I3 CON CONFERENCE
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Loughborough, UK

ICT FOR ENERGY EFFICIENCY
ON GOING ACTIVITIES AND PLANS
FOR THE FUTURE

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ICT for Sustainable Growth means...

Sustainable Growth

Risk and Disaster Management
Environmental Management
Energy Efficiency

EU Sustainable Development Strategy and the EU Lisbon Strategy
Research and Development + Competitiveness and Innovation funding programmes
### POLICY CONTEXT

<table>
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<th>Date</th>
<th>Event</th>
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<td>March 2007</td>
<td>The European Council endorsed a combined climate and energy policy package with the 3 x 20 targets by 2020.</td>
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<td>January 2008</td>
<td>The European Commission agreed on a package of proposals that will deliver the European Council’s commitment to fight climate change and promote efficiency and renewable energy.</td>
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As a cross-cutting technology impacting all socio-economic sectors, ICT must contribute to reduce GHG emissions and to fight climate change while maintaining growth.

In the past progress in the ICT-enabled sensing, monitoring and optimisation technologies have helped to improve energy efficiency in several domains.

ICT can achieve in energy productivity the same results as for labour productivity by innovating in ICT solutions dedicated to the improvement of energy efficiency in many areas.

Through R & I instruments we have to prepare the next generation of ICT and ICT-enabled solutions helping significantly to decouple energy consumption from growth, thus participating to the targets set by European Council.
COMMUNICATION: « ADDRESSING THE CHALLENGE OF ENERGY EFFICIENCY THROUGH ICT »

Objectives

- Raise awareness on the potential of ICT to combat climate change by improving EE

- Identify promising socio-economic sectors and actions
  - The ICT sector itself: cleaning its own house
  - Highlighting the enabling role of ICT in sectors such as buildings and lighting, energy generation/supply chain and others (e.g. transport, virtualisation)

- Stimulate an open debate among relevant stakeholders: Ad Hoc group of stakeholders/consultations
  - Promote interoperability among solutions
  - Coordinate awareness raising, best practices...
  - RTD roadmaps and priorities
  - Recommend actions as follow up of the Communication

The Communication has been adopted yesterday by the Commission
ON GOING R & D ACTIVITIES (1)

In FP7

- Construction sector: ICT contributing to energy neutrality of buildings
- Call 2 (September 2007) of WP 2007-2008: 4 STREPS and 1 CSA have been selected with a total funding of 12.3 M€
- They cover a range of energy efficiency-related challenges:
  - Real time information on energy consumption of appliances and their fine grained control
  - Interactive interfaces to manage/optimize energy consumption at appliances/buildings/grid level
  - Provision of buildings management and energy efficiency services platforms
### ON GOING R & D ACTIVITIES (2)

- Contribution to end-user awareness and control
- Energy management within a micro grid of buildings and with the main grid
- Tests and validation cases cover various geographical/cultural contexts

- Progresses in ICT are expected in:
  - Decision support systems, software-based actuation systems
  - Visualization tools, user interfaces/interactions paradigms
  - Wireless sensing and networking architectures
  - Ontologies, agent technologies, ambient intelligence approaches
  - Energy Efficiency services platforms
ON GOING R & D ACTIVITIES (3)

CIP PSP – WP 2008

- Call for proposals launched with submission deadline 09/09/2008
- Objective 2.1 – Pilots B
  - ICT for energy efficiency in public buildings and spaces, including lighting
    - Several pilots (2,5 M€) with direct involvement of public sector, users and ICT suppliers
    - Tested in real local conditions (at least one year), fostering innovation through ICT-based innovative services, potential for replicability, at least 4 legal entities from 4 different MS
- Objective 2.3 – Thematic network
  - Consensus building and experience sharing in ICT sustainable urban development and management
    - One network (300-500 K€) gathering all urban stakeholders
    - Awareness raising actions, best practices, scenarios & roadmaps on ICT solutions for urban development
### FUTURES ACTIVITIES

#### Policy level
- Information gathering and constituency building
- Preparation of an Impact assessment
- Focus on recommendations for further R & D & I and possible inputs for policy
- Construction will remain a sector of the portfolio

#### R & D level/WP 2009-2010
- Under discussion with a publication at the end of this year
- Likely increase of visibility and financial support for ICT for EE
- Construction/buildings will remain among the priority themes
- Possible joint call with DG RTD

#### Innovation level/WP 2009-under discussion
- Pilot B - Energy optimisation in social/urban neighborhood
- Thematic Network - Integration of renewables in the grids
For more information:

European Commission – DG INFSO
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