BUILD UP
The European portal for energy efficiency and renewable energy in buildings
WEBINAR
Transposing and implementing the EPBD Recast: Next Generation Energy Performance Certificates (EPCs)

27th September 2023 / 11.30H – 13.00H CET
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Transposing and implementing the EPBD Recast: Next Generation Energy Performance Certificates (EPCs)

Welcome & Introduction

powered by EPB Center & REHVA, hosted by Build Up Portal

11h30-13h00 CEST, 27 September 2023
The EPBD revision

Commission Proposal (December 2021)

Council General Approach (October 2022)

“Trialogues”

Adoption

Transposition

European Parliament amendments (ITRE committee 9 February 2023 Plenary 14 March 2023)

Roadmap
Feedback period 22 February 2021 - 22 March 2021

PUBLIC CONSULTATION
Consultation period 30 March 2021 - 22 June 2021

Commission adoption
Feedback period 15 December 2021 - 01 April 2022
The EPBD revision

From: General Secretariat of the Council
To: Permanent Representatives Committee
Subject: Proposal for a DIRECTIVE OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL on the energy performance of buildings (recast) - Preparation for the trilogue

NOTE


| Article 11(1), first subparagraph | 1. Member States shall, for the purpose of optimising the energy use of technical building systems, set system requirements in respect of the overall energy performance, the proper installation, and the appropriate dimensioning, adjustment and control of the technical building systems which are installed in new or existing buildings. When setting up the requirements, Member States shall take account of design conditions and typical or average operating conditions. |

| 1. Member States shall, for the purpose of optimising the energy use of technical building systems, set system requirements using energy saving technologies, in respect of the overall energy performance, the proper installation, and the appropriate dimensioning, adjustment and control of the technical building systems, and, where appropriate, hydronic balancing, which are installed in new or existing buildings. When setting up the requirements, Member States shall take account of design conditions and typical or average operating conditions. |
Energy Performance Certificates are linchpin
These projects have received funding from the European Union’s Horizon 2020 and Horizon Europe research and innovation programmes. The European Union is not liable for any use that may be made of the information contained in the documents prepared by the projects’ consortia, which are merely representing the authors’ view.
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BUILDUP Webinar- Transposing and implementing the EPBD Recast: Next Generation Energy Performance Certificates (EPCs), 27 September 2023

LIFE-CET and Buildings – Turning Policy into Action

Ulrike Nuscheler, Senior Project Adviser,
LIFE-Clean Energy Transition, CINEA
LIFE sub-programme Clean Energy Transition

Key EU programme for clean energy transition

focusing on policy implementation & market up-take of technologies and products

Creating favourable regulatory and market conditions; mobilising investments; building capacity; empowering consumers

- 2021-2027 budget of almost €1 bn
From Horizon 2020 to LIFE-CET - Buildings

- **Deep Renovation**
  - Innovative approaches + affordable solutions

- **EPCs**
  - Next Generation CSA/ IA

- **Smartness / Smart Services**
  - DR/ Up-Grade of Smartness
  - Smart Services

- **Buildings Data**
  - Big Data/ Self-assessment of buildings and appliances

- **Deep Renovation**
  - BUILDRENO
  - DEEPRENO

- **EPC + SRI**
  - BUILDPERFORM

- **Smart Readiness + Smart Services**
  - SMARTREADY + SMARTSERV

- **Access to and Use of Data**
  - BSO/ tender

**POLICY: EPBD-implementation Calls 2022 + 2023**
Buildings - Policy challenges

- Reduction of complexity of renovations + regulatory frameworks
- Reduction of Costs
- Better synchrony across instruments
- Better implementation and up-take of SRI
- Better market up-take/valuation of EPC + SRI
- Untapping potential of innovative services + co-benefits
- Coordination renovation supply chains
- Improved reliability + consistency of EPC assessments
- Mitigation of Split Incentives
- Clearer projectability of (staged) renovations
How does LIFE-CET respond to these challenges?

**Deep Renovation**

Making **renovation easier, more, standardised, coordinated, cost-efficient, projectable** (e.g. Pre-fab elements, BRPs)

**Energy Performance EPC, BRP**

**Supporting policy implementation, make up-take + integration** of key energy performance instruments (e.g. EPC + BRP/ SRI)

**Promoting policy implementation and market up-take** of the Smart Readiness Indicator

**Promoting market up-take of innovative service models**

**Smart Services**

**Smartness**
LIFE-CET buildings projects kicking off in autumn 2023

✓ **EPBD.wise** - supporting public authorities in 6 focus countries in the **design, implementation** and evaluation of ZEB, NBRP, MEPS, BRPs, EPCs; engaging with CA-EPBD + Renovate Europe Campaign.

✓ **tunES** - supporting Member States in **implementing + initiating legislative** action to exploit potential of EPC + SRI via consistent + user-friendly design targeting AT, HR, EL, HU, IT, PL, SI.

✓ **Smarter EPC** - delivering a **platform for open access to EPC and SRI tools** developed under (H2020, LIFE CET) past and ongoing projects + supporting integrated assessment.

✓ **iEPB** - improving the **synchrony between EPB assessments** – i.e. EPCs, SRI + energy renovation recommendations through **common data model**; focus will be on ES, NL and AT.

✓ **OneClickReno** – developing + integrating automatically generated, customizable and easy to understand BRPs through simple (“one-click”) web tools for 4 + 1 markets (IE, ES, NL, IT + EL).

✓ **COSME Reno** - implementing **industrialised renovation solutions**, focus on SMEs, using prefab elements and by deploying tools, services and training for SMEs.
LIFE-2023-CET BETTERRENO

Making renovation faster, deeper, smarter, service- and data-driven

• Facilitate large-scale deep renovation (scope A): business models, link supply + demand, renovation passports, better coordination, replicable models

• Streamline the regulatory and administrative framework (scope B): adapted legal frameworks and support schemes, improved governance

• Better building energy data and services (Scope C): improved availability + quality of data, more accurate EPCs, building valuation, services.

LIFE-2023-CET-Policy (scope C)

Support for the implementation of the EPBD

• Support design, monitoring and evaluation of policy implementation; provide advice and tools for contextualisation and specification of requirements

• Develop methodologies to more accurately measure and account for policy measures and programmes

Focal Area 1
Effectiveness and coherence of instruments (EPCs, MEPS, data)

Focal Area 2:
Climate-neutral building stock (ZEBs, GWP, Cost Optimality)
Relaunch of the EU BSO

**EU Building Stock Observatory (BSO)** – the European Repository for Data and Information on the EU Building Stock

- offering key data and indicators, infographics, data mapper, country reports
- revamped Digital platform (preliminary version) launched in June 2023
- EPBD-recast proposal includes obligation for MS to transfer buildings data to BSO

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30 years of bringing green ideas to LIFE

https://cinea.ec.europa.eu/life_en

LIFE Programme
@LIFEprogramme
@CleanEnergy_EU
LIFE Programme
LIFE Programme
@LIFEprogramme
LIFE Newsletter
Clean Energy Newsletter
Thank you
Horizon Landscape EPC-projects

Innovation Actions

Call 2019
- D^2EPC
- ePANACEA
- EPC-RECAST
- E-DYCE

Call 2021 (HE)
- SmartLivingEPC
- CHRONICLE

Coordination and Support Actions

Call 2018
- U-CERT
- X-tendo
- QualDeEPC

Call 2020
- CrossCert
- TIMEPAC
- iBRoad2EPC
- EUB Super Hub

BuiltHub
Transposing and implementing the EPBD Recast: Next Generation Energy Performance Certificates (EPCs)

EPBD Recast’s transposition

Aitor Domínguez Martín
September 27, 2023
EVOLUTION OF ENERGY PERFORMANCE CERTIFICATES OF BUILDINGS
EVOLUTION OF ENERGY PERFORMANCE CERTIFICATES OF BUILDINGS

The Energy Efficiency Directives in Buildings over the years

Main objective: create an information system on the energy status of buildings:

- Citizen-oriented
- Administration Oriented (specific policies)

Characteristics

- Systems included in the calculation and systems excluded
- Indicators based on primary energy or emissions (kyoto protocol)
- Simplified Methodologies or Methodologies based on energy simulations (extremely complex)

- EPC image that was not defined
- Methodologies adapted to ME need; Building stock, climatic zones and construction typologies
- No digital registration of EPCs, no big data
EVOLUTION OF ENERGY PERFORMANCE CERTIFICATES OF BUILDINGS

Early changes

- New indicators
- EPC content
- Recommendations to improve energy efficiency
- Information adapted for EPC assessors and users
- Creation of new simulation tools, specific and adapted to requirements and indicators
- NZEB and COptimal
- Technical updates (scales, default systems, materials, etc)
Current EPBD

- Changes in methodology and registries (Digitalization Process, Databases)
- New updated indicators (Emissions, Primary/final E, Renovable/No renewable E)
- Climatic data and PEF
- EPC assessors skills
- Update and calculation methodology (Application UNE-EN ISO standards)
  - Emphasis on passive aspects of design
  - Better integration of Renewable Energy
  - SRI
EVOLUTION OF ENERGY PERFORMANCE CERTIFICATES OF BUILDINGS

EPBD recast proposal

- New Zero-emission buildings
- MEPs
- Infrastructure for sustainable mobility
- Financing
- Renewable
- Whole life-cycle carbon
- Energy Performance Certificates (new provisions)
IDENTIFICATION OF NECESSITIES

Better analysis of the building stock
The more demands, the more precision

More specific and individualized regulations

More and better energy rehabilitation of buildings

EPCs

Renovation Passports

Financial programs

One Stop Shops
IDENTIFICATION OF NECESSITIES

➢ User needs
  o Comprehensible system,
  o credibility,
  o Contained cost

➢ Technician needs;
  o Ability to integrate different solutions,
  o Maximum output information,
  o Facilitate obligations (e.g. improvement measures)

➢ Administration Needs;
  o Precision, confidence,
  o Possibility of exploitation,
  o Stability,

The market identifies, and seeks, energy labeling systems

Public Administration ➔ Tool to promote decarbonization
EVOLUTION OF ENERGY PERFORMANCE CERTIFICATES OF BUILDINGS

FUTURE EPCs

➢ Information adapted to users, professionals and the Administration
➢ Improve accuracy of the energy performance assessment results.
➢ Technical changes
  o Rescaling (Convergence for calculations across EU)
  o Electromobility integration
  o Renewables and storage
  o Inclusion of smart and novel technologies
➢ GWP
➢ Integration with Renovation Passport (Rehabilitation push)
➢ Smart Readiness Indicator (SRI)
➢ Improve the confidence in EPC
➢ Integrate into other existing building-related systems
➢ Identify the worst performing buildings
➢ Promote rehabilitation
➢ Allow better knowledge of the building stock to implement more effective policies
Proposal for the recast of the Energy Performance Certificates in the recast EPBD

Delivering on the European Green Deal and Fit for 55

ENER/B – Just Transition, Consumers, Energy Efficiency and Innovation
Unit ENER B.3 – Buildings and products
Legal requirements for EPCs
EPBD, Directive 2010/31/EU

EPCs - Articles 11-13

EPCs provide information about the energy performance of the building and make recommendations on improvement

- Compulsory when selling or renting a building
- Must be shown to the prospective buyer or tenant and handed over to the buyer or new tenant
- Must be shown in advertising media
- Must be displayed in public buildings or buildings frequently visited by the public
Legal requirements for EPCs
EPBD, Directive 2010/31/EU

EPCs - Articles 11-13

- Produced by qualified independent experts
- Subject to an independent control system
- Rating based on kWh/m²*year (additional ratings may be used, for example kg CO2/m²*year)
- Rating depends on Member State, based on current state of the building stock and energy legislation
Legal requirements for EPCs
EPBD, Directive 2010/31/EU

EPCs - Articles 11-13

- Current coverage between 10% and 60% of the building stock depending on Member State -> representative sample
- Important element to gather information on the building stock
- Most Member States make some of the EPC information publicly available (subject to privacy legislation)
- Evidence of increased value of properties with good ratings
- Initiatives to address worst performing buildings in some Member States
EPBD revision – Focus areas

**Renovation**
- National Building Renovation Plans
- Minimum Energy Performance Standards
- Energy Performance Certificates
- Renovation passports for individual buildings

**Decarbonisation**
- Zero-emission buildings as new standard for new buildings and 2050 vision for building stock
- Consideration of whole life cycle carbon
- Phasing out of incentives for fossil fuels and new legal basis for national bans

**Modernisation & system integration**
- Infrastructure for sustainable mobility
- EPC digitalisation & databases
- Smart Readiness Indicator

**Financing**
- Public and private financing & technical assistance
- Deep renovation standard
- Priority to vulnerable households and people affected by energy poverty
Proposal for a revision of the EPBD - 2021

EPCs are part of the revision in 2021

- Improve EPCs in their role as an information tool
- Improve quality and coverage
- Availability and accessibility to information

EPCs link to other initiatives

- Finance: EU Green Taxonomy, Availability and accessibility to information
- Links with other assessment tools
Strengthened provisions on energy performance certificates
Articles 16-19, Annexes V and VI

- Increased **quality, reliability and accessibility**
- **Harmonized scale** of energy classes by 2025 from A to G
  - A = ZEB and G = 15% worst performing buildings
- Common **template** with energy and greenhouse gas emission indicators
- EPCs to be provided following **on-site visit**
  - Metered data for calculation
- Obligation for all **public buildings** and for all **buildings offered for sale or rent** to have EPCs, requirement to update EPC following major renovation
Strengthened provisions on energy performance certificates

**Articles 16-19, Annexes V and VI**

- **Simplified update** procedures (upgrade of individual elements or following renovation passport)
- National **databases** for energy performance of buildings, publicly accessible, regular transfer to Building Stock Observatory
- Links with:
  - Building Renovation Passport
  - Smart Readiness Indicator
  - Life Cycle Assessment of GWP
EPC links

- MEPS
- MEPR
- Calculation Methodology
- Design
- Building permits
- Public Finance
- Private Finance
- EU Green Taxonomy
- GWP
- SRI
- BRP
- EPC Databases
- Electro mobility
- Digital Building Logbook
- CO
Thank you
Panel discussion

moderated by
Rémi Collombet, Senior EU Affairs Officer, EuroACE
Thank you!