

The Importance of the Energy Performance of Buildings Directive



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***Reducing the energy footprint
in the built environment***

EU POLICY FRAMEWORK

Policy framework for 2030: ambitious climate and energy targets



Minimum **40%** cut in greenhouse gas emissions compared to 1990 levels



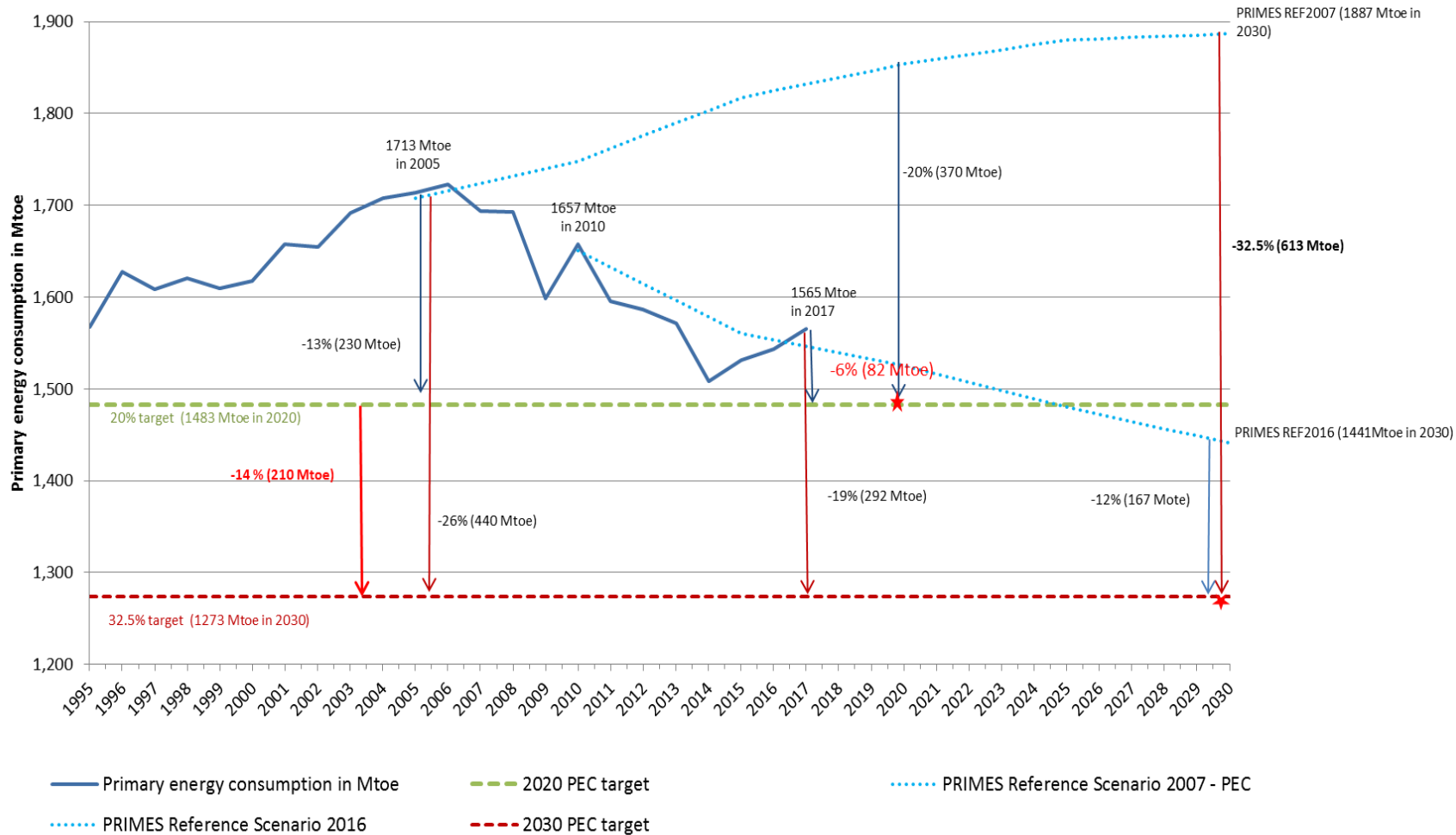
At least a **32%** share of renewables in final energy consumption



At least **32,5%** energy savings compared with the business-as-usual scenario

Vision for 2050: achieving net-zero GHG emissions, including highly energy efficient and decarbonized EU building stocks

... 2020 AND BEYOND



<https://ec.europa.eu/energy/en/studies/drivers-recent-energy-consumption-trends-across-sectors-eu28>

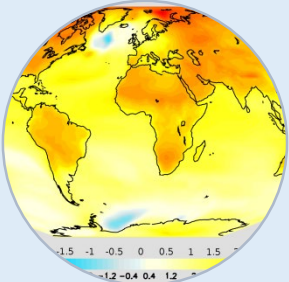
<https://energybimcert.eu>

BUILDINGS ARE IMPORTANT

- 75% of the housing stock is energy inefficient
- Construction rates / worse economic conditions
 - low demolition rates (0.1-0.2% per year)
 - limited new construction activities (0.4-1.1% per year)
 - very **low renovation rates** (0.4-1.2% per year)
- Improvements in buildings have **positive benefits on comfort** and well-being and on **energy bills**
- Buildings connect demand and supply, energy efficiency and **renewable** energy, can hold **storage** and charge **electric vehicles**
- Housing faces the largest financing gap for the EU to reach its 2030 objectives
- 150 million Europeans live in rented dwellings and four out of ten live in flats facing complex governance and ownership models

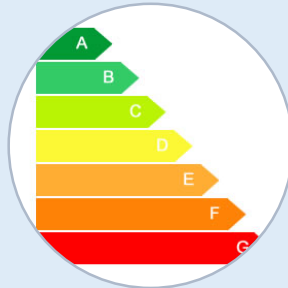
CHALLENGES

in the building sector



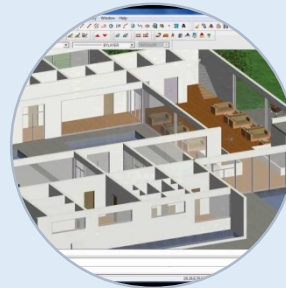
Climate change

- Energy consumption
- Renewables



Higher standards

- Energy efficiency
- Air tightness



Technological change

- BIM, IoT and connected grids
- Prefabrication, 3D printing



Fragmented industry

- SME's
- Separated disciplines



The overall architecture of the EPBD is working

- **Nearly Zero-Energy Buildings (NZEB)** set a 'future-proof' vision
- **Cost-optimality** is an efficient approach to set energy requirements
- **Energy Performance Certificates (EPCs)** is a useful demand-driven market tool

There is still significant potential to be enhanced

Set ambitious **targets for new buildings** and **increase renovation of existing buildings**

Wider benefits of NZEB and highly energy performance buildings

- Health, comfort, indoor air quality, increased property value, increased productive (for offices), etc.
- Better support of indoor environment quality, life-cycle performance and resource-efficiency

Strengthen the implementation of **EPCs** (quality, credibility, usability, including as a tool for finance mobilisation)

Better data - upgrade EU buildings data and analytics, including through **big data approaches**

- Databases can be a key instrument for reinforced compliance

REVISED EPBD 2018

✓ **Support building renovation by linking policy and financing**

✓ ***Modernisation by ensuring the use of ICT and modern technologies***



REVISED EPBD 2018



Requirement for Member States to establish comprehensive strategies aiming at a highly efficient and **decarbonised building stock** by **2050** and at a cost-effective transformation of existing buildings into **nearly zero-energy buildings**



Financial component: facilitate access to appropriate mechanisms (effective use of public funding; aggregation; de-risking)

<https://ec.europa.eu/energy/en/topics/energy-efficiency/energy-performance-of-buildings/long-term-renovation-strategies>

REVISED EPBD 2018



Smart Finance for Smart Building Initiative aims at unlocking investments and private financing through:

- ✓ **Effective use of public funding**

- ✓ **Technical Assistance and Aggregation of projects**

- ✓ **De-risking**
 - The De-risking Energy Efficiency Platform (DEEP) <http://deep.eefig.eu>
 - EEFIF Underwriting toolkit <http://valueandrisk.eefig.eu>

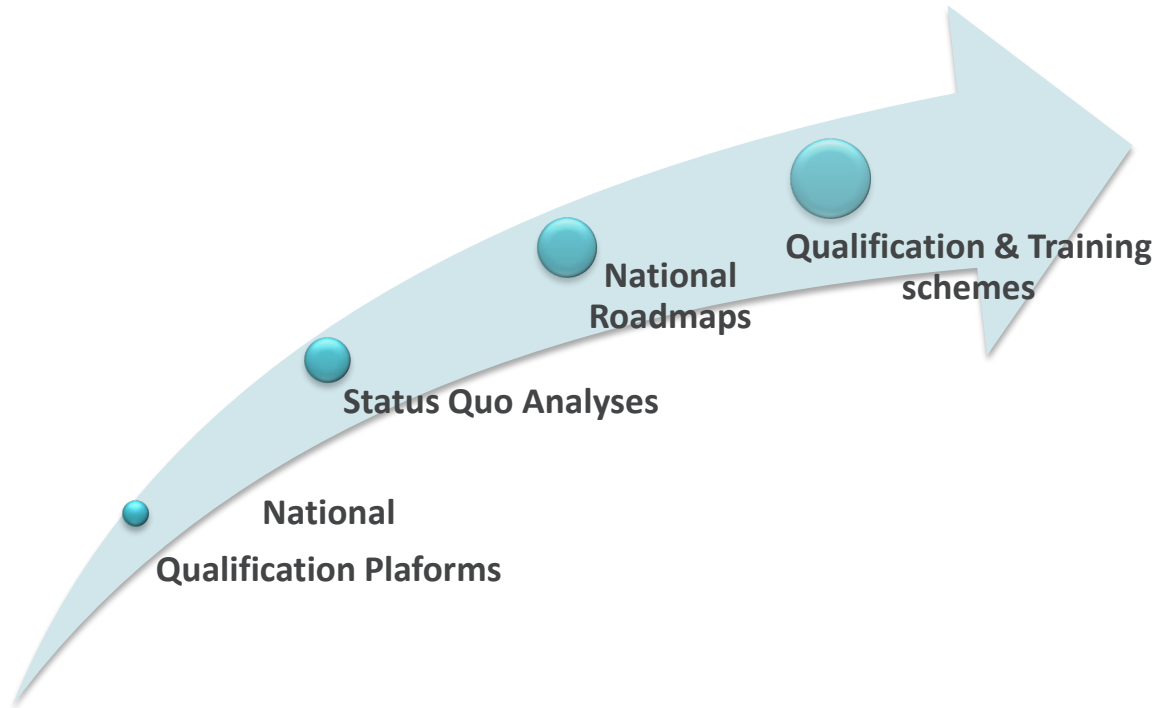
Pilot phase in 5 EU Markets: MT, FR, ES, NL and PT (and preliminary discussions in PL and IE)

BEYOND ENERGY SAVINGS

Wider
benefits of
NZEB and
highly
energy
performance
buildings

- Health
- Comfort
- Indoor air quality
- Lower bills
- Increased property value
- More demand
- Increased productive (for offices)
-

CONSTRUCTION SKILLS



<http://www.buildup.eu/en/skills>



research^{eu}

RESULTS PACK ON CONSTRUCTION SKILLS



EU FUNDING AFTER 2020

EU funding for sustainable energy investment after 2020



Increased mainstreaming across EU budget (25%)

- Cohesion Funds
- Invest EU
- **Horizon Europe**
 - €15 bn to Climate, Energy, Mobility
- **LIFE**
 - € 1 bn to Clean Energy Transition
- Connecting Europe Facility
- Innovation Fund



BIMcert Conference

22nd January 2020

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Thank you!

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