EU support to private finance for energy efficiency

Intelligent Energy Europe programme and Horizon 2020 Energy Efficiency call

Adrien BULLIER, European Commission
Senior Project Advisor Intelligent Energy Europe and Horizon 2020 programmes

The EU's 2030 framework for climate and energy

Investments needed in the European energy system:

> EUR 200 billion per year  
EUR 100 billion/year for energy efficiency
**Key EU policies on energy efficiency**

  - Energy performance certificates on most buildings
  - New build to be nearly zero energy by 2020
  - EE requirements on components / major renovations

- **Energy efficiency directive (2012):**
  - Energy efficiency obligations (1.5% of energy sales)
  - Renovation of 3% p.a. of central government buildings
  - National building renovation plans
  - Support to energy performance contracting

- EE finance mostly through public grants and bank loans
- On-bill or on-tax finance is almost non existent
EE finance: matching squares and circles? EU programmes intervention

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

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

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

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

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

European Fund for Strategic investments (risk-sharing)
EU structural funds
Intelligent Energy Europe & Horizon 2020

Financial sector
- Dedicated credit lines
- Risk-sharing schemes
- Equity provision

Standardise investments
Awareness of investors
Organise dialogue
Capacity building

Project dvpt assistance
Energy performance contracts
Local financing schemes

Project developers

Adapted from C. MILIN, ECEEE 2013
Project development assistance facilities: building a project pipeline

- Every Euro of EU funding must lead to investments of EUR 15
- Altogether approx. €100m to > 80 projects expected to trigger > €4 billion investments in EE/RES
- Examples of projects:
  - (Bundled) energy performance contracts on public buildings and street lighting
  - Investment funds, citizen financing (mostly RES)
  - On-bill finance / PACE schemes on private housing
  - Public ESCO schemes
  - Other: district heating, clean urban transport, smart grids, biogas...
French regional ESCOs to develop the market for deep renovation

- **Picardie Pass Renovation** (Picardie, detached housing)
- **OSER** (Rhône-Alpes, public buildings)
- **Energies Posit’If** (Ile de France, condominiums)

Source: Caisse des Dépôts et Consignations, 2010
Energies Posit'IF (Ile de France, FR) Deep renovation of condominiums

- Semi-public ESCO proposing an integrated service offer:
  - Project design and financial engineering for each household
  - Works implementation and follow-up, guaranteed energy savings
  - Provision of finance

- Results (to date)
  - Project pipeline: 60 condominiums
  - 22 contracts signed: 1 600 dwellings with investment of €18m
  - EUR 100 m loan from EFSI (European Investment Bank)
ESCOs are not banks: how to (re)finance ESCOs?

- The successful model of Renesco in Latvian multifamily building stock (Soviet era buildings):
  - 15 buildings retrofitted, 50-60% guaranteed savings over a 20 year contract
  - Financed with 40% ERDF, 25% equity and 35% bank loans (6-7%)
  - Savings are reached in all cases, 0% payment default from homeowners
- ... but Renesco is running out of equity and cannot finance more projects!
- Development of a forfeiting fund for ESCOs that will pay cash for the future receivables of the EPC and thus allow ESCOs to develop more projects
  - SUNSHINE project, started in 2015
  - Previous example: Energetics and Energy Savings Fund set up by EBRD in Bulgaria in 2011 (EUR 11 million)
ESCO Bank

Forfeiting fund

Initial capital + first risk coverage

Securitisation

Forfeiting

Soft loans / interest rates buy down

Banks/ESCOs don't want to increase their debt

Requires size and standardisation

Project development assistance

Standardisation

Guarantee fund(s) to cover first losses

Banks don't trust energy savings as revenues

Banks don't trust energy savings as revenues

Guarantee fund(s) to cover first losses

Project development assistance

Standardisation

Requires size and standardisation

Bank

Loan

ESCO

EPC

Loan

Source: A. Bullier, ECEEE 2013
Structuring the market for energy efficiency finance

- Standardisation and improving confidence:
  - Investor Confidence Project Europe: standardisation of building retrofits
  - Transparence: European code of conduct for EPC
  - Trust EPC South: certification for EPC on tertiary buildings (IT, ES, FR, HR, GR, PT)
  - SEAF, led by Joule Assets: IT based framework for valuation and benchmarking of small-sized projects (EE, RES, demand response)
- TrustEE: investment fund focused on energy efficiency in industrial process heat
- Raising awareness of institutional investors
  - SEI Metrics (led by 2 Degrees Investing): benchmarking the climate performance of investment portfolios
  - ET RISK (led by 2 Degrees Investing): integrating energy transition risk in asset rating methodologies
Over 120 participants from the finance sector and other key stakeholders worked for 18 months

- Report (Feb 2015): 'Energy Efficiency – the first fuel for the EU Economy. How to drive new finance for energy efficiency investments'

- Focused on buildings and industry – different issues but similar conclusions!

- EEFIG is being replicated at the national level and G20 level

- Smart Finance for Smart Buildings (2016-17)
  - Joint work with the financial sector towards commonly accepted underwriting procedures, contract elements, protocols etc.
  - Tracking projects' energy and financial performance in order to make cash flows more credible
Thanks for your attention

Adrien BULLIER, European Commission
Senior Project Advisor Intelligent Energy Europe and Horizon 2020 programmes
Executive Agency for Small and Medium-sized Enterprises (EASME)
Adrien.Bullier@ec.europa.eu