

EUSEW

"Local and regional action for sustainable energy"

13 April 2011

ICT contributing to the development of a more efficient Europe

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Policy context

Europe 2020 (March 2010)– A European smart, sustainable and inclusive growth can be achieved through:

- knowledge and innovation
- greener, more competitive and resource-efficient economy
- empowering people and strengthening cohesion

2020 Targets – Climate and Energy Package (Dec. 2008)

- reduction in EU greenhouse gas emissions of at least 20% below 1990 levels
- 20% of EU energy consumption to come from renewable resources
- 20% reduction in primary energy use compared with projected levels, to be achieved by improving energy efficiency.



ICT for Energy Efficiency

ICT - key enabler for energy efficiency,
contributing to a low carbon economy by

- bringing direct efficiency gains:
 - measuring, monitoring, intelligent management and control
- driving behavioural change:
 - providing reliable data,
 - identifying energy consumption (how much, where),
 - enabling comparative analysis (identify common inefficiencies, best practices and opportunities)



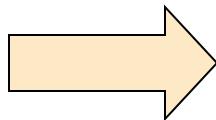
ICT for Energy Efficiency (2)

ICT potential for a significant impact in:

- 1) Buildings & Construction
- 2) Transports & Logistics
- 3) Energy supply

BUT:

ICT has a growing appetite for energy (~15 -20 % of total electricity consumption by 2020)



improve the efficiency of ICT



Measuring the Environmental Impact of ICT

- Commission Recommendation of October 2009
- Digital Agenda for Europe (*Key Action 12*)

*The ICT Sector should develop, adopt and implement **common methodologies to measure its energy consumption and GHG emissions** by end of 2011*

- ICT enabling energy efficiency in other industrial sectors



Response of the ICT Industry

- Creation of the **ICT for Energy Efficiency (ICT4EE) Forum**
 - Voluntary exercise, but the EC will consider legislative measures if necessary
- Contributions to **International Standards Development Organizations** (ITU, IEC, ETSI, ISO) and related initiatives (e.g. GHG Protocol)
 - Agreement on reconciling SDO efforts to ensure **compatibility** and **consistency**
- Begin road tests on methodologies developed by SDOs
 - To be launched by EC by end 2011



Cities taking on the challenge: The Green Digital Charter

- An initiative of Manchester City, EUROCITIES and the European Commission
- Launched in November 2009, to encourage cities to i) reduce the carbon footprint of their ICT and ii) roll-out ICT solutions which lead to more energy efficiency in areas such buildings, transport, energy
- Signatory mayors commit to:
 - Deploy 5 large-scale ICT pilots per city before 2015;
 - Decrease ICT direct carbon footprint per city by 30% by 2020;
 - Create a partnership of cities on ICT for Energy Efficiency to work through to the end of 2011.



Cities taking on the challenge: The Green Digital Charter (2)

- 23 cities have signed up to the Charter so far:

Amsterdam, Belfast, Birmingham, Bologna, Bristol, Genoa, Ghent, The Hague, Helsinki, Lisbon, Malaga, Malmo, Manchester, Murcia, Nantes, Nice Cote d'Azur, Nuremberg, Reykjavik, Rijeka, Stockholm, Tallinn, Vienna, Zaragoza

- The European Commission plans to launch a support action for the Green Digital Charter in the coming months.



Developing new initiatives: Smart Sustainable Cities and Regions

Much preparation work has been undertaken - as we approach new programmes (FP8/CIP II)

ICT for sustainability vs sustainable ICT

ICT-specific guide on energy efficiency:

- Toolkit/guide with recommendations for local and regional authorities
- Wiki-type resource for communication and exchange of experiences, ideas, best practices and opportunities



Digital Agenda going local

"Cities as leaders in the Digital Agenda"

- Revision of the Digital Agenda for Europe
- Making it more effective, relevant and tangible at the local level
- Building digital local agendas, depending on regions/local authorities needs
- Input from regional and local digital agendas

1st Digital Agenda Assembly

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Brussels

16 – 17 June 2011 *Save the date!*

➤ A thorough discussion with stakeholders, including key regional/local actors



... ICT in the balance

"The digital revolution is transforming the way we interact – how we live, work and play. At the same time, growing awareness of the sustainability challenges facing our planet is forcing us to ask profound questions about our economy and lifestyle.

If we develop and apply ICT badly, it could add to the world's problems. It could devour energy and accelerate climate change, worsen inequality for those who do not have access and increase pollution and resource use by encouraging ever more frenetic consumerism.

If we apply ICT well, the rewards could be enormous. It could help to enhance creativity and innovation to solve our problems, build communities, give more people access to goods and services and use precious resources much more efficiently."

(Peter Madden and Ilka Weißbrod, "Connected – ICT and sustainable development", April 2008)

