

Agenda for the morning

08:30-09:10 Arrival & Opening

09:15-10:00 EU & Nordic Outlooks

10:00-10:15 Break

10:15-11:15 Norwegian, Swedish, Finnish & Estonian Construction Authorities Presentations

11:15-11:30 Break

11:30-12:20 Sector Inspiration

12:20-12:50 Danish & Icelandic Construction Authorities Presentations

12:50-13:00 Wrap up







Energy Performance of Buildings Directive (EPBD)

Draft of the delegated act setting out a Union framework for the national calculation of life-cycle global warming potential (GWP)



European Commission – DG ENERGY Unit B3 - Buildings and Products Bunthan IEA, Ph.D., Policy Officer



EU legislation & EPBD

1970s Oil crisis 2002 EPBD 2002-91-EC Minimum performance requirements (2004) RES Directive 2009/28/EC 2009 2010 **EPBD 2010/31/EU – recast** 2012 EE Directive 2012/27/EU **EPBD (EU) 2018/844 – amending** 2018 RES Directive – amending + EE Directive – amending Nearly Zero Energy Buildings (2020) **EU Green Taxonomy** 2021 2023 RES Directive – amending + EE Directive – recast 2024 **EPBD** recast Zero Emission Buildings (2030) + life-cycle global warming potential



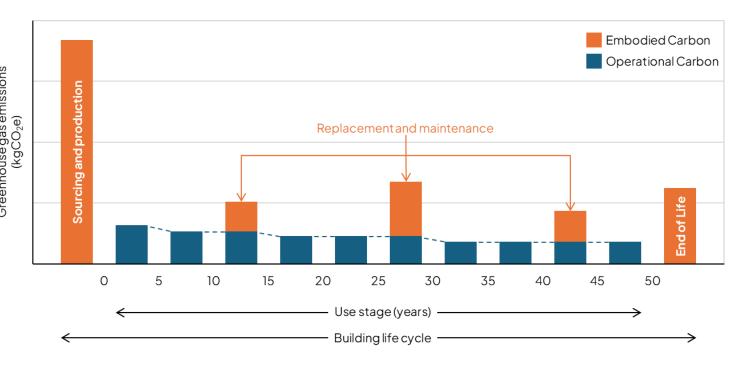
Whole-life-cycle emissions of buildings

Recitals

(7) Buildings are responsible for greenhouse gas emissions before, during and after their operational lifetime. The 2050 vision for a decarbonised building stock goes beyond the current focus on operational greenhouse gas emissions. The whole-lifecycle emissions of buildings should therefore progressively be taken into account, starting with new buildings. Buildings are a significant material bank, being repositories for resources over many decades, and the design options and choices of materials largely influence the whole-life-cycle emissions both for new buildings and renovations. The whole-life-cycle performance of buildings should be taken into account not only in new construction, but also in renovations through the inclusion of policies for the reduction of whole-life-cycle greenhouse gas emissions in Member States' national building renovation plans.

Life-cycle global warming potential (GWP)

→ Indictor life-cycle global warming potential (GWP): greenhouse gas emissions that occur over the whole life \(\frac{5}{2} \) cycle of a building, including the production and transport of construction products, constructionsite activities, the use of energy in the building and replacement of construction products, as well as demolition, transport and management of waste materials and their reuse, recycling and final disposal;





Summarise

- Article 7(2): Calculation of LC Global Warming Potential (GWP) from 1-01-2028 for large new buildings & from 01-01-2030 for all new buildings
 - Article 7(3) Calculation in accordance with the main principles of Annex III, pending the adoption of a DA to set out a Union framework for the national calculation of GWP by 31 December 2025
- Article 7(5): By 01-01-2027, publication & notification of national roadmaps detailing introduction of limit values and set targets

Timeline of the provisions for Life-cycle GWP

May 2024

Publication of the EPBD in the OJ & entry into force <u>Directive - EU - 2024/1275 - EN - EUR-Lex</u> (europa.eu)

January 2027

Member States shall publish and notify to the Commission a roadmap on the introduction of limit values & targets Article 7(5)

January 2030

> All new buildings

Member States shall ensure that life-cycle GWP is calculated in accordance with Annex III (and DA) and disclosed in the energy performance certificate

+ limit values for all new buildings from national roadmaps

Article 7(2) + Article 7(5)

31 December 2025

The Commission shall adopt a delegated act setting out a Union framework for the national calculation of life-cycle GWP.

Article 7(3)

January 2028

> New buildings over 1000m2 useful floor area

Member States shall ensure that life-cycle GWP is calculated in accordance with Annex III and disclosed in the energy performance certificate.

Article 7(2)



Guidance for the national roadmap and the limit values

Published on 30 June as part of the EPBD implementation supporting package – <u>link</u>:

- MS publish and notify a roadmap detailing the introduction of **limit values**, from 2030.
- A series of limit values from 2030 with **downward trend**, for example, a limit value (or corresponding level of ambition) in 2030 followed by a lower value in 2033, in 2036, etc.
- MS decides on the interval, typically every 3 or 5 years.
- If relevant, MS adapt the limit values for different climatic zones and building typologies.
- MS considers the readiness of the market while encouraging the decarbonisation of the construction sector as soon as possible.
- Relevant stakeholders are to be consulted by MS when the limit values established.

Delegated Act for the Union framework for the calculation

- General framework
 - Standard EN 15978
- 2. Data for the calculation
- Useful floor area
- 4. Scope of life-cycle stages
 - aligned with Construction Product Regulation
- 5. Allocation of emissions related to a building's energy consumption and on-site generation
- 6. Scope of building elements and technical equipment
 - aligned with Levels EU framework, with some adjustments
 - Requirement to cover the elements, but flexibility for the "classification"
- 7. Results of life-cycle GWP
 - for reporting in EPC, disaggregated and transparence for each life cycle stages
- > Flexibility for the implementation and comparability of the results



Data for the calculation

Construction Product Regulation (CPR)

Ecodesign and energy labelling legislation

Shall be used when available





Data for the calculation

Member States have to ensure that the life-cycle GWP is calcuated by 01.01.2028 for large new buildings (EPBD Article 7(2))

Project-specific	Compatible with EN 15978 and only if they are explicitly permitted by national legislation.
Product-specific	
Average data	

Generic data	To fill data gaps, where none of the above data sources are available, or to simplify
Default values	the calculation
	- Any a specific scope of a building element or multiple building elements,
	- Any scope of a life-cycle sub-module or a life-cycle module, or multiple life-cycle sub-modules or multiple life-cycle modules.



Public feedback 'Have your Say'

https://ec.europa.eu/info/law/better-regulation/have-your-say/initiatives/14604-EU-framework-for-calculating-the-global-warming-potential-of-new-buildings en

Feedback period

03 October 2025 - 31 October 2025 (midnight Brussels time)



Thank you!



#EPBD

LinkedIn <u>EU Energy</u>
YouTube <u>@EUEnergy</u>
https://energy.ec.europa.
eu/
DG Energy newsletters





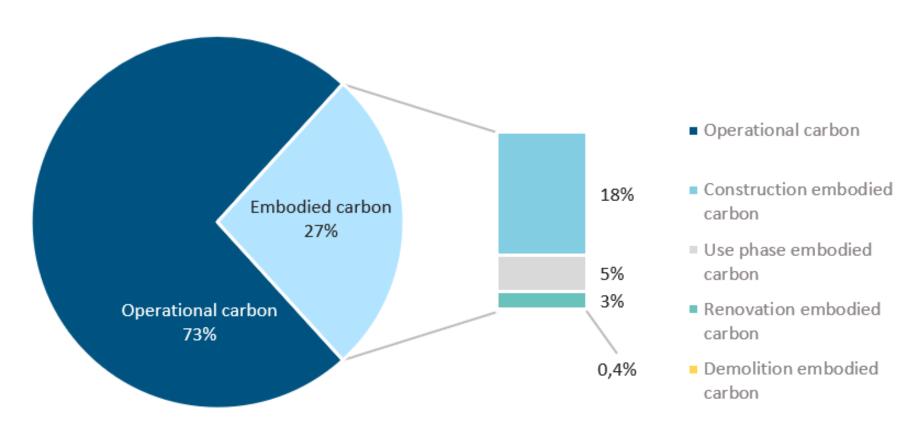
Keep buildings we have and use them better

Josefina LINDBLOM

DG Environment

GHG emissions - EU building stock

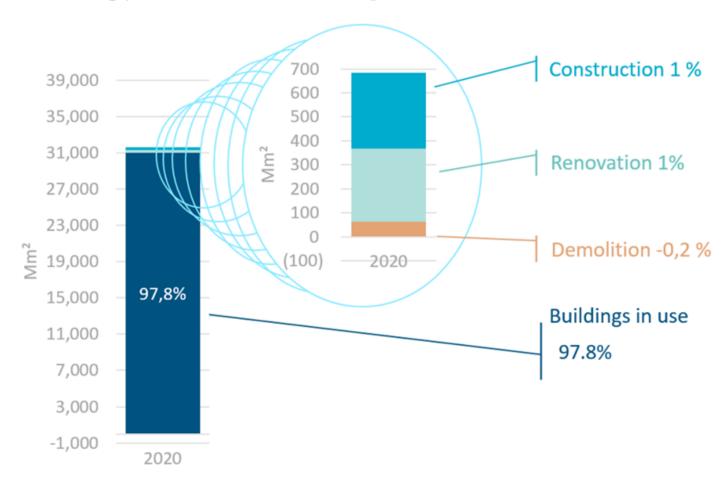
■ Figure • 2. • Greenhouse • gas • emission • distribution • by • building • stock • activity, • baseline • year • 2020





EU building stock activity

Figure-3.-Building-stock-floor-area-distribution-in-million-m2-in-the-baseline-year-2020-for-construction-of-new-buildings,-renovations-and-demolitions.





Circularity of buildings - benefits and drivers

- Less need of material
 - →material independency and waste reduction
 - →reduce embodied carbon emissions
- Less m2 to heat/cool
 - →potential for affordable housing and shared spaces
- Less land take for buildings and necessary infrastructure
 - →positive for biodiversity and climate resilience





Göteborg -90% GHG by 2030

- Public owner provides housing to 25% of inhabitants and in charge of 60% of new built
- 2025 target: each building project halving its climate impact through product reuse and low carbon material
- 2030 target: 90% reduction for entire stock >> actions on each project is not enough, requires fewer new buildings to be constructed





Showcasing Sufficiency - completed study

- Gaining a better understanding of vacancies is possible with little extra investment
- Measures are context dependent and need tailored approaches to be effective
- Requires capacity within public administrations
- In policy objectives driven by climate, social, economic, and aesthetic objectives





Office conversion to housing — ongoing study

- Create affordable, decent, high-quality housing in the centres of EU cities
- Often less costly than new construction, but bigger uncertainties
- Decarbonisation and urban regeneration
- Permitting process is key



Springville House before the office-to-residential conversion





Springville House after the office-to-residential conversion

Housing Package - 2025

- Affordable Housing Plan
- Construction Housing Strategy
- New European Bauhaus Communication





Notuddsparken in Västerås, Sweden © New European Bauhaus

Coming study

Investigating

- how building policies as well as other conditions can impact the potential for sufficiency
- how data can be generated and shared, to allow for useful monitoring of e.g. vacant or underused building as well as conversion and infill potentials



Rue Acquaviva, Marseille

