

Practical implementation note | Workshop of 15 October 2026

EPBD Article 13 in practice: Implementation lessons and open questions

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This note draws on eu.bac's closed workshop at the European Parliament and a limited pre-workshop survey. It brings together implementation experience and options for stakeholders to consider.

Building automation can help owners detect energy waste and manage indoor conditions. Achieving those benefits depends on how systems are specified, commissioned and used. Article 13 implementation therefore needs a clear route from identifying covered buildings to demonstrating functions and keeping them operational.

Five lessons for implementation

1. Help owners establish whether they are covered. Worked examples of system boundaries and capacity thresholds should explain what information is needed to reach a decision.

2. Verify functions in use. Equipment lists and class labels need supporting evidence that the required functions operate in the building.

3. Reuse processes where they fit. Energy performance certificates and inspections can reduce duplication, provided their evidence and assessor competence match the checks required.

4. Assign responsibility for acting on data. Someone must review the information, investigate faults and arrange corrective work. This responsibility needs to survive changes in staff and building use.

5. Coordinate controls around building needs. Comfort, energy use and running costs need to inform how systems work together, including during hot weather.

The relevant EU requirements

The Energy Performance of Buildings Directive (EPBD) sets the following requirements for new and existing non-residential buildings, where technically and economically feasible. Thresholds concern effective rated output of heating or air-conditioning systems, including the specified combinations with ventilation. he specified combinations with ventilation.

Requirement	EU deadline
Building automation and control systems (BACS), over 290 kW	31 December 2024
Building automation and control systems (BACS), over 70 kW	31 December 2029
Indoor environmental quality monitoring through BACS already in scope	29 May 2026
Suitably zoned automatic lighting controls with occupancy detection	Over 290 kW: 31 December 2027 Over 70 kW: 31 December 2029

The general transposition deadline was 29 May 2026.

1. Make the route to compliance clear

Identify the building and the systems that count

The first difficulty is often establishing scope. Campuses, mixed-use buildings and several generators serving the same premises can raise different questions about the relevant building and system boundaries. Existing records may contain floor area or consumption data without the capacity information needed to apply the BACS thresholds.

Survey responses described using energy performance certificate (EPC) processes to help identify covered buildings and check BACS provision. Other responses described databases or links with inspection records still under development. Reusing these sources offers a practical starting point, but missing system information must still be obtained and checked.

For national and regional authorities. A short decision guide could set out the information owners need: building use, areas served by each system, effective rated output and the applicable deadline. Worked examples should cover shared systems and mixed uses, with a clear route for resolving uncertain cases. Testing the guide with owners and practitioners would expose questions that legal wording alone may leave unanswered.

Connect compliance with investment decisions

Experience in the room ranged from owners already planning upgrades to owners unaware of the requirements. The discussion exposed a tension between explaining the benefits of controls and relying on enforcement. Owner engagement can help turn a legal obligation into an investment decision, while clear responsibilities and credible checks remain necessary to implement the minimum requirements.

One approach described from project work was to compare controls with other improvements in terms of energy, carbon and cost. Understanding actual demand could also inform the sizing of replacement heating systems. The useful lesson is to consider controls early in renovation planning, when their contribution can be assessed alongside other investments.

For owners and their advisers. Start with the building's operational problems and planned works. Ask what the existing controls already do, which required functions are missing and how an upgrade would be used. Include commissioning, staff time and ongoing support in the cost assessment. Coordinate works where possible while observing the applicable compliance deadlines.

Clarify how feasibility is assessed

Assessors need room to consider the circumstances of each building, but clear guidance is needed to avoid different decisions in similar cases. One survey response described setting out the required functions while allowing flexibility in system design. **National and regional authorities should publish a short feasibility guide, developed with assessors and building professionals**. It should include worked examples, explain what evidence owners need to provide and show where professional judgement is appropriate. This would help owners understand what is expected and assessors make consistent decisions. eu.bac's BACS Compliance Verification Checklist provides practical guidance on checking the required functions, including examples of supporting records for owners and verification steps for assessors.

2. Demonstrate functions and keep them working

A reported heating problem illustrated why installed equipment is an incomplete picture. Increasing settings did not resolve cold rooms because the underlying difficulty lay in heat distribution. Checking actual operation was needed to understand the fault. As buildings change, the assumptions behind their original design also need revisiting.

Ask the right question of the evidence

The discussion and survey pointed to commissioning records, system documentation and operating data as useful evidence. The following distinctions offer a starting point for owners and assessors when agreeing what a check needs to establish.

Question	Evidence to consider
What has been installed?	System records, equipment information and a description of the functions configured.
Do the required functions work?	Commissioning results and demonstrations of the relevant monitoring, analysis, communication and control functions.
Do they continue to work?	Operating records, fault reports, corrective actions and checks following changes to the building or its use.
Has performance improved?	A comparison with a defined baseline, accounting for relevant changes in weather, occupancy and use.

These checks answer different questions. Demonstrating functional compliance does not by itself establish the size of an energy saving. National requirements determine what evidence is required for a regulatory assessment.

Combine digital evidence with professional judgement

Continuous monitoring was mentioned as a way to identify problems between periodic assessments and reduce repetitive manual work. Its value depends on suitable sensors, understandable data and people who know the design intent. An automated report still needs someone able to distinguish a fault from an expected change in operation.

For owners and facility managers. Define who reviews operating information, who can change settings and who arranges repairs. Keep an accessible record of the intended operation and subsequent changes. A regular review of unresolved faults gives monitoring a practical purpose.

For authorities and professional bodies. Trial a concise evidence checklist on different existing buildings before wider use. Check both the confidence it provides and the time it takes. Training should cover control sequences, sensor suitability and interpretation of operating data, with designers and system integrators working from the same examples.

Match the check to its purpose

EPC processes, regulatory inspections, subsidy checks and voluntary operational reviews serve different purposes. Reusing them can limit paperwork if the necessary functions are actually examined.

3. Coordinate controls for changing conditions

Define the outcome and who maintains it

The resilience discussion considered how heating, cooling, ventilation, lighting and shading work together. An illustrative comparison of independent systems with coordinated operation raised a practical question: what should the building optimise? Lower energy use, lower bills, reduced demand on the grid and comfortable indoor conditions may call for different operating choices.

For owners and designers, a useful step is to describe how the building should operate in a few relevant situations, such as a hot occupied day or a period of low occupancy. The control strategy can then be checked against those needs, including how conflicting demands are resolved. Indoor environmental quality and occupant needs should form part of that brief.

Responsibility must also extend beyond handover. Owners and managers could agree who reviews the combined operation of systems after equipment replacement or a change of use, and include the cost of this work in maintenance planning. How responsibility and costs should be shared between owners, operators and service providers remains an open implementation question.

Use performance information to guide decisions

There was a substantive difference of view over how controls are represented in energy performance calculations. One concern was that methods do not adequately show the value of particular control functions. Shared calculation tools were proposed as a way to handle technical complexity through a simpler interface.

The Smart Readiness Indicator (SRI) prompted a related debate. Support focused on recognising capabilities and enabling gradual improvement; concerns centred on additional assessment effort and usefulness to owners. The SRI assesses capabilities, rather than proving realised savings. Any future use should make clear how the information supports decisions alongside EPCs and operating data. Closer links between building controls and grid flexibility were also suggested as an area for future policy development.

Questions worth taking forward

Further exchange would be most useful on the minimum evidence needed for a credible BACS assessment, when functions should be rechecked, and how to keep those checks affordable. The balance between common definitions and professional judgement also needs practical testing. For resilience, the unresolved task is to connect suitable performance measures with responsibility for maintaining results over time.

References

Legal context refers to the provisions applicable on 15 October 2026.

Directive (EU) 2024/1275 on the energy performance of buildings, consolidated version of 24 May 2026. https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX-:02024L1275-20260524

Relevant provisions: Article 13(1), (9), (10) and (12); Article 15(1); Article 23(7); Article 35. Article 13's thresholds are expressed as "over" 290 kW and "over" 70 kW. The requirements discussed here cover new and existing non-residential buildings; the lighting thresholds concern heating and air-conditioning capacity, not lighting power.

The Directive sets the EU framework. National and regional measures determine its application to individual buildings. The inspection exemption in Article 23(7) concerns the inspections under Article 23(1).

European Commission Notice C/2025/6438 of 18 December 2025. https://eur-lex.europa.eu/eli/C/2025/6438/oj/eng

Guidance on new or substantially modified provisions of the recast EPBD. Annex 10 addresses technical building systems, indoor environmental quality and inspections. This is non-binding guidance; the legal requirements are established by the Directive and the applicable implementing measures.

Further reading and practical tools

eu.bac (2024). 2024 EPBD BACS Compliance Verification Checklist for Non-Residential Buildings.
Practical guidance on checking BACS functions and preparing supporting evidence, including introductory notes, a verification checklist and a building owner self-declaration form.

eu.bac (2026). Guidelines for the Transposition of the 2024 Energy Performance of Buildings Directive (EPBD) in Member States.
Industry guidance for national authorities and building professionals on implementing the Directive's provisions for building automation, technical building systems and indoor environmental quality.

Energy & Strategy, Politecnico di Milano (2024). Building Automation and Control Systems Impact on EPC Classes in Europe. July 2024. Study developed with eu.bac.
Modelling of how BACS upgrades could affect energy use, EPC class distributions and investment costs. The analysis uses a common illustrative EPC classification to compare building stocks across Europe; results do not predict individual buildings' ratings under national EPC methods.