

# FINANCING ENERGY EFFICIENCY

## Support by the EIB

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Financing Energy Efficiency in Central Europe  
Prague, 27 April 2017

# The EIB - the EU bank



- ❖ Natural financing partner for the EU institutions since 1958
- ❖ Around 90% of lending in the EU
- ❖ Shareholders: 28 EU Member States
- ❖ Largest multilateral lender and borrower in the world
- ❖ Some 450 projects/year in over 160 countries
- ❖ Headquartered in Luxembourg
- ❖ 33 local offices
- ❖ Around 2,600 staff

Investing in Europe's growth

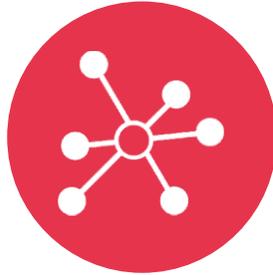


We focus on our **key priorities**, We are the world's largest provider of **climate** finance



**ENVIRONMENT**

EUR 19.6bn



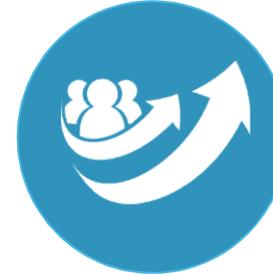
**INFRASTRUCTURE**

EUR 19.1bn



**INNOVATION**

EUR 18.7bn



**SMEs**

EUR 28.4bn



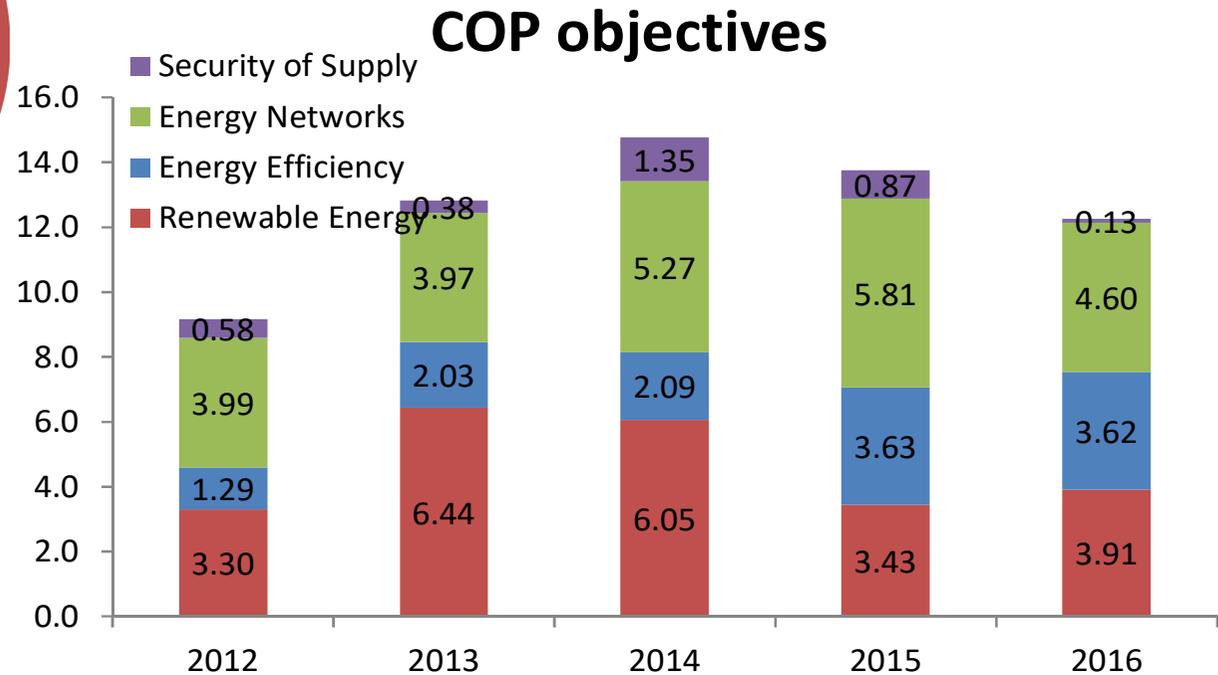
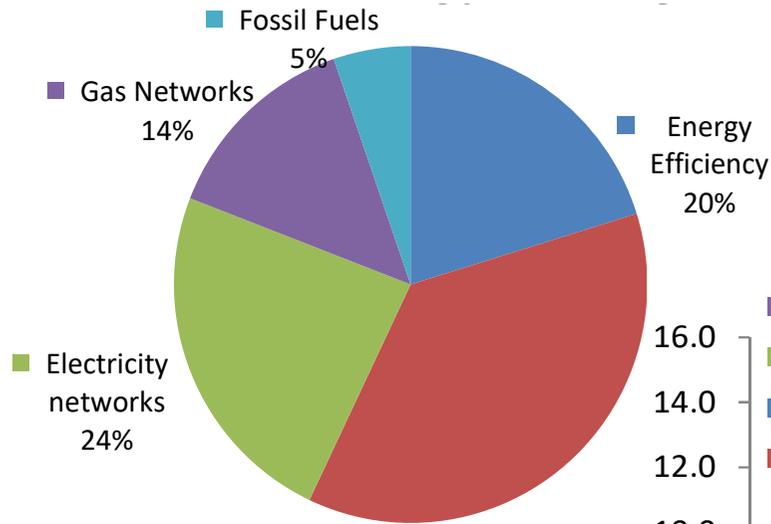
>25% worldwide



35% in the world's developing regions

**EIB's 2015 Climate Strategy**  
We are increasing our climate commitment:  
USD 100bn over the next 5 years

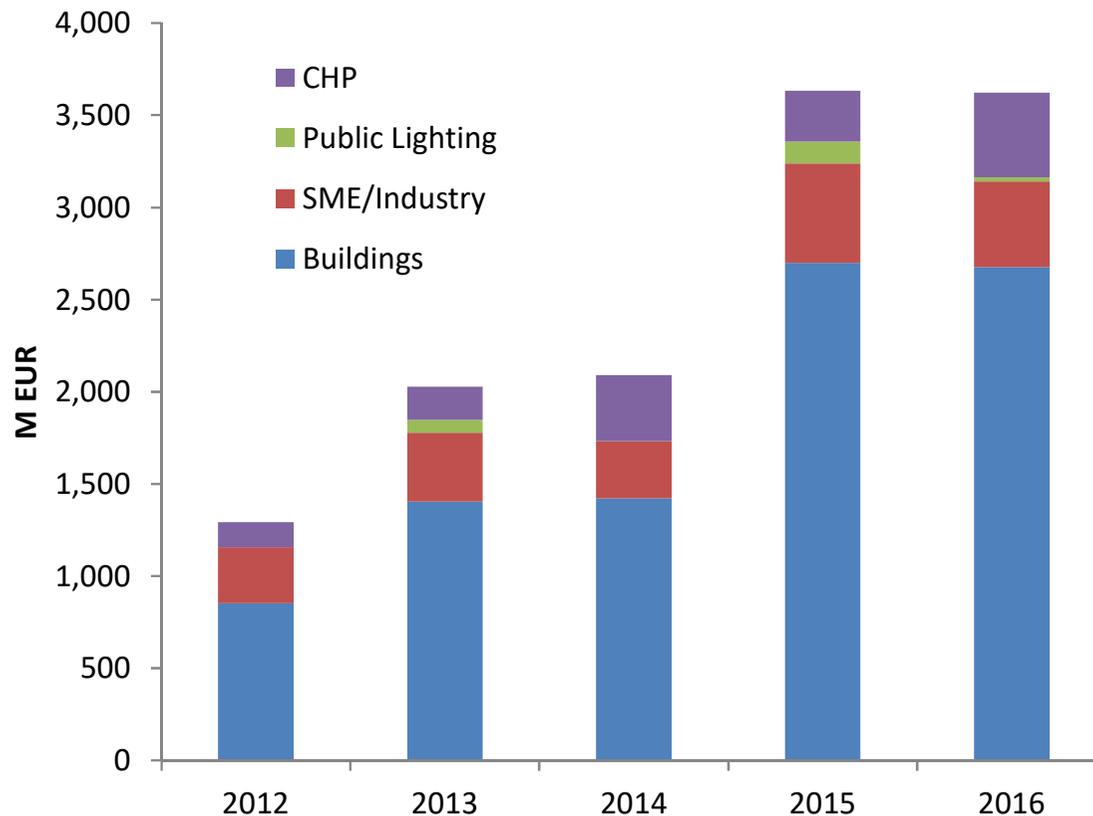
# EIB Energy Lending 2012-2016



- Signatures 2012-2016: EUR 62.7 bn
- In Renewable Energy, Energy Networks, Security of Supply and Energy Efficiency



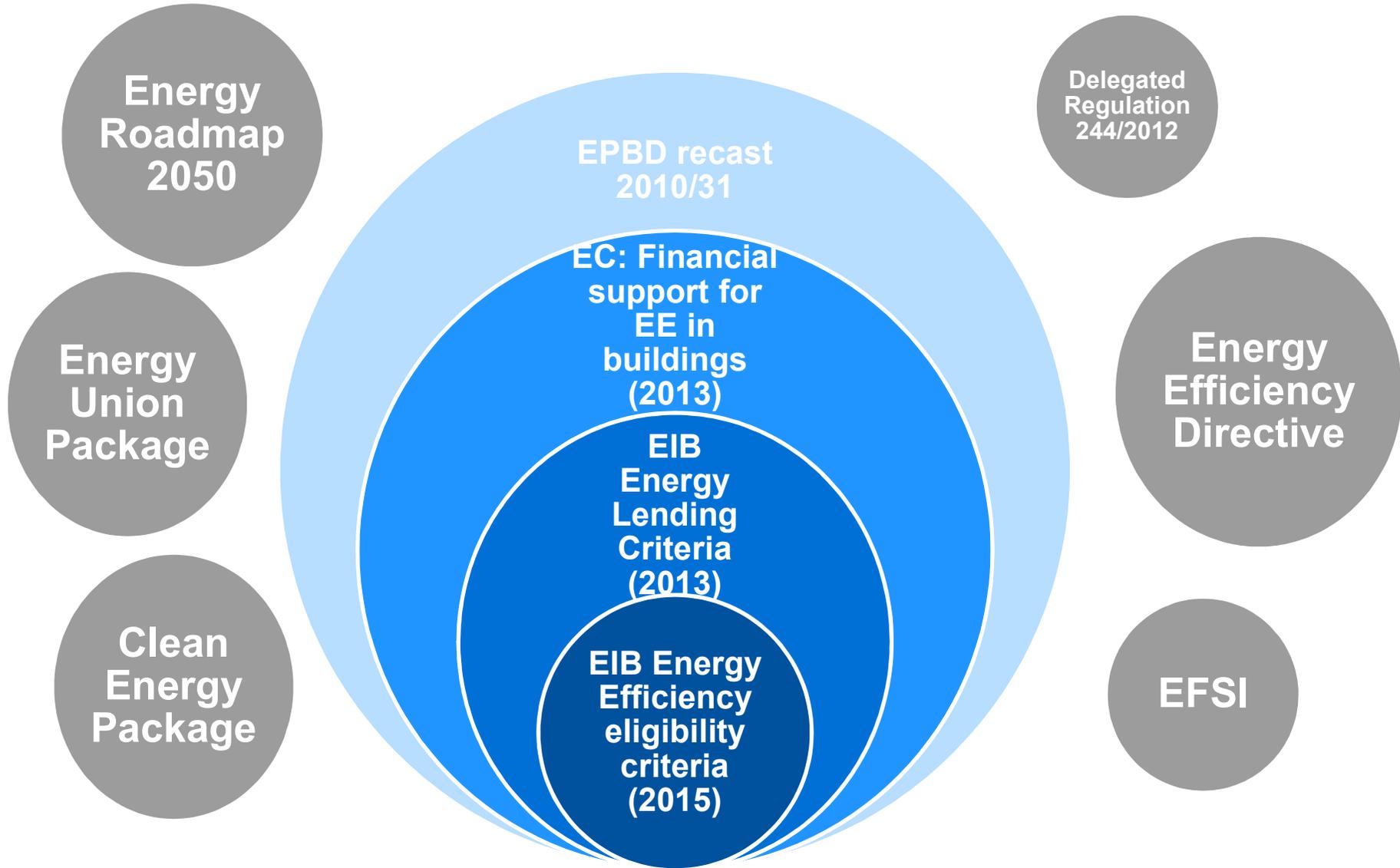
## EE Lending Breakdown per year



- ▶ Overall EE-lending increased by 3x since 2012
- ▶ 75% of EE-lending volume to Buildings



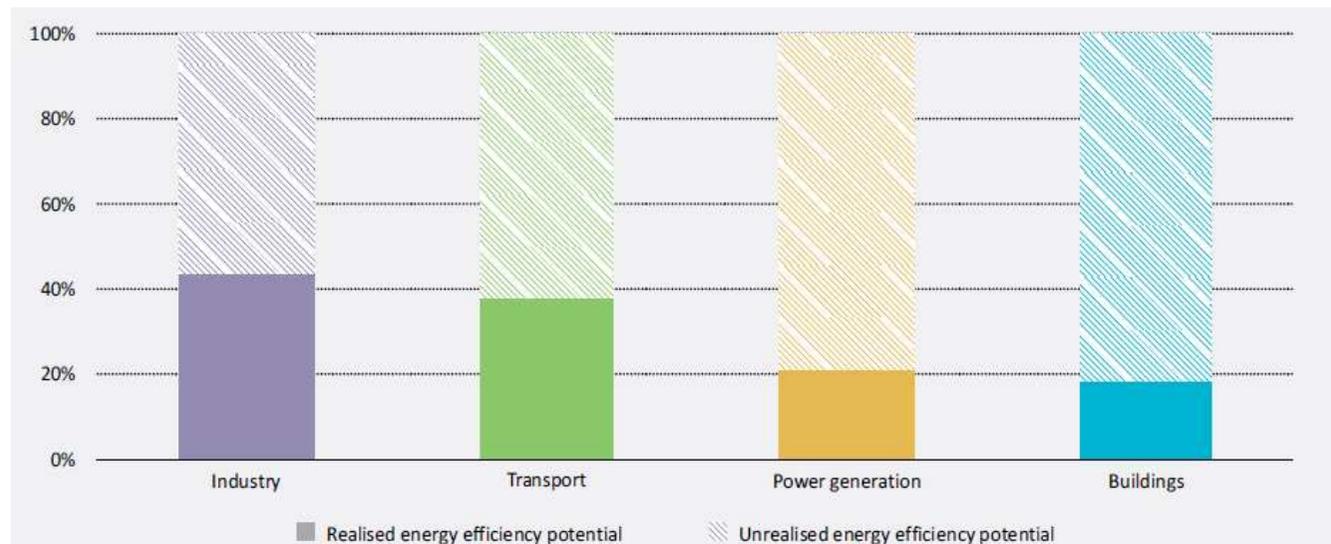
# EU legal framework & EIB eligibility



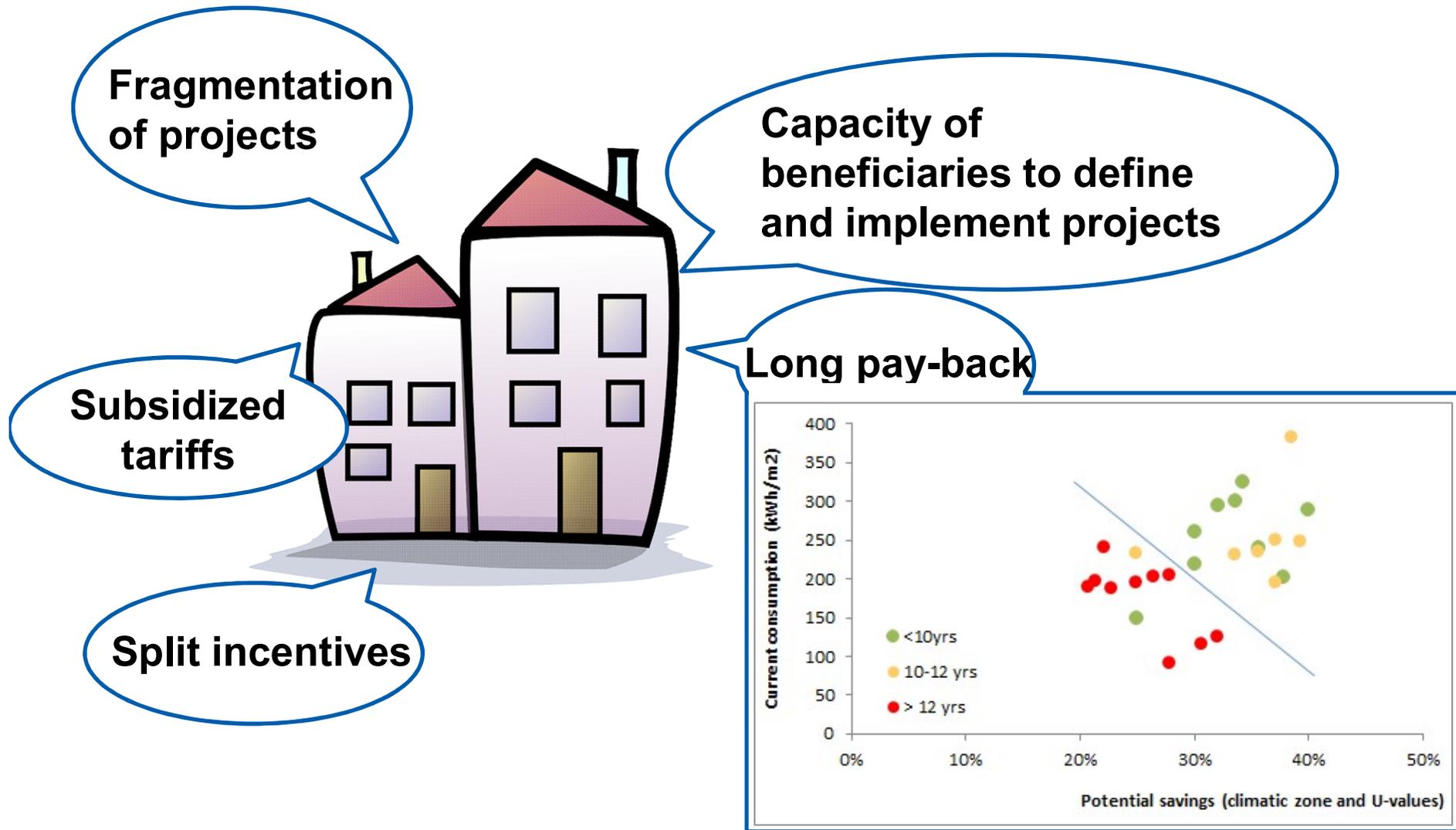
## The potential for EE investments



- EUR 1.1 trillion of EE investments needed to comply with new 2030 framework of 40% GHG target (75% in buildings)
- Buildings account for ~ 40% of EU final energy consumption. Given low annual new build rate (1.5%). Even if NZEB standards are adopted, 50 years to renovate the existing building stock. We can't afford it!



# Typical barriers to delivering EE





## We help catalyse investment

LENDING	BLENDING	ADVISING
<p>Long term debt Subordinated loans Project finance Equity type</p> <p>Venture capital Guarantee Securitisation Growth finance</p> <p><b>Specific tools:</b> PF4EE</p> <p>EFSI</p>	<p>Combining EIB finance with EU budget (Project Bond Initiative)</p> <p>Higher risk projects for innovation (InnovFin)</p>	<p>EIAH (European Investment Advisory Hub) and Fi Compass</p> <p>ELENA (European Local Energy Assistance)</p> <p>Prepare, evaluate and support the implementation of projects (JASPERS)</p> <p>Support for public/private partnerships (EPEC)</p>

Attracting FUNDING for long-term growth



## Scaling up EE investments

- Technical, financial & regulatory barriers
- EFSD : TA & risk sharing instruments

## Meeting EU RE targets

- Regulatory uncertainties, emerging technologies
- EFSD : can accelerate projects (project finance)

## Networks integration, modernisation

- Permitting, cross-border issues, financial strength of TSO/DSOs
- EFSD: increase support for weaker grid companies;  
reinforce Bank capacity to support project financed operations

## ELENA

### Technical Assistance

Support for Project developers (public or private), e.g.:

- Additional personnel
- Technical studies
- Preparation, evaluation of calls for tender
- Financial structuring

### INVESTMENT PROGRAMME

Energy efficiency and distributed renewable energy in public and private buildings, public lighting and traffic light network, roof top photovoltaics, heating/cooling systems (e.g. biomass);

Efficient urban transport and mobility: clean and energy - efficient road transport vehicles, trams, trolleybuses, metros, and trains; investments to improve public transport;

Local energy facilities that support EE/RE: smart grids, district heating and cooling infrastructure for recharging electrically powered vehicles, information and communications technologies,

Provided over 100m in grants supporting ~5 bn in CAPEX

# Conclusion: Unlocking EE

## Huge investment needs and real potential to consume energy more efficiently

### But...

- Fragmentation (small projects and high transaction cost)
- Split incentives (landlords vs tenants)
- Subsidized energy costs
- Capital constraints to expand into new products
- Lack of technical expertise

### EIB's response

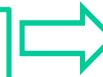
- Aggregation (intermediated lending, investment Funds, project and promoter aggregation, etc.)
- Innovative set ups (ESCO, French SEM)
- Broad range of instruments : direct and intermediated operations
- Provision of TA: PF4EE, ELENA and high-involvement in direct operations (NZEBS)
- However, some barriers non-addressable by EIB (e.g. regulatory barriers, ESCO market, public sector limitations)



## Energy Efficiency Private Housing (France)



Barrier: Fragmentation



Solution: Aggregation

- Refurbishment of residential buildings to reduce energy consumption by up to 75%
- One-stop shop, technical assistance, implementation and monitoring. Financial assistance provided directly by the promoters (tiers-financement) or through financial intermediaries
- Total project cost of EUR 800m. Average investment of EUR 20,000

## Navarra – NZEB social housing (Spain)

**Challenge:** Promote new building standards



**Solution:** Support to NZEBs



- **524 units with consumption of 20 Kwh/m2, (EPC of A, passivhouse)**
- **Expected energy savings of 2,298.3 MWh/y (75% reduction versus the baseline), corresponding to 748.8 ton/y CO2 savings**
- **Levelized cost of the final energy saved (LCOE) by the NZEB buildings is between 64 and 128 €/MWh**

## SATO – NZEB buildings (Finland)

**Challenge:** Accelerate building renovation



**Solution:** Support to deep renovation

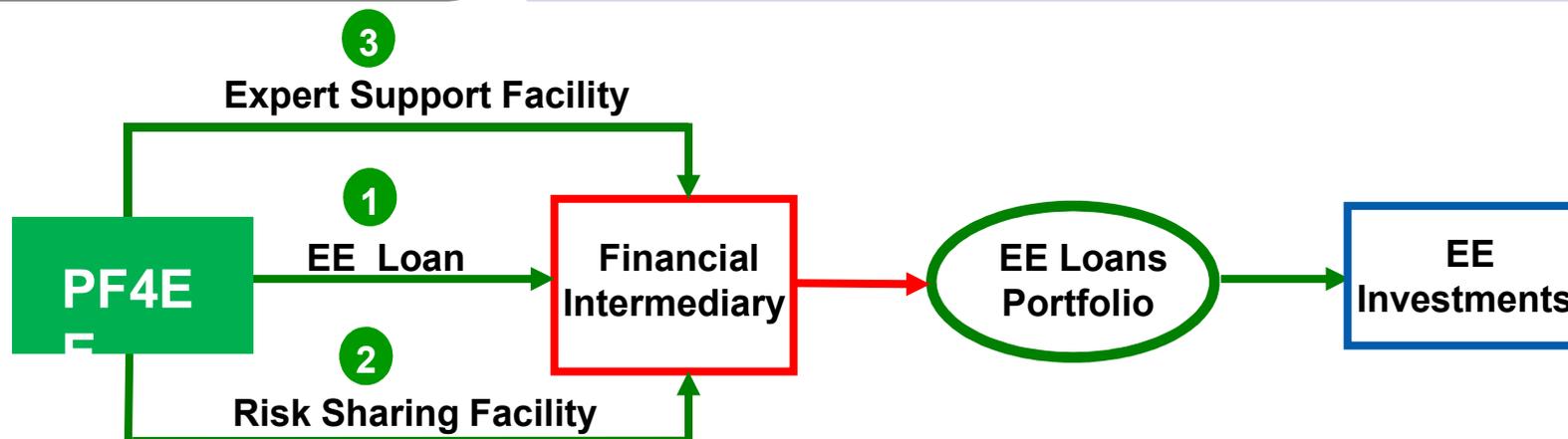


- **Financing of deep renovation of existing buildings and NZEBs in the Helsinki metropolitan area.**
- **Expected energy savings estimated at 2,461 MWh/y of primary energy.**
- **Total project cost of EUR 320m. Corporate EIB loan of 150m.**

## Private Finance for Energy - PF4EE (UE)

### 3 components

- A loan to the financial intermediary to be on-lent for financing of energy efficiency investments (“**EE Loan**”)
- A risk mitigation mechanism, which covers losses incurred in the portfolio of EE loans granted by the financial intermediary to on-lend the EE Loan (“**Risk Sharing Facility**”)
- Consultancy services aiming at supporting the financial intermediary to create the abovementioned EE loans portfolio (“**Expert Support Facility**”)





## Impax Property Fund (UK)

**Barrier:** Split incentives

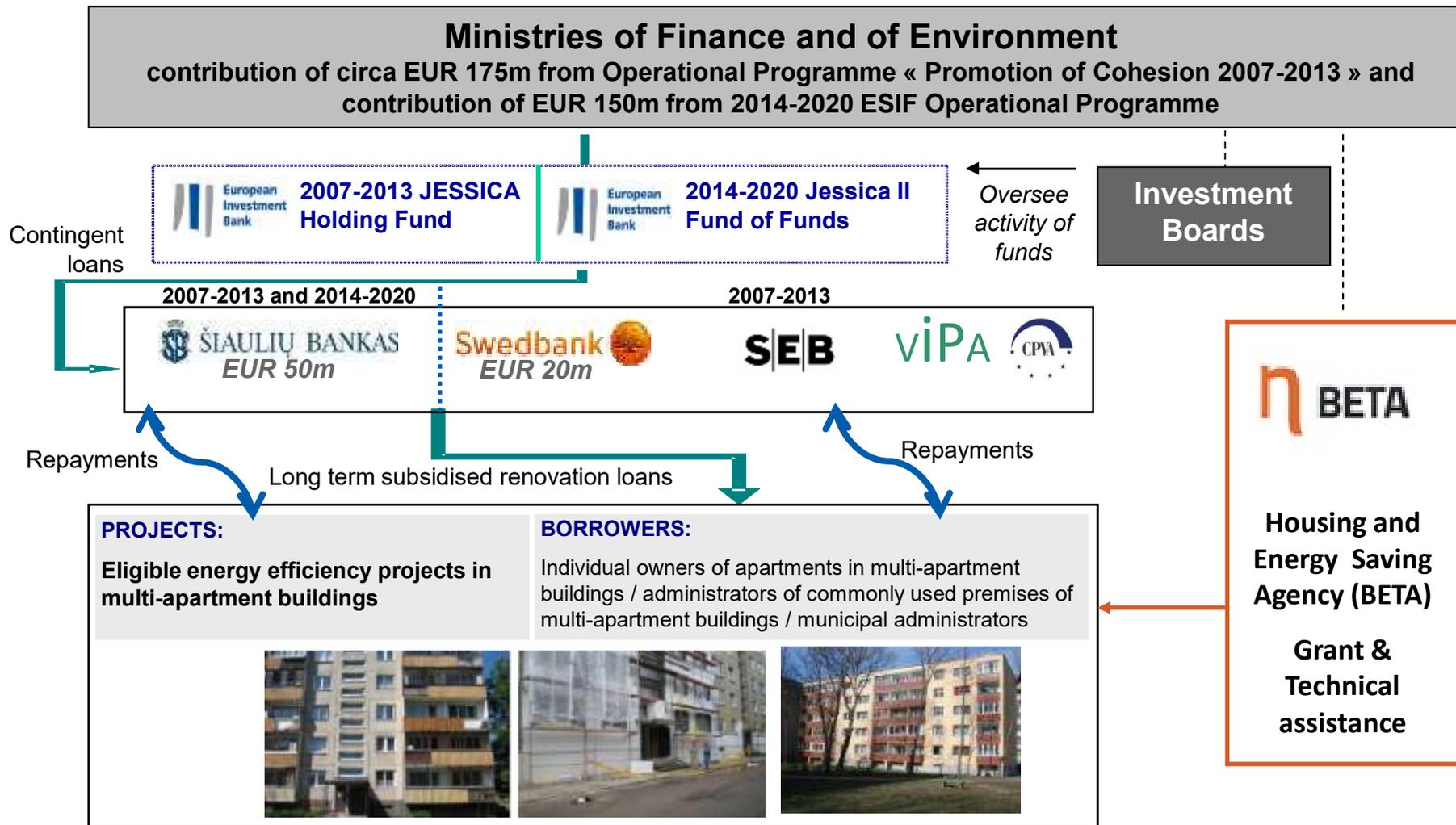


**Solution:** Aggregation



- **Infrastructure fund targeting the refurbishment of UK commercial buildings**
- **Renovation of 8 to 12 properties, increasing EPC ratings in at least 2 levels (30-50% energy reduction)**
- **Total project cost (renovation) GBP 150m**
- **EIB investment 25m, under EFSI**

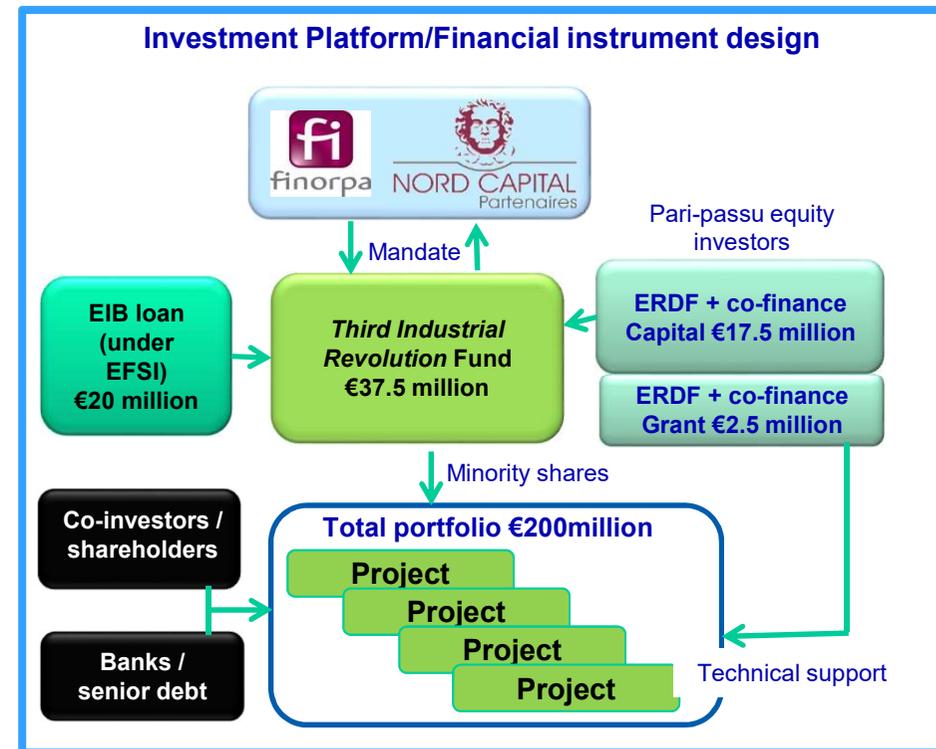
# ESIF – EFSI project: Lithuanian case study



# Nord pas de Calais' "TRI" Fund



- Investment platform/financial instrument dedicated to supporting the low carbon economy (energy, mobility, waste) in the region – combining EFSI and ESIF
- Ex ante assessment - demand for equity
- EIB provided advise structuring the fund's design and implementation strategy, as well as a loan facility, under EFSI, of up to €20 million
- Total anticipated investment volume of €200 million
- Technical support facility of €2.5 million for project preparation



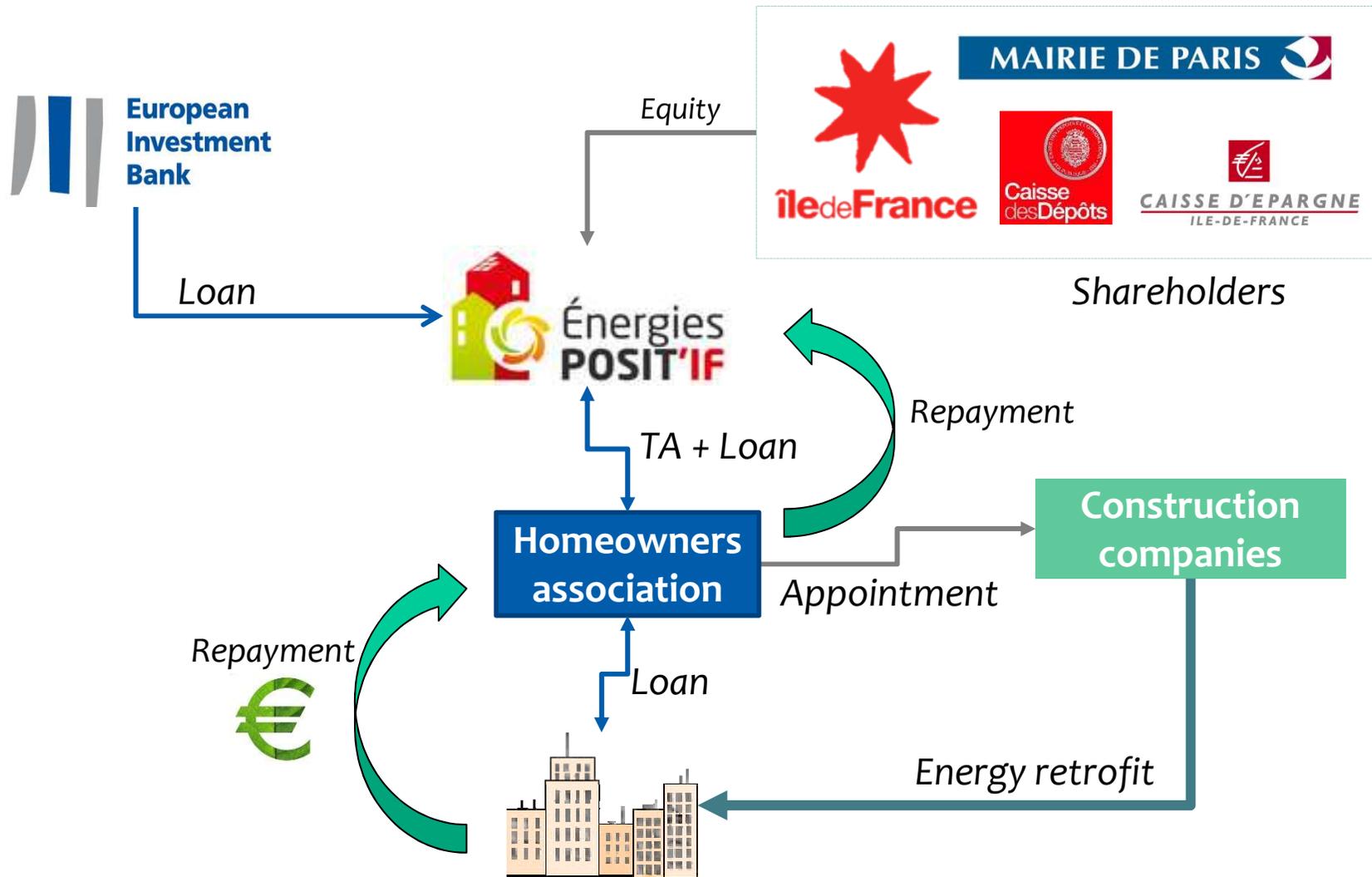
# A new model: “Sociétés de tiers financement”

- Public or public-private entities, sponsored by Regions
- Act as a one-stop-shop for Energy Efficiency in buildings:
  - Technical assistance
  - Long term and affordable funding

## Financing proposal

Programme-loan maximum amount	EUR 400m
Maturity (amortizing = economic life of assets)	Up to 22 years
Financing plan	Up to 75% of EE
Security for the Single signature risk loan	None
Timeline	2015-2020
Structure for approval of sub-operations	Delegation to MC

# Ile-de-France STF example





# THANK YOU !



## Any questions?

More information at:

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Advisory Hub [www.eib.org/eiah](http://www.eib.org/eiah)

ELENA facility [www.eib.org/elena](http://www.eib.org/elena)

