



*Boosting Eco-Innovation through
cooperation in research*

www.eco-innovaera.eu

2nd Call for transnational proposals for Eco-Innovation

2013 from January, 8th to July, 15th

Call secretariat

ecoinnovaera-call2@tubitak.gov.tr

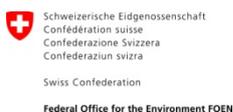
Ms. Pinar Aker +90 312 4685300-3414

Online Submission

www.eco-innovaera.eu/submissioncall2

Further information: www.eco-innovaera.eu/jointcall2

The second call is supported by 12 funding partners with a total budget of up to €10m



agency for Innovation
by Science and Technology



Technology Strategy Board
Driving Innovation



ECO-INNOVERA is funded by the EC (GA No. 266538)



Summary

Up to 10 m EUR is available under this competition to support eco Innovation in Europe. The second call of the ECO-INNOVERA Network aims to boost Green Growth and industrial driven R&D by addressing market-oriented projects in the fields of:

Topic 1: System innovation

Topic 2: Sustainable processes and products

Topic 3: Recycling; re-use of waste and water

This competition opens on 8th January 2013. Proposals should be collaborative and driven by business as a contribution to a Green Economy in Europe.

- The maximum duration of projects under this competition is 36 months.
- Proposals under consideration should clearly describe how the research will lead to sustainable benefits to European business, preferably on a timescale of within 3-5 years after the project start.
- Projects should be international with a minimum number of 3 partners, drawn from a minimum of 3 countries.
- Where one of the partners is an SME, the minimum number of partners is 2, drawn from 2 countries.

Not all funding organisations participate in each theme area and funding eligibility criteria may differ for some countries/regions. Applicants should check that the funding organisation for their country/region has confirmed its participation in the appropriate topic for their proposal; also which type of organisation may be funded at what level of support and the maximum budget available. A summary of these points is provided in Appendix but applicants are obliged to check with their national/regional contact point for this call.

Background

In 2012, the world population reached an estimated 7 billion human beings. This number is expected to exceed 9 billion by 2050 followed by increasing intensity in the exploitation and use of resources of all kinds. The RIO+20 United Nations Conference on Sustainable Development has proposed the vision of a Green Economy for sustainable growth. Major market opportunities arise for new products, services and systems which sustain prosperity and high standards of living for Europeans while reducing their impact on the environment.

The fundamental role of Innovation in a Green Economy is recognised by European policy through the Eco Innovation Action Plan (Eco AP), which refers to eco-innovation as “any form of innovation resulting in or aiming at significant and demonstrable progress towards the goal of sustainable development, through reducing impacts on the environment, enhancing resilience to environmental pressures, or achieving a more efficient and responsible use of natural resources”.

A study on the competitiveness of the European eco-industry emphasized the need to promote eco-innovation, the role of R&D and the need to innovate strategically to provide for the needs of the future. In its first joint competition ECO-INNOVERA called for multidisciplinary research projects which included social, environmental, market and technological issues; in this second call the Eco Innovera Network is looking for collaborative R&D projects which address similar issues but additionally have a strong focus on future markets and societal needs and have a strong capability to deliver to the market.

- Proposals therefore should be driven by entrepreneurial initiative. The participation of SMEs - as project leaders or consortium partners- is strongly encouraged in this competition. Funded research activities may differ between funding organizations. However, all proposals should be clearly focused on applied research or proofs of concepts.
- All proposals should state clearly what added benefits they hope to provide to the ECO-INNOVERA network. This could include policy recommendations to support the broader take-up of eco-innovation, e.g. innovative proliferation and dissemination, contributions to standards and norms, provision of case studies for dissemination to the broader network.
- Intellectual property: no right to IP is asserted by the funding partners for this call. Proposals should describe the principles by which intellectual property will be managed by the consortium in a manner that recognises the contribution of all partners and supports the eventual commercialisation of the project results.

- Proposals should describe and quantify the environmental impact of the project, which of course will also depend on the success of the innovation. Therefore, proposals should also describe and quantify the potential impact on the market in detail. They should deliver an ex-ante environmental assessment of the innovation and describe convincing metrics for evaluating the improvement of the environmental performance of the innovation (process, product or service) compared to the actual market situation. Metrics should take a holistic point of view and thus life cycle thinking into account and should also discuss possible draw backs of the innovation. A whole range of environmental metrics is possible, also depending on the topic of the project. A specific work package on the follow up of these metrics in order to steer the project into the most environmentally beneficial direction could be an option and is recommended.

Scope

“Eco-Innovation” as a broad concept offers a comprehensive view covering different topics and industrial branches. Only topics which are already addressed in other ERA-Nets will be excluded. Therefore, following **general exclusions** to scope apply:

- Transport applications
- Energy generation (both from conventional and renewable sources) and energy efficiency

Proposals in these themes will not be considered for funding under any topic of this competition. In addition, applicants should comply with **specific exclusions** to the scope within the 3 competition topics.

Topic 1: System Innovation

Europe is following the goal of sustainable development. Achieving eco-innovation at high scale and with transformational impact is a key element of the European Sustainability Strategy. Proving the transformational potential of eco-innovation requires a systemic approach and differs from conventional approaches to innovation. As “System Innovation” it may lead to quite different models of production and consumption. The drivers for system innovation broadly comprise:

1. Major societal challenges such as
 - a. the resource constraints/impact of resource extraction due to markedly higher global levels of consumption owing to population growth and demographic change,

- b. global change and more specifically environmental changes (pollution, climate change impacts) affecting e.g. in new technology paths, social innovation, legislation, services and business models
2. Convergence of cross-cutting technological platforms (for example NBIC – nanotechnology, biotechnology, information technology and cognitive science)
3. Social innovation, operating at an individual or community level

These drivers present major business opportunities for novel, high-impact and potentially transformative approaches to supplying goods and services (e.g. by generating value through mass-customisation to meet individual consumer's needs or new product-service systems). At the same time, entrepreneurs responding to these challenges may face barriers such as substantive investments in existing infrastructure making the system resistant to change. Thus they will probably need new investments and contractual frameworks which encourage a broader response to emerging market needs than the current incumbents.

ECO-INNOVERA will assess the transformational impact and system innovation character of proposals in Topic 1 by considering the following questions:

- Does the proposed innovation represent radical or transformational change in the manner and/or environmental impact in which a product or service is delivered? Proposals should be able to present clear and convincing arguments for a significant improvement in environmental performance over the product/service life cycle.
- To what extent does the proposed innovation imply a contribution to the Green Economy paradigm, e.g. the development of new supply chains or substantial reconfiguration of (multiple) existing supply chains?
- Are multiple innovations required along the supply chain (or even across different supply chains) and to what extent are these mixtures of technological, societal or institutional in nature?
- Does the proposed innovation require interdisciplinary and socio-economic research contributions?
- Does the proposed innovation require or support the deployment of new business models and/or radical disruption of the supply chain/business model by new entrants?

Participating funding organisations for topic 1:

BAFU, BMBF, BMLFUW, DG06, IWT, FORMAS, MATIMOP-ISERD, NCBiR, TSB, TEKES, TUBITAK

Topic 2: Sustainable processes and products

The re-design of industrial products and processes requires a full understanding of the innovation and research needs across the life cycle to ensure the greatest environmental benefits can be obtained. In this topic we are looking for proposals which will mobilise the value chain (both industry partners and the knowledge base) to deliver projects which are high impact both in terms of the market opportunity they address, and the environmental/societal benefits they will enable.

Suggestions for this topic include:

- Technologies which allow a significant improvement in resource efficiency that can be applied across different industrial and consumer applications
- Process modifications which significantly reduce pollution at source
- Substitution of high impact materials and/or the use of renewable resources in existing industrial processes and products
- Integrated waste management approaches including technologies that support the greater use of industrial symbiosis within a specified industrial system.

The following **specific exclusion** to the scope applies for topic 2:

- Single end of pipe treatments such as wastewater treatment, remediation of soils and polluted streams
- Forest based value chains

List of participating funding organisations for topic 2:

BAFU, BMLFUW, DG06, IWT, FORMAS, IHOBE, MATIMOP-ISERD, NCBiR, TSB, TEKES, TUBITAK

Topic 3: Recycling; re-use of waste and water

By 2020 EU households will be required to re-use or recycle at least 50% of their waste, and the construction sector will be required to meet a recycling rate of 70%. While there has been significant progress in the recycling and re-use of waste across Europe, there are significant technological, behavioural and infrastructure challenges that remain to be addressed if these targets are to be met.

This topic seeks new products, processes and services which will enable significant reductions in the impact of waste and recycling processes and new products which make better use of waste and secondary materials. Suggestions for this topic include:

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- Product design approaches which minimise or eliminate waste production, or that facilitate the treatment at end-of-life to provide high-quality secondary materials
- Supporting research for overcoming social and market barriers for using materials and products made from secondary materials
- Sorting and separation technologies for complex mixtures of plastics, metals and waste materials
- Production of high value chemicals and products from organic waste streams
- Lower impact waste management and recycling processes, including adaptation of existing waste processes to provide better separation and recovery of materials from difficult-to-treat waste streams
- New recycling processes for high volume industrial waste streams such as construction/demolition wastes
- Re-use of water

The following **specific exclusion** to the scope applies for topic 3:

- Biogas and composting

List of participating funding organisations for topic 3:

BAFU, DG06, IWT, FORMAS, IHOBE, MATIMOP-ISERD, NCBiR, TSB, TEKES, TUBITAK

Governance

The common funding pot is a virtual one. Projects participants will be funded by their national funding body, regarding the national funding specifications and within the national allocated budget.

The call will be managed by the Steering Committee (SC) and the Evaluation Committee (EC) with support of the Joint Call Secretariat (JCS) (set up at TUBITAK). The process includes the evaluation procedure of pre- and full-proposals and the final selection and award of research projects.

- The Steering Committee (SC) is composed of a single representative from each funding organisation. The SC will supervise the progress of the call and the evaluation of proposals. The SC will make the final funding recommendation to the national/regional funding organisations on the proposals to be funded. All decisions concerning the call procedures will be taken by the SC.

- The Evaluation Committee (EC) is a panel of internationally recognised scientific experts responsible for the evaluation of submitted proposals. EC members will not submit or participate in proposals within this call, and must sign a confidentiality form and a statement to confirm that they do not have any conflicts of interest. The EC will nominate external peer reviewers.

Submission of joint proposals

There will be a two-stage submission procedure for joint applications: pre-proposals and full proposals. In both cases, one joint proposal document (in English) shall be prepared by the partners of a joint transnational proposal, and must be submitted to the JCS by one spokesperson, the coordinator. Applicants should take note of individual national/regional rules which may require further documents on a national/regional level.

Joint pre-proposals (in English) must be received by the JCS in an electronic version no later than **8th April 2013** at 12 a.m. Central European Time. The pre-proposals should strictly follow the “Guidelines for applicants”.

The selection on full proposals will be communicated to applicants as soon as possible and before the **end of May 2013**.

Please note that joint full proposals will be accepted only from those applicants explicitly invited by the JCS to submit them. Full proposals (in English) must be received by the JCS in an electronic version no later than **15th July 2013** at 12 p.m. Central European Summer time.

The information given in the pre-proposal is binding. Thus, any fundamental changes between the pre- and full proposals, e.g. composition of the consortia, objectives of the project, must be communicated to the JCS with detailed justification and will only be allowed by the SC under exceptional circumstances.

Further information on how to submit pre-proposals and full proposals electronically will be made available through the ECO-INNOVERA website (www.eco-innova.eu) and in the "Guidelines for applicants". The forms that have to be used for submission of pre-proposals and full proposals are available on the ECO-INNOVERA website. Applicants should take note of individual national/regional rules, and are therefore, obliged to contact their national/regional contact person for any questions (see “contact information” section).

Eligibility and evaluation criteria

Applicants should note and comply with the following mandatory eligibility criteria.

- Proposals must be submitted by the appropriate call deadline, using the Electronic Submission System (ESS).
- The ESS information and documents must be written in English, and not exceed the maximum number of pages permitted by the ESS.
- Proposal must include the required financial data, including budget.
- Proposals must fit with the general scope requirements of the call, and the specific requirements of the topics.
- Each applicant must have a steady position in his/her institution for the duration of the project. In countries where rules allow it, the applicant may hold a temporary position whose funding is requested as part of the proposal. In such a case the applicant must provide a letter from the hosting institution certifying that the candidate will have access to all the resources necessary for carrying out the project
- The partnership should fit with the requirements:
 - Each collaborative proposal must involve applicants, independent from each other, based for their research in at least 3 different funding countries, 2 partners from 2 different countries will be allowed only if a SME is involved.
 - A maximum of 70% of the total budget can be allocated to one country.
 - A proposal including a partner of a country which is not participating financially in the call n°2 will be declared non eligible.
 - Co-applicants from the same laboratory cannot enter the same proposal.

Projects will be funded from 24 months to 36 months maximum.

The eligibility of institutions, researchers, and costs, as well as complementary administrative requirements is subject to national regulations. Applicants are obliged to check these requirements with their relevant contact person prior to submitting a pre-proposal.

Proposals will be evaluated according to the following 6 criteria (see table 1). A mark from 1 to 5 will be given for each of them by each reviewer.

Table 1: Description of evaluation criteria including weighting

Criterion	Weighting	Assessed on the basis of
Scientific/technical excellence	6	Validity of proposals (soundness of concept and quality of scientific/technical objectives; originality of the research and progress beyond state-of-the-art); quality and effectiveness of the methodology
Environmental impact of the project	6	Environmental impact of the project; quantification of the expected impact and application of life cycle thinking using appropriate metrics. Expected recommendations to policy makers from the project
Market impact of the project	6	Description of the European market opportunity and capability of the consortium to deliver to market. Does the consortium have clear and realistic understanding of the target markets, the barriers to entry and value chains involved, as well as the potential interactions with other markets? The consortium is able to address a whole sector and provides convincing arguments for a positive impact on the market in terms of e.g. investments, employment etc.
Project implementation and management	4	Appropriateness of the management structure and procedures. Quality and relevant experience of the individual participants. Appropriateness of requested funding. Appropriateness of measures for the dissemination and/or exploitation of the results and the management of the intellectual property rights.
Social Impact	3	Social impact of the project, such as consumer behaviour, employment, labour circumstances, health effects. Expected recommendations to policy makers
Transnational added value	3	Cohesion of proposed research (necessity of contributions from all the applicants).

Eligibility check of pre-proposals

The JCS will assess all pre-proposals to ensure that they meet the call's formal criteria (see eligibility criteria). In parallel SC members will perform a formal check for compliance to country/region rules. Please note that proposals not meeting the formal criteria or the national/regional eligibility criteria and requirements will be declined without further review. The SC will meet to decide which proposals will be accepted for the full proposal submission.

Evaluation of full proposals

The JCS will check the full proposals to ensure that they meet the call's eligibility criteria and have not changed substantially from the respective pre-proposals before sending them to the external reviewers.

Each proposal will be allocated to at least two external reviewers who fit the profile of the application.

The JCS will send full proposals and reviews to EC members. The EC will meet to discuss each proposal and, after consideration of the evaluation criteria, external reviews and their own discussions, the EC will make a classification of the proposals.

The SC will suggest the projects to be funded to the national/regional funding agencies taking into account the proposals' classification established by the EC and on the available budget. Based on these recommendations, final decisions will be made by the national/regional funding agencies and will be subject to budgetary considerations.

The Joint Call Secretariat will communicate to all project coordinators the final decisions together with the review from the EC.

Table 2: Key dates of the 2nd joint transnational call of the ERA-Net ECO-INNOVERA

08 Jan 2013	Call launch, opening of Electronic Submission System (ESS) for pre-proposals
08 Apr 2013	Close of call on ESS (noon CET)
End of May	Selection of pre-proposals for full proposal
15 Jul 2013	Deadline for full proposals
End of Oct	Selection of projects for funding
Jan 2014	Start of projects expected
Jul 2014	Signing consortium agreement (6 month after the projects start)

Other conditions

A single project leader representing the transnational project consortium externally will be responsible for project management. By submitting the proposal, the coordinator certifies that each co-applicant has received the official approval to submit from the person authorized to legally commit this co-applicant's institution. The coordinator, with the agreement of all partners, is permitted to name (max.) 3 experts with whom a direct conflict of interest exists. The designated Project Leader can only submit one proposal but can be a co-applicant in other proposals.

The coordinator will be in charge of reporting to the ECO-INNOVERA Joint Call Secretariat for funded projects. By submitting a proposal, all applicants acknowledge the obligation for participating in the follow up meetings (kick-off, mid-term and final meetings). Each project coordinator, on behalf of all participating teams, should submit to the parties, through the Joint Call Secretariat all the following reports, in English:

- A first short report after 6 months
- A mid-term report
- A final report

A consortium agreement fixing in particular the Intellectual Property Rights has to be signed for each project. Depending on the relevant national/regional specifications, it can induce delays before contracting. The way it will be handled should be detailed in the proposal.

When preparing the project budget and funding demands, the coordinator must make sure that funding is available for each applicant regarding national/regional specifications and that all costs are clearly calculated and relevant with the work programme.

The appendix overleaf provides summary information from each funding organisation on: contact details; overall budget; participation in individual call topics, the types of organisations funded at what level of support and the maximum budget available.



Appendix

Organisation	Contact	Email	Total budget	Topic 1	Topic 2	Topic 3	Comments
Agency for Innovation by Science and Technology, Flanders	Kathleen Goris Paul Schreurs	KTG@iwt.be PS@iwt.be	€1m	Yes	Yes	Yes	
Environmental Performance Agency of Basque Government	Inaki Susaeta	Inaki.Susaeta@ihobe.net	€0.5m	No	Yes	Yes	
Federal Ministry of Agriculture, Forestry, Environment and Water Management	Norbert Peherstorfer	n.peherstorfer@kommunalkredit.at	€0.5-1m	Yes	Yes	No	
Federal Ministry of Education and Research	Holger Grünewald Evelyn Echeverría	h.gruenewald@fz-juelich.de e.echeverria@fz-juelich.de	€0.5-1m	Yes	No	No	
Federal Office for the Environment	Daniel Zürcher	Daniel.Zuercher@bafu.admin.ch	€0.5m	Yes	Yes	Yes	
Israeli Industry Center for Research and Development	Lior Ben Artzi-Gershon	lior@iserd.org.il	up to €0.5m	Yes	Yes	Yes	
National Centre for Research and Development	Olesia Witowska	o.witowska@ncbir.pl	up to €1m	Yes	Yes	Yes	
Scientific and Technological Research Council of Turkey	Pinar Aker	pinar.aker@tubitak.gov.tr	>€1m	Yes	Yes	Yes	
Service public de Wallonie	Julie Marlier	julie.marlier@spw.wallonie.be	€1m	Yes	Yes	Yes	



Swedish Research Council for Environment, Agricultural Sciences and Spatial Planning	Conny Rolén	conny.rolen@formas.se	€1m	Yes	Yes	Yes	
Technology Strategy Board	Graham Mobbs	graham.mobbs@tsb.gov.uk	€1.25m	Yes	Yes	Yes	Up to €250k per partner available to industry partners only at up to 50% eligible costs (60% for SMEs)
Tekes – The Finish Funding Agency for Technology and Innovation	Tuomo Suortti	tuomo.suortti@tekes.fi	€0.5m	Yes	Yes	Yes	

