

Eracobuild: Strategic Networking of Research Development
Innovation Programmes in Construction and Operation of Buildings

Invitation to a Joint Call for proposals on SUSTAINABLE RENOVATION

What is Eracobuild?

ERA-Net Eracobuild is a network of national R&D programmes focusing on construction and the sustainable built environment and aims to develop synergies between national programmes by sharing strategies and establishing joint programmes and projects. Eracobuild has defined two thematic frameworks for transnational cooperation: "Sustainable Renovation" and "Value Driven Processes".

What is this call?

The purpose of this call is to generate joint research and innovation activities addressing the challenge of sustainable renovation of the existing built environment and to provide opportunities for industries, research, academic and other organisations to take part in multilateral cooperation in this field.

This document is an invitation to take part in a joint call for proposals by the ERA-Net Eracobuild partners from **Austria, Cyprus, Flanders, Greece, Sweden and United Kingdom** under the "Sustainable Renovation" programme. 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 opens on 28 February 2011 and closes on 31 May 2011.

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

Call secretariat: Centre for Renewable Sources and Saving (CRES), Greece
www.cres.gr

For further information see: www.eracobuild.eu

The following information is included in this call document:

- Overall Goals and Objectives of the call (background, other initiatives)
- Call Research and Innovation Thematic Areas
- Call facts (timetable, budget)
- Application Requirements (application procedure, application forms, consortium agreement)
- Who can apply?
- National criteria of funding
- Eligibility check & Evaluation processes (eligibility and evaluation processes, evaluation criteria, funding restrictions)
- Monitoring and reporting
- Enquiries

Overall Goals and Objectives

The overall goal of the Eracobuild Sustainable Renovation programme is to support research and innovation for sustainable development of the existing built environment resulting to the sustainable economic growth of society. It aims to support potential stakeholders, such as research organisations, industry, associations and decision-makers to undertake innovative projects and develop synergies in the field of sustainable renovation for the building stock across Europe.

The research area *Sustainable Renovation* covers a wide scope of technological, energy, environmental, social, cultural and economic aspects within the lifetime of a construction asset. The aim is to increase knowledge of how to renovate the existing building stock for low cost and in large volumes, whilst providing healthy environments and economical performance of buildings.

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 users, the owners and society as a whole. Urban revitalisation could be seen as an opportunity and challenge for sustainable renovation initiatives. The global renovation market is currently \$50bn per annum. The challenge is how best to maintain and upgrade buildings to meet our changing needs.

Existing buildings are replaced at very low rate – only 1-2 percent each year – and the renovation activities that take place are often limited and often do not address carbon reduction and other sustainability initiatives. Barriers to sustainable renovation include the lack of knowledge, experience and good examples, inappropriate processes and products, lack of system thinking and lack of cost effective investments.

At a European level and in large city centres, the number of buildings that are renovated each year exceeds the number of new buildings. Focus is given to the revitalisation, maintenance and facility management of the existing building stock in order to achieve high indoor quality standards, low operational costs and user satisfaction. Therefore, growing renovation rates mean that improvement of technologies and processes are challenged to meet the market demands.

Other Initiatives

Several funding initiatives of the European Commission currently focus on the development of sustainable built environment and cities such as:

- The 7th Framework Programme (FP7) targeting R&D, innovation and demonstration projects for sustainability in the built environment (http://cordis.europa.eu/fp7/home_en.html)
- Intelligent Energy - Europe (IEE II), aiming to facilitate the implementation of the EU directives for energy efficiency and renewable energy sources (<http://ec.europa.eu/energy/intelligent/>)
- Various transnational co-operation schemes, such as LIFE+, CONCERTO+, LLP, and many others (http://www.managenergy.net/eu_programmes_funding_other.html)
- Energy Efficient Buildings (E2B) PPP initiative which aims 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. This programme is funded by NMP, ICT, Energy and Environment (<http://www.e2b-ei.eu/default.php>)

The Sustainable Renovation 2011 Call complements these initiatives through the national funding programmes of the participating countries, adding value to European synergies and innovation schemes for sustainable buildings.

Call Research and Innovation Thematic Areas

Since this is a multi-national/international call, the proposals should address common problems and not be nation specific. Projects need to consider the above mentioned aims and overall objectives of the call in the European context.

Projects should focus on applied research, have a multidisciplinary and integrated character and ensure active participation and leadership of research organisations, industry and other stakeholders. The scope of the national programmes through which a project applies for funding must be given consideration. Any demonstration activities funded from third parties (industry, developers, market) are highly recommended.

This call addresses the improvement of the existing building stock and covers both domestic and non-domestic buildings. The duration of the projects should be 18-36 months.

SusRen 2011 focuses on the following thematic areas; however it encourages innovation in synergies between the multidisciplinary fields and the different stakeholders, as well as high replication potential of the proposed actions:

1. Renovation processes

This topic area invites projects concerning sustainable, bottom up and large-scale, high impact renovation processes. It addresses renovation schemes with high replication potential and cost efficiency, examining processes from industry and product or service development to construction, quality supply-chain assurance, operation, facility management and maintenance.

Projects demonstrating pre-fabrication and lean process approaches, together with Life Cycle Cost and/or Carbon Analysis (LCCA) and enabled through Building Information Models (BIM) are some areas of particular interest within this subject.

2. Advanced building components

The existing building stock is challenged to adapt to new legislative, energy, economic and societal requirements. Improvements in the building envelope and systems are needed, considering their energy and economic viability in a construction lifetime, particularly in face of the changing climate.

This area focuses on helping the construction industry to further develop emerging and innovative building components and systems by assessing their real-world performance and how they can best be integrated into existing buildings through renovation projects.

3. Community scale renovation schemes

Renovation schemes on a community scale require a holistic approach, examining the interactions of the buildings, the microclimate and the users. Transformation of a whole community (or a part of an existing built environment) towards sustainable living is aimed through energy efficiency plans, renewable-energy integration, mobility and energy management issues.

Projects that address this area are encouraged to be aligned with existing community and/or large scale national programmes / projects, in order to expand research and knowledge while complementing and improving national initiatives with EU dimension.

Some topics of interest are the post occupancy evaluation (energy and cost monitoring) and actual performance of buildings and their infrastructure for large scale projects on community renovation schemes. A holistic approach to design, construction and operation phases is encouraged, as well as user behaviour and acceptance at large scale. Other areas of consideration include large scale infrastructure planning, planning permissions, how to gain community buy-in, logistics and economies of scale.

Call facts

Publication of the call:	28 February 2011
Deadline for proposals:	31 May, 2011, 14:00 CET
Evaluation results:	end September 2011

Country	Budget
Austria	€ 400.000
Cyprus	€ 200 000
Greece	€ 300.000
Flanders	€ 800.000
Sweden	€1.000.000
United Kingdom	€1.000.000
Total	€3.700.000

Funding will be awarded according to national rules. Additional co-financing from stakeholders is required according to national rules (see National criteria).

Application Requirements

Application procedure

SusRen 2011 proposal generally consists of two parts:

1. Common application

Each consortium must appoint one "Project Coordinator" who will be responsible for:

- a) the communication with the call secretariat during the preparation and submission of the application and
- b) the communication with the Eracobuild representative (who will be assigned after the funding decision is taken) and submission of reports during the implementation of the project.

The common 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 activities and budget per partner, per work package and for the project as a whole (see Common Application Form document). The proposal will be evaluated as one entity.

Each partner will be funded by the national funding organisation involved in the call. The common application form should be written in English and the budget should be submitted using € as a currency.

2. National application

National applications are to be submitted directly to the national agencies by each national consortium (NOTE: if two or more partners are from the same country, one national application form needs to be submitted).

National applications must be submitted using the relevant national application forms accompanied with the common applications.

Application Forms

The common application form should be electronically submitted by the "Project coordinator" to the call secretariat (contact e-mail: mkiki@cres.gr). The project coordinator should receive a read receipt by the call secretariat at the date of the submission of the proposal. National applications forms are to be submitted directly to the national agencies by each consortium partner.

The common application form and links to the national application forms and procedures can be found at www.eracobuild.eu.

Additionally, the national application forms can be found at the national websites:

- Austria: www.ffg.at/eracobuild
Belgium/Flanders: www.iwt.be
Cyprus: www.research.org.cy
Greece: www.gsrt.gr
Sweden: www.formas.se
United Kingdom: www.innovateuk.org/retrofit

Consortium Agreement

The project partners are requested to submit a draft consortium agreement (CA) dealing with the responsibilities within the project and the exploitation of results to the call secretariat together with the common proposal submission.

When the project will be awarded for funding, the Consortium Agreement shall be reviewed duly signed and submitted to the national funding bodies before the contract is signed (an example of CA can be found on the call website).

Therefore, **each consortium should submit:**

- The common application and a draft of the consortium agreement to the call secretariat (contact e-mail: mkiki@cres.gr).
- The national application forms and any other documents that national rules and regulations require, to the national agencies.

Who can apply?

Proposals are invited from universities, research institutes, companies, industries 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 (3) of the participating countries.**

Potential proposers are advised to contact their local funding agency for any further information on the call, for assistance on consortium synergies, for budget allocation and regulations, etc. All national contact points are listed at the end of this document.

For restrictions to participation see the section below on National criteria for funding.

IMPORTANT NOTE:

The following table gives an overview of the basic national criteria for funding, with the aim to help building up collaborations between the participating countries. Detailed information and regulations for each country can be found at the national rules and criteria.

National Criteria of funding

COUNTRY	FUNDING PROGRAMME	Funding opportunities	Who can apply	Possibility to subcontract	Other requirements
Austria	<p>Austrian participation in projects is funded within the national research and technology programme "Building of tomorrow plus".</p> <p>www.hausderzukunft.at ; www.ffg.at</p>	<p>Industrial Research (IF) 50–80% funding</p> <p>Experimental development (EE) 25–60%</p>	<p>IF: companies and research institutions</p> <p>EE: companies</p>	Max. 80 % of total costs.	None
Belgium/ Flanders	<p>Collective Research Programme (CRP)</p> <ul style="list-style-type: none"> This programme intends to build knowledge and translate it into innovative applications, useable by a range of companies (SME's in particular). <p>R&D Business Projects Programme</p> <ul style="list-style-type: none"> This programme focuses on technological research & development of innovative products and processes, as well as on new concepts and services. 	<p>CRP</p> <ul style="list-style-type: none"> 80% funding (research partners are co-financed by the applicants). <p>Business projects</p> <ul style="list-style-type: none"> 25-60%, depending on type of project (research/development), type of applicant (large company, SME), policy relevance.... Research organizations as partners are co-financed by the applicants. 	<p>CRP</p> <ul style="list-style-type: none"> Application by organisations representing a group of companies (consortia, federations, collective research centres...). The actual research is carried out by a (collective) research centre or university (is co-financed by the applicants). <p>Business projects</p> <ul style="list-style-type: none"> Enterprises Research centres and universities can be partner (co-financed by the applicants). 	Yes, please contact IWT for more details.	<p>CRP</p> <ul style="list-style-type: none"> potential, and a clear strategy, to enlarge the competence of a target group of (mainly) SME's in Flanders. A user committee composed of Flemish SME's (and other organizations) must be proposed <p>R&D business projects</p> <ul style="list-style-type: none"> clear outlook and strategy on creating economic 'added value' in Flanders for the applying company

COUNTRY	FUNDING PROGRAMME	Funding opportunities	Who can apply	Possibility to subcontract	Other requirements
Cyprus	<p><u>Programme:</u> International Cooperation</p> <p><u>Action:</u> Participation in Common European Programmes</p> <p><u>Call Identifier:</u> KOINA/ERACOBUILD-SR/0211</p>	<p><u>Max Funding %</u> <u>Applied Research</u> Small Enterp.: 80% Medium Ent.: 75% Large Enter: 65% Research Org.: 100% Public/Governmental organisation: 100%</p> <p><u>Experimental Development</u> Small Enterp.: 60% Medium Ent.: 50% Large Enter: 40% Research Org.: 100% Public/Governmental organisation: 100%</p> <p><u>Max. Funding per project:</u> <u>€100.000</u></p>	Basically all the legal entities established in the Republic of Cyprus can participate in research proposals of the specific call.	Up to 10% of the budget, with no restrictions regarding the origin of the subcontractor.	<p>The general terms and conditions regarding eligibility for participation and proposal submission, the categories of organisations and individuals and the roles of the participants are described in detail in Chapter 19 of the DESMI 2009-2010 Work Programme Document.</p> <p>The specific terms and conditions of the Call are included in the KOINA/ERACOBUILD-SR/0211 Call Text.</p>
Greece	Strategic Plan for the Development of Research, Technology and Innovation under the National Strategic Reference Framework 2007-13: European S&T Cooperation.	<p>Basic Research 100%</p> <p>Applied research</p> <p>Small Enterp.: 70%</p> <p>Medium Ent.: 60%</p> <p>Large Enter: 50%</p> <p>Research & Public Org.: 100%</p> <p>Experimental development</p> <p>Small Enterp.: 45%</p> <p>Medium Ent.: 35%</p> <p>Large Enter: 25%</p> <p>Research & Public Org.: 100%</p>	Universities, research centres, public/private SMEs and enterprises, sections of the public sector. The enterprises should have at least one (1) annual financial report and have published at least one (1) balance.	Up to 20% of the budget.	<p>- Other costs must not exceed 5% of total budget and they should be stated by invoices.</p> <p>- National eligibility criteria are further specified and defined in the "Guide for applicants": "European S&T Cooperation – Action for funding Greek organizations participating successfully in the Joint Calls for Proposals of European ERA-NETs" www.gsrt.gr/default.asp?V_IITEM_ID=6812</p>

COUNTRY	FUNDING PROGRAMME	Funding opportunities	Who can apply	Possibility to subcontract	Other requirements
Sweden	The Swedish parts of projects are included in the Formas-IQS programme (Sustainable Buildings). The Swedish funding agencies Formas and Swedish Energy Agency collaborate in this call. Results from research parts of projects with Swedish public funding are in the public domain.	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.	Funding in this call is restricted to Swedish universities and research institutes recognized by Formas.	Subcontracting is allowed.	The project leader of the Swedish part of the project must hold a PhD degree.
United Kingdom	Technology Strategy Board, Low Impact Buildings Innovation Platform. Investing around £10m per annum supporting the UK construction industry in delivering buildings with a significant lower environmental impact. www.innovateuk.org/buildings	50% funding for all partners.	This call is for industry applicants only. Academic partners may be engaged as subcontractors.	Subcontracting is limited to 25% of UK partner costs. UK partners can only subcontract work in the UK and subcontractors must be separate legal entities. UK partners may not subcontract project management.	Maximum of 300,000 Euros per project for UK partners.

Eligibility check & Evaluation processes

The Sustainable Renovation Call 2011 aims to provide funding on highly relevant projects with competent teams and a sound mix of countries/regions.

Applications will be rejected if the deadlines and the requirements listed in the call text are not met.

The evaluation procedure will be set up as follows:

0. Formal eligibility check of the common proposal by the call secretariat. The call secretariat will send formal acknowledgment of receipt and eligibility check results to the project coordinators.
1. National/regional pre-evaluation of eligibility in accordance with the call text and the national eligibility rules. This stage is to determine whether the project proposal can be funded according to national eligibility rules. Applicants will be informed in due time on the results of this pre-evaluation stage.

(only proposals that passed the eligibility checks will go to the next stage)

2. Evaluation by a joint international expert panel consisting of one expert appointed by each participating funding organisation. The panel will rank the proposals according to the criteria given below.

The ranking produced by the expert panel is recognised by the funding bodies.

3. Formal national/regional funding approval. This is the final decision on projects to be funded taking into account the budget availability of each funding partner and the usage of the total funding available for the Call.

A project is not funded until it is accepted by all national funding organisations for that project.

When the national approval has been made, the call secretariat will send a confirmation letter to the project coordinator. Subsequently, contracts will be sent out from the national funding organizations and the consortium agreement will be reviewed for signature.

Evaluation Criteria

The joint evaluation criteria are:

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

Evaluation criteria applicable to Collaborative project proposals		
Scientific and/or Technological Innovative Quality “Scientific and/or technological and innovative excellence (relevant to the topics addressed by the call)”	Project Implementation “Quality and efficiency of the implementation and the management”	Impact “Potential impact through the development, dissemination and use of project results”
<ul style="list-style-type: none"> • Soundness of concept, and quality of objectives • Progress beyond the state of-the-art • Quality and effectiveness of the scientific and/or technological methodology and associated work plan 	<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 (including European dimension, interdisciplinarity, complementarity) • Appropriateness of the allocation and justification of the resources to be committed (budget, staff, equipment) 	<ul style="list-style-type: none"> • Contribution, at the national and European level, to the expected impacts listed in this call text • Appropriateness of measures for the dissemination and/or exploitation of project results, and management of intellectual property • Collaboration with, and co-funding from stakeholders (industry, associations, chambers, public bodies)

Evaluation scores will be awarded for each of the criteria, and not for the sub-criteria. The sub-criteria are issues which the experts will consider in the assessment of criteria.

The relevance of a proposal in relation to the topic(s) of the given call, and to the objectives of a call shall be considered. These aspects will be integrated in the evaluation of the criterion "Scientific quality". When a proposal is partially relevant because it only marginally addresses the topic(s) of the call, or if only part of the proposal addresses the topic(s), this condition will be reflected in the scoring of the first criterion. Proposals that are clearly not relevant to a call ("out of scope") will be rejected on eligibility grounds.

Each criterion will be scored out of 5. Half marks can be given. Proposals failing to reach an average ≥ 3 or failing to reach ≥ 2 on each of the 3 criteria will be rejected. The scores indicate the following with respect to the criterion under examination:

0 - The proposal fails to address the criterion under examination or cannot be judged due to missing or incomplete information

1 - Very poor. The criterion is addressed in a cursory and unsatisfactory manner.

2 - Poor. There are serious inherent weaknesses in relation to the criterion in question.

3 - Fair. While the proposal broadly addresses the criterion, there are significant weaknesses that would need correcting.

4 - Good. The proposal addresses the criterion well, although certain improvements are possible.

5 - Excellent. The proposal successfully addresses all relevant aspects of the criterion in question. Any shortcomings are minor.

Monitoring and reporting

Projects granted funding will be monitored.

A progress project report shall be delivered every 6 months. A detailed interim and final publishable project report will also be required. These reports will be delivered by the project coordinator to the Eracobuild representative.

The national funders will monitor the respective national parts following their own practices.

Enquiries

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

Call Secretariat

Centre for Renewable Energy Sources and Saving (CRES)
Energy Efficiency Division, Department of Buildings
Contact name: Maria Kikira
e-mail: mkiki@cres.gr
<http://www.cres.gr>

Austrian participants

ÖGUT - Austrian Society for Environment and Technology
Claudia Dankl
E-mail: claudia.dankl@oegut.at
Tel.: +43.1.315 6393-24
<http://www.oegut.at>

FFG – Austrian Research Promotion Agency
Robert Schwertner
E-mail: Robert.schwertner@ffg.at
Tel.: +43.57755-5045
<http://www.ffg.at>

Cyprus Participants

Research Promotion Foundation
Christakis Theocharous
Tel.: +357 22 205029
e-mail: ctheocharous@research.org.cy
Website: www.research.org.cy

Flemish Participants

IWT – the agency for Innovation by Science and Technology
Dirk Otte
E-Mail: do@iwt.be
Tel +32 2 432 42 41
www.iwt.be

Greek participants

General Secretariat for Research & Technology, website www.gsrt.gr

Financial & admin issues: Chrysoula Diamanti

(cdiama@gsrt.gr, Tel +302107458190)

Scientific issues: Vassilis Geros (vgeros@gsrt.gr, Tel. +30 2107458000)

Swedish participants

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

Conny Rolen

e-mail: conny.rolen@formas.se

Tel: +46 8 775 40 00

www.formas.se

United Kingdom Participants

The UK partners should send their application (electronically) to Technology Strategy Board following the national rules on the Technology Strategy Board website www.innovate.org/retrofit.

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