



fi-compass study "Financing rural, agricultural and forestry infrastructure"

Mr Frank Lee, European Investment Bank







Objective and scope of the study







to provide a preliminary assessment of the needs/demand for rural and agricultural infrastructure investments



to analyse how FIs could be utilised to unlock infrastructure investment in these areas

In the following sectors

- ► Broadband and ICT
- ► Renewable energy and building energy efficiency investments
- ► Irrigation, water supply and purification
- ➤ Smart services and infrastructure for rural villages
- ► Supply chain
- ▶ Waste treatment
- ► Forestry

Inspiration from EIB operations, ESIF Financial Instruments, EU centralised instruments/facilities







Infrastructure investment: needs





Annual infrastructure investment gap for EU27

	EUR billion	% of GDP
ICT (broadband and digitalisation)	50	0.38
Energy generation and grids	17	0.13
Water and waste	7	0.05
Social and affordable housing	6	0.05
Education	8	0.06
Health	17	0.13
Mobility	50	0.38
Total	155	1.19

There are no specific data on infrastructure investment needs in rural areas, but these can be assumed to be higher than in urban areas

Source: EIB estimates

EU's post 2020 MFF: need to invest more in Europe's infrastructure

A greater involvement of private investment (particularly from institutional investors) is critical to help fill this gap. Therefore, the returns on such infrastructure investment have to be made sufficiently attractive.







Challenges and constraints



Constraints	Mitigants	
 MAs lack of knowledge about FIs, and their specific use for rural infrastructure 	► Information/training/awareness raising	
 Project promoters not skilled in finance and risk management 	 Reliable locally-based intermediaries able to originate projects and/or to assist with appropriate TA/advisory support 	
► Critical mass/size of projects	 Project pooling/aggregation, through FIs and/or combining multiple smaller scale projects of a single borrower 	
► Low private appetite for a dedicated "rural" infrastructure instrument, due to lack of information and higher risk perception	➤ Public resources to lower the overall risk — layered structures to attract private resources	
 Reduced size and low population density may reduce profitability 	 Grants combination and/or guarantees may be needed 	

Infrastructure assets already have some features that appeal institutional investors: long duration/ economic life that facilitate the matching of long-term liabilities with cash flows, portfolio diversification etc.





Rural broadband and ICT – background







- EUR 90bn gap to reach Digital Agenda targets
- Investment opportunity for rural and low-revenue areas of EUR 32bn
- Concession-type structures leading to small-sized projects, limited scale effects, limited competition in public procurement
- Rural broadband schemes are often greenfield projects, without existing revenue generation, large upfront capex, J-curve cash-profile
- High unit costs per connected household (scattered customers and lack of regional backhaul systems suitable for HS broadband) and low revenue prospects

Rural broadband PPP - Greece

 Half Greek territory covered w/fibre and wireless technologies



- ► Total cost of ca EUR 200m (of which EUR 144m ESIF)
- ► Public partner funding the initial network deployment (2007-2013 & 2014-2020 ERDF&EAFRD resources + national funds)
- ► Private partner managing the operation period (including re-investments)
- ▶ Private providers alone would not have invested (lack of commercial interest in catering to 6% of Greek population)







Rural waste treatment - Greece





Awarding Authority:

Solid Waste Management Company of Serres Prefecture

(ESANS S.A.)

Sponsor/ Contractor:

ARCHIRODON – INTRAKAT – ENVITEC

Sign of contract:

June 2017

Status: Under construction

Total Development

Cost:

EUR 36 mn

EU grant:

FUR 15.2 mn

Financing:

EU Grant Private partner

Lenders involved:

National Bank of Greece Project type:

Availability payments

Design, financing, construction, maintenance, technical management and operation of the Waste Management Unit in the Prefecture of Serres for a period of 27 years. The total annual amount of waste to be managed has been estimated at 63,000 tons.







Infrastructure fund – Marguerite





Investment platform providing equity contributions to infrastructure projects in the transport, energy, renewable energy, energy efficiency, ICT / broadband and the water treatment sectors.

It invests in medium and large greenfield infrastructure projects, in particular for development, construction and ramp-up risk, where equity is still scarce.

(sell) its assets shortly after construction and ramp-up phase. This is to address the significant interest of institutional investors in operational infrastructure assets once they are de-risked and have demonstrated a stable cash yield flow

EFSI backed

Example: **Poznań energy-from-waste** (Poland).

The plant was procured in the form of an availability-based PPP between the City of Poznań and a SPV, in which Marguerite has 50% stakes



Key financial information:

- Marguerite I has been fully invested (over 700m commitments to 20 investments in 13 Member states)
- Marguerite II: target size 700m, EIB to invest up to 200m
- Institutional investors: NPBs/NPIs (CDC, CPD, ICO, KfW, PKO)
- Target: 10-20 assets (large tickets)





Infrastructure fund – Infranode





INFRANODE FUND – NORDIC COUNTRIES

Investment Platform to provide capital to the implementation of **medium-size**, **local**, **privately-promoted infrastructure projects**

Sectors: RE/EE; Waste treatment; Smart services

The Fund Manager main role is mainly the origination of a solid pipeline

- EIB's participates under EFSI guarantee with a Bullet Profit Participating Loan (quasi equity)
- Infranode provides capital injections in enterprises (mainly MidCaps) in need of expansion capital for investment in greenfield or brownfield infrastructures
- Medium-size local projects, not addressed by big international infrastructures funds

- EIB played a role in attracting other patient investors (Pension Funds, Foundations, etc.)
- "Patient investor strategy" provision of equity/quasi equity with a long time horizon (25 years)
- Investments in highly regulated markets/quasi monopolistic situations – reduced risk in a long term perspective







Smart villages

- Deployed by an intermediary bank with technical capacity and market reach in the municipal market.
- Covers wide range of SMART investments and promoters in Belgium: investments in urban renewal, urban infrastructure, social and affordable housing, energy efficiency, renewable energy, sustainable transport, water, solid waste and ICT

Heer-sur-Meuse (<6k inhab.): transformation of a dangerous crossroad into a communal square with modern street furniture and LED lighting

Dour (<17k inhab.): first organic swimming pond in Belgium, as part of the transformation of the disused Belvédère site into a unique Recreational and Sports Center, focused on swimming and tennis, relaxation and education to the environment. Grant + loans





BELFIUS SMART CITIES CLIMATE & CIRCULAR ECONOMY



Smart Cities

Intermediated framework loan

EUR 200m from EIB EUR 200m from Belfius



Sint-Amands (<8k inhab.): transformation of former shoe factory in Sint-Amands, closed in 2011, into a sustainable multipurpose community center for citizens and local associations





■ Belfius

Energy efficiency and renewables - JESSICA





Jessica Sardinia (ERDF 2007/2013)

#ficompass

- Main beneficiaries are local authorities (21)
- Strong partnership Bank-Advisor aimed at scouting projects across the eligible territory and at creating a pipeline of feasible projects
- Niche operations (around EUR 100k) but also bigger infrastructure projects (gas pipeline, biogas and biomass plants)

Energy efficiency

Photovoltaic systems on public buildings (14 towns, out of which 11 with less than 1k inhabitants) Fnergy efficiency

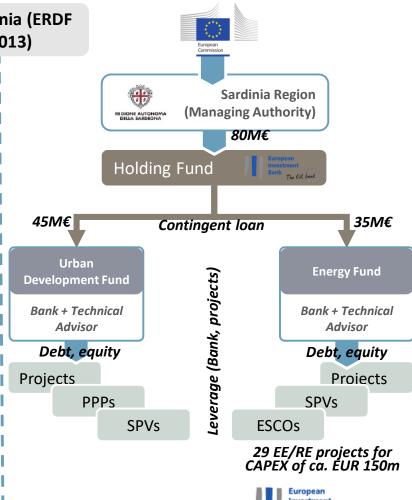
Energy efficiency improvement

- Public hospital
- City Halls
- Schools

Renovation/ Extraordinary maintenance and efficiency of the **public lighting**

Renewable energy

- Treatment plant of slaughtering waste associated to a cogeneration plant
- Cogeneration plant and wind power plant in small towns
- Conversion of a petrochemical plant in a bio refinery
- Geothermal system for heating public buildings
- Installation of 55kW wind power plant
- Biomass heating system

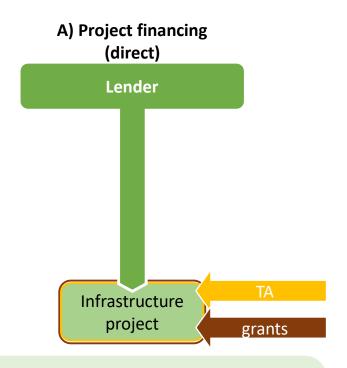




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Main findings - How to deliver the financing





B) Intermediate financing

Lender

Intermediary layer Fund/Investment Platform; Bank(s)

Infrastructure project(s) grants

Direct financing on a stand-alone basis (i.e. project finance), with individual assessment of financing terms and project viability based on the creditworthiness of the project itself. Such projects usually generate some degree of revenue or cost savings that can be used to repay FI support

Intermediated financing of projects which do not have sufficient creditworthiness or scale to be financed on a standalone basis. In such scenarios the financing is provided by a financial intermediary to an underlying portfolio of smaller projects.







Main findings - Fls potential





High potential investment sectors

- ► Energy efficiency (primarily in buildings)
- ► Renewable energy (primarily biomass, wind and solar)
- ► Rural Broadband (almost always in combination with grants)
- ► Smart investments in medium/small municipalities

Other interesting sectors

- ► Irrigation
- ► Forestry







Main findings - How to unlock new investments





The impact assessment for InvestEU highlighted the <u>lack of a strong pipeline of sustainable</u> infrastructure projects as a recurring concern among investors.



Technical assistance/ advisory support key to further support the development of sustainable projects and to aggregate/ scale up smaller projects (e.g. JESSICA)

Grants alongside financial products

To finance the non-profitable part of the projects

Layered schemes; different treatment of public/private investors

When a crowd-in effect is needed







Main findings – proposals for future discussion





Small-scale projects implemented at local level are normally the main focus of the EAFRD support measure for infrastructure. **JESSICA-like structures can be easily implemented by MAs** and have proven some **potential given the following conditions:**

- ESIF is used to attract financial intermediaries with knowledge of local conditions, able to build a pipeline of eligible projects and raise additional finance
- Technical assistance and support are provided both at intermediary level (if needed) and at project level

A thorough **ex ante assessment/feasibility study** should **focus on assessing both the possible market gap and the presence of some necessary enabling factors** (project promoters with sufficient knowledge, sufficient debt capacity of public promoters and fiscal constraints, presence and interest of financial intermediaries which can take ownership and promote the FI).

A larger platform (EU level) to target larger rural projects could be a policy option, but also "rural windows" in existing (or future) EU infrastructure facilities may be an option.















