

Invitation to a

JOINT CALL FOR PROPOSALS

FINAL VERSION

Topic:

Bioenergy demonstrations of the European
Industrial Bioenergy Initiative:

Bioenergy Sustaining the Future 2

Deadline for submission of outlines: 10.02.2014

Deadline for submission of full proposals: 12.05.2014

This document is an invitation to take part in a joint call for innovative and collaborative bioenergy demonstrator projects.

BESTF2 is a network of national and regional ministries and funding organisations that wish to invest in industry-led bioenergy projects to meet their strategic aims as well those of the European Commission. The partners supporting this call are Germany, Spain, Sweden, Switzerland, The Netherlands, Denmark and the United Kingdom.

The principal objective of this joint call is to fund public-private projects that de-risk bioenergy technologies at demonstration¹ scale and encourage further private exploitation.

Key dates

Call opens	11th December 2013
Deadline for submitting outline proposal	10th February 2014
Consultation period (mandatory!)	17th February to 12th May 2014
Deadline for submitting <u>full proposals</u>	12th May 2014
Expected project start	Late 2014/beginning of 2015
<p>This call is published on the BESTF2 web page and on the web pages of the participating national programmes. See: www.ernetbestf.net/two</p>	

Please note that the consultation stage is mandatory, i.e. each consortium member will contact their national funding agency during this phase, prior to submission of a full proposal!!

No full proposal will be accepted from partners who have not completed this procedure.

¹ Definition of “demonstration” as decided in the EIBI Team on 5 Nov 2013: “Demonstration plants are considered the last non-economic step to demonstrate the overall performance and technical reliability of a complete conversion concept in a value chain so that the first-of-a-kind, commercial-scale industrial unit can be designed with sufficient confidence for the investment”.

1. Background

The European Union (EU) is committed to combatting climate change and to increasing security of its energy supply. Bioenergy plays a key role for both targets, and already accounts for more than two thirds of total renewable energy in the EU. Bioenergy is a form of renewable energy that, if produced sustainably, saves greenhouse gas emissions. As bioenergy feedstocks are storable, bioenergy can be produced constantly and is a reliable source of energy. Biomass is amply available in most parts of Europe and can be either in solid, liquid or gaseous form and can be used to produce electricity, direct heating, or transport fuels.

The European Council in 2007 adopted ambitious energy and climate change objectives for 2020 – to reduce greenhouse gas emissions by 20%, rising to 30% if the conditions are right, to increase the share of renewable energy to 20%, and to make a 20% improvement in energy efficiency. The European Parliament has continuously supported these goals.

The European Industrial Bioenergy Initiative (EIBI) is one of the industrial initiatives launched under the SET Plan and foresees that; *“Bioenergy will play a key role in the EU long-term energy strategy for all applications and especially the transport sector, contributing up to 14% of the EU energy mix and up to 10% of energy demand in transport in 2020”²*.

The EIBI aims to contribute to the commercial availability of advanced bioenergy at large scale by 2020 and will thus support demonstration or flagship plants for innovative bioenergy value chains which are not yet commercially available (thus excluding existing biofuels and heat & power technologies). These plants should be deployable at large scale and demonstrate production costs that are competitive with fossil fuels at the prevailing economic and regulatory market conditions. EIBI further aims to contribute to advanced biofuels (i.e. sustainable biofuels with a broader material base and/or better end product properties than biofuels currently on the market) covering up to 4% of EU transportation energy needs by 2020.

BESTF2 is an ERA-NET Plus mechanism that accesses European Community support as a result of national research programmes pooling financial resources to address a topic of particular European value. BESTF2 addresses the shortfall of innovative bioenergy pilot and demonstration plants, resulting from a lack of finance as well as a number of technical hurdles.

2. Aims

BESTF2 aims to provide financial support to pre-commercial³ bioenergy projects that demonstrate collaboration, innovation and industry focus. It will encourage collaboration across the EU, by bringing partners together to deliver demonstration projects, and encourage commercialisation by ensuring strong industry leadership.

² Boosting the contribution of bioenergy to the EU climate and energy ambitions. European Industrial Bioenergy Initiative Implementation Plan, 05.11.2010, <http://www.biofuelstp.eu/eibi.html> (accessed 15.08.2012).

³ “Pre-commercial” meaning:

1. The third level of development, prior to a full scale commercial plant typically following laboratory and pilot scale.
2. A scaled down version of a full commercial plant, although the actual necessary scale cannot be generally defined as it will differ depending on the technology.
3. Batch approach is allowed, in particular if it leads to a new type of reactor or development of a crucial step in a continual process.
4. Proposals must have a clear vision of what is required at demonstration to enable scale-up to a full plant. They should only demonstrate those elements that are required to be proven at demonstration level.
5. The demonstration should be as small as possible to but enable the practical scale-up to commercial plant.
6. This could be achieved by defining the first commercial plant and demonstrating the size and other aspects that require demonstration and scale up.
7. Direct scale up from Lab scale or pilot plant to the commercial plant can be included depending on what needs to be demonstrated to provide commercial guaranties for a first commercial plant.

3. Scope

Projects must address one or more of these seven value chains:

- i. Synthetic liquid fuels and/or hydrocarbons and blending components via gasification
- ii. Bio-methane and other synthetic gaseous fuels from biomass via gasification
- iii. High-efficiency heat and power generation via gasification of biomass
- iv. Bioenergy carriers via other thermochemical processes (e.g. pyrolysis, torrefaction)
- v. Ethanol and higher alcohols from lignocellulosic feedstock via fermentation
- vi. Renewable hydrocarbons through biological and/or chemical synthesis from biomass containing carbohydrates
- vii. Bioenergy carriers from CO₂ and sunlight through microorganism-based production and upgrading into fuels and valuable bio-products

Projects must address the last steps prior to commercial operation, i.e. primarily:

- A full-scale, similar system demonstrated in a relevant environment or
- An actual system completed and qualified through test and demonstration activities⁴.

Projects can include:

- New demonstrations of innovative bioenergy conversion technologies, including analysis and evaluation of results, plus strategies and proposals for optimisation.
- Innovative technological modifications of existing demonstration plants that subsequently enable operations which differ significantly from past operations of that plant. This can include engineering tasks in planning and design as well as technical installations and their subsequent operation. All of the above are eligible for funding *insofar* as they are reasonable and caused by the project.

However, it is recognised that the technological development in some of the seven value chains is less advanced. Therefore, proposals addressing these value chains may include scientific, technological, commercial research and economic studies which contribute directly to the goals and objectives of BESTF2, and which are **firmly integrated** into the abovementioned demonstration project. Such accompanying research must aim to determine the KPIs of the project and evaluate activities in the context of the SET-Plan⁵. This may include, for example, scientific or technological assessments of the novel technology or system, life cycle analysis, techno-economic modelling, and conceptual planning and design of a new industrial-scale plant.

The energy outputs of projects can be electricity heat, or transport fuels. Projects may take a multi-product or biorefinery approach, but the **major focus must be energy production** (see eligibility below).

Due to the requirement for projects to be at a pre-commercial stage, it would be expected that the majority of funding will be used for operational costs. Projects that require significant capital funding will need a strong business case with evidence that they will complete construction within the BESTF2 timeframe.

Proposals must highlight the added value derived from European cooperation, in comparison to national projects.

BESTF2 will not support:

⁴ i.e. Technology Readiness Levels 6 to 8, see definition under Annex C.

⁵ See http://setis.ec.europa.eu/implementation/eii/eii-key-performance-indicators/KPIs_EIBI/view

- Failed or ailing projects, i.e. projects that have already failed to meet existing objectives or that have proved unsatisfactory in operation;
- On-going work, or work that will be on-going before the call is fully implemented;
- Costs of official permissions/ or licenses for operation including the preparation for approval procedures.

Please make sure to contact your national/regional funding organisation *prior* to submitting a proposal!

4. BESTF2 Eligibility

National eligibility criteria are separate and distinct to the BESTF2 criteria given below. A summary of national eligibility requirements is provided under Annex A, but it is essential that applicants discuss national eligibility prior to submitting an application.

The BESTF2 joint call will support projects that:

1. Are within the scope of BESTF2 (see scope) and the respective national / regional programme;
2. **Are industry-led** with **at least 51% of person-months and costs** incurred by the **industrial partners**, not taking into account non-technical sub-contracts;
3. Address at least one of the following seven value chains provided above (see scope);
4. Demonstrate value for money;
5. Have appropriate sources (either internal or external) of **matched funding**. Allocation of funding will only be possible upon the **verification** of these third party funds.

In addition to the above eligibility criteria, projects will only be support where:

- There is at least one innovative step not demonstrated previously;
- At least 70% of the bio-products produced by the plant shall be bioenergy, calculated on the basis of energy content of the products sold;
- Applied research will be moved into demonstration within the timeframe of the project;
- True cooperation exists between the consortium members, with risks and benefits shared;
- The industry coordinator of each project demonstrates relevant experience and interest in the project.

It is expected that economic and technical parameters as well as project results will be published in accordance with national rules and regulations, which may vary from case to case (see Annex A). Although the BESTF2 project duration is limited to 31.08.2018, continuation of operations is highly welcome in order to further prove the achieved results.

5. Guidance for applicants

5.1 Call procedure

The following section outlines the BESTF2 call procedure.

Full proposals must not exceed 60 pages. All proposals should be written in English and using the Times New Roman font with a minimum acceptable font size of 10.

1. Outline proposals

Following the launch of the BESTF2 call, applicants have until **10th February 2014** to submit outline applications to the central Electronic Submission System.

The template for outline proposals can be found here: <http://eragnetbestf.net/two/>.

Only applicants that submit an outline proposal will be invited to the consultation stage. It is therefore essential that outline proposals are submitted on time.

2. Consultation period

Following submission of an outline proposal, ***all project partners*** are required to consult the respective national funding organisations regarding the outline of their work. Consultation may be via e-mail (or other electronic systems), phone, and/or physical meeting(s) as required. The aim of the consultation phase is to ensure proposals fulfil all national eligibility criteria, especially regarding the goals and contents of the respective funding programmes. Advice concerning European State Aid Regulations or avoiding overlap with similar past or on-going actions can also be discussed.

Consultations involving partners and funding bodies of several or all countries in a proposal are also possible, if deemed necessary, but are not required.

The consultation period will be complete by 12st May 2014⁶, by which stage all relevant national funding agencies will have confirmed the eligibility (or otherwise) of a project and its partners.

Please note that project partners who do not consult their national funding organisations, or who do not successfully complete this phase are not eligible for inclusion in a full proposal.

3. Full proposals

The *consultation period is designed to end with an eligible full proposal being uploaded to the electronic submission system*. Please note that an invitation to submit a full application provides no commitment to funding.

Applicants should use the template provided under <http://eragnetbestf.net/two/> for full proposals.

The deadline for submission of full proposals is 12th May 2014.

Please note that some national funding agencies may require a full application prior to this date. It is therefore essential that applicants confirm national requirements at an early stage.

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

Please note that some national funding agencies may require additional documents specific to national regulations. These are NOT submitted to the central website, but directly to the relevant

⁶ The deadline for the partners to contact their funding agency can depend on national requirements

ministry or agency. Please consult the relevant National Annexes at the end of this document for further details.

Full proposals will be assessed at a European transnational level by an independent panel of experts using the assessment criteria detailed under Annex B.

The expert panel will rank the proposals and provide recommendations for funding based on a quality threshold. Final funding decisions will be taken by the BESTF2 funding agencies.

The final decision on successful projects is expected to be made by November 2014 and will be communicated as soon as possible after that, with projects expected to begin from January 2015.

In order to ensure a broad coverage of value chains, we reserve the right to apply a 'portfolio' approach, subject to applications meeting the required quality threshold. This means that, if competition in a particular value chain (number of high-quality proposals submitted) is particularly high, a proposal judged to be of similar technical quality, but covering a different value chain may ultimately rank higher.

5.2 Consortia

Proposals are invited from transnational consortia involving large companies, SMEs and/or research organisations depending on national funding conditions.

The minimum requirements for consortia are:

- Industry partners take the leading role in the consortium. This means that all projects must be led by an industry partner. A consortium may include non-industrial partners (universities etc.), but at least 51% of person-months as well as at least 51% of costs must be incurred by the industrial partners, not taking into account non-technical sub-contracts.
- At least two partners from **at least two different countries** are involved. As transnational cooperation is a key criterion, consortia are encouraged to go beyond these minimum requirements.
- True cooperation between the consortium partners, with each partner contributing to and benefiting from the results of the project.
- Exploitation of R&D, including IPR, is focussed in the BESTF2 partner countries.

Partners from countries which are not members of BESTF2 are also encouraged to join a consortium as additional partners. These partners must finance their activities from other sources, as the BESTF2 resources will *not* fund partners outside of the participating member states.

The number of partners per consortium is not limited, but the manageability of the consortium must be demonstrated.

Project partners are required to sign a consortium agreement in order to agree on Intellectual Property Rights (IPR) and other relevant issues dealing with responsibilities within the project and exploitation of results. The consortium agreement:

- must be provided (not necessarily signed yet) together with the full proposal and
- must be signed by all partners before the first payment can be made.

5.3 Funding arrangements

The total funding available for BESTF2 projects is up to € 24.3m, made up of national budgets and an EU contribution of €7m. National partners will receive funding from their respective national funding

agencies that will incorporate the EC contribution. Projects are therefore subject to national/regional and EU funding rules.

Projects must demonstrate the source of co-funding within their proposals, with evidence of the commitment from the stakeholder.

Since demonstration units, by definition, aim to produce marketable products, any such products must be put on the market. Revenues generated during the project run-time will be deducted from the public funding initially granted (please refer to your national/regional agency for detailed procedures).

5.4 Project duration

Projects are expected to start in late 2014 / beginning of 2015 and must be **completed (including all reporting) by 31.08.2018**.

5.5 Project monitoring and expected deliverables

In addition to standard national requirements, BESTF2 projects are expected to deliver the following:

1. Participation in and presentation at two BESTF2 status seminars (mid-term and final seminar).
2. An annual, 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.
3. A common publishable and public final report, describing the 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. 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.

A high degree of transparency is essential to the expected type of project. Consequently, experiences made during operation, as well as the operation process itself, must be meticulously documented, analysed and evaluated. Potential for optimisation must be identified and the appropriate strategies be formulated.

Annex A National/regional requirements

Denmark

The EUDP - Energy Development and Demonstration Programme - will be the Danish national funding body to fund BESTF2 projects. EUDP funding is awarded with an expectation that the projects funded will lead to market implementation of the new products and technologies developed by the project and an important objective is to ensure involvement of private investors in projects. It is important to concentrate on functionally delineated projects, with innovative and patentable technological content that is deemed technically practicable and which meets a market demand and has a well-defined customer target.

The total minimum budget for EUDP funding in a BESTF2 context will be 3 M € on the condition that projects are qualified to receive support. EUDP will fund projects according to the EU state aid rules which allows up to 25-40 % support to demonstration projects for large companies and up to 35-60 % for SME's. Universities and research organisations can apply for higher rates - the actual rate will be decided case by case. The received outline for BESTF2 support has to be followed by a full application in the usual EUDP format to be evaluated (national evaluation) by the EUDP Board prior to the evaluation (transnational) by the BESTF2. Only projects that the EUDP Board finds to be qualified for support will proceed to the transnational evaluation stage.

The usual EUDP funding rules and conditions in general will apply also for funding in a BESTF2 context. Further information: <http://www.ens.dk/da-DK/NyTeknologi/om-eudp/Sider/Forside.aspx>.

The Netherlands

The total budget for the Netherlands under this Programme amounts to about € 3 million. The Dutch funding bodies may choose not to allocate the full budget.

Requirements for Participants

Partners: NL Agency and the Ministry of Economic Affairs

- At least two companies must take part in the project;
- At least one Dutch research or higher educational institute (* incl. universities and "HBO") must take part in the project (no contract research) and must have a meaningful contribution to the project;
- Companies must accept dissemination and exploitation of results;
- Grants will be provided as aid for industrial research or experimental development, or as environmental investment aid;
- Funding for Dutch participants is limited to 40% of the eligible project costs in the case of industrial research, 30% in the case of experimental development and 40% in the case of environmental investment aid;
- In the case of small and medium enterprises an additional 10% funding quota may be awarded;
- Public research organisations can apply for higher rates. The actual rate will be decided on a case by case basis;
- Eligible project costs in the case of environmental investment aid are defined as the additional project costs compared to the costs of implementing an equivalent, conventional technology or solution;
- For eligible project costs we also refer to the Framework decision on subsidies of the Ministry of Economic Affairs;
- In general, the subsidy amounts to a maximum of €1.000.000 per project;
- At least 40% of the total project costs must be funded by companies;

- All projects must contribute to the goals of the Top Sector Energy (reduction of CO₂, increase in sustainable energy production at the lowest possible cost). Those projects which contribute to solving societal challenges will be given priority;
- Admission criteria include:
 - Contribution to the use and production of sustainable energy in the Netherlands;
 - Contribution to the Dutch Economy;
 - Level of innovation, compared to the international state of the art;
 - Quality of the project plan and the participating partners;
- For Dutch participants most of the regulations in the Framework decision on subsidies of the Ministry of Economic Affairs will apply, with the exception of Article 6.

National Call Coordinator:

Rebecca.vanleeuwen@agentschapnl.nl

Germany

Funding quota of German participants can be up to 100 % for universities or research organisations. In the case of companies, 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, commercial perspective of exploitation, typically up to a range of max. 50 %.

In case of small and medium enterprises, an additional bonus of 10-20 % funding quota can be awarded.

The maximum project duration for projects with German partners will be 36 months.

There is no obligation regarding the number of companies to be involved from Germany, but company participation is recommended for dissemination and exploitation of results.

The relevant national R&D programme for German project partners is the BMELV's "Nachwachsende Rohstoffe" ("Renewable Resources") managed by FNR. Please note that only operational costs are eligible for funding in case of new bioenergy demonstration plants (i.e. additional staff and material cost), while depreciation of the plant itself is not. The costs of official permissions/ or licenses for operation are not eligible for funding, either.

There is no need for additional national application forms without request by the funding organisations. The central transnational application is sufficient.

Only the German project partners of positively evaluated projects will, at a later stage, be invited by FNR to submit national application forms within one month after notification.

The usual FNR funding rules and forms will apply: AZA or AZK using the electronic proposal assistant "easy" (see <http://www.kp.dlr.de/profi/easy/formular.html> for details).

The total budget available for both call topics in Germany is 2 Mio €.

FNR's contact person during the application phase is: Dr.-Ing. Thorsten Gottschau, +49-3843-6930-110, t.gottschau@fnr.de.

Spain

The total budget for Spain under this programme amounts to about € 1.5 million, on the condition that projects are qualified to receive support.

The entities eligible for CDTI's funding are companies established and carrying out R&D activities in Spain. Universities and Research Institutions can participate as subcontractors of Spanish companies.

- Eligible expenditure in R&D projects: Personnel, Instrument and Material, Contractual research, Technical knowledge and Patents consulting and equivalent services intended exclusively for the research activity. Other operating expenses derived from the research project.
- Length of the project: The length of these projects may be from 12 to 36 months.

- Project budget: The minimum fundable budget is around €175,000
- Specific financial conditions could be required according to CDTI funding rules. For more information on the applicable funding rules please see: www.cdti.es

The support provided by CDTI is composed of a standard financing package which includes loans and grants to the promoters calculated in function of the project and promoter's characteristics. This financing can be converted into an effective equivalent grant using European standard calculation method established in the State Aid Regulation, and it is established project by project.

For applications with Spanish partners, the Spanish applicants have to submit a formal application through CDTI proposals submission system (<http://www.cdti.es/>) with the information related with the Spanish participation for the National Eligibility check. This application must be received not later than February 28, 2014.

Sweden

Funding of Swedish participants underlies the Swedish Energy Agency.

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 Statues. 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, commercial perspective of exploitation, typically up to a range of max. 50 %. State aid rules allows up to 25 % when it is close to market and regarded as experimental development. In case of small and medium enterprises, an additional bonus of 10-20 % funding quota can be awarded. Universities and research organisations can apply for higher rates - the actual rate will be decided case by case.

Projects in this call are supposed to demonstrate applications close to the market. Awarded projects are expected to lead to market implementation of the new products and technologies developed by the project and an important objective is to ensure involvement of private investors in projects. It is important to concentrate on functionally delineated projects, with innovative technological content that is deemed technically practicable and which meets a market demand and has a well-defined customer target.

There is no obligation regarding the number of companies to be involved from Sweden, but company participation is obligated and must accept dissemination and exploitation of results.

For applications with Swedish partners it is necessary also to send in full proposal for the Swedish part of the project to Swedish Energy Agency (in Swedish), preferably the online application form E-kanalen⁷ or a Swedish Energy Agency application form is necessary. The common proposal for the consortium should be appended. 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.

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.

⁷ <http://energimyndigheten.se/E-Tjanster/E-kanalen/>

More criteria might be added depending on the topic.

National contact point and call coordinator at the Swedish Energy Agency:

Alice Kempe.

Programme manager at the Energy Technology Department

alice.kempe@swedishenergyagency.se

Phone number: +46 16 544 2092

Switzerland

Funding of Switzerland participants underlies the SFOE (Swiss Federal Office of Energy) pilot- and demonstration programme application rules (see: www.bfe.admin.ch/cleantech).

Funding of Swiss participants is limited to 40% (in exceptional cases 60%) of the eligible project costs. Eligible projects costs are defined as the additional project costs which cannot be amortized over the expected lifetime of the developed installation or solution. Additional projects costs are the additional project costs compared to the costs of implementing an equivalent, conventional technology or solution.

Eligible funding recipients are private and public sector entities (companies, research institutes, municipalities, or communities consisting of several of the former).

Admission criteria include

- 1) Project topic contributes to increasing energy efficiency or use of renewable energy;
- 2) High application and success potential;
- 3) Project topic in line with the Swiss energy policy;
- 4) Gathered results are publically accessible and disseminated among interested circles.

More criteria might be added depending on the topic / adjudication mode.

Expected deliverables of pilot- and demonstration programme projects include:

1. Proof of concept of facilities, systems and proposed solutions
2. Intermediate and final reports of individual projects providing details on technical feasibility, operational achievements and project economics (particularly related to innovative energy technologies and installations) and
3. Demonstrated knowledge transfer to target community providing details on individual measures that have been implemented

For submission of proposals please use the SFOE form

(<http://www.bfe.admin.ch/cleantech/05765/index.html?lang=de>) as well as the dedicated BESTF2 transnational application form (to be updated).

Contact persons for questions during the application phase are: yasmine.calisesi@bfe.admin.ch (administrative issues); sandra.hermle@bfe.admin.ch (technical issues)

United Kingdom

The total UK budget for eligible projects under this programme is up to £5M. The UK funding bodies may choose not to allocate the full budget.

Requirements for Industrial Participants

Partners: Technology Strategy Board (TSB) and the Department of Energy and Climate Change (DECC)

- All UK participants must be separate legal entities;
- Companies must have been trading for at least 12 months before the closing date for applications (i.e. 28th March 2013). UK companies must be VAT registered and registered at Companies House;

- Companies have to provide evidence they have the resources and finances to undertake the project;
- Companies with fewer than 5 Full Time staff cannot lead a project, unless agreed prior to application with the Technology Strategy Board;
- There are specific accountancy rules for Sole Traders & Micro Companies [companies with less than 10 employees];
- Claims under the UK grant must be for project costs incurred in the UK, including subcontracting. UK subcontracting is capped at a maximum of 20% of the UK budget;
- The management of the project must be undertaken by a project participant and cannot be subcontracted;
- Industry partners are eligible for up to 60% funding of project costs. It is necessary that applicants demonstrate evidence of private funding to cover the balance of the eligible project costs. Such funding may come from a company's own resources or external private sector investors, but may not include funding attributable to any public authority or EU institution;
- Grants will be provided under Article 31 of the EU State Aid General Block Exemption Regulation ("the Block Exemption"⁸);
- The terms of the Grant Offer Letter will be designed to reflect the requirements of the Block Exemption, and companies will need to be aware that a failure to comply with those terms may result in DECC, TSB, the European Commission or a court requiring the grant to be repaid together with interest.
- For eligible project costs contact Graham.mobbs@tsb.gov.uk

National Call Secretariat:

Ewa Bloch

- National Contact Point, Technology Strategy Board – TSB
- Postal address: North Star House, North Star Avenue, Swindon, SN2 1UH, UK
- Phone: +44 (0) 777 137 2409; email: ewa.bloch@tsb.gov.uk

Requirements for Academic Participants**Partner: Biotechnology and Biological Sciences Research Council (BBSRC)**

Funding is available for biological research under Value Chains 5, 6 and 7 only and where the feedstock is not derived from material that would be used for the human food chain or animal feed. Agricultural residues such as straw would be acceptable as a feedstock under this call (see <http://www.bbsrc.ac.uk/web/FILES/Policies/bioenergy-position-statement.pdf>). Subject to all conditions of eligibility and peer review being fully met, the budget earmarked by BBSRC for collaborative proposals is up to £1M.

If applicants are in any doubt about the above exclusions, please contact the National Call Secretariat for further clarification (see below). Proposals should be for a maximum of three years duration.

Eligibility

UK Universities, Independent Research Organisations and Institutes that receive strategic funding from BBSRC are eligible to apply. Full details of eligibility conditions can be found on the BBSRC website: <http://www.bbsrc.ac.uk/funding/apply/eligibility-overview.aspx>

Specific national regulations and guidelines

⁸ http://ec.europa.eu/competition/state_aid/legislation/block.html

Research studentships (PhD) will not be supported under this initiative.

Funding will be awarded on the basis of full economic cost as described on the BBSRC website. UK applicants who successfully complete the consultation period and submit a full proposal will also be required to complete a BBSRC proforma to ensure their proposal complies with full economic cost requirements. Applicants are encouraged to clearly justify all the requested resources. Further details and a copy of the proforma, will be provided during the national consultation period, when full proposals are invited.

BBSRC has a very restricted budget available for equipment and other capital items. Applicants requesting items of equipment costing over £10k in their full proposals will be required to follow the guidelines as set out on the BBSRC website.

<http://www.bbsrc.ac.uk/funding/apply/research-equipment-guidance.aspx>

National Call Secretariat

Dr Colin Miles (BBSRC)

Funding organisation: Biotechnology and Biological Sciences Research Council - BBSRC

Postal address: Polaris House, North Star Avenue, Swindon, Wiltshire SN2 1UH, UK

Phone: +44 1793 413359; e-mail: colin.miles@bbsrc.ac.uk

Annex B Evaluation criteria

Some of those points are guided by the EIBI Key Performance Indicators (KPIs). In the frame of BESTF2, and the projects we are looking at funding, the KPIs represent indicative parameters, and the expert panel will assess whether a proposal will facilitate a significant development towards achieving the KPIs. The KPIs, their background and rationale are described here: http://setis.ec.europa.eu/implementation/eii/eii-key-performance-indicators/KPIs_EIBI/view

FP7 general criteria	BESTF2 specific criteria	Score/weighting factor
<p>Scientific and/or technological excellence - Quality of the transnational projects:</p> <ul style="list-style-type: none"> - sound concept, and quality of objectives - progress beyond the state-of-the-art - quality and effectiveness of the scientific and technological methodology and associated work plan <p>(Threshold 48/80)</p>	<p>1) Fit to call:</p> <ul style="list-style-type: none"> - Proposal complete and complies with specifications of BESTF2 and other relevant programmes - Min. 70% of the bio-products produced are bioenergy, based on energy content of products - Incentive effect of the BESTF2 Grant 	<p>Score 0-10; weight</p> <p>0= unsatisfactory 2= poor 5= average 8= good 10= very good</p>
	<p>2) Innovation:</p> <ul style="list-style-type: none"> - Addresses innovative technologies and processes or novel integration of known technologies and processes to be established at the appropriate scale 	<p>Score 0-10; weight</p> <p>0= unsatisfactory 2= poor 5= average 8= good 10= very good</p>
	<p>3) Quality of the technological concept:</p> <ul style="list-style-type: none"> - techno-economic and environmental analysis of the value chain 	<p>Score 0-10; weight</p>

	<ul style="list-style-type: none"> - energy efficiency to primary end product - feedstock availability and logistics - quality specification of production, logistics and end user requirements 	<p>0= unsatisfactory 2= poor 5= average 8= good 10= very good</p>
	<p>4) Sustainability:</p> <ul style="list-style-type: none"> - Renewable Energy Directive and Greenhouse Gas Emission targets/regulations met, based on LCA and RED calculation 	<p>Score 0-10; weight</p> <p>0= unsatisfactory 2= poor 5= average 8= good 10= very good</p>
<p>Quality and efficiency of the implementation and the management:</p> <ul style="list-style-type: none"> - Appropriateness of the management structure and procedures - Quality and relevant experience of the individual participants - Quality of the consortium as a whole (incl. complementarity and balance) - Appropriate allocation and justification of the resources to be committed (budget, staff, equipment) 	<p>5) Project set-up and implementation planning:</p> <ul style="list-style-type: none"> - Quality of the consortium <ul style="list-style-type: none"> a. adequate competence, management experience and know-how, b. adequate industrial and scientific competence, c. financial strength, d. operational capacity to carry out the project - realistic timeline of the project and deployment - work plan with clear tasks, deliverables and milestones, methodology including LCA analysis, efforts - progress monitoring /control 	<p>Score 0-10; weight</p> <p>0= unsatisfactory 2= poor 5= average 8= good 10= very good</p>
	<p>6) Risk analysis:</p> <ul style="list-style-type: none"> - identification and assessment - management, incl. Quality Assurance Plan 	<p>Score 0-10; weight</p> <p>0= unsatisfactory 2= poor 5= average 8= good 10= very good</p>

(Threshold 42/70)		
<p>Potential impact:</p> <ul style="list-style-type: none"> - Contribution, at the European and/or international level, to the expected impacts listed in the BESTF2 call - Appropriateness of measures for the dissemination and /or exploitation of trans-national projects results, and management of intellectual property <p>(Threshold 60/100)</p>	<p>7) EU dimension and industrial leadership:</p> <ul style="list-style-type: none"> - Consortium requirements met - Can the project contribute to achieving the relevant KPI? 	<p>Score 0-10; weight</p> <p>0= unsatisfactory 2= poor 5= average 8= good 10= very good</p>
	<p>8) Implementation potential:</p> <ul style="list-style-type: none"> - Operation of demo plant planned for 2018? - Learning curve for further development? 	<p>Score 0-10; weight</p> <p>0= unsatisfactory 2= poor 5= average 8= good 10= very good</p>
	<p>9) Future market deployment of the concept:</p> <ul style="list-style-type: none"> - Realistic feedstock and market potential for industrial scale described and volume potential of corresponding bioenergy market outlined - Economic performance of the commercial concept 	<p>Score 0-10; weight</p> <p>0= unsatisfactory 2= poor 5= average 8= good 10= very good</p>
	<p>10) Strong business case:</p> <ul style="list-style-type: none"> - Clear identification of target groups and added value for consumers - Adequate analysis of competition - Adequate analysis of market potential - Adequate marketing plan 	<p>Score 0-10; weight</p> <p>0= unsatisfactory 2= poor</p>

	<ul style="list-style-type: none"> - Adequate cost-benefit ratio of the concept 	<p>5= average 8= good 10= very good</p>
	<p>11) Impact, dissemination and exploitation plan and knowledge sharing:</p> <ul style="list-style-type: none"> - Contribution to call goals and to European knowledge, incl. dissemination plan - Benefits to EU public - Detailed exploitation plan incl. IPR issues 	<p>Score 0-10; weight</p> <p>0= unsatisfactory 2= poor 5= average 8= good 10= very good</p>
	<p>12) Societal issues:</p> <ul style="list-style-type: none"> - Employment - Health and safety - Training - Rural development - Public acceptance 	<p>Score 0-10; weight</p> <p>0= unsatisfactory 2= poor 5= average 8= good 10= very good</p>

Annex C – Technology Readiness Levels

Where a topic description refers to a TRL, the following definitions apply:

TRL 1 – basic principles observed

TRL 2 – technology concept formulated

TRL 3 – experimental proof of concept

TRL 4 – technology validated in lab

TRL 5 – technology validated in relevant environment

TRL 6 – technology demonstrated in relevant environment

TRL 7 – system prototype demonstration in operational environment

TRL 8 – system complete and qualified

TRL 9 – actual system proven in operational environment