

EED REVIEW

EU.BAC SUGGESTIONS

Following the publication of the roadmap and public consultation, the workshops held by COWI and the communication on the Renovation Wave strategy, eu.bac would like to provide the European Commission with more detailed suggestions on the upcoming EED review.

We welcome the increased commitment of 55% emissions reduction. However, the existing legislation needs to be updated to match this and achieve the goals of decarbonization and digitalization. Alongside the energy efficiency benefits provided by demand-optimized energy usage and permanent energy monitoring, Building Automation and Control solutions optimize air quality, thermal comfort and human-centric lighting while helping to reduce the spread of infections. Digitalization of our buildings can be an urgent and crucial enabler of energy efficiency.

ARTICLE 2 – DEFINITIONS

Energy management system: defined in the EED as “a set of interrelated or interacting elements of a plan which sets an energy efficiency objective and a strategy to achieve that objective”. Nevertheless, in the building sector, the term “Energy Management System” often refers to Building Energy Management Systems (BEMS) / Building Automation and Control Systems (BACS). These two concepts have to be addressed and distinguished. To avoid any confusion, we suggest adding the definition of BEMS/BACS to the EED glossary.

BACS: According to the revised EPBD, “building automation and control system” means a system comprising all products, software and engineering services that can support the energy-efficient, economical and safe operation of technical building systems through automatic controls and by facilitating the manual management of those technical building systems. It is sometimes also referred to as Building Energy Management System (BEMS). Advanced capabilities of BACS can be found in the revised EPBD in Articles 14 and 15, par.5

ARTICLE 3 – ENERGY EFFICIENCY TARGETS

The level of the target: The EU is set to increase its CO₂ emissions target from 40% to at least 55% by 2030. In light of this, the Energy Efficiency target for 2030 should be increased accordingly from the current 32.5% to at least 40% by 2030.

Nature of the target: The Energy Efficiency target should be expressed in both primary and final (CO₂) energy consumption to ensure the gaps at the end-user level are eliminated. The target should be binding on both EU and national level.

ARTICLE 5 – EXEMPLARY ROLE OF PUBLIC BUILDINGS

3% rate should be increased: In light of the EU’s increased climate ambition, the 3% goal is too low. This goal, which might be too low for the private sector, is certainly not fit for the public sector. All existing public buildings, owned by central governments and local authorities, should be targeted by renovation measures, with exceptions only for new buildings able to demonstrate adequate automation and control levels.

The alternative approach should be eliminated: If public buildings are to lead by example, no exceptions or alternatives should be in place. Measures for behavioural change of occupants are important but they should not be an alternative to mandatory renovation. The mandatory deployment of building automation and control solutions in public buildings is key to motivate end-users' behavioural change.

Public buildings at local and regional levels should be covered: To be consistent with the purpose of this article, there must be a stronger involvement of the regional and local level, with legally binding obligations extended to these levels, covering not only the government but all public buildings, including housing, schools and hospitals. Schools, hospitals and other public buildings often are homogenous segments in which it would be easier to adopt a common renovation approach.

Energy management systems for all public buildings: The building stock of the future will have to be ultra-efficient and decarbonized. On top of this, the combination of more RES, more decentralized energy resources, and more flexible buildings will require to ramp up the use of digital technologies to face technical challenges and manage more complex systems. This goal can be achieved only ensuring increased control of the energy usage and smart management of increasingly renewable and thus volatile energy resources. Energy management systems, managed by digital interfaces can cost-effectively implement this approach, delivering a multiplier effect: enabling energy savings and reducing operational costs while improving productivity, health and well-being. The implementation of the current EED proves that simple encouragement is not enough. BACS should be deployed, with mandatory requirements, in public buildings at all levels.

Other buildings: We strongly support the exemplary role given to public buildings in Article 5 however, the current provisions have not been effective enough in the broader building stock and buildings continue accounting for 36% of greenhouse emissions. The renovation rate has to be increased through more ambitious energy efficiency provisions targeting all buildings both through EED and EPBD.

ARTICLE 6 – PURCHASING BY PUBLIC BODIES

Purchasing at local and regional levels should be covered: there must be a stronger involvement of the regional and local level, with legally binding public purchasing obligations extended to these levels.

Cost should not be the main factor in public procurement: When awarding contracts, other factors, such as high energy-efficiency, cost-effectiveness and sustainability should play a role.

ARTICLE 8 – ENERGY AUDITS

Energy audits and implementation of energy management systems represent one of the best ways to achieve cost-effective improvements in the energy efficiency of final customers such as SMEs, medium-sized and large enterprises. As of today, the implementation of article 8 has resulted in low-quality of audits. Some Member States have set a threshold for energy consumption higher than EMS legislation requires, undermining the article 8 implementation. In some cases, MS have also chosen to exempt certain companies.

Uptake of the measure: The recommendations of energy audits or energy management systems carried out across industry should be made mandatory for all non-SMEs. All enterprises which implement an energy management system should be exempted from conducting an audit, as long as the energy management complies with certification ISO50001. This element is crucial to ensure a high-quality of the energy management system.

Digitalization and monitoring: Smart technologies (such as BACS / BEMS, HEMS) can support energy audits, energy management programs and market surveillance authorities in MS. Digitalization is an urgent and crucial enabler of energy efficiency. In addition to monitoring energy data, BACS also monitor, control and optimise energy use – it might be useful to cross-reference EPBD Art. 14 and Art. 15 on required BACS capabilities. These capabilities can support market surveillance authorities in monitoring the progress and in reporting defined KPIs. Through ongoing monitoring and reporting, they could make frequent regular energy audits, e.g. once in every X years, unnecessary. Instead, an energy audit could be required only when there are significant deviations in the monitored parameters that require expert analysis.

Implementation of identified measures: An energy audit has a value only if subsequently measures are taken. Currently, there is very scarce data on the implementation of measures recommended in the energy audit report. Ongoing monitoring using smart technologies (such as BACS/ BEMS, HEMS) would easily indicate improvement in energy efficiency due to the implementation of specific measures.

Financial incentives: funds should be made available through the European Recovery and Resilience Facility.

ANNEX VI – MINIMUM CRITERIA FOR ENERGY AUDITS INCLUDING THOSE CARRIED OUT AS PART OF EMS

Energy Management System alternative: Smart technologies (such as BACS / BEMS, HEMS) can support energy audits, energy management programs and market surveillance authorities in MS. Through ongoing monitoring and reporting, they could make frequent regular energy audits, e.g. once in every X years, unnecessary. Instead, an energy audit could be required only when there are significant deviations in the monitored parameters that require expert analysis.

ARTICLE 17 INFORMATION AND TRAINING

Shortage of professionals: There exists a shortage of skilled professionals for audits, certifications, installation and maintenance of those technologies that can play a key role in decarbonizing the building stock, such as building automation and control solutions. The number of qualified energy auditors is not sufficient to meet the demand for mandatory energy audits. As part of the #Skills4climate coalition, eu.bac, calls for actions to:

- Better intertwine skills and climate strategies
- Strengthen public-private partnerships
- Incentivise technical education
- Incentivise apprenticeships
- Incentivise up- and re-skilling
- Introduce periodical retraining of inspectors to ensure their familiarity with the newest technologies and their application.

ARTICLE 18 – ENERGY SERVICES

Energy service as a mandatory element: EnPCs are an effective way to improve EE, but only if their enforcement in the Member States can be ensured through mandatory requirements in renovation projects. Energy efficiency services should become a mandatory element for renovation projects for public authorities or when buildings exceed a certain effective rated energy output.

Public body oversight and standardization: Member States should set up/designate a public body that oversees ESCO functioning, is responsible for accrediting qualified ESCOs and supports the creation of standardised contracts to apply EnPCs.

Promote best practice: showcasing success stories that could address potential concerns of end-users. Administrative and financial uncertainties/complexities should be addressed and alleviated.

Promote the uptake of Eurostat Guidance Note on accounting rules for Energy Performance Contracts: While this clarification contributed to stimulating the market in some countries, some Member States/local authorities still did not change their approach on this matter.

ARTICLE 20 – ENERGY EFFICIENCY NATIONAL FUNDS AND OTHER SUPPORT MECHANISMS

Reviewing the investment: Between 2014 and 2020, the EU Cohesion policy allocated a budget of around €14 billion to improve the energy efficiency of buildings. To ensure cost-effective measurements of energy efficiency renovations, incentives for the deployment of energy audits through the use of Energy Management Systems should be further supported. Digital technologies should play a key to gather data about buildings renovations projects across the EU Member States.

Several powerful initiatives could stem from Article 20, such as:

- Setting up an Energy Efficiency National Fund or a similar national financial support scheme for energy efficiency both in households and non-residential buildings
- Setting up specific financing facilities for increasing energy efficiency in different sectors
- Setting up specific technical support schemes for increasing energy efficiency in different sectors
- Dissemination of best practice in the field of financing energy efficiency

Unfortunately, at the moment these initiatives are deployed only partly and in a few Member States. More should be done to fully exploit their potential. There is a need for clear financing schemes, supporting the implementation of measures already approved at the European level. Often the lack of appropriate funding schemes impedes the ambition of Member States when transposing European policies, resulting in diluted national policies. The existence of funds needs to be better communicated through awareness campaigns. Often despite being available, funds do not reach their target.