



# **An overview of the EU Energy Research initiatives in relation to Smart Cities**

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European Commission

Smart Cities Member States Initiative Meeting

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## Smart Cities

*One of the greatest challenges facing the EU is how best to design and adapt cities into smart intelligent and sustainable environments*

- *68% of the EU population lives in urban areas*
- *70% of the EU's energy is consumed by cities*
- *75% of the EU's total greenhouse gas emissions are produced in urban areas*

## ***EU 2020 Objectives***

- *Saving 20% of the EU's primary energy consumption*
- *20% reduction of greenhouse gas emissions*
- *20% renewable energies*



## Smart Cities and Communities EIP : Energy, ICT, Transport

### 1. Integrated approach

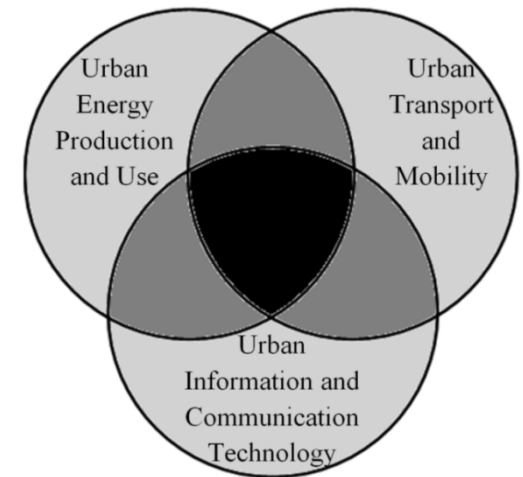
- Energy, Transport and ICT
- Social economic research
- Better organization (energy mix)

### 2. Energy efficiency

- ICT both as enabler and consumer

### 3. Focus on industry involvement

- Focus on demonstration projects
- Aiming at market solutions
- Supporting business case



## Implementation

### Supply side:

- Large-scale demo projects ('lighthouse projects')

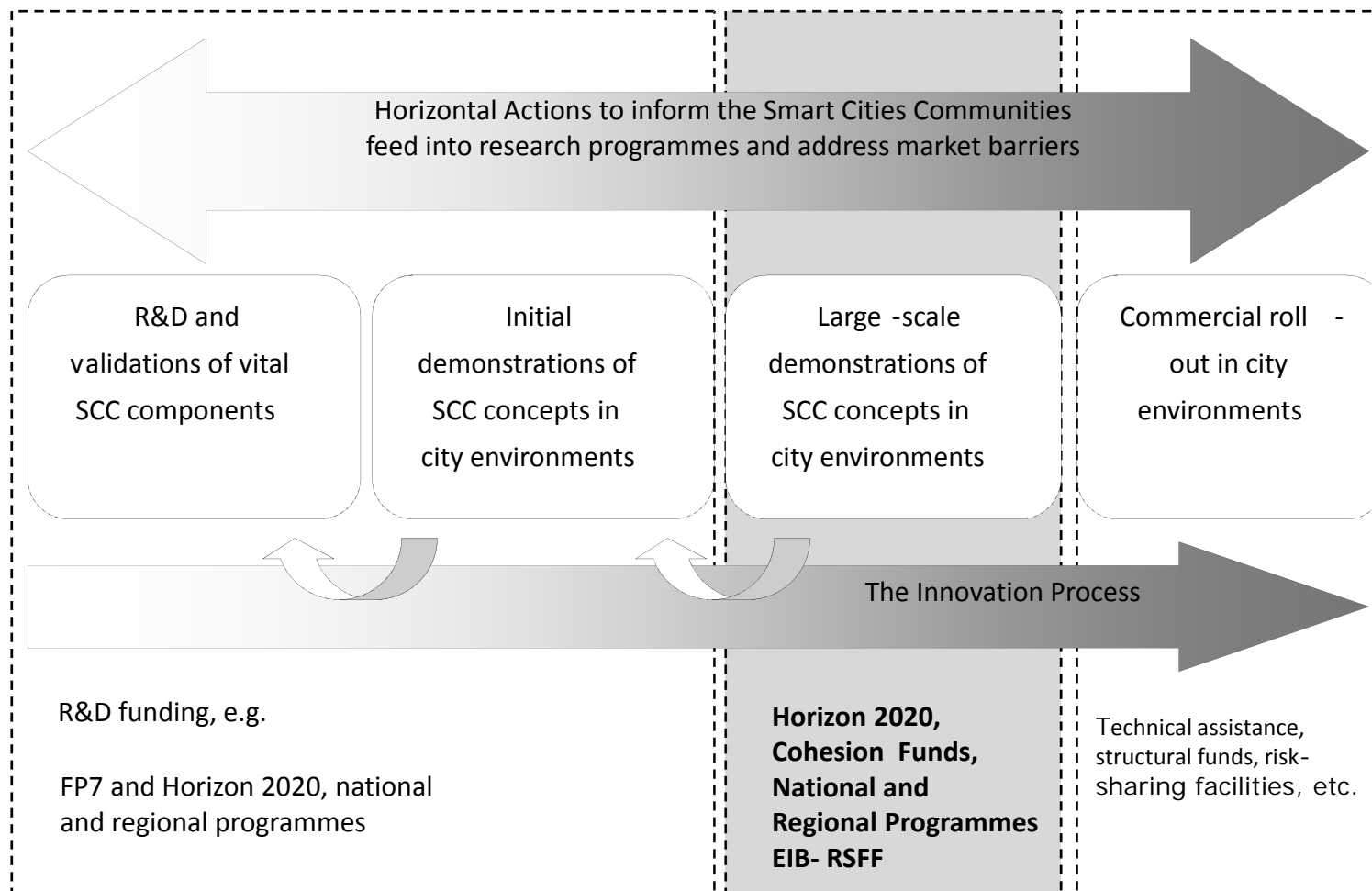
### Demand side:

- Business models
- Public procurement
- Regulatory measures (e.g. standards)



## Importance of European Innovation Partnership

## Innovation process and financing



## Governance

### High Level Group

- *under elaboration*

- *Advise the Commission*

### Stakeholder Platform

- *Develop strategic implementation plan*
- *Exchange of knowledge*
- *Create partnerships*
- *Europe-wide outreach*





## EU Funding

### ***In FP7 WP2012 (first year )***

- *€ 81 Million*
- *two sectors: transport and energy*
- *demonstration projects financed under the scheme could be in either one of the two sectors*

### ***In FP7 WP2013***

- *€ 365 Million*
- *Three areas: energy, transport and ICT*
- *Each demonstration project financed under the scheme must combine all three sectors.*
- *Pooling the sources together also means using synergies.*

### ***Framework period 2014- 2020***

- *Horizon 2020*
- *Cohesion Policy*





## Project parameters

### Consortia

- Innovation-driven industries
- Cities from at least 2 MS
- Open to International Cooperation

### Indicators (e.g.)

- Energy performance
- Urban transport management
- Shared use of infrastructures
- Environmental performance

### Size of projects

- Max. EU contribution €30 million/project







## Smart Cities JP- EERA

Formally launched at the SET Plan Conference in November 2011

### Participants/Associates:

- 15 full participants
- 45 associated participants
- 4 industry partners on board



### Structure (*Sub-Programmes*):

- Energy in Cities (coordinator AIT + VITO)
- Urban Energy Networks (coordinator ENEA + AIT)
- Energy-efficient Interactive Buildings (coordinator SINTEF + NTNU)
- Urban City-related Supply Technologies (temporary coordinator AIT)





## JPI Urban Europe

- Formally launched on 5 December 2011 when the Council endorsed its conclusions on the Commission recommendation
- 13 participating countries and 3 observers (members: Austria, Coordinator, Cyprus, Denmark, Finland, France, Germany, Ireland, Italy, Malta, the Netherlands, Norway, Sweden, Turkey; observers: Belgium, Portugal, Spain).
- First call launched last June with a total public funding of approx. € 7.5 million, jointly provided by national funding agencies from seven JPI countries for research projects submitted under the topics of
  - **Urban Diversity and Social Cohesion**
  - **Urban Systems and Networks**
  - **Governance of Complex Urban Systems**





# Smart Cities Member States Initiative

Launch of the Smart Cities MS initiative in  
December 2011

Currently 21 MS and AS

First joint call under preparation





## Next steps

### For the European Commission

- Elaboration of the High Level Group
- Initiate the process on the development of a Strategic Implementation Plan and a Roadmap Document
- Reflection on the development of the demand side

### For the Member States

- Objective of this 12 October meeting
- Joint action plan and a consistent approach with the European Innovation Partnership





**Thank you!**



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