

Personal Energy Administration Kiosk application



"Wind is currently producing high loads. Your electricity provider offers you a discount of 25% on every kWh of electricity used between 1 and 4 pm today."

In the near future consumers will receive such text messages from their energy companies to consume the energy from renewables when they are cheaply available. A dynamic electricity accountancy system is the basis of real time monetary rewards for consuming electricity in times of high production.

The PEAKapp consortium develops a unique ICT-to-Human ecosystem, which:

- Triggers lasting energy savings through behavioural change and continuous engagement
- Enables increased consumption of clean and low priced electricity from the spot market for household customers
- Connects them to social media and motivate them through serious gaming

The PEAKapp ICT ecosystem will be designed to require smart meters as only hardware with respect to in-house equipment. The system can be implemented almost immediately and everywhere, which perfectly responds to the EU targets for smart meter roll-out: several EU Directives (2009/72/EC and 2009/73/EC, 2012/27/EC) ask for almost complete availability on all sites until 2020. These low hardware requirements are prerequisite for a fast market uptake. Thus, a noticeable impact on EU energy consumption can be achieved with almost no delay and without the need to equip the over 230 mill. households in the EU with any extra hardware.

Validation of the ICT ecosystem under real life conditions in the publicly owned social housing sector is carried out in Austria, Estonia, Sweden and Finland. The analyses of the collected data will allow ground-breaking insights into consumer behaviour, while outstanding EU energy market analyses will derive implications for regulatory practice to better support energy efficiency goals. An outstanding market uptake strategy:

- Provide electricity utilities with ready-to-sign agreements to implement the ICT system
- Advise the European social housing sector about consumer benefits
- Promote European smart meter utilisation and consumer acceptance

Project Title:

PEAKapp – Personal Energy Administration Kiosk application: an ICT-ecosystem for Energy Savings through Behavioural Change, Flexible Tariffs and Fun

Call:

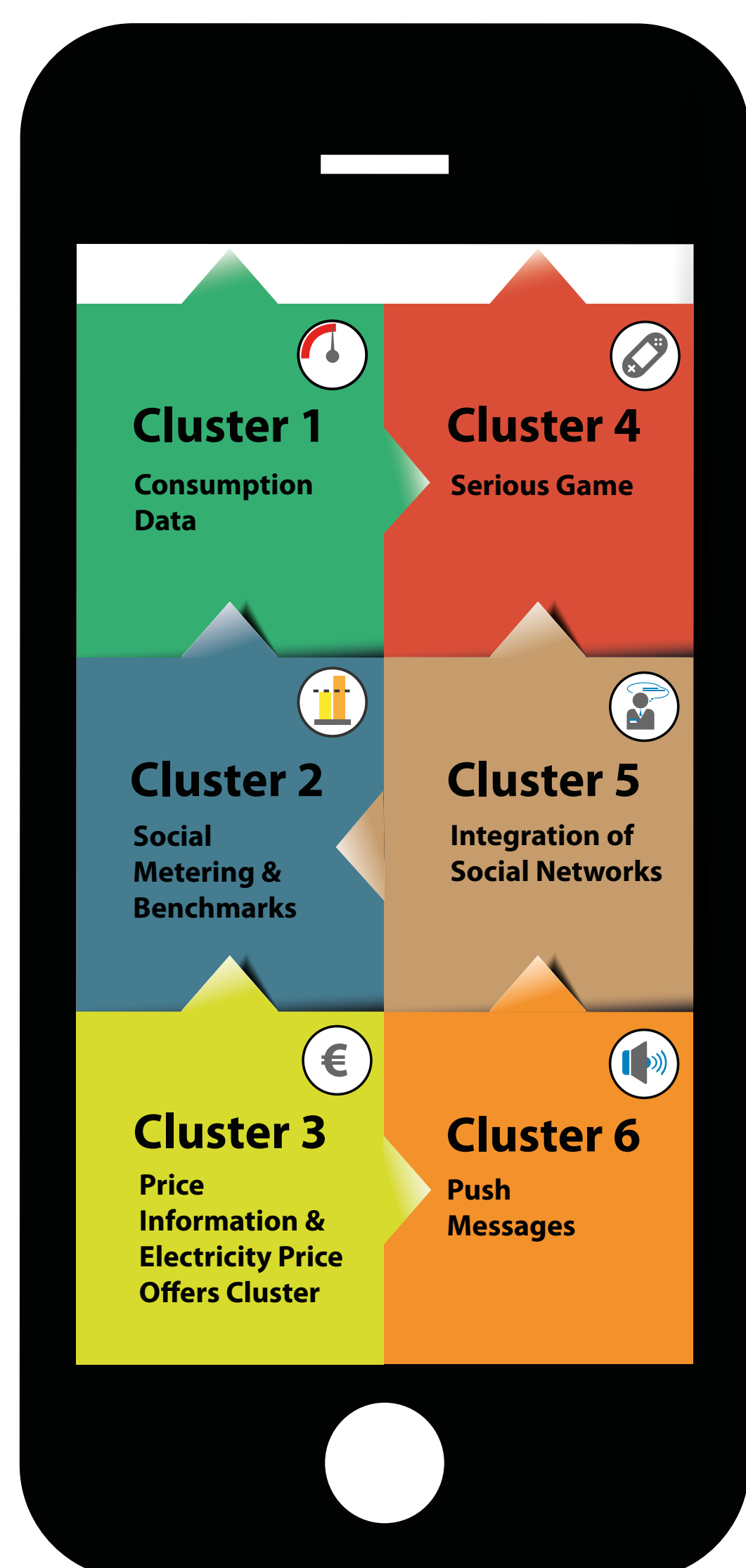
Horizon 2020 – Call EE-11 2015 – New ICT-based solutions for energy efficiency

Funding:

€2 mill. approximately

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PEAKapp provides its users six clusters of functionalities. These are:

- ▶ 1. Displaying consumption information
- ▶ 2. Benchmarking through comparison with other consumers
- ▶ 3. Dynamic electricity prices and spontaneous savings opportunities
- ▶ 4. Entertaining while educating gaming
- ▶ 5. The option to share and discuss savings achievements via social networks
- ▶ 6. The ability to receive push messages containing tailored energy efficiency tips and offers

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