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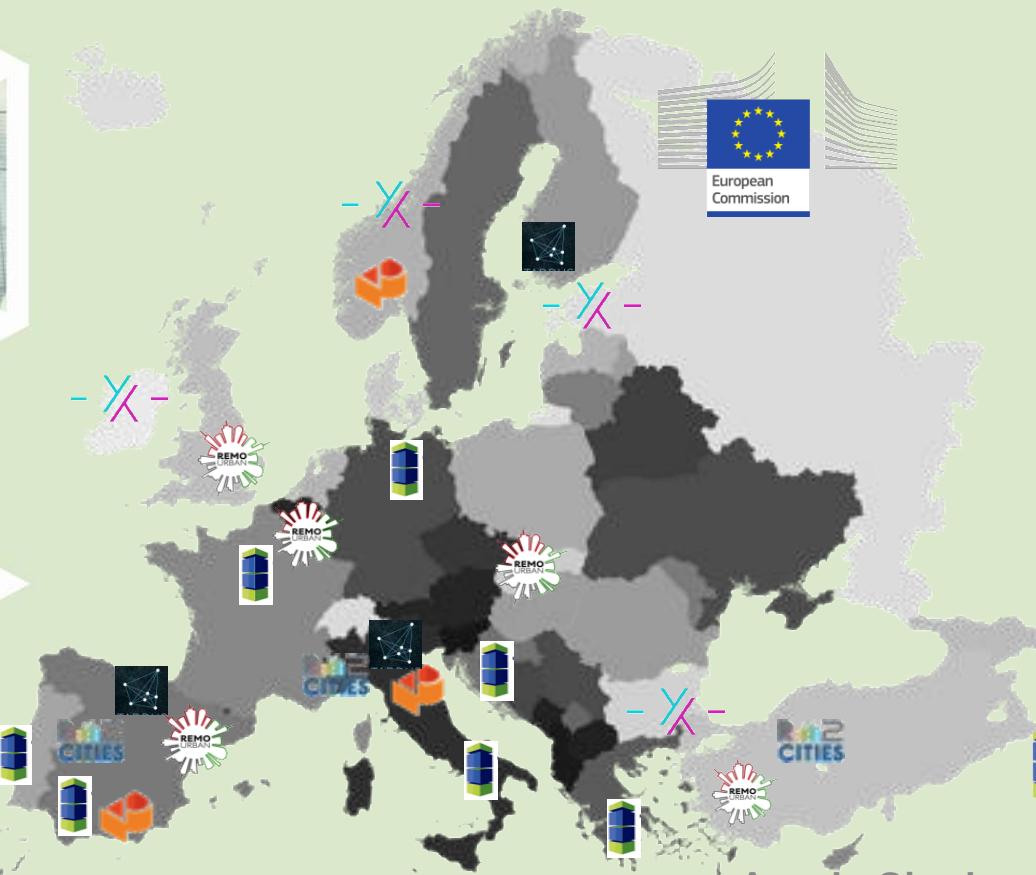
## **FUNDS AND FINANCE SMART CITIES**

# Executive summary

- #1 The “Long Term Generating” concept
- #2 The smart city “Ecosystem vision”
- #3 The city enablers’ engagement
- #4 Smart City integrated infrastructures
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- #6 Funding instruments
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- #9 Business Models and Financing Schemes customization process



# OV Background – EU Projects | Funds & Finance for Smart Cities



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# #1 The “Long Term Generating” concept

The **LTG** could be considered as a key enabler concept triggering, around a wide smart city framework, investment projects.

According to our experience, **15-to-25 ys** is the right lapse able to generate benefits for **both** financing investors and social welfare.

## #2 The SC “Ecosystem vision”

Successful case studies underlines the establishment of a **well-functioning Ecosystem architecture** as a key issue for a real-life city investment plan activation.

Literature is currently focused on the **Quintuple Helix** engagement, covering all local society involvement. Emerging instruments are **social innovations and gamification tools**

## #3 The city enablers' engagement

An emerging case study in US is the creation of a local **Venture Smart Group**. A platform built for co-design the local smart city vision, sharing data and information.

The objective is to establish a **co-thinktank approach** involving policy decision making, citizens, technology providers, financial institutions in order to adopt smart city local medium/long term vision. <2030..>

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## #4 Smart City integrated infrastrs.

Currently, EU cities infrastructures need massive reinvestment and modernization. Up-to-date SCs trends focus on city infra/structures and info/structures at integrated level.

But, there is a need for financial engineering allowing smart cities capturing conventional funding and un-conventional financing, even trespassing the stability pact rules and other constraints.

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## #5 The EIP-SCC city domains

EIP-SCC Marketplace, coordinated all the co-funded FP7 SCs and H2020 LCs, individuates validated/experienced smart cities' domains.

Smart Lamppost  
e-Mobility  
Social Housing  
Urban Platform

## #6 Funding instruments\*

\*Triggering an innovative investment pool for smart city program, requires creative thinking overcoming the traditional models of infrastructure fund.

- EU/EC co-funding initiatives and programs (ERDF, H2020/HEurope, etc. fulfilling the investment projects funding gap)
- tools by which project costs are repaid by the city through mechanisms such as: property taxes, business taxes, municipal income tax, user charges, pay-for-performance models, asset disposals, etc.

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## #7 Financing mechanisms \*

\*Triggering a

comprehensive investment pool for smart city program deployment requires creative thinking overcoming the traditional models of infrastructure financing.

**Project promoter's contribution**

**Private contribution under a PPP**

**Bond financing** bond options issued by states, local authorities, or corporates to finance different projects

**Pension fund private placement bonds** financing, capital to invest through non-public

**Equity investment and infrastructure fund managers** investments as part of diversified securities portfolio

**Venture capital** invest in companies in exchange for equity in the companies they invest in

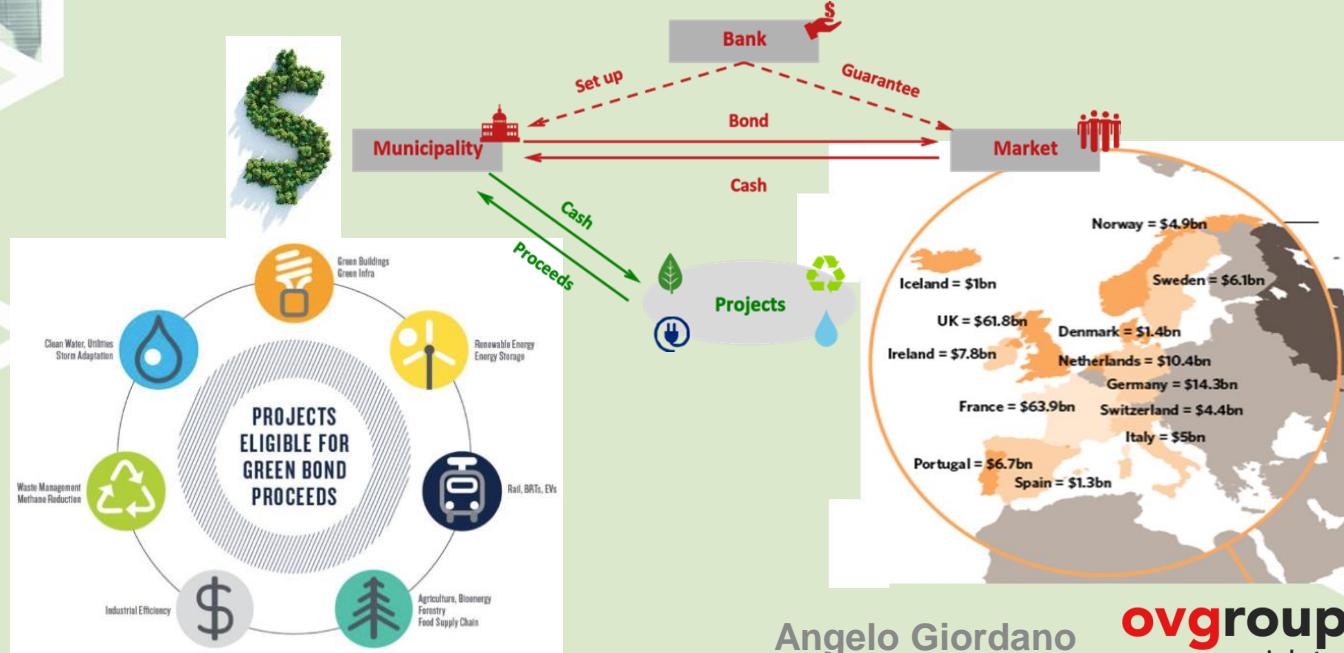
**Crowdfunding** enables groups to support a solution by pooling their resources

**Venture philanthropy** private investors, foundations or private-equity firms using VC approaches to provide financial support to viable projects with high levels of social interest.

**EIF – VentureEU** €2.1 billion to boost venture capital investment in Europe's innovative start-ups

# #7 Financing mechanisms

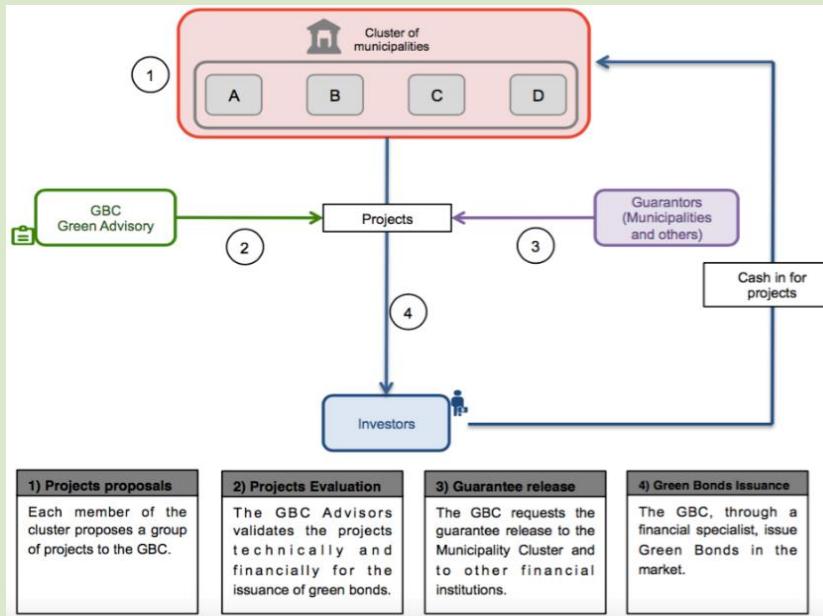
## Bond, green bond



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## #7 Financing mechanisms

### Bond, green bond



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## #7bis Financing mechanisms

Up to date there are convenient forms of debt, equity and guarantees, which could income from public financial institutions:

The EIB\* Financial Instruments, possibly blended with EC grants, such as: Investment loan, Framework loan, Equity investment, Intermediated loans, Investment platform.

\*the largest supranational borrower and lender in the world and the only international financial institution politically accountable to the EU

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## #7ter F&F mechanisms

Funding and Financing instruments are the vehicle used to pay for and generate revenue to service costs related to traditional infrastructure development and transitions.

### Case study:

- IoT and Blockchain cryptocurrency transactions for energy
- Car2go business model vs City net revenues
- Monetizing BigData revenues

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## #8 Role of Private Equity

According to latest financial literature “**Private Equity is the new black**”.

The biggest firms might become the new banks. They are not linked with deposit and short-term funding, but they raise money from long term investors such as insur. co. or pension funds.

Over the last 10ys private credit is the most performing, vice versa Real Estate and Venture Capital are the worst.

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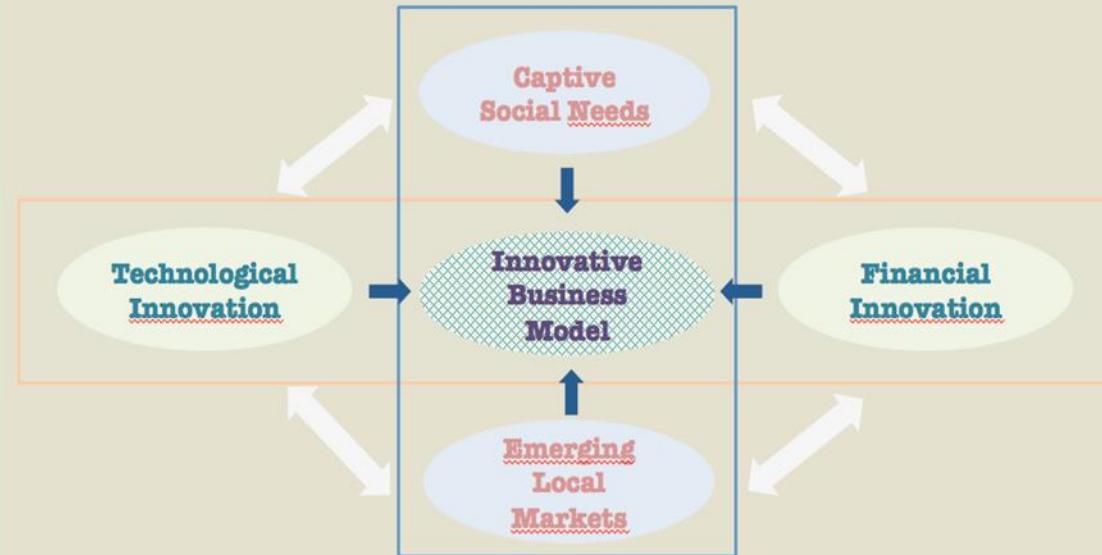
### #9 BMs&FSs customiz. process

SC renovation process in business model will encompass the creation of new types of jobs and a green local value chain, as a baseline milestone of a valuable and bankable platform for innovation.

Disruptive business model will be not only on canvas but bankable, having evaluated since the co-design phase the gap analysis, underpinning all the constraints and all the bottlenecks (regulatory, financial, technological and social).

The feature is scalable and replicable ready-to-market business model, crossing investor's sentiment, duly highlighting the de-risk of the implemented technologies.

## #9 BMs&FSs customiz. process



## #9 BMs&FSs customiz. process

We are still committed to setting a customized financing schemes settled for the integrated infrastructure use.

Basically, it is a **Revenue Sharing Stabilization Mechanism**, enabling **new public private partnership models** for front-end investment and revenue sharing, including pay-for-performance related to service improvements or access to services.