Eracobuild Joint Call

Invitation to a Joint Call for proposals on Sustainable Renovation

This document is an invitation to take part in a joint call by the ERA-Net Eracobuild partners from Austria, Denmark, Finland, Flanders, France, Nordic Region, Romania, Sweden and Switzerland.¹

ERA-Net Eracobuild is a network of national R&D programmes focusing on construction and sustainable built environments and aims to develop synergies between national programmes by sharing strategies and establishing joint programmes and projects. Eracobuild has so far defined two thematic frameworks for transnational cooperation: "Sustainable Renovation" and "Value Driven Processes". This document gives you all the necessary information on the first call for proposals within the "Sustainable Renovation" framework.

The <u>purpose</u> of this call is to generate joint research and innovation activities within sustainable renovation of the existing built environment. The call provides opportunities for researchers, industries and other organisations to take part in multilateral cooperation in the field of sustainable renovation. Projects being proposed are welcome to include partners from other countries than mentioned above. However, these partners have to finance their participation from other sources.

The joint call will open December 2009 and will close on 28. February 2010.

This call will be published on the ERA-Net Eracobuild web page and in the web pages of the national programmes.

Call secretariat: Nordic Innovation Center For further information see: www.eracobuild.eu

Overall Goals and Objectives

The overall goal with Eracobuild Sustainable Renovation program is to support research and innovation for balanced and sustainable development within the built environment and sustainable economic growth of society. The research area *Sustainable Renovation* covers a wide scope of technological, environmental, social, cultural, economic and institutional aspects. The proposals should take the users' need as a starting point and when possible take a life-cycle-perspective on sustainable renovation.

ISO TS 21929

¹ We are soon expecting final confirmation of participating from Denmark and Finland.

Sustainable building achieves the required performance with the minimum of environmental impact. At the same time sustainable building encourages economic, social and cultural improvement at a local, regional and global level.

The objectives of this call are:

- to support research and innovation in order to make the existing built environment more sustainable
- to promote sustainable renovation activities for the building stock in Europe Suggested themes for this call are elaborated below.

Background

One of the main challenges confronting the European construction and real estate sector is maintaining and upgrading the built environment to meet the changing needs of the inhabitants, users and owners. Urban renewal could be seen as an opportunity for sustainable renovation.

Existing buildings are replaced at very low rate – only 1-2 percent each year – and often too little and partly insufficient renovation activities take place to transform the building stock into a more sustainable state. Recognized barriers to renovation are for example lack of knowledge, experience and good examples, inappropriate processes and products, missing incentives or lack of cost effective investments.

Maintenance and renovation are significant elements of a sustainable built environment. The emphasis in construction is moving from new buildings towards maintenance and renovation. Already now the number of buildings that are renovated each year exceeds the number of new buildings in Europe. Growing renovation rates mean that improvement of technologies and processes are needed to meet the market demands.

Other Initiatives

In order to achieve the objectives of the Energy Policy for Europe adopted early in 2007 and to contribute through Energy-efficient Buildings, the *Energy-efficient Buildings* (*E2B*) *PPP Initiative* has been launched by the European Commission. Its objective is to deliver, implement and optimise building and district concepts that have the technical, economic and societal potential to drastically reduce energy consumption and decrease CO₂ emissions, both in relation to new buildings and to the renovation of existing buildings. The aim of the activities is to identify, through the partnership with industry, the main RTD needs, and address a number of areas of clear industrial interest, such as tools, the building envelopes, systems and equipment, ICTs for energy efficiency, environmental technologies, social and behavioural aspects, standardisation and business models. The budget for the "Construction" PPP initiative is taken from several themes (NMP, ICT, Energy and Environment). For this reason, the research initiatives within the E2B PPP are driven according to the objectives of the different themes. The focus of the Eracobuild Sustainable Renovation call is broader and also includes non-technological aspects.

Call facts

Time table

Publication of the call: December 2009

Deadline for proposals: February 28, 2010 at 15:00 (CET)

Evaluation of proposals: April 2010

Formal Funding decisions: May-June 2010

Budget

Total		3850	000€
-	Switzerland	200	000€
-	Sweden		000€
-	Romania	500	000€
-	Nordic Region	500	000€
-	France	100	000€
-	Flanders	1000	000€
-	Finland	500	000€
-	Denmark	350	000€
-	Austria	200	000€

Restrictions to Participation

See parts on eligibility of participants under national conditions.

Research and Innovation Themes

Since this is a European call, the proposals should address common problems and not be nation specific. Projects should look at the broad picture and we encourage multidisciplinary projects. In order to fulfil the objectives of the call one or more of the themes below should be addressed in the proposals.

1. Business models and new financial instruments

Business and service concepts for cost and energy-efficient sustainable renovation are needed to enhance the renovation rates. Concepts may include integration of technologies, improving or re-engineering the renovation processes and services, especially for neighbourhood scale renovations:

- a. Financial instruments that address new funding models of renovation for single-family houses, apartment buildings or neighbourhoods (e.g. ESCO/EPC). Models to overcome the owner-/user-dilemma, behavioural, organizational or financial barriers to sustainable renovation.
- b. Business concepts which include identification and reduction of market barriers, contracting issues and Life Cycle Cost thinking.

2. Policies and tools for promoting Sustainable Renovation

Some obstacles for sustainable renovation need the attention from government and other public bodies. This could include the following issues:

a) Legislation/Regulations

What kind of economic incentives/taxation, legislation/regulations or political instruments are needed to remove barriers and to increase the quality and quantity of sustainable renovations?

b) Education & Awareness

How to increase the knowledge about sustainable renovation among decision makers and the construction industry? How to make innovative concepts desirable for decision makers and consumers?

c) Standardisation

How can standardisation be an instrument to facilitate sustainable renovation? How to implement standards to facilitate sustainable renovation?

d) Procurement/Lead market

The role of government and other public bodies in creating a demand for sustainable renovation.

3. Technology

Project proposals should be related to sustainable renovation and take a life cycle perspective. Suggestions for topics include, but are not limited to:

- a) Energy supply and efficiency for buildings and communities

 Possible technologies include approaches for energy storage and PV inclusion, new sensor technologies and smart metering as a tool to reduce electricity use in buildings, approaches for efficient electricity use.
- b) Sustainable material and the efficient use of material Suggestions include the introduction of nano-based technologies for thermal insulation, refurbishment and conservation of historical buildings envelopes, approaches for the optimization of material usage.
- c) System approach for sustainable renovation
 Suggestions include prefabricated elements, retrofit techniques,
 development of user-technology interfaces, indoor climate/environment
- d) Methods of developing standards that will facilitate sustainable renovation

The call is open for projects within a part of, parts of or all aspects in a research and innovation process covering applied research, development and implementation. However, the national programs through which a project applies for funding must be given consideration.

Structure of proposals/Application Requirements

The proposal must consist of two parts: A <u>common application</u> form and a <u>national application</u> form. The common application and links to the national application forms can be found at <u>www.eracobuild.eu</u>.

Application procedure

Each consortium must appoint one "Project Coordinator" who will be responsible for the communication and joint reporting with the call secretariat. The project partners are requested to sign a consortium agreement dealing with the responsibilities within the project and the exploitation of results. The consortium agreement should be delivered to the national funding bodies before the contract is signed.

A) Common application form

The application must include and explain the research idea, relevance of the project for the construction sector, relevant knowledge in this area and research methods. There shall be a common project plan describing the responsibilities and budget of each partner (see Annex 1 for details). The proposal will be evaluated as one entity. **Each partner will be funded by the national funding organisation involved in the call**. The proposal should define activities, as well as the budgets, for each partner and the total budget. Proposals should be written in English and the budget should be submitted using € as a currency.

B) National application form (see further instructions in the section "National eligibility criterion")

Application must be submitted using the relevant national application form accompanied with the common application form. Applicants applying for funding from NICe only have to submit the common application form.

The national application forms can be found at the national websites:

Austria: www.ffg.at

Belgium/Flanders: <u>www.iwt.be</u> Denmark: <u>www.ebst.dk/udbud</u>

Finland: <u>www.tekes.fi</u> France: www.rgcu.pcd.fr

Nordic Region: www.nordicinnovation.net

Romania: <u>www.cnmp.ro</u> Sweden: <u>www.formas.se</u>

Switzerland: www.bfe.admin.ch/forschunggebaeude/

Who can propose?

Proposals are invited from universities, research institutes, companies and other organisations according to national eligibility rules (see below and national websites of the funding agencies). Proposals should include partners from at least three of the participating countries. A plan of work that distributes the work among all parties involved is of great importance. It is also of importance that the project should be integrated and the project partners work together.

Eligibility

Applications will be rejected without substantive consideration if the deadlines and the requirements listed in the call text are not met. The eligibility of the proposals will be evaluated by the national funding organisations following national eligibility rules. Eligible proposals will then be evaluated in a joint international evaluation panel.

Evaluation

An evaluation of all project proposals will be made jointly by an international panel consisting of one expert appointed by each participating funding organisation. A joint evaluation will take place in April 2010. Funding decisions will be made in May-June 2010, based on the results of the evaluation.

The joint evaluation criteria are:

- Impact
- Scientific and/or technological quality
- Project implementation

The joint evaluation criteria is described in annex 1.

Funding

Funding will be awarded according to national rules. Additional co-financing from stakeholders is requested according to national rules. A project is not funded until it is accepted by all participating funding organisation in that project. When all national decisions have been made, the call secretariat will send a confirmation to the project coordinator. Subsequently, contracts will be sent out from the national funding organizations. The length of the projects should be 24-36 months.

Monitoring and reporting

Projects granted funding will be monitored on the overall project level by the Eracobuild Sustainable Renovation Program group. An overall status report shall be delivered to the secretariat every 12 months. The national funders will monitor the respective national parts following their own practice.

Enquiries

Enquiries should be addressed to the national contact points in the participating countries or to the Call Secretariat.

National eligibility criteria and contact person

Austrian participants

Austrian participation in projects is funded within the national research programme 'Building of tomorrow plus' which is managed by aws, FFG and ÖGUT. Projects are funded within topic three 'Technology' according to the guidelines of the programme 'Building of tomorrow plus'

(http://www.ffg.at/content.php?cid=952).

Further Information:

Austrian Society for Environment and Technology (ÖGUT)

Herbert Greisberger

e-mail: herbert.greisberger@oegut.at

Tel.: 0043.1.315 6393-13 http://www.oegut.at

Danish participants

Danish participation in projects is funded by EBST - the Danish Enterprise and Construction Authority. Funding by EBST is restricted to public owned or public supported universities and research institutes. The project leader of the Danish part of the project must hold a Ph.D.-degree. Proposals with Danish participation must be accepted by The Danish Strategic Research Council. Private companies have the opportunity to take part in a consortium, but cannot receive Danish funding. Further information and the national application form is available at www.ebst.dk/udbud

EBST – The Danish Enterprise and Construction Authority

John Noes Jørgensen e-mail: jnj@ebst.dk Tel: +45 3546 6000

www.ebst.dk

Finnish participants

Tekes funds Finnish universities, research institutes and private companies. Funding is given within the following parameters:

- Research institutes and universities:
 - Research grants are 60 percent of eligible costs. Projects are co-financed by and conducted in cooperation with companies.
 - In university, polytechnic and research institute projects, Tekes funding requires collaboration between research organisations and companies or a significant social impact.
- Private companies:
 - o R&D grants run from 25 to 65 percent of the eligible costs.
 - o R&D loans run from 25 to 70 percent of the eligible costs.
 - Differing funding measures can be combined in a single project. One project may, for example, receive a grant of 25 percent of the eligible costs, and in addition, a loan of 25 percent.
- Application forms are available on the internet www.tekes.fi in Finnish and Swedish. Applications may be signed electronically.

Tekes

Angelica Roschier

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www.tekes.fi

Flemish Participants

Participation by Flemish participants can be funded via 2 programmes: the collective research programme and the R&D Business projects programme.

The Collective Research Programme intends to build knowledge and to translate it into innovative applications that can be used by a range of companies. Project proposals can be submitted by consortia or organisations representing such a group of companies (consortia, federations, collective research centres....), where the actual research is carried out by a research centre or university. (80% funding)

The R&D business projects programme focus on technological development of products and processes, as well as on new concepts and services. Basic funding percentages are 40% for research and 15% for development (additional funding for SME's, for international collaboration and for policy relevance such as sustainablity)

IWT – the agency for Innovation by Science and Technology

Dirk Otte

E-Mail: do@iwt.be Tel +32 2 209 09 18

www.iwt.be

French participants (MEEDDAT/DRI)

Funding by MEEDDAT/DRI is intended for challenging and innovative research projects in universities, research institutes and private companies. During project selection, DRI funding will be preferably focused on projects highlighting a collaboration between research organizations and companies.

Funding will be given to a national leader; the total grant is restricted to 50% of the eligible total cost for companies, and 100% of the marginal costs for the universities and research institutes. Application forms are available on the RGCU internet site. The project leader of the French part of the project must hold a PhD degree.

Proposals with French participation must be accepted by MEEDDAT/DRI. French evaluators must also be approved by the scientific committees of DRI research programs.

MEEDDAT/DRI Christian Cremona Dominique Pierroux

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dominique.pierroux@developpement-durable.gouv.fr

Tel: 33 1 40 81 29 41

Nordic Innovation Centre (Nordic Region)

Nordic Innovation Centre (NICe) funds projects which enhances innovation and competitiveness in the Nordic business sector. NICe does not fund pure research project but requires that companies are involved in the project. NICe funds maximum 50 percent of project costs. The remaining funds can be covered by in the form of cash contribution, working hours or direct funding. All types of organisations (e.g. companies, universities, research institutes, etc,) can apply. Projects must include partners from at least three Nordic countries. For further information see www.nordicinnovation.net

Nordic Innovation Centre

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Romanian Participants

Romanian funding agency: National Centre for Programmes Management (NCPM) Funding conditions will match the National Plan for R&DI, Partnerships in S&T Areas Program

Type of funding: grant

The maximum grant for Romanian partners (nevertheless how many they are in a project) is 300,000 EUR for max. 3 years.

- 1) The funding programme for which the Romanian partners will apply to is "Partnerships **in S&T Priority Areas**, managed by the National Centre for Programmes Management (NCPM) see www.cnmp.ro/parteneriate; www.cnmp.ro/int
- 2) Research organisations are funded 100% of the eligible costs
- 3) Both large Industries and SMEs could be funded; the percentage depends on the type of activity they perform in the project and according to the scheme of the State Aid for Research& Development. Briefly that means:
- 3.1 fundamental research, 100% only for large Industry
- 3.2 industrial research 65% for large Industry, 75% for medium -sized companies, 80% for small companies
- 3.3 experimental developments 40% for large Industry, 50% for medium -sized companies, 60% for small companies
- 3.4 Technical feasibility studies for industrial research 65% for large Industry, 75% for SMEs
- 3.5 Feasibility studies for experimental development 40% for large Industry, 50% for SMEs

The eligibility conditions for funding are:

- 1. The capability of performing R&D activities should be certified according to the Government Decision no. 551/2007 see www.mct.ro .The Decision is in force beginning with June 2008.
- 2. The Romanian applicant should be registered and validated in RPC (Register of Potential Contractors) www.mct.ro
- 3. Compliance of the project topic(s) with the objectives & themes of the corresponding S&T Research Domain.

Administrative and technical eligibility must be verified by the funding agency prior to proposal submission. The funding decision is lasting to the National Authority for Scientific Research, based on the NCPM recommendation.

Centrul National de Management Programe Virgil Rotaru e-mail: vrg_rtr@yahoo.com www.cnmp.ro/

Swedish participants

Funding in this call is restricted to Swedish universities and research institutes recognized by Formas. The project leader of the Swedish part of the project must hold a PhD degree. The projects require co-financing with at least 50 % (20 % of the co-financing in ready money/cash) and inclusion of an implementation plan for the result of the project.

The Swedish parts of projects are included in the Formas-BIC or CERBOF programme, managed by BIC. The Swedish funding agencies Formas and Swedish Energy Agency collaborate in this call. Funding by Swedish Energy Agency goes through the research and innovation programme CERBOF, managed by BIC. Results from research parts of projects with Swedish public funding are in the public domain.

The Swedish partner shall <u>send the application (electronically) to Formas following the</u> national rules at Formas website <u>www.formas.se</u>.

Conny Rolen e-mail: conny.rolen@formas.se

Tel: +46 8 775 40 00

www.formas.se

Swiss participants

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 Energy in Buildings and can be suitably coordinated with ongoing or planned projects. A specific goal for this call for proposals is to promote Swiss researchers' international collaboration within the Eracobuild framework.

The main focus is on applied research, development-related research and pilot applications of new technologies. Furthermore strategy development for the application of new technologies is targeted. Universities, research institutes and private companies are eligible for funding. Collaboration between research institutes and private companies is appreciated.

Proposals corresponding to research theme *3. Technology* can be funded to a maximum of 100%. However, third party contributions are appreciated and will be taken in consideration within the evaluation procedure.

Proposals corresponding to research themes 1. Business models and new financial instruments and 2. Policies and tools for promoting Sustainable Renovation can be funded to a maximum of 50%. To insure the implementation of the results, the other

50% of the eligible costs shall be covered by a private company (in cash or in the form of performed work).

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

The total budget for Swiss projects is 200'000 Euro (CHF 300'000) over 24 to 36 months. It is the aim to finance 1 to 3 Swiss projects within this call.

Application forms and further information are available at http://www.bfe.admin.ch/forschunggebaeude/

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www.bfe.admin.ch/forschunggebaeude