



Energy Performance of Buildings Directive

Policy update related to EPCs

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Vivian Dorizas

Hélène Sibileau

D2EPC_E-DYCE_ePANACEA

Final conference





BUILDINGS PERFORMANCE INSTITUTE EUROPE

Who we are, what we do



EUROPEAN
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POLICY ADVICE
ON BUILDING
REGULATION,
FROM DESIGN TO
IMPLEMENTATION



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RESEARCH AND
ANALYSIS



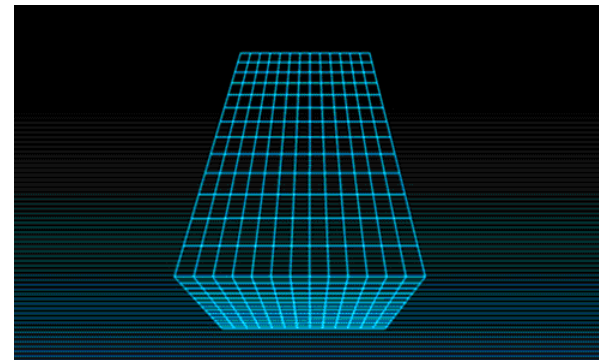
IMPROVING THE
ENERGY
PERFORMANCE
OF BUILDINGS
ACROSS EUROPE



IN OPERATION
SINCE 2010



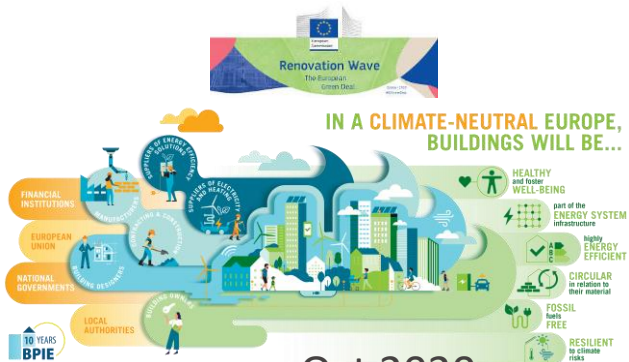
Structure of the presentation



1. Decarbonisation goals
2. Energy Performance of Buildings Directive: Process update
3. Energy Performance of Buildings Directive: Content update, assessment of provisions relevant to the Next Gen EPCs
4. Potential implications



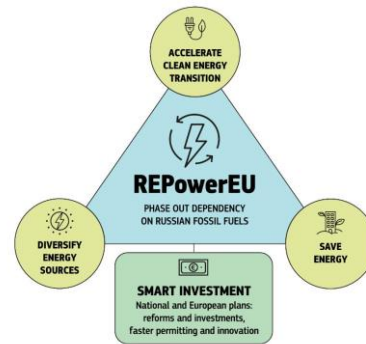
1. EU DECARBONISATION GOALS



Oct 2020



COM proposal I
Dec 2021



Spring 2022

Cut GHG by at least 55% by 2030

Dec 2019



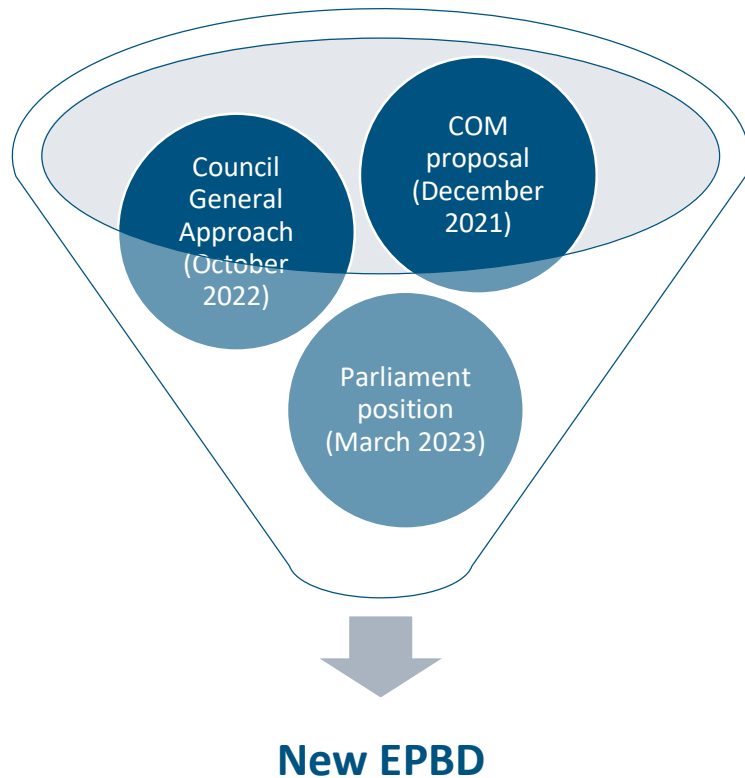
July 2021



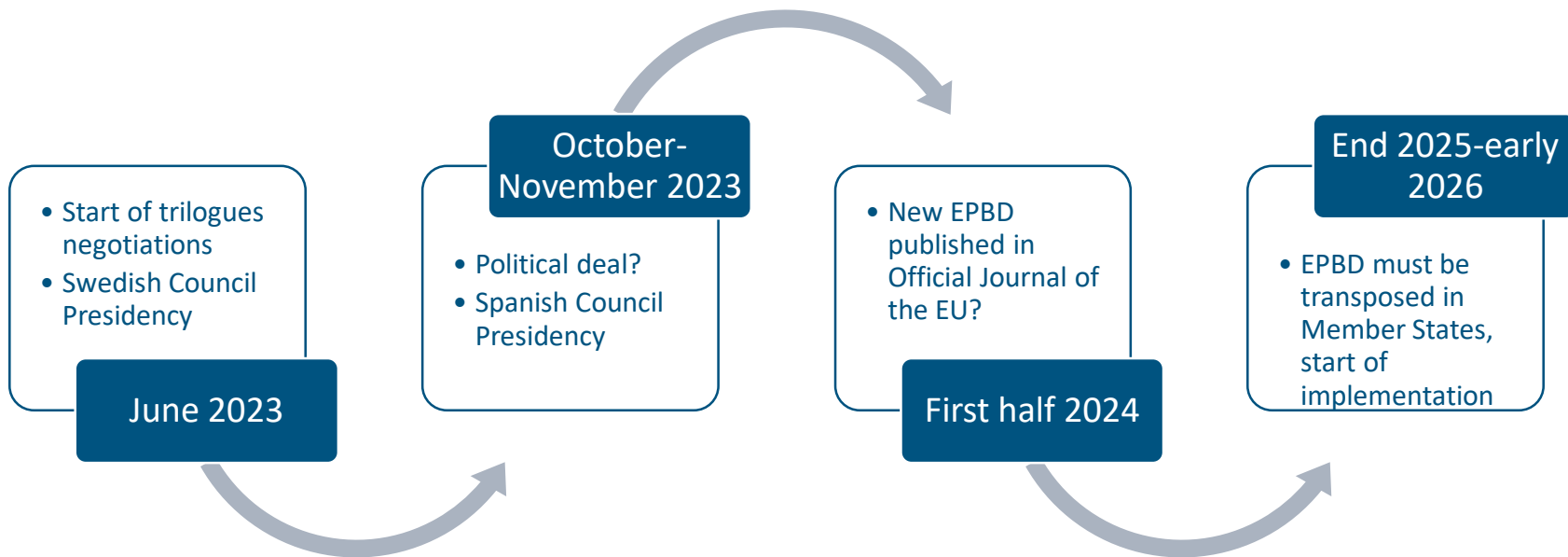
-60% GHG emissions
3% annual deep renovation rate
70% of renovations to be deep



2. EPBD state of play: process update



2. EPBD state of play - Process update



3. EPBD

Relevant provisions for Next Gen EPC cluster

1. Energy Performance Certificates (EPCs)
2. Renovation Passports (RP)
3. Minimum Energy Performance Standards (MEPS)
4. Deep renovation
5. Whole Life Carbon (WLC)



3. EPBD

Content update – EPCs

	COUNCIL	PARLIAMENT
Timeline	Reform pushed to EPCs issued as of 2027	Reform pushed to EPCs issued as of 2026
EPC classes	<ul style="list-style-type: none"> - Creates A+ (positive energy buildings) and A₀ (ZEB) - G = worst performing buildings, scope/number to defined nationally - A to G : no even bandwidth distribution between ranges 	<ul style="list-style-type: none"> - Creation of A+ (energy needs <15 kWh/m²/y, production of more RES on site, carbon positivity re: life-cycle GWP) - G = 15% worst performing buildings at national level - B to F: even bandwidth distribution between ranges
Issuing EPCs	<ul style="list-style-type: none"> - “Virtual site visit” possible - Brings back validity from 5 to 10 years 	<ul style="list-style-type: none"> - On-site visit (by independent expert) - Validity 10 years for EPC A+, A, B, C (others: 5)



3. EPBD

Content update – Renovation Passport

	COUNCIL	PARLIAMENT
Definition	Document that provides a tailored roadmap for the renovation of a building in several steps that will significantly improve its energy performance	Document that provides a tailored roadmap for the <i>deep</i> renovation of a specific building in a <i>maximum number of steps</i> that will transform the building <i>into a ZEB by 2050 latest</i>
Timeline	<ul style="list-style-type: none"> - MS must introduce scheme by end 2025 - Explicit <i>“voluntary use by building owners”</i> 	<ul style="list-style-type: none"> - MS must introduce scheme by end 2024 - MS shall ensure RP rollout is financially supported
Links	Allows integration of RP into EPC schemes	Facilitates <i>integration into Digital Building Logbook</i>
Quality	Can be issued after <i>“virtual on-site visit”</i>	<p>Issued by a qualified and certified expert after an <i>on-site visit</i></p> <p>Estimated costs of one-step deep renovation = reference scenario</p>

3. EPBD

Content update – MEPS for non-residential

	COUNCIL	PARLIAMENT
Scope	Non-residential	Public buildings (owned) and non-residential
Approach	Phasing out worst performing buildings at certain dates, based on thresholds in primary energy use (kWh/m ² /y), with flexibility	Phasing out worst performing buildings at certain dates, based on EPC classes
Ambition and dates	Phase out of 15% worst performing by 2030 and 25% (cumulative) by 2034	At least class E as of 2027 and at least class D as of 2030
Exemptions	Exemption of certain buildings possible based on “unfavourable cost-benefit assessment”	No exemption





3. EPBD

Content update – MEPS residential

	COUNCIL	PARLIAMENT
Approach	<ul style="list-style-type: none"> - Trajectory approach at segment level, with milestones 	<ul style="list-style-type: none"> - Phasing out worst performing buildings at certain dates, based on EPC classes (similar to architecture proposed by COM)
Ambition and dates	<ul style="list-style-type: none"> - MS to establish trajectory as of 2025 in line with ZEB stock 2050 = decrease of average primary energy use - Residential segment to reach on average equivalent EPC class D by 2033 and nationally defined milestone by 2040 	<ul style="list-style-type: none"> - At least E as of 2030 and D as of 2033 - Linear trajectory for achievement of higher classes by 2040 and 2050 - MS shall establish MEPS for all other buildings at national level and introduce social safeguards
Exemptions	<ul style="list-style-type: none"> - Single Family Homes - After 2028 - Achieve at least class D within 5 years of trigger point (sold, rented, donated, re-purposed) 	<ul style="list-style-type: none"> - Exemption: publicly owned social housing + heritage buildings - Adjustment of MEPS for <i>economic/technical feasibility + availability of skilled workforce</i> - Exemption and adjustment: <i>max 22% of residential buildings in G, F, E & only until end of 2036</i>

3. EPBD

Content update – Deep renovation

	COUNCIL	PARLIAMENT
Definition	- Renovation to NZEB before 2030 and to ZEB as of 2030	- Renovation to NZEB before 2027 and ZEB as of 2027
	- Same as in COM proposal, but changed considerably ZEB definition + thresholds to be set at national level for renovated ZEB (NBRP)	- <u>Additional info in definition:</u> in line with EE1 principle and efforts to reduce whole life-cycle GHG emissions, focuses on essential building items [list], or a renovation reducing at least 60% primary energy demand for WPB for which ZEB is technically/economically not feasible = energy performance thresholds in Annex III (60-90 kWh/m ² /y)
Worst Performing Buildings	-to be defined at national level (NBRP)	- E, F, G



• 3. EPBD

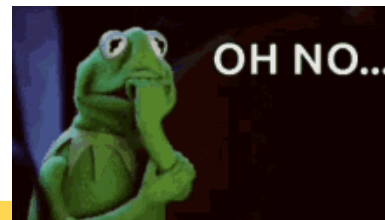
Content update – WLC

COUNCIL	PARLIAMENT
<ul style="list-style-type: none"> New construction to disclose WLC on EPCs as of 1 January 2030 (2027 for buildings over 2000m²) 	<p>Lifecycle emissions should progressively be taken into account, in line with a Union methodology to be established by the Commission, starting with new, then renovated buildings, for which Member States should establish whole life-cycle greenhouse gas emission reduction targets.</p>
<ul style="list-style-type: none"> No provisions for renovations Annex 3 – calculation methodology with reference to EN15798, Level(s) and CPR 	<ul style="list-style-type: none"> NBRP with national WLC targets for 2025, 2030, 2035, 2040 Delegated act by 2025 for the COM to set out WLC methodology Disclosure requirements for <i>all</i> new buildings as of 2027 and <i>limit values</i> as of 2030 considering incremental tightening Existing buildings undergoing major renovations to disclose WLC of building parts Renovation Roadmaps to outline measures to reduce WLC



4. EPBD

Potential implications



Relevant dimension for Next Gen EPCs

Building renovation passports	<ul style="list-style-type: none"> • Implementation date (end 2024/2025) • Issued after “virtual on site visit”? • Financial support and integration into DBL?
Updates for EPCs	<ul style="list-style-type: none"> • Bandwidth EPCs (A+, Ao) and date EPC reform • EPC issuance • Validity (5-10 years)
Deep Renovation definition	<ul style="list-style-type: none"> • Deep renovation = ZEB in 2027 or 2030 • Definition WPB – national or EU level • Inclusion WLC
Minimum energy performance standards	<ul style="list-style-type: none"> • NR - Scope regulation (EPC classes or % WPB) • NR - Exemptions
	<ul style="list-style-type: none"> • R - Compliance deadlines and ambition of performance standard • R - Exemptions
Whole Life Carbon (on EPC)	<ul style="list-style-type: none"> • WLC to be disclosed on EPCs • WLC gradually applied to renovations (methodology to be established in 2025) based on national targets • WLC disclosure of building parts during major renovations



Vivian Dorizas Project Manager

Vivian.Dorizas@bpie.eu

www.bpie.eu

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