

Smart Cities Programme & Project Screening

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Smart Cities Member States Initiative

Delegates and Experts Workshop, 21 May 2012, Vienna

Programme Screening

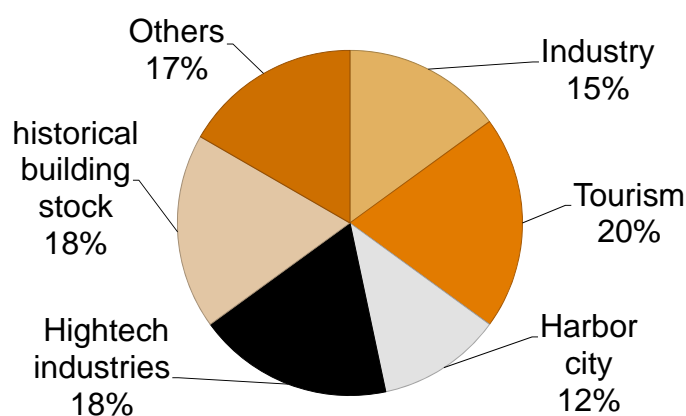
- response from 13 European countries:
AT, BE, CH, CZ, DE, DK, ES, FI, FR, NO, SK, SE, TK,
- Collection of 36 programmes relevant for Smart Cities
- Total budget of all 36 programmes: ~ **3,15 Bn €**
- Average budget per year: ~ **158 Mio €/ year**

Smart Cities Project Screening Response



- Preliminary response from 11 European countries
- Collection of 49 projects in 24 cities
- Identification of 10 „project bundles“
- Number of projects and cities per country:
 - Austria: 11/3
 - Belgium: 2/3
 - Czech Republic: 1/1
 - Denmark: 1/1
 - France: 1/1
 - Germany: 4/4
 - Norway: 1/1
 - Portugal: 11/4
 - Spain: 1/1
 - Sweden: 15/4
 - Switzerland: 1/1

City characteristics (multiple answers possible)



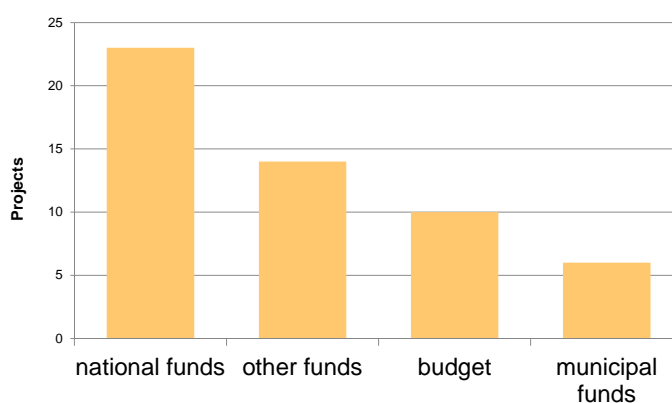
Projects are located in all kinds of cities, city characteristics are evenly distributed

Duration & Budget

- Overall duration of projects: 1994 – 2023
- Average duration of Projects: 3 years

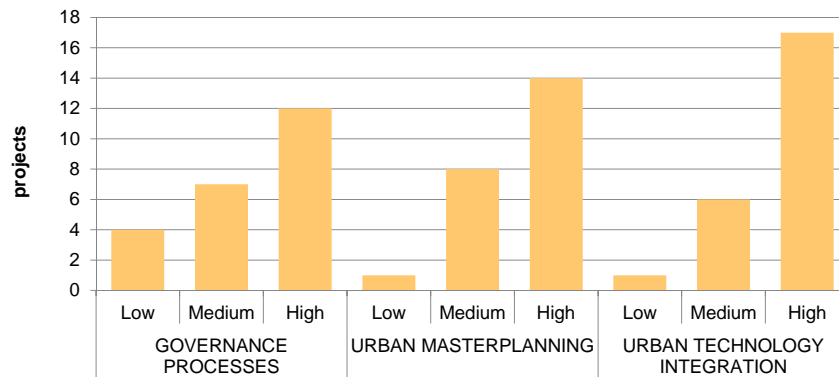
- Total budget of all 49 projects: ~ 618 Mio €
- Average budget per year: ~ 21.3 Mio €/year

Origin of Funding (multiple answers possible)



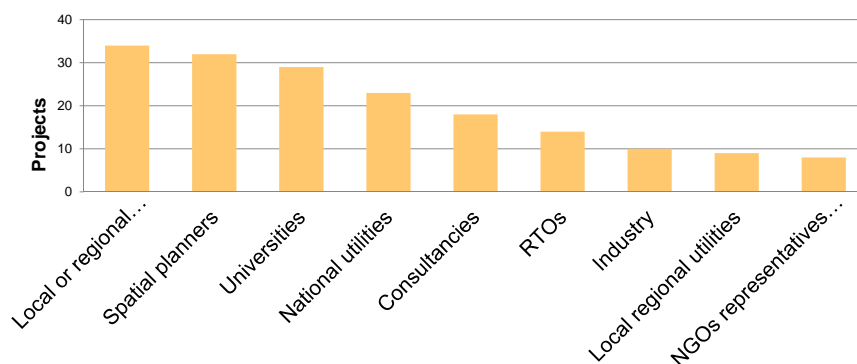
National funds are the most common source when it comes to financing Smart Cities projects

Level of Innovation



-> Innovation within governance processes shall be increasingly promoted

Actors (multiple answers possible)



- Local and regional governments are key players for Smart Cities
- Increase of Industry involvement is needed

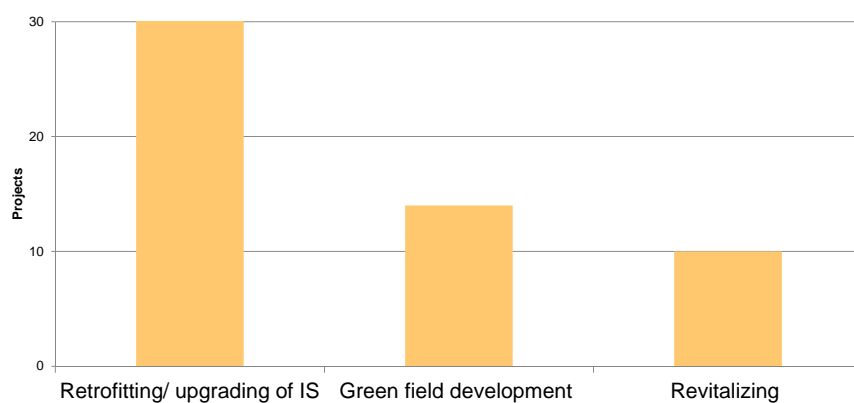
Quantitative Targets

- **14 projects have set up quantitative targets, e.g.:**
 - **Reduction of CO2 Emissions (7 projects)**
 - CO2 emissions should also be reduced from today's levels to 1ton per person and year
 - CO2 reduction by 80 % until 2050
 - **Reduction of Energy consumption (5 projects)**
 - reduction of primary energy consumption and CO2 emissions for heating and domestic hot water supply by 80 %
 - less than 2 kW average outtake of primary energy (or lower)
 - **Renewable Energy (4 projects)**
 - solar heat and geothermal energy with a rate of more than 80 %
 - area should be Energy Positive by the year 2035 (net producer)
 - **Others (2 Projects)**
 - 23% motorised transport fraction of modal split (in passenger-trips)
 - energy renovation of minimum 40 houses.

Qualitative Targets

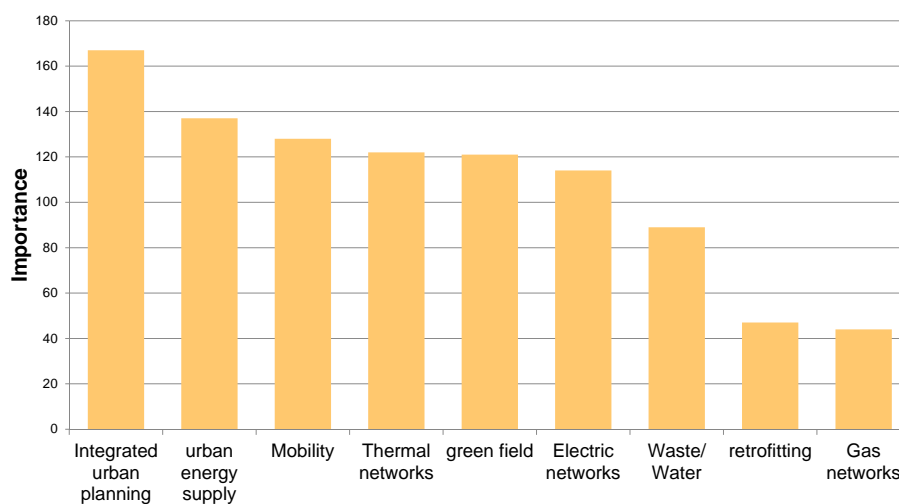
- **32 projects have set up qualitative targets, e.g.:**
 - Improve living standard and comfort of tenants
 - Optimization of the planned new buildings
 - Awareness raising about energy challenges
 - Increase operating efficiency and service quality
 - develop a well-grounded base for decisions regarding the design of future energy infrastructure
 - high quality of technical solutions and dissemination of lessons learnt

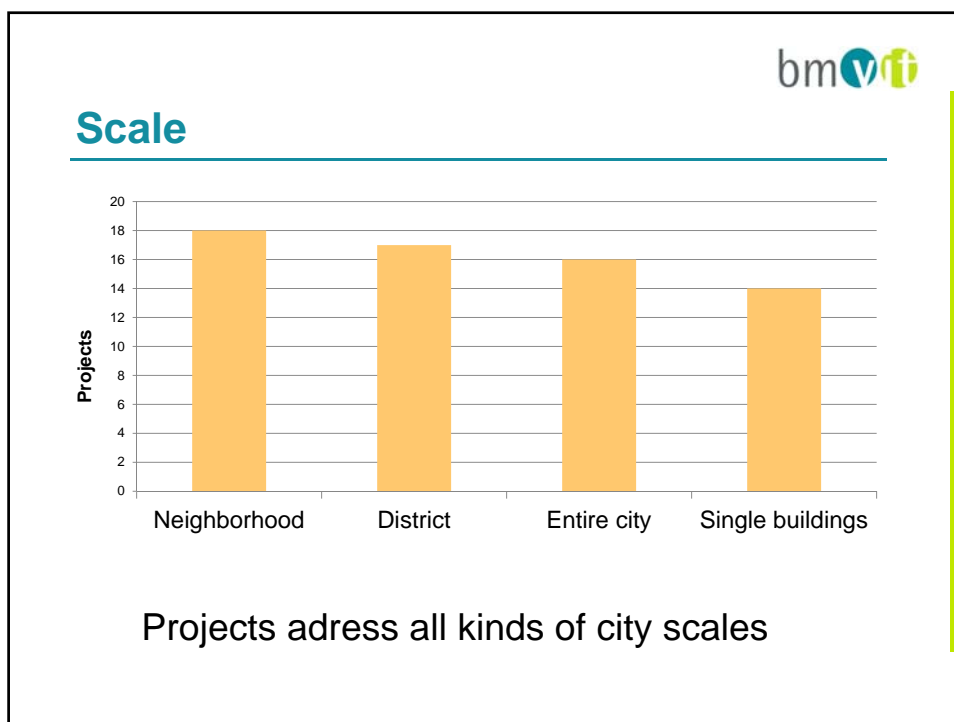
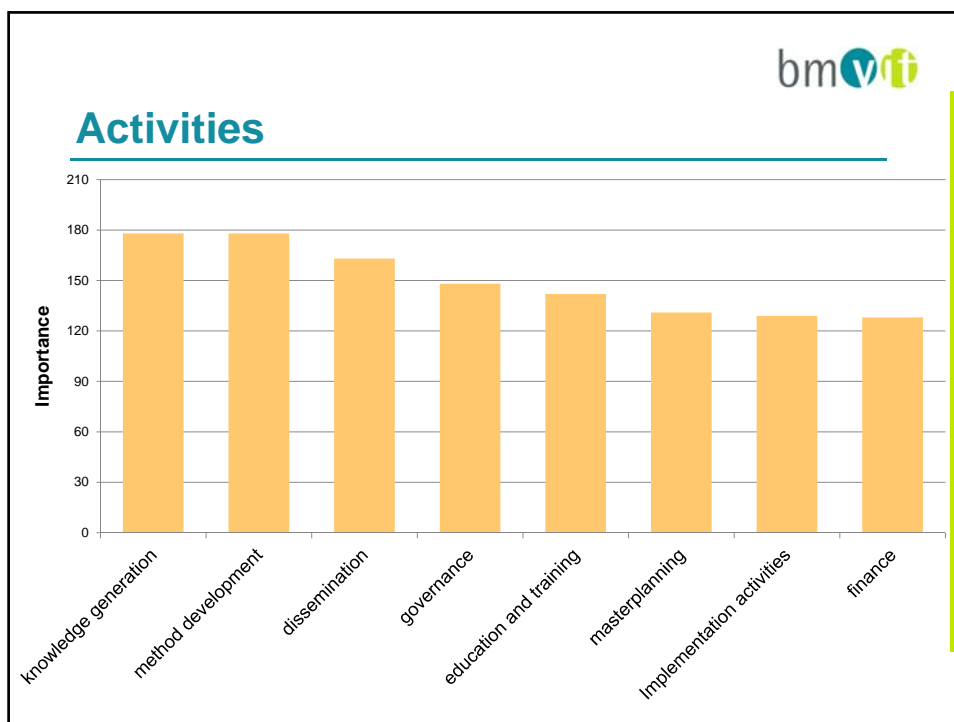
Target area



Existing building and infrastructure stock is main target area of Smart Cities projects

Thematic Areas (weighted from 1 to 5)





Key Performance Indicators

- 19 projects have set up KPI's, for example:
 - Time to market
 - Final Heating energy consumption for room and domestic hot water heating: 30 kWh/m2.year
 - specific CO2-emission; primary energy demand, share of renewable energy
 - Passive building standards
 - ...

Lessons learned

- In technical terms:
 - The amount of Service Providers ready for targeting end-users within a smart city concept is much higher than first assumed
 - Wired internet connections should be used on more robust applications
 - ...
- In terms of working methods:
 - Cooperation and team-work within different organisations and stakeholders is key!
 - Joint Knowledge Production between public-political organisations, academics and the private sector is needed
 - integrated approach to planning is needed
 - Identification of the need for new need governance structures and stakeholder engagement
 - first consensus finding within the city before dealing with external smart cities stakeholder
 - Implementation of master plan needs dedicated follow-up

Conclusions

- National funds are the most common source when it comes to financing Smart Cities projects
- Innovation within governance processes shall be increasingly promoted
- Local and regional governments are key players for Smart Cities
- Increase of Industry involvement is needed
- Existing building and infrastructure stock is the main target area of Smart Cities projects – but projects adress all kinds of city scales

Next Steps

- Finalize Screenings by end of June
- Analysis and summary report
- Elaborate key-messages for the formulation of possible joint MS+ AS Calls



Thank you for your attention!

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