

Invitation to a Joint Call on Short Rotation Coppice

2nd January 2008

Aim of the call

The purpose of this call is to generate joint European industrially relevant research and development activities within ERA-NET BIOENERGY. This call builds on the experience that was gained in the previous two Joint Calls (on small-scale combustion and on cleaning of product gas from biomass gasifiers respectively).

This call provides new opportunities for industries and researchers to take part in multilateral cooperation in the field of Short Rotation Coppice (SRC) and to enhance the quality of the conducted research. Projects are expected to provide knowledge through research in order to develop solutions which are economically competitive, reliable and environmentally friendly.

Given the limited budget and also the content of the existing FP7 call from the European Commission, the topic open for research proposals focuses on three areas: genetic improvement of cultivars/species for SRC, improving the value chain of SRC and environmental aspects of SRC. The joint call will open on 2nd January 2008 and will close on 1st April 2008.

This call will be published on the ERA-NET BIOENERGY web page and on the web pages of the national programmes. See: www.eranetbioenergy.net

Research on Short Rotation Coppice

Background

This is a joint call by some of the ERA-NET BIOENERGY partners. ERA-NET-BIOENERGY is a network of national R&D programmes focusing on bioenergy. The network includes funding organisations from Austria, Denmark, Finland, France, Germany, the Netherlands, Sweden and the United Kingdom. The ERA-NET BIOENERGY project has a duration of 4 years and ends December 2008. The funding agencies organising this call are aiming to investigate best practises for arrangement of joint calls and subsequent evaluation of the resulting projects. We are also aiming to provide a platform for information exchange related to short rotation coppice in different countries through workshops and other dissemination activities.

The European Commission actively supports the use of biomass for energy as part of the EU aim to increase the use of renewable energy and to avoid an increase of CO₂ concentration in the atmosphere. The European Union and its Member States recently decided to set a target of 20% CO₂-reduction and the implementation of 20% Renewable Energy by the year 2020. Wood has traditionally played a major role in supplying biomass for energy, and demand for this raw material is expected to rise with new policies promoting renewables while prices for fossil fuels are increasing.

By-products from conventional forestry have been the traditional bioenergy feedstock. However, the increasing demand raises concern about future energy feedstock availability and its effects on conventional forest industry. SRC (defined as short rotation coppice of woody species such as willow or poplar) is regarded as a promising option to mitigate these future problems. Although the species used for SRC may have a long commercial and scientific history their application in the SRC concept is relatively new and requires further development.

Joint call topic

Due to budgetary restrictions and participating countries' different priorities, the content of this joint call is restricted to three focus areas. Note that not all countries participate in all parts of the call, i.e. organisations can only apply for projects in a specific topic if there is a financing national body.

1.) Genetic improvement of Salix and other woody SRC species

The genetic properties of commercial plant material are one of the most important factors influencing the economic as well as environmental performance of SRC. Traits like growth pattern, resistance to and tolerance of diseases and frost, water and nutrient efficiency, etc are all key parameters for the competitiveness of the production system. Compared to e.g. agricultural crops and conventional poplar plantations, coppice systems of e.g. willow and poplar are relatively new and have a short history of genetic improvement. At this early phase of commercialisation, the global R&D effort in genetics and breeding is limited and involves few actors. Enhancing cooperation and coordination between national programmes is thus of vital importance.

The objective of this call is to support breeding technologies and programmes by collaboration between leading stakeholders involved in breeding of e.g. willow and in related disciplines. Collaboration should make use of advanced breeding technologies aiming at substantially improving the time and cost efficiency in commercial breeding of e.g. willow or poplar. Projects should focus on traits regarded as commercially critical on future main SRC markets. New technologies and tools should be validated and tested in breeding programmes. Projects should also have a strong link to national programmes and contain a component of systematic information exchange.

Countries participating in this sub-call are Germany, Sweden and the UK. (Partners from other countries may be involved, please see "General instructions for proposers" on p. 4 for details.)

2.) Improving the value chain of SRC

A cost efficient production of woody biomass for energy purposes requires both efficient technical solutions, e.g. harvesters, biomass storage and transport systems, as well as efficient business models. The harvested volume of SRC for energy is still

very limited and further R&D is expected to result in major cost reductions on the supply side.

This sub-call covers R&D in all parts of the value chain, technical as well as non-technical. Examples are:

Harvesting technologies:

Harvesting represents a major cost factor in the production of SRC biomass. Furthermore, local conditions differ considerably between countries and there is limited large-scale experience of the different harvesting technologies. Further improvement of harvest technologies is expected to decrease costs and increase productivity.

Transport and logistics:

Transport and logistics are critical parameters for most bioenergy systems. Infrastructure and logistic systems will depend on local conditions but are expected to have a considerable potential for improvement through development and comparison of different options.

Storage and drying technologies:

Storage of raw wood from SRC is made difficult by the seasonally high demands for storage space. Innovative solutions would have to look at this problem as well as consider volume losses over time and moulding.

Drying: existing technologies (e.g. for wood chips) are not suitable for round wood. New technologies would have to consider the economy of such operations, aim to minimise losses of heating value and fit into an overall Value Chain Concept (i.e. taking into account further processing/transport).

New business concepts:

Business concepts differ considerably in profitability, and significant increases in efficiency are expected to result from the development and implementation of new, innovative business models. Examples of such concepts might involve a feedstock buyer (e.g. a utility) acquiring land to become a feedstock producer as well, or an SRC concept integrated in multifunctional production systems to improve the profitability of the whole chain.

Projects may address one or several of the above topics. The sub-call may fund partners from Germany and France. (Partners from other countries may be involved, please see “General instructions for proposers” on p. 4 for details.) All systems, technologies, etc., covered by the projects should be of such scale that a successful project is likely to have an impact on commercial conditions.

3.) Environmental aspects of SRC

The objective of this sub-call is to develop new information to facilitate political decision-making on SRC and environmental areas. Projects may deal with the role of SRC in landscaping, the impact of SRC on biodiversity – with regard to flora as well as fauna –, on soil productivity, water resources or soil contamination of heavy

metals. The call is open for projects developing ways of mitigating known negative environmental impacts as well as for those examining aspects which have not been studied so far but represent potential hindrances for the wider adoption of SRC. Since closed life cycles must be a core aim for any raw material if it is to be considered a sustainable solution, the question of how to dispose of product wastes (such as ashes from combustion) must also be taken into consideration. Life cycle analyses of SRC, on the other hand, are NOT a content of this call, as past studies do already exist.

Project partners from France, Germany, Sweden and the UK may be funded within this sub-call. (Partners from other countries may be involved, please see “General instructions for proposers” below for details.)

General instructions for proposers

Consortium

Proposals are invited from companies and/or research organisations depending on national funding conditions. *Be aware that national criteria apply!* Proposals must include partners from at least two of the countries involved in the call. Project outputs are expected to provide benefits to all partner countries.

Partners from countries which are not members of ERA-Net Bioenergy are also encouraged to join a consortium (as additional members, the minimum number of partners from ERA-Net Bioenergy countries stays the same).

These so-called “associate partners” must seek funding for their activities individually, as the ERA-Net Bioenergy members will **not** provide for it.

The 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 signed before the first payment can be made.

Table: Overview of countries and possible applicants. At least one industry should participate in the consortium

Country	Who can apply
UK/ BBSRC	Research Institutions (standard BBSRC eligibility rules apply)
All others	Industries as well as Research Institutes

Funding arrangements

Research will be funded from national sources and will be subject to their national funding rules. Each participating funding agency has made separate arrangements for funding the national participants. The amount of public funding available for individual projects depends on the relevant national rules. Additional co-financing from stakeholders is expected following national and European rules for R&D funding. The total funding budget is limited. For details please contact your national agency.

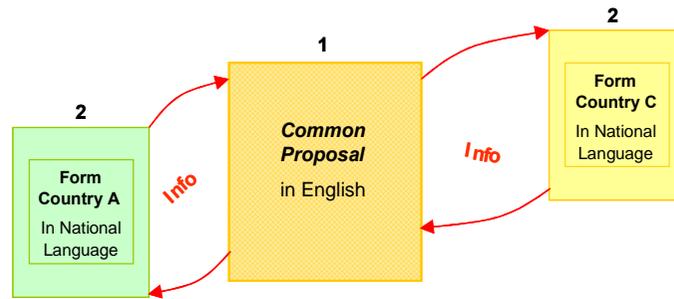
Project duration

Projects are expected to start between July 2008 and September 2008 and must be completed by 31st August 2011.

Deadline for Submission

Proposals must be *received* (i.e. the relevant date is that of the agency's receipt stamp, not the post mark) by your participating national funding agency by **1st April 2008** at the latest. It is the responsibility of each applicant to ensure their documents are submitted on time.

Structure of Submission

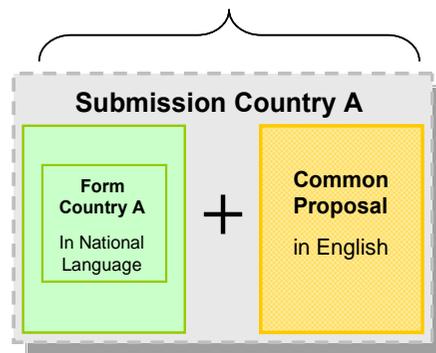


The documentation you have to submit consists of two parts.

1. A common proposal written in English which contains all relevant information about the joint project. This will be evaluated as one entity by an international jury and will form the basis for the funding decision.

2. A national proposal, i.e. a proposal in the national language which is based on the common proposal, but may include further information/application forms according to the requirements of the national funding organisation. The national proposal will not be seen by the international jury.

e.g. Funding Agency A



These documents should be submitted by each project partner to their participating national funding agency (see list of national contacts below).

Structure of Common Proposal¹

The Common Proposal document should be structured as follows:

1. Project Title (max. 150 characters).
2. Duration in months (Considering that project work must be completed by 31st August 2011).
3. Name of coordinator of the project.
4. Applicant details (institution, name of contact person, contact information).
5. Financial summary table – totals only, (in €) for overall costs, costs per partner, required national funding per partner.
6. Executive summary (300 words).
7. Detailed description of consortium (role of each partner organisation and stakeholders involved).
8. Detailed project description (objectives, materials and methods, state of the art and innovative contribution of the project, project management incl. work packages and milestones, together with details of assigned resources/man-hours and associated budgets (max. 15 pages).
9. Project outcomes (implementation and exploitation plan, implementation should involve all participating countries) (max. 3 pages).
10. Background and competences of participating organisations and individuals (max. 1 page per partner organisation plus ½ page per key person involved).
11. "Affirmation sheet", filled in and signed. The form can be downloaded on the ERA-Net Bioenergy website and the national agency's sites.

The proposal should be written using the Times New Roman font with a minimum acceptable font size of 10.

Proposal evaluation

The proposals will be evaluated 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 made by the ERA-NET BIOENERGY partners.

The evaluation of proposals will take place during May 2008 and the funding decisions will be communicated by the end of June 2008.

The evaluation criteria are:

- Fit to call
- Technological and scientific quality of R&D (including why specifically the international cooperation improves the quality of the results)
- Implementation and exploitation of results (an appropriate implementation will be crucial for evaluation, e.g. describing industry involvement if type/topic of project calls for it)
- Resources available for the project, including quality of project management and coordination
- Promoting cooperation within the ERA-Net Bioenergy framework.

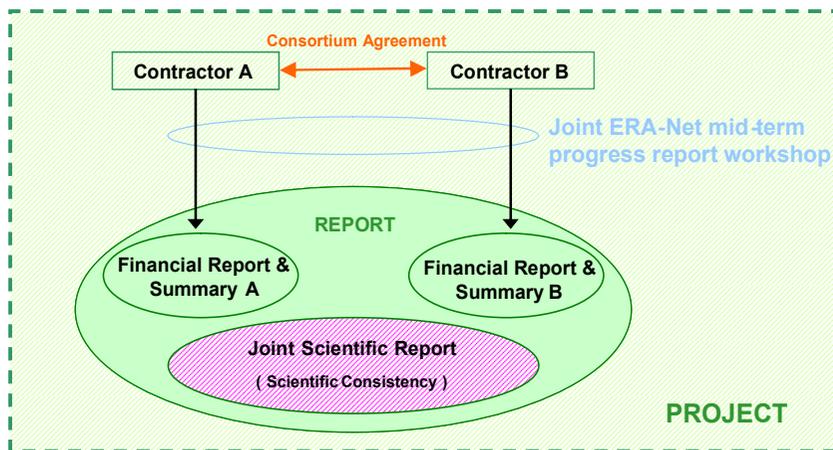
¹ The common proposal must be equal for every applicant within any one consortium. The final version of the common proposal must be approved by the coordinator of the project before submission.

Beyond the above instructions, your participating national funding agency's guidelines should be followed. If you intend to participate in this call, please contact your national funding organisation.

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 a joint ERA-NET workshop.
2. A common publishable Final Report (written in English), describing the activities and outcomes of the work including an exploitation plan stating how the results of the project will be implemented. The report should consist of a public summary and the rest will be treated as confidential. National guidelines have to be followed as well. Detailed requirements for this report will be distributed to successful applicants once the projects have started.



Participating countries / National contact points

France

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