



The ICT programme and sustainable buildings

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European Commission
Information Society and Media

The ICT programme and sustainable buildings

- 1) Overview of approach
- 2) Ongoing activities
- 3) Open call on ICT for energy-positive neighbourhoods

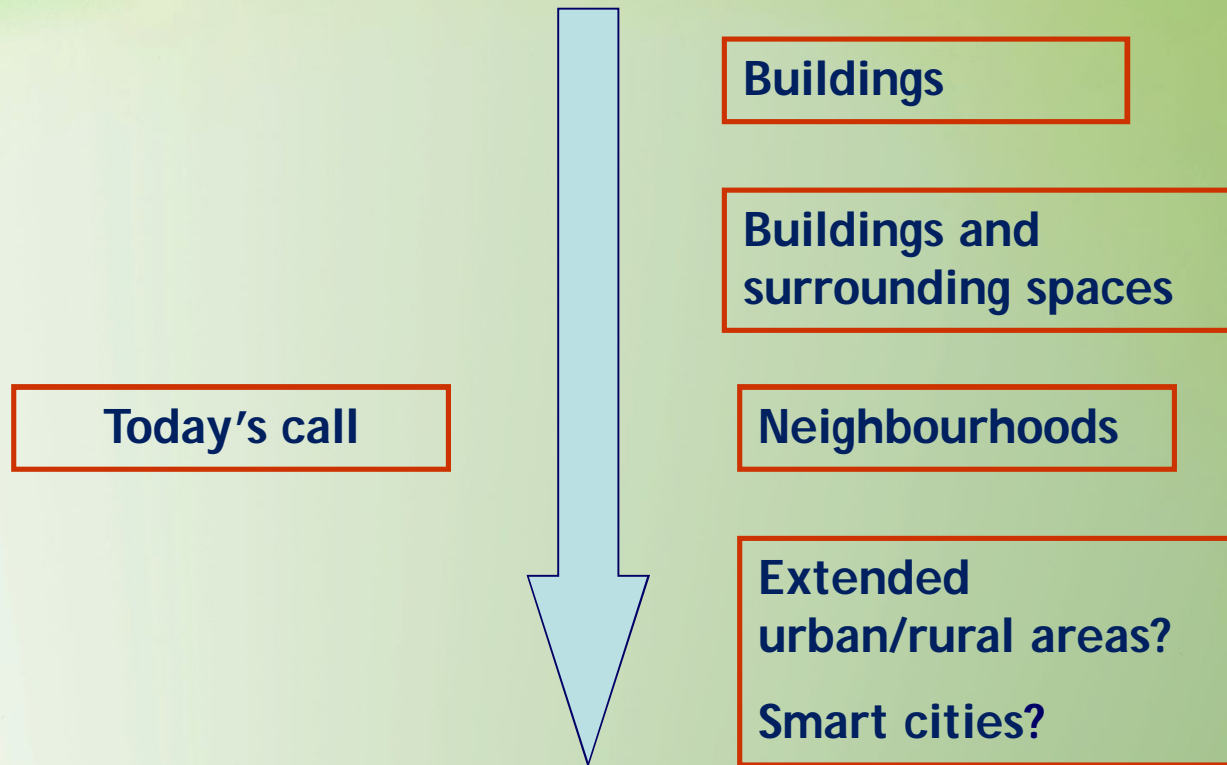


The ICT programme and sustainable buildings - approach

- Focus on energy-efficiency
- Many elements can contribute to energy-efficiency of buildings, incl. ICT
- ICT can contribute at different stages of a building's life-cycle



The ICT programme and sustainable buildings - approach



The ICT programme and sustainable buildings – ongoing activities

1) Projects

2) Horizontal activities:

- Measuring the energy savings
- Data modelling



The ICT programme and sustainable buildings – ongoing activities

1) Projects

- Main instruments CIP & FP7
- Demonstrate how ICT can contribute to energy (and water) savings
- Adaptation of existing technologies & validating these in pilots
- In residential buildings strong emphasis on behavioural change
- In non-residential buildings decision support at a higher level & more automation whilst taking into consideration the needs of the users



The ICT programme and sustainable buildings – ongoing activities

2) Horizontal issues

Measuring energy savings

- Projects started to work together on this in 2010:
 - Definition of the methodology for the efficiency measurement and
 - Impact Assessment Methodology
- 2nd version available and refinement continues



The ICT programme and sustainable buildings – ongoing activities

Data modelling

- 2nd workshop today
- **8 Sessions:** Ontological Engineering State of the Art / Green Building Information Modelling / Energy and Behavioural Modelling and Simulation at Facility Management / BEMS Integration Platforms & Ontology's / Ontology's for Heterogeneous Physical Devices / Middleware for EupP (Energy using or producing Products), White goods, HVAC, Storage and Micro Renewables / Prosumers Micro Energy Trade Semantics / eeB Data Models collaboration space
- **papers:** http://ec.europa.eu/information_society/activities/sustainable_growth/docs/eeb-data-models_ws/eeb_dm_proceedings_07-10.pdf
- **ICT4E2B Forum:** <http://forum.ict4e2b.eu:8080/share/page/site-index> (username: visitor, password: ict4e2b). To register as a contributor send an e-mail to infso-ictforsg@ec.europa.eu and indicate if you are participating in a European Commission funded project.



The ICT programme and sustainable buildings – open call

ICT for energy-positive neighbourhoods

Call deadline: 01/12/2012, € 30 m

Targeted Outcomes

To achieve energy-positive neighbourhoods and/or energy-positive extended urban/rural communities

By means of management and control systems and / or decision support systems



The ICT programme and sustainable buildings – open call

Conditions

- Technical Research + Appropriate business models
 - How to split incentives
 - How to engage users
 - How to commit public authorities
- Beyond buildings
 - Integration of renewables and connection to the electricity grid

Interoperation with other ICT systems already deployed e.g. traffic management, GIS would be a plus



The ICT programme and sustainable buildings – open call

Proposals shall include

- Systems Integration
- A substantial validation Phase
 - Record evidence of benefits
 - Total cost of operation
 - Scalability potential
 - User benefits

Consortia must be compact



The ICT programme and sustainable buildings – open call

Expected Impact

- Quantifiable and significant reduction of energy consumption and CO2 emissions through ICT
- Contribution to the opening of a market for ICT-based district/community energy management systems
- Establishment of a collaboration framework between the ICT sector, the buildings and construction sector and the energy sector



Thank you for your attention!

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Disclaimer: the opinions in this presentation are those of the author and do not commit in any way the European Commission

