

# Energy efficient Mortgages Action Plan (EeMAP) Initiative

Banks can play a game changing role in providing long-term financing for energy improvements to the existing European housing stock. They intervene at the most critical moment, when citizens purchase a property, and mortgages help individuals and families to access homeownership, thereby allowing them to secure a key part of their social expectations. The banking industry has a key role to play in improving the quality and energy performance of housing so as to free-up disposable income and, in parallel, reduce credit risk for borrowers, lenders and investors. A pan-European energy efficiency mortgage initiative in this area will help to coordinate market interventions, create synergies in the mortgage and covered bond value chain, delivering a virtuous circle between lenders, borrowers and investors from the origination of the mortgage to the pooling of energy efficient collateral that would be the underlying collateral for “green” covered bonds.

1. Buildings are responsible for 40% of energy consumption & 36% of CO<sub>2</sub> emissions in the EU.
2. By improving the energy efficiency (EE) of buildings, total EU energy consumption could be reduced by 5%-6% and CO<sub>2</sub> emissions by 5%.
3. 75-90% of the building stock in the EU is predicted to continue to stand in 2050 making energy efficient refurbishment a top priority for Europe.
4. In the context of the EU’s energy savings targets for 2020 and 2030 and of COP21, there is a role for **a private, bank financing initiative to support households in the energy efficient (EE) renovation of their homes or in the acquisition/construction of energy efficient real estate**. The Initiative is independent from, but complementary to, public funds, tax incentives and utility rebates.
5. The EeMAP Initiative rests on two assumptions:
  - Improved EE of the property lowers the PD of the borrower as energy savings are recouped in the energy bill, leaving more disposable income in the household. A renovated house that moves from an ‘E’ to a ‘B’ grade in its energy performance certificate (EPC) will save an estimated EUR 24,000 over 30 years, according to an analysis of 365,000 house sales in Denmark last year.
  - Improved EE increases the value of the property. From a price perspective, an increase in energy performance can correspond to the adding of an extra 10-15 m<sup>2</sup> to the size of a property.
6. These two assumptions drive an incentive chain relevant in both base cases i.e. the energy efficient renovation of property as well as the acquisition/construction of energy efficient properties. This incentive chain provides a micro-economic advantage to all stakeholders: borrowers, lenders, investors and SMEs in terms of wealth conservation, risk mitigation, energy conservation and job creation.
7. Based on a set of energy efficiency indicators, lenders will offer a discount in the interest rate after a certain period of time according to the improvement in the energy rating or performance of the property, or provide additional funds at the time of origination to finance EE renovations.
8. Measurement of the energy efficiency improvement will build on research on how to more accurately predict energy costs in mortgage affordability calculations, and likely be based on three pillars: (1) the Energy Performance Certificate (EPC) and (2) a consumption indicator in the short term and (3) a demand indicator in the longer term. The evaluation and validation of the energy efficiency improvements using the above-mentioned indicators would be delivered by external/third party providers.
9. This Initiative will address 3 areas of potential risk: credit risk, asset risk and performance risk
10. The Initiative will bring sustainability into the conversation between borrowers and lenders at point of purchase/re-mortgage, thus help triggering the rate of energy efficient renovation necessary to meet the EU’s climate and energy targets.
11. The focus of this Project is on lending on **residential property**, but potentially the underlying mechanism should also be deployed in the context of **commercial property lending** where applicable.
12. In the context of their successful application for Horizon 2020 funding, the Consortium will concretely undertake 5 ‘operational’ Work Packages, each with a clear set of deliverables: **(1) Identification and summary of market best practices, (2) Definition of an energy performance indicators and a Building Energy Passport, (3) Identification of pre-requisites for the assessment of “green value”, (4) Substantiation of correlation between EE & probability of default – portfolio analysis and (5) Definition and design of energy efficient mortgage, based on preferential financial conditions.**

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## Objective & Underlying Business Case

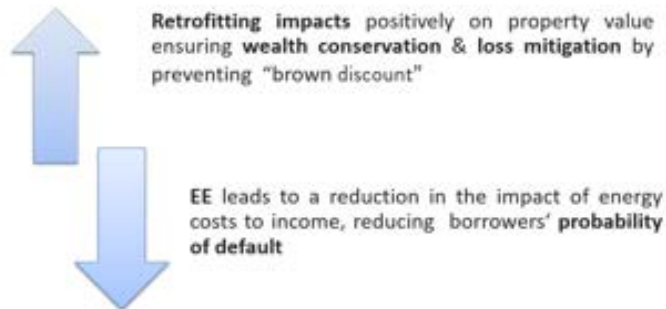
The **ultimate objective** is a pan-European private bank financing mechanism, based on a standardised approach, to encourage energy efficient improvement by households of the EU's housing stock by way of financial incentives linked to the mortgage, and in this way support the EU in meeting its energy savings targets.

Independent from, but complementary to, public funds or tax incentives

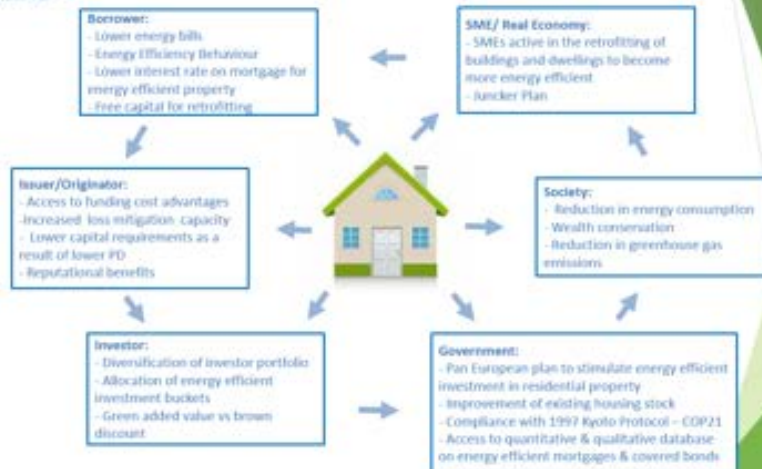
### Underlying business case



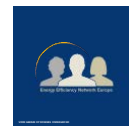
## Underlying Market Characteristics Impacted by Energy efficiency (EE)



## Incentive Chain



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