

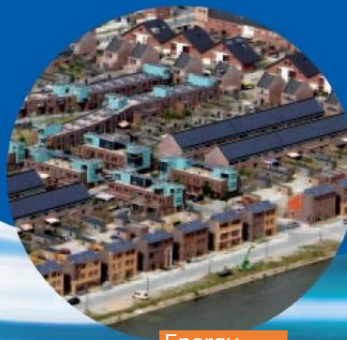


European  
Commission

# ***Smart Cities & Communities***

***DG ENER***

***Andreea Strachinescu, Head of Unit  
Bari, 12 November 2012***



Energy

# Cities are Europe's power & traffic centres

- $\frac{3}{4}$  of EU energy consumption in cities
- $\frac{3}{4}$  of CO<sub>2</sub> emissions



# **Smart Cities 'philosophy'**

- **Identify common challenges**
- **Develop innovative, replicable solutions**
- **Bundle demand from cities**
- **Attract and involve business and banks**

 **Create markets!**

# Commission Communication



EUROPEAN COMMISSION

Brussels, 10.7.2012  
C(2012) 4701 final

**COMMUNICATION FROM THE COMMISSION**

**SMART CITIES AND COMMUNITIES -  
EUROPEAN INNOVATION PARTNERSHIP**



# Smart Cities EIP : Energy, ICT, Transport

## 1. Integrated approach

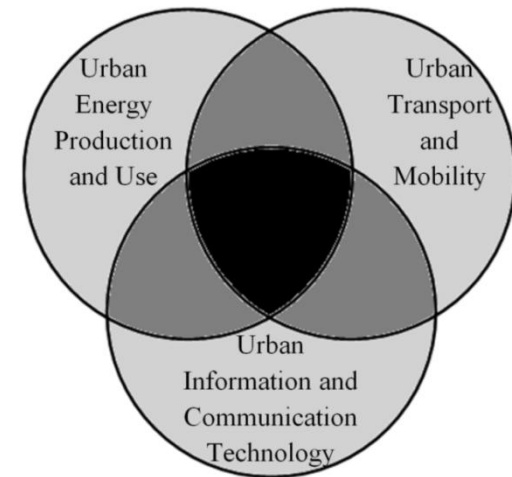
- Energy, Transport and ICT

## 2. Energy efficiency

- ICT both as enabler and consumer

## 3. Focus on industry involvement

- Focus on demonstration projects
- Aiming at market solutions
- Business case



# Learning from experience

- CIVITAS
- Covenant of Mayors
- CONCERTO
- Green Digital Charter
- Urban Europe JP Initiative
- Energy Efficient Buildings Public Private Partnership (EeB PPP)
- European Green Cars Initiative
- European Energy Research Alliance (EERA) Joint Programme on Smart Cities





# Implementation

## Supply side:

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

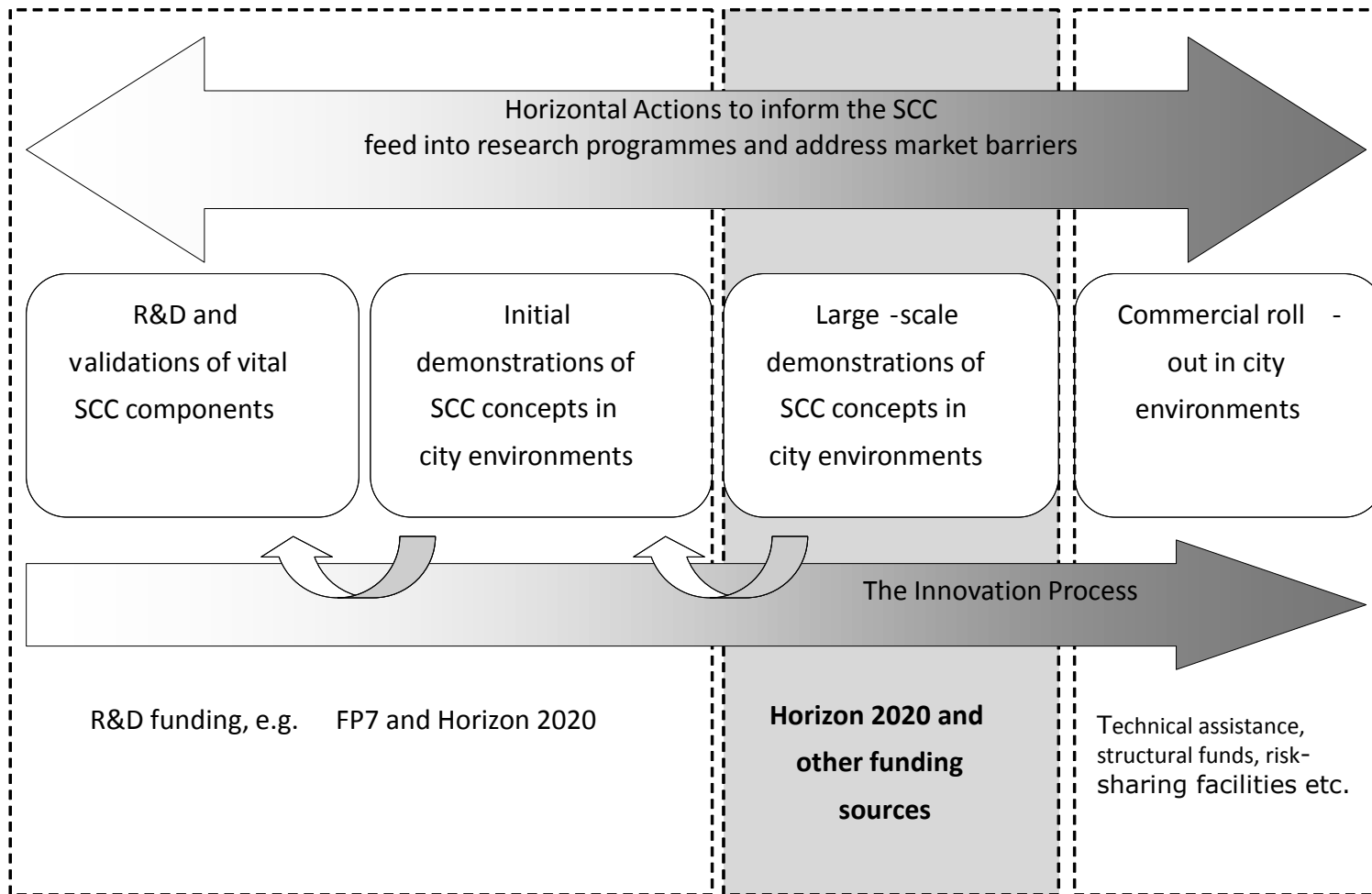
## Demand side:

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





# Innovation process and financing





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# Governance

## High Level Group

- *advise the Commission*

## Stakeholder Platform

- *develop strategic implementation plan*
- *exchange of knowledge*
- *create partnerships*
- *Europe-wide outreach*



# Cross cutting themes

*Smart buildings and neighbourhoods*

*Smart supply and demand systems*

*Sustainable urban mobility*

*Smart and sustainable digital infrastructures*

*Strategic Planning for integration and  
optimisation of flows*

# Parameters

## Financing 2012

- Energy: 90 € million
- ICT: 95 € million
- Transport : 24 € million

## Indicators (e.g.)

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





# Projects

## ➤ Consortia

- Innovation-driven industries from 3 Member States
- Average one to two cities per project

## ➤ Objective - innovative integrated energy systems

## ➤ Energy topic –all three areas should be covered

- Retrofit of districts towards near zero energy houses
- Distribution grid
- Heating/Cooling networks





# Areas I

## ➤ Retrofit of districts

- Coherent district, clearly identifiable, geographic zone
- Easy to measure in/out of primary energy and CO2 emissions
- Easy to measure success (before/after)
- All buildings eligible, but ...preference to residential buildings



# Areas II

## ➤ Distribution Grid

- Medium/low voltage interface + low voltage/house interface
- Smart Grids with ICT, smart meters, local RES (maximise self-consumption), storage
- EV demo is possible (in addition)



# Areas III

## ➤ Smart Heating/Cooling systems

- Innovative use of existing/upgrading of networks
- ICT
- smart use of all available (waste) heat sources
- Integration with industrial parks
- Etc... Optimised according to local conditions and needs





# Thank you!

