



PPPs in the Recovery Plan Focus on “energy efficiency in buildings”

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Recovery Plan

Research activities

- **Adopted by the EC on 26 Nov 2008 and endorsed by the EU Council on 11-12 Dec 2008**
- **Includes 'smart investment' in research**
*'To support **innovation** in the **manufacturing, construction and automotive** sectors, which have recently seen demand plummet as a result of the crisis and which also face significant challenges in the transition to the green economy...'*
- **Three Public-Private Partnerships (PPPs)**
Objective: to promote the convergence of **public interest** with **industrial commitment and leadership** in determining **strategic** research activities



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Research activities

“Factories of the future” PPP initiative

- Manufacturing is the driving force in the EU’s economy, with 21% of GDP and 20% of all jobs
- 25 industrial sectors, dominated by SMEs

Objective: Developing enabling technologies to support EU manufacturing across many sectors

- Themes: NMP, ICT

€ 1.2 billion in 4 years



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“Green cars” PPP initiative

- The Automotive sector gives jobs in the EU directly to 2 million and indirectly to 11 million people
- In Europe 73% of oil is used in transport. It is urgent to find alternatives to fossil fuels

Objective: Supporting the emergence of more efficient and sustainable hybrid and electric cars

- Themes: TRANSPORT, NMP, ENERGY, ICT, ENV

€ 1 billion in 4 years



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“Energy-efficient buildings” PPP initiative

- The Construction industry accounts for 10% of EU’s GDP and gives jobs to 32 million people
- Buildings represent 40% of energy use and 33% of Green House Gas emissions

Objective: Developing building and district concepts with the potential to reduce energy use

- Themes: NMP, ENERGY, ICT, ENV

€ 1 billion in 4 years



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3 major phases EeB Strategy

1. **Reducing the energy consumption of buildings and its negative impacts on environment.**

Integration of innovative technologies.
Towards the low carbon economy.

2. **Buildings covering their own energy needs contributing to EU energy independence**

3. **On a longer term may become even energy or electricity provider (smart grid) with storage capability**



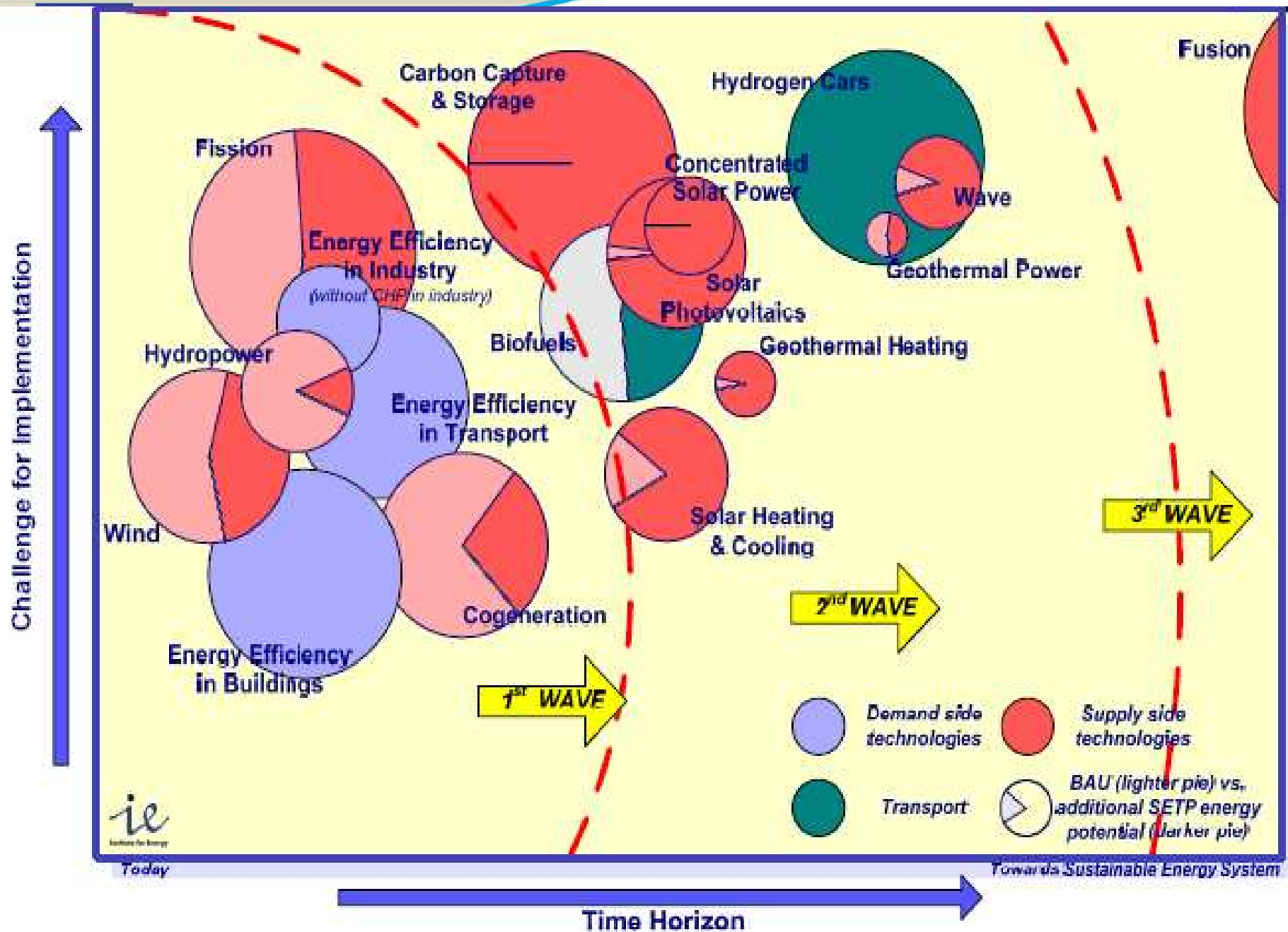
Winston Churchill Tower - Rijswijk:
Renovation with a double skin
facade (internally ventilated)

Source: Permasteelisa Group

Budget: € 1 Billion over 4 years (2010-2013)



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Today

Towards Sustainable Energy System

Time Horizon



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Challenges in Buildings

40%



**Responsible of EU
energy consumption**

✓ *The present rate of construction of new buildings is below 2%, destruction rates are even lower, in the range of 0,5%*

→ Refurbishing is key!!!

✓ *Big sector (32 million jobs) heavily effected by the crisis*

✓ *Citizens energy use to be reduced by 20% by 2020 (lower energy bills!)*



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Energy Efficient Buildings A priority at World level....

- **Major Economies Forum – Technology Meeting (London 18/10/09)
Energy Efficiency – Buildings and Industrial efficiency
Draft papers: Technology action plan for buildings efficiency**
- **IPEEC: International Partnership for Energy Efficiency Cooperation
G8 + Brazil, China, Korea, Mexico, India (soon) and EC, established
in May 2009
Key objective: to promote energy efficiency practices.**
- **CIB – International Council for Research and Innovation in Building
and Construction (International Seminar, Brussels 14/10/09)
Task Group 66: Energy efficient buildings**
- **WBCSD – World Business Council for Sustainable Development
Report: Energy Efficiency in Buildings – Transforming the market
EEB project (August 2009)**



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Energy Efficient Buildings Potential Cooperation with USA...

- **DoE: Building Technologies Programme**
- **Building Efficiency Initiative: part of American Recovery and Reinvestment Act (July 2009) – \$346 million (advanced building system research, buildings and appliance market transformation: Energy Star)**
- **Energy Efficient Buildings Technologies as integral part the new US-EU Energy Council**
- **DoE interest to cooperate with EU:**
 - **Zero Net Energy Buildings**
 - **Building retrofit technologies**
 - **Energy Management systems**





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Energy Efficient Buildings Potential Cooperation with Russia...

- **Russia-EU Energy Dialogue
Thematic Group on Energy Efficiency**
- **G20 Summit in London (April 2009)
Concept of Energy-Efficient Growth**
- **Technology Platform in Russia (July 2009) – PPP instrument
Strategic objectives: improve efficient use of energy resources in
buildings and construction. (FASI)
Launch of pilot projects in 2009-2010 (universities and schools)**
- **Presidential Commission for Modernization and Technological
Development of Russia's Economy (02 July 2009, Arkhangelsk)
Five priorities including Energy Efficiency (n°1)**



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Public-Private Partnerships

Double approach

- **Involvement of industry** in the planning and implementation
- **Quick response needed:** implies use of existing instruments
 - 7th Framework Programme
 - European Technology Platforms
- **Implementation approach:**
 - In 2009,2010 cross-thematic calls for proposals under FP7
 - In parallel, exploration of further calls and other options for the longer term, e.g. Joint Technology Initiatives





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Indicative PPP contributions

FP7 research budget (2010-2013)

Budgets (M€)	TRANSPORT	NMP	ENERGY	INFSO	ENV	TOTAL FP7	TOTAL PPP
Green Car	220	60	50	120	50	500	1,000
Energy efficient buildings		250	125	100	25	500	1,000
Factories of the future		400		200		600	1,200



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For industry: Why a PPP ? (compared to business as usual)

- Industry wants to have a **leading role** in defining research priorities, and to be involved in programme implementation
- A multi-annual integrated Work Programme with pre-defined budget ensures **continuity** in the implementation of research strategies & allows industry to have **long-term investment plans**
- Activities going from basic and applied research through to large-scale demonstration. More emphasis on **impact**.
- Increased use of SME-friendly research instruments



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Public-Private Partnerships

Dialogue and coordination

- Meetings between High-level Industrial representatives of the 3 PPP initiatives and RTD Director General Silva Rodriguez have taken place:
 - Factories of the future initiative: *21 January 2009*
 - European energy efficient buildings initiative: *17 February 2009*
 - European green cars initiative: *5 March 2009*
- Commissioner Potočnik met with the 3 PPPs on *30 March & 13 July 2009*
- The Commission Interservice group on “ Research implementation of the recovery package” has been created: SG, SJ, RTD, INFISO, TREN, ENTR, ENV, ADMIN & BUDG
- Three **Ad Hoc Industrial Advisory Groups** have been created:
 - Industrial input for WP 2010 and preparation of a multi-annual roadmap until end of FP7



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PPP Calls in WP 2010

Main elements

- **Quick response needed:** use of existing FP7 instruments
- **Involvement of industry** through advisory ad hoc group
- **Open to all** proposers according to **normal FP7 rules**
- **Industrial partners** provide added value
- **Coordinated** Calls for Proposals
- **Complementary topics** and harmonised evaluation
- **Collaborative** projects and **Coordination** actions
- **Single stage** evaluation to **reduce time** to contract
- **Specific PPP “Annex 5”** to the WP for higher visibility

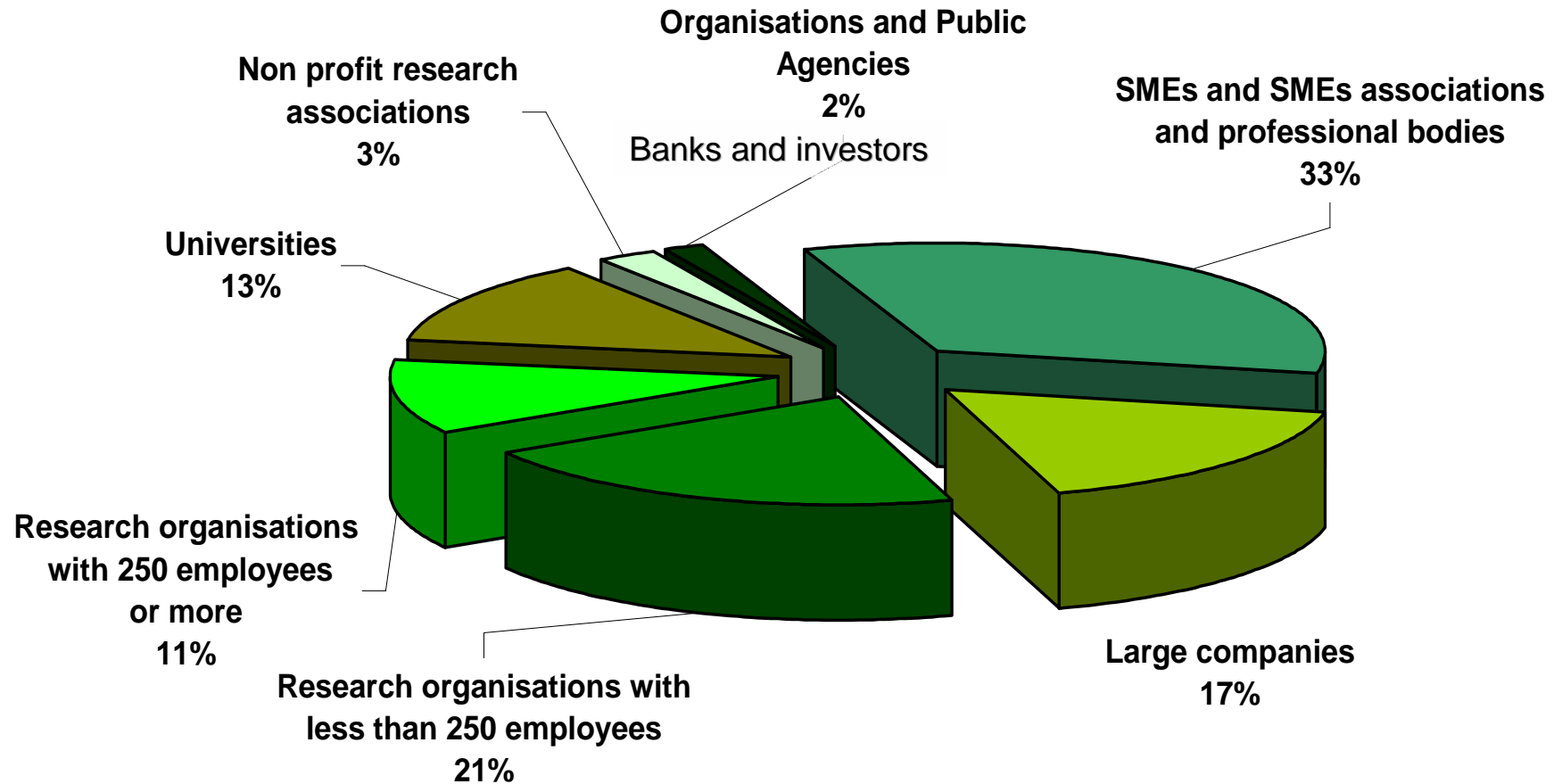


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E2BA as industry lead platform

Over 130 members have joined the Association. Almost 50% increase since the beginning.





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Public-Private Partnerships

Budget Contributions 2010

Budgets (M€)	NMP	INFSO	TRANS- PORT	ENERGY	ENV	TOTAL 2010
Factories of the future	60	35				95
Energy- efficient Buildings	30	15		15	5	65
Green Cars	10	20	68	5	5	108
TOTAL	100	70	68	20	10	268

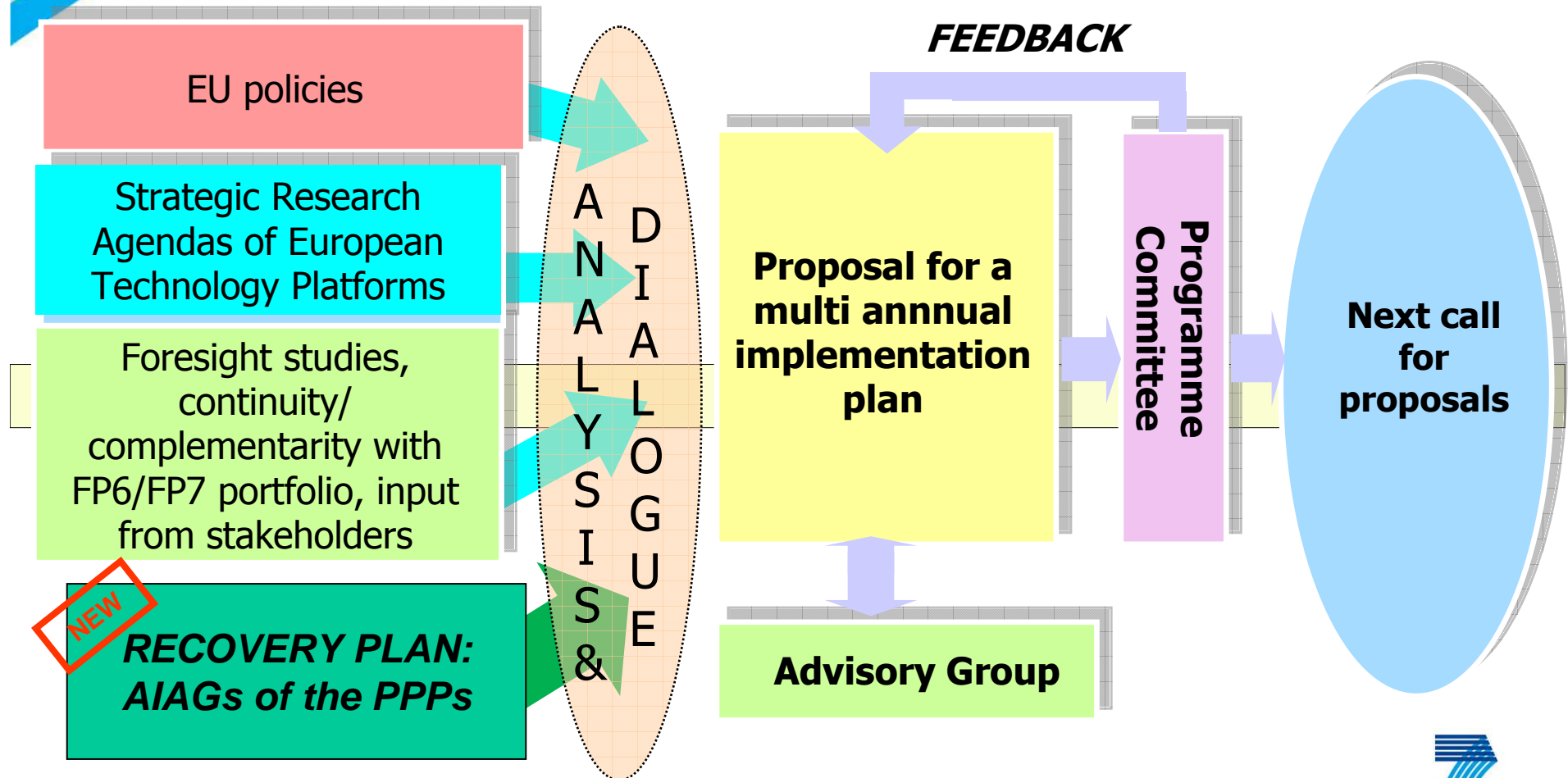


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FP7 Methodology

Work Programme builds upon many inputs





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Call Topics WP 2010

Energy-efficient Buildings PPP

- **Coordinated Call (59)**
- **Deadline for all topics: 3 November 2009**
- New nanotechnology-based high performance insulation systems for energy efficiency - **NMP**
- New technologies for energy efficiency at district level - **NMP**
- ICT for energy-efficient buildings and spaces of public use – Collaborative Projects & CSA - **ICT**
- Compatible solutions for improving the energy efficiency of historic buildings in urban areas - **ENV**
- Demonstration of energy efficiency through retrofitting of buildings - **ENERGY**



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Proposed future EeB priorities

- **Envelope for existing buildings**
- **Systems and equipments for energy use for existing buildings**
- **Interaction integration between buildings , grid, heat network**
- **Systems and equipments for energy use generic**
- **Knowledge transfer**
- **Relationship between user and energy**
- **Retrofitting at district level**
- **Envelope and components**
- **Design integration of new solutions**
- **Systemic approach for new and old buildings**
- **Energy management systems**
- **Labelling and standardization**
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Further information ...

FP7 Research Themes and Call information

cordis.europa.eu

Information on the Research PPPs

ec.europa.eu/research/industrial_technologies/

Multi Annual Roadmap : <http://www.e2b-ei.eu>





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Thank you for your attention



***The difficulty lies not
so much in developing
new ideas as escaping
from old ones. . . .***

John Maynard Keynes

