justified case, this need will be verified by a national experts panel; 5. other operating costs including costs of materials, supplies and similar products incurred directly as a result of the research activity; 6. additional overheads incurred indirectly as a result of the research project; that costs cannot account for more than 25% of eligible project costs; That costs (6) are counted as a multiplication by percentage given above (called x%) and the rest of direct costs, excluding subcontracting (4); It means $6=(1+2+3+5)*x\%$.

a) National funding rates

Funding quota of Polish participants can be up to 100% for universities or research organisations. In the case of enterprises, funding quota will be decided on a case-by-case basis depending on the size of the company, type of research/development, risk associated with the research activities and commercial perspective of exploitation. Organization must be registered in Poland.

	Large Enterprises	Medium Enterprises	Micro/Small Enterprises	Research organizations
Industrial/Applied Research	Up to 50+15 (max 65 %)	Up to 50+10+15 (max 75 %)	Up to 50+20+15 (max 80 %)	Up to 100 %
Experimental development	Up to 25+15 (max 40 %)	Up to 25+10+15 (max 50 %)	Up to 25+20+15 (max 60 %)	Up to 100 %

Other types of activities (e.g. coordination, dissemination, management) are not eligible for funding as separate tasks. They can be included in a appropriate cost category within research tasks.

Sweden

Funding body: Swedish Energy Agency

Submission of proposals

Swedish partners participating in a project recommended for funding by ERA-NET Bioenergy at the second submission stage will be invited by the Swedish Energy Agency to send the application via the online application form E-kanalen². A Swedish project leader should be appointed of the Swedish part of the project. The Swedish application must describe the project as a whole in brief and clarify the Swedish participation regarding the objectives and implementation (clarify who does what). The description should be kept short and not exceed the specified number of pages in E-kanalen. Only the costs of the Swedish participants should be included. The full proposal of the consortium should be appended.

Consultation with Swedish Energy Agency is not mandatory

It is solely the responsibility of the applicant to develop the project idea in the short outline to a full proposal.

Swedish Energy Agency will evaluate the short outline and contribute to the recommendation that will be given from the Secretariat. The recommendation may include modifications of the project idea.

Funding rules

Decisions on funding research, development and innovation in the energy area are taken according to the ordinance SFS 2008:761 in the Swedish Code of Statutes. Funding quota of Swedish participants can be up to 100%, 50% and 25% of eligible costs for each participant in a project defined as basic research, applied research and development, respectively. The quota can be increased in case of e.g. small and medium enterprises see the ordinance for details. The decision cannot be appealed.

Granted projects have to meet conditions such as submitting interim and end reports as well as accounts. In addition, the projects should contribute to evaluations, conferences and other common programme activities.

Confidentiality

Sweden has a constitutionally founded right of public access to official records. All documents sent to, sent from or drawn up at Swedish Energy Agency are therefore official. In this call, the documents concerned are e.g. applications, minutes from expert evaluation meeting, project contracts. Secrecy can only be claimed when legally supported. If a project leader wishes to keep an application confidential due to for example IPR reasons, Swedish Energy Agency should be informed. In case e.g. the application is asked for, Swedish Energy Agency decides whether (parts of) the document can be marked as confidential. The decision can be appealed to the Administrative Court of Appeal and subsequently to the Supreme Administrative Court.

Funding commitment: 12.000.000 kronor (SEK) (ca. 1.250.000 EUR)

Contact person:

Anette Rothberg

Swedish Energy Agency, Research and Innovation Department

Tel. +46 (0)16 544 23 16

anette.rothberg@energimyndigheten.se

² <http://energimyndigheten.se/E-Tjanster/E-kanalen/>

Switzerland

The Swiss Federal Office of Energy (SFOE) is able to offer funding for energy-related research as long as the projects correspond to the priorities of the research programme Biomass and Wood Energy (please visit http://www.bfe.admin.ch/forschungbiomasse/index.html?lang=en&dossier_id=02902). A specific goal for this call for proposals is to promote Swiss researchers' international collaboration within the ERA-NET Bioenergy framework.

The main focus is on applied research, development-related research and pilot applications of new technologies for the energetic use of biomass (not chemicals or compounds). All biomass for energy related value chains (biochemical, thermochemical) are eligible for funding. Strategy development, conceptual work and “stand-alone LCAs” for the application of new technologies will not be funded. Universities, research institutes and private companies are eligible for funding. Collaboration between research institutes and private companies (industry) is highly appreciated.

Proposals can be funded to a maximum of 70%. Third party contributions (a minimum of 30% of the total national project costs) are indispensable to insure the implementation of the results. This contribution can be provided in cash or in the form of performed work. The amount of third party contribution will be taken in consideration within the evaluation procedure.

The funded Swiss research partner may use and commercialize the project results. In parallel the project results will be made publicly available by SFOE. SFOE disclaims the IPRs. The mandatory can utilize the project results.

The total budget for Swiss projects is CHF 300'000 over a maximum of 36 months.

Application forms and further information are available at <http://www.bfe.admin.ch/forschung/biomasse/>

Direct communication with the national funding body SFOE is strictly mandatory directly after submission of the outline in order to develop a full proposal.

Funding commitment: 300'000 CHF (ca 275.000€)

Contact person:

Swiss Federal Office of Energy

Energy research section

Sandra Hermle

e-mail: sandra.hermle@bfe.admin.ch

Tel: +41 58 465 89 22

<http://www.bfe.admin.ch/forschung/biomasse>

Annex II: Evaluation criteria for full proposals

Indicator 1

	Contribution to the Call	Unsatisfactory	Poor	Below average	Good	Very good
1.1	Contribution to the goals of the call How well does the proposal align with the call topic?	0	4	8	16	20
Maximum						20

Indicator 2

	Technical/scientific quality	Unsatisfactory	Poor	Below average	Good	Very good
2.1	Novelty Does the proposed project produce a step forward in knowledge and technology?	0	3	6	12	15
2.2	Quality of the proposed R&D Are the issues to be addressed significant and relevant within this field? Will the proposal as written be able to address these issues? Are worthwhile challenges identified in the proposal?	0	5	10	20	25
2.3	Quality of the approach - methodology Clarity, adequacy and consistency of the approach. Is there enough technical detail in the methodology? Is the approach clear, adequate to the problem and consistent?	0	4	8	16	20
Maximum						60

Indicator 3

	Qualification of Consortium	Unsatisfactory	Poor	Below average	Good	Very good
3.1	Competence concerning the topics addressed Does the consortium have the necessary competence and experience to achieve the results proposed?	0	3	6	12	15
3.2	Co-operation and complementarity of partners Are the partners clearly complementary in their roles and do they fit together? Is the balance between the partners appropriate? Is there added value in the co-operation including why specifically the international co-operation improves the quality of the results? Is there a true co-operation of all partners (e.g. not simply separate work packages)? Will external stakeholders be engaged?	0	3	6	12	15
3.3	Availability of technical and human resources Are appropriate technical and human resources available within the consortium or if not, have they been requested within the proposal?	0	3	6	12	15
Maximum						45

Indicator 4

	Project management	Unsatisfactory	Poor	Below average	Good	Very good
4.1	Quality of project management Are suitable plans and structures in place to ensure the project will operate effectively over its run time? Is there sufficient detail in the project plan (milestones, work packages,...)? Are arrangements in place to ensure effective & efficient communication between the partners?	0	4	8	16	20

Maximum	20
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Indicator 5

	Outputs and exploitation	Unsatis- factory	Poor	Below average	Good	Very good
5.1	Potential outputs and expected results Are any cost reductions and efficiency improvements likely to result from the proposed work? What is the economic perspective of the results?	0	6	12	24	30
5.2	Plans for implementation and exploitation Are realistic and appropriate plans in place for effective implementation and subsequent exploitation of the outputs?	0	5	10	20	25
Maximum						55