The three Research PPPs: Results and outlook

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Industrial Technologies
DG Research
European Commission

Disclaimer: This presentation is not legally binding and does not represent any commitment on behalf of the European Commission

Research PPPs Info-Days, 11 July 2011
EUROPE 2020 and the PPPs

● Strategy for smart, sustainable and inclusive growth:  
  - Innovation, Competitiveness, Green & Social aspects
● Focus on facing the Grand Challenges: Ageing, Energy ...
● 3% for R&D and 20/20/20 climate targets should be met
● Among 7 flagship initiatives, PPPs may play a strategic role in Innovation Union, Resource-efficient Europe and Industrial policy
● Innovation Partnerships build on initiatives such as the PPPs
● Support to PPPs as a tool to combine public and private funding
● Acting efficiently together as in the Recovery Plan

Research PPPs Info-Days, 11 July 2011
Factories of the Future PPP

Manufacturing sector (1.2 billion in 4 years)

- 21% of the EU’s GDP and 30 million jobs before the crisis
- Manufacturing production declined by 20% in 2009
- Need to produce more with less resources and waste
- Themes: NMP, ICT
Energy-efficient Buildings PPP

Construction sector (€ 1 billion in 4 years)

- 10% of the EU’s GDP and 32 million jobs before the crisis
- Building activity dropped by 8% in 2009 and declines further
- 40% of energy use and 33% of GHG emissions in Europe
- Themes: NMP, ENERGY, ICT, ENVIRONMENT
Green Cars PPP

Automotive sector (€ 1 billion for research in 4 years)

- 11% of the EU’s GDP and 14 million jobs before the crisis
- Total vehicle production decreased by 23% in 2 years
- In Europe, 73% of oil is used in transport
- Themes: TRANSPORT, NMP, ENERGY, ICT, ENVIRONMENT
Advantages of a PPP

- **Industry has a leading role** in defining research priorities
- **Ad-hoc Industrial Advisory Group** advises on implementation
- **Multi-annual Roadmap** allows long-term investment plans
- **Pre-defined budget** ensures continuity
- More emphasis on **relevance of industry** and **impact**
- Focused on **enabling industrial technologies**
- Increased use of **SME-friendly** instruments and **demonstration**
Special features in the PPP calls

- Involvement of industry in the preparation
- Industrial partners provide added value
- High share of industrial experts in the evaluation
- Single stage evaluation to reduce time to contract
- Coordinated & Joint Calls for Proposals
- Specific PPP Annex to the WP for higher visibility

but... Open to all according to normal FP7 rules
## Public-Private Partnerships

**Calls of July 2009 - Budget Contributions 2010**

<table>
<thead>
<tr>
<th>(M€)</th>
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<td><strong>Total 2010</strong></td>
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<td><strong>65</strong></td>
<td><strong>95</strong></td>
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### Public-Private Partnerships

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<td>TRANSPORT</td>
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<td>Total 2011</td>
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### Results of first FoF Calls

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<tr>
<td><strong>Success rate:</strong></td>
<td>26%</td>
<td>19%</td>
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<tr>
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<td>25 funded of 98</td>
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<td><strong>Share by Org. Type:</strong></td>
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<tr>
<td>- Higher Education:</td>
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<td>- Research Org.:</td>
<td>22%</td>
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<td><strong>Share of Funding of SMEs:</strong></td>
<td>31%</td>
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<td><strong>Countries of funded partners:</strong></td>
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Results of first EeB Calls

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<td>Success rate:</td>
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<td>17 funded of 60</td>
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<td>Higher Education:</td>
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Continued successful dialogue since July 2010:

- 3 meetings of the **EeB AIAG** (8th to 10th)
- 3 meetings of the **FoF AIAG** (8th to 10th)
- 5 meetings of the **EGCI AIAG** (8th to 12th), which has completed the comprehensive Multiannual Roadmap
- The recent **ISG meeting** endorsed a further formalisation of the work of the AIAGs already during FP7
- Three meetings of **all 3 PPPs and the RTD Director-General**, with the three industrial sectors converging to a Common Position
- Meeting tomorrow with **Commissioner Geoghegan-Quinn**
Impact-related Workshops

- “Impact of the Factories of the Future PPP” on 25 NOV 2010
- “Impact of the Energy-efficient Buildings PPP” on 26 NOV 2010
- “FoF PPP Beyond 2013: Which Role for ICT ?” on 14 OCT 2010
- “Electric Vehicle Batteries Made in Europe” on 30 NOV 2010

Major outcomes:

- PPPs are perceived as being of high value and important to help EU industry respond to current and future competitiveness challenges
- Enhancements to the operation of the PPPs are possible, to improve effectiveness and ensure larger impact than in standard FP7 projects
Interim assessment of the three PPPs

- A Group of Experts was set up to assist the Commission in the combined interim evaluation of the three PPPs
- The Interim assessment was carried out against the criteria of effectiveness, efficiency and quality of the implementation
- The Group analysed existing evidence relating to the PPPs and they collected stakeholder experiences via a questionnaire
- The Group produced its final report in May 2011, providing conclusions and recommendations to the Commission
Recommendations from the assessment

• Continue and further develop the research PPP initiatives in the CSF and enlarge their scope to a full programme concept
• The governance and procedures of the research PPPs should be formalised and made more transparent
• The procedures for administration and management of the research PPPs should be further streamlined, allowing for appropriate flexibility in the execution of the programmes and projects
• The Innovation actions should be strengthened, with more emphasis on supporting transfer of new concepts to the market
• Actions and activities need to focus on strengthening the overall impact and dissemination of the project results
Key Enabling Technologies  
*The basis for products to address societal challenges*

HLG Case example: the electric car

Transdisciplinarity: Combining several KETs for advanced products  
→ Case study: electric vehicle

**Societal Challenge**  
Energy

- De-carbonisation of transport
- Nanotechnologies
- Advanced Manufacturing Systems
- Advanced materials
- Microelectronics
- Biotechnologies
- Photonics

**Electric vehicle**

Research PPPs Info-Days, 11 July 2011
KETs HLG analysis: the “valley of death”

Triggering a virtuous cycle from manufacturing experience

- Ideas « cherry picking »
- Relevant technologies
- Technical research
- Industrial consortia
- Anchor companies
- Research & technology organisations
- Product development
- Globally competitive manufacturing facilities
- User needs
- Spec for further products

Experience from large diffusion products
User needs clearly identified

- Innovation ecosystem creation
- Jobs creation
- Feedback through taxes

The valley of death
Common Strategic Framework for EU Research & Innovation

- Covering FP, CIP and EIT in a Common Strategic Framework
- With a coherent set of funding instruments along the whole innovation chain (from basic research to market uptake)
- Far reaching simplification of procedures and rules

Response to the Green paper seeking the views of all stakeholders on the priorities and proposed improvements:

- ETPs are generally seen as a valuable tool
- Efforts must be made to simplify the complex structures of the existing JTIs, for example through the broad application of PPPs like those that emerged under the Recovery Plan
Horizon 2020

- Based on Europe 2020 and the Innovation Union
- Seamless integration of Research and Innovation
- Proposed amount: €80 billion for 2014-2020
- 46% increase compared to 2007-2013
- Commission proposals for Horizon 2020: by end of 2011

Objectives and structure:
- Tackling societal challenges
- Strengthening competitiveness
- Excellence in the science base
- Much shorter negotiation and selection phases and radically simplified cost-reimbursement approach
Longer-term outlook

- **Continued dialogue under FP7** via the Advisory Groups
- **New articles related to PPPs** in the Commission proposal for revision of the **Financial Regulation**
- The **CSF Sub-group on the PPPs “Ideal House”** works on:
  - The CSF models for research PPPs
  - The specific criteria to justify the creation of a PPP
  - Definition of the role and commitment of the PPP partners
  - Governance and implementation issues
Implementation for 2012

Calls on the three PPPs in WP 2012:
- Cross-thematic approach for each PPP
- Single-stage evaluation
- **Planned publication:** July 2011
- **Tentative deadline:** 1 December 2011

**Indicative Evaluation and Negotiation timetable:**
- Evaluation: January 2012
- Launch of Negotiations: February-March 2012
- First projects begin: June 2012
Public-Private Partnerships
Calls of July 2011 - Budget Contributions 2012

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Eligibility in FP7

- Meeting the deadline
- Completeness of Parts A and B of the proposal
- Minimum participation for both Collaborative Projects & Coordination Actions:
  - At least 3 independent legal entities, each of which is established in a Member State or Associated Country and no two of which are established in the same Member State or Associated Country
- In scope of the Call and topic
- Funding limits (in some topics)
Maximum Funding Rates

- Research and technological activities:
  - up to 50% of eligible costs, except for:
    - Public bodies: up to 75%
    - Secondary and higher education centres: up to 75%
    - Research organisations (non-profit): up to 75%
    - SMEs: up to 75%

- Demonstration activities: up to 50%
- Other activities: up to 100%, e.g. Management
- Coordination and support actions: up to 100%
Call Documents

- Work Programme 2012:
  - Sections for the Themes (NMP, ICT, SST, ENV, ENERGY)
  - Annex 5 – PPP information collected together for high visibility

- Call Fiches

- Guides for Applicants

- EPSS Electronic Proposal Submission System

- After Call launch, all are available to download from the relevant CORDIS Call page
Call Topics WP 2012
Factories of the Future PPP

- Cross-thematic Call
  - EC funding: 160 M€
  - 7 topics in from NMP: 1L+2S+2SME+2 DEMO-targeted
  - 2 topics from ICT: IP/STREP+IP
  - Areas covered include: systems and equipment for eco-efficiency in manufacturing; mechatronics; predictive maintenance; integration of automation equipment; high-performance manufacturing; 3D micro-production; knowledge-based process planning; innovative processes; smart factories (energy-aware, agile manufacturing and customisation); and manufacturing solutions for new ICT products
Call Topics WP 2012
Energy-efficient Buildings PPP

- Cross-thematic Call
  - EC funding: 140 M€
  - 6 topics from NMP: 2L+1SME+2S+1CSA
  - 1 topic from ENV: SME
  - 1 topic from ENER: CP-SoU
  - 1 topic from ICT: STREP

- Areas covered include: integration between buildings and grids; systemic approach for retrofitting; new processes and business models for EeB; HVAC systems; smart windows; knowledge transfer; energy efficiency of historic buildings; demonstration of renovation; and ICT for energy-positive neighbourhoods
Call Topics WP 2012
Green Cars PPP

- Cross-thematic Calls
  - EC funding: 118 M€
  - 2 topics in Joint call NMP-ENV-SST: S+L
  - 13 topics from SST: 8S+1L+2CP+2CSA
  - 2 topics from ICT: STREP+CSA
- Areas covered include: electrochemical storage; lightweight materials; infrastructures and services for EVs; rare materials substitution; improved safety; range extenders on EVs; energy simulation and testing; urban freight EVs; extreme low rolling resistance tyres; vehicle energy management; HDV running with liquefied methane; logistics; data handling; intermodality; green hubs; and ICT for fully electric vehicles
Further information ...

**FP7 Research Themes and Call information**
cordis.europa.eu

**Information on the Research PPPs**
ec.europa.eu/research/industrial_technologies/

Research PPPs Info-Days, 11 July 2011
Afternoon parallel sessions

- 13.00 – 17.30, with a Coffee Break at 14:30 – 15:00

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<th>FoF</th>
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<td>13.00-14.30</td>
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- Detailed information on the Call topics (with Q & A)
- Brokerage event (with presentations of ideas)
Thank you for your attention