# ENERGY PERFORMANCE OF BUILDINGS

cep**PolicyBrief** No. 06/2017



**Objective of the Directive:** New requirements and the abolition of "cumbersome" existing provisions will further increase the energy performance of buildings.

Affected parties: Suppliers and consumers of energy services in the buildings sector.



**Pro:** Linking financial support for building renovation to the energy savings achieved is an improvement on the status quo.

**Contra:** (1) The existing requirements on nearly zero-energy buildings should be abolished because they prevent the construction of affordable housing.

(2) Alleviating energy poverty should not be pursued by way of building renovation requirements but by the social systems of the Member States.

(3) The obligation to set up smart recharging points for electric cars which react to price signals is disproportionate due to the high costs involved.

# CONTENT

# Title

**Proposal COM(2016) 765** of 30 November 2016 for a **Directive** of the European Parliament and of the Council amending Directive 2010/31/EU **on the energy performance of buildings** 

# **Brief Summary**

#### Context and objectives

- 75% of the EU building stock is "energy inefficient" and "only" 0.4-1.2% of it is renovated each year. In future, this "huge potential for efficiency gains" is to be used more effectively. (p. 2)
- The existing Energy Performance of Buildings Directive [2010/31/EU; see <u>cepPolicyBrief</u>] aims to improve the "overall energy efficiency" of buildings by reducing their consumption of energy for heating, cooling, ventilation, hot water and lighting (Art. 2 No. 4). For this [SWD(2016) 408, p. 6]
  - a "demand-driven market" for energy efficient buildings is to be created, which reduces "information barriers" through energy certification and inspection,
  - "sub-optimal investments" are to be prevented in that Member States will set "minimum energy performance requirements at cost-optimal levels",
  - as from 2021, all new buildings public buildings as from 2019 have to be built exclusively as "nearly-zero-energy buildings" which require "nearly zero or a very low amount of energy" (Art. 2 No. 2).
- The proposed changes to the Energy Performance of Buildings Directive are supposed to accelerate the energy-related renovation of existing buildings (p. 2).
- The Proposal for a Directive now being submitted is part of a comprehensive energy package. This includes:
  - A recast of the Internal Electricity Market Directive [2009/72/EC; COM(2016) 864],
  - A recast of the Internal Electricity Market Regulation [(EC)714/2009; COM(2016) 861],
  - An amendment of the Renewable Energy Directive [2009/28/EC; COM(2016) 767] and
  - An amendment of the Energy Efficiency Directive [2012/27/EU; COM(2016) 761, see cepPolicyBrief].

## Abolition of "cumbersome" obligations

The following obligations on the Member States have proven to be "cumbersome" and will therefore cease to apply:

- the duty to encourage the introduction of intelligent metering systems whenever a building is constructed or undergoes major renovation (Art. 8 (2) repealed);
- the duty, in respect of new buildings, to ensure that, before construction starts, the "technical, environmental and economic feasibility of high-efficiency alternative systems" e.g. decentralised renewable energy supply systems, heat pumps, cogeneration is taken into account (Art. 6 (1) sentence 2, (2) and (3) repealed).

## Long term renovation strategy

- Member States must establish a long-term strategy to promote investment in the renovation of public and private residential and commercial buildings [new Art. 2a (1), previously Art. 4 of the Energy Efficiency Directive (2012/27/EU); see <u>cepPolicyBrief</u>].
- In order to achieve a "decarbonised building stock" by 2050 Member States must set out a "roadmap" (new Art. 2a (2)) with "clear milestones and measures" and with "specific milestones" for 2030.

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- To "guide" investment decisions, Member States must introduce mechanisms to aggregate projects, reduce the risk of energy efficiency operations for investors and create incentives for additional privatesector investment by the use of public funding (new Art. 2a (3)).
- The renovation strategy shall contribute to the alleviation of energy poverty (new Art. 2a (2).
- Energy poverty occurs where a household [Impact Assessment SWD(2016) 414, p. 25] - cannot afford to adequately heat the home or
  - is late with payment of utility bills or
- is living in a badly insulated and/or damp dwelling.
- According to model-based forecasts, the proposed measures would create an estimated 220,000 new jobs in 2030 [Impact Assessment SWD(2016) 414, p. 40 and 94].

# Technical building systems

- A "technical building system" is (Art. 2 (3) as amended)
- the technical equipment in a building for heating, cooling, ventilation, domestic hot water, lighting, building automation and control, on-site electricity generation and infrastructure for electro-mobility, or
   a combination of such systems, including those using energy from renewable sources.
- Member States must set requirements in respect of the overall performance, installation, "appropriate dimensioning", adjustment and control of the technical building systems (Art. 8 (1)).
- When a technical building system is installed, replaced or upgraded, the overall energy performance of the altered system must be assessed, documented and passed on to the building owner, and included in the national energy performance certificate database (new Art. 8 (5)).

# Regular inspection of heating and air-conditioning systems

As only alternative to the regular inspection of heating and air-conditioning systems in non-residential buildings with annual consumption over 250 MWh, and in residential buildings with an effective output of over 100 kW, these must be equipped with building automation and control systems (amended Art. 14 (2) and Art. 15 (2)).

## "Smartness indicator"

- A "smartness" indicator must be issued for every building (Art. 8 (6). It tells potential tenants or purchasers
  of a building the extent to which its energy consumption can adapt to the requirements of the occupant
  and of the power grid (p. 13).
- It records the "flexibility features, enhanced functionalities and capabilities" of technical building systems
  resulting from more interconnected and built-in "intelligent devices" (new Art. 8 (6)).
- It will enable occupants and the building itself to react to comfort or operational requirements, contribute to demand response and support the "optimum, smooth and safe operation" of the energy infrastructure (new Art. 8 (6)).

# Financial Support

- Member States must make their financial support for building renovation dependent on the energy savings thereby achieved (new Art. 10 (6)).
- These savings must be determined by comparing energy performance certificates which must be issued before and after renovation (new Art. 10 (6)).

## Recharging points for electric vehicles

- As from 2025, in the case of all new or substantially renovated non-residential buildings with more than ten parking spaces, at least one in every ten parking spaces must be equipped with a recharging point for electric vehicles, which can "start and stop charging in reaction to price signals" (new Art. 8 (2)). Small and medium-sized enterprises (SMEs) may be exempt from this obligation (see Recommendation 2003/361/EC).
- As from 2025, in the case of all new or substantially renovated residential buildings with more than ten parking spaces, pre-cabling must be included to enable the installation of recharging points for electric vehicles for every parking space (new Art. 8 (3)).

# Main Changes to the Status Quo

- ► The abolition of the obligations for the Member States, whenever a building is constructed or undergoes major renovation, to support the introduction of smart metering and to ensure that the feasibility of high-efficiency alternative systems is considered, before the start of a new build.
- ► Until now, the long-term renovation strategy did not expressly pursue social goals. Now it is intended to contribute to the alleviation of energy poverty.
- ► New: after a technical building system is installed, replaced or upgraded, its overall energy performance must be assessed, documented and passed on to the building owner.
- ► New: Member States must make their financial support for energy efficiency when renovating buildings, dependent on the energy savings achieved.



New: As from 2025, in the case of all new or renovated non-residential buildings with more than ten parking spaces, at least one in every ten parking spaces must be equipped with a recharging point for electric vehicles. In the corresponding case for residential buildings, pre-cabling for recharging points is required for every parking space.

# Statement on Subsidiarity by the Commission

EU-wide regulation of the energy performance of buildings strengthens the internal market. Companies which operate across borders, such as supermarkets or hotel chains, will profit from "more unified" methods of certifying the energy performance of buildings. The finance sector needs more EU-wide comparability of energy performance measurements in order to develop financing products for this. According to the EU Commission, the principle of subsidiarity is respected as Member States will still be able to make adaptations to national circumstances and local conditions. (p. 4)

## **Policy Context**

In 2015, in order to realise the non-binding EU energy efficiency target for 2030, passed by the European Council in 2014, of at least 27%, the European Commission outlined possible energy efficiency measures which were to take priority in its "Framework Strategy for an Energy Union" (see <u>cepPolicyBrief</u>) (see <u>cepInput</u> 01/2017). In addition to this Proposal for an Amendment to the Energy Performance of Buildings Directive (2010/31/EU), the Commission has also published a proposal for a new Regulation on "Governance" of the Energy Union [Proposal COM(2016) 759].

## **Legislative Procedure**

30 November 2016	Adoption by the Commission
Open	Adoption by the European Parliament and the Council, publication in the Official
	Journal of the European Union, entry into force

## **Options for Influencing the Political Process**

Directorates General:	Energy
Committees of the European Parliament:	Industry, Research and Energy (leading), Rapporteur: Bendt
	Bendtsen (EVP Group, DK); Environment, Public Health and Food
	Safety
Committees of the German Bundestag:	ТВА
Decision-making mode in the Council:	Qualified majority (adoption by 55% of the Member States making up 65% of the EU population)
Formalities	
Legislative competence:	Art. 194 TFEU (Energy)
Form of legislative competence:	Shared competence (Art. 4 (2) TFEU)
Legislative procedure:	Art. 294 TFEU (ordinary legislative procedure)

# ASSESSMENT

## **Economic Impact Assessment**

The idea of overcoming information barriers, to create a demand-driven market for energy-efficient buildings, is appropriate because the economic justification used for government intervention in free market processes is often the need to overcome problems of information and "external effects", such as the emission of greenhouse gases (GHG) whose costs are not borne by the polluter (see <u>cepInput 01/2017</u>). Energy certificates for buildings and housing allow for comparability of the likely energy costs and solve informational problems between landlords and tenants. That is the condition for the energy-efficient construction and cost-effective energy-related renovation of buildings.

Documenting the overall energy performance of a modified technical building system brings about an improvement in information for issuing energy certificates and on compliance with minimum requirements. "Smartness indicators" also ensure market transparency for technical building systems. In both cases, however, care must be taken to ensure cost-effective implementation.

The specified aim of the existing Directive of preventing "sub-optimal investment" by setting "minimum energy performance requirements at cost-optimal levels" is more doubtful. Even an approximate calculation of the latter, by the state, is not possible. Where minimum requirements are too high, they may make living space unnecessarily expensive.



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The existing requirements on nearly-zero-energy buildings should be abolished before coming into force because they undermine market forces with a dirigiste and disproportionate call for nearly zero energy consumption and impede or prevent the construction of affordable housing.

Against this backdrop, the planned abolition of "cumbersome" rules on the mandatory introduction of smart metering systems and on highly efficient alternative systems is appropriate. The "mechanisms" called for by the amendment Directive to aggregate projects, reduce risks for investors and subsidise private investment in energy efficiency, do reduce transaction and financing costs, but may lead to cost-inefficient energy-saving measures or make housing significantly more expensive.

Alleviating energy poverty should not be pursued by way of energy-related building renovation requirements but by the social systems of the Member States because increased rents resulting from energy efficiency measures may be unacceptable for those affected by energy poverty who cannot afford energy costs. Wanting to alleviate energy poverty by way of obligations to renovate buildings may even be counter productive. Reduced variable energy costs alongside higher fixed rental costs reduces the scope for bridging short-term financial emergencies by saving on certain energy services or by deferring payments.

Linking financial support for building renovation to the energy savings achieved is an improvement on the current status quo. The requirement for energy certificates to be issued before and after renovationfacilitates inspection and prevents the misdirection of funds.

The obligation for large buildings to set up smart recharging points for electric cars which react to price signals is disproportionate due to the high costs involved. Simple recharging points are sufficient for the aim of promoting electro-mobility.

Retrospective installation of cabling for recharging points in individual parking spaces may, in the case of some residential buildings with a number of apartment owners, require the consent of the owners' association and is not therefore easily achievable. An installation obligation for new builds is therefore appropriate for reasons of cost. However, an obligation to lay conduits is sufficient for this. This is preferable to the planned pre-cabling obligation, likewise for reasons of cost.

# **Legal Assessment**

#### Legislative Competency

Unproblematic. The EU can take energy policy measures to promote energy efficiency and energy savings (Art. 194 TFEU).

#### Subsidiarity

Although "more uniform" methods for the certification of the overall energy performance of buildings may be advantageous for companies operating in the internal market, as the Commission itself asserts, [Impact Assessment, SWD(2016) 414, p. 24], climate conditions, local factors and building methods vary greatly within the EU, so buildings as well as the property and housing markets are local in nature. **In the absence of a cross-border element, EU action to improve the energy performance of buildings is** therefore **unnecessary.** In fact, Member States are in a better position to establish their own requirements for the energy efficiency of buildings. **The Proposal for a Directive is therefore in breach of the principle of subsidiarity.** 

## **Alternative Approach**

Instead of legislative provisions and subsidies for the energy efficiency of buildings, the buildings sector should be included in the Emissions Trading System EU-ETS (see <u>cepInput 01/2017</u>). This will enable the actual energy policy goals such as climate protection and security of supply to be achieved cost effectively.

# Conclusion

The existing requirements on nearly zero-energy buildings should be abolished because they prevent the construction of affordable housing. Alleviating energy poverty should not be pursued by way of building renovation requirements but by the social systems of the Member States. Linking financial support for building renovation to the energy savings achieved is an improvement on the status quo. The obligation to set up smart recharging points for electric cars which react to price signals is disproportionate due to the high costs involved. In the absence of a cross-border element, EU action to improve the energy performance of buildings is unnecessary, the Proposal for a Directive is therefore in breach of the principle of subsidiarity.