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## **EU BUILDINGS LEGISLATION: UP TO THE TASK TO DELIVER CLIMATE-NEUTRALITY?**

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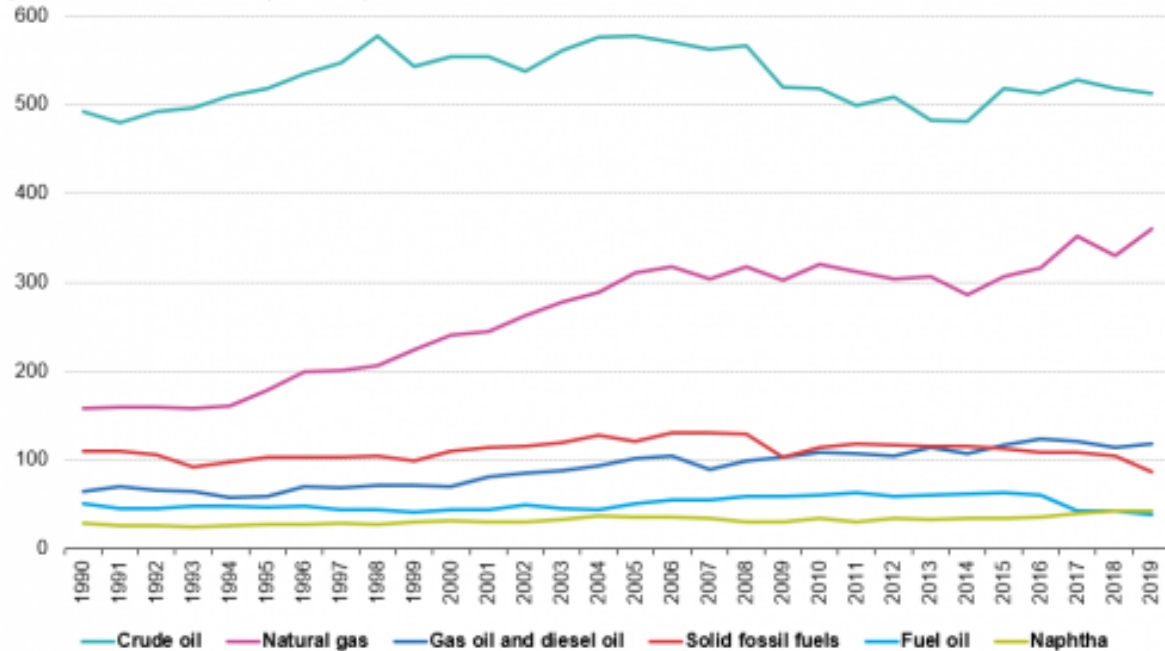
sEEnergies - Webinar

10/03/2023



# The Challenge

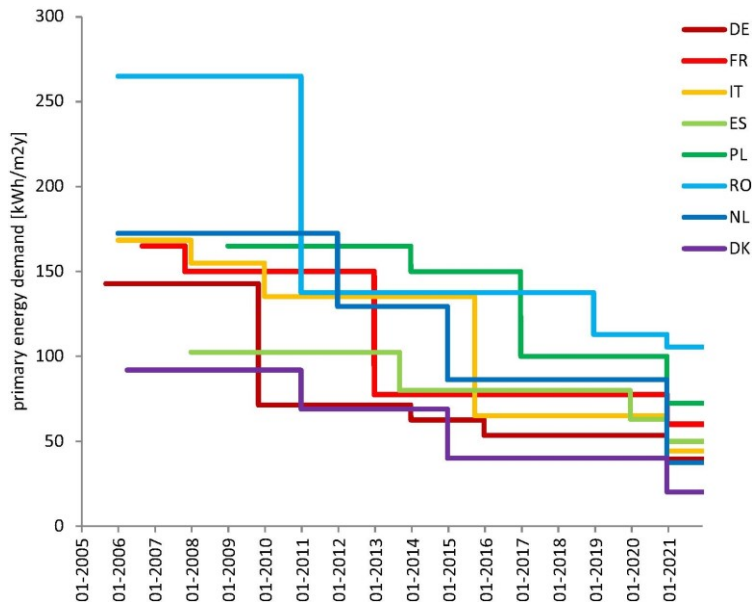
**Imports of selected energy products, EU, 1990-2019**  
(million tonnes of oil equivalent)



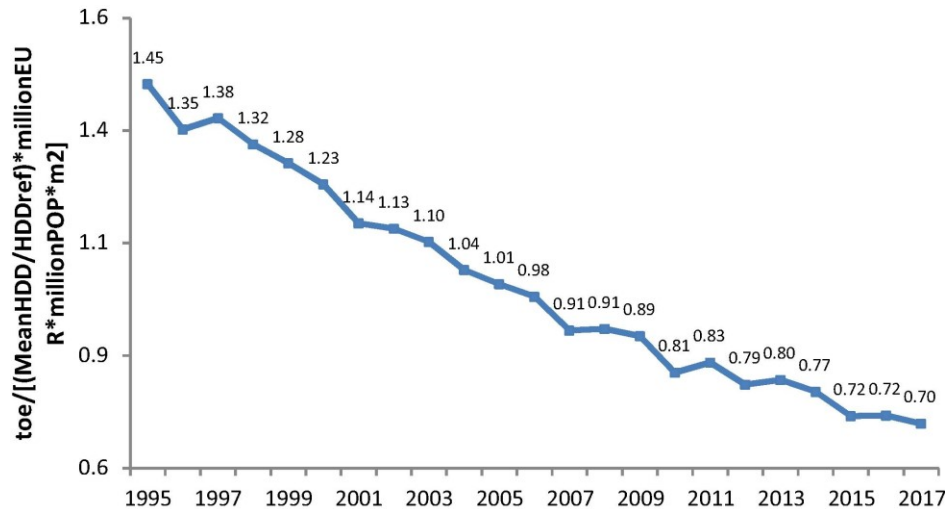
Source: Eurostat (online data code: nrg\_bal\_c)

# Efficiency is the Key (and we know it works)

## Improvement of residential minimum energy performance requirements



## Residential energy consumption (corrected for climate, floor area and income)

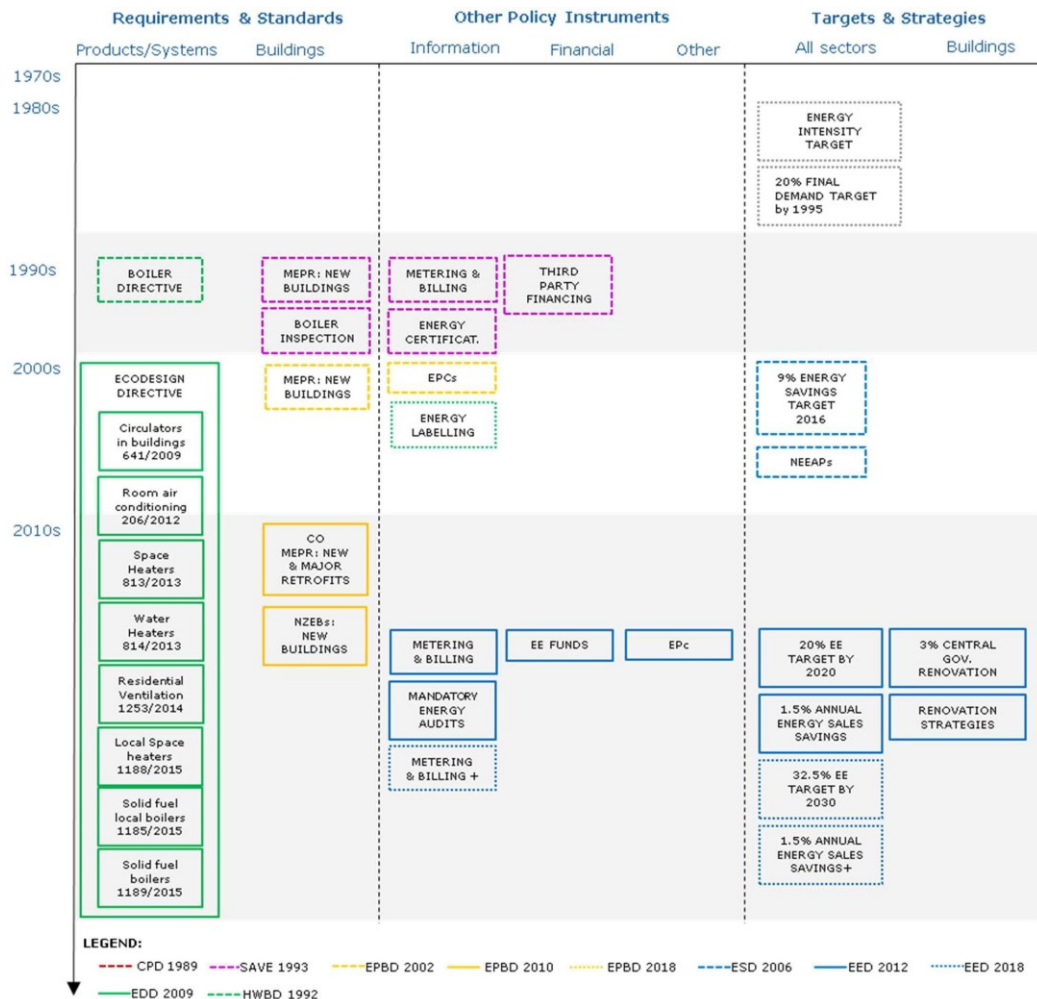


Source\_ EU JRC (2020) Review of 50 years of EU energy efficiency policies for buildings



But again...  
The existing  
policies have  
**not** put us on the  
required  
decarbonisation  
track

Source\_ EU JRC (2020) Review of 50 years of EU energy efficiency policies for buildings



# And that is why we got the RW strategy

## An overhaul of EPBD & EED



# New Provisions Need Sharpening to Hit Climate Targets

- **Full recast** (complete replacement of EPBD 2010, as amended by EPBD 2018): lots of new or modified provisions
- What are the **main elements** of the proposal, and how to assess them in view of 2030/2050 climate ambition?
- **Good working basis**, but unless elements are strengthened, better linked to each other, and geared towards deep renovation, **climate ambition will be missed** (contribution to alleviation of **energy poverty** could also be made stronger)
- Overall: **role of EPBD within Fit for 55** needs to be underlined again (esp. compared to carbon pricing)



# The Main Elements

2050 vision for  
building stock

EPBD scope /  
WLC

Standard for new  
buildings

Deep Renovation  
definition & use

MEPS

FF phase out &  
H&C  
decarbonisation

National Building  
Renovation Plans

Financing &  
Technical  
Assistance

EPCs

Renovation  
Passport  
schemes





# Zero emission building stock by 2050 (Articles 1 & 2)

- **EPBD recast:** new additional objective besides energy performance (reduction of GHG emissions) with view to achieve **zero emission building stock** by 2050 (very high energy performance, supply 100% RES). Existing buildings to be transformed into ZEB by 2050.
- **BPIE assessment:** good to see widening of the scope to operational carbon besides operational energy, but embodied carbon not strong enough and unclarity between carbon > energy (in operation)
- **BPIE recommendation:** *“net zero operational energy & net zero carbon over whole life-cycle”* (full decarbonisation based on 3 pillars)

More ambition needed to increase deep renovation rate!





# Whole life carbon (Articles 2&7, Annex III)

## EPBD recast

- Definitions for life-cycle GHG emissions and GWP introduced
- WLC absent from 2050 vision, from definition of ZEB, from provisions on existing buildings
- New buildings: as of 2030, life-cycle GWP to be calculated (based on EU methods) and disclosed in EPC

## BPIE assessment & recommendation

- Good to see first steps on WLC being *considered* (reporting for new buildings, reference to national policies to be reported by MS in Building Renovation Plans)
- More *requirements* and *benchmarks* should be introduced to mandate reduction of embodied carbon / assess national progress



# Standard for new buildings (Articles 2&7, Annexes I & III)

## EPBD recast

- ZEB standard by 2030 (2027 for public buildings)
- ZEB: very high energy performance, fully supplied by RES (on-site, renewable energy community or DHC system)

## BPIE assessment & recommendation

- Good to see upgrade from NZEB to ZEB, but...
- Focus of fuel switch not enough for full decarbonisation
- Max thresholds for primary energy use (Annex III) too high (= 2016 COM Rec. on NZEB)
- WLC thresholds should be introduced, then tightened over time



# Deep Renovation (Articles 2 & 15)

**EPBD recast:** introduction of definition = renovation into NZEB (by 2030) and into ZEB (as of 2030).  
Staged-deep renovation: DR carried out in several steps, following Renovation Passport.

## BPIE assessment & recommendation (definition)

- First, 27 definitions of NZEB. Second, 1 EU definition for ZEB but 2 sets of values for energy performance (inconsistency)
- No consideration for building starting point (both  $F > A$  and  $B > A$  are considered DR), with ZEB = EPC A class



## BPIE assessment & recommendation (approach to DR)

- Lack of importance given to DR: not reflected/mainstreamed into design of policies, such as MEPS
- Only used as threshold setter for financing: minority of buildings deeply renovated, while majority of funds would go to large number of buildings with 30% savings



# Minimum Energy Performance Standards (Article 9)

## EPBD recast

- EU-wide MEPS:
  - Publicly owned & non-res buildings must be at least F by 2027 & E by 2030
  - Residential buildings must be at least F by 2030 & E by 2033
- With reform of EPC system, G = 15% worst performing buildings at national level
- National MEPS: MS may apply MEPS to the rest of the stock, but not required to
- MS must support compliance with financing, TA, OSS...but monitoring & verification very vaguely phrased, some unclarities about use of state aid



## BPIE assessment & recommendation

- Introduction of MEPS framework: good to increase renovation rate, what about depth?
  - No provisions applied to buildings in class E and above, nothing after 2033
- = high risk of lock in of WPB in class E as of 2030/2033 = how to reach ZEB stock by 2050?
- Energy poverty concerns
  - Compliance: coordinated use of natural trigger points could be helpful besides backstop dates



# H&C decarb. & FF phase out (Art. 2, 7, 11 & 15 + Annex II)

## EPBD recast

- Requires MS to include (in their Building Renovation Plan) an overview of implemented and planned policies to phase out FF in H&C with a view to complete phase out by 2040
- Allows MS to set requirements related to GHG emissions of heat generators (legal basis for banning FF in H&C)
- Forbids MS as of 2027 to provide financial incentives for installation of FF boilers



## BPiE assessment & recommendation

- Measures to kickstart/incentivise FF phase out but too weak, too much leeway given to MS or misaligned with 2050 climate ambition
- Overview of national policies: from reporting indicator to true requirement being verified / benchmarked
- FF ban: only possible, not mandatory
- Financing: ban should be already in 2024



# National Building Renovation Plans (Article 3 & Annex II)

## EPBD recast

- NBRP replaces LTRS
- Objective: transform existing buildings into ZEB by 2050, ZEB stock by 2050 (= 100% RES supply)
- MS must show how NBRP contributes to energy & climate targets
- More detailed requirements (mandatory template with indicators)
- Planning cycle shortened (10 > 5 years), aligned with NECPs, draft and final NBRP with COM Recommendations to MS



## BPIE assessment & recommendation

- More ambitious vision for 2050, better content
- More coordination with the drafting of other planning tools could have been added
- Better governance system



# Financing & Technical Assistance (Article 15)

## EPBD recast

- MS must provide appropriate financing in line with NBRP, making best cost-effective use of a list of EU funds
- Promotes of innovative financing tools (e.g., on-bills schemes)
- Requires MS to target vulnerable households as priority
- Recognises importance of TA, incl. OSS

## BPIE assessment & recommendation

- Building renovation is eligible measure under those funds, but no ringfencing (allocations not enough)
- MS should be required to set up subsidy schemes with long-term perspective
- Financing and advisory measures to be more strongly tied with ambition on DR and full decarbonisation (risk of sub-optimal use of public money, e.g., link between level of savings and financial support is not proportionate)







# Energy Performance Certificates (Articles 16-19, Annex V)

## EPBD recast

- MS must ensure that as of 2026, EPCs comply with common EU template, including additional indicators (operational GHG emissions, share of RES in energy use)
- As of 2026, EPCs to be based on harmonised scale of classes (A = ZEB and G = 15% WPB at national level, with *“the remaining classes (B to F) having an even bandwidth distribution of energy performance indicators among the energy performance classes”*)
- EPCs valid for 5 years (10 for EPC A, B, C), digital and following an on-site visit

## BPIE assessment & recommendation

- Good to see increase scope of indicators & push for more comparability
- Adding positive energy buildings as A+
- Big issue with coverage (hampering all improvements on design): renewal of rental contract and major renovation added as trigger point to issue EPC (besides selling, renting, constructing), but not enough
- Unclear how to treat existing EPCs or EPCs issued until 31/12/2025  
(critical for MEPS implementation)





# Renovation Passports (Article 10)

## EPBD recast

- MS must introduce by end of 2024 a scheme for RP, based on common EU framework developed by COM by end of 2023
- National schemes must make RP available to building owners for use on voluntary basis
- Definition: *“a document that provides a tailored roadmap for the renovation of a specific building in several steps that will significantly improve its energy performance”*
- Based on on-site visit, objective to transform the building into ZEB by 2050, include info on benefits + financial & technical support

## BPiE assessment & recommendation

- Welcome introduction of scheme on RP (based on EU framework)
- Needs that EU framework to be strong/detailed to avoid national inconsistencies
- What links with EPCs / recommendations? Alignment with DR? No interlinkages with MEPS? Link to H&C?





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