



**EUROPEAN INVESTMENT BANK**

**Smart Cities – EIB Approach**

*Gerry Muscat, Senior Urban Specialist*

**Workshop - FACING THE CHALLENGE OF A NEW ERA:  
SMART CITY PROJECTS**

*Madrid, 16-17 July 2014*



# Presentation Outline

- EIB - Background
- Why is EIB interested in Smart City investment?
- Smart City projects – where do they fit?
- Towards Smart City investment criteria
- Financing instruments for Smart City investment
- EIB Advisory support
- Collaboration with the UfM and other partners



# The European Investment Bank

- EIB is the EU's long-term financing institution
- Shareholders are 28 EU member states
- AAA-rated supra-national bank
- Provides long term loans to private and public sector
- Financing projects within the EU to support EU policy
  - 2012 project signatures: 44.8 billion
- Financing projects outside the EU under various EU mandates
  - 2012 project signatures: 7.4 billion



# EIB – the Bank promoting EU objectives

## Lending within the EU:

- Cohesion and convergence ('regional development')
- SME financing
- Environmental sustainability
- Knowledge economy
- Trans-European Networks
- Sustainable, competitive and secure energy

## Blending:

- Combining grants and loans to leverage EU funds

## Advising:

- Sharing EIB know-how through technical and financial advice

## Outside the EU:

- Facility for Euro-Mediterranean Investment and Partnership



## FEMIP – Facility for Euro-Mediterranean Investment and Partnership

### A diversified and complementary range of products

Instruments	Objectives	Beneficiaries
<b>Loans:</b> <b>Credit lines</b> <b>Individual loans</b>	To develop SMEs by providing credit lines to financial institutions  To develop the economic infrastructure	SMEs  Public and private sector promoters
<b>Private equity</b>	To promote the creation or strengthening of the capital base of companies	SMEs Intermediate-sized private enterprises Investment funds Microfinance institutions
<b>Technical assistance</b>	To improve the quality of FEMIP's operations and their impact on development	All FEMIP customers
<b>Guarantees</b>	To stimulate the local capital market To mobilise additional resources to supplement scarce public capital resources. To support sub-sovereign development To reduce foreign exchange risk To reduce government risk exposure	SMEs Large corporates Domestic banks Public sector promoters Sub-sovereigns

# EIB FEMIP TA resources

## used by the EIB in the urban sector

- **FEMIP Support Fund**
  - Direct TA for projects, for example: TA for Social Housing Infrastructure in Morocco followed up by a project
- **FEMIP Trust Fund (for upstream activities)**
  - TA Study to prepare an Urban Renewal and Regeneration Operation in the Historical Centre (medina) of Meknes
  - Feasibility of Medinas 2030 Investment Programme: Pre-operational study on rehabilitation of historic city centres (medinas) in S. & E. Mediterranean towns
  - Identification Study for Urban Renewal and Development in the Southern Mediterranean Region
- **Neighbourhood Investment Facility (NIF)**
  - TA or Investment Grant
  - Examples: Urban Projects Finance Initiative (5M of TA resources for urban renewal projects); EIB Community Development Programme in Egypt (15M grant)



# Policy context for Smart Cities

- EU2020 strategy to foster smart, inclusive and sustainable growth
- European Commission Communication – Smart Cities and Communities European Innovation Partnership 2012
- Key EU legislation (eg. Energy Performance in Buildings Directive)
- Urban focus of EU Structural Funds
- European platforms and initiatives (eg. European Platform for Intelligent Cities, European Smart Cities Project)
- Sectoral initiatives (eg. Covenant of Mayors)
- Industry initiatives (eg. Agoria smart city ranking, Belgium)



# Where do Smart Cities fit?

- Sustainable Cities, Resilient Cities, Eco-cities – what is special about the Smart City concept?
- Are we talking about Smart Cities, or Smart Communities? Can small towns be Smart?
- How does the Smart City concept apply to cities with different income levels?
- What is Smart today may be “normal” tomorrow.
- How to match an integrated concept with sectorial criteria and teams?
- How can EIB help push the boundaries?
- Monitoring – labelling: is the project really Smart?





# Towards Smart City investment criteria

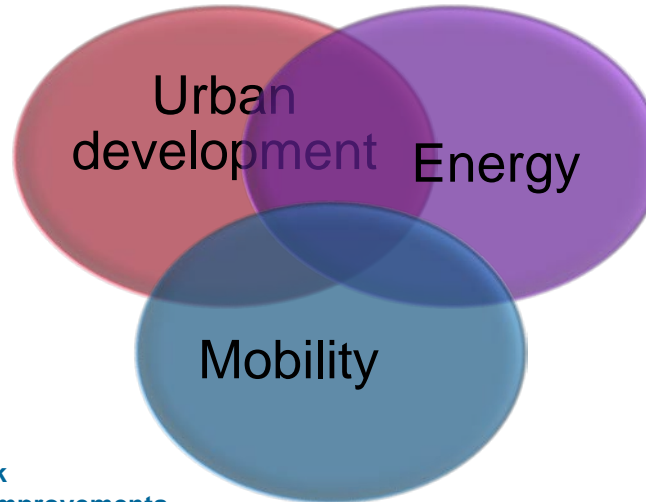
## Sustainable

### Sustainable Communities:

- Led by urban strategy, local development plan
- Promote employment and growth
- Alleviate social exclusion
- Brownfield redevelopment
- Public buildings
- Social and affordable housing
- Invest in heritage sites

### Sustainable Mobility:

- Fit into a mobility plan
- Public transport infra + rolling stock
- Road safety and energy efficiency improvements
- Intelligent transport systems
- Traffic control systems
- Intermodal transfer
- Demand management measures



- Energy efficiency and renewables:  
(New EIB lending criteria 2013)
- New buildings – near energy neutral
  - Existing buildings – cost-optimum approach
  - Efficient lighting – energy savings stream > 50% of investment cost
  - Support to meeting EU2020 and national RES targets
  - Support to mature and emerging RES technologies

## Smart?

### Sustainable and ....

#### Integrated

- Smart strategy
- Two or more dimensions

#### Innovative

- Technology
- Approach

#### Inclusive

- Stakeholder participation
- Partnership government-business-universities
- Smart governance



# Smart city investments

## ***Smart Transport and Mobility***

- Bike schemes
- Real time travel information
- Electric vehicle car pools
- Congestion charging
- Traffic control systems
- Electric Vehicle Charging Point
- Apps

## ***Renewable energy & energy efficiency***

- Energy efficiency
- Renewables
- Combined Heat and Power
- Efficient Street lighting
- Smart grids

## ***Urban Development***

- E-government developments
- Brownfield redevelopment
- Eco-quartier development
- Innovative administrative buildings
- Smart cultural heritage investments
- Energy-efficient social and affordable housing

## ***Digital infrastructure***

- ICT infrastructure
- high speed broadband
- Sensors to monitor traffic, pollution, emissions
- fibre optic cables
- wireless technologies
- networked information systems

## ***Smart and Sustainable Buildings***

- Smart meters
- Energy efficiency measures: Insulation, low energy lighting, efficient boilers
- Building Integrated Renewables
- EV charging points
- Motion detectors
- Automatic weather forecasting



# Lending: EIB Financing Instruments

<b>Instrument</b>	<b>Examples of potential Smart City financing</b>
<b>Investment Loans</b> Direct loan for a specific investment project or programme, usually > EUR 25m	<ul style="list-style-type: none"><li>• Loan to a City to finance an urban renewal project with smart features</li><li>• Loan to co-finance an Integrated Territorial Investment with structural funds</li><li>• Loan to a private partner to implement a Smart City programme under contract</li><li>• R&amp;D loan to develop innovative Smart technology</li></ul>
<b>Framework Loans</b> Loan for a programme of investments meeting defined criteria but not finally prepared at time of signing	<ul style="list-style-type: none"><li>• Framework loan to a city or region to finance a programme of small or medium Smart investments</li><li>• Framework loan to co-finance sustainable urban investments under a structural fund operational programme</li><li>• Framework loan to a bank to finance smart city investments</li></ul>
<b>Global Loans</b> Credit lines to banks	<ul style="list-style-type: none"><li>• Multi-purpose credit line including smart city projects</li></ul>
<b>Funds</b> Investment in a fund	<ul style="list-style-type: none"><li>• Investment into an urban development fund, brownfield fund, fund specialised in Smart City investment</li></ul>



## EIB Advisory Support:



# ASCIMER - Smart Cities in the Mediterranean Region

- Research grant from the EIB Institute
- EUR 100,000/year for 3 years
- Components:
  - Review EU and international best practice
  - Develop a Smart City concept tailored to the Mediterranean south (FEMIP region)
  - Review regulatory, institutional and financing context for potential smart city projects

# II EIB-Belfius Smart &



## Sustainable Cities – a € 400m facility

- Covers wide range of Smart investments and promoters in Belgium
- Aims to cover the whole country – Smart is not only for big cities!
- Stimulates best practice – integrated approach, innovative governance, use of tested smart technology, consultation
- Recognises Belgian certification schemes (eg. Referentiel Eco-quartier Wallonia, Flanders Duurzaamheidsmeter)
- Relies on an intermediary bank with technical capacity and market reach in the municipal market
- [Belfius film](#)



## EIB Advisory Support: ELENA

- TA grant support for preparation of urban Energy Efficiency and Renewables programmes linked to the Covenant of Mayors
- Must lead to an investment programme > EUR 20m
- Suitable for large cities, or associations of smaller cities and towns
- May be linked to energy efficiency goals under Smart City investment
- New Med-ELENA initiative under consideration



# EIB Partnerships in the Mediterranean Area



- Close collaboration with the Union for the Mediterranean (UfM):
  - UPFI
  - Starting collaboration on Smart Cities
- Partner for Centre for Mediterranean Integration (CMI)
- Close partnership with EU (DG Devco), AFD, KfW, CDC, and other IFIs active in the region.



# Urban Project Finance Initiative



The Initiative is managed by AFD and EIB in liaison with the EC and under the umbrella of the UfM Secretariat.



Union pour la Méditerranée  
Union for the Mediterranean  
الاتحاد من أجل المتوسط

KFW and the CDC are closely associated.

Other IFI's and investors such as the EBRD, La Caixa, CDG Morocco and CDC Tunisia have expressed their interest.



# UPFI | Objectives

---

- Act as a pipeline for urban projects, to favour the emergence of sustainable urban development projects in 9 Southern and Eastern Mediterranean Countries
- Select projects that are sustainable and innovative, serve as best practice examples and are potentially replicable
- Make them eligible vis-à-vis the standards of the EU, the donors and for UfM label
- Refine project feasibility studies
- Ensure project bankability according to the standards of the International Financial Institutions
- Give a boost to the implementation of the projects

# Tunisia – Sfax Taparura Urban Development

- 229 ha redevelopment of former phospho-gypsum site depolluted through an EIB-financed previous project
- Development of housing, tourism development, leisure facilities, green space, offices and commercial space, and related infrastructure
- Key challenges: land ownership, involvement of the private sector, phasing in relation to land use planning – **and creating a SMART CITY?**





# European Investment Bank

<http://www.eib.org>