Finance for Energy Efficiency

HORIZON 2020 INFO DAY
Energy Efficiency Call for Proposals 2017
19 September 2016 / Brussels
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EASME
Executive Agency for Small and Medium-sized Enterprises

EE24 – Investible energy efficiency market
EE23 - Innovative financing schemes

Björn ZAPFEL & Adrien BULLIER
EASME B.1.3 H2020 Energy - Public Authorities, Energy Services and Financing
**Financial sector**

- Dedicated credit lines
- Risk-sharing schemes
- Equity provision
- Project development assistance
- Energy efficiency services
- Innovative financing schemes

**“Investment project” for the financial sector:**
- technical black box
- standardized product
- cash-flows, IRR, NPV
- predictability of risks
- transaction costs

**“Investment project” for many project developers:**
- technical design tailored to physical constraints
- state-of-the-art technology
- energy payback times
- “no financing” = “no subsidy”?

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**Green bonds market forecast at USD 66bn for 2015 (CBI)**

- +/- €100 bn/year add'l investment required in EE

**Adapted from C. MILIN, ECEEE 2013**

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**We’ve got money, but... we’re looking for projects!**

**We’ve got projects, but... we’re looking for money!**

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**National funding**

**EU structural and investment funds**

**IEE & Horizon 2020**

**Benchmark investments**

**Awareness of investors**

**Organise dialogue**

**Capacity building**

**Innovative financing schemes**

**EE24**

**EE25**

**EE23**

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* only in 2016
Making the energy efficiency market investible
The challenge

- **Lack of trust** of investors and financiers in the financial viability of energy efficiency measures.

- Banks, institutional investors and asset managers lack the **skills and operational tools** to effectively assess sustainable energy investments and integrate energy efficiency in their investment strategies.

- Access to the capital markets for energy efficiency investments is hampered by the **lack of standardisation** of assets.
The scope
Proposals should address 1 or more of the following issues:

1. Frameworks for the standardisation and benchmarking of energy efficiency investments

2. Gathering, processing and disclosing large-scale data on actual financial performance of energy efficiency investments,

3. Targeting institutional investors
1. Frameworks for the standardisation and benchmarking of EE investments

- Development, demonstration and promotion

- Frameworks could be (not limited to):
  - labelling schemes,
  - project rating methodologies
  - risk assessment tools,
  - standardised legal and financial structures of assets (loans, guarantees, energy performance contracts etc.)

- Develop **securitisation and rating models** for energy efficiency based financial products, to allow access to secondary markets.

- Proposals integrated in a broader approach such as socially responsible investment should focus on the energy component.
2. Data on financial performance of energy efficiency investments

- Create a **track record** for energy efficiency in different sectors (buildings, industry, transport, etc.).
- Gathering, processing and disclosing **large-scale data on actual financial performance** of energy efficiency investments
- Further integrating the 'green value' of buildings in property valuation through
  - collection of market data across the EU
  - actions targeted to the key actors in the sale or lease process (e.g. real estate agents, property valuers, notaries, etc.)
3. Targeting institutional investors

- Engaging with institutional investors (e.g. public pension schemes)
- The objective is that investors will:
  - increase the share of their funds invested in energy efficiency,
  - or develop specific funds or investment products.
- Supporting the integration of energy efficiency in portfolio management strategies for institutional investors and/or fund managers, including through re-definition of fiduciary duties.
The expected impact

- **Reduced uncertainty** as regards investments into energy efficiency and **increased investor confidence**;

- **Frameworks, standardisation, benchmarking, standardised descriptions and data evidence of financial returns of energy efficiency investments agreed and accepted by the market**;

- **Higher allocation of institutional investments to energy efficiency; standardisation of assets enabling securitisation; development of a secondary market for energy efficiency assets.**
Relevant projects examples

- Investor Confidence Project Europe:
  - Increase investor confidence and reduce transaction costs through standardisation
  - Joint development with the finance sector of protocols for process and data management in building energy retrofit projects
  - Replicates a US initiative in 5 European countries.

- SEAF – Sustainable Energy Assessment Framework
  - IT based framework for valuation and benchmarking of smaller sized sustainable energy projects (energy efficiency, demand response, distributed renewable generation etc.),
  - reduction of transaction costs and risks and enhancement of bankability
  - enhance investors' confidence, through innovative and relevant asset valuation methodologies accepted by the market and standardized descriptions of sustainable energy investments.
Relevant projects examples

• SEI Metrics (Sustainable Energy Investment Metrics)
  • Develop an assessment toolbox that will enable to measure the performance of investors' portfolios vis-à-vis climate and energy scenarios.
  • Create visibility on the market in order to monitor the impact of investment portfolios.
  • Methodology is currently being tested by >70 institutional investors

• ET RISK (Energy Transition Risk)
  • Methodology to assess the risks associated to an Energy Transition scenario for institutional investors.
  • Equity valuation models and credit risk models will be integrated into the products of mainstream service providers such as Standard & Poor's (part of the consortium).
Relevant projects examples

- **REVALUE**
  - Improve the financeability and attractiveness of sustainable energy efficiency investments in social and private housing
  - Developing standards and valuation techniques that integrate energy efficiency performance into residential property valuation.
Other projects to build upon or take into account

- SUNSHINE project on forfeiting in Latvia - [http://sharex.lv/en](http://sharex.lv/en)
- 'Financing platforms' projects selected in 2014-15: SEFIPA (AT), ENERINVEST (ES), BUILDINTEREST (NL, FR, IT), RESFARMS (ES)
- IEE and Horizon 2020 projects under Project Development Assistance (MLEI / PDA), EIB ELENA projects
EE-23-2017
Innovative financing schemes
Challenge

• **Innovative regional/national financing schemes**
  • Adequate private finance supply for EE investments
  • Support of Investment Plan for Europe and ESIF

• **Requirements**
  • Legal/technical arrangements between key actors in given territory
  • Agreed common procedures for project qualifying/financing
  • Templates for technical specifications/contracts

• **Principles**
  • Complementarity/additionality & transparency and due diligence
  • Reflection of fundamentals of given territory/market segment
Challenge (cont.)

• **Options**
  - Different organisation types/ownership structures involved
  - Replication of previously successful financing models

• **Examples**
  - Dedicated credit lines
  - Guarantee facilities
  - Factoring/forfaiting schemes
  - On-bill (e.g. utility-financed) or on-tax financing schemes
  - Citizen financing (e.g. crowd-funding) for EE
  - Models for deep renovation of buildings (property and rental market)
  - Schemes based on project aggregators /clearing houses at regional/national level (project development support; matching demand & supply of EE finance)
Scope

- Development or replication of innovative financing schemes

- Exploration of options to support EE financing by innovating the framework and instruments that could be further up-scaled (e.g. under the European cohesion policy or other schemes)

- Analysis of impacts of existing financial instruments and requirements for up-scaling
Scope (cont.)

- **Capacity building** on innovative financing
  - Should be included for specific groups of stakeholders (Member States, public authorities, energy agencies, energy consultants, financial sector)
  - Should be led by or involve professional federations or associations at national level, as appropriate
  - Could use examples developed through project development assistance (PDA) facilities (e.g. MLEI PDA, ELENA)
  - Should use training tools that are complementary to already existing/recognised training schemes for the target groups and demonstrate sustainability
Expected Impact

- Depending on activities of proposal
- Quantified indicators and targets, whenever possible

- Delivery of innovative financing schemes that are operational and ready to finance EE investments
- Market stakeholders with increased skills/capacity/competences and long-lasting training tools
Horizon 2020 projects (Call 2014)

CITYnvest

- Introduction of *innovative financing schemes* (revolving funds, EPC, third party financing, cooperative models etc.) in 3 pilot regions (Belgium, Bulgaria, Spain)
- **Analysis of models** (opportunities and barriers)
- **Large-scale capacity building** and training (for public authorities)
- **Web-based portal** for practical guidance and match-making

http://citynvest.eu/
Horizon 2020 projects (Call 2015)

TrustEE

- **Investment fund** focused on industrial energy efficiency
- Fund-internal **guarantee facility** to reduce risks
- **Third Party Financing** – institutional investors

Intelligent Energy Europe (IEE) projects

INFINITE Solutions

PDA projects (Horizon 2020/IEE)

- Info Day Session 8: Project Development Assistance (EE-22)
More information and help

THANK YOU
FOR YOUR ATTENTION

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INFINITE SOLUTIONS PROJECT

Proposal building and project implementation: experiences & lessons learnt

Jana Cicmanova, Project Manager, Energy Cities
INFO DAY - Horizon 2020 Energy Efficiency, 19 September 2016, Brussels
European association of cities in energy transition
Energy Cities: the network

More than 1,000 members from 30 countries

Cities of all sizes and ambitions
INFINITE Solutions project - INnovative FINancing for Local SusTainable Energy Solutions

IEE 2013 Call Priority: Replication of successful innovative financing schemes

Coordinator: Energy Cities

Partners: 12 cities, regions and energy agencies from 9 countries (PT, FR, BE, NL, DK, HR, IT, LV, DE)

Duration: March 2014 – February 2017

More info on the project: www.energy-cities.eu/infinitesolutions
Agueda (PT), Almada (PT), Udine (IT), Koprivnica (HR):

- Committed to implement sustainable energy measures in the **public sector**
- Interest to create a **revolving fund** linked to **internal contracting** (intracting)
- Financing scheme already tested by the **city of Stuttgart** (DE)

Municipality of Agueda set up a local revolving Fund for Energy and Water Efficiency starting with 300,000 EUR!
INFINITE SOLUTIONS: low-interest loans

Brussels-Capital Region (BE), Frederikshavn (DK), Riga (LV), Parma (IT) and Bordeaux Métropole (FR):

➢ Committed to implement actions in the private residential sector

➢ Interested to test a revolving fund linked to soft loans and establish partnerships with banks

➢ Revolving fund and soft loans financing scheme already tested by the city of Delft (NL)

Stuttgart (DE):
➢ Interested to set up public financial engineering support service facilitating private energy performance contracting
Energy Cities members and other municipalities committed to the Covenant of Mayors and seeking financing solutions for the actions featured in their Sustainable Energy Action Plans (SEAPs)

Internal contracting: successfully running in Stuttgart since 1995 – why not in other cities?

Soft loans: a European movement to move away from grants and use the public money more efficiently. First experiences with low interest loans at local level (mainly in France, the Netherlands) showed encouraging results.

Energy Cities used its network and knowledge of European good practice case studies to bring together the consortium of enthusiastic and motivated partners. Most of them have already developed or were about to develop innovative financing schemes to implement their SEAPs.

IEE Work Programme priority was a perfect opportunity to make the cities’ strategic projects happen with the contribution of EU funds and especially, to improve them thanks to lessons learnt from other cities’ experiences!
INFINITE SOLUTIONS: success factors?

- Proposed actions very relevant and fully **consistent with the Call Priority**
- Work Plan with concrete **deliverables & milestones** leading to the implementation of local financing schemes:
  - Local and market study
  - Business model
  - Financing scheme
  - City Council Decision / partnership agreements with financing institutions
- European study comparing existing financing schemes, training materials and European train the trainers workshop – contributing to **capacity building of potential replicators** of the financing schemes thus increasing the project impact
- **EU added value** is very good thanks to geographical coverage and many activities facilitating exchange of experience and transfer of knowledge
- **Good allocation of resources**: although adaptation to national costs and more subcontracting for local/market studies could have been foreseen as the cities’ legal and financial skills can be limited in some cases,
What kind of activity are you searching funding for?

**Soft activities**
- Exchange of experience, transfer of knowledge, peer learning, networking, organization of events, preparation of energy and climate strategies & action plans, research & studies, implementation of pilot and demonstration projects, development of innovative products, services, initiatives, business models and financing schemes, communication campaigns and involvement of stakeholders, etc.

**Human resources & skills**
- Trainings and education, reskilling qualified workforce, up-scaling skills, recruitment of experts, development of training programmes, etc.

**Project development assistance**
- Preparation of investments, recruitment of new staff and experts, market studies, feasibility studies, energy audits, preparation of tendering procedures and contractual arrangements, structuring of business plans, etc. Hardware costs are excluded.

**Investments**
- Hard measures such as retrofiting of buildings, new buildings, public lighting, production of renewable energy, district heating and cooling, cogeneration, etc.

### Urban Innovative Actions

**Beneficiaries**
- Urban authorities belonging to an urban area of more than 50,000 inhabitants. It is also possible for several urban authorities to come together and submit a joint-bid (provided they represent 50,000 inhabitants altogether), group or association of cities or urban authority

**Participating countries**
- EU-28

**Focus areas**
- Identify and test new urban solutions - the aim is to generate knowledge which can then be mainstreamed (research element is crucial). Innovative actions can take the form of studies or pilot projects. Cities need to apply and are encouraged to cooperate with researchers.

**Type of funding**
- Grants (co-financing)

**Managing structure and Coordination**
- Managing Authority Nord-Pas-de-Calais

**More info**
- Programme website

### HORIZON 2020 Programme

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**Participating countries**
- EU-28 and its Overseas Countries and Territories
- List of associated countries
- List of other non-EU countries

- Innovation in SMEs - First calls open on 10 November 2015
- 9) Food security, sustainable agriculture and forestry, marine and maritime and inland water research and the bioeconomy - First calls
Financing schemes increasing energy efficiency and renewable energy use in public and private buildings

COMPARATIVE ANALYSIS

Spring 2014
Energy Cities: contact us!

www.energy-cities.eu

Offices: Brussels & Besançon (FR)