

Smarter Finance for EU

Banking on green homes

Scaling green homes the SMARTER way

Madrid 28th May 2025

The SMARTER Finance for EU project has received funding from the European Union's LIFE Clean Energy Transition Programme under grant agreement no. 101121060



**Co-funded by
the European Union**



Smarter Finance for EU

Banking on green homes: European

Context

Ciarán Cuffe

Co-Chair European Greens

Madrid 28th May 2025

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the European Union



Temperature change in Madrid

Relative to average of 1961-2010 [°C]

ShowYourStripes.info

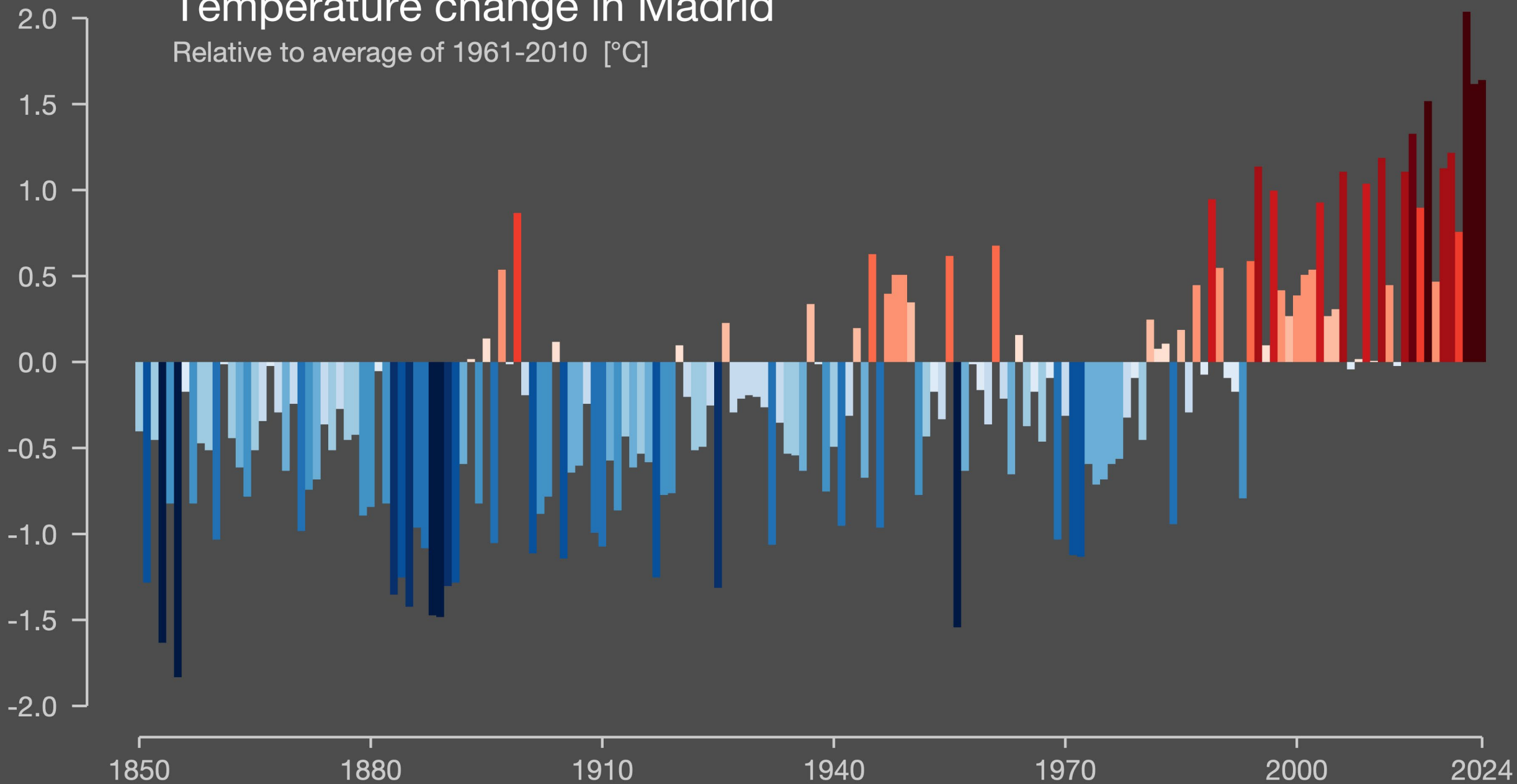
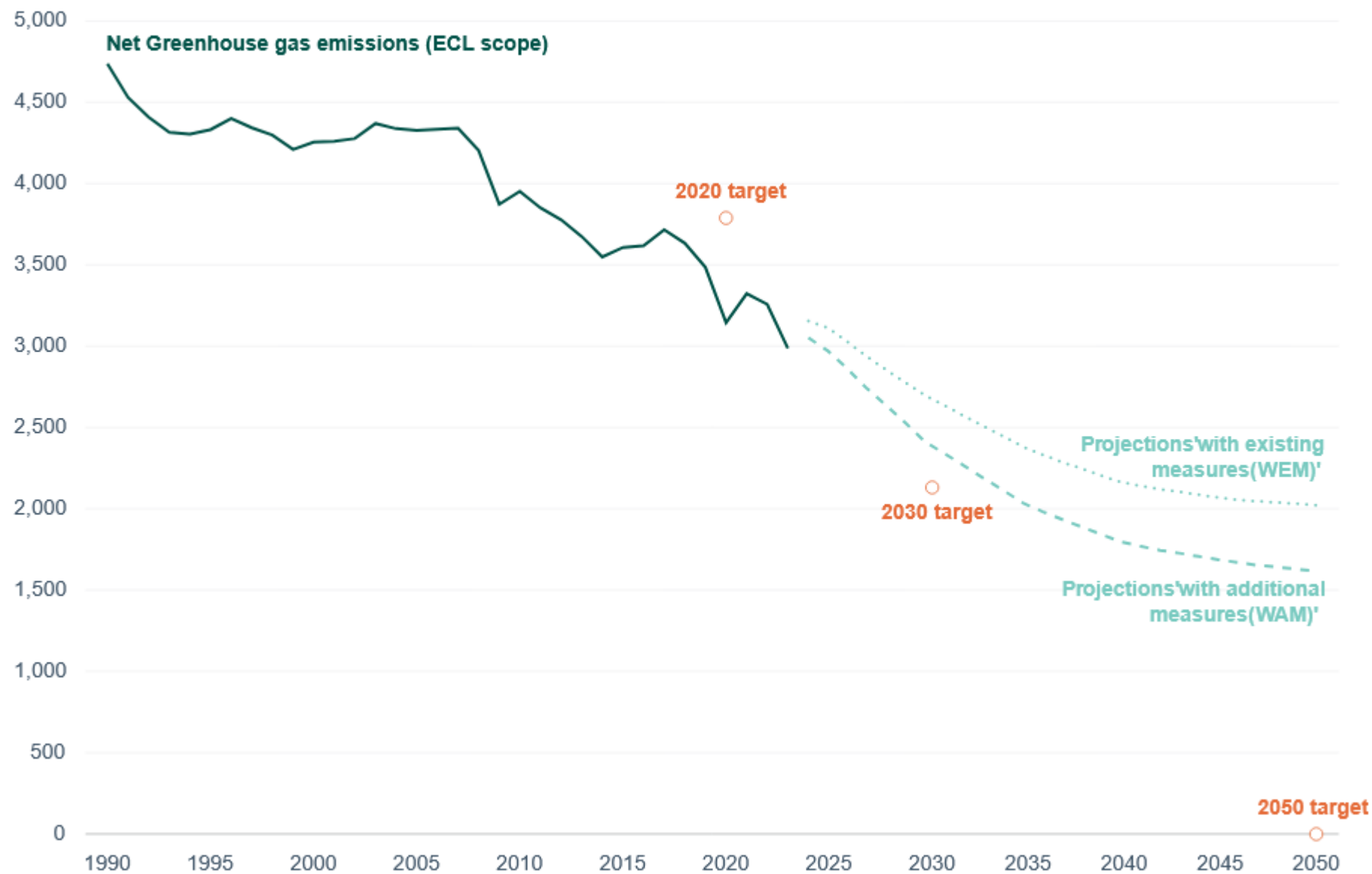


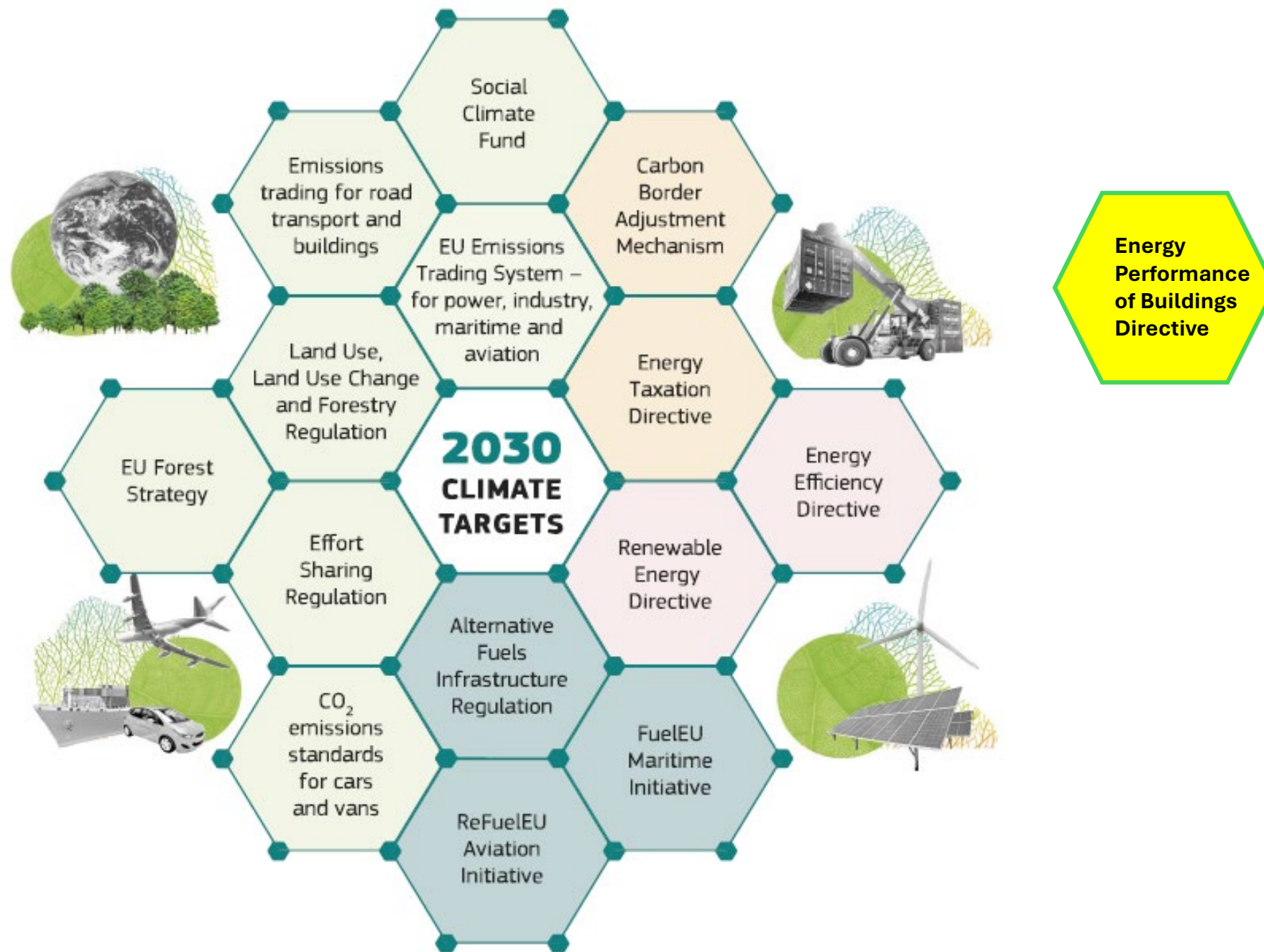
Figure 1. Progress towards achieving climate targets in the EU-27

Million tonnes of CO₂ equivalent (MtCO₂e)



Europe's approach to the Climate Challenge

- **European Green Deal**: Carbon Neutrality by 2050
 - Longer term, bigger picture
 - Destination in a quarter of a century
- **#FitFor55**: **55%** Greenhouse Gas **reduction** 1990-**2030**
 - Clear medium term goals, new laws and revised laws
 - Traction by the end of the decade
- **RepowerEU**: renewables, efficiency, and alternate supplies
 - Short-term response to **Ukraine** crisis
 - Independence from Russian fuels
 - More solar, efficiency, heat pumps



Previous Energy Performance of Buildings Directives

2002 Directive (EU) 2002/91/EC **Energy performance certificates** (EPCs) first introduced

2010 Directive (EU) 2010/31/EU **EPCs** should include **considerable detail** including :

- measures carried out ... with a major renovation of the building envelope or technical building system(s)
- EPCs may include energy consumption for non-residential buildings, % energy from renewable, payback periods or cost benefits over lifecycle, info on energy audits, financial or other incentives, and financing

2018 Directive (EU) 2018/844 **Building renovation passports**

- Under Article 8, Member States must ensure that any modifications to the technical building systems that alter the overall energy performance of the building are documented and provided to the building owner for the purpose of issuing EPCs.
- **encourages** the use of EPC databases to gather measured or calculated energy consumption of the buildings

2024 Directive (EU) 2024/1275 **Mandatory renovations**

Article 5:

Setting Minimum Energy Performance Standards

- Set minimum energy performance requirements
- Take account of optimal indoor environmental quality
- Consider financial situation, in particular for vulnerable households
- Over time gradually improve energy performance
- Law comes into force in 2026
- First energy target 2030, then 2033
- Net-zero building stock 2050

Article 7

New Buildings

Member States shall ensure that new buildings are **Zero-emission buildings** in accordance with Article 9b:

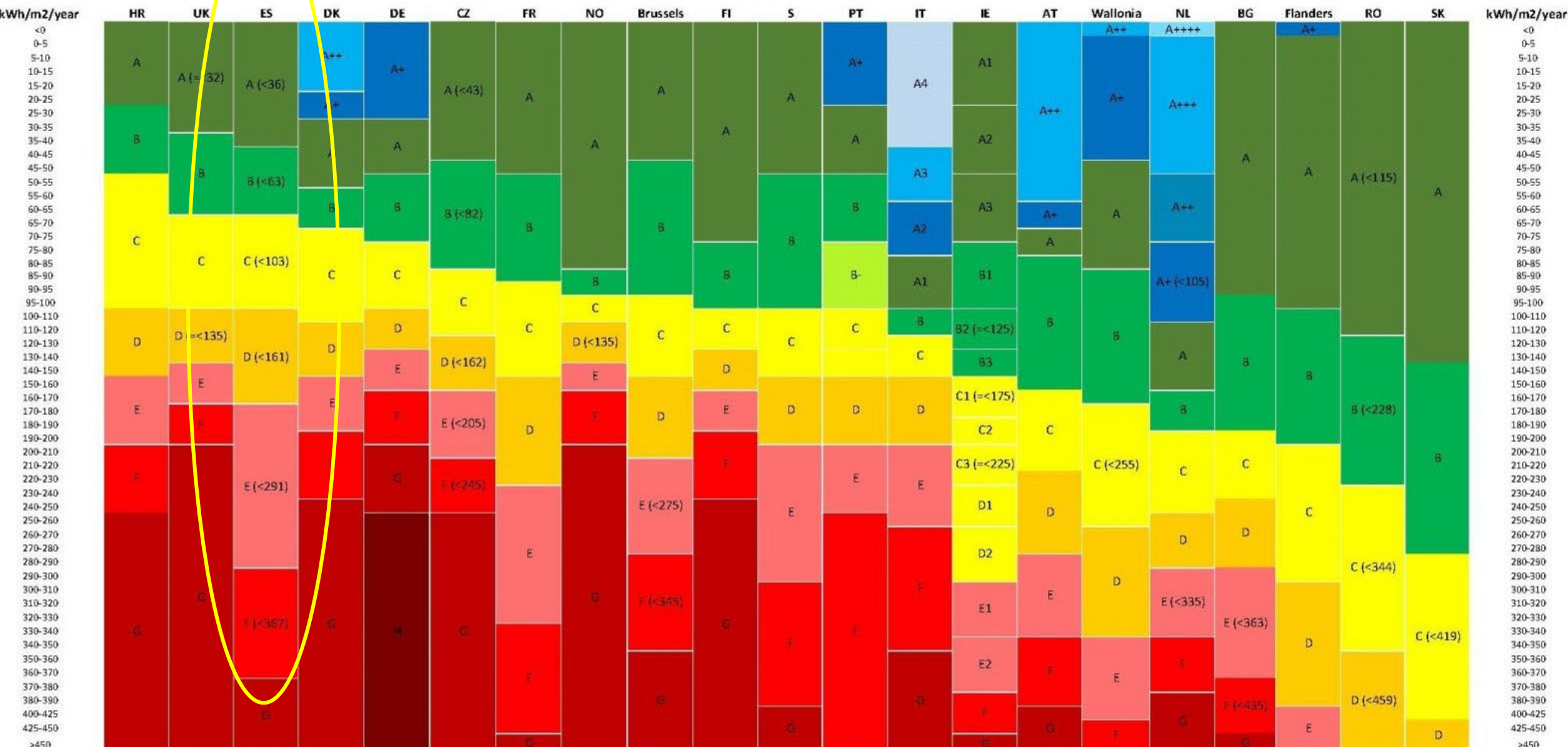
- (a) as of 1 January 2028, new buildings owned by public bodies; and
- (b) as of 1 January **2030**, all new buildings;

Member States shall ensure that the life-cycle **Global Warming Potential** (GWP) is calculated in accordance with Annex III and disclosed through the energy performance certificate of the building:

- (a) as of 1 January 2028, for all new buildings with a useful floor area >1000 square meters;
- (b) as of 1 January **2030**, for all new buildings.

Energy level diagram showing the following states and their counts:

State	Count
A	<36
B	<63
C	<103
D	<161
E	<291
F	<367



Article 9

MEPS and trajectories for progressive renovation

- **Non-Residential**, requirement to **renovate worst** performing buildings
 - 2030 worst 16% (of buildings)
 - 2033 worst 26% (of buildings)
 - 2050 zero-emission
- **Residential**, requirement to **save energy**
 - 2030 16% energy reduction
 - 2033 20-22% energy reduction
 - 2050 zero-emission

Article 3

National Building Renovation Plans

- overview of the national building stock for different building types
- roadmap with nationally established targets and measurable progress indicators
- overview of implemented and planned policies and measures
- outline of the investment needs/sources
- evidence-based estimate of expected energy savings and wider benefits, including those related to indoor environmental quality
- First Member State draft Plans to be submitted to European Commission 31 December 2025

Article 9

MEPS and trajectories for progressive renovation

- Member States shall establish specific timelines for the buildings referred to in this paragraph to comply with lower maximum energy performance thresholds by 2040 and 2050, in line with the pathway for transforming the national building stock into zero-emission buildings
- Member States shall ensure that at least 55 % of the decrease of the average primary energy use is achieved through the renovation of worst-performing residential buildings (43%), the '*worst first*' principle

Cross-border **cooperation**, city-to-city **learning**

- Decarb City Pipes 2050: city transition roadmaps
- EU Climate-Neutral and Smart Cities Mission
- C40 Cities: Mayors and Climate Action
- ICLEI – Local Governments for Sustainability
- Eurocities: climate and environment
- Energy Cities: fossil-free cities

Local initiatives and partnerships

Connecting Cabra, Dublin Ireland



Connecting Cabra was set up as a Sustainable Energy Community (SEC) in 2021. It seeks to create a cleaner, greener and CO2 leaner community in Cabra, Dublin 7.

Shares information & experience with locals to help improve the energy efficiency of their homes, businesses, and community buildings

Priorities are to **empower locals to take climate action** at a local level. These projects benefit all residents in Cabra and surrounding communities.



Regional dynamics and investment opportunities

Geopolitical Opportunities

- Tackling Climate Change
- Energy Security
- Creating Local Jobs
- Cost of Living Crisis
- Improving health and well-being



Article 17

Financial incentives, skills and market barriers

1. Member States shall provide appropriate financing... to address market barriers in order to deliver the necessary investments identified in their national building renovation plan to transform their building stock into zero-emission buildings by 2050.

1a. Member States shall ensure that application and procedures for public financing are simple and streamlined in order to facilitate the access to financing especially for households.

3. Member States shall make ... use of national financing and financing ... in particular the Recovery and Resilience Facility, the Social Climate Fund, cohesion policy funds, InvestEU, auctioning revenues from emission trading

4. Member States shall promote ... energy efficiency loans and mortgages for building renovation, energy performance contracting, pay-as-you-save financial schemes, fiscal incentives, ... reduced tax rates on renovation works and materials, on-tax schemes, on-bill schemes, guarantee funds, funds targeting deep renovations, funds targeting renovations with a significant minimum threshold of targeted energy savings and mortgage portfolio standards.

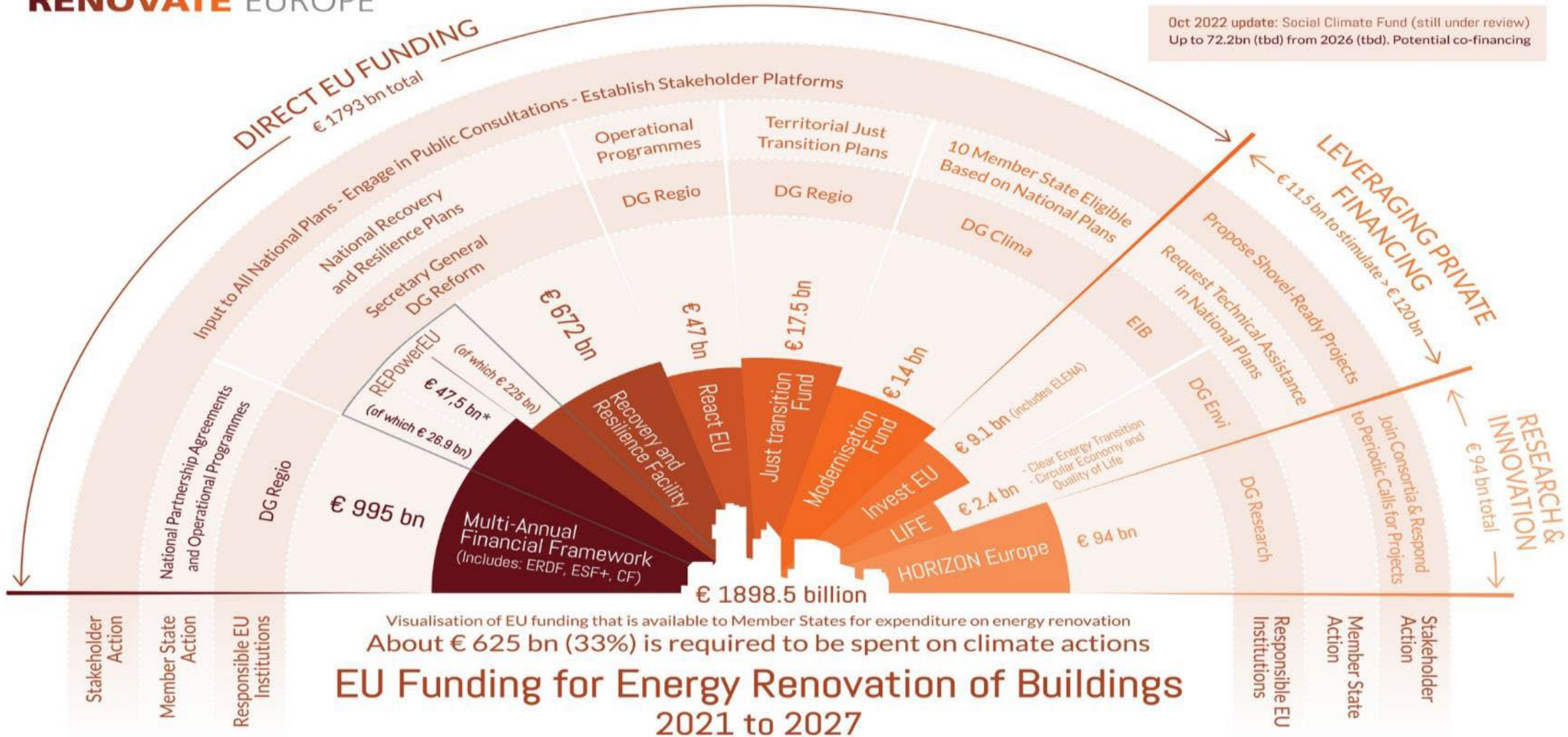
11a. Without prejudice to their national economic and social policies and to their systems of property law Member States shall address eviction of vulnerable households caused by disproportionate rent increases following energy renovation of their dwelling.

Regional dynamics and investment opportunities

Sources of Funding

- European Investment Bank
- EU Recovery and Resilience Facility
- EU Horizon Europe
- EU Social Climate Fund
- EU Multi-Annual Financial Framework
- Private investment: e.g. Energy Service Companies (ESCOs)

Oct 2022 update: Social Climate Fund (still under review)
Up to 72.2bn (tbd) from 2026 (tbd). Potential co-financing



Note: All numbers based on content of EU Commission Staff Working Document: SWD (2020) 550 final, October 2020, REPowerEU (2022) documents and the Social Climate Fund proposal (2022).

* In the context of REPowerEU, MS can repurpose €26.9bn from current Cohesion funding, €7.5bn from the CAP in the current MFF, and €40bn from the previous 2013-2020 MFF. This excludes the proposed €20bn accessible through the ETS's Market Stability Mechanism.

Thank you!



LinkedIn: Ciarán Cuffe

Banking on green homes

Scaling green homes the SMARTER way

The role of EU
regulations

Presentation



Madrid

Peter Sweatman, CEO

CLIMATE
STRATEGY
&
PARTNERS

Wednesday May 28th 2025

Energy in residential real estate :
New tools and new opportunities
for Europe and property
stakeholders through the recast of
the EED and EPBD



Climate Strategy & Partners

33 years of experience advising **companies, banks, and governments** across the world on accelerating the economic transition to a net-zero emissions economy.

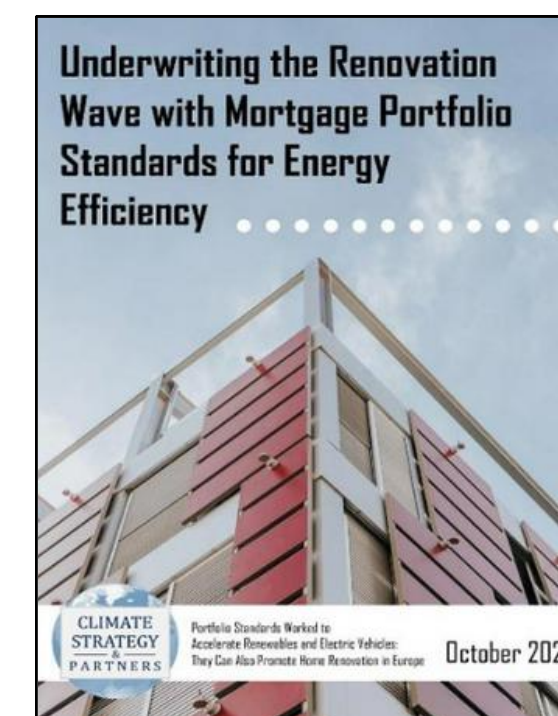
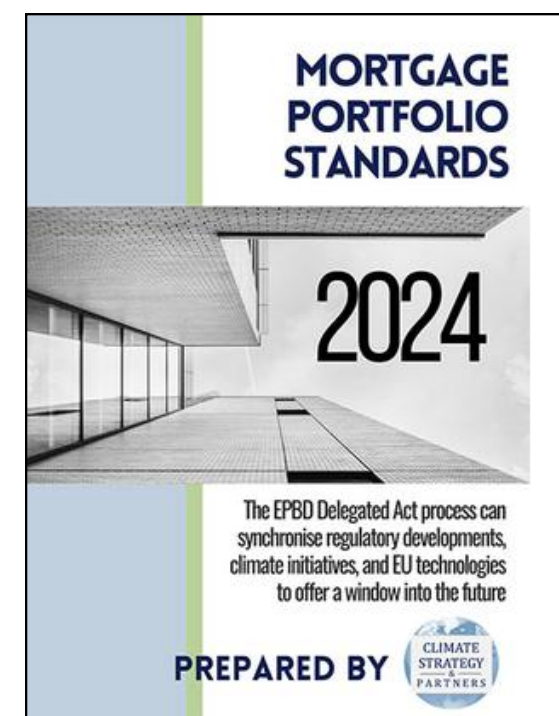


Peter Sweatman, Executive Director: 33 years of outstanding experience in finance and climate strategy with key positions at:

- JP Morgan
- Climate Change Capital
- G20 EEFTG and EEFIG rapporteur
- Energy Efficiency Capital Advisors

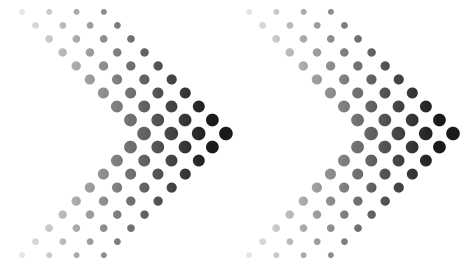


Recent CS publications:





Setting the scene



Energy Performance in Buildings



**131 million
buildings**

- Buildings have a very long useful life
- They use 40% of Europe's energy
- Buildings heat comes mainly from burning fossil fuel
- Nothing technically prevents efficient buildings



**Most buildings
are inefficient**



9% Have some renovation each year

1% Of renovations impact energy performance

0.2% Optimise for energy efficiency (only)

How European Buildings are Owned and Financed



Residential buildings

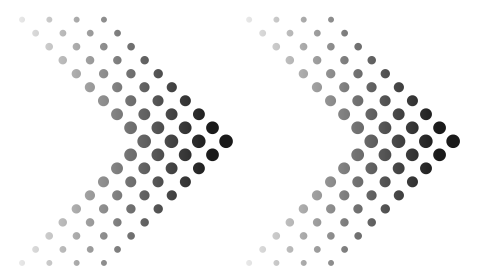
- 70% of Europeans live in a home they own
- EU27 residential mortgages total €6-7 trillion
- €10+ trillion of home equity is stored in EU homes
- c.8% of EU27 homes (21.5 million) are publicly owned
- 15% of European households own a second home



Worth over
€ 17 trillion

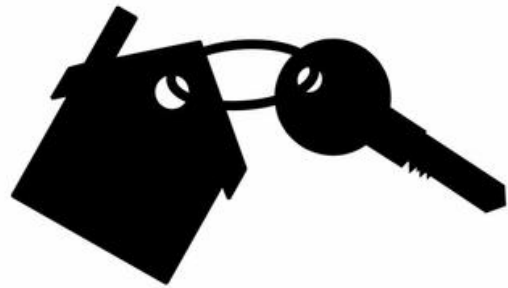
Euro 3
trillion

Institutional real estate
investments in the EU27



50 million opportunities to be unlocked for the EU Renovation Wave

100 million residential buildings



70 million owned by occupants



50 million are primary homes



Could use an ERL for renovation



Still standing
in 2050

Consumer Attitudes to Renovation and Funding

International Union of Property Owners survey revealed key consumer attitudes towards renovation:

44%

Don't renovate as they simply don't think they need it



44%

Don't have the funds

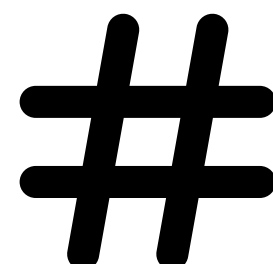
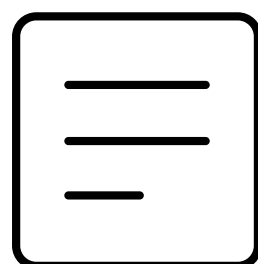
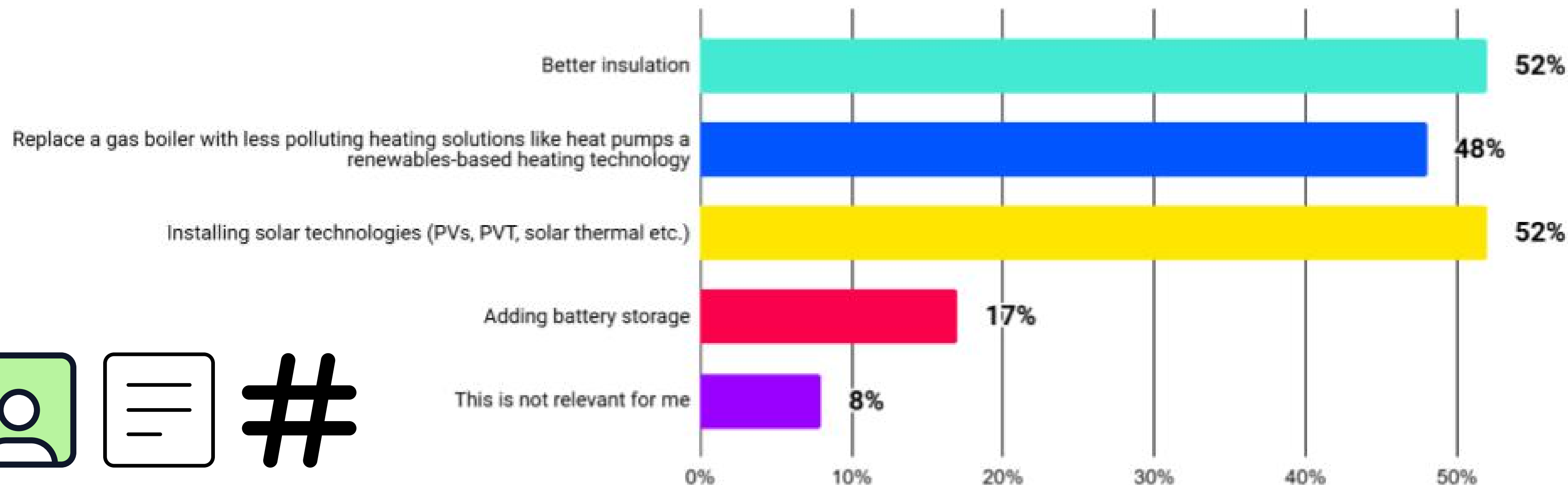


Below 10%

Saw “lack of information” or “lack of qualified” services as significant barriers to their renovation



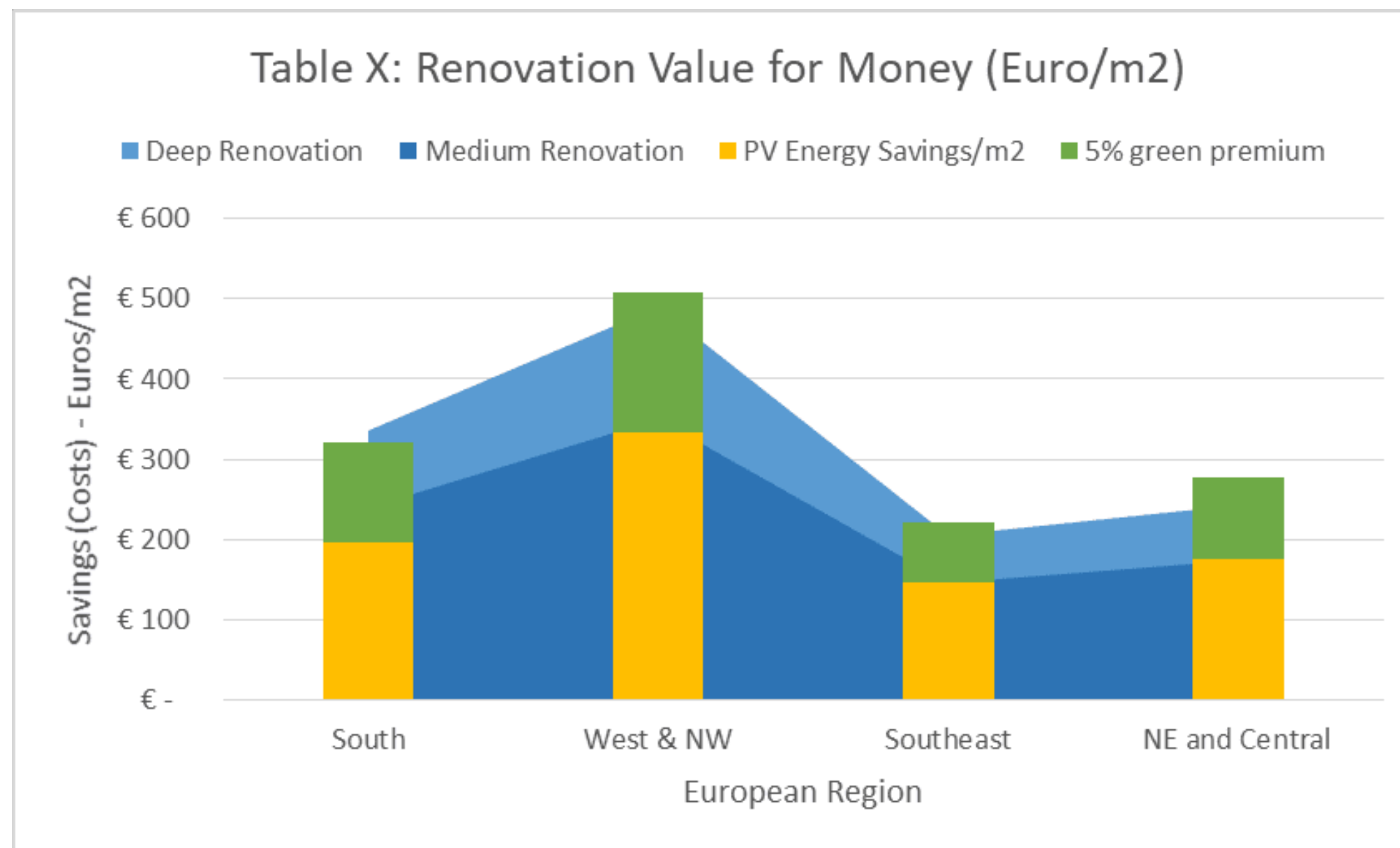
If Spaniards had access to low or no-interest loans, their key priority would be better insulation



- 89up survey of 12,000 respondents across 5 EU MS ( ,  ,  ,  , and ) with a focus on public attitudes toward home renovation and financing
- The proposed **EU Renovation Loan (ERL)** could help finance exactly these types of upgrades in Spain, such as insulation improvements, making energy efficiency more accessible.

Deep renovation pays-out over 30 years...

Renovation Value for Money (Euro/m2) discounted at 3%:



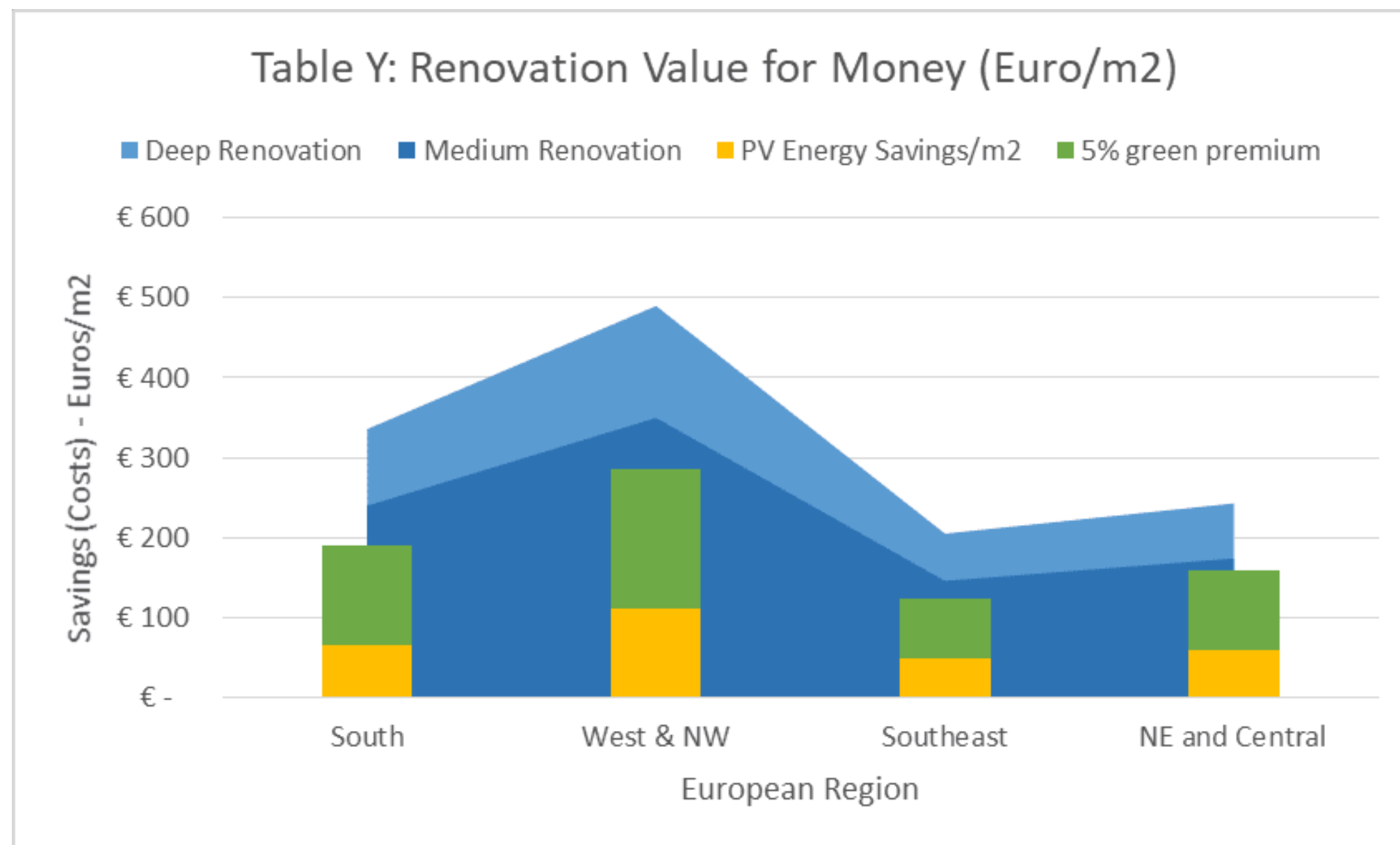
Investing in renovation makes “long-term economic sense” for homeowners:

- Cuts bills in half ✓
- Delivers a 5% property value increase ✓

* does not include CO2 value nor other “non-energy” benefits

...but only at low (less 3%) discount rates

Renovation Value for Money (Euro/m2) discounted at 15%:



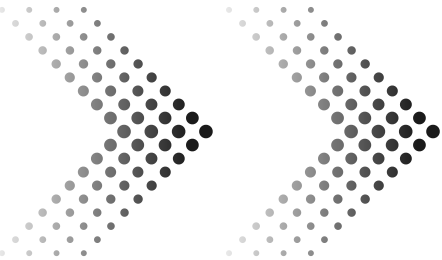
Medium renovations

- If they deliver a 50% reduction in energy costs

Don't break even funded at 15% cost of capital



The EU Renovation Loan

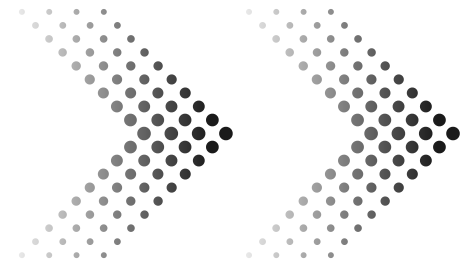


Energy Performance in Buildings

The EU Renovation Loan (“ERL”)

is an EU-backed, privately contracted, collateralised loan that provides all homeowners fair and equal access to long-term financing for the deep renovation of their home. The funding is provided on a (near) zero-coupon basis with repayment of principal and accrued interest at EU-borrowing costs upon the earlier of transfer, sale or its 30 year maturity.





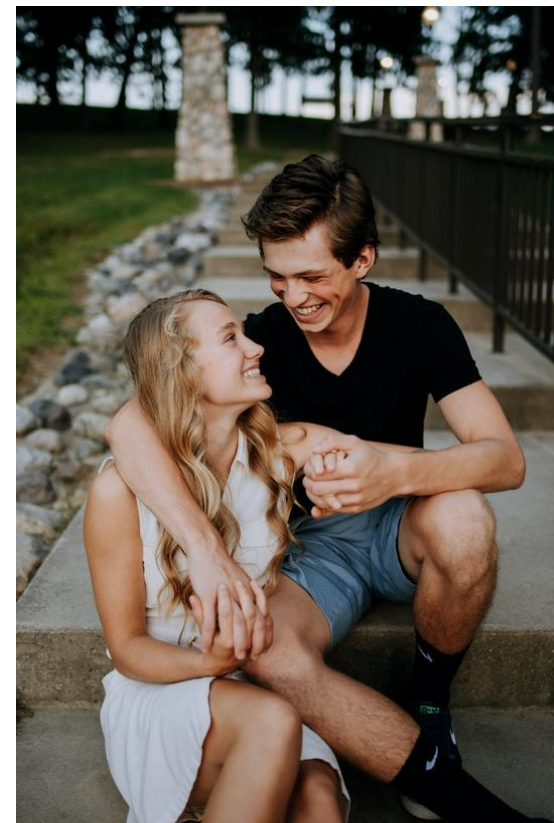
Consumer Perspective

ERL supports vulnerable communities

**The elderly with
reduced pensions**



**Young couples with a
mortgage and with no
savings**

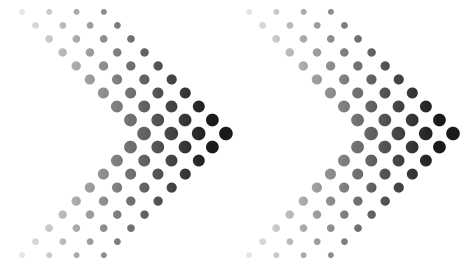


**The ERL targets income constrained
homeowners who can't access (more)
low-cost mortgage finance**

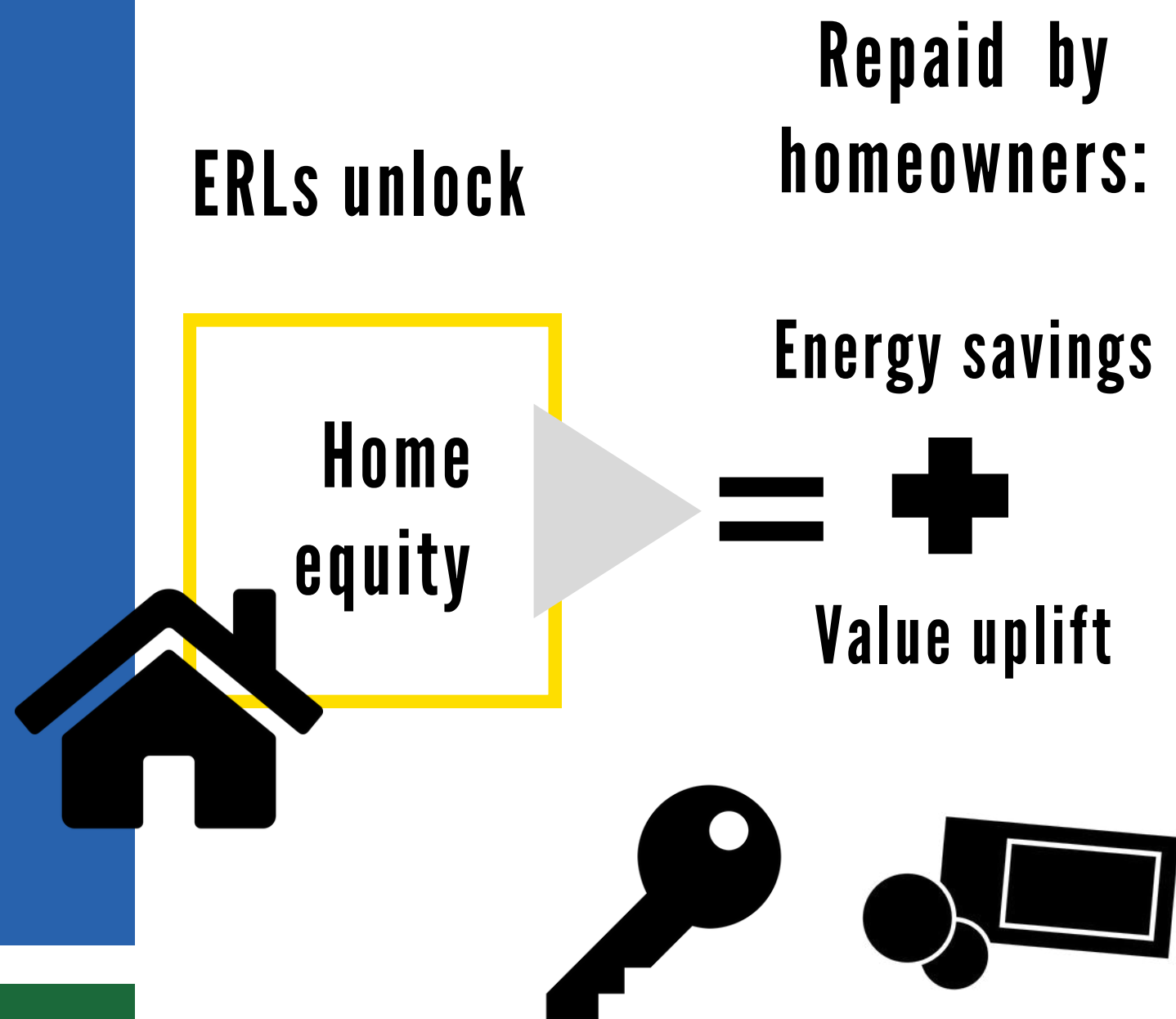


**ERLs address affordability from a
cash perspective by:**

- Delivering net cash positive savings directly ✓
- Rolling up some interest payments until the end ✓



The EU Renovation Loan value proposal



- Loans for renovation purpose, **aligned with EU Taxonomy** significant contribution criteria
- (Near) **zero-coupon structure**: so clients benefit from a net-cash positive deal until the property is sold or transferred, or until a 30 year maturity
- Borrowing amount **capped at home value** (to ensure deep renovation can be covered by collateral)
- **Collateralised by home** - lien is junior to existing mortgage
- **EU Guarantee** against eventual collateral insufficiency
- **Interest rate level** struck at EU-30 year borrowing cost (3-4% today)
- Supported by **central bank liquidity**

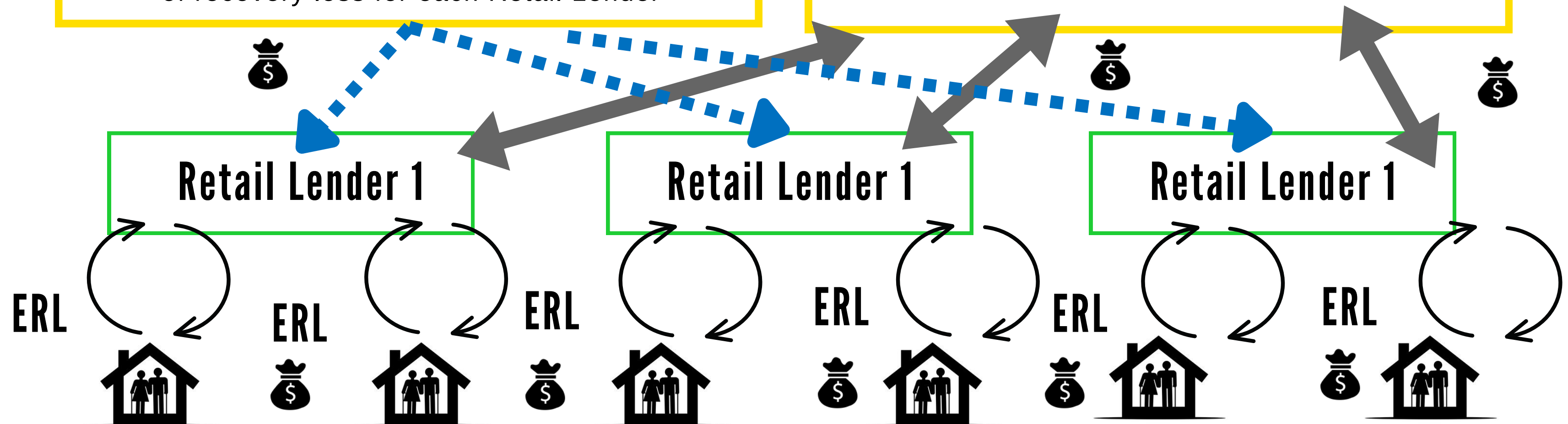
Institutional relationships and funds flows that support thousands of branch offerings

EU Guarantee

Based upon InvestEU Portfolio Guarantee product for the individual qualifying ERL Portfolios in case of recovery loss for each Retail Lender

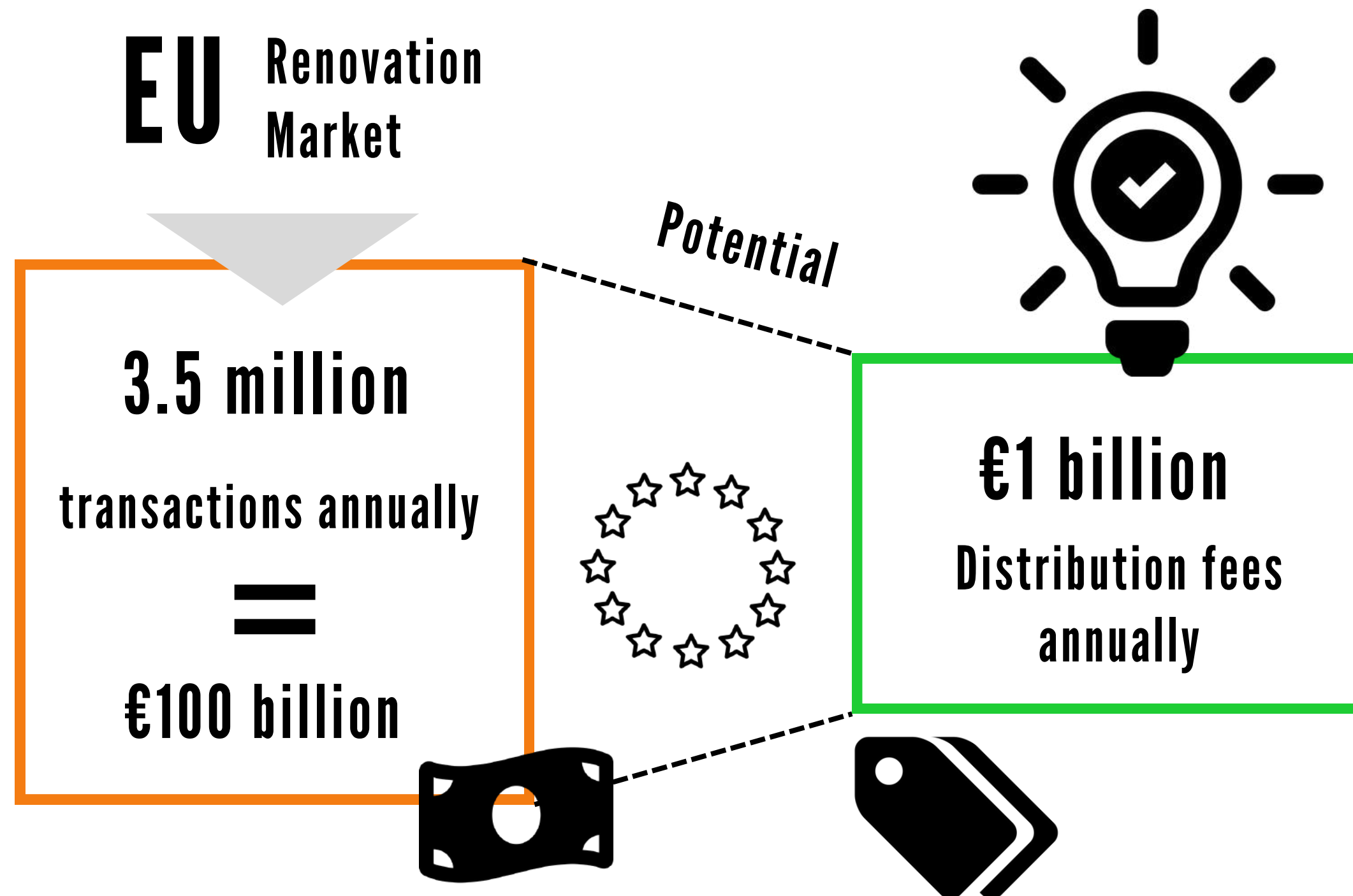
ECB

Provision of TLTRO liquidity at below portfolio yield rates for qualifying ERL portfolios above a minimum threshold size



Lenders' Perspective

Climate finance \$, risk reduction and origination fees



the ERL provides lenders:

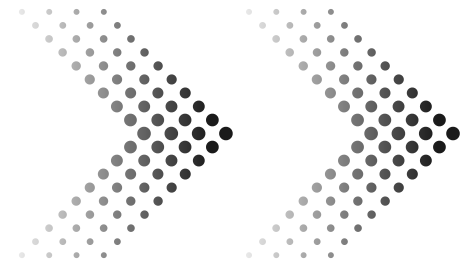
A product to “**green**” their existing property collateral against which their current mortgages are lent

Improving credit quality ✓

+

Energy performance ✓

of the whole portfolio



EU Renovation Loan: 100x more finance than direct subsidy

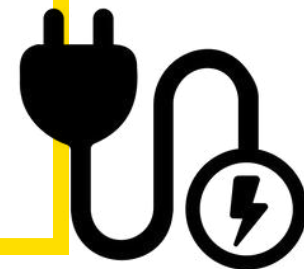
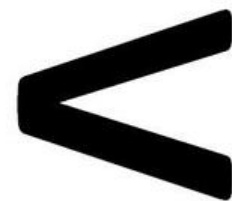
EU Guarantee against non-repayment by borrowers

TLTRO liquidity provision for ERLs

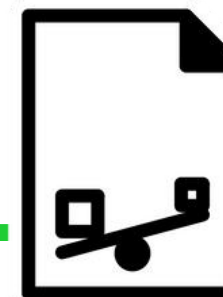
Up to 100x more efficient than direct subsidy

Alternatives to:

Activates drive from retail lenders to offer ERLs



- Cash grants
- Energy subsidies



- There are insufficient public funds to maintain cash grants and energy subsidies to combat the energy crisis
- Home equity can be mobilised to add resilience to EU homes
- ECB can “green” its activities adding ERLs to its funded programmes



The ERL Facilitation Framework

Hearing of Commissioner-designate Dan Jørgensen

Nov 5th 2024



*Would you consider setting up an **EU renovation loan** to assist in providing the capital funding needed to achieve a net zero building stock by 2050?*



19

MEP Benedetta Scuderi
(Greens/EFA Group)



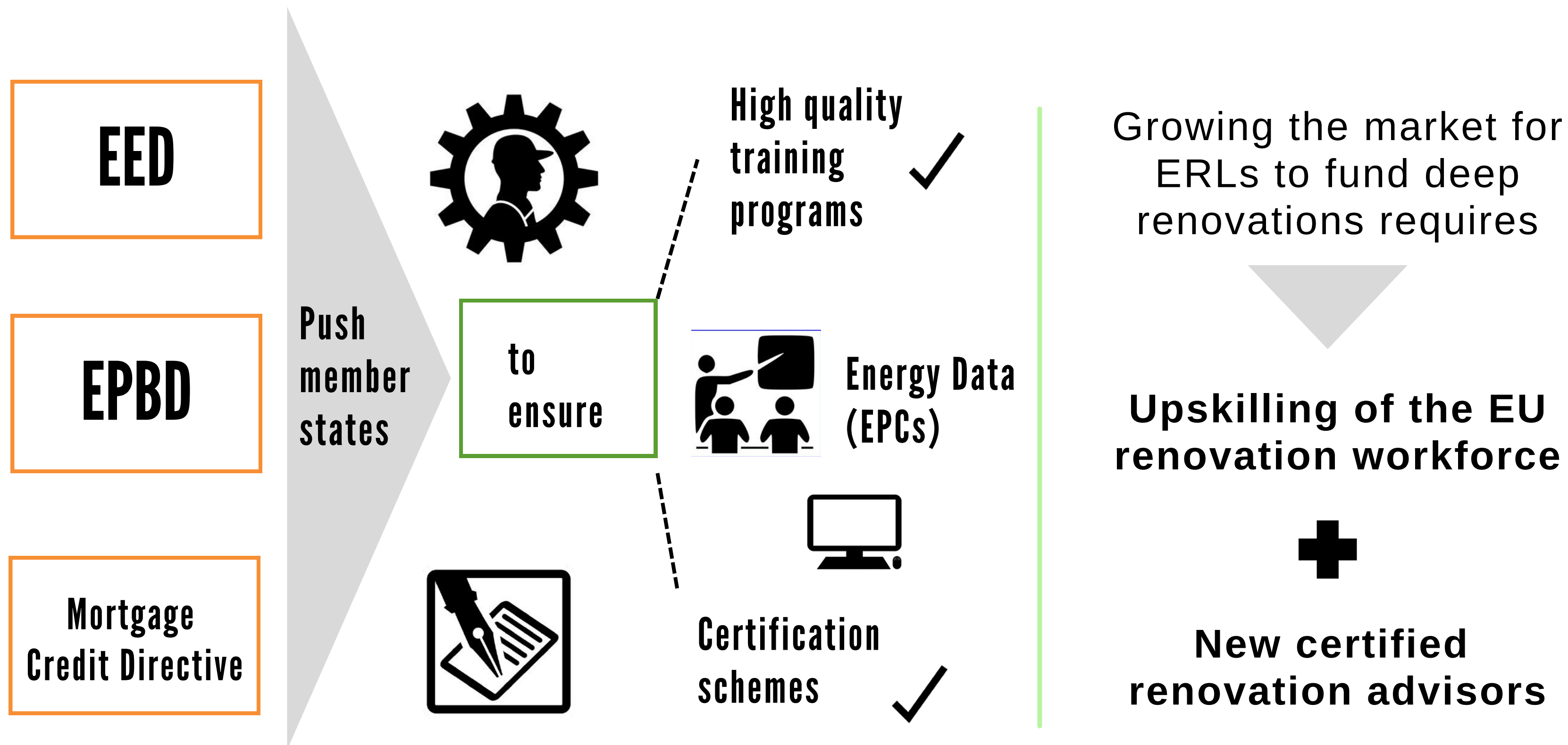
Commissioner Jørgensen

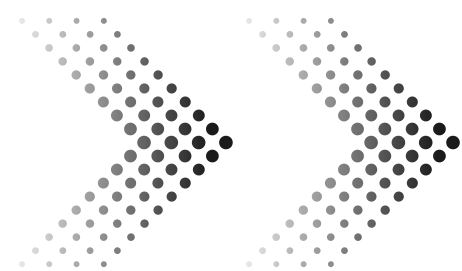
Special Committee on the Housing Crisis in the European Union

March 3rd 2025

- **Euro 21.3 billion** from the Recovery Resilience Facility has been earmarked for housing reforms and investments.
- We've planned to **double the cohesion policy**, investments in affordable housing, and we can mobilize public and private investments through the planned **Pan European Investment platform** in collaboration with the **EIB** and other financial partners.

The ERL Policy Facilitation Framework





EED's Article 30 offers a frame to work with Member States on Renovation



Facilitate the establishment of financing facilities to mobilise investments in EE in different sectors



Strengthen cooperation and dialogue with private and public financial institutions



Regulate the voluntary National Energy Efficiency Fund set up by MS



Promote energy efficiency lending products EE mortgages & green loans



Introduce reporting requirements on energy efficiency financing

ERL Components		EED recommendation for Article 30
A	Zero-coupon structure ↔	Various financing solutions are offered including a standalone loan offer, zero-interest ‘eco-loans’ ✓
B	EU Green Guarantee ↔	Unlock private sector financing for energy efficiency improvements: Member States can actively support private financial institutions to extend suitable lending products, e.g. through de-risking tools like loan guarantees ✓
C	A fair interest rate ↔	It is important that the interest rate of an energy efficiency financial product is not higher than a regular financial product in the same institution for a comparable type of investment. ✓
D	30 year final maturity ↔	Affordability can be improved through pre-financing of the work, longer loan maturities that consider the lifetime of the installations, ✓
E	ECB liquidity facility	*Without direct reference
F	Designed to benefit low income Europeans ↔	Specific guarantees should be provided to allow youth and the aging population to access energy efficiency lending products. ✓

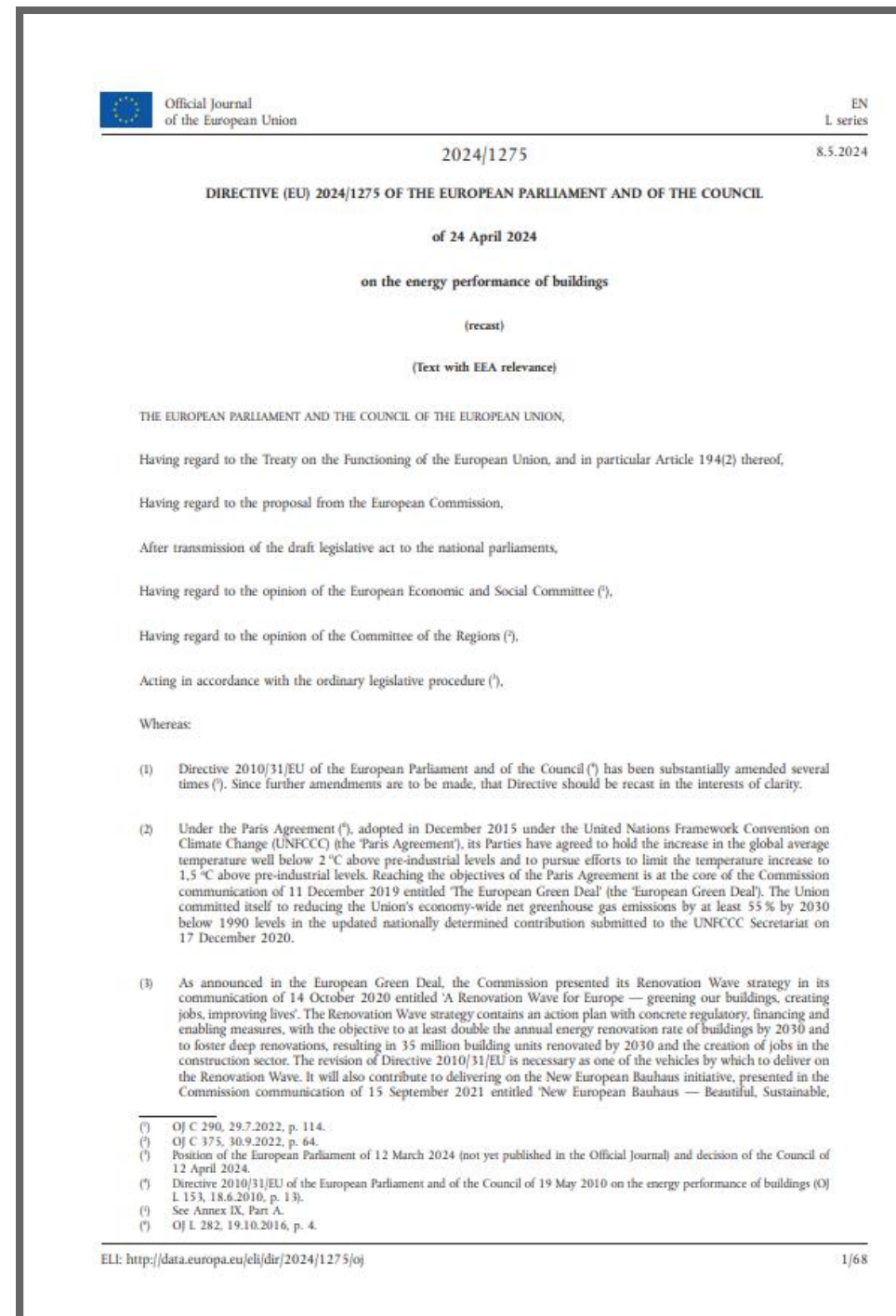
ERLs help fund MPS

Mortgage Portfolio Standards (MPS) is a regulatory lever to engage lenders

MPS is a regulatory mechanism where **lenders pledge to work with their clients** to increase the energy performance of the buildings which back their mortgages along a **science-based trajectory** for their portfolio.



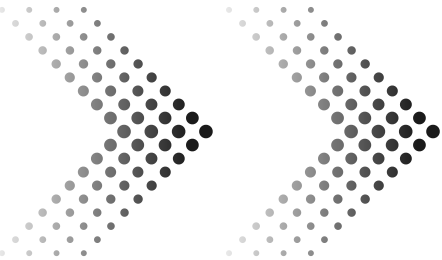
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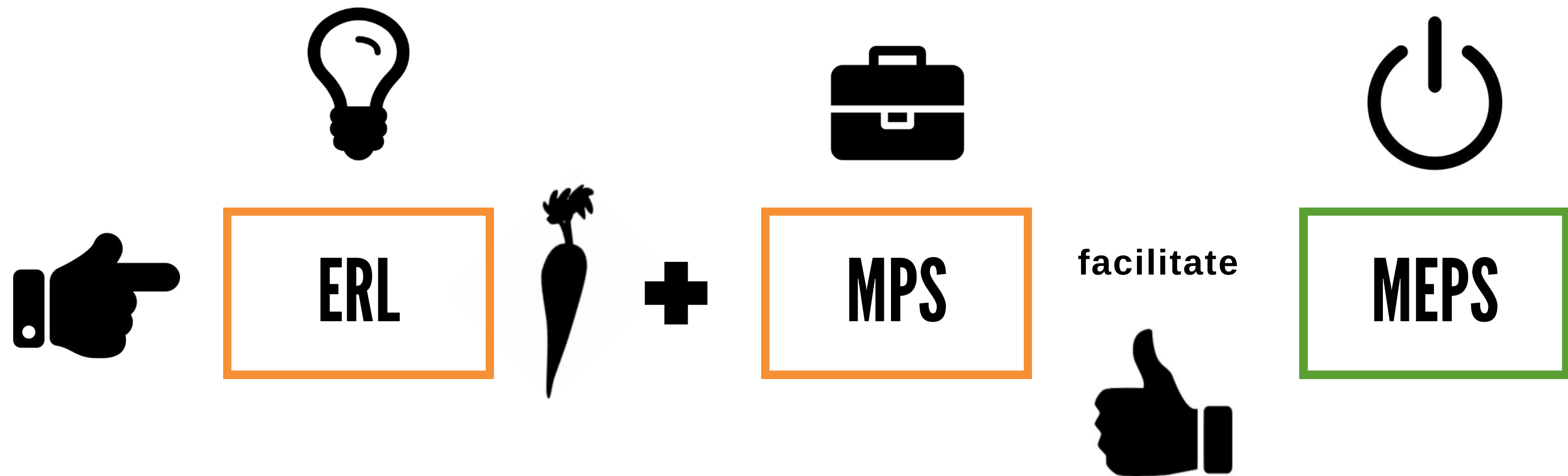
Mentioned in the EPBD
recast (April 2024)

Will promote engagement
by MS with FIs to identify
and finance

buildings in their portfolios
with the highest energy
savings potential



ERLs enable lenders to adopt MPS and together they facilitate and deliver MEPS



- The data, review and operationalisation of a **MPS** will naturally help lenders identify qualifying **ERL** customers

- **ERL** provides a low-cost funding source for a deep renovation to those clients who **banks could not lend more to**

350,000 renovation project managers are needed in Europe (like DENA-KfW)

**Germany's
DENA**

Has a network of 13k
Government accredited
energy experts

Work with

retail banks +
state bank KfW

To prepare home
renovation projects
and finance them

**"independent
renovation advisors"**

- Prepare a technical project
- Can help arrange financing
- Are required to co-sign loans

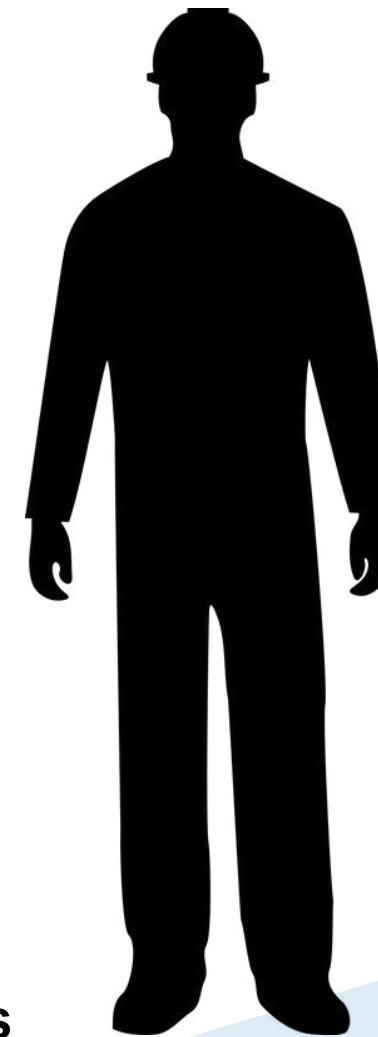
**Qualified renovation project
manager could deliver**

10 deeply renovated
buildings per year

of 35 million
European building units

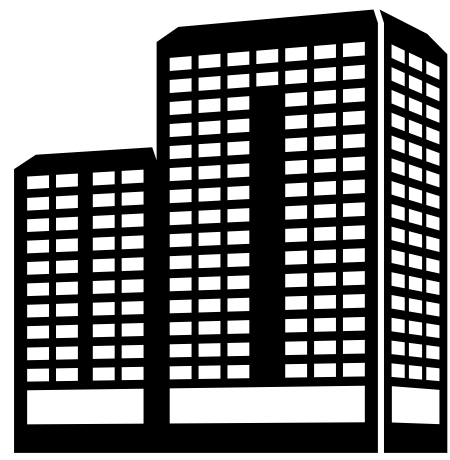
World require 350,000
accredited project managers

**138,000 bank
branches in the EU**





Answering the question...
(without repeating the
approaches of the past)



Recommendations for Next Steps...

- Define Energy Poverty and Increase EU grants for renovating energy-poor homes
- Develop an EU Renovation Loan pilot (ERL) using InvestEU increase
- Offer Member States Renovation Loans using the InvestEU MS compartment mechanism
- Work with retail banks to train and improve contractor workforce

Define Energy Poverty in each Member State

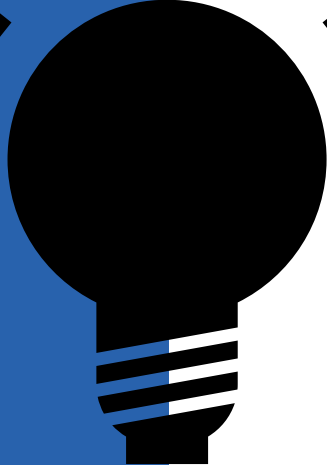
Energy poor homes

Represent around
16 million households

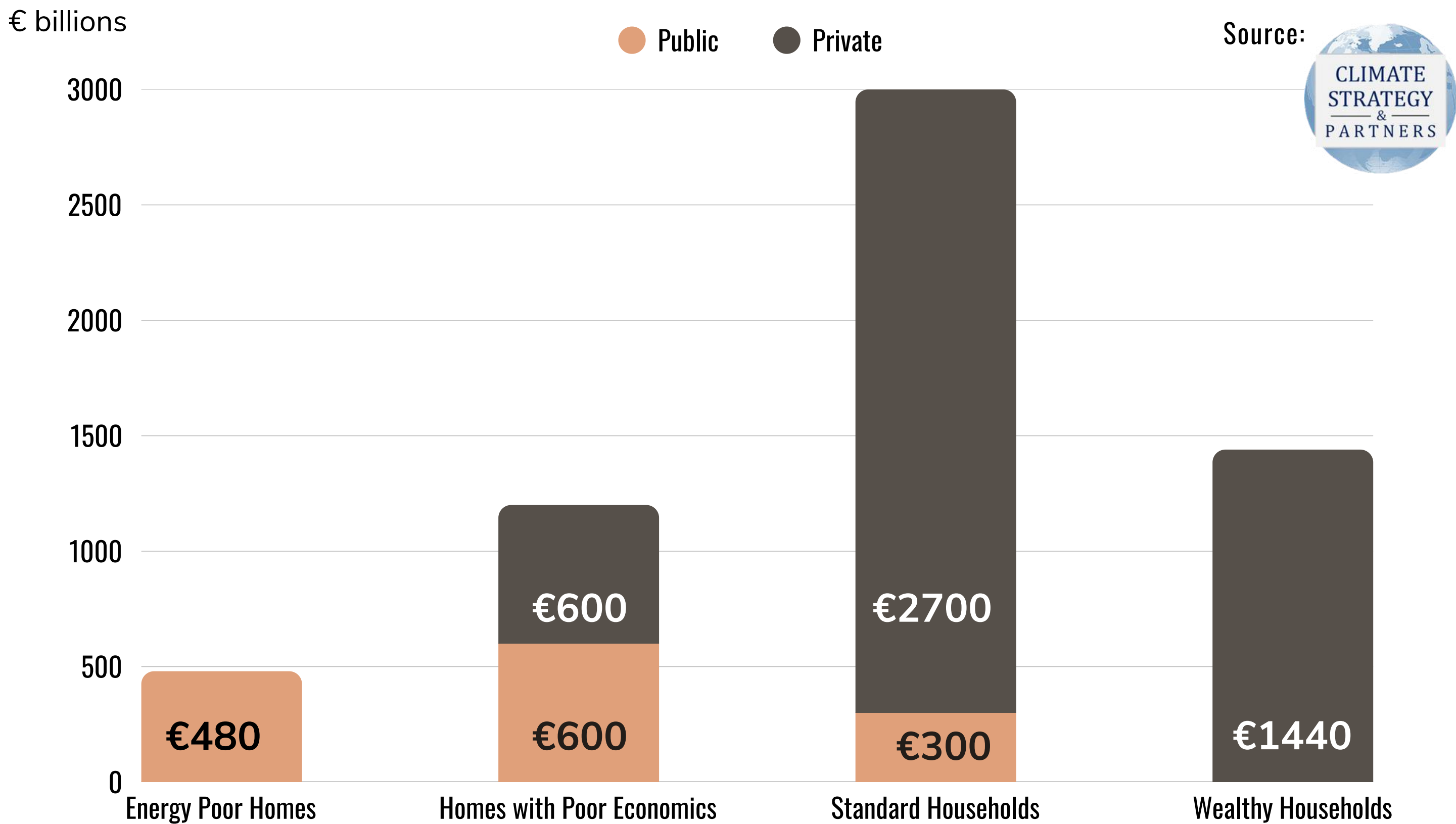
Require up to €480 billion
in social investments

- 8% of the EU's 200 million households cannot adequately heat their homes. ✓
- If each energy poor home received a €30k upgrade investment as a 100% public grant, the total grant funding needed for this segment would be €480 billion. ✓
- Over 10 years, with 1.6 million renovations per year, the cost would be €48 billion per annum, or just over 1% of the €4 trillion annual social expenditure of the EU. ✓

Map the €6 trillion of home renovation finance needed for 2023-2050



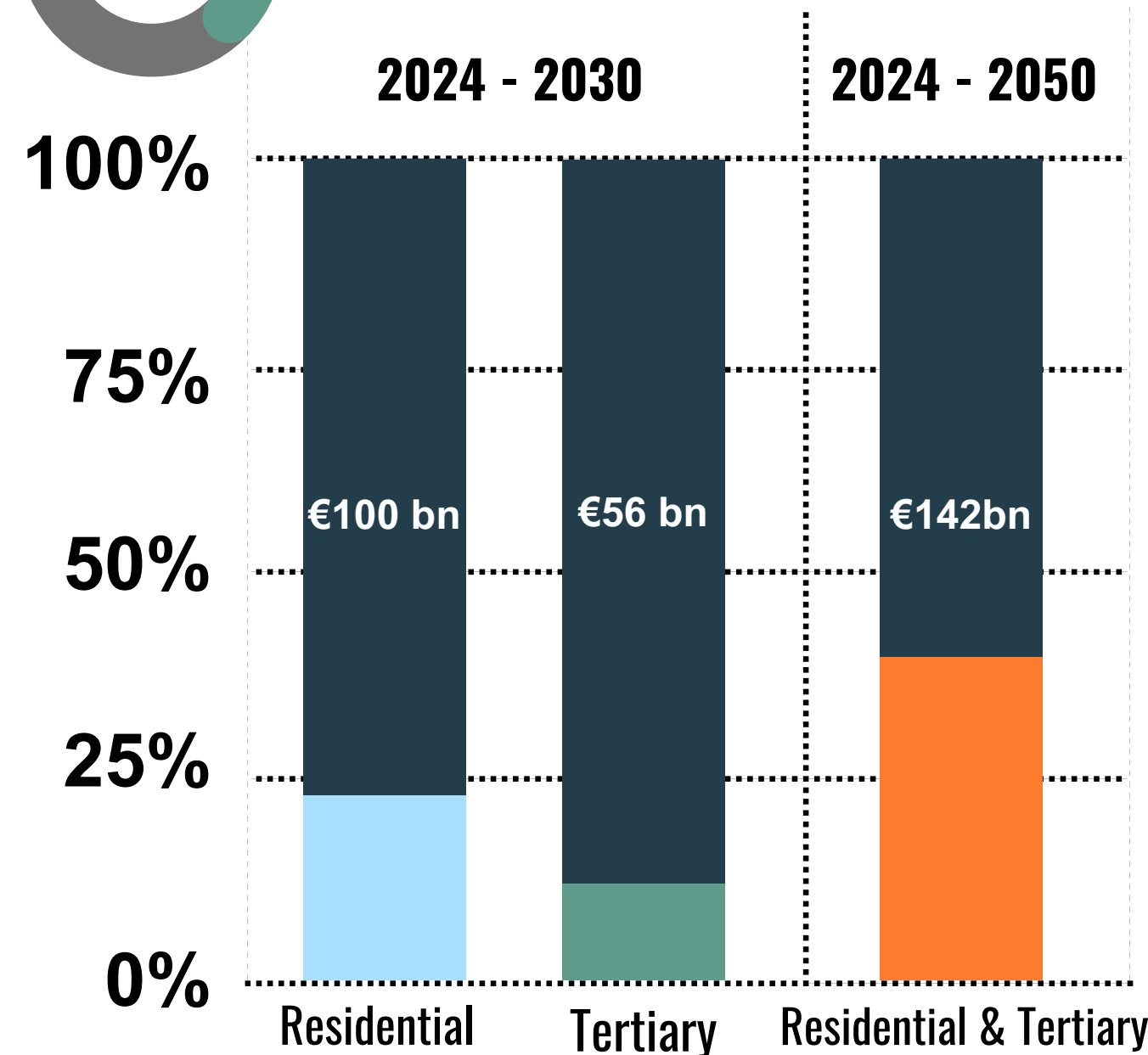
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Identify where the (public) money is...



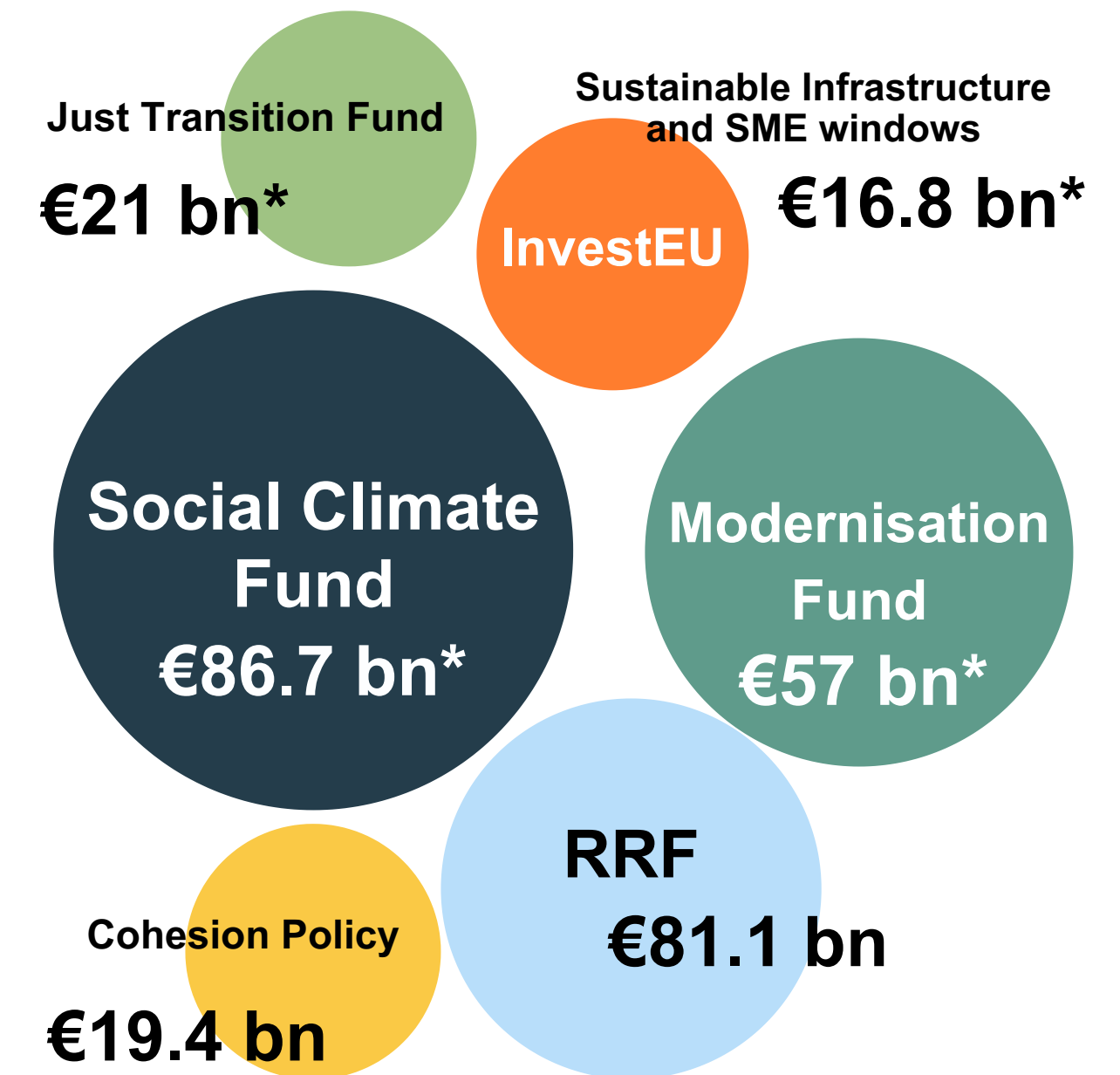
41% public share



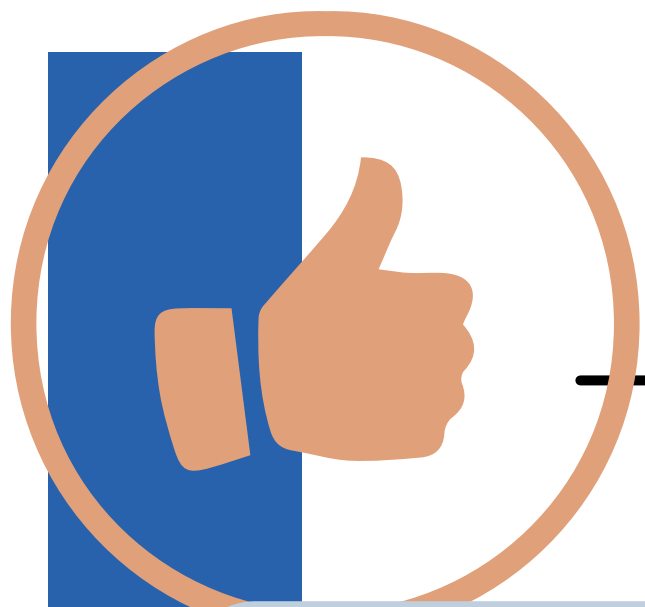
Annual share of public & private investment gap of Residential and Tertiary Buildings from total gap

(Averages from EC 2023, EC 2020b, EC 2022, I4CE 2024, Institute Rousseau 2024)

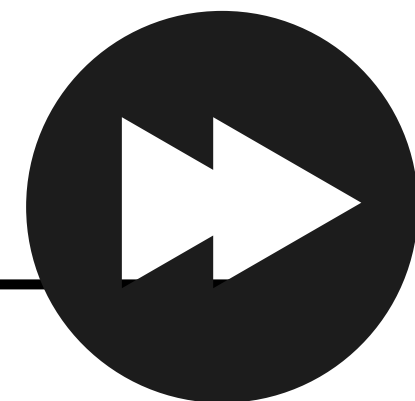
EU funds allocated to Buildings investments (estimated amounts unless specified otherwise*)



*Buildings are part of investment scope, but no specific allocation is provided



InvestEU “Renovation Loan as a Service”



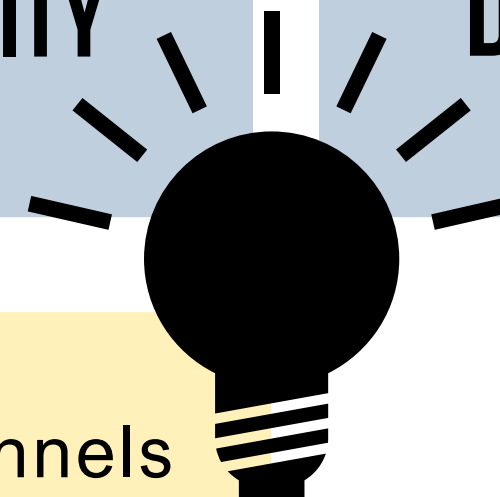
**HIGHER
LEVERAGE
(11.4X)**

**EU-LEVEL
HARMONISATION**

**LOCALLY
TAILORED**

**ADMINISTRATIVE
SIMPLICITY**

**STREAMLINED
DELIVERY**



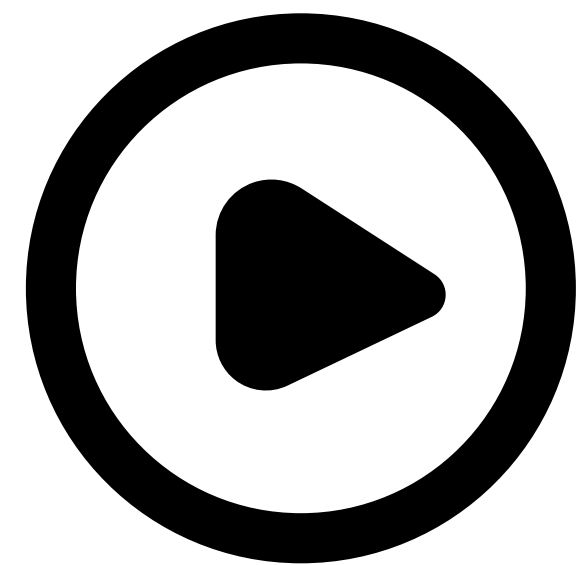
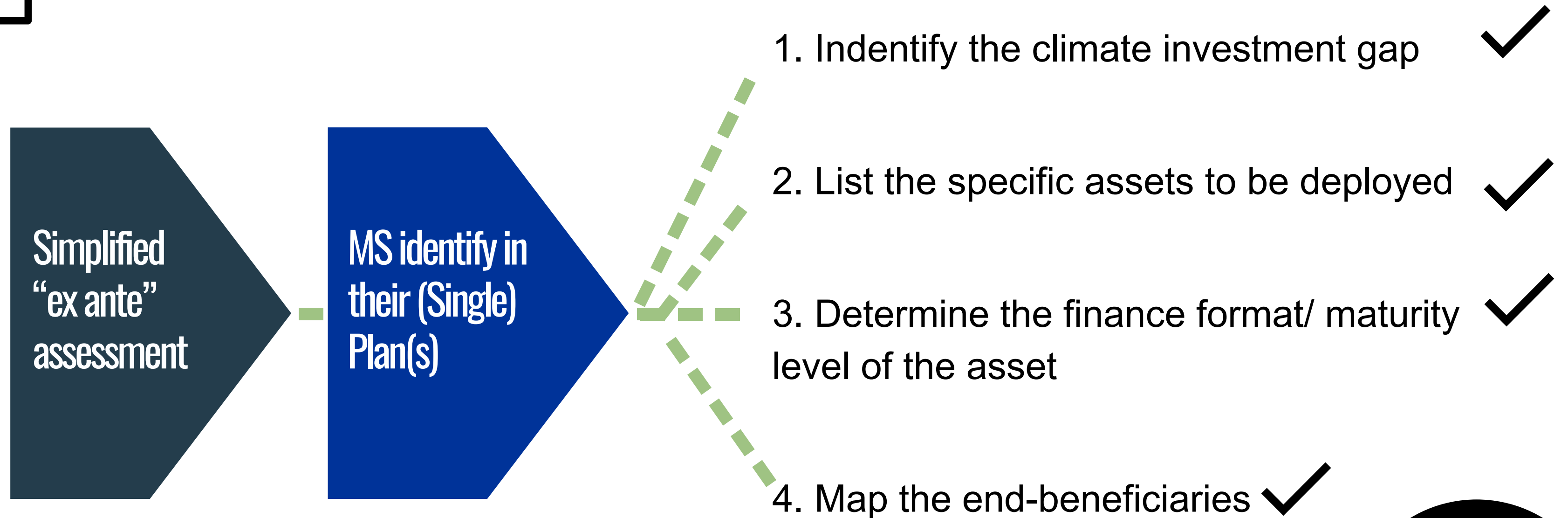
To avoid inefficiencies of the past and ensure Member State demand

- 1** Enabling local adaptation and local channels = more control and visibility.
- 2** Ensure aligned timings with national investment planning processes.
- 3** Excluding the impact of contributions to the EU FlaaS from the national debt calculus.

**TA SUPPORT
FROM EIB AND
NPBS**



2014 Renovation Loan template, ready to be activated on an “off-the-shelf” basis



Case Study -



Repair Your Grandma's Home

**Co-financed by the
Modernisation Fund**

follows trend
established in 2009



- Created in 2024
- Finances up to 50% of efficiency measure
- Interest free loan offered by the government
- Building societies finance other 50%

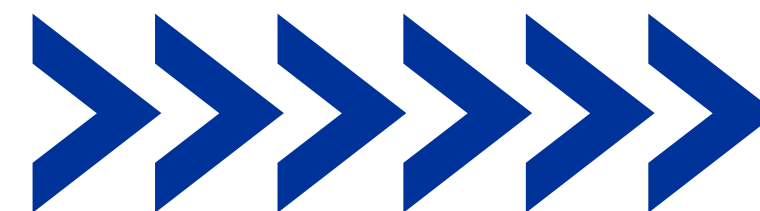
- Govt has been using EU funds + local co-financing to promote the deep renovations



3.9 MM

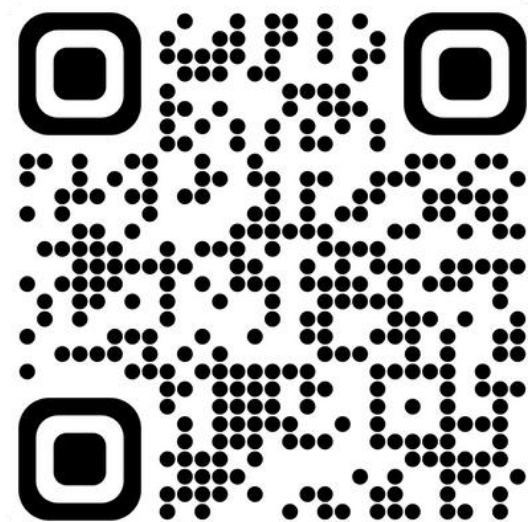
Czech dwellings

in the last 15 years

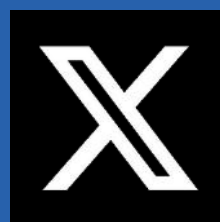


1/3+

Renovated



Thanks!



@Climatest

Contact us

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