

Future Internet Usage Area Workshop

June 22nd 2010



The FI-PPP from a Sustainable Energy Perspective

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ICT for Sustainable Growth

European Commission

Information Society and Media Directorate-General



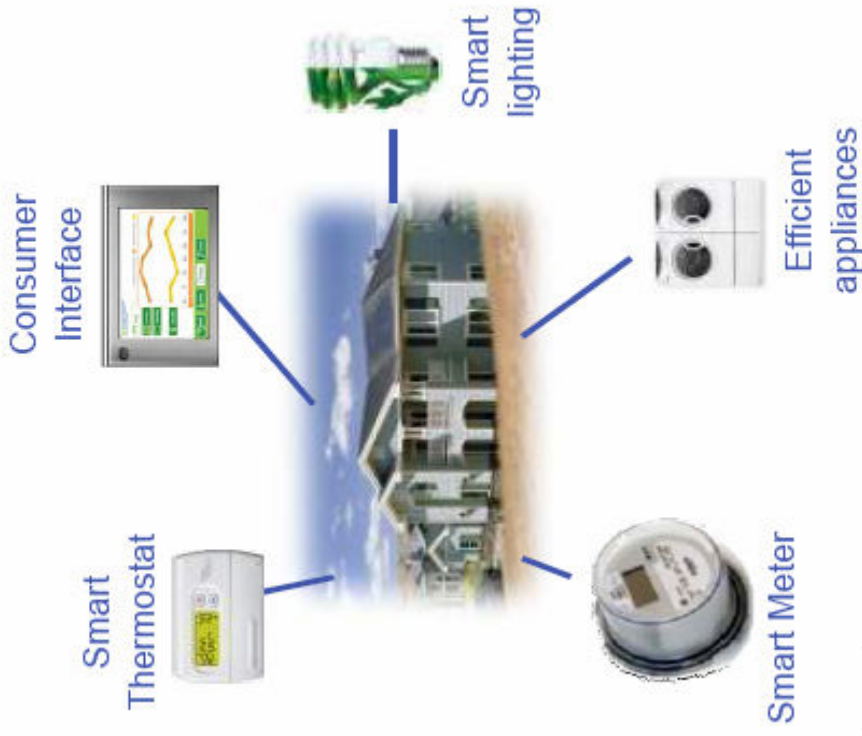
Information Society and Media
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Smart Metering: Key Platform to enable Smart Grids

- Need to focus on providing consumers with improved information on, and improved capabilities to manage their energy consumption
 - Minimum functional requirements
- Key building block to enable data visibility and automation
 - Smart site management (enterprise)
 - Smart home management (consumer)
- Connectivity through existing and planned communication infrastructure
 - Leverage broadband deployment + HAN
 - *Broadband not mandatory for metering...*
 - *...but essential for advanced services on top of meters*

Demand Optimization

- Bi-directional flow of information
- Information collection through extensive sensors networks
- Local communication network (HAN)
- Empowering user with real time information to create awareness and change of behaviour
- Integrated management and decision support based on data collection and aggregation

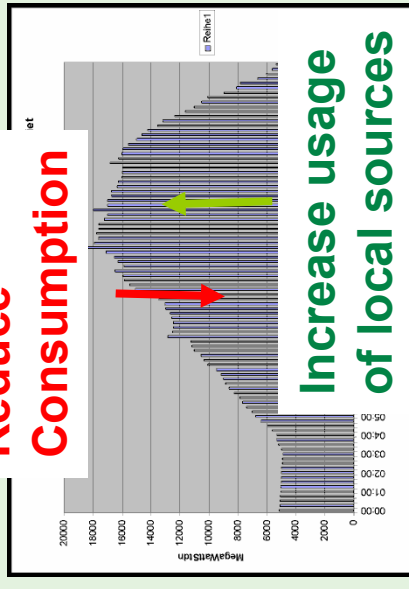
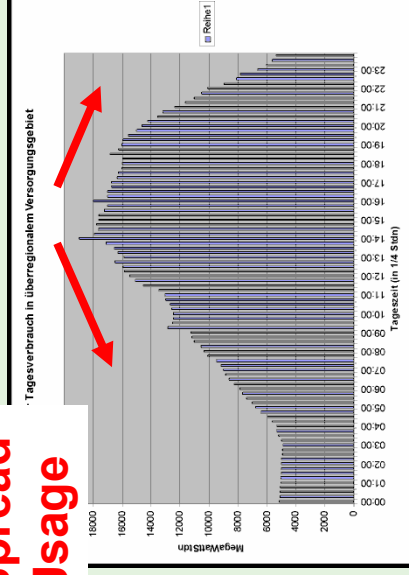
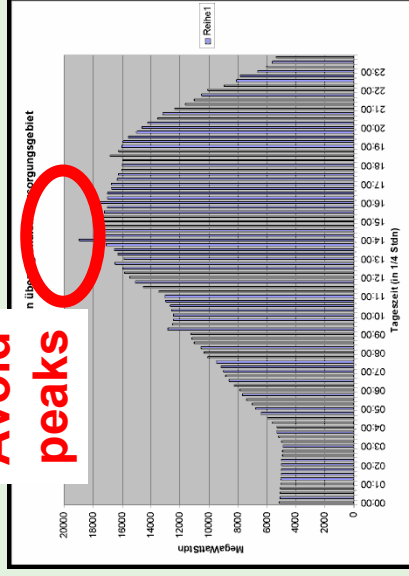


Source: GE

Avoid peaks

Spread Usage

Reduce Consumption



If you cannot measure it You cannot improve it

Key Functionalities

required for Smart Energy Management

- Integration of multiple sources of information at the edge
- Control of energy-efficient lighting and appliances
- Complete energy/resources usage tracking (water, gas, electricity)
- Extendable application (*heating, security, EV, emergency... but also weather, news, music, integrated com. ...*)

Key Principles for Future Internet Energy Applications

- Open architecture
- Internet protocol
- Plug and play services and equipment
- Heterogeneous networks support
- Industry-driven open standards (non-proprietary)
- Interoperability
- Scalable and open platform (integration of new applications)

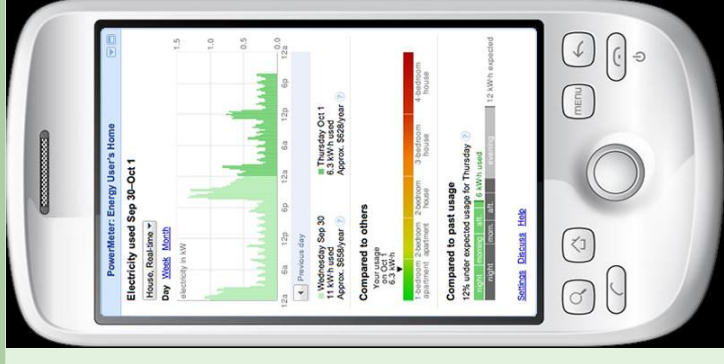


Technology Push vs. User Application Pull Anytime, Anywhere Energy Services



Multipurpose devices
becoming the gateway
to in-home multi-
services platform:

- home entertainment
- home automation
- home security
- home energy management



- Importance to safeguard security and privacy
- It's all about the applications
- Controlling energy and power use to reduce bills
- User adoption (investment, usage and benefits)
- Unleash innovation potential of open development platform for novel application and services

Further Information

Policy

- http://ec.europa.eu/information_society/activities/sustainable_growth/index_en.htm

Research

- <http://cordis.europa.eu/fp7/ict/sustainable-growth>

ICT4EE Forum

- <http://www.ict4ee.eu>

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