Theme 4: ICT for energy efficiency and environment

**Information day on
ICT PSP-Call 3
Brussels, 26th January 2009**

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Brussels, 26 January 2009**

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Theme 4: ICT for energy efficiency and environment

Instrument

Objective

Pilot Type B

4.1 ICT for Energy Efficiency in social housing, i.e. rental housing which may be owned and managed by the state, by not-for-profit organizations, or by a combination of the two, with the aim of providing affordable housing.

4.2 ICT for prevention, alert and rescue to minimise impacts of climate change

Budget allocation: ~ 8 M €

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Theme 4: ICT for energy efficiency and environment

Objective 4.1:
ICT for energy efficiency in social housing

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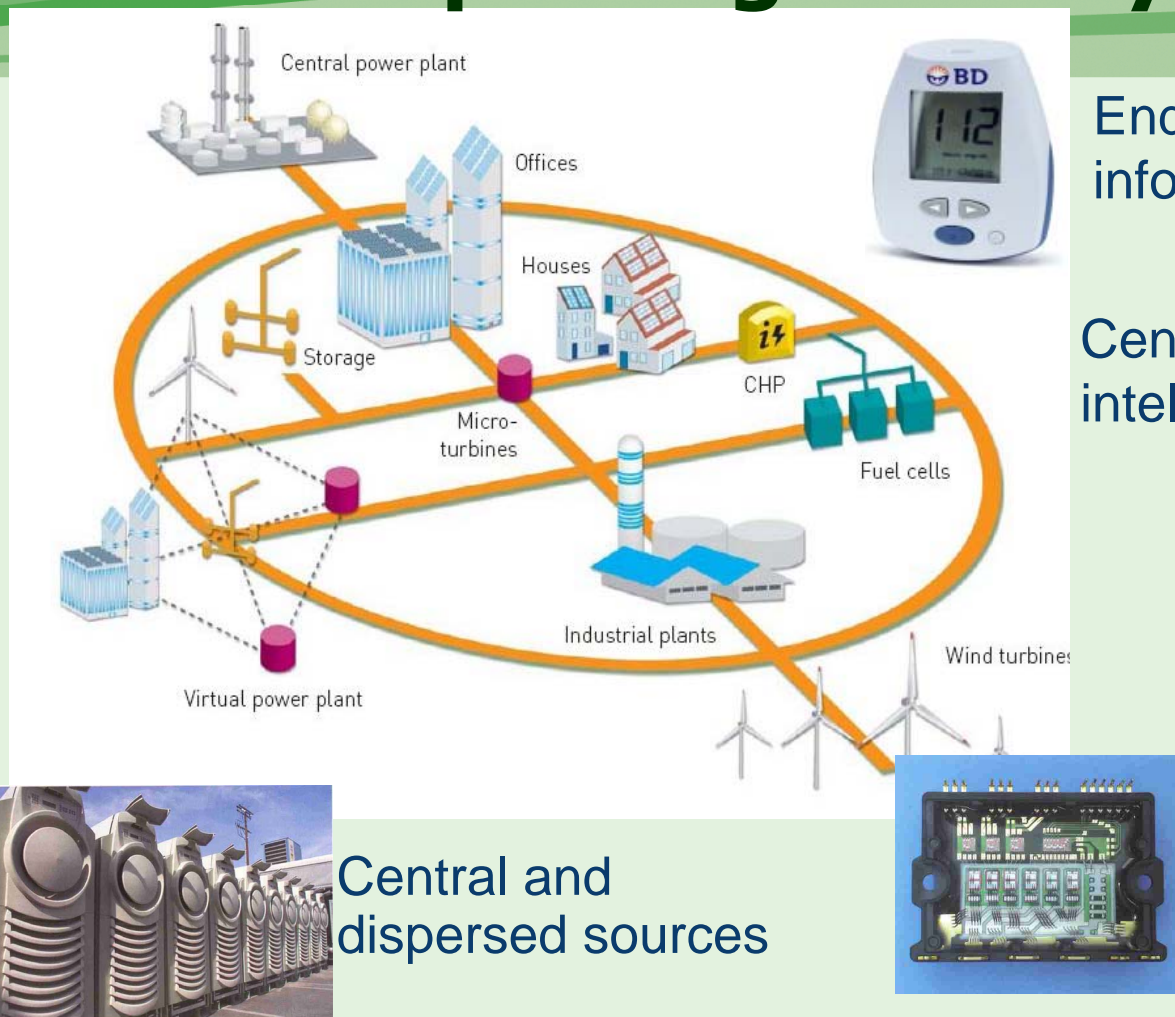THEME 4: ICT for energy efficiency and environment
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Background concept: Smart Grids Internet-like power grid infrastructure "replacing kWh by Bits"

End user real time
information & participation

Central & Dispersed
intelligence

Smart embedded
power electronics

Central and
dispersed sources

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Objective 4.1: ICT for energy efficiency in social housing

Objective: to improve, through ICT-based solutions, energy efficiency in social housing

> **Pilot actions under this Objective aim to demonstrate that advanced ICT components and systems (e.g. smart metering, smart lighting, power electronics for integration and management of locally generated renewable energy sources, etc.) can contribute directly to reducing both the peak-consumption and annual energy use by more than 15% under real conditions in European social housing.**
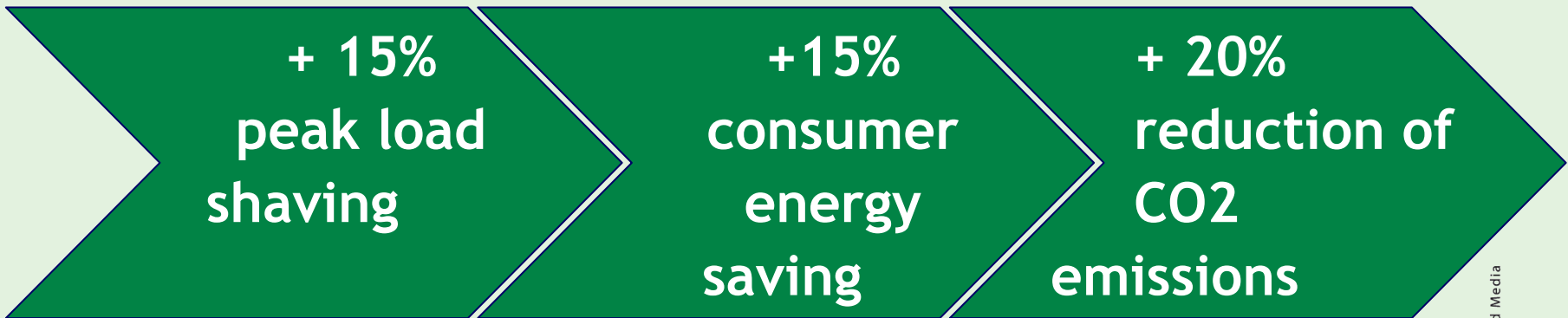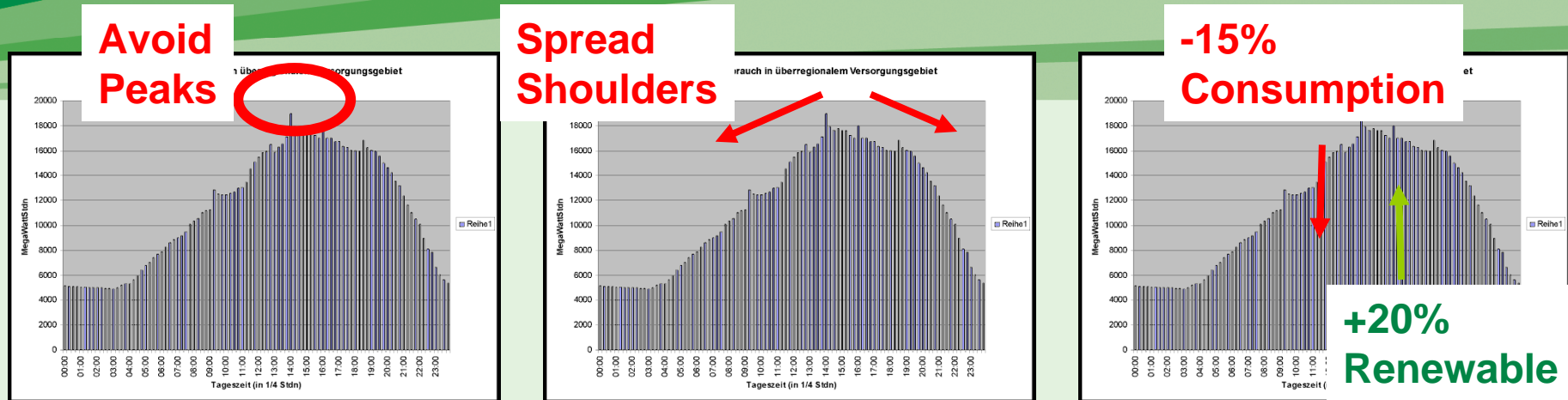
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Objective (cont.)

> **Pilots might also integrate the use of embedded power production based on clean locally distributed and renewable energy resources. In such cases, the ICT systems applied should also demonstrate that they can be operated without causing local instabilities in the electricity distribution infrastructure, and that the overall annual CO_2 emissions can be reduced by more than 20%.**

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Goals for social housing trial tests during one+ year

Avoid Peaks

Spread Shoulders

-15% Consumption

+20% Renewable

+ 15% peak load shaving

+15% consumer energy saving

+ 20% reduction of CO2 emissions

Real life testing and validated functional specifications, involving a statistically significant number of users and ethical and privacy safeguards

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Objective 4.1: ICT for energy efficiency in social housing

Rational and main features of Pilots

✓ **The goal is to carry out a first implementation of an ICT based innovative service carried out under realistic conditions.**

✓ **The emphasis is on fostering innovation in services ➔ the pilot may need to take-up completed R&D work, may extend already tested prototype services or may combine / integrate several partial solutions to realise a new innovative approach**

✓ **Proposals will be evaluated against the published evaluation criteria. It is intended to support at least two pilots.**

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Objective 4.1: ICT for energy efficiency in social housing

Targeted outcomes include:

✓ **Demand-driven pilots built on public-private partnerships and ensuring a successful end-user acceptance and uptake.**

✓ **Validation of the pilots shall be carried out during at least one year.**

✓ **High quality dissemination and deliverables that enable relevant authorities and bodies to implement an replicate interoperable solutions.**

✓ **Provide detailed plans for larger-scale sustainable uptake beyond pilots**

Expected impact:

✓ **Empowering end-users to play a central role in increasing energy efficiency, CO_2 emissions reduction and opening up the energy market.**

✓ **Enlarging the ICT market for energy network design and control tools as well as the corresponding services.**

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European Union
Sustainable Energy Week
9 ▶ 13 February **2009**

12/02/09, ICT FOR ENERGY EFFICIENCY: EU CONFERENCE AND INFO DAY

European Commission - Charlemagne Building
Brussels, 12 February from 14:30 to 18:00

Registration: http://85.255.198.139/eusew/index.cfm

Your presentation: INFSO-ICT4EE@ec.europa.eu

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ICT PSP Call 3

Theme 4: ICT for Energy Efficiency, Environment and Smart Mobility

Objective 4.2
ICT for prevention, alert and rescue to minimise impacts of climate change

ICT PSP Information Day

26 Jan. 2009

Antonios Barbas, Project Officer
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ICT for Sustainable Growth,
DG Information Society and Media, **European Commission**

Climate change adaptation actions include improvement of our risk management capacity

ICT systems enable:

- Better preparedness against extreme events
- Prevention of risk-prone conditions, enabling early warning to authorities and alert to population at risk
- Rapid and effective response
- Efficient resource management and substantial societal benefits (human life and operational costs)
- Reliable and timely communication to the public

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The Union's Policy context on Risk and Disaster Management: ICT enabling most of solutions

- **Reinforcing the Union's disaster response capacity [COM(2008)130 final; 5.03.08]**

- **Towards better protecting citizens against disaster risks: Strengthening early warning systems [SEC(2007)1721]**

- **2 new COMs foreseen in 2009:**
  -A Community approach on the prevention of natural and man-made disasters.
  -EU strategy for supporting risk reduction in developing countries

- **GMES –We care for a safer planet [COM(2008) 748 final 12.11.08]**

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ICT PSP Call 3
4.2: ICT for prevention, alert and rescue to minimise impacts of climate change

- **Call for 1-2 Pilot B projects (duration: 2-2.5 years) to validate and demonstrate innovative ICT practices for climate-induced incidents (floods, heat waves, pollution peaks, etc.)**

- **Disaster management cycle from prevention and preparedness to response; a multi-risk approach (all hazard) to be followed in all scenarios**

- **Improving interoperability in the management of extreme events and mitigating impacts**

- **Public & private stakeholders to make commitments for a trial in a regional/urban setting over one year**

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ICT PSP Call 3
4.2: ICT for prevention, alert and rescue to minimise impacts of climate change

- **Evaluation and impact assessment:** Societal benefits; Operational costs and efficiency of resource usage

- **Transferability**; Sustainability plan; **Take-up scenarios**

- Evidence of **ICT contribution to climate change adaptation plans**; Benchmarking in functionality, readiness and co-operation

- Public **demonstration & dissemination** incl. the media

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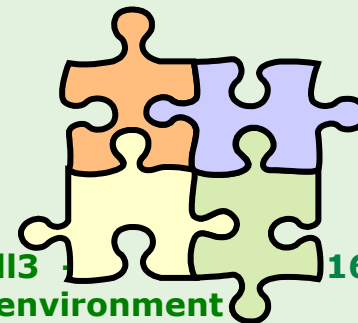Information Society and Media

Opportunities for Stakeholders

- **Set up test beds** for innovative ICT applications in environmental risk and disaster management, bring **end users** closer to key stakeholders, thus enhancing societal benefits
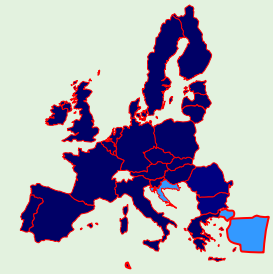
- Gain access to & **share knowledge** about interoperable ICT solutions, for increasing their competitive edge

- Contributing to an early and efficient adaptation to climate change by **reducing adverse effects for next generations**

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Further Information & Contact

DG INFSO Unit H4 "*ICT for Sustainable Growth*"

- **http://ec.europa.eu/ictforsg**

- **Mailbox: INFSO-ICTPSP-H4@ec.europa.eu**

For more information on ICT-PSP:
- **Short url: http://ec.europa.eu/ict_psp**
- **Mailbox: infso-ict_psp@ec.europa.eu**

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