




Study on financial instruments for rural, agricultural and forestry infrastructure

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Objective and scope of the study



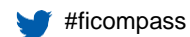
to provide a preliminary assessment of the needs/demand for rural and agricultural infrastructure investments

to imagine how FIs could potentially be utilised to facilitate more investment in these areas

In the following sectors

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

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



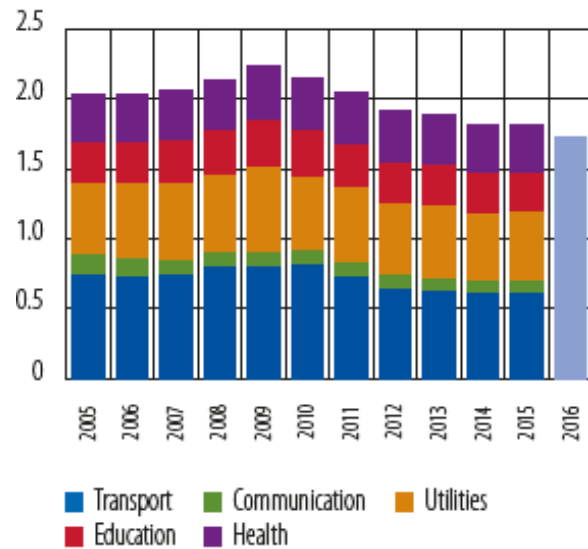
Infrastructure investment: trend and needs



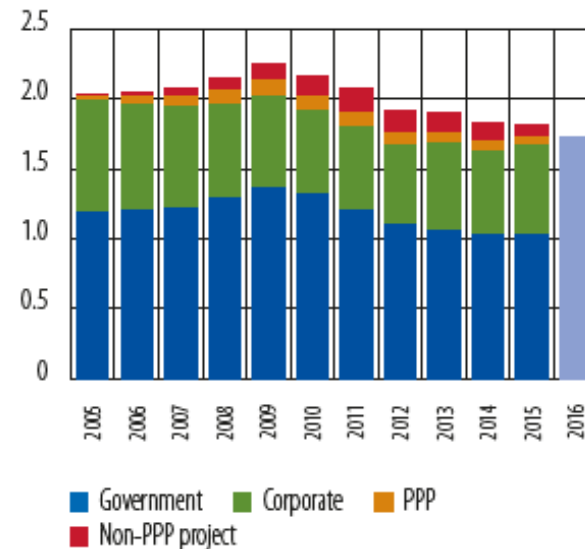
Investment trends in EU infrastructure

(in % of GDP)

a. by sector



b. by source



- ▶ Pull back of the public sector (-20%): short-term needs displacing long term ones. ESIF mitigated such drop
- ▶ Setback of investments most intense at sub-national level and in MS already suffering low infrastructure levels

Investment needs in EU infrastructure

per year, period 2015-2030

	Total (% of GDP)	Total (EUR bn)
EU	4.7	688

of which

Energy (EUR bn)	Transport (EUR bn)	Water and sanitation (EUR bn)	Telecoms (EUR bn)
230	160	138	160

Source: EIB Investment Survey

Infrastructure gap in rural areas



A differentiation of infrastructure investment needs *specifically in rural areas* is not there, but these can be assumed to be **higher** than those in urban areas

Here's why:

- Lower accessibility rates to services and provision of social infrastructures (for example, healthcare)
- Broadband and internet access
- Higher risk of poverty or social exclusion
- Higher rate of school dropouts

although important differences among MS exist

thus


A greater involvement of private investment is critical to help fill this gap. Such infrastructure investment has to be made sufficiently attractive for them to invest

Rural broadband and ICT

- EUR 90bn gap to reach Digital Agenda targets
- Investment opportunity for rural and low-revenue areas of EUR 32 bn
- 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

Connecting Europe Broadband Facility (CEBF) – pilot Fund backed by CEF



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Rural broadband PPP - Greece

- ▶ Half Greek territory covered fibre and wireless backhauling, wireless and VDSL access technologies
- ▶ Total cost of EUR 199.7 million (of which EUR 143.8 million from ESI Funds)
- ▶ 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)



Renewable energy from Biomass



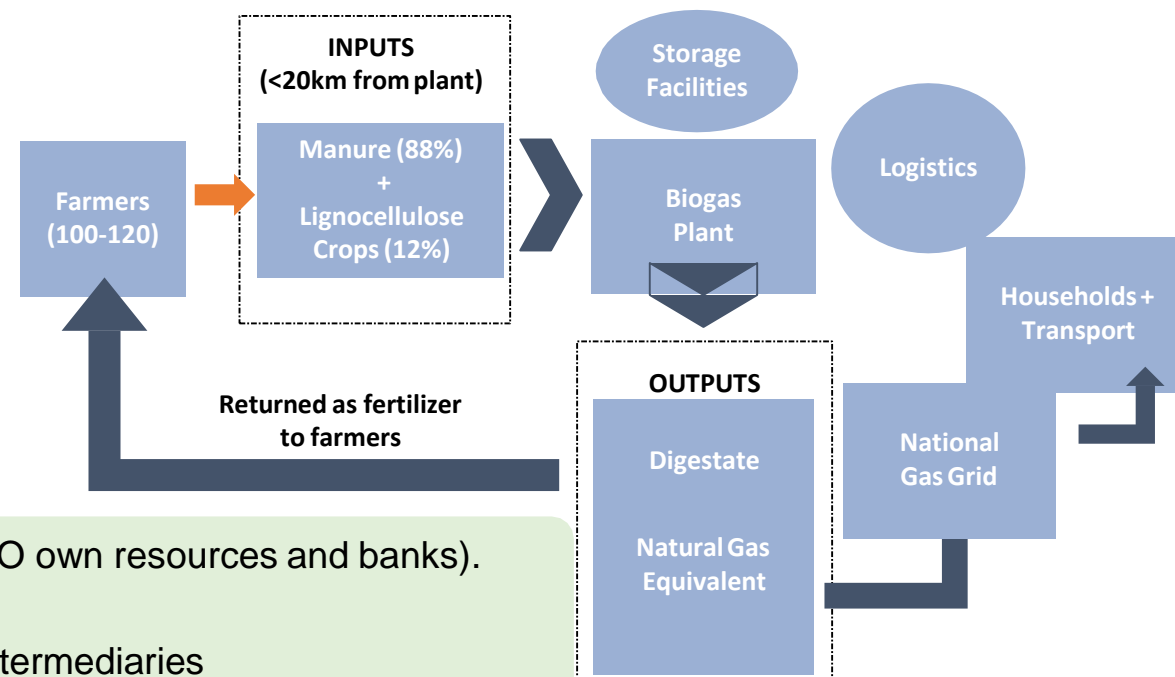
ENVO BIOGAS TONDER – Project Loan

Construction and operation of a biogas production in Denmark, with an annual production of approximately ~31 m Nm³ of natural gas.

Enabling environment:

- subsidy scheme for production and upgrading of biogas
- Denmark committed to achieving 100% RE sourcing by 2050.

- EIB's loan: up to 32.5m – maturity up to 12 years (the rest from ENVO own resources and banks). EFSI guarantee requested. Total investment cost: ca. EUR 92.80m
- EIB provides secured senior debt on a pari-passu basis with other intermediaries
- Revenues based on the sale of bio-natural gas to the off-taker utility company
- Key features of the model: **offtake payment system risk** and contractual arrangements (also with a compensation mechanism to mitigate gas price fluctuations) and **continuous supply of feedstock** (especially manure and household waste) backed by acceptable contractual arrangements.



Irrigation



Comunidades de Regantes (Spain) - Upgrade and modernization of irrigation water distribution infrastructure managed and owned by a number of Comunidades de Regantes (i.e. Water User Associations (WUA)).

- EIB Multiple Beneficiary Intermediated Loan: EUR 150m, long tenor (20y)
- Estimated total investment EUR 300m
- At Sub-Project level, EIB max cofinancing is 50% of total costs
- Possible combination with EAFRD support at project level

- Modernisation plans **with the support of Rural Development Programmes**
- **Switch to pressurized water at farm level (complementary farmer's investments expected) and energy saving in pumping systems**
- **Borrowers:** Spanish banks, which will appraise each sub-project individually, thanks to a dedicated and experienced team across their branches
- “Comunidades de Regantes” responsibility: construction, operation and maintenance of irrigation systems, management of related land drainage schemes



Infrastructures fund – Infranode



INFRANODE FUND – NORDIC COUNTRIES

EIB investment in an Investment Platform (IP) 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

Key financial information:

- EIB's loan share: 22,5% (90m circa), under **EFSI** guarantee – **Bullet Profit Participating Loan** (quasi equity)
- Total investment cost: ca. EUR 415,54m
- 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.)
- The public sector in the Nordic countries is under heavy pressure to curb its debt burden despite a current low cost of financing.
- “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

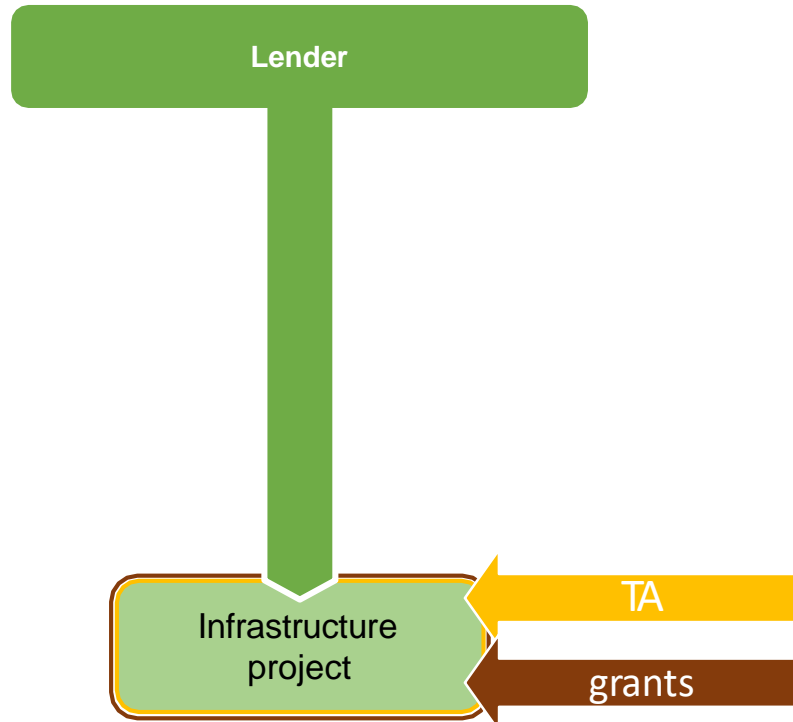


Findings (1)

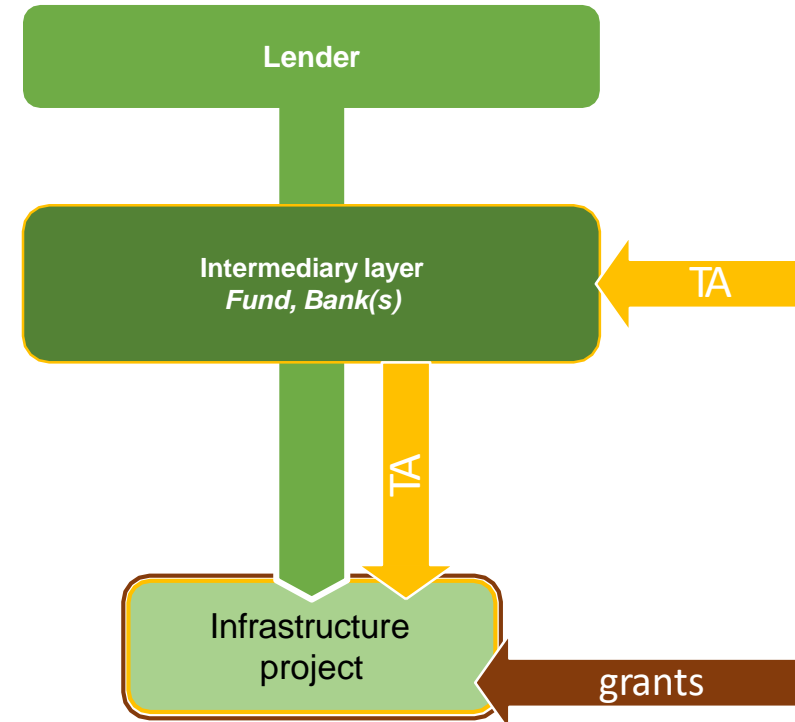
How to deliver the financing



A) Project financing (direct)



B) Intermediate financing



Findings (2) Constraints and potential for FIs



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

Constraints

- ▶ Project promoters not skilled in finance and risk management
- ▶ MAs lacking in FI skills
- ▶ Time consuming lead-in – project pipeline generation
- ▶ High-risk activities, low appetite for private and institutional investors to a dedicated “rural” instrument
- ▶ Some revenue generating schemes likely to cover just the operational and maintenance costs of the facilities

High potential investment sectors

- ▶ Energy efficiency (primarily in buildings)
- ▶ Renewable energy (primarily in biomass, wind and solar)
- ▶ Rural broadband (almost always in combination with grants)

Other interesting sectors, smaller in scale

- ▶ Irrigation
- ▶ Smart investment in medium/ small municipalities
- ▶ Forestry

How to unlock new investments



The recent impact assessment for the post 2020 InvestEU highlighted the lack of a strong pipeline of sustainable infrastructure projects as a recurring concern among investors.



Technical assistance/ advisory support key to foster the development of sustainable projects and to aggregate/ scale up smaller projects

Grants alongside financial products



To finance the non-profitable part of the projects (broadband Greece for example)

Layered schemes; different treatment of public/private investors



When a crowd-in effect is needed

