



**European
Investment
Bank**

The EU bank



improve lives.
together.

General Assembly of the European Innovation Partnership in
Smart Cities and Communities
Action Cluster Sustainable Urban Mobility

Dietmar Dumlich
Sofia, 27 June 2018

EIB

- EU's long-term lending bank set up in 1958 by the Treaty of Rome
- Largest multilateral lender and borrower in the world
- Total assets of EUR 573bn as of 2016, AAA-rated with strong capital base
- Raise funds on the international capital markets, passing on favourable borrowing conditions to clients (e.g. large amounts, broad range of currencies, long maturities, attractive interest rates)
- Catalyst for participation of other banking or financial partners
- **Shareholders:** 28 EU Member States
- **Some 440 projects each year in over 160 countries**

EIF

- Leading developer of risk financing for entrepreneurship and innovation across the EU
- Supported over 1.5 million SMEs over 20 years
- **Shareholders:** EIB (62.1%), European Commission (30%), public and private financial institutions (7.9%)
- **Working with financial intermediaries** across the 28 EU Member States, EFTA and all Accession countries
- **AAA-rated with strong capital base**

EIB Group results 2017



Innovation



EUR **13.8bn**

Environment



EUR **16.7bn**

Infrastructure



EUR **18bn**

SMEs



EUR **29.6bn**

EUR
78.2bn



EIB Group impact



10,924 MW
of power created
(99.6% from
renewables)



572,324 families
in EIB-financed
affordable social
housing



Improved
healthcare
services for
45.7 million
people



Safer drinking
water for
23 million
people



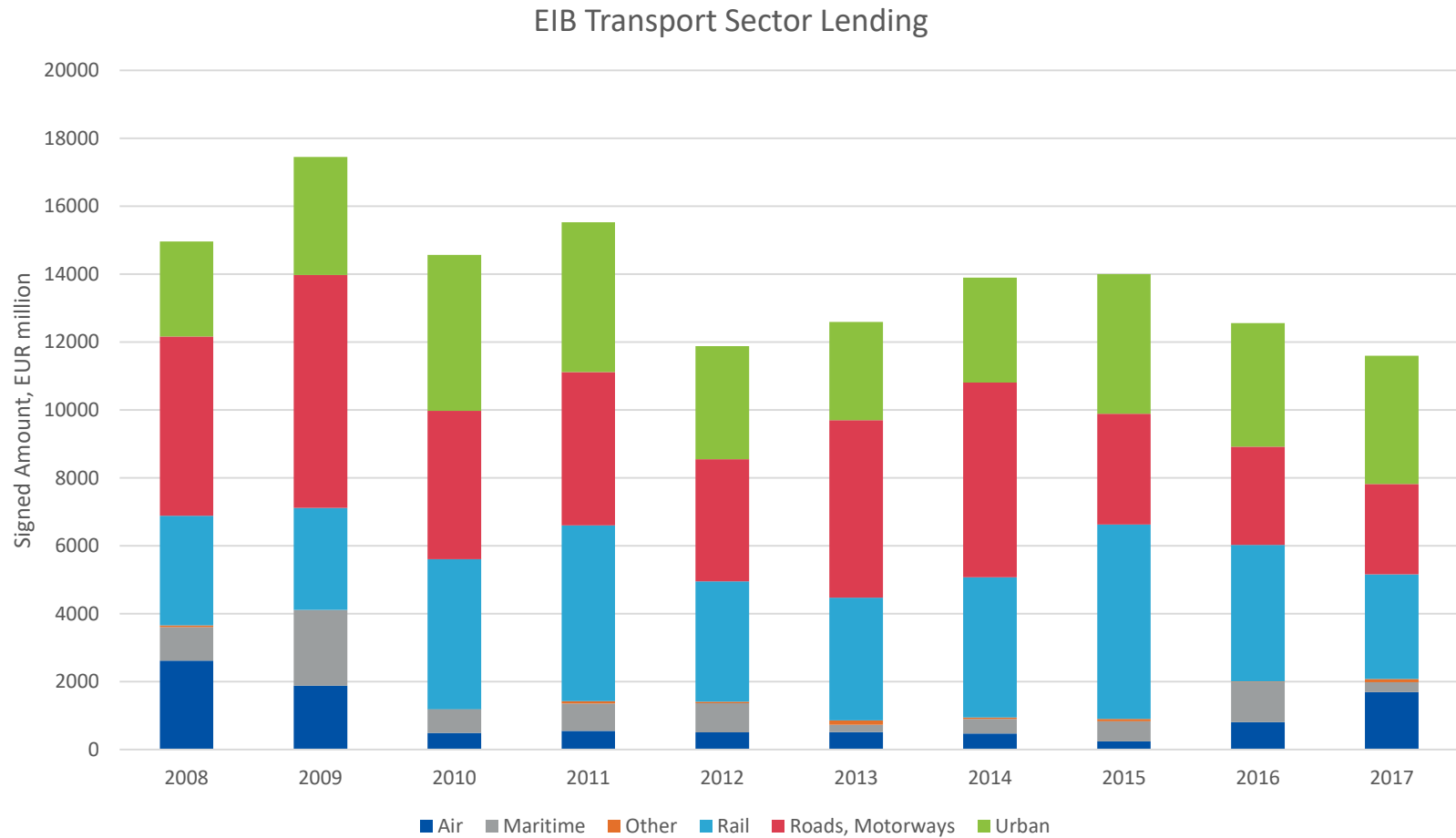
3.9 million
jobs sustained
in **285,800**
firms



7.44 million
new & upgraded
high speed digital
connections

EIB Transport Sector Lending

2008-2017



EIB Urban Transport projects in Europe 2016-2017



Disclaimer: Locations and alignments are estimates based on the information available at the time of geocoding and may differ from the actual locations and alignments

EIB Support to Urban Transport

- ▶ **EIB Transport Lending Policy (2011)** describes eligibility and quality requirements.
- ▶ Projects to be technically, economically, socially environmentally and financially sound.
- ▶ Urban transport projects to be linked to a urban transport strategy.
 - ▶ Public transport (bus/metro/rail)
 - ▶ Urban roads
 - ▶ ICT transport projects
- ▶ In terms of technology, a combination of best available technology and least cost principles. **Typically at least EURO VI in EU.** Cleaner technology supported/encouraged where applicable.
- ▶ Urban projects expected to help in reducing congestion and environmental externalities:
 - ▶ modal shift from private cars to more sustainable transport modes; and/or
 - ▶ improvements in transport efficiency, including improved inter-modal connections.



Cleaner Transport Facility (CTF)

- ▶ Launched by EIB/EC in December 2016
- ▶ Support the **accelerated deployment** of new cleaner transport technology
- ▶ Full range of **available tools (financial/advisory)** from EIB and EC for public and private entities
- ▶ Development of new financial instruments (as applicable)
- ▶ **Focus:**
 - ▶ Public transport buses / public fleets
 - ▶ Alternative fuel infrastructure on strategic networks
 - ▶ Innovative technologies
 - ▶ *(safety and security investments)*



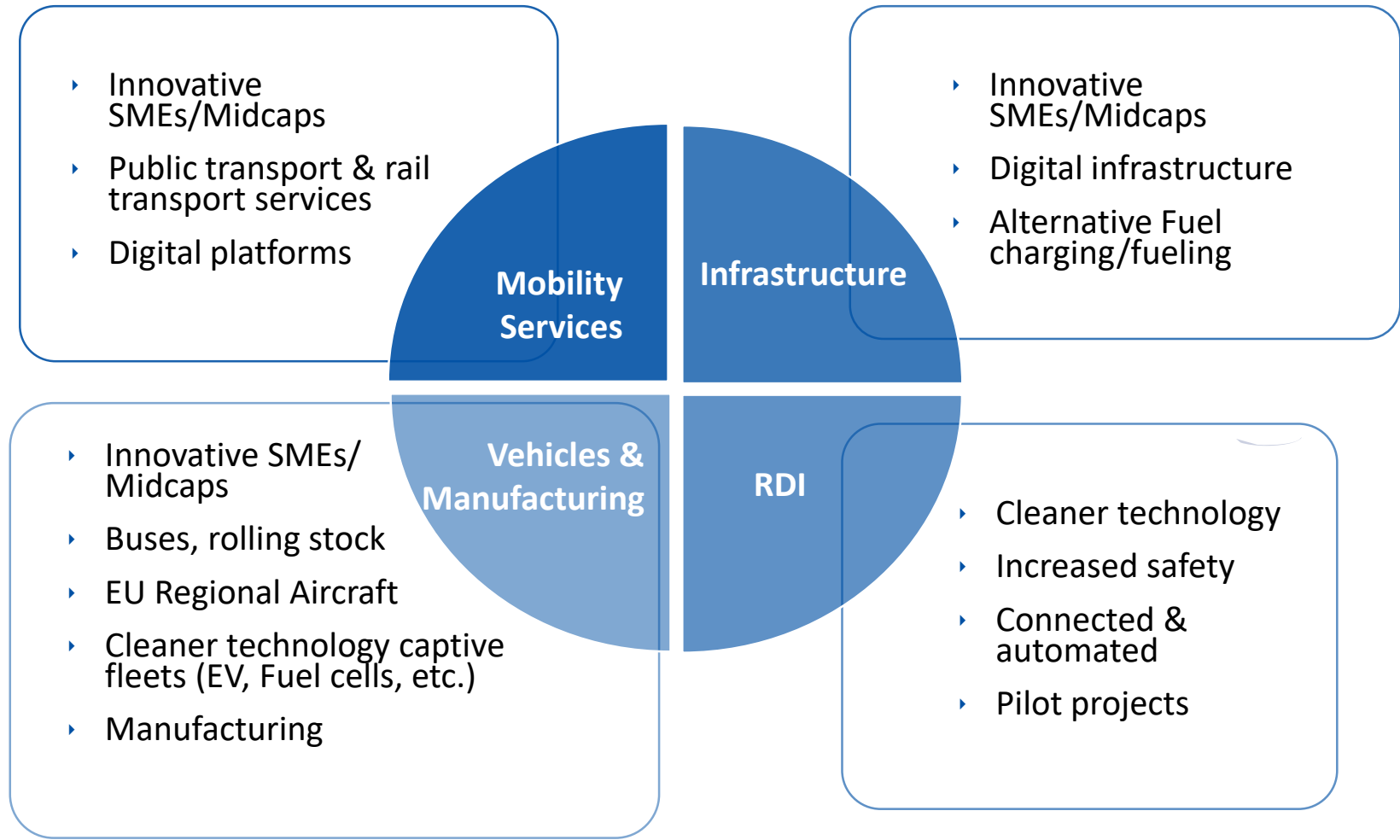
The graphic features the EIB and EC logos at the top. Below them, a blue banner contains the title "Cleaner Transport Facility: Supporting the deployment of cleaner transport". A photograph of a modern green and black tram is shown. Text overlays provide details about the CTF's mission to support the transition to cleaner transport across the EU.

Cleaner Transport Facility:
Supporting the deployment of cleaner transport

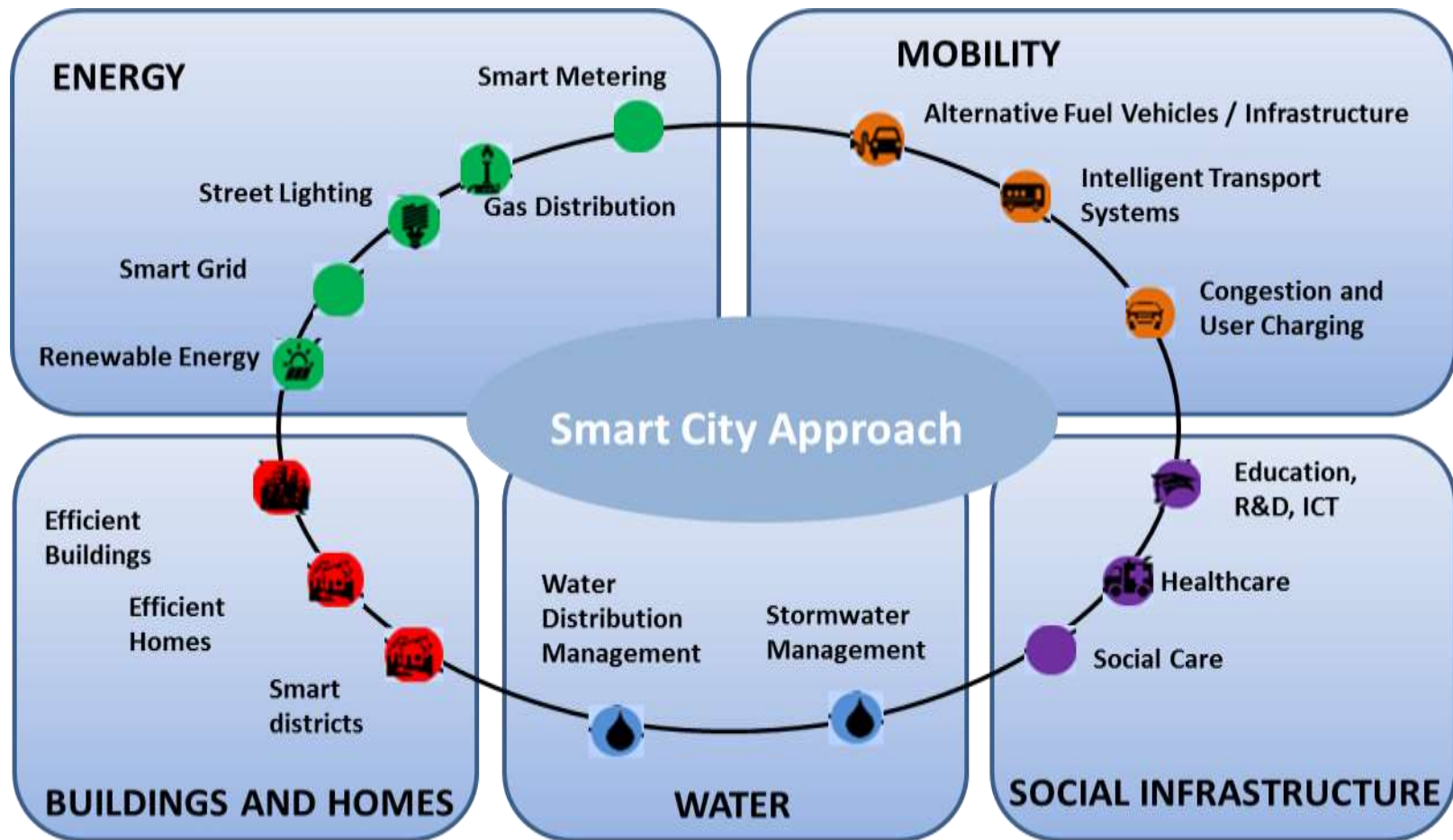
The alternative fuels and cleaner transport sector is gradually moving towards large-scale deployment across the EU. The European Investment Bank (EIB) is supporting this shift. The Cleaner Transport Facility (CTF) is a new initiative launched in December 2016 by the EIB and European Commission (EC) to assist investments, by both public and private entities, in cleaner transport projects through existing EIB products and new financial instruments.

The objective of the CTF is to support the accelerated deployment of cleaner transport vehicles and help meet their associated infrastructure needs. The CTF is an umbrella that deploys the EIB's technical and financial capacity to adapt to specific market needs in order to explore viable business models and invest opportunities to finance cleaner transport. The first projects were investments in cleaner public transport buses, and we are further exploring other markets. We want to hear from stakeholders in the cleaner transport and alternative fuels sector to work together to develop financial products and structures tailored to the industry's profiles and investment needs. Please contact us to work together to develop financing solutions that meet your needs.

Transport innovation investments supported by EIB



EIB Support to Smart Cities



Challenges

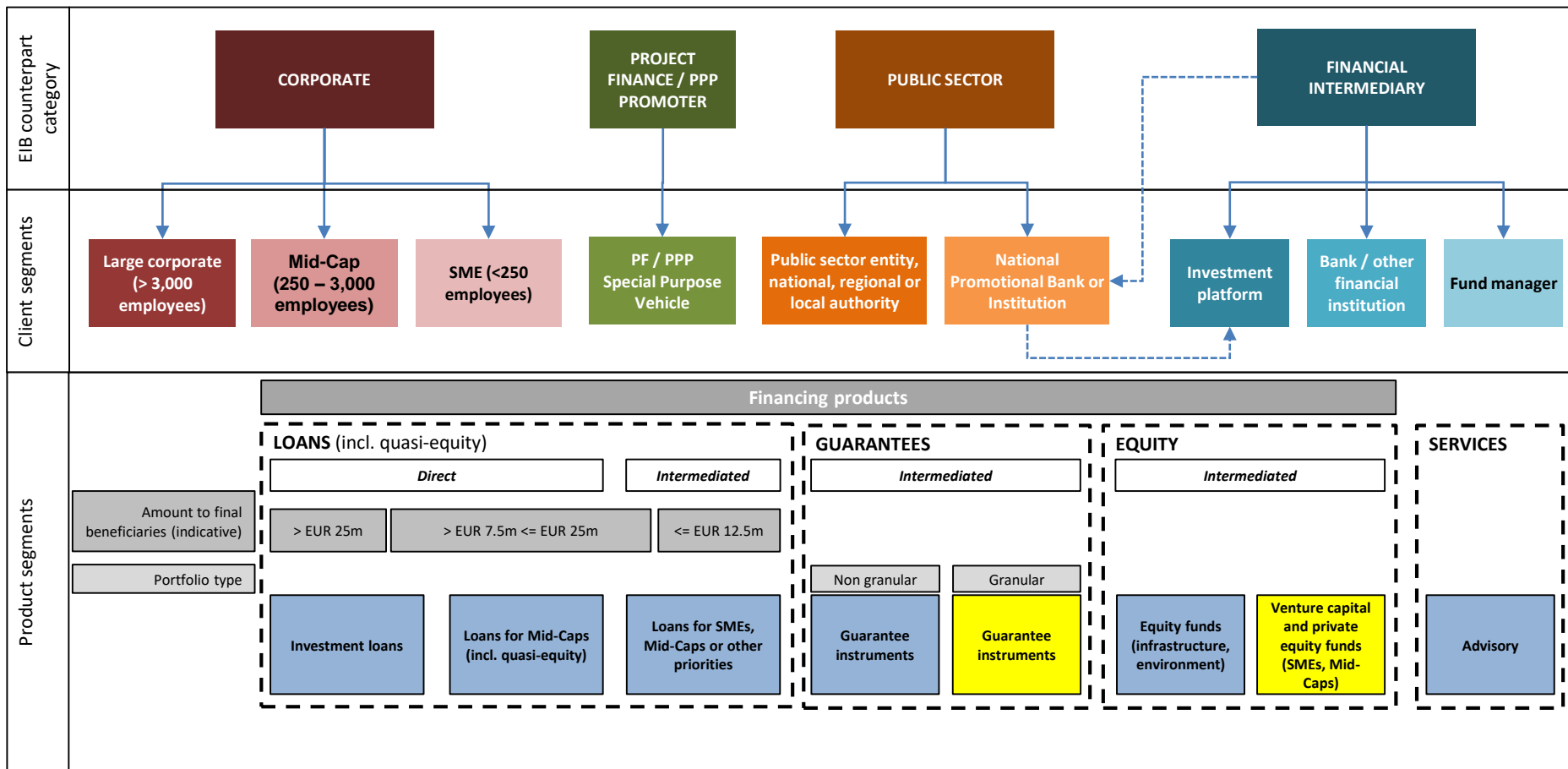
- Multi-disciplinary: Energy, Operations, Assets, etc.
- Emerging Business Models
- Geographies differ: culture, history, preferences

Future uncertain – focus on:

- Charging infrastructure – main focus for EV
- Fleet renewal
- Biggest challenge: market risks



Main EIB Group client and product categories



- **InnovFin** – EU Finance for Innovators under Horizon 2020, covering the entire value chain of research and innovation (R&I) **up to a limit of EUR 300m down to EUR 25 000**, either directly or indirectly through banks or other financial institutions.
- Typically, the EIB loan covers a third of project cost, but we may finance up to 50%.



Early-Stage Enterprises	SMEs
InnovFin Technology Transfer	InnovFin SME Guarantee
InnovFin Business Angels	
InnovFin Venture Capital	
InnovFin Fund-of-Funds	
Early-Stage Enterprises, SMEs and Small Midcaps < 500 Employees	SMEs and Small Midcaps < 500 Employees
Intermediated Equity Financing	Intermediated Debt Financing



Corporate	Science	Thematic Finance	Advisory
InnovFin Emerging Innovators	InnovFin Science	InnovFin Energy Demo Projects	InnovFin Advisory
InnovFin MidCap Guarantee		InnovFin Infectious Diseases	
InnovFin Corporate Research Equity		InnovFin Thematic Investment Platforms	
SMEs, Midcaps, Large Caps, SPVs	Research Institutes, Universities, Research Organisations	SMEs, Midcaps, possibly Large Caps, SPVs	Public and Private Sector Promoters
Direct and/or Intermediated Financing (including equity type)	Direct Financing (including equity type)	Direct and/or Intermediated Financing (including equity type)	Financial Advisory

 Direct products
  Indirect products
  Direct or indirect products

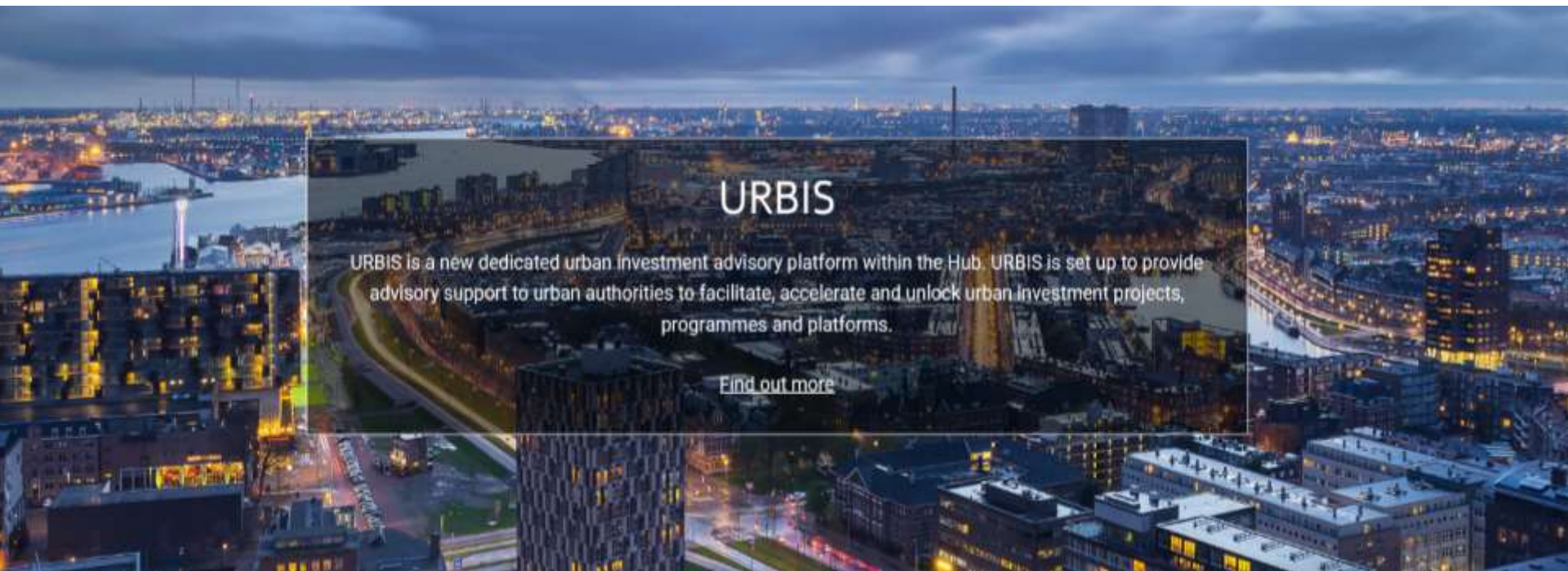
Note: InnovFin Large Projects succeeded by InnovFin Emerging Innovators
 InnovFin MidCap Growth Finance is deployed under the European Fund for Strategic Investments (EF5I) since November 2016

Key Advantages of EIB involvement

- EIB offers affordable lending rates.
- Unmatched long term financing, in line with the project's economic life (e.g. infrastructure projects 25-30 years).
- Flexible product offerings for the promoter's multi-year and multi-sectorial investment programmes (e.g. framework/ programme loans without commitment and long availability periods).
- “Blending” of financing, project expertise and advisory support (both project preparation as well as technical assistance and implementation support).
- EIB involvement sends strong signals to other market participants concerning the viability of the project and often “crowds-in” other financiers.
- As the EU Bank we are the natural facilitator of discussions with the European Commission and the other EU institutions.

URBIS – Investment Support for Cities

- Launched in Rotterdam at the Cities Forum November 2017 in partnership with EU
- Provides advice to cities and their partners
- Focuses on investment support: project development, linking strategy to investment, and innovative financial instruments and approaches
- Available via the European Investment Advisory Hub and its own dedicate page



Eligibility Criteria

- Investment related and for the benefit of urban authorities
- Activity must build on a planning led approach and reflect sustainable urban development
- Advice will be given for an integrated urban investment programme, with a short to medium term time-horizon, typically 3-5 years
- Investment projects should be typically over EUR 20m, but can include programmes of smaller projects
- Activity must demonstrate additionality

Examples of URBIS assignments

- Development and implementation of urban regeneration schemes in Poland
- Climate risk work to support framework loans in Bologna
- Bulgaria urban investment platform – combining EFSI and ESIF
- Slovakia smart cities investment platform
- Urban strategy development – Greece
- Regeneration strategy development - Malta
- Feasibility work to explore the potential for multi regional financial instruments for urban development

ELENA (European Local Energy Assistance)

- ▶ Technical Assistance facility: managed by EIB on behalf of EU; funded by EU budget (HORIZON 2020 programme)
- ▶ Makes available project development support for energy efficiency; local renewables; clean urban transport
- ▶ Market replication focus (min. investment amount EUR 30)
- ▶ Investment leverage required (ratio investment implemented/grant 20 sustainable energy projects; 10 clean urban transport projects; claw back possibility)
- ▶ 90% funding rate (grant)
- ▶ ELENA budget : still available, per year EUR 30m sustainable energy and EUR 5m clean urban transport
- ▶ First come, first served rule, no cut-off date

ELENA- Eligible investment programmes

Energy efficiency

- EE renovations of public and private buildings
- Street and traffic lighting
- Integration of renewable energy sources into the buildings
- Investments in district heating/cooling networks
- Local energy facilities that support EE/RE (e.g. smart grids)

Urban transport and mobility

- Investments to support the use and the integration of innovative solutions going beyond the current state of art for alternative fuels in urban mobility
- Vehicles, recharging infrastructure, energy-efficient measures and systems

Investment programmes implemented by the final beneficiary or by a third party

ELENA

CASE STUDIES

Sofia Transport Fleet Renewal (BG)

- ▶ Project includes purchase of new buses, in addition to 5 trams and traffic control systems:
 - ▶ 126 modern, low-floor, 18m long articulated CNG buses
 - ▶ 110 modern, low-floor, 12 m long solo EURO VI diesel-buses
 - ▶ 22 Solo CNG buses
- ▶ Borrower: Sofia Municipality (sub-sovereign)
- ▶ EIB loan: EUR 40m
- ▶ Co-financed with EU funds (Operational Programme Environment 2007-2013)



Riga Transport Company (LV)

- ▶ Example of blending CEF grant and EIB/EFSI finance
- ▶ Borrower: Riga Transport Company (RTC), public transport operator owned by Municipality of Riga (no direct Municipality guarantee on obligations of RTC)
- ▶ EIB EUR 75m loan (with EFSI guarantee) to:
 - ▶ Upgrade the tram system (new rolling stock and infrastructure)
 - ▶ Modernise existing tramway depot
 - ▶ Purchase 10 new hydrogen fuel cell buses, 10 new trolleybuses with hydrogen fuel cell range extenders and associated refueling infrastructure
- ▶ EUR 8m CEF grant to co-finance installation of hydrogen fuel production and charging facilities
- ▶ Remainder to be financed by RTC's own funds and other bank (commercial) loans



Source: Latvian Information Agency (2016), Leta/delfi.lv

EIB Financing Digital Transport Infrastructure

Autolib electric car-sharing Paris

- ▶ EUR 75m loan for deployment of interconnected recharging infrastructure
- ▶ Upstream R&D for further implementation of automated registration, billing, charging and control systems to facilitate customer and fleet management



Electronic Tolling System Poland

- ▶ EUR 120m loan to finance installation of electronic tolling system on Polish motorways, expressways and highways

Volvo Cars Innovative Technologies

- ▶ EUR 245m for development of fuel efficient powertrains, active safety systems and telematics and connected vehicle technologies

Paris Subway network

- ▶ Support to the construction of a fully automated 33km first phase of Line 15 running from east to west around Paris, reaching 22 municipalities



Thank you!

More information at: www.eib.org
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