E2B EI

European Initiative on Energy Efficient Buildings

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Conference 2009
Brussels  24/25 November 2009
Energy and buildings: a challenge

E2BA: why and what?

The first job: a roadmap

Ambition for next steps
Building sector is today the largest energy consumer: 40% in Europe

ADEME
... but building stock is old and “natural” renewal of building stock is very slow

Composition of European dwelling stock

“New buildings” since 1971
Energy efficiency of existing dwellings is poor especially for heating

European project Cepheus
Energy and buildings: a key role in 20/20/20 EU targets

• Buildings use 40 % of total EU energy consumption
• The built environment generates 1/3 of GHG in Europe
• Efficient new buildings construction is a necessity …
• … but existing stock retrofitting is a priority and a difficult challenge

⇒ ECTP chose EEB as its first priority in its Implementation Action Plan in June 2007

⇒ Energy Efficient Buildings European Initiative was part of the recovery Plan announced by EC in November 2008 and was confirmed in July 2009

A €2bn research and demonstration program:

- to increase research and develop competitive industry in energy efficient construction, products and services
- to address climate change, reduce CO₂ emissions and improve EU energy independance
- initiated by members of ECTP and interacting with other ET Platforms
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www.e2b-ei.eu
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E2BA: a legal entity representative of the construction industry and research to manage E2B EI partnership with EC

Energy Efficient Buildings Association

Arrêté royal belge
20 November 2008

Energy Efficient Buildings European Initiative

AIAG for FP7 calls
PPP for next FP

European Commission

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E2BA membership

9 founding members
132 members (5 Nov /2009)

- Non profit research associations: 3%
- Universities: 13%
- Research organisations with 250 employees or more: 11%
- Research organisations with less than 250 employees: 21%
- Organisations and Public Agencies: 2%
- SMEs and SMEs associations and professional bodies: 33%
- Large companies: 17%

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E2BA – achievements and action plan

• achieved
  ➔ Incorporation, Statutes, Secretary General, Membership
  ➔ Steering Committee

• first steps
  ➔ Roadmap for research FP7 calls 2010-2013
  ➔ Definition and set-up of the PPP instrument with EC
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A Multiannual Research Roadmap
500 millions € dedicated over 2010-2013 FP7 calls

- Built with EC in AIAG
- Analysis of ETPs/JTIs SRAs/SET Plan Roadmaps (SETIS)
- Over 200 contributions from E2BA members highlighting research challenges and opportunities
- and many outside stakeholders comments and inputs (ETP’s, public agencies..)
Multiannual Research Roadmap

REFURBISHMENT TO TRANSFORM EXISTING BUILDINGS INTO ENERGY-EFFICIENT BUILDINGS

- Systems and Equipment for energy use for existing buildings
- Envelope for existing buildings
- Solutions for Cultural Heritage (including diagnostics)
- Systemic Approach for existing buildings

HORIZONTAL ORGANISATIONAL ASPECTS

- Relationship between User and Energy
delivering/generating

- Value Chain and SME's context
- Knowledge transfer
- Business models, organisational and financial models (including ESCOs)

CROSS-CUTTING CHALLENGES

- Systems and Equipment for energy (horizontal)
- Storage of energy
- Quality Indoor Environment
- Building performance management
- Envelope and components
- Industrialisation and mass customization
- Automation and control
- Life cycle analysis (LCA)
- Energy management (horizontal)
- Retrofitting (Clips)
- Materials: embodied energy and multi-functionality
- Diagnosis and predictive maintenance (continuous commissioning)
- Systems and Equipment for energy production (horizontal)
- Diagnosis

HORIZONTAL TECHNOLOGICAL ASPECTS

- Energy Efficient District/Communities
- Storage of energy (district): thermal, electrical or other
- Interaction (integration) between buildings, grid, heat networks
- District and urban design
- Systems and Equipment for energy production (district)
- Retrofitting (clips)

NEUTRAL/ENERGY POSITIVE NEW BUILDINGS

- Systems and equipment for energy use for new buildings
- Systemic approach for new buildings

Dead-line for last contributions : 30 Nov 2009 !

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Next steps:
build a Public - Private Partnership with EC

a “win-win” PPP common approach in order:

- to focus research and demonstration calls
- to choose the best projects in bids
- to monitor the project results
- to ensure a proper implementation and dissemination of the best results

Industry and all E2BA members are ready for this partnership!
Thank you for your attention

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