

The climate-change-related transition risk associated with real estate exposures in the Belgian financial sector


Thursday 28 October 2021
13u – 14u30 CEST

WEBINAR

"Climate-change related transition risk associated with real estate exposure calls for data on energy performance"
by Brenda Van Tendeloo and Alexandre Francart, both National Bank of Belgium

"Financing of residential property as a lever to improve energy efficiency" by Elisabeth Minjauw, BNP Paribas Fortis

"The Energy Efficient Mortgage Initiative (EEMI): a driver for a new ecosystem" by Luca Bertalot, EMF-ECBC



Transition risk associated with real estate exposures calls for data on energy performance

Brenda Van Tendeloo & Alexandre Francart

28 October 2021

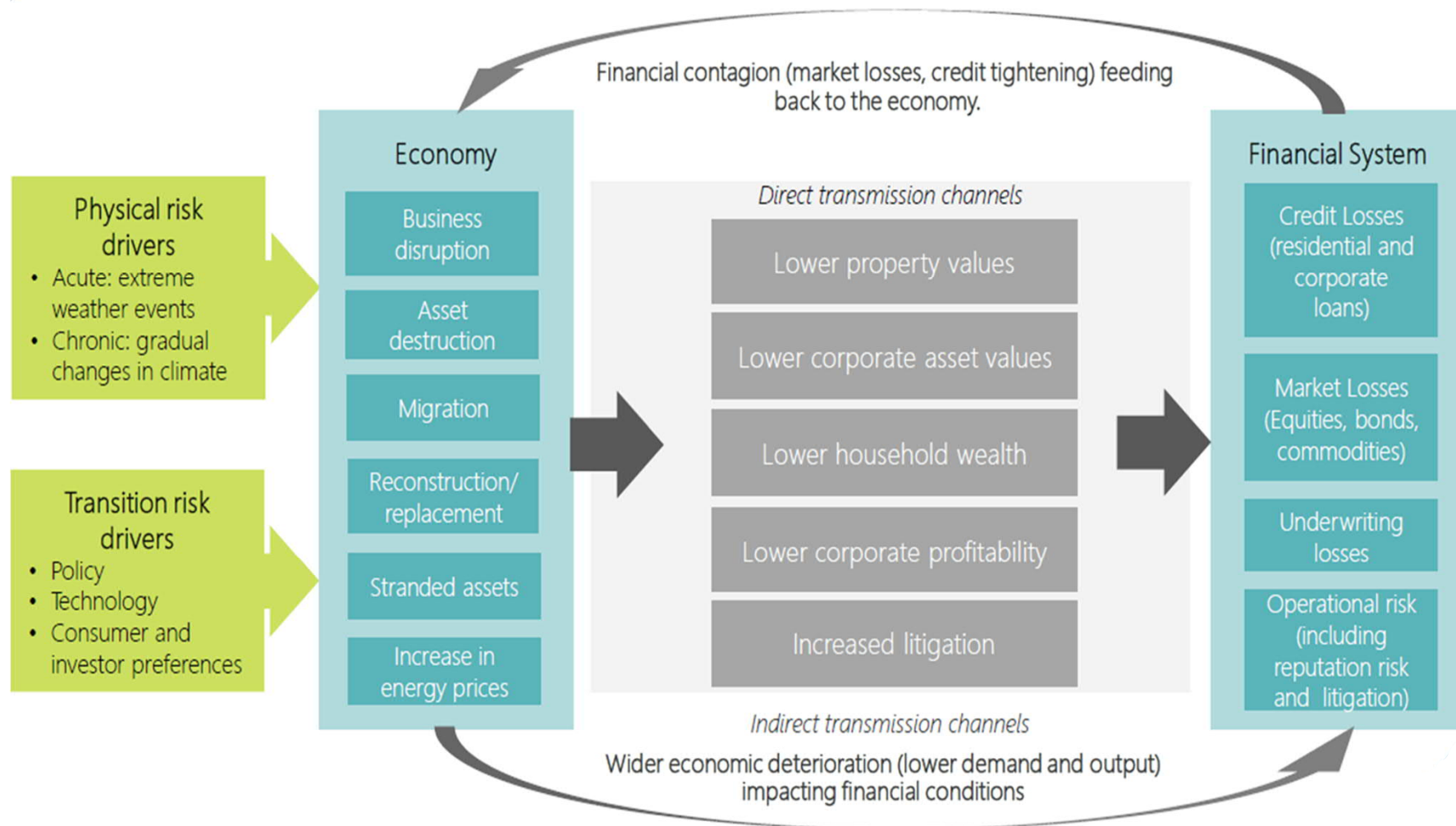


1 Climate-related financial risks

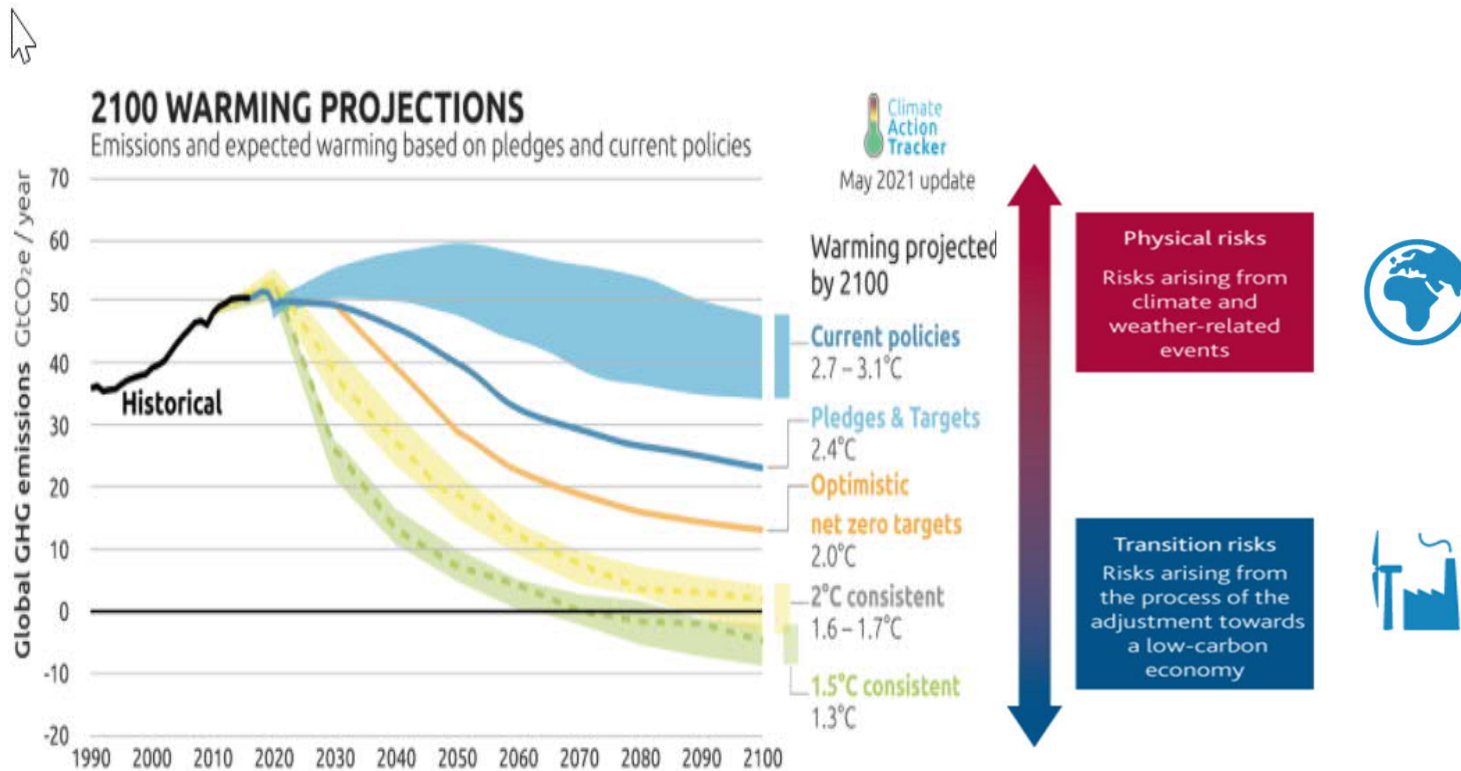
2 Energy efficiency of real estate as risk factor for transition risk

3 Need for EPC-data

1. Climate-related risks as financial risks



1. Climate-related risks as financial risks



May occur more frequently and more severely when not enough action is taken fast enough



Will materialise especially in case of too late, too sudden changes

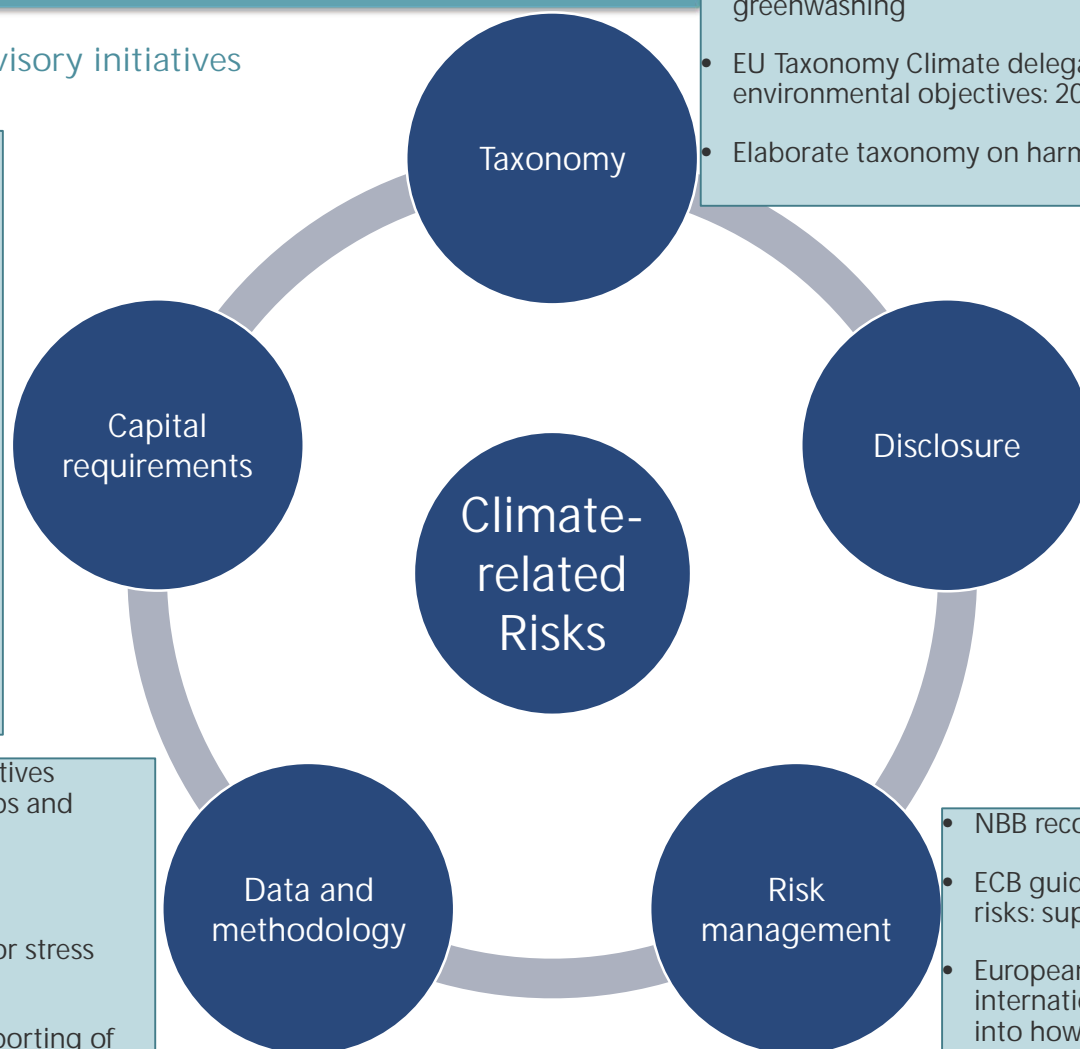
Need for a timely and gradual transition!

1. Climate-related risks as financial risks

Regulatory and supervisory initiatives

- Capital requirements should remain risk based, not used to incentivise green investments unless proven lower risks
- EU Banks (EBA) first progress report by end 2021-Final report by 2025 2023
- Global banks (BCBS) first report by 2022
- EU Insurers (EIOPA): Methodological paper on inclusion climate in natural catastrophe standard formula, Jul 2021 + exploring need for green supporting/brown penalising factors

- Various private and public initiatives working on identifying data gaps and improving data availability
- Risk metrics
- Methodologies and scenarios for stress testing
- BE circular on gathering and reporting of energy performance of real estate exposures



- Common definitions: increase demand, mitigate greenwashing
- EU Taxonomy Climate delegated act 21/4/21. other environmental objectives: 2022
- Elaborate taxonomy on harmful activities

- Corporate disclosures= necessary for FIs to assess their exposures: mandatory disclosures for all large corporates + listed SMEs needed: Proposal EU Corporate Sustainability Reporting Directive (Replace NFRD)
- Taxonomy Disclosures + asset management and financial advice: product and entity disclosures
- FIs: prudential (pillar 3) disclosures
- Double Materiality

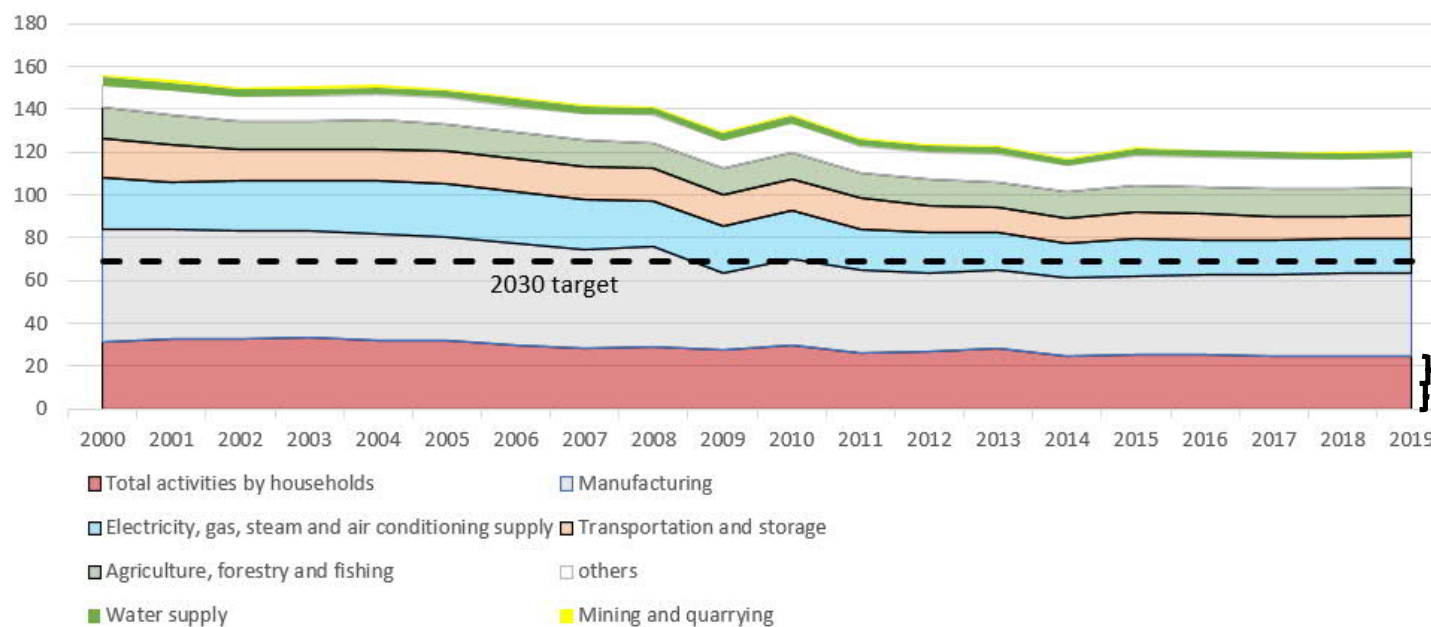


- NBB recommendations (FSR, 2019)
- ECB guide on climate -related and environmental risks: supervisory recommendations, Nov 2020
- European supervisory authorities (EBA, EIOPA) and international standard setters (BCBS, IAIS) looking into how to potentially adjust regulatory framework on risk management
- Performing stress tests and scenario analyses

2. Energy efficiency of real estate as risk factor for transition risk

2.1 Real estate important contributor to greenhouse gas emissions in Belgium

Emissions of Greenhouse gases* in Belgium
(millions of tons of CO₂ equivalent)



12% heating and cooling= housing

7% Transport

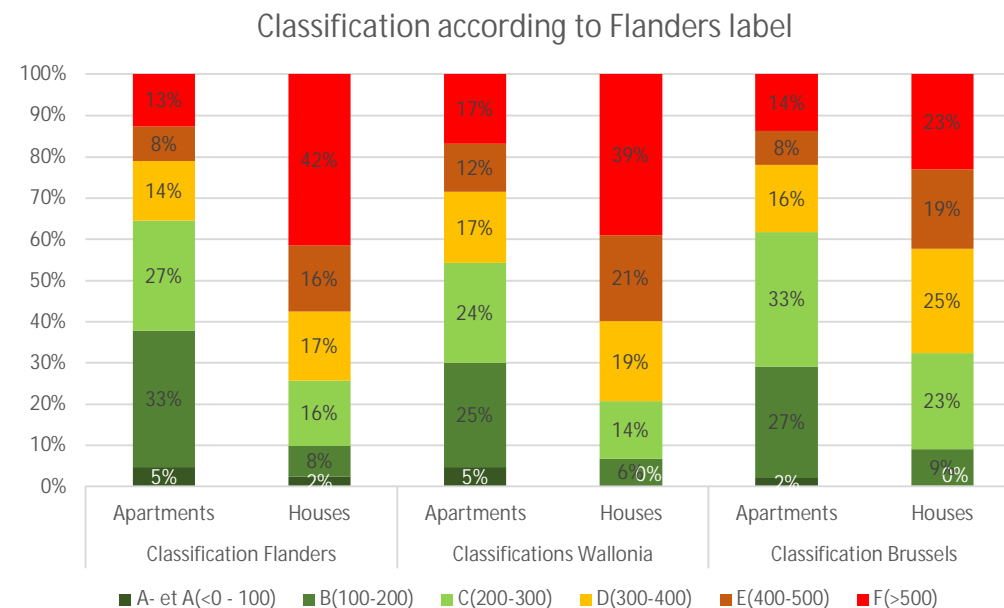
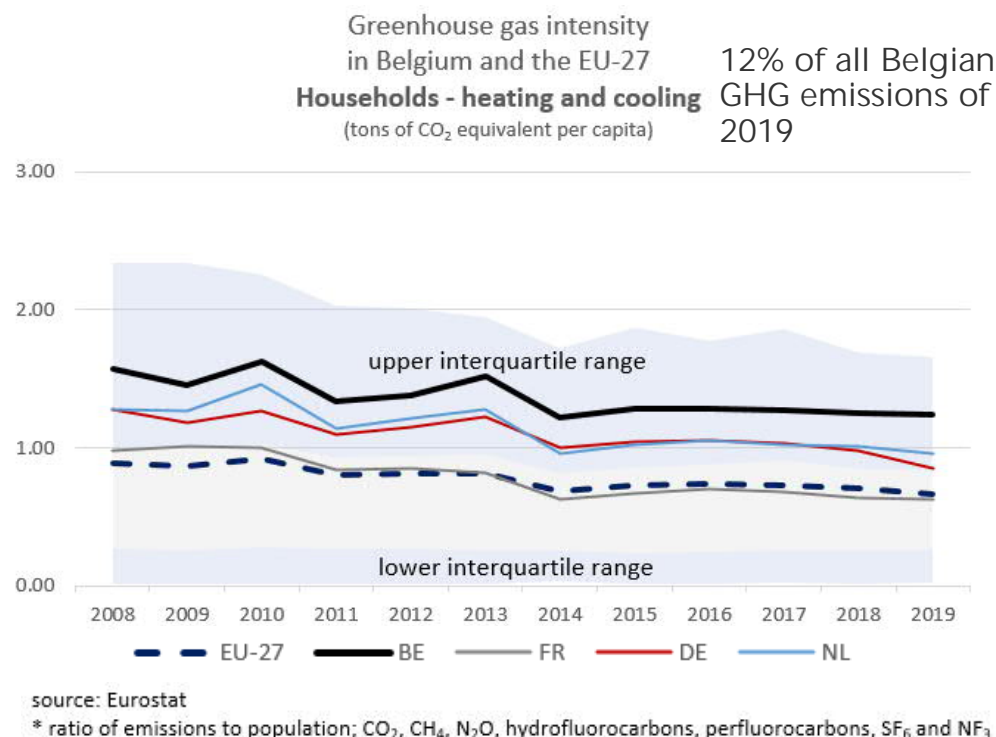
source: Eurostat

* emissions of CO₂, CH₄, N₂O, hydrofluorocarbons, perfluorocarbons, SF₆ and NF₃

Source: Final National Energy and Climate Plan 2021-2030 Belgium

2. Energy efficiency of real estate as risk factor for transition risk

2.1 Real estate important contributor to greenhouse gas emissions in Belgium



Source: Regional energy/environmental agencies. Period covered by database: Flanders 2009-2019 – Wallonia 2010-2019 – Brussels 2011-2019

Explanations behind the poor energetic performance of Belgian buildings

- ☐ lots of independent houses (vs. apartments)
- ☐ age of the buildings
- ☐ above average space of living for all income classes.

2. Energy efficiency of real estate as risk factor for transition risk

2.2 Policy measures directed at reducing GHG emissions

- Policies targeting climate relevant sectors are increasing and becoming more ambitious
- Carbon prices are rising and are expected to increase further

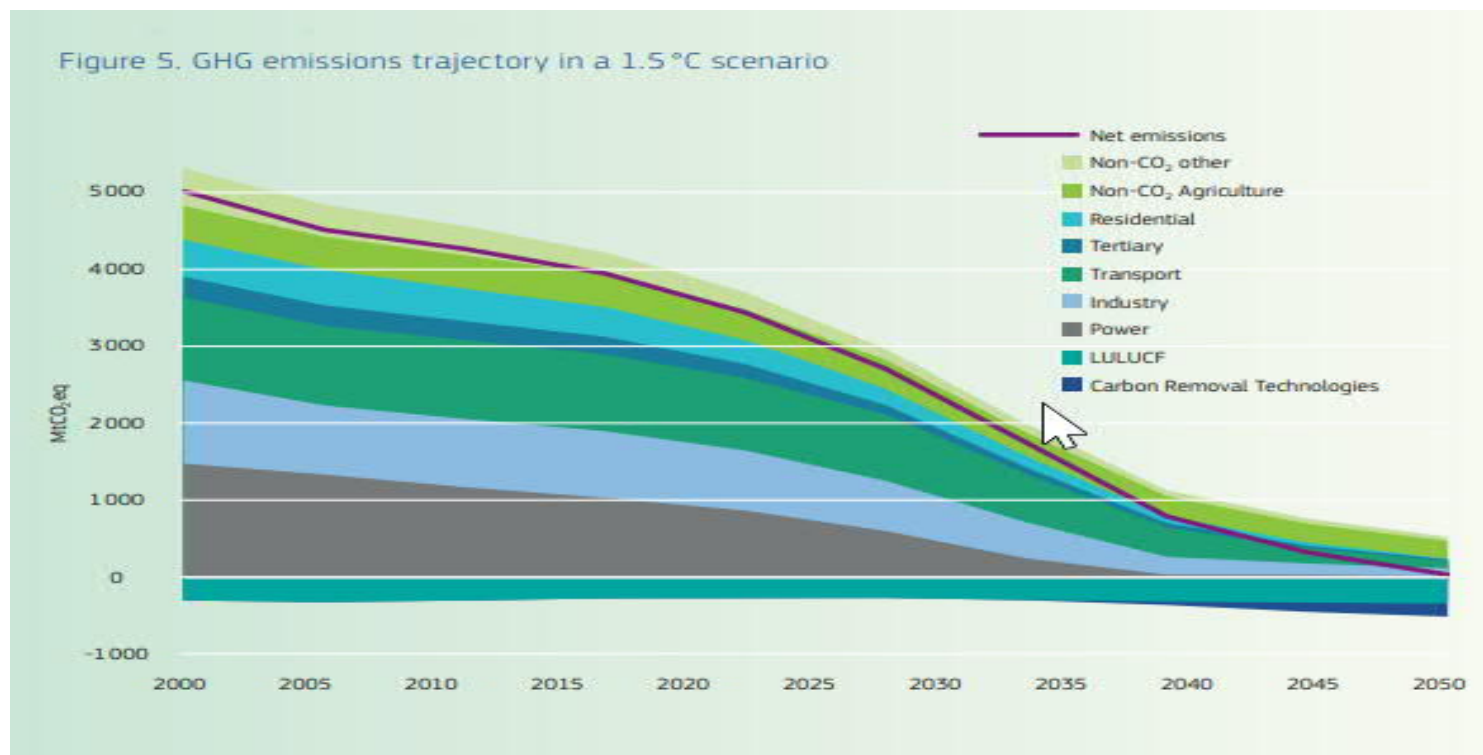


European Emission Allowance
(€ per ton CO₂)



2. Energy efficiency of real estate as risk factor for transition risk

2.2 Policy measures directed at reducing GHG emissions



Source EU Commission: Going climate-neutral by 2050

2. Energy efficiency of real estate as risk factor for transition risk

2.2 Policy measures directed at reducing GHG emissions

“Belgium is one of the countries with the biggest policy gap”

Hans Bruyninckx Director EEA, Conference Fit for 55 6/10/21

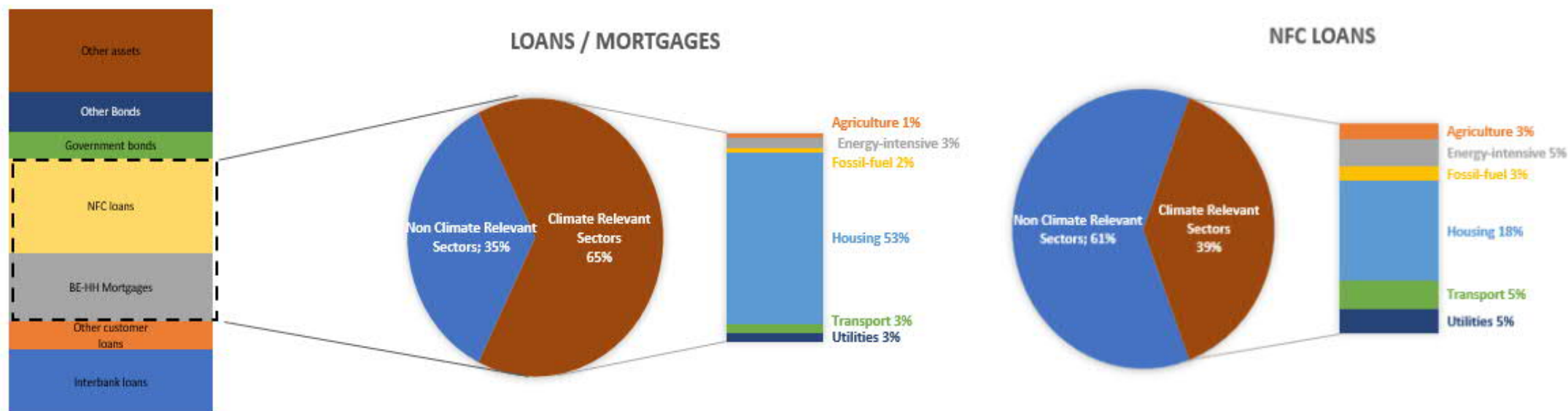
- [BE National Energy and Climate Plan 2021-2030 + BE long term strategy 2050](#): Building and transport sector are most important sectors for taking further measures to reduce GHG emissions in Belgium
- [European Green Deal](#): Renovation of both public and private buildings has been singled out as a key initiative to drive energy efficiency and deliver on objectives.

-> minimum energy performance for buildings + (carbon tax) are considered to be likely policy measures to be taken

2. Energy efficiency of real estate as risk factor for transition risk

2.3 Transition Risks

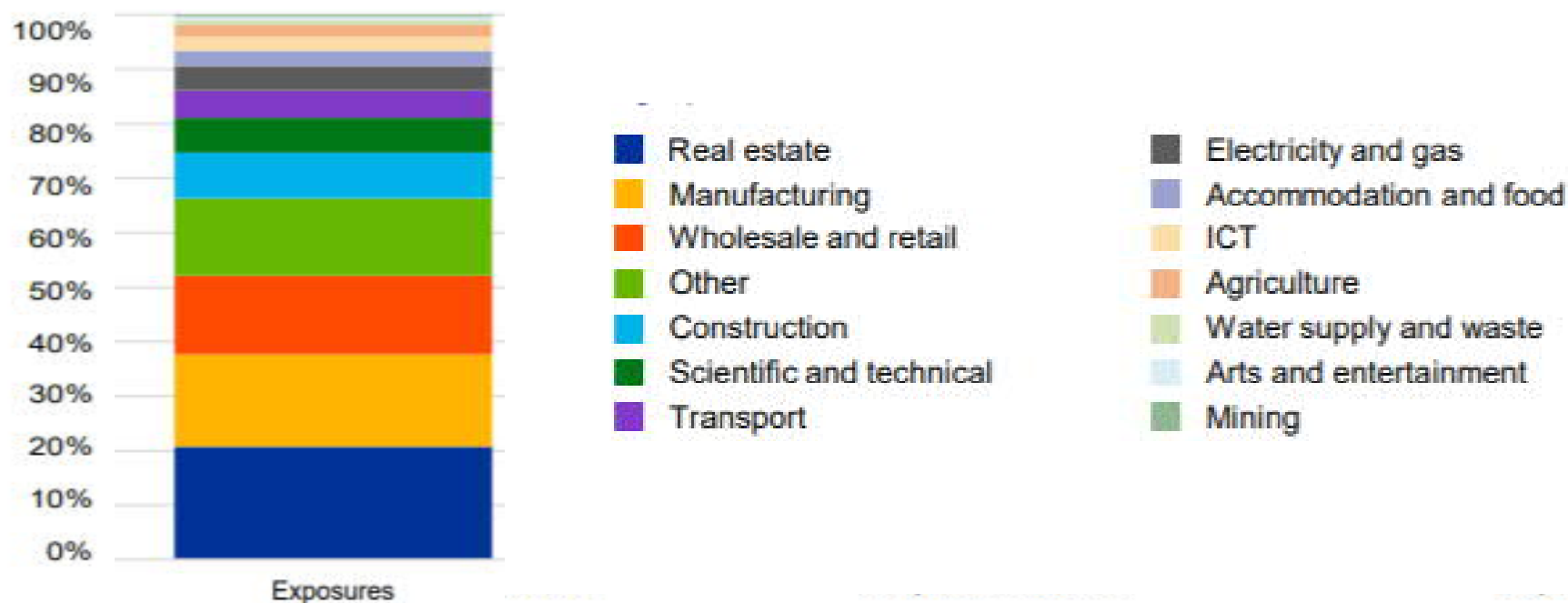
Banks (12/2020)-Belgium



2. Energy efficiency of real estate as risk factor for transition risk

2.3 Transition Risks

Banks (12/2018)-Europe



Source: ECB calculations based on Urgentem data (2018).

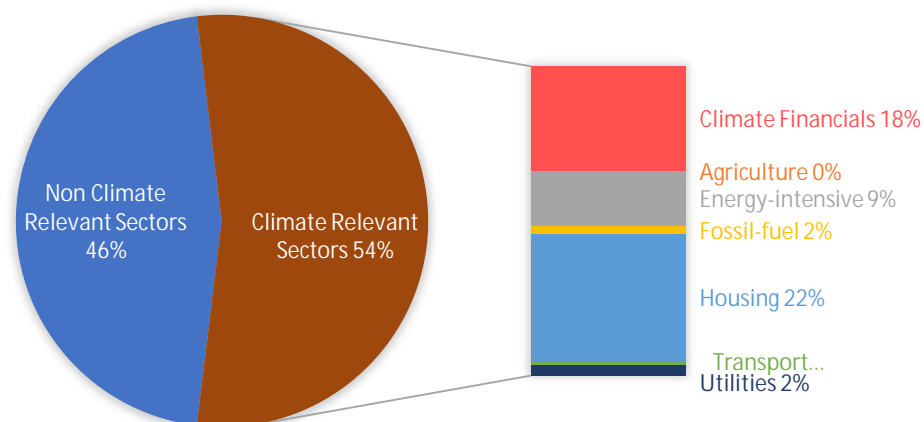
Notes: Level 1 NACE sectors are shown.

2. Energy efficiency of real estate as risk factor for transition risk

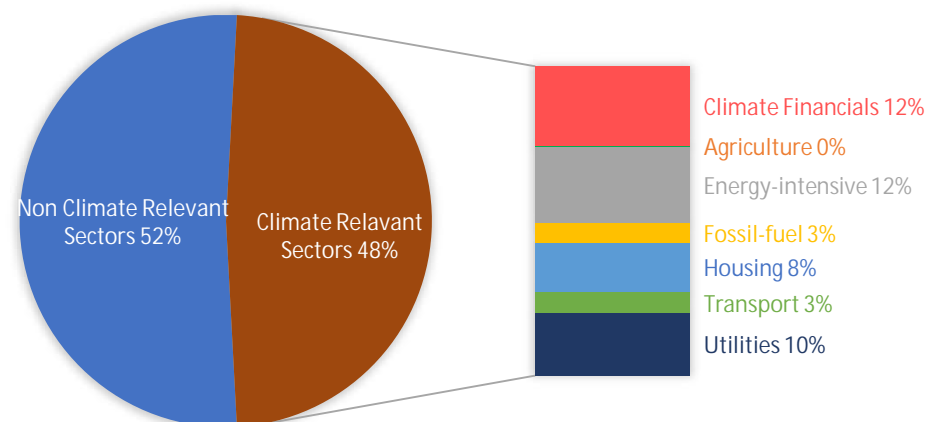
2.3 Transition Risks

Insurance companies (12/2019)- Belgium

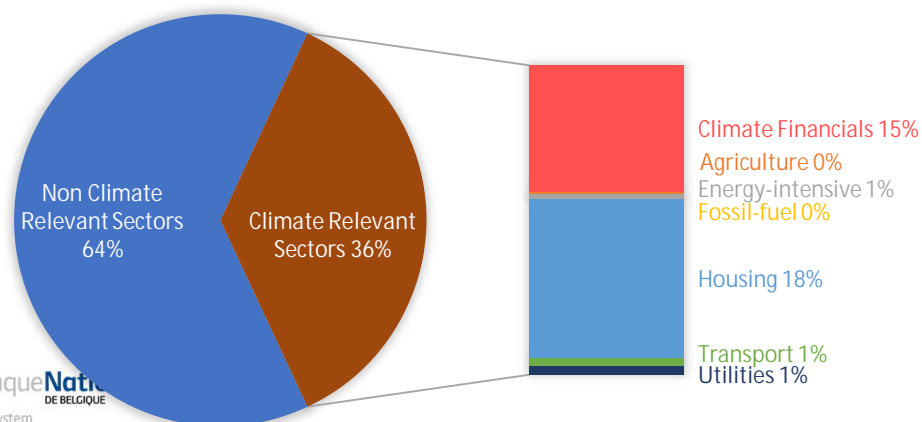
EQUITY



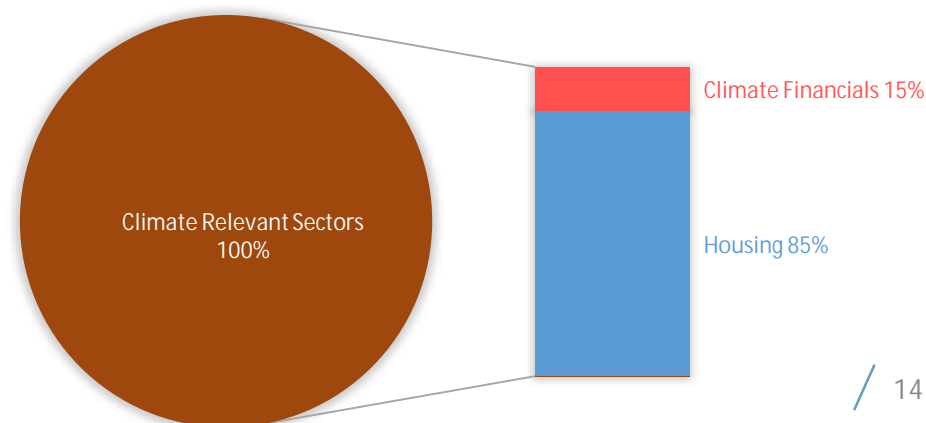
CORPORATE BONDS



LOANS



MORTGAGES



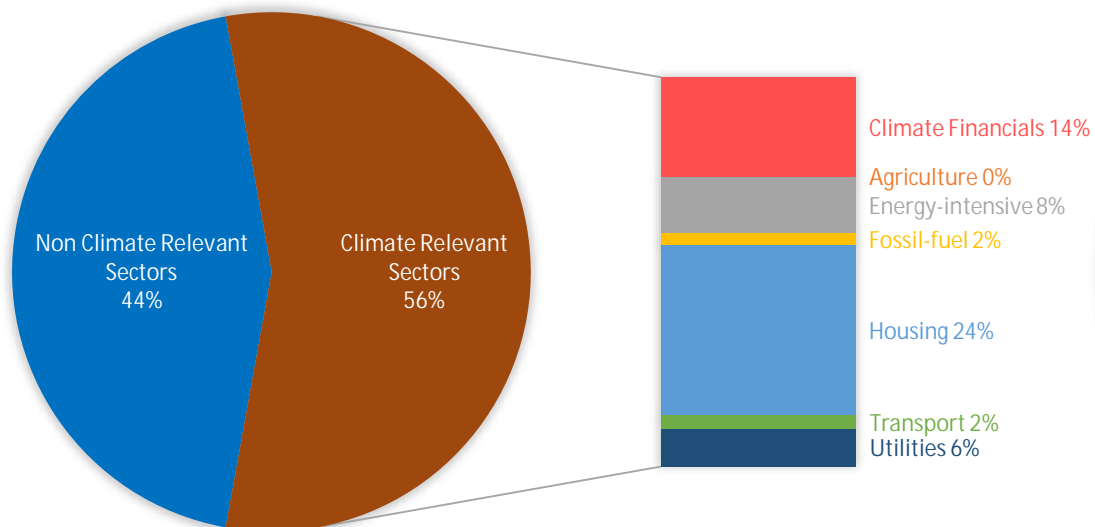
2 Climate related risks and sustainable finance in the Belgian financial sector

2.3 Transition Risks

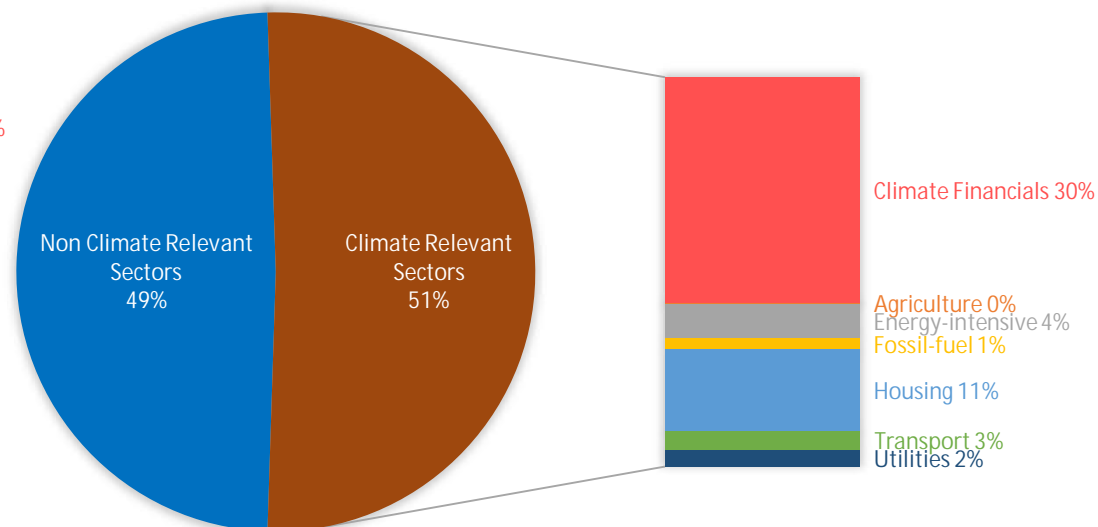
Insurance companies (12/2019)

EQUITY / CORPORATE BONDS / LOANS / MORTGAGES
YE 2019

BELGIUM

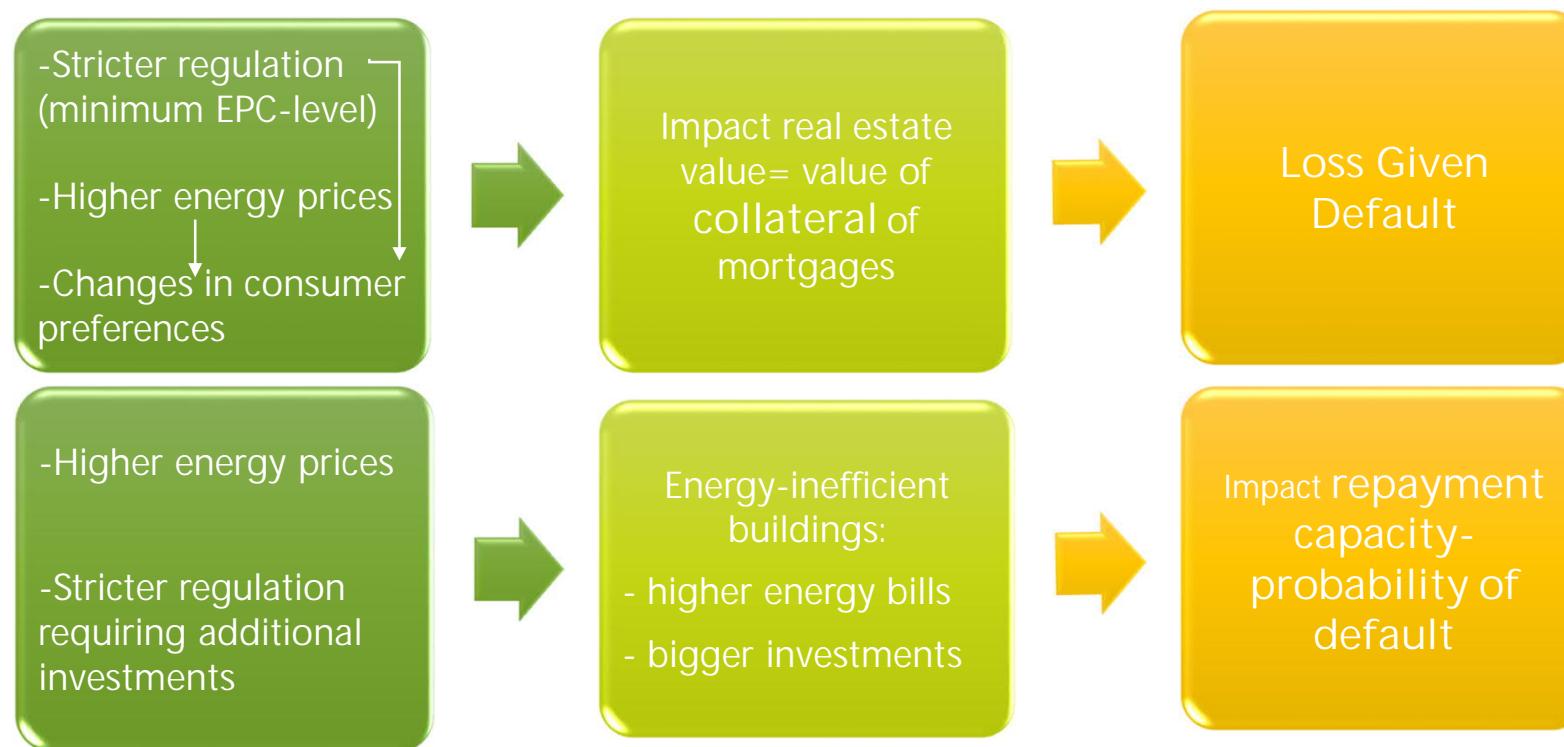


EUROPE



2. Energy efficiency of real estate as risk factor for transition risk

2.4 Energy efficiency impacting current and future credit risk



Cfr. Van Iendeloo (2020): "Climate-change-related transition risk associated with real estate exposures in the Belgian financial sector" (NBB FSR 2020) + Forthcoming EBA Discussion paper on "The justification for a dedicated prudential treatment for exposures related to assets or activities substantially associated with environmental objectives"

2. Energy efficiency of real estate as risk factor for transition risk

2.4 Energy efficiency impacting current and future credit risk

Research and analysis to-date points to a correlation between higher energy efficiency and lower default rates and higher collateral values

- Collateral Value

- Energy efficiency is currently already a determining factor for the price of real estate
- The time it takes to sell the more energy efficient houses appears to be considerably shorter
- The price difference for energy-efficient houses has widened over time
- The pricing of energy standards is higher for high-income groups, more expensive houses, and in the capital region (compared to other regions).

-Zancanella, P, P. Bertoldi and B. Boza-Kiss (2018), "Energy Efficiency, the value of buildings and the payment default risk", JRC science for policy report.

-Damen (2019) Het effect van het EPC en energetische kenmerken op de verkoopprijs van woningen in Vlaanderen. Manuscript. KU Leuven.

-Copenhagen Economics (2015), Do homes with better energy efficiency have higher house prices?

- Probability Of Default

- Energy efficient mortgages have lower payment arrears
- Guin, B. and Korhonen, P.: Does energy efficiency predict mortgage performance? (January 2020) BoE Staff Working Paper No. 852
- Mortgages on A-rated Buildings are less likely to default
- EEDaP: Final report on correlation analysis between energy efficiency and risk

2. Energy efficiency of real estate as risk factor for transition risk

2.5 Scenario analysis

Probability of default

Stressed PDs for households in « inefficient » homes in case of:

- Higher energy costs
- Investments made abruptly to comply with new rules

- More vulnerable to other income shocks ?

Need to identify energy inefficient exposures

X

Loss given default

Stressed LGDs for households in « inefficient » homes in case of:

- Decrease in value due to lack of time/money to adapt to new (abruptly introduced) rules

- Potentially amplified by looser credit standards ?

Need to combine EPC-analysis with other indicators

=

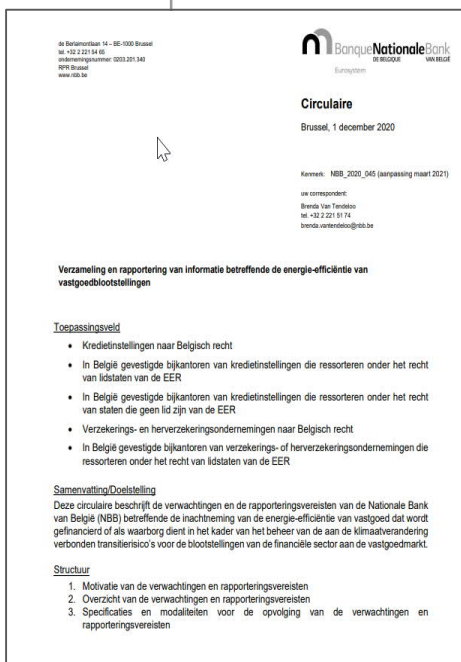
Higher credit losses and potential threat for financial stability, given relevance of real estate exposures for the Belgian financial sector ?

3. Need for EPC data

3.1 NBB efforts to encourage financial sector to gather EPC data and include them in their risk management

NBB initiatives regarding EPC

- ◆ FSR 2020 thematic article on climate-change-related transition risk associated with real estate exposures in the Belgian financial sector + Letter to sector
- ◆ Circular Letter NBB 2020 45 (December 2020) on gathering and reporting on information related to the energy performance of real estate exposures of financial institutions.
 - ◇ Financial institutions are asked
 - to gather information on energy performance of real estate exposures for
 - * New exposures as of 2021
 - * Recent existing exposures as of 2017
 - to report to NBB information on energy performance of new residential mortgage loans as of March/April 2022 + September 2021 (best effort basis)
- ◆ Initiatives to grant financial institutions access to regional EPC databases



3. Need for EPC data

3.1 NBB efforts to encourage financial sector to gather EPC data and include them in their risk management

Prudential context

NBB circular is part of a broader national macroprudential approach to real estate risks.

Other initiatives at European/international level already cover transition risks but NBB focuses on transition risks related to real estate exposures given the relevance of such exposures for the Belgian financial sector and hence, for financial stability in Belgium

Why collect EPC ?

The main goal is to ask financial institutions to start analyzing the transition risk related to their real estate exposures (cf. scenario analyses)

EPC data are also useful for financial institutions to i.a.:

- Comply with ECB guide on climate-related risks
 - *Various expectations regarding i.a. valuation of collateral, inclusion in risk appetite framework / credit policy ...*
- Comply with disclosure requirements / expectations
 - *Pillar 3 disclosures, taxonomy disclosures ...*
- Provide sufficient data for the ECB/SSM Climate stress tests in 2022
 - *Specific requests for EPC*

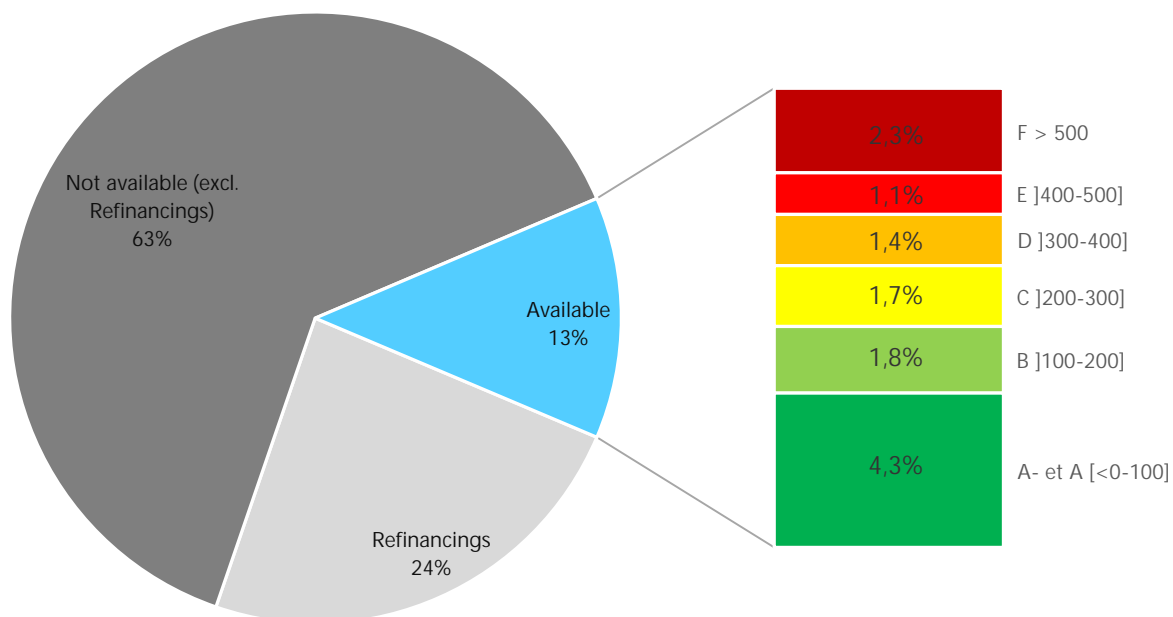
Data also useful for NBB to assess financial stability risks

3. Need for EPC data

3.2 NBB reporting EPC data

(new credit production residential mortgage loans in H1 2021, best effort basis ; classification according to Flanders EPC-label)

Need to identify
energy inefficient
exposures



■ Refinancings ■ Not available (excl. Refinancings) ■ F > 500 ■ E]400-500] ■ D]300-400] ■ C]200-300] ■ B]100-200] ■ A- et A [<0-100]

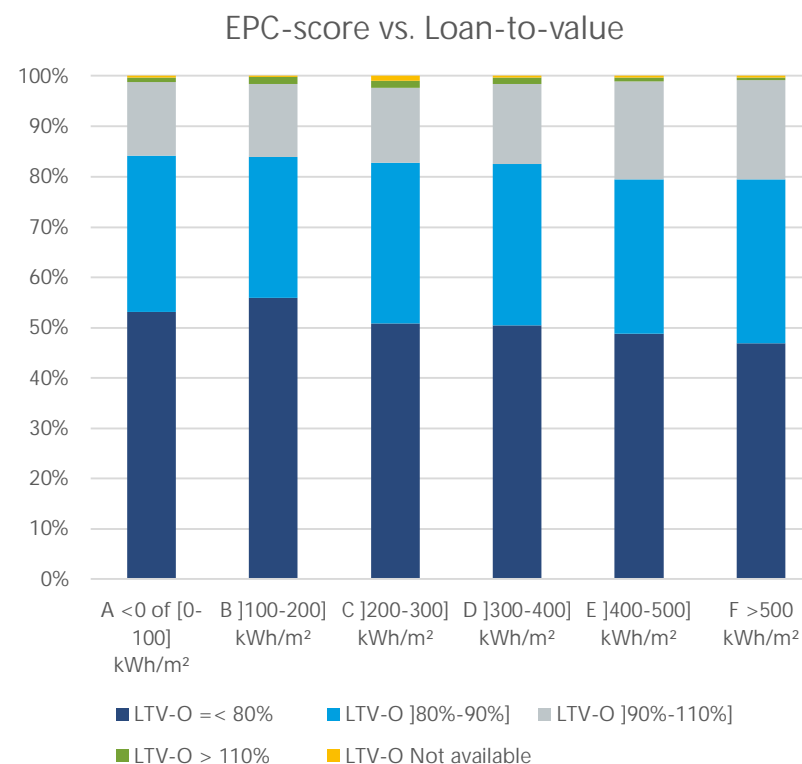
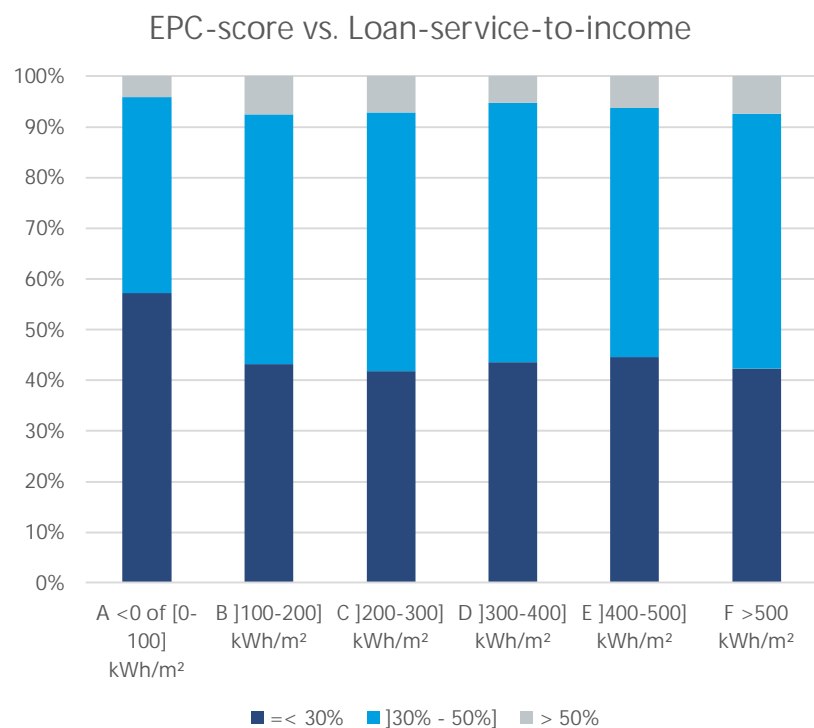
Important caveat: non representative data

3. Need for EPC data

3.2 NBB reporting EPC data

(new credit production residential mortgage loans in H1 2021, best effort basis ; classification according to Flanders EPC-label)

Need to combine
EPC-analysis with
other indicators



Important caveat: non representative data

Conclusions

- Real estate is an important contributor to greenhouse gas emissions in Belgium
- Further measures to reduce GHG emissions in Belgium will most likely also target real estate
- Real estate exposures represent a very large share of the Belgian financial institutions' balance sheet
- Point of attention for NBB, as potential threat for financial stability
- Climate-related transition risks need to be taken into account by financial institutions
- Need to collect data on energy performance of real estate exposures / collateral and include them in risk management practices

Retail Credit Sustainable Loans Committee BVK/Febelfin

Commissie Sustainable Loans BVK/Febelfin



Secretariat



**BNP PARIBAS
FORTIS**
Coordinator



Crelan

Belfius



ARGENTA

Triodos Bank

ING

onesto
woonkrediet dat hansen biedt

STATER

Atradius
Managing risk, enabling trade

Febelfin

Frequentie
Maandelijks / 2 wekelijks

Stakeholders already involved



Vlaanderen



Wallonie



Service Public
Fédéral
FINANCES



GOVERNEMENT DE LA RÉGION DE BRUXELLES-CAPITALE
BRUSSELSE HOOFDSTEDELIJKE REGERING



Banque Nationale Bank
DE BELGIË VAN BELGIË
Eurosysteem



**Banque européenne
d'investissement**
La banque de l'UE



EMF
EUROPEAN MORTGAGE
FEDERATION

— REAL ESTATE —
EXPERTS



SAMEN MAKEN WE
MORGEN MOOIER
OVAM



verenigde eigenaars

CIBweb
VLAAMSE VASTGOEDMAKELAARS

TEGoVA
THE EUROPEAN GROUP OF VALUERS' ASSOCIATIONS

Febeg

FEDNOT



KU LEUVEN

ULB

UNIVERSITÉ
LIBRE
DE BRUXELLES

UNIVERSITEIT
GENT



Confédération Construction
Construction, énergie & environnement



**Vlaamse
Confederatie Bouw**
Bouw, energie & milieu





How can the financial sector play a role in stimulating Energy Efficiency ?

Awareness



How can the financial sector play a role in stimulating Energy Efficiency ?

Government
Support

Awareness



How can the financial sector play a role in stimulating Energy Efficiency ?

Government
Support

Awareness

EE &
Value



How can the financial sector play a role in stimulating Energy Efficiency ?



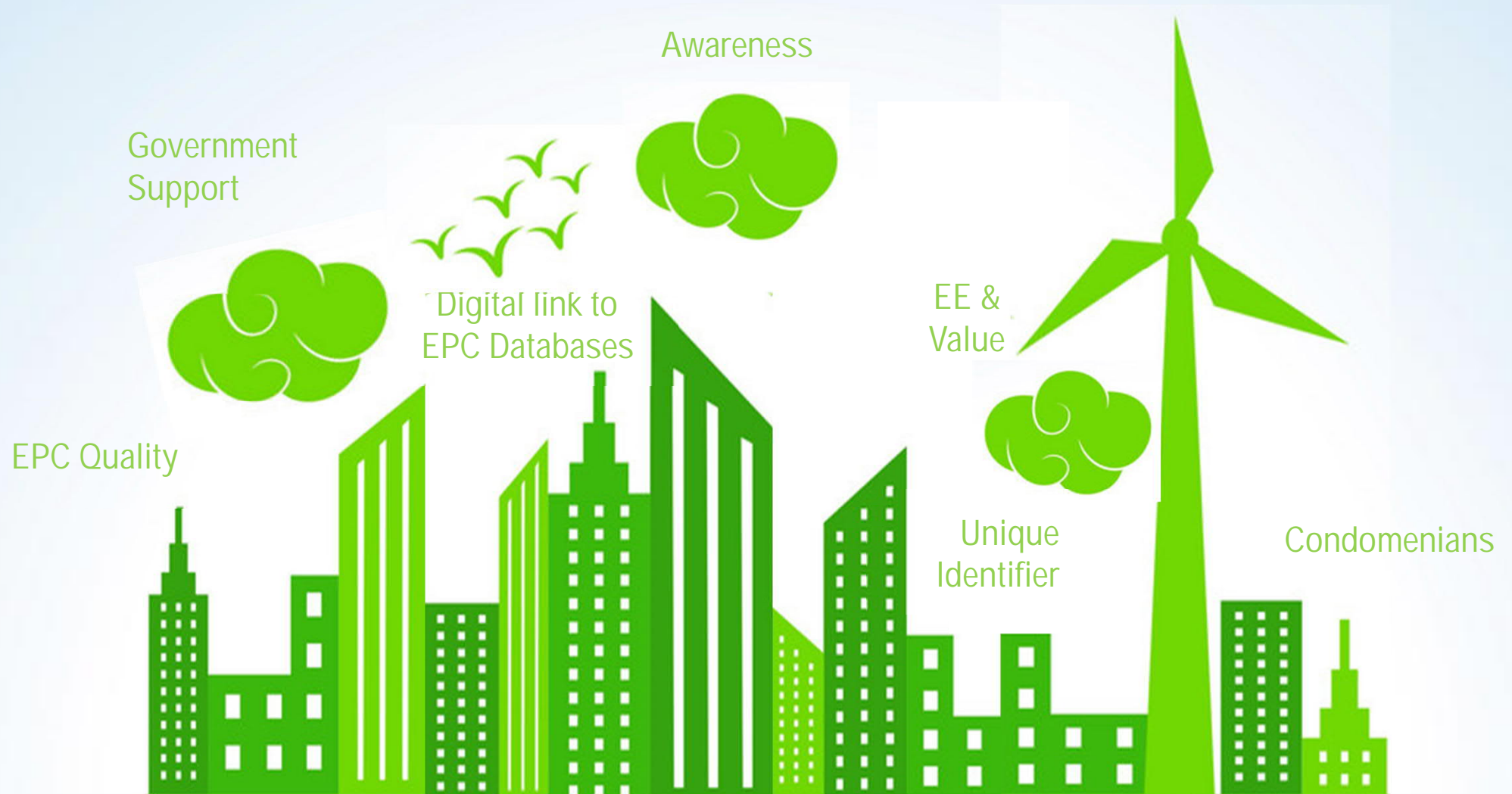
How can the financial sector play a role in stimulating Energy Efficiency ?



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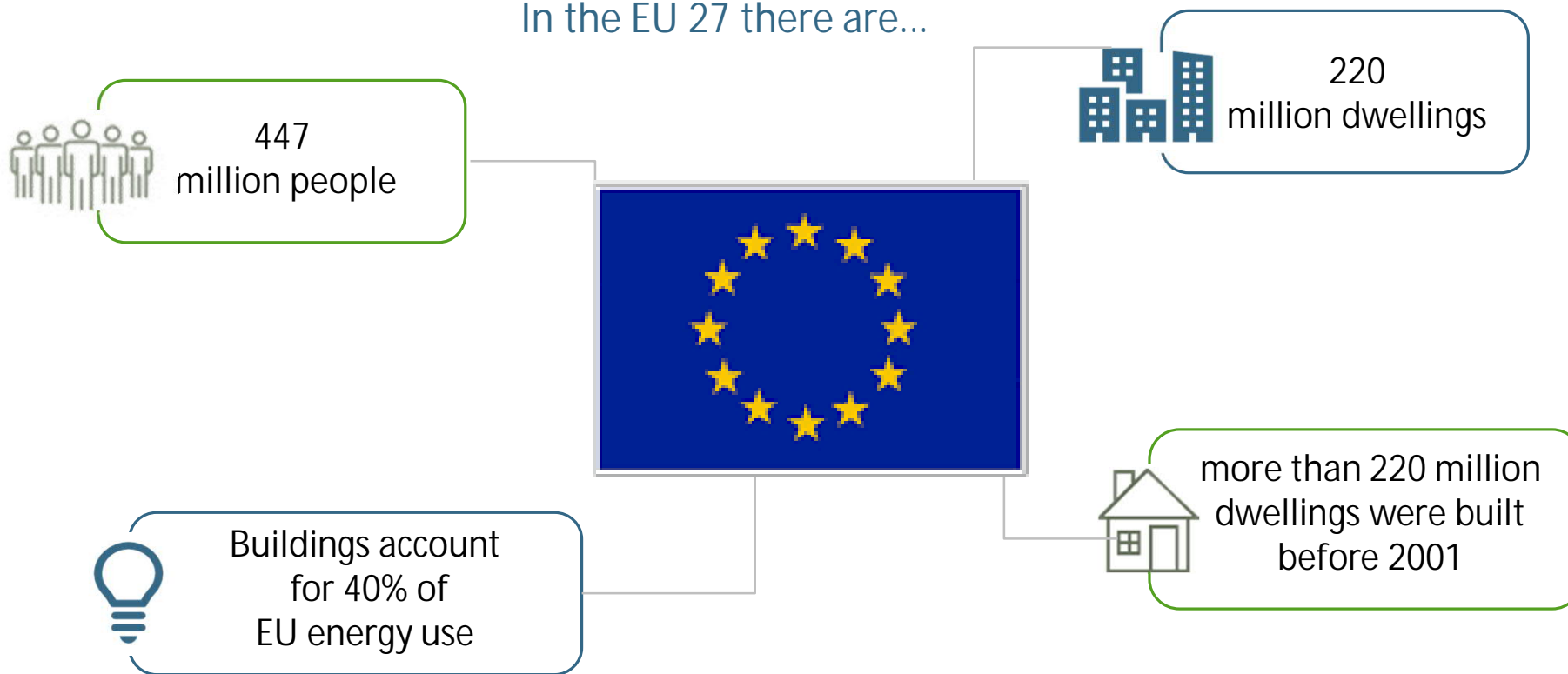
How can the financial sector play a role in stimulating Energy Efficiency ?



Energy Efficient Mortgages Initiative (EEMI) & Energy Efficient Mortgage Label (EEML)

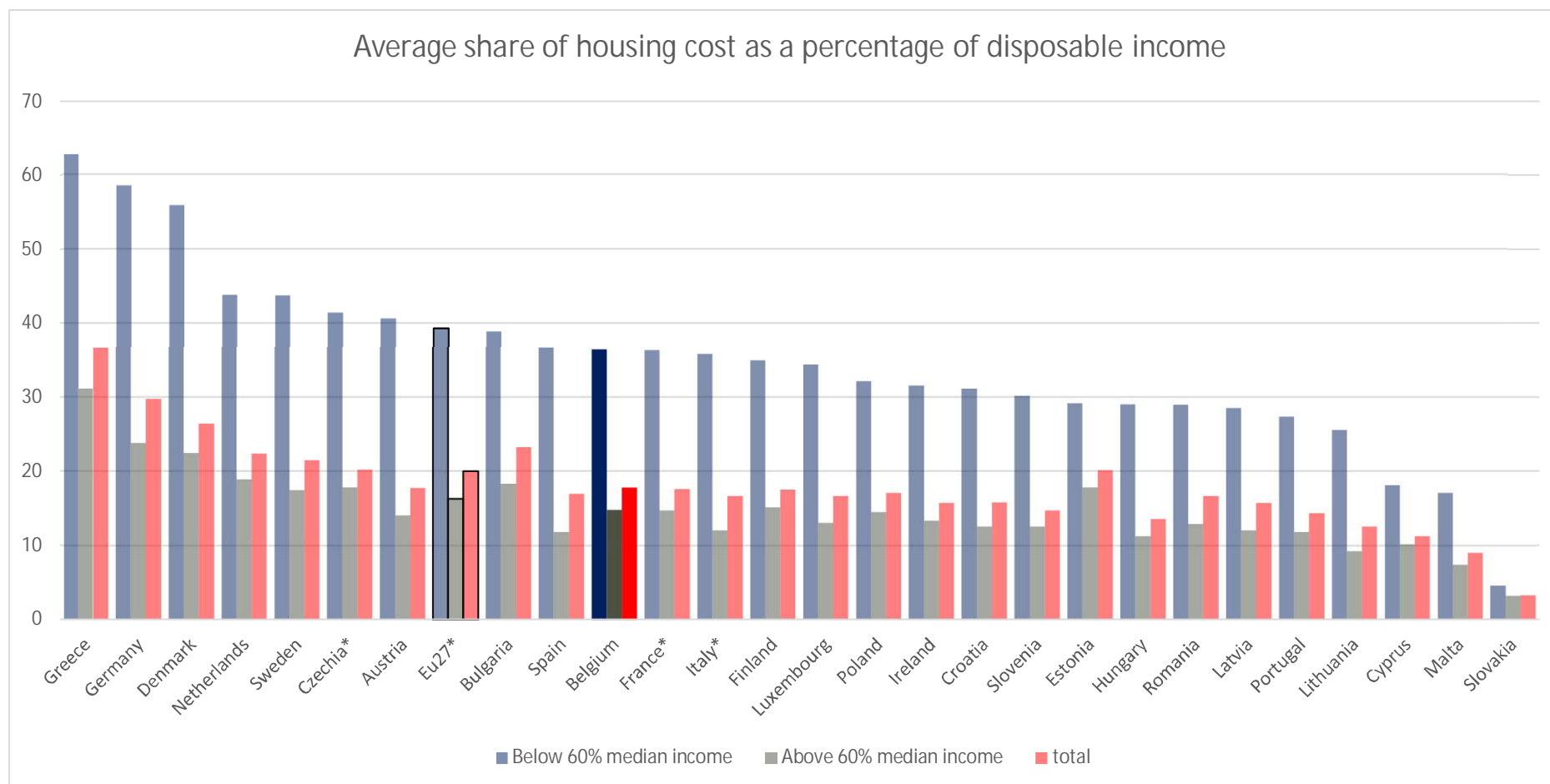
Bring Energy Efficiency to the EU buildings stock: Banks can Play a Game Changing Role

In the EU 27 there are...



€180 BN OF YEARLY INVESTMENTS IS NEEDED TO REACH EU TARGETS
A significant share of it must come from the private sector

Average share of housing cost in EU by income group

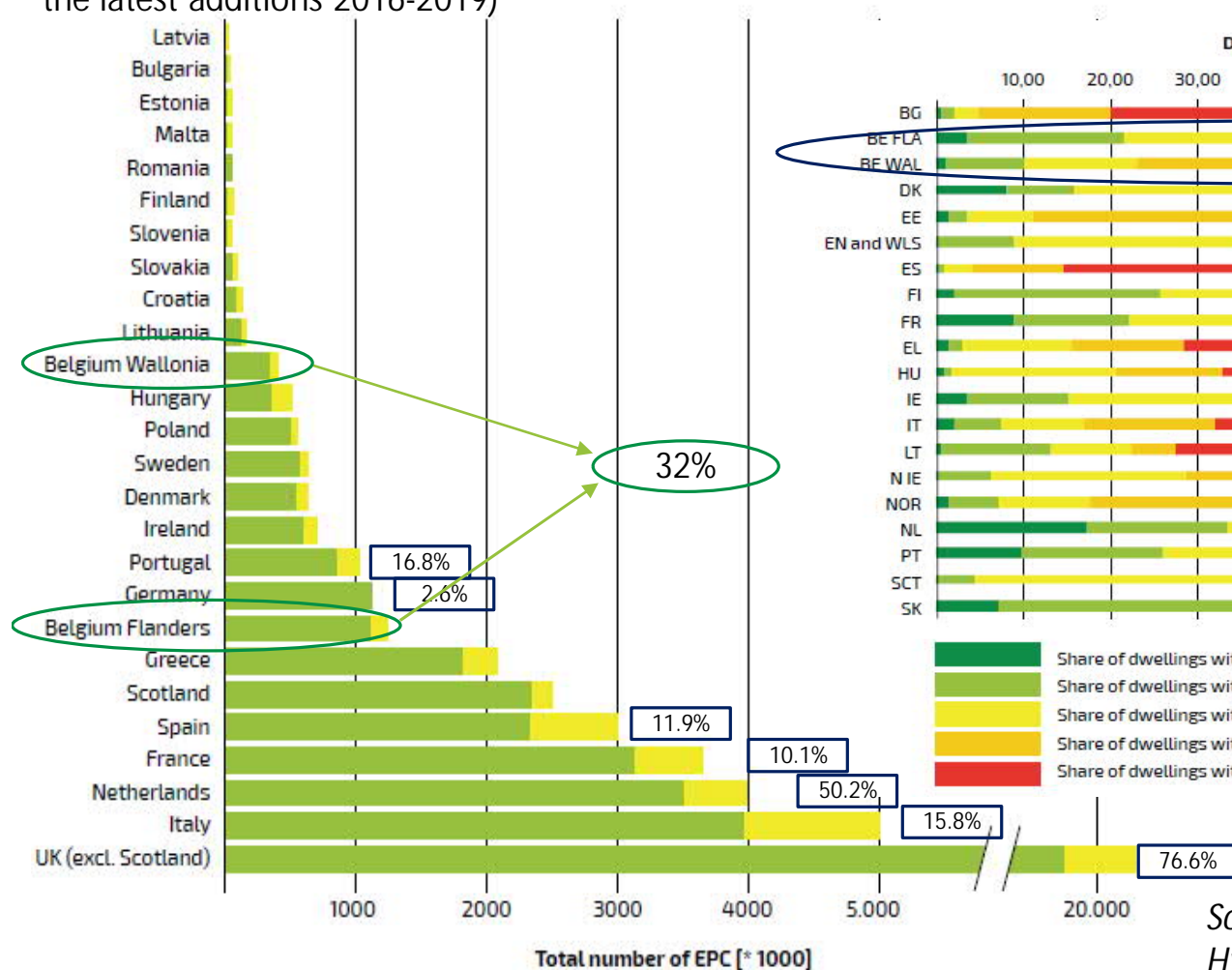


Notes: *datapoint refers to 2019

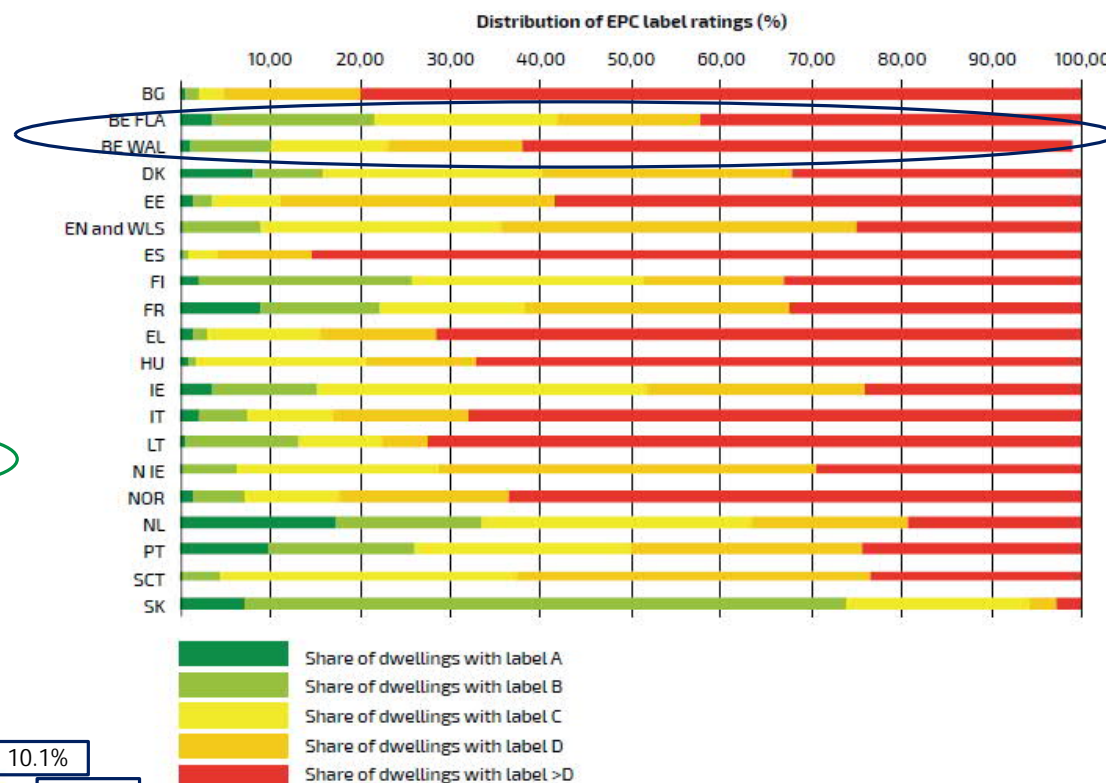
Source: Eurostat

EPC overview in Europe

Number of EPC registered per country. Yellow bar indicates the latest additions 2016-2019



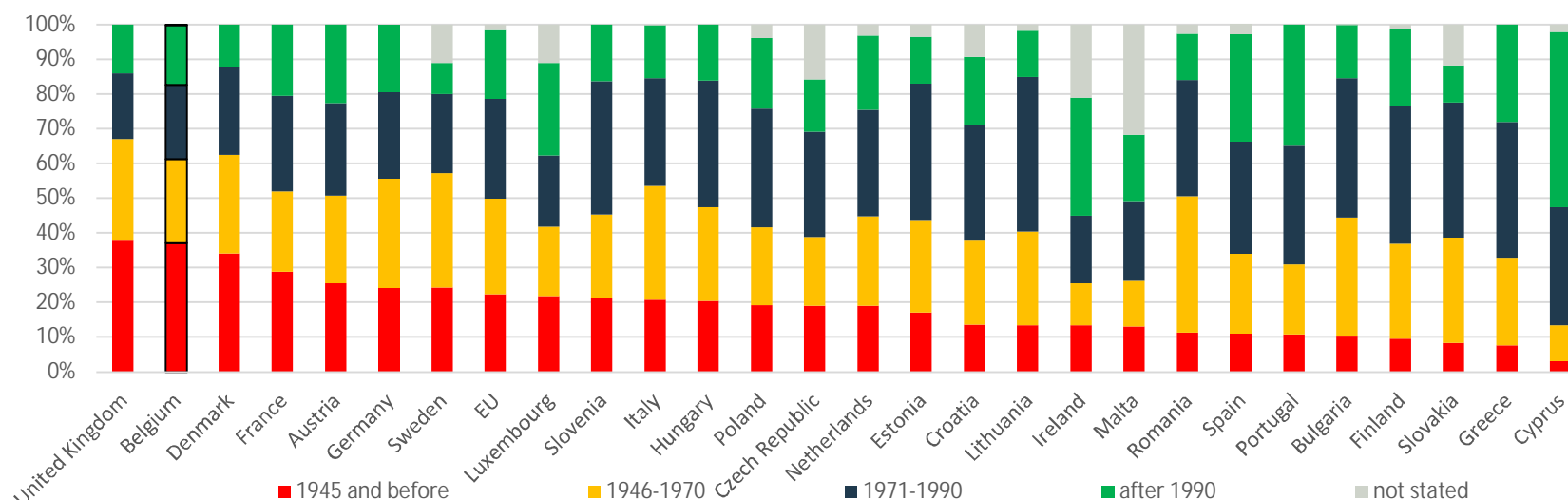
Share of registered EPC ratings across EU, Norway and UK



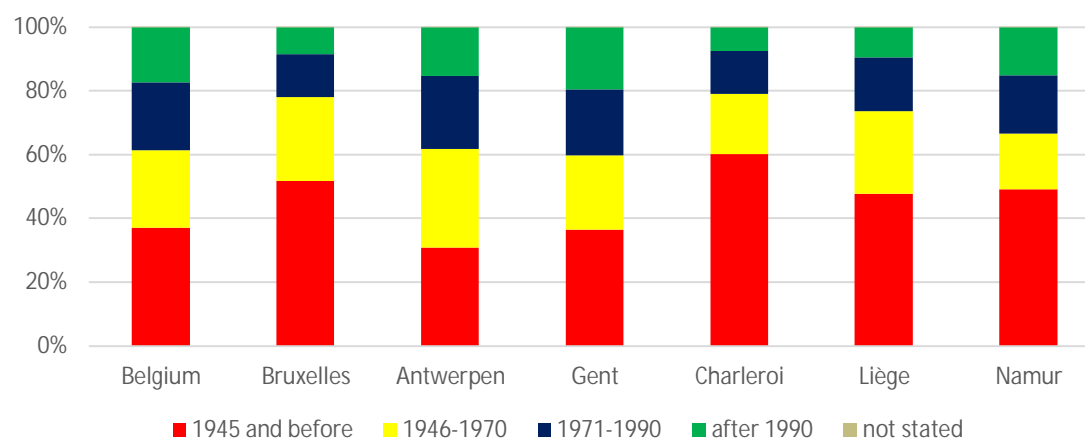
Source: Xtendo report on EPC (March 2020), Hypostat

House age structure in Belgium and Europe

Housing age structure in the EU



House age structure of selected Belgian cities



About EEMI

The Energy Efficient Mortgages (EEM) Initiative is a pan-European private bank financing mechanism that aims to stimulate and finance investment in energy efficient buildings, energy saving renovations in order to secure a greener and more sustainable future for all.

Our stakeholders: seventy lending institutions, which represented 55% of mortgages outstanding in the European Union supported by fifty-two Supporting Organisations and by the Advisory Council.

EEMI develops the market through the establishment of national market hubs across Europe, our national hubs are active in Belgium, Germany, Hungary, Italy, the Netherlands, the Nordics, Spain and the UK (Scotland).

Our Workstreams

Product	Data	Partnerships	Correlation analysis
Common definition of energy efficient mortgage.	EEM data collection template.	Advisory Council solutions and institutional support.	The econometric analyses carried out within EeDaPP proves the existence of a negative correlation between asset' s energy performance and credit risk: the «greener» the asset, the lower the credit risk.
	Harmonised Disclosure Template (HDT).	EIB / EEMI Financing Scheme.	A negative correlation between PD & EE (A-rated dwellings) exists.
			Degree of Energy Efficiency matter.

Check our findings:

[EEMI Master Template](#)
[EEM Label Harmonised Disclosure Template](#)
[BE, IT, NL & UK Correlation Analysis – 2019](#)
[Italian Correlation Analysis – 2020](#)
[Extended Dutch Correlation Analysis – 2021](#)

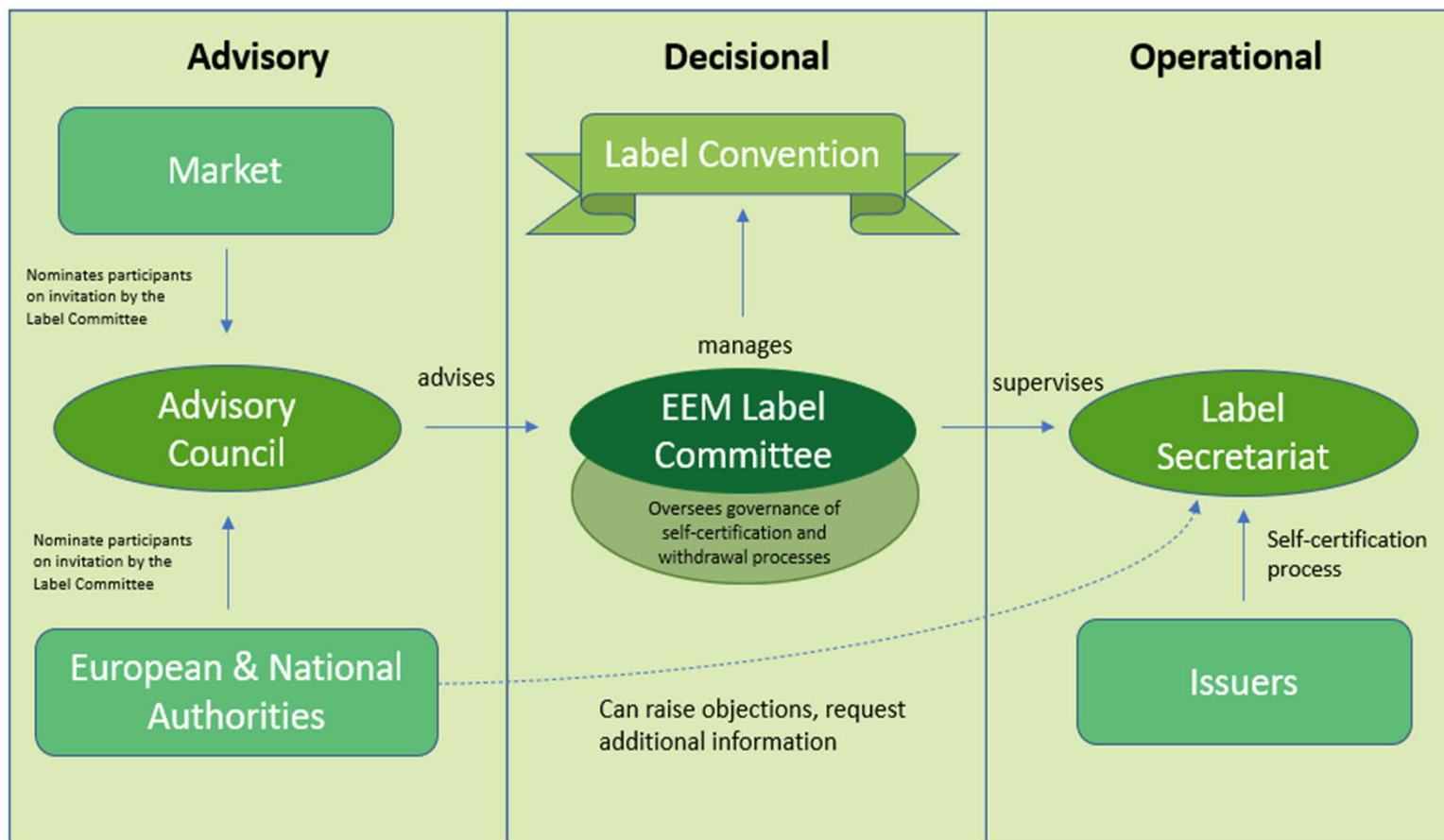
The EEML

Officially launched on 12 February 2021 in the presence of Mr João Galamba, Deputy Minister and Secretary of State for Energy, Portuguese Presidency of the European Council and Ms Kadri Simson, European Commissioner for Energy.

The objectives

- Regulatory alignment
- Improve awareness of EE
 - Asset Resilience
 - Transparency

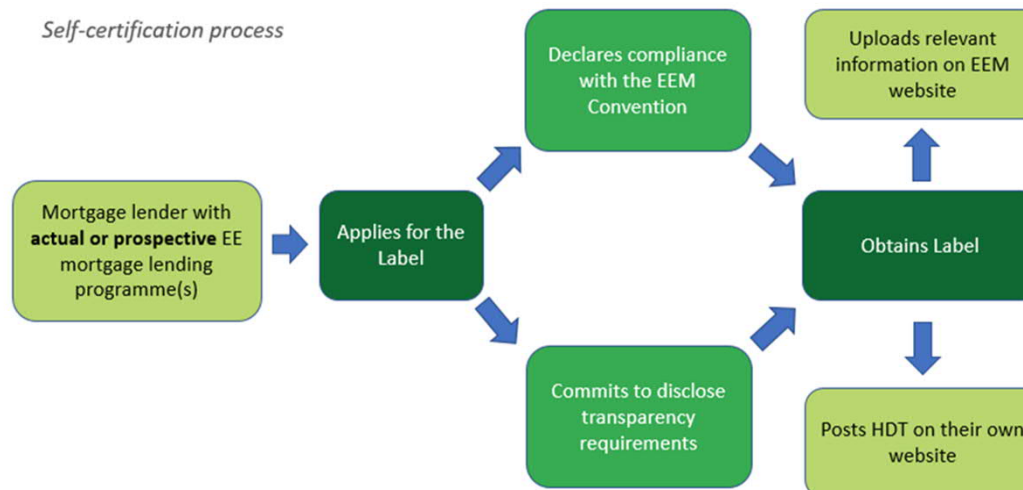
The EEML Governance Structure



- [EEM Label Committee](#)
- [Advisory Council](#)
- [Label Secretariat](#)

The EEML distribution

- 38 Products (+ 2 complementary products)
- 31 Lending institutions (banks, residential mortgage service providers, alternative investment funds etc)
- 13 countries



Core Elements of the EEM Label - HDT

The Harmonised Disclosure Template (HDT) is based on the successful Harmonised Transparency Template (HTT) of the Covered Bond Label.

Each EEM product receives one Label and needs to report one separate HDT at least every quarter.

The HDT has the following structure:

1. A1. EEM General Mortgage Assets: Tab where information on the general mortgage portfolio is requested (e.g. location, size, ESG, repayment type, LTV, NPL, type of building) the information is subdivided also for type of real estate (residential or commercial)
2. B1. EEM Sustainable Mortgage Assets: Tab which requests the same set of information as tab A1, but focused only on the subset of mortgages which are EEM compliant
3. EEM Harmonised Glossary: Tab where definitions and further comments on the sections of the HDT can be introduced

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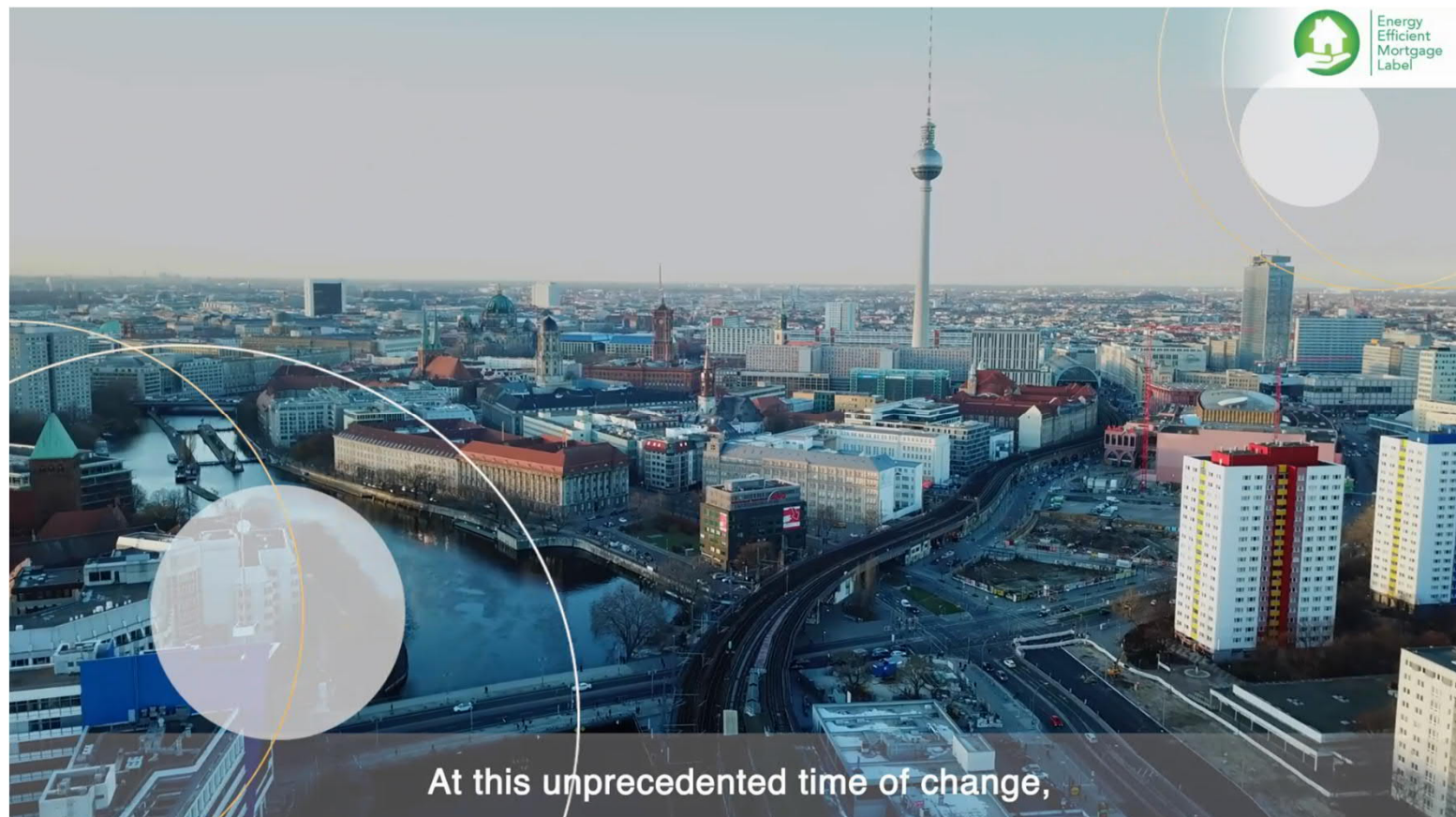
WEBINAR

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"Financing of residential property as a lever to improve energy efficiency" by Elisabeth Minjauw, BNP Paribas Fortis

"The Energy Efficient Mortgage Initiative (EEMI): a driver for a new ecosystem" by Luca Bertalot, EMF-ECBC

Our video: Funding the Hope for a Better Future



<https://www.youtube.com/watch?v=jDUxdjvH0zo>

Find out more
about EEMI

Website:

<https://energyefficientmortgages.eu/>

Twitter:

https://twitter.com/emf_ecbc

Linkedin

<https://be.linkedin.com/company/european-mortgage-federation>