EEGI – FP7 Last calls

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The contents of this presentation are not legally binding
FP7 – Energy projects launched 2012

• **Storage demonstration projects (WP2011)**
  - E-STORAGE, Enhanced pump storage
  - INGRID: Hydrogen storage

• **WP2012 R&D projects**
  - Electricity Highways 2050 – started 01/09/2012
    Long-term prospective planning of European transmission
  - Families of Projects – linking EU R&D, assessment & replication with national demonstration projects:
    - Renewable Integration (3 projects) started 12/12 - 01/13
    - Distributed Intelligence (1 project) starting 01/02/2013
    - "Smart Customers" (2 projects) started 11/12 – 12/12
  - Safety of grid-connected storage (2 projects) started 01/10/12

• **WP2012 coordination projects**
  - METER-ON, Technology platform secretariat started 7/12 – 10/12
FP7 – ICT projects launched 2012:

- Topic ICT-2011.6.1 Smart Energy Grids

Integration of renewable energy sources (emphasis)

- **I3RES**: ICT-based Intelligent management of Integrated RES for the smart grid optimal operation
- **INERTIA**: Integrating Active, Flexible and Responsive Tertiary Prosumers into a Smart Distribution Grid

Security and reliability (emphasis)

- **C-DAX**: Cyber-secure Data and Control Cloud for Power Grids

Data management infrastructures (emphasis)

- **EBADGE**: Development of Novel ICT tools for integrated Balancing Market Enabling Aggregated Demand Response and Distributed Generation Capacity
- **SMARTC2NET**: Smart Control of Energy Distribution Grids over Heterogeneous Communication Networks
FP7 – ICT projects launched 2012:

• Topic ICT-2011.6.1 Smart Energy Grids

Home energy control hubs (emphasis)

- **GREENCOM:** MyGrid; Energy Efficient and Interoperable Smart Energy Systems for Local Communities
- **INTREPID:** INTelligent systems for Energy Prosumer buildIings at District level
- **SMARTHG:** Energy Demand Aware Open Services for Smart Grid Intelligent Automation

Consensus on industry-driven open standards

- **STARGRID:** STandard Analysis supporting smart eneRgy GRID development
FP7 – 2013 Energy calls

- 7.2.1: Advanced concepts for reliability assessment of the pan-European transmission network
  1 proposal above threshold

- 7.2.2: Advanced tools and mechanisms for capacity calculation and congestion management
  0 proposals above threshold

- 7.2.3: Large-scale demonstration of innovative transmission system integration and operation solutions for (inter)connecting renewable electricity production (Energy-2 call) call closed 24-01-13

- 7.2.4: Ensuring stakeholder support for future grid infrastructures
  1 proposal above threshold

- 7.3.3: Understanding interfaces in rechargeable batteries and supercapacitors through in situ methods
  6 proposals above threshold
FP7 – 2013 Smart Cities call

- 7.1.1: Development and validation of methods and tools for network integration of distributed renewable resources
  5 proposals above threshold

- 7.3.1: Planning rules for linking electric vehicles (EV) to distributed energy resources
  2 proposals above threshold

- 7.3.2: Enhanced interoperability and conformance testing methods and tools for interaction between grid infrastructure and electric vehicles
  2 proposals above threshold

- 8.8.1: Demonstration of optimised energy systems for high performance-energy districts
Synergy Energy – Telecom Research

Objective ICT-2013.6.1 Smart Energy Grids

- This objective explores the potential of bringing together stakeholders from both the energy utilities and the telecom sector to develop common approaches for future digital networks and smart energy services infrastructure for electricity distribution.

- The focus is on data management including the exchange of information with transmission network operators and with end users.

- Special attention is given to exploring new business models for DSOs (Distribution System Operators).
Objective ICT-2013.6.1 Smart Energy Grids

Targeted Outcome: Intelligent management systems for DSOs

Key research challenges:
  a) Sharing backbone infrastructure and last mile connectivity, considering not only technologies but also the appropriate business models
  b) Improving existing telecoms infrastructure in order to cope with mission critical grid services
  c) Demand response services
  d) Data management issues (ownership, access, security, confidentiality, business models)

(!) Proposals should focus on one or a combination of the previous points and in all cases include a validation phase to draw conclusions for further deployment

(!) Consortia must be compact and must include both telecoms and energy expertise.
Objective ICT-2013.6.1 Smart Energy Grids

**Expected Impact:**

- Reduction of the percentage of energy lost during energy distribution;
- Reduction of the gap between energy produced and energy consumed;
- Increase of renewable energy sources and Combined Heat and Power - CHP connected to the distribution grid;
- Reduction and shifting of peak loads;
- Number of publications jointly authored by researchers from ICT and energy.

**Funding Scheme:** STREPs

**Indicative budget:** 18M€

**Call FP7-ICT-2013-11:** 18th September 2012 to 16th April 2013
Thank you

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Additional Slides
FP7 – ICT: topic ICT-2011.6.1

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Families of Projects: EC R&D validated in national demonstration projects

- 6 projects linking each to 4-9 national demo projects
- Completing negotiations
FoP RES Integration

EU: Research and Innovation

iGREENGRID
SINGULAR
SUSTAINABLE

PT: Inovgrid
S. Miguel Azores

FR: VENTEAA
Houat & Houedic

ES: PRICE
Energos
Castellon
La Graciosa island

IT: Isernia
Pantelleria island
Smart Info

RO: Braiila island

DK: Ecogrid

DE: e-Energy MOMA
e-Energy EDEMA
Future Energy Grids
Autonomous LV Agents
NET-Elan

BE: LINEAR
New Thames Valley
Bristol

AT: Salzburg model
Upper Austria

SE: Smart Grid Gotland
Hus-14

EL: Crete
RES integration

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NET-Elan
FoP Smart Customers

UK: New Thames Valley Bristol
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NET-Elan
RO: Braila island
EL: Crete RES integration

Advanced IT: Isernia Pantelleria island
S3C
Future Energy Grids