The 3 Research PPPs: Results and outlook

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DG Research and Innovation
Industrial Technologies

Research PPPs Info-days
Brussels, 9 July 2012
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

• **Support to PPPs** as a tool to combine public & private funding

• PPPs may play a role regarding the **7 flagship initiatives**

• The **Horizon 2020** proposal promotes the use of PPPs

• Acting efficiently together as in the Recovery Plan
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

Goal: Cross-sectoral enabling manufacturing technologies

Sub-domains: Sustainable manufacturing
ICT-enabled intelligent manufacturing
High performance manufacturing
Exploiting new materials through manufacturing
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

Goal: New concepts for energy-efficient construction

Sub-domains: Energy-efficient refurbishment of existing buildings
Neutral/energy-positive new buildings
Energy-efficient districts/communities
Green Cars PPP

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

- 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

Goal: New and sustainable forms of land transport
Sub-domains: Electrification of road & urban transport
                           Energy efficiency for heavy duty vehicles
                           Logistics and co-modality
The PPPs using FP7 rules

- The Recovery Plan launched FoF, EeB and GC in End 2008
- A new model had to be developed, different from JTIs
- PPPs with FP7 rules demonstrated clear benefits to industry
- Europe 2020 and the May 2010 Council supported the PPPs
- Key industry role to shape strategy, but implementation in FP7
- Stakeholders backed these PPPs in response to CSF Green Paper
- Horizon 2020 and Partnering Communication promote further use
Advantages of these PPPs

- **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**
PPP Implementation under FP7

- Quick response in defining the strategic roadmaps
- Efficient launch of calls within the Recovery Plan
- Increased industry participation: >55%, SMEs ~ 23%
- More innovation activities, including demonstration
- The full EC contribution of € 1.6 billion was provided
Interim assessment of the PPPs

- A group of experts carried out the combined assessment of the three PPPs in May 2011, against the criteria of effectiveness, efficiency and quality of the implementation.

- Recommendations:
  - Continue under Horizon 2020 and enlarge their scope
  - The governance should be formalised and more transparent
  - The procedures should be further streamlined
  - The innovation actions should be strengthened
  - More focus on the overall impact and dissemination of results
### Initial & Provided FP7 contributions

<table>
<thead>
<tr>
<th>Budgets (M€)</th>
<th>NMP</th>
<th>ICT</th>
<th>TRANSPORT</th>
<th>ENERGY</th>
<th>ENV</th>
<th>TOTAL FP7</th>
<th>TOTAL PPP</th>
</tr>
</thead>
<tbody>
<tr>
<td>Factories of the future</td>
<td>400</td>
<td>200</td>
<td>+45</td>
<td>245</td>
<td>600</td>
<td>+45</td>
<td>1,200</td>
</tr>
<tr>
<td>Energy-efficient Buildings</td>
<td>250</td>
<td>100</td>
<td>+5</td>
<td>105</td>
<td>500</td>
<td>+5</td>
<td>1,000</td>
</tr>
<tr>
<td>Green Cars</td>
<td>60</td>
<td>120</td>
<td>220</td>
<td>50</td>
<td>50</td>
<td>50</td>
<td>1,000</td>
</tr>
<tr>
<td>TOTAL</td>
<td>710</td>
<td>420</td>
<td>220</td>
<td>175</td>
<td>75</td>
<td>1,600</td>
<td>3,200</td>
</tr>
</tbody>
</table>
Annual EC budget evolution

<table>
<thead>
<tr>
<th>Year</th>
<th>FoF</th>
<th>EeB</th>
<th>GC</th>
</tr>
</thead>
<tbody>
<tr>
<td>July 2009</td>
<td>268 M€</td>
<td></td>
<td></td>
</tr>
<tr>
<td>July 2010</td>
<td>341.25 M€</td>
<td></td>
<td></td>
</tr>
<tr>
<td>July 2011</td>
<td>418 M€</td>
<td></td>
<td></td>
</tr>
<tr>
<td>July 2012</td>
<td>593.45 M€</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Factories of the Future
Results of the first 3 Calls
Distribution per Organisation Type

Number of Participations
- Higher Education: 30%
- Public Organisations: 29%
- Research Institutes: 19%
- Industry (Large): 19%
- Industry (SME): 0%
- Other: 3%

EC Contribution Allocated
- Higher Education: 24%
- Public Organisations: 28%
- Research Institutes: 23%
- Industry (Large): 23%
- Industry (SME): 0%
- Other: 2%
# Results of the FoF Calls

<table>
<thead>
<tr>
<th></th>
<th>July 2009</th>
<th>July 2010</th>
<th>July 2011*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Success rate (%)</td>
<td>26</td>
<td>19</td>
<td>14</td>
</tr>
<tr>
<td>Projects funded</td>
<td>25/98</td>
<td>36/193</td>
<td>34/251</td>
</tr>
<tr>
<td>SMEs (%) of EC contribution</td>
<td>27</td>
<td>23</td>
<td>23</td>
</tr>
<tr>
<td>SMEs (%) of participation</td>
<td>33</td>
<td>30</td>
<td>25</td>
</tr>
<tr>
<td>Industry (%) of EC contribution</td>
<td>54</td>
<td>49</td>
<td>52</td>
</tr>
<tr>
<td>Industry (%) of participation</td>
<td>60</td>
<td>56</td>
<td>61</td>
</tr>
</tbody>
</table>
Energy-efficient Buildings
Results of the first 3 Calls
Distribution per Organisation Type

Number of Participations
- Higher Education: 23%
- Public Organisations: 14%
- Research Institutes: 7%
- Industry (Large): 15%
- Industry (SME): 29%
- Other: 6%

EC Contribution Allocated
- Higher Education: 18%
- Public Organisations: 15%
- Research Institutes: 9%
- Industry (Large): 27%
- Industry (SME): 26%
- Other: 5%
## Results of the EeB Calls

<table>
<thead>
<tr>
<th></th>
<th>July 2009</th>
<th>July 2010</th>
<th>July 2011*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Success rate (%)</td>
<td>28</td>
<td>20</td>
<td>23</td>
</tr>
<tr>
<td>Projects funded</td>
<td>17/60</td>
<td>24/120</td>
<td>31/135</td>
</tr>
<tr>
<td>SMEs (%) of EC contribution</td>
<td>19</td>
<td>24</td>
<td>16</td>
</tr>
<tr>
<td>SMEs (%) of participation</td>
<td>24</td>
<td>25</td>
<td>21</td>
</tr>
<tr>
<td>Industry (%) of EC contribution</td>
<td>47</td>
<td>54</td>
<td>40</td>
</tr>
<tr>
<td>Industry (%) of participation</td>
<td>54</td>
<td>56</td>
<td>47</td>
</tr>
</tbody>
</table>
Green Cars
Results of the first 3 Calls
Distribution per Organisation Type

- Number of Participations:
  - Higher Education: 37%
  - Public Organisations: 22%
  - Research Institutes: 18%
  - Industry (Large): 18%
  - Industry (SME): 3%
  - Other: 2%

- EC Contribution Allocated:
  - Higher Education: 37%
  - Public Organisations: 26%
  - Research Institutes: 15%
  - Industry (Large): 18%
  - Industry (SME): 18%
  - Other: 3%
# Results of the GC Calls

<table>
<thead>
<tr>
<th></th>
<th>July 2009</th>
<th>July 2010</th>
<th>July 2011*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Success rate (%)</td>
<td>33</td>
<td>26</td>
<td>32</td>
</tr>
<tr>
<td>Projects funded</td>
<td>31/94</td>
<td>23/87</td>
<td>36/112</td>
</tr>
<tr>
<td>SMEs (%) of EC</td>
<td>15</td>
<td>15</td>
<td>14</td>
</tr>
<tr>
<td>of EC contribution</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SMEs (%) of participation</td>
<td>18</td>
<td>20</td>
<td>17</td>
</tr>
<tr>
<td>Industry (%) of EC</td>
<td>49</td>
<td>55</td>
<td>51</td>
</tr>
<tr>
<td>of participation</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Industry (%) of</td>
<td>55</td>
<td>57</td>
<td>54</td>
</tr>
<tr>
<td>participation</td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>
A year since July 2011

- **Partnership dialogue**
  - Continued successful dialogue via the three AIAGs: in order to prepare the last calls in FP7 and to discuss future priorities

- **Further Workshops on the Impact of each PPP**
  - In mid March 2012 for FoF PPP and EeB PPP
  - Later in July 2012 for GC PPP

- **High level meeting with EC services on 23 May 2012**
  - Discussion on industrial commitment and on preparatory work
Implementation for 2013

Calls on the three PPPs in WP2013:

• Cross-thematic approach for each PPP
• Single-stage evaluation
• **Planned publication:** 10 July 2012
• **Tentative deadline:** 4 December 2012

**Indicative Evaluation and Negotiation timetable:**

Evaluation: January 2013
Launch of Negotiations: February-March 2013
First projects begin: June 2013
PPP Calls of July 2012 – Budget in WP2013

<table>
<thead>
<tr>
<th>(M€)</th>
<th>Green Car</th>
<th>Energy-efficient Buildings</th>
<th>Factories of the future</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>NMP</strong></td>
<td>20</td>
<td>110</td>
<td>160</td>
<td>290</td>
</tr>
<tr>
<td><strong>ICT</strong></td>
<td>40</td>
<td>40</td>
<td>70</td>
<td>150</td>
</tr>
<tr>
<td><strong>ENERGY</strong></td>
<td>5</td>
<td>90</td>
<td>-</td>
<td>95</td>
</tr>
<tr>
<td><strong>ENVIRONMENT</strong></td>
<td>-</td>
<td>6</td>
<td>-</td>
<td>6</td>
</tr>
<tr>
<td><strong>TRANSPORT</strong></td>
<td>52.45</td>
<td>-</td>
<td>-</td>
<td>52.45</td>
</tr>
<tr>
<td><strong>Total 2013</strong></td>
<td><strong>117.45</strong></td>
<td><strong>246</strong></td>
<td><strong>230</strong></td>
<td><strong>593.45</strong></td>
</tr>
</tbody>
</table>
Call Topics in WP2013
Factories of the Future PPP

- Cross-thematic Call
  EC funding: 230 M€

- 11 topics in from NMP: 3L+3S+1SME+3 DEMO-targeted+1 SA

- 2 topics from ICT: IP/SA+IP/CA

- Areas covered include: use of renewable resources in factories; reuse of modular equipment; the workplaces; social sustainability; collaborative design; mini-factories; hybrid production systems; strategies for renovation and repair; business approaches for globalised markets; products made of advanced materials; making highly miniaturised components; applications of robotics and simulations; and equipment assessment for sensors and lasers
Cross-thematic Calls EC funding: 246 M€
6 topics from NMP: 4L+1S+1 DEMO-targeted
1 topic from ENV: CP
1 topic from ENER: CP-(predominant demonstration)
1 topic from ICT: STREP / CSA

Areas covered include: applying nanotechnology; eco-innovative materials; renovation of public buildings; control systems; design for integration in the energy systems; deep retrofitting of commercial buildings; sustainable urban districts; energy systems in smart cities; and demonstration of optimised districts
Call Topics in WP2013
Green Cars PPP

- Cross-thematic Calls
  - EC funding: 117.45 M€
- 1 topic from NMP: L
- 7 topics from SST: 2S+3L+2CP
- 1 topic from ICT: IP/STREP/CSA
- 2 topics from ENERGY: 2 CP

- Areas covered include: materials for batteries; electro-mobility; electric vehicle range extension; electric motors; light urban electric vehicles; demonstration of electric buses; adaptable trucks; heavy duty transport; intermodal freight transport; and rules and tools to link electric vehicles to the grid
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 2013:
  - Sections for the Themes (NMP, ICT, SST, ENV, ENERGY)
  - Annex 5 – PPP information put together for high visibility
- Call Fiches
- Guides for Applicants
- Electronic Proposal Submission System
- After Call launch, all are available to download from the Participants Portal (at ec.europa.eu/research)
Horizon 2020: Key elements

- Coupling of research and innovation
- Addressing societal challenges, industrial competitiveness and excellence in science
- Involving more the industry and in particular SMEs
- More innovation related activities
- Proposed amount: € 80 billion for 2014-2020
PPPs in the Horizon 2020 proposal

- PPPs are specifically addressed in Article 19
- To implement R+I activities of strategic importance
- Based on Article 187 TFEU or on a Contractual agreement
- Identified in an open way based on five specific criteria
- Envisaged cross-themed Contractual PPPs: The three in the Recovery Plan plus Sustainable process industry (SPIRE)
Timetable envisaged

- Draft Multi-annual Roadmaps (including Vision to 2030, R+I strategic content and Expected impact) available in July 2012
- Wide stakeholders consultation launched until October
- Updated versions ready in January 2013 after validation
- Formal PPP approval process launched by EC during 2013
- Aiming at being ready for the start of Horizon 2020
Further information ...

FP7 Research Themes and Call information: ec.europa.eu/research/participants/portal

Information on the Research PPPs: ec.europa.eu/research/industrial_technologies/
# Afternoon parallel sessions

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

<table>
<thead>
<tr>
<th>Rooms</th>
<th>EeB</th>
<th>FoF</th>
<th>GC</th>
</tr>
</thead>
<tbody>
<tr>
<td>13.00-15.00</td>
<td>Lord Jenkins – Sicco Mansholt</td>
<td>Alcide De Gasperi</td>
<td>Jean Durieux</td>
</tr>
<tr>
<td>15.30-17.30</td>
<td>Alcide De Gasperi</td>
<td>Lord Jenkins – Sicco Mansholt</td>
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