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Announcement

"Smart Home a new customer relationship with energy"

Project funding by the E.ON International Research Initiative 2012

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1   Introduction

The annual grant program was launched in 2007 to support researchers and teams at universities and institutes in a wide variety of research topics relevant to the energy business. In its research initiative, E.ON has to date invested €18 million in international research projects in order to find solutions for the challenges we are facing in the future energy supply. The focal topic of the research calls will change annually.

E.ON is funding research into new, innovative solutions in projects. E.ON is dedicated to supporting international energy research to find new answers to pivotal questions in energy technology. Funding recipients are encouraged to publish their findings and to make the information accessible to the general public as well as regular reports to E.ON.

As one of the world's largest investor-owned power and gas companies, E.ON believes that it has a responsibility to provide investment into research, in order to meet future challenges in energy technology. E.ON intends to contribute significantly towards progress in global research of energy technologies. Research into new technologies needs strong financial support, even if they are not yet close-to-market and this is recognized and supported by E.ON. One aim of E.ON's International Research Initiative is to generate results with potential benefit for society, the environment and future energy supplies.

In 2007, 10 projects where funded in the theme of "Energy Storage", in 2008, nine projects where funded on "Application of Nanotechnology in the Energy Business". In 2010 the topic was "Heat Storage for Concentrating Solar Power" where five projects where selected. The 2012 call is "Smart Home a new customer relationship with energy".

2   Subject of the funding

E.ON believes that the range of smart home technologies now emerging can enhance customers' lifestyles while helping them to use energy in a cleaner and better way.

These technologies, linked to the smart power networks of the future, will transform the landscape in the residential and small enterprises energy markets, creating demand for new products and services.

Each customer could have a single system for controlling and monitoring an integrated network of electrical appliances and electrical equipment at their property. These could range from heating, ventilation and air conditioning units through cookers and washing machines to TVs, radios and security equipment.

Customers could choose to operate their network directly by pre-programming or remotely through mobile phone systems and the internet.

Smart home technologies can help customers to make their lives more comfortable and energy efficient by extracting the maximum value and benefit from the minimum amount of energy.

Understanding is needed of how different customers will want to use these technologies, how these technologies are packaged and offered as attractive products and services, and how customers will relate to these.

To help acquire this knowledge, E.ON intends to use its International Research Initiative to fund research costing up to €1 million to be completed by the end of 2012.

E.ON is seeking applications from research institutions, scientific organizations and universities which will form the basis of a suite of up to five projects which together address the core themes.

Examples of some of the key questions that successful project proposals should cover include:

Customer appeal

• Why do people use energy in the way they do today?

• What is their motivation to change their behavior?

• Which elements of their behavior affect the acceptance or rejection of Smart Home concept?

- What benefits will Smart Homes provide to customers?

- Which technology combinations (energy and non-energy) are most interesting and create value for which customers? For example, in Smart Homes for older people, which technologies are required and what particular benefits could emerge?

- How can a Smart Home be integrated into the daily lives of customers, and what is the role of energy companies in this

- What features and offerings (products and services) would have most customer appeal in terms of their fun, ease-of-use, image and efficiency?

- Which combination of features, products, and services, bring the most value to the customer and the supplier?

- Which functionalities of a Smart Home are: essential, optional, or undesirable

- What safeguards will customers and the law require with regard to data security and sharing?

Smart Home Strategy and Marketing

- What would be the most effective approach to launching a new and revolutionary technology? This may be sector specific. For example, the approach to older people in apartments may be different to small and medium sized businesses.

- What lessons can be applied to Smart Homes from the introduction of new technologies into other sectors?

- What would be the most effective split of the customer base into market sectors for the progressive introduction of this technology?

- What approaches and incentives would help to increase the adoption of Smart Home technology in selected customer sectors?

- What are the customers' price-thresholds for Smart Home solutions and what payment terms are preferred – monthly fee, one-off payment, etc.?

Projects should develop an understanding of how these themes may differ across Europe – for example, Germany, Italy and UK.

The research will help further the development of a smart energy world and increase the understanding of Europe's energy markets and demographics from an energy industry perspective.

3 Scope of funding

3.1. Funding recipients

Universities and non-commercial research facilities (outside of universities) are entitled to apply. Applications will be accepted from any country around the world. Private individuals will not be funded.

The funds may not be used to fill gaps in budgets nor may they be used to enable other sponsors to reduce their grants correspondingly. Applications should not be submitted for the purpose of:

- Topping up travel assistance or scholarships of third parties

- Testing and development work on problems that have already been solved scientifically

- Evaluating patents

- Increasing basic budgets.

3.2.   Preconditions for funding

The applicant must have the necessary specialist qualifications demonstrated by relevant previous achievements and a sufficient capability to execute the project.

Collaborative projects, particularly with multi-national participation, are welcome. Partners in collaborative projects are to declare their cooperation in an agreement prior to the decision on funding.

Previous or current funding relating to the research proposed for the E.ON International Research Initiative Call 2012 should be stated along with an indication of the significance of these third-party contributions. In addition the proposer must detail how this proposal differs from existing research programs in their institute and what added value will be provided by the funding proposed.

3.3.   Type, scope and amount of funding

The funding is granted on application; there is no legal entitlement to funding at all or to a specific amount. The forms published by the E.ON International Research Initiative must be used for the application.

The funding comprises 100 percent of the approved financing plan. Overpayments resulting after the conclusion of the project are to be returned without request. If third parties are to participate in the project financing, then the prior approval of E.ON must be obtained. The funding is reduced by the amount of third-party subsidies. In the case of third-party funding already stated in the application, approval is regarded as issued unless there are any other stipulations in the funding agreement.

Projects will be funded for up to one year. In exceptional cases the funding period may be extended due to unforeseen circumstances with no additional funds provided. In such cases the extension will need to be re-approved by an expert, appointed by E.ON, who will assess the projects viability under the new time scale. An extended project will not last more than two years.

Personnel expenses including social security charges and other statutory costs, expendables, travel costs, expenditure for the awarding of contracts to third parties as well as for the procurement/manufacture of objects for the project can be funded. Personnel expenditure is to be stated in the amount of prevailing country-specific remuneration.

Please provide details of any expenditure for infrastructure performances (so-called overheads) as these may be considered for funding in the 2012 call. However, we reserve the right to decide how much of these overhead costs will be funded.

3.4.   Other provisions for funding

The E.ON International Research Initiative places value on funding recipients making their results accessible to the public (in addition to regular internal reports to E.ON) via the usual specialist technical journals. Any publication by the funding recipient is to refer to the support by the E.ON International Research Initiative. Furthermore, E.ON would also like to be mentioned in information distributed to the general public regarding the projects it funds. E.ON requests cooperation in this matter.

Regular engagement with E.ON personnel will be expected throughout the project.

The E.ON International Research Initiative may invite funding recipients to an annual symposium and asks them to present an update regarding the progress in their projects.

4   Application procedure

The funding measures are supported by the E.ON International Research Initiative and proposals must be submitted to:

E.ON International Research Initiative
T/TI3
E.ON-Platz 1
40479 Düsseldorf
Germany

E   EIRI@eon.com
F +49 211 4579 422

Before submitting your application, please request a copy of the E.ON IRI Funding Agreement document using the following e-mail address: EIRI@eon.com

Project applications and descriptions can be submitted to the E.ON International Research Initiative following the guidelines detailed in this announcement, up to **Midnight GMT, 30 November 2011**. We cannot guarantee that any applications submitted after this date will be considered. Only applications in English will be considered.

The preferred start date for research projects is **1 March 2012, with a presentation in November 2012 and completion before 31 December 2012**. This should be taken into account in the project schedule provided in the project application.

The application comprises:

1) **Project application**: Applications must be generated using the standardized "Project Application" form available from www.eon.com/research_initiative. If the work is to be carried out in a consortium, each partner should make their own funding application.

2) **Project description**: A comprehensive project description including clearly identified work packages, deliverables, milestones and schedule. The project proposals should address the evaluation criteria detailed in section 5. The project description should be no longer than 16 pages of A4 in 11pt Polo and must contain a brief, purposeful project title and be organised as follows:

- Abstract (maximum one page)

- Research content (maximum 10 pages) contained within clearly defined work packages and approach methodology

- Candidate/consortium/sub-contract experience (maximum two pages)

- Project management (maximum three pages) including defined deliverables, milestones and a clear and detailed project planning schedule.

All sections of the application are to be submitted in both **electronic** and **paper** form.

5   Evaluation and selection process

The evaluation of the project application including project application and project description will be weighted as follows:

- Research content: 50 percent

- Candidate/Consortium experience: 25 percent

- Project management: 25 percent

The project description must address the following evaluation criteria (with the weighting of these summary criteria given in brackets) and therefore should be organised accordingly. Further explanation of the evaluation criteria has been detailed below.

Short listed projects may be asked to give a presentation to the selection panel to support the final selection in January 2012

1) Abstract – maximum one page

Please submit an overview of the entire project proposal, including the aims of the project, the designated scientific approach, the expected results and the impact through the project.

2) Research content (50 percent) – maximum 10 pages

Research landscape	Outline of the current status of science and related technologies specific to the research topic, a description of the project aims and the expected outcome / understanding of the in relation to the research areas
Approach	Outline of the methodology that will used to carry out the research, highlighting any specific approaches for geographic regions, segmentation, future trends
Scope of research	Describe the areas that the research will cover and any links to current or recent research in this area
Output and benefits	Detailed description of the likely outputs and potential benefits to societies environmental challenges and energy businesses
Impact	Likely influence of this research on future policy and regulation, impact on the future of smart homes

3) Candidate/Consortium/sub-contract experience (25 percent)

Quality of project participant(s)	• A summary of candidate(s) experience both generally and in the field of research proposed in this application.
	• A chronological account of recently concluded and current projects relating to the specific research topic.
Experience of project participant(s)	• Three papers published by the applicant (or a consortium member) determined by the candidate(s) to be of the most relevance and importance to the project proposal which demonstrate an excellent track record of successful research in proposed research area.
Overall value of collaboration (where applicable)	• A link to the website(s) of the researcher(s) or the university/institute(s) where possible.

4) Project management (25 percent)

Project related costs	The funding amounts are to be submitted in agreement with the intended coordinator, partners and cooperation models are to be stated.
Time and resource management	A realistic Gantt diagram (work and time schedule) with milestones on a monthly basis should be produced. This should be linked to work package descriptions and the planned engagement with E.ON at key stages.
Overall degree of risk	Outline of main obstacles that may prevent further development along with an indication of the risk involved and planned ways in which these will be overcome.
Implementation of project results	Planned measures for the scientific and economic implementation of the project results expected.

Project applications are evaluated by international E.ON-internal experts and external scientists. The E.ON International Research Initiative maintains strict confidentiality regarding the evaluation. The final decision on funding of the projects is made by E.ON with consideration of the funds available. The announcement of selected projects is scheduled for the **30 January 2012**. The selection results will be announced in writing.

Note: In the case of a consortium, a cooperation agreement will need to be agreed prior to signing of the funding agreements (cooperation agreement).

The provisions for funding (www.eon.com/research_initiative) apply to the approval, payment and interruption of funding, for the verification and review of use as well as, if necessary, to the cancellation of the funding agreement and the return of the funding granted.

This agreement and the following are exclusively subject to the laws of the Federal Republic of Germany regarding its realization and in all its effects.

6   Calendar

Launch of Call 2012	23 September 2011
Deadline for proposals submission	30 November 2011 (midnight)
Start date of selected projects	1 March 2012
Presentation of results	**November 2012 (date tbc)**
Completion of projects	**31 December 2012**