



Energy efficiency in buildings: how to accelerate investments?

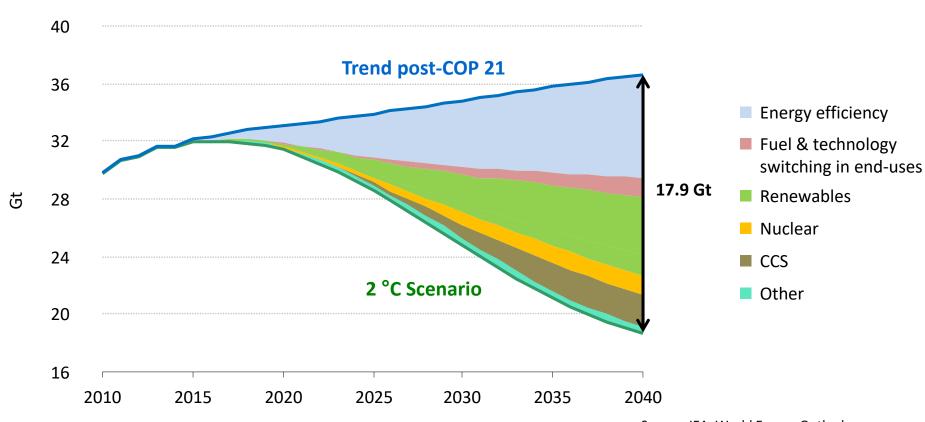
Isidoro Tapia / Laurent Bender **EUROPEAN INVESTMENT BANK**

Paris, Dec 11 2017



A 2 °C pathway requires more technological innovation, investment & policy ambition

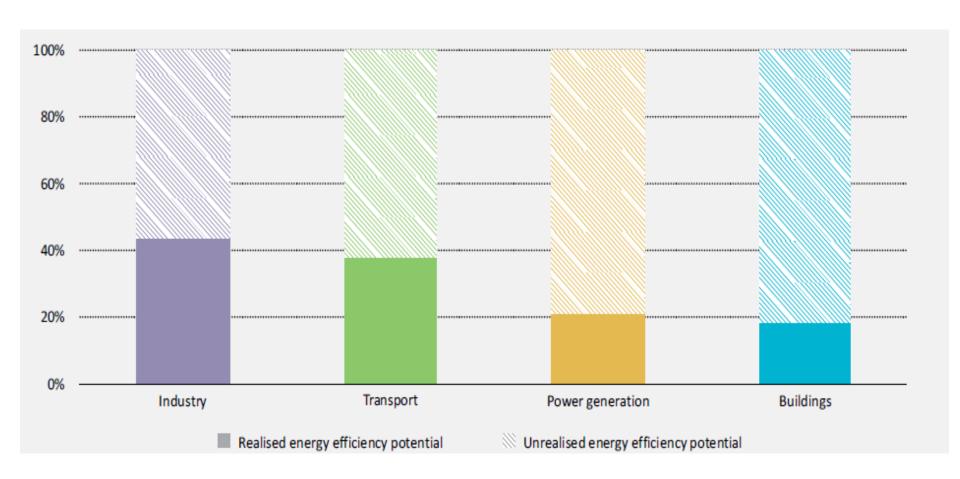
CO₂ emissions in a post COP 21 world



Source: IEA, World Energy Outlook



Investments in buildings are crucial in EU decarbonisation scenarios



Buildings is the largest untapped sector



Building energy performance standards: what has changed?

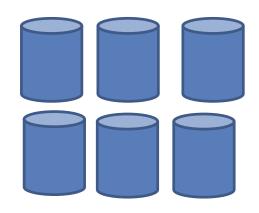
1970s



20 barrels / year

Current

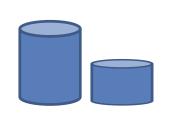




6 barrels / year

NZEB



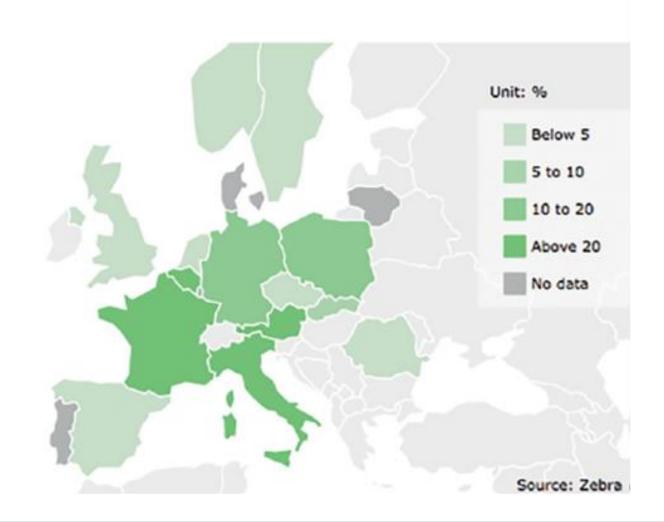


1.5 barrels / year



Slow progress....

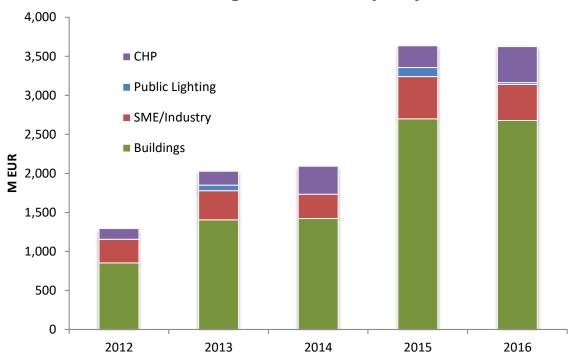
Share of new dwellings built according to national NZEB definition





Overview of EE lending in EU and France

EE Lending Breakdown per year



- Overall EE-lending increased by 3x since 2012
- 75% for Buildings
- 25% in France



Typical EIB products for EE projects

- Investment loans (direct) barriers tackled plus possible blending
- Framework loans (intermediated) to promote aggregation and crowding in of commercial lending
- Investment funds (equity) to catalyse private investors
- Advisory services
 – typically upstream, with of without link to EIB loans

11/11/2015



European Investment EE Framework Loan – Public sector - Case Study

Case study

- SPEE in Picardie (France)
- Framework loan signed 2015

Promoter

 Regional Division of the Environment and Energy Efficiency Agency (ADEME) and the Picardie Region

Investments

 Objective: EE renovations of private houses (as of mid 2017, 1 480 ongoing, investment cost of EUR 31.5m) to generate 50-75% energy savings

Final Recipients

• Natural persons, home-owner associations,

EE Loans

- Estimated investment programme cost: EUR 52m
- EIB loan: EUR 43.5m

Elena

- Development of a one-stop shop
- ELENA grant budget. EUR 1.8m (Set up of the SPEE operational team, external assistance to support each homeowner in the implementation phase, marketing)

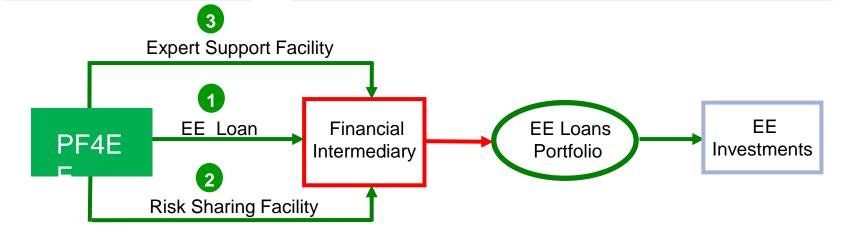


Private Finance for EE (PF4EE)

(joint instrument of the EIB and the EC)

PF4EE comprises three components

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





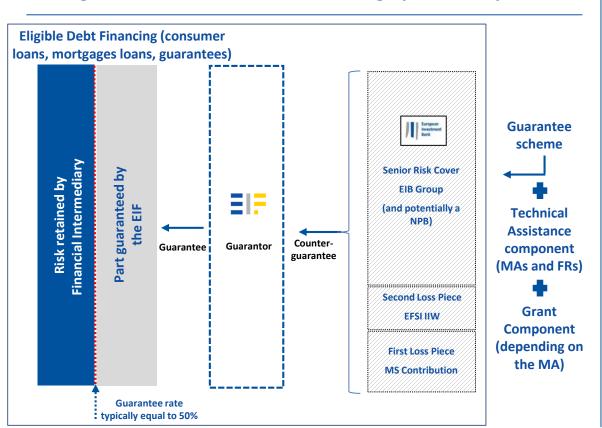
PF4EE operations – Nov 2017

			EIB loan	Energy savings	CO2
Operation	Country	Status	(EUR m)	(MWh/year)	(tons/year)
Belfius	Belgium	Signed	75.0	75,900	3,031
BPER	Italy	Signed	50.0	n.a.	n.a.
BPI	Portugal	Signed	50.0	35,571	14,174
CC	France	Signed	75.0	94,750	7,837
Kormercni	Czech Republic	Signed	75.0	126,000	68,531
Santander	Spain	Signed	50.0	24,600	8,017
Zaba	Croatia	Signed	40.0	26,300	8,979
ССВ	Cyprus	Approved	25.0	35,665	27,058
Piraeus	Greece	Approved	100.0	35,215	25,750
Total (signed)			415.0	383,121	110,569



The 'Smart Finance for Smart Buildings' initiative – SFSB initiative

A single financial instrument combining up to 3 components



Background information

- Launched on **Nov. 30th, 2016** by **the European Commission**;
- Developed in cooperation with EIB Group (EIB/EIF);
- Part of the "Clean Energy for all Europeans" package";
- Aims to unlock EUR 10bn of public and private funds by 2020 for energy efficiency ("EE") in buildings;
- Consists mainly in an unfunded credit risk protection fronted by EIB Group (EIF);
- Relies heavily on MS Contribution to the First Loss Piece (most likely ESIF – ERDF);
- Contains reasonable eligibility criteria to ensure consistency with policy objectives
- May be combined with an EIB Global Loan

A comprehensive financial instrument providing SFSB stakeholders with a holistic solution





ELENA: TA required to deliver investment needs

ELENA

ELENA Technical Assistance

Support for Project developers (public or private) for 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,



Unlocking EE investments in buildings

Challenges and EIB's response

Fragmentation (small projects and high transaction costs)

Aggregation (Fls, Funds, IT tools)

Lack of technical expertise

Blending (provision of TA and first loss funding)

Horizontal role (industry, SMEs, social housing) Strategic decision and bottom-up (EE first)

Financial and capital constraints

Linking EE assets and liabilities (EEMAP and green bonds)



THANK YOU!

Any questions?



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