



EPBD and EED Interaction for Public Buildings and Bodies
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Energy Performance Certificates and Buildings

‘Energy performance certificate’ means a certificate, recognised by a Member State or by a legal person designated by it, which indicates the energy performance of a building or building unit

‘building’ means a roofed construction having walls, for which energy is used to condition the indoor environment;

Building Definition Important to Understand EPCs

Examples from current non-residential EPCs in Ireland

EPC may apply to an entire building or part of a building

EPCs overlap – same area included in more than 1 EPC

Multiple EPCs for the same building or part of a building

“Part of a building” refers to the physical structure of a property and not to ownership

All buildings do not have an EPC

Issue of Energy Performance Certificates

Member States shall ensure that a digital energy performance certificate is issued for:

(a) buildings or building units when they are constructed, when they have undergone a major renovation, when they are sold, when they are rented out to a new tenant, or for which a rental contract is renewed;

(b) existing buildings owned or occupied by public bodies

In accordance with the template in EPBD Annex V

Display of Energy Performance Certificates

Building for which an energy performance certificate has been issued and is occupied by public bodies and frequently visited by the public, the energy performance certificate is displayed in a prominent place clearly visible to the public

In a non-residential building for which an energy performance certificate has been issued, the energy performance certificate is displayed in a prominent and clearly visible place

Digital Building Logbook – Definition

‘digital building logbook’ means a common repository for all relevant building data, including data related to energy performance such as energy performance certificates, renovation passports and smart readiness indicators, as well as data related to the life-cycle GWP, which facilitates informed decision making and information sharing within the construction sector, and among building owners and occupants, financial institutions and public bodies

Digital Building Logbook

- Common repository for energy performance building data such as energy performance certificates, renovation passports etc.
- To track building renovation
- To monitor progress



Data Exchange

Building owners, tenants and managers direct access to their building systems data

Upon their consent access and data shall be made available to a third party subject to applicable rules and agreements

Member states shall facilitate the full interoperability of services and of data exchange within the Union in accordance with planned implementing acts detailing interoperability requirements and non-discriminatory and transparent procedures for access to the data

Buildings System Data

Energy performance of building elements

Energy performance of building services

The project life span of the heating systems where available

Building automation and control systems

Meters/ measuring and control devices

Recharging points for e mobility

And be linked where available to the digital building logbook

Databases for the energy performance of buildings

Energy performance of individual buildings and on the overall energy performance of the national building stock

Databases may consist of a set of interconnected databases

Energy performance certificates, inspections, renovation passport, smart readiness indicator, calculated or metered energy consumption of the buildings covered

Data may also be gathered and stored on both operational and embodied emissions and the life cycle GWP

Aggregated and anonymised data of building stock shall be made publicly available

Access to databases for the energy performance of buildings

Access for full EPC for building owners, tenants, managers and financial institutions as regards buildings in their investment and lending portfolios and upon permission from the owner to independent experts. Also tenants with buyers permission

Local authorities access to data on their territory to facilitate drafting heating and cooling plans

Make publicly available info on share of national building stock covered by EPCs and aggregated / anonymised data on the energy performance, including energy consumption and where available life cycle GWP of buildings covered. Updated at least twice per year

Make available to public and research institutions including national statistics institutes upon request

Once a year give data to the national building stock observatory

Minimum Energy Performance

Minimum energy performance standards for non-residential buildings ensures that those buildings do not exceed the specified maximum energy performance threshold.

Maximum energy performance thresholds shall be established on the basis of the building stock on 1 January 2020, based on available information and, where appropriate, on statistical sampling.

Minimum Energy Performance Standards

The minimum energy performance standards shall ensure, at least, that all non-residential buildings are below:

- (a) the 16 % threshold from 2030; and
- (b) the 26 % threshold from 2033

May set maximum energy performance thresholds with reference to the national building stock as a whole or per building type or category of building

BERs by Building Type Non Domestic 2009-2024

Table 3 BERs by Type of Building (Non-Domestic) 2009-2024

Building Type	Energy Rating												% of row		Total
	A	B1	B2	B3	C1	C2	C3	D1	D2	E1	E2	F	G		
Retail	1	1	5	9	15	13	9	10	7	5	4	6	12	28,410	
Office	2	2	3	5	8	11	11	13	11	7	6	8	14	17,737	
Restaurant/public house	0	1	2	5	10	12	12	18	15	10	6	6	4	7,202	
Hotel	3	4	10	11	15	14	11	12	8	4	2	3	2	1,100	
Warehouses	1	2	6	8	12	12	9	12	8	5	5	6	14	9,340	
Workshops/maintenance depot	0	1	3	6	7	8	8	13	9	8	6	10	23	2,361	
Industrial process building	3	11	11	10	12	9	6	10	6	5	5	4	9	1,535	
Hospitals and primary health care	9	4	5	5	8	9	8	11	10	6	6	9	11	1,412	
Community/day centre	9	4	10	10	12	10	8	10	8	5	4	5	7	1,386	
Nursing residential homes and hostels	14	9	16	16	13	9	6	6	6	2	1	1	2	721	
Schools and colleges	47	6	6	7	6	6	5	6	4	2	2	2	3	1,946	
Sports facilities	3	6	11	12	12	10	8	10	8	5	2	6	8	506	
Other	13	5	6	8	9	6	5	9	6	5	5	7	17	1,757	
Total	3	2	4	8	12	11	9	12	9	6	5	6	12	75,413	

<https://www.cso.ie/en/releasesandpublications/ep/p-ndber/non-domesticbuildingenergyratingsquarter22024/>

The data have not been adjusted to represent all non-domestic buildings in the State and hence the tables only represent buildings that have been assessed.

Compliance of individual non-residential buildings with the thresholds shall be checked on the basis of energy performance certificates or, where appropriate, other available means

Building renovation plans Article 3(1)(b) timelines to comply with lower maximum energy performance thresholds by 2040 and 2050

Criteria to exempt individual non-residential buildings

Member States may establish and publish criteria to exempt individual non-residential buildings

Criteria shall be clear, precise and stringent and shall ensure equal treatment

Where exemptions established - equivalent improvements in non-residential building stock needed

Overall renovation has unfavourable cost-benefit assessment, at least individual renovation measures with favourable cost-benefit implemented

Building Renovation Passport

Building renovation passports to guide building owners in their staged and deep energy renovations – optional from May 2026

Tailored roadmap for the deep renovation of a specific building

Transforms a building or building unit:

(a) before 1 January 2030, into a nearly zero-energy building;

(b) from 1 January 2030, into a zero-emission building

Building Renovation Passport - Purpose

Renovation passports provide a clear roadmap for staged deep renovations, helping owners and investors plan the best timing and scope for interventions. Therefore, renovation passports should be encouraged and made available, as a voluntary tool, to building owners

Building Renovation Passport - Definition

'Renovation passport' means a tailored roadmap for the deep renovation of a specific building in a maximum number of steps that will significantly improve its energy performance

'deep renovation' means a renovation which is in line with the 'energy efficiency first' principle, which focuses on essential building elements and which transforms a building or building unit:

(a) before 1 January 2030, into a nearly zero-energy building

(b) from 1 January 2030, into a zero-emission building

'staged deep renovation' means a deep renovation carried out in a maximum number of steps, as set out in a renovation passport

Building Renovation Passport – Key Principles

National framework ready by mid-2026 - compulsory

For voluntary use by building owners

Affordability of the Building Renovation Passport – compulsory

Option to issue it together with EPC

Building Renovation Passport to then replace recommendations from EPC

Build from the information in the EPC

Issued by qualified or certified expert & following on-site visit – compulsory

Discussion with the expert to be proposed – compulsory

Building Renovation Passport issued in a digital format suitable for printing - compulsory

Digital tool for preparing the Building Renovation Passport

Tool to simulate a draft simplified renovation passport

Building Renovation Passport – Mandatory Parameters

Current energy performance of the building

Graphical representation of the roadmap and steps for a staged deep renovation

Minimum energy performance standards and phasing out of fossil-fuels

Explanation on the optimal sequencing of steps

Estimated energy performance class to be achieved following completion of the step

Share of individual or collective generation and self-consumption of renewable energy

Available finding, technical advice and advisory services

Full details in Annex VIII

Building Renovation Passport – Optional Parameters

Indicative timing of the steps

Detailed description of the technologies, techniques and materials and costs

Estimated costs for carrying out the step

Estimated payback period for the step, with and without any available financial support

Estimated time needed to carry out the step

Reference values on the life-cycle greenhouse gas emissions

Estimated lifetime of measures and the estimated maintenance costs

Full details in Annex VIII

Building Renovation Passport Next Steps in Ireland

Zero Emissions Definition

Define EPC scale A – G

Review and update calculation methodology especially treatment of renewable energy produced on site and exported

Current EPC recommendations impact low / medium / high and not kWh/m²/yr

Layout and content of renovation passport

Define renovation measures aligned with EPBD Annex VIII

Define Minimum Energy Performance Requirements for existing buildings

Stakeholder consultation

EPBD Draft Guidance October 2024

Building Renovation Passport Article 12

Databases Article 22

Solar Energy in Buildings Article 10

Trajectories for residential building renovation Article 9

Sustainable Mobility Article 14

Solar Energy in Buildings – New Buildings

Member States shall ensure the deployment of suitable solar energy installations, if technically suitable and economically and functionally feasible, as follows:

31 December 2026, new public and non-residential buildings with useful floor area larger than 250 m²

31 December 2029, on all new residential buildings

31 December 2029, on all new roofed car parks physically adjacent to buildings

Solar Energy in Buildings – Existing Buildings

Existing public buildings with useful floor area larger than:

2 000 m² , by 31 December 2027

750 m² , by 31 December 2028

250 m² , by 31 December 2030

31 December 2027, on existing non-residential buildings with useful floor area larger than 500 m² , where the building undergoes a major renovation or an action that requires an administrative permit for building renovations, works on the roof or the installation of a technical building system;

EED Article 6 Exemplary role of Public Bodies' Buildings

Publicly available and accessible inventory of heated and/or cooled buildings owned or occupied by public bodies and have a total floor area of more than 250m². Update every two years.

Inventory shall contain at least floor area, measured annual energy consumption of heat, cooling, electricity and hot water when available and energy performance certificate.

At least 3% of total floor area of heated and/or cooled buildings that are owned by public bodies is renovated each year to be transformed into at least nearly zero energy buildings or zero emissions buildings

Alternative approach – each year renovation passport for buildings representing at least 3% of total floor area of heated and/or cooled buildings owned by public bodies. For those buildings, the renovation to nearly zero energy building shall be achieved by at least 2040

Energy Performance of Buildings Directive (EPBD)

https://energy.ec.europa.eu/topics/energy-efficiency/energy-efficient-buildings/energy-performance-buildings-directive_en#revised-energy-performance-of-buildings-directive

Thank You

