



Objective EEB-ICT-2011-6.5

ICT for Energy-positive neighbourhoods

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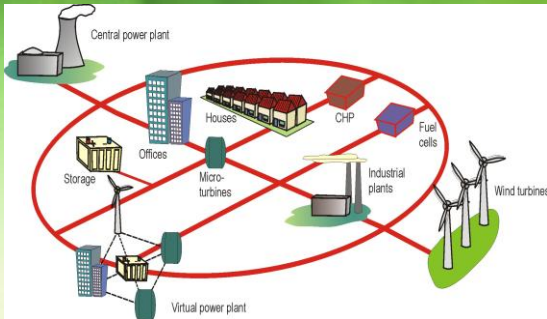
ICT for Sustainable Growth

European Commission

Information Society and Media Directorate-General



Outline



- Policy Setting



- Support for Research: The 7th Framework Programme – Theme 3 (ICT)



Energy-efficient buildings PPP Context

- **What:** part of the Recovery Plan, to boost the construction sector.
- **Aims:** Support RTD on new green technologies and materials and advanced energy efficient systems and services - this, with a view to radically reducing energy consumption and CO2 emissions by buildings.
- **Funding:**
 - 0.5 B€ for research; Joint & Co-ordinated calls between four relevant FP7 Themes: ENERGY/ENVIRONMENT/MNP/ICT



ICT for energy efficient buildings PPP

The 4 years strategy

call 2010

Buildings

5 STREPs

Call 2011

**Buildings and
Surrounding spaces**

7 STREPs

Call 2013

**Extended
urban/rural areas?
Smart cities?**

Call 2012

Neighbourhoods



The Green Digital Charter

- An initiative of Manchester City, Eurocities and the Commission launched in November 2009
- The signatory Mayors commit to
 - Deploy 5 large scale projects before 2015
 - Decrease ICT direct carbon footprint by 30% by 2010
 - Create partnerships on ICT and energy consuming sectors by 2011
- Signatories: Amsterdam, Birmingham, Bologna, Bristol, Genoa, Ghent, The Hague, Helsinki, Lisbon, Malaga, Manchester, Murcia, Nantes, Nice, Reykjavik, Rijeka, Tallinn, Stockholm, Vienna and Zaragoza.



The Green Digital Charter (2)

- Aims at:
 - Reducing own ICT footprint (notably data centers)
 - Increase the use of renewables
 - Improve measurability, transparency and visibility emissions and energy use
 - Improve transport and urban mobility
 - Deploy smartgrids with particular attentions to microgrids and virtual powerplants

http://ec.europa.eu/information_society/events/ict4ee/2010/charter/index_en.htm

- In the context of the Covenant of Mayors

<http://www.eumayors.eu/>



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Target Outcomes

Shall

- Addressing the dynamics of energy supply and demand in neighbourhoods and extended urban/rural communities
 - Management and control systems
 - Decision support systems
- Beyond buildings
- Integration of renewables
- Connection to the electricity grid



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Target outcomes

Technical Research

Appropriate business models

How to split incentives

How to engage users

How to commit public authorities

SHALL

Target Outcomes

Interoperation with other ICT systems already
deployed

e.g Traffic management, GIS

MAY



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Target outcomes

SHALL

- A substantial validation Phase
 - Record evidence of benefits
 - Total cost of operation
 - Scalability potential
 - User benefits
- Consortia **MUST** be compact



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Expected Impact

- 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
- Quantifiable and significant reduction of energy consumption and CO2 emissions achieved through ICT.



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- **Funding schemes: STREP**
- **Indicative budget distribution:**
 - **STREP: EUR 30 million**
- **Call: FP7-I2012-NMP-ENV-ENERGY-ICT-EeB**
- **Date of publication: July 2011**
- **Call deadline: 01/12/2011**



Information Days for PPP



Source: RTD

•11-12 July 2011
Brussels

- Green cars
- Factory of the future
- Energy-efficient buildings

http://ec.europa.eu/research/industrial_technologies/energy-efficient-buildings_en.html



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

