



Committee on the Environment, Public Health and Food Safety

2016/0381(COD)

19.9.2017

OPINION

of the Committee on the Environment, Public Health and Food Safety

for the Committee on Industry, Research and Energy

on the proposal for a directive of the European Parliament and of the Council amending Directive 2010/31/EU on the energy performance of buildings (COM(2016)0765 – C8-0499/2016 – 2016/0381(COD))

Rapporteur: Anneli Jäätteenmäki

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SHORT JUSTIFICATION

The Commission proposal tries to increase the energy efficiency of the European building stock and to contribute positively to the EU climate goals. The chosen method is to enhance implementation of the existing directive and to propose some provisions that go beyond the current situation. Putting energy efficiency first is rightly restated as the guiding principle.

Given the slow annual renovation rate of European buildings (around 0,4-1,2% depending on the Member State) and the complex interplay between EU legislation, national building codes, building practices, economic trends and the ownership structure of the building stock, there still remains enormous untapped energy saving potential. In light of the current trend, the coming years will not radically change the situation.

Without further measures, energy efficiency renovations will be carried out when they are economically reasonable and have the proper incentives in place in order to incentivise reaching the energy efficiency goals.

It is important that the Member States know their building stock and thus help the different actors to prioritise the renovations based on cost-efficiency. This is encouraged in the amendment to Article 2 on the long-term renovation strategies.

Currently, there is an urgent need for widely available financing products that would include and support the positive aspects of energy efficiency renovations, such as the higher asset value and healthier living conditions for the occupants. The Commission's efforts in enabling financing, such as the “Smart Finance for Smart Buildings” initiative are to be encouraged.

The rapporteur would like to stress two major issues: healthy building and the Commission proposal on electro-mobility.

First, one cannot overstate the importance of healthy buildings. A healthy building is designed to fulfil the needs of its occupants and can be modified to accommodate future needs. It is constructed from durable, repairable and recyclable non-toxic materials. It uses energy efficiently and might also produce it, has sufficient natural light and is ventilated and heated properly to maintain good indoor air quality and temperature.

Nowadays, most people spend most of their time indoors. According to estimates, tens of millions of Europeans suffer from bad indoor air quality, often because of excessive dampness, which encourages the growth of mould and can also cause structural damage to the building.

The range of affected buildings varies from private dwellings to public buildings. The way buildings are built and maintained has huge effects on public health and the well-being of the whole population.

Energy inefficient houses and energy poverty are intimately linked. If the housing estates postpone the necessary renovations due to lack of financing, they risk further degrading of the living conditions and also decrease the value of the housing stock.

For the rapporteur, the second major issue is the proposal on electro-mobility, introduced in

the amended Article 8.

The proposition includes all new non-residential buildings and existing non-residential buildings undergoing major renovation with more than ten parking spaces. Newly built residential buildings and those undergoing major renovations are also included. For the first category, at least 10 % of the parking spaces should be equipped with a recharging point. For the second category, every parking space should be equipped with pre-cabling.

In the rapporteur's view, the charging infrastructure obligations proposed by the Commission undermine the efficient allocation of both private and public money.

Currently, charging technology is being developed at a fast pace. Many Member States have already taken steps to build the charging infrastructure. The cost of a charging point is decreasing. Private companies and public utilities have viable business cases for building the network and pricing electric vehicle charging.

For new buildings, both non-residential and residential, the necessary infrastructure can be integrated to the design process from the beginning. It is therefore wise to make new buildings future proof by ducting. This would leave sufficient flexibility for the sizing of the cabling and ensure that the necessary charging infrastructure can easily be built when needed.

For existing non-residential buildings, the obligation should be relaxed to apply only in cases where the renovation concerns electric infrastructure of the building. This would help to keep the return for investment for the actual energy efficiency improvements higher.

AMENDMENTS

The Committee on the Environment, Public Health and Food Safety calls on the Committee on Industry, Research and Energy, as the committee responsible, to take into account the following amendments:

Amendment 1

Proposal for a directive

Recital 1

Text proposed by the Commission

(1) The Union is committed to a sustainable, competitive, secure and decarbonised energy system. The Energy Union and the Energy and Climate Policy Framework for 2030 establish ambitious Union commitments to reduce greenhouse gas emissions further (by at least 40 % by 2030, as compared with 1990), to increase the proportion of renewable energy consumed (by at least 27 %) and to make

Amendment

(1) The Union is committed to a sustainable, competitive, secure and decarbonised energy system **and to a high level of human health protection**. The Energy Union and the Energy and Climate Policy Framework for 2030 establish ambitious Union commitments to reduce greenhouse gas emissions further (by at least 40 % by 2030, as compared with 1990), to increase the proportion of

energy savings of at least 27 %, reviewing this level having in mind an Union level of 30 %¹⁰, **and** to improve Europe's energy security, competitiveness and sustainability.

renewable energy consumed (by at least 27%) and to make energy savings of at least 27%, reviewing this level having in mind an Union level of **at least** 30 %¹⁰, to improve Europe's energy security, competitiveness and sustainability **and to promote access to affordable energy in order to reduce energy poverty.**

Amendment 2

Proposal for a directive

Recital 1 a (new)

Text proposed by the Commission

Amendment

(1a) The Commission has co-financed a number of projects which foster experience and good practices in regional collaboration, practices which can be shared across the Union with a view to improving the implementation of this Directive. Examples of those projects include MARIE, and its extension SHERPA, along with ELIH-MED and PROFORBIOMED.

Amendment 3

Proposal for a directive

Recital 2 a (new)

Text proposed by the Commission

Amendment

(2a) Improvements to the energy efficiency in buildings reduce the demand for heating fuels, in particular solid heating fuels, and therefore contribute to improving air quality through reduced emission pollutants and achieving, in a cost effective manner, the objectives of Union's air quality policy, as established in particular by Directive (EU) 2016/2284 of the European Parliament and of the Council^{1a}. Energy efficiency should therefore be considered to be an element of air quality policy, especially in Member

States where achieving Union's limits on emissions of air pollutants is problematic and energy efficiency could help attain those goals.

^{1a} Directive (EU) 2016/2284 of the European Parliament and of the Council of 14 December 2016 on the reduction of national emissions of certain atmospheric pollutants, amending Directive 2003/35/EC and repealing Directive 2001/81/EC (OJ L 344, 17.12.2016, p. 1-31).

Justification

The residential sector is responsible for important shares of pollutant emissions, such as BaP, PM2.5 and PM10 in Europe stemming from smoke caused by burning solid fuels used for residential heating. These pollutants increase mortality, morbidity and hospitalization, especially as measured emission values often go well beyond the limits established by the EU air quality legislation.

Amendment 4

Proposal for a directive Recital 2 b (new)

Text proposed by the Commission

Amendment

(2b) Around 50 million households in the Union are affected by energy poverty. Energy poverty should be considered to be the inability of a household to support an adequate level of energy supply so as to guarantee basic levels of comfort and health, due to a combination of low income, high-energy prices and low quality, poor performing housing stock. Current building renovation rates are insufficient and buildings owned or occupied by low-income citizens at risk of energy poverty are the hardest to reach.

Amendment 5

Proposal for a directive

Recital 5 a (new)

Text proposed by the Commission

Amendment

(5a) The Union's building stock will need to become 'nearly zero-energy buildings' (nZEB) by 2050, in line with the objectives of COP21 (the Paris Agreement). The current building renovation rates are insufficient and those buildings owned or occupied by low-income citizens at risk of energy poverty are the hardest to reach.

Amendment 6

Proposal for a directive

Recital 6

Text proposed by the Commission

Amendment

(6) The Union is committed to developing a secure, competitive and decarbonised energy system by 2050¹². To meet this goal, Member States and investors need milestones to ensure that buildings are decarbonised by 2050. In order to ensure this decarbonised building stock by 2050, Member States should identify ***the*** intermediary steps to achieving ***the*** mid-term (2030) and long-term (2050) objectives.

(6) The Union is committed to developing a secure, competitive and decarbonised energy system by 2050¹². ***In the light of the Paris Agreement and to meet this goal, Member States and investors need ambitious targets and clear milestones and measures to ensure that buildings are decarbonised and that the overall energy efficiency of buildings is increased so that they reach the nZEB standard by 2050. In order to ensure this decarbonised building stock by 2050, Member States should identify intermediary steps and the trajectory to achieving mid-term (2030 and 2040) and long-term (2050) objectives and stimulate the renovation of the existing building stock as the current building renovation rates are insufficient.***

Amendment 7

Proposal for a directive

Recital 6 a (new)

Text proposed by the Commission

Amendment

(6a) To meet the targets for decarbonising the building stock by 2050, and to reduce greenhouse gas emissions and promote the transition to a low-carbon economy, it will be necessary to take a holistic approach to defining energy-efficient buildings. The construction of new buildings and the renovation of existing buildings should aim to create buildings that fulfil the needs of occupants and that can be modified to accommodate future needs, that are constructed from durable, repairable and recyclable non-toxic materials, that use energy efficiently and that could also produce energy, that have sufficient natural light, that fulfil safety requirements, including fire safety, and that are ventilated and heated properly to maintain a healthy indoor air quality.

Amendment 8

Proposal for a directive Recital 6 b (new)

Text proposed by the Commission

Amendment

(6b) The Paris Agreement must be reflected in the Union's efforts to decarbonise its building stock, taking into account that almost 50 % of the Union's final energy demand is used for heating and cooling, of which 80 % is used in buildings. The Union's energy and climate goals therefore need to be met by switching supply to nearly 100 % renewables by 2050 at the latest, which can be achieved only by reducing energy consumption and making full use of the 'energy efficiency first' principle, as energy efficiency measures are the most cost effective way of achieving reductions

in greenhouse gas emissions.

Amendment 9

Proposal for a directive Recital 6 c (new)

Text proposed by the Commission

Amendment

(6c) As up to 90 % of the 2050 built environment already exists, more ambitious efforts are needed to accelerate the rate of renovating and decarbonising the existing building stock. As 30 years is a relatively short time period to renew the existing building stock, the incentives and standards set today will ultimately determine whether the Union will reach its long-term climate and energy goals.

Amendment 10

Proposal for a directive Recital 7

Text proposed by the Commission

Amendment

(7) The provisions on long-term renovation strategies provided for in Directive 2012/27/EU of the European Parliament and of the Council¹³ should be moved to Directive 2010/31/EU, where they fit more coherently

(7) The provisions on long-term renovation strategies provided for in Directive 2012/27/EU of the European Parliament and of the Council¹³ should be moved to Directive 2010/31/EU, where they fit more coherently, ***and where they accomplish Member States' plans to arrive at a nearly zero energy buildings stock by 2050. While keeping that long-term objective, they should be accompanied by binding milestones for 2030 and 2040. The long-term renovation strategies and the renovation work that they stimulate will contribute to boosting growth through the creation of jobs, and to providing clean and affordable energy to consumers. Financing mechanisms and***

financial incentives should be given a central position in the Member States' long-term national renovation strategies and be actively promoted by them. Furthermore, a strategy for promoting specialist support and advice for consumers and for training specialists should be included.

¹³ Directive 2012/27/EU of the European Parliament and of the Council of 25 October 2012 on energy efficiency, amending Directives 2009/125/EC and 2010/30/EU and repealing Directives 2004/8/EC and 2006/32/EC (OJ L 315, 14.11.2012, p. 1).

¹³ Directive 2012/27/EU of the European Parliament and of the Council of 25 October 2012 on energy efficiency, amending Directives 2009/125/EC and 2010/30/EU and repealing Directives 2004/8/EC and 2006/32/EC (OJ L 315, 14.11.2012, p. 1).

Amendment 11

Proposal for a directive Recital 7 a (new)

Text proposed by the Commission

Amendment

(7a) The construction industry alone directly accounts for 18 million jobs in the Union and generates 9 % of its GDP. Energy efficiency measures in the building industry with ambitious goals for the deep, gradual renovation of existing building stock have the potential to accelerate the modernisation of that sector and its associated workforce and to create millions of jobs in the Union, in particular in micro-, small and medium-sized enterprises. Underlying cost-optimality calculations for elaborating Member States' long-term renovation strategies and decisions on their minimum performance criteria should also duly take account the economic value of co-benefits of energy efficiency measures, such as job creation, asset value, reduced import dependence, health or indoor and outdoor air quality, via harmonised reference values as a part of the guidance for the Union's cost-optimality calculation

methodology.

Amendment 12

Proposal for a directive Recital 7 b (new)

Text proposed by the Commission

Amendment

(7b) As the building stock in the Union is being modernised to a higher level of energy efficiency, it is also becoming more complex. There is an increasing need for cooperation between the different professionals on-site. The right set of professional skills plays an essential part in untapping that potential and improving the building stock. Encouragement for systemic thinking should start from the educational system and continue throughout the careers of builders. In that context, it is necessary for Member States to provide a clear link between their national long-term renovation strategies and suitable initiatives, to promote skills and education, lifelong training and skills for technicians and professionals working in the construction and energy efficiency sectors as well as to inform communities groups and small businesses on energy awareness, efficiency measures and building renovation.

Amendment 13

Proposal for a directive Recital 7 c (new)

Text proposed by the Commission

Amendment

(7c) National renovation strategies should set out the expected results and the contribution to achieving the overall energy efficiency target in the short term (2030), medium term (2040) and long

term (2050).

Amendment 14

Proposal for a directive

Recital 9

Text proposed by the Commission

(9) In order to adapt this Directive to the technical progress, the power to adopt acts in accordance with Article 290 of the Treaty on the Functioning of the European Union should be delegated to the Commission to supplement it by defining the smartness indicator and enabling its implementation. The smartness indicator should be used to measure buildings' capacity to use ICT and electronic systems to optimise operation and interact with the grid. The smartness indicator will raise awareness amongst building owners and occupants of the value behind building automation and electronic monitoring of technical building systems and will give confidence to the occupant about the actual savings of these new enhanced-functionalities.

Amendment

(9) In order to adapt this Directive to the technical progress, the power to adopt acts in accordance with Article 290 of the Treaty on the Functioning of the European Union should be delegated to the Commission to supplement it by defining the smartness indicator and enabling its implementation. The smartness indicator should be used to measure buildings' capacity to use ICT and electronic systems to optimise operation, ***particularly the supply and use of energy (such as water and air)***, and interact with the grid. The smartness indicator will raise awareness amongst building owners and occupants of the value behind building automation and electronic monitoring of technical building systems and will give confidence to the occupant about the actual savings of these new enhanced-functionalities.

Amendment 15

Proposal for a directive

Recital 10

Text proposed by the Commission

(10) Innovation and new technology also make it possible for buildings to support the overall decarbonisation of the economy. For example, buildings can leverage the development of the infrastructure necessary for the smart charging of electric vehicles ***also*** provide a basis for Member States, if they choose to,

Amendment

(10) Innovation and new technology also make it possible for buildings to support the overall decarbonisation of the economy. For example, buildings can leverage the development of the infrastructure necessary for the smart charging of electric vehicles ***and also*** provide a basis for Member States, if they

to use car batteries as a source of power. To reflect this aim, the definition of technical building systems should be extended.

choose to, to use car batteries as a source of power. ***In view of the energy efficiency target, water may also be a source of energy in buildings. Heat recovery units may, for example, make it possible to produce heat from waste water.*** To reflect this aim of ***overall decarbonisation***, the definition of technical building systems should be extended.

Amendment 16

Proposal for a directive Recital 10 a (new)

Text proposed by the Commission

Amendment

(10a) Water is an essential element of many technical building systems, such as heating and cooling systems, and in domestic uses. The supply of the pump and pressure systems required to transport water uses a lot of energy. In addition, water leaks account for 24 % of total water consumption in the Union, resulting in energy and water loss. More effective management and a decrease in water use in new and renovated buildings would therefore contribute to the objective of rational use of resources.

Amendment 17

Proposal for a directive Recital 10 b (new)

Text proposed by the Commission

Amendment

(10 b) Measures to further improve the energy performance of buildings should take into account the Union's nZEB benchmarks required for new buildings by 2021, and the requirement for a fully nZEB building stock by 2050, and, in this context, should also take into account climatic and local conditions as well as

indoor climate; health and safety requirements including fire safety, indoor and outdoor air quality, and cost-effectiveness, including non-energy related benefits.

Justification

The EU benchmark for nZEB defined in the Commission Recommendation (EU) 2016/1318 shall serve as a guidance for MS that are lagging behind in improving energy performance requirements.

Amendment 18

**Proposal for a directive
Recital 10 c (new)**

Text proposed by the Commission

Amendment

(10c) The promotion of alternative, safe and sustainable modes of transport, such as bicycles, also contributes to the overall decarbonisation of the economy and should be integrated by the Member States as an element of the long-term strategies aimed at increasing the renovation rate of the building stock across the Union.

Amendment 19

**Proposal for a directive
Recital 10 d (new)**

Text proposed by the Commission

Amendment

(10d) Member States should provide incentives for the use of natural building materials with low carbon content and the deployment of green rooftops in the occasion of major building renovations as they can be effectively used for improving air quality, for addressing the worsening of climatic conditions, particularly in urban areas, and for improving the overall energy performance of buildings.

Amendment 20

Proposal for a directive

Recital 11

Text proposed by the Commission

(11) The impact assessment identified two existing sets of provisions, whose aim could be achieved in a more efficient manner compared to the current situation. First the obligation, before any construction starts, to carry out a feasibility study on highly-efficiency alternative systems becomes an unnecessary burden. Second, provisions related to inspections of heating systems and air-conditioning systems were found to not sufficiently ensure, in an efficient manner, the initial and maintained performance of these technical systems. *Even* cheap technical solutions with very short payback periods, such as hydraulic balancing of the heating system and installation/replacement of thermostatic control valves, are insufficiently considered today. Provisions related to inspections are amended to ensure a better result from inspections.

Amendment

(11) The impact assessment identified two existing sets of provisions, whose aim could be achieved in a more efficient manner compared to the current situation. First the obligation, before any construction starts, to carry out a feasibility study on highly-efficiency alternative systems becomes an unnecessary burden. Second, provisions related to inspections of heating systems and air-conditioning systems were found to not sufficiently ensure, in an efficient manner, the initial and maintained performance of these technical systems. Cheap technical solutions with very short payback periods, such as hydraulic balancing of the heating system and installation/replacement of thermostatic control valves, are insufficiently considered today ***and should be fully exploited, including as solutions for assisting energy-poor consumers.*** Provisions related to inspections are amended to ensure a better result from inspections. ***Factors such as the original design and position of the building should be taken in account with a view to achieving greater initial energy efficiency, which would, in turn, lead to savings in other improvements, such as the fittings, outer structure and lighting. To obtain real-time data so that systems can be optimised when necessary, monitoring systems also need to be developed.***

Amendment 21

Proposal for a directive

Recital 12

Text proposed by the Commission

Amendment

(12) Notably for large installations, building automation and electronic monitoring of technical building systems have proven to be an effective replacement for inspections. The installation of such equipment should be considered as the most cost-effective alternative to inspections in large non-residential and multifamily buildings of a sufficient size that allow a payback of less than three years. The current possibility to opt for alternative measures is therefore deleted. For small scale installations, the documentation of the system performance by installers and the registration of this information in the databases on energy performance certification will support the verification of compliance with the minimum requirements set for all technical building systems and reinforce energy performance certificates role. In addition, existing regular safety inspections and programmed maintenance work will remain an opportunity to provide direct advice on energy efficiency improvements.

(12) Notably for large installations, building automation and electronic monitoring of technical building systems have proven to be an effective replacement for inspections *and maintenance*. The installation of such equipment should be considered as the most cost-effective alternative to inspections in large non-residential and multifamily buildings of a sufficient size that allow a payback of less than three years. The current possibility to opt for alternative measures is therefore deleted. For small scale installations, the documentation of the system performance by installers and the registration of this information in the databases on energy performance certification will support the verification of compliance with the minimum requirements set for all technical building systems and reinforce energy performance certificates role. In addition, existing regular safety inspections and programmed maintenance work will remain an opportunity to provide direct advice on energy efficiency improvements.

Amendment 22

Proposal for a directive Recital 12 a (new)

Text proposed by the Commission

Amendment

(12a) The deployment of technical building systems should relate to equipment (new technologies, smart equipment), but also systems governing their operation and interaction. That relates, in particular, to the transmission of energy in buildings and systems to manage water and air efficiently.

Amendment 23

Proposal for a directive

Recital 12 b (new)

Text proposed by the Commission

Amendment

(12b) In the case of staged deep renovations, technical building systems and building automation and control systems also present an opportunity to realise savings potential with relatively short payback periods, allowing to generate additional savings over longer periods to be re-invested in the next stage of renovation.

Amendment 24

Proposal for a directive Recital 13

Text proposed by the Commission

Amendment

(13) To ensure their best use in building renovation, financial measures related to energy efficiency should be linked to the depth of the renovation, which should be assessed by comparing energy performance certificates (EPCs) issued before and after the renovation.

(13) To ensure their best use in building renovation, ***both public and private*** financial measures related to energy efficiency should be linked to the depth of the renovation ***and should promote a holistic approach to building renovations in order to ensure that all parts and technical building systems, including building maintenance, result in a high level of energy efficiency and improved indoor air quality with positive impact on health, well-being, comfort and productivity.*** Such renovations should be assessed by comparing energy performance certificates (EPCs) issued before and after the renovation, ***or another transparent and proportionate method.***

Amendment 25

Proposal for a directive Recital 13 a (new)

Text proposed by the Commission

Amendment

(13a) Long-term renovation strategies with clear milestones and measures stimulate energy efficiency investments from the private sector. Long-term investments should be further stimulated by facilitating access to refinancing of portfolios the assets of which have energy efficiency renovations characteristics.

Amendment 26

**Proposal for a directive
Recital 13 b (new)**

Text proposed by the Commission

Amendment

(13b) In order to encourage renovations, long-term private financing and de-risking tools should be promoted by implementing energy efficient mortgage standards for certified energy efficient building renovations. A lower risk weighting in capital requirements should be recognized for financial institutions providing energy efficient mortgages. The requirements should reflect the potential risk mitigating effects of energy efficiency and be reviewed in light of de-risking data gain, and where appropriate, a lower capital charge for energy efficiency mortgage collateral should be considered.

Amendment 27

**Proposal for a directive
Recital 13 c (new)**

Text proposed by the Commission

Amendment

(13c) In that regard, small-scale efficiency actions in individual apartments remain important. Such actions are often useful in alleviating fuel poverty.

Amendment 28

Proposal for a directive Recital 13 d (new)

Text proposed by the Commission

Amendment

(13d) Where a new energy performance certificate demonstrates an improvement in the building's efficiency, its cost may be included in the incentive provided by a Member State.

Amendment 29

Proposal for a directive Recital 14

Text proposed by the Commission

Amendment

(14) Access to financing is easier ***when good-quality*** information is available. Public buildings ***with a total useful floor area over 250 m²*** should ***therefore be required to*** disclose their actual energy consumption.

(14) Access to financing is easier ***with an ambitious and stable long-term framework in place and when good-quality*** information is available. ***This information also includes EPCs, information from maintenance and inspections and energy performance databases.*** Public buildings, ***including those owned, managed and occupied by public authorities, whether owned by the Member State, region, or municipality, or privately owned but publicly used buildings,*** should ***meet their role and lead by example by becoming nZEB buildings in accordance with Directive 2012/27/EU and*** disclose their actual energy consumption

Amendment 30

Proposal for a directive Recital 15

Text proposed by the Commission

Amendment

(15) The current independent control

(15) The current independent control

systems for EPCs should be strengthened to ensure certificates are of good quality, can be used for compliance checking and for producing statistics on the **regional/national** building stocks. High-quality data on the building stock is needed and this could be partially generated by the registers and databases that almost all Member States are currently developing and managing for EPCs.

systems for EPCs should be strengthened to ensure certificates are of good quality, can be used for compliance checking and for producing **harmonised** statistics on the **local, regional and national** building stocks. High-quality data on the building stock is needed and this could be partially generated by the registers and databases that almost all Member States are currently developing and managing for EPCs.

Amendment 31

Proposal for a directive

Recital 16

Text proposed by the Commission

(16) To meet the objectives of energy efficiency **policy** for buildings, the transparency of EPCs should be improved by ensuring that that all necessary parameters for calculations, for both certification and minimum energy performance requirements, are set out and applied consistently. Member States should put in place adequate measures to ensure, for example, that the performance of installed, replaced or updated technical building systems is documented in view of building certification and compliance checking.

Amendment

(16) To meet the objectives of energy efficiency for buildings **as part of the Union's binding energy efficiency target of at least 40 % by 2030**, the transparency of EPCs should be improved by ensuring that that all necessary parameters for calculations, for both certification and minimum energy performance requirements, are set out and applied consistently. Member States should put in place adequate measures to ensure, for example, that the performance of installed, replaced or updated technical building systems is documented in view of building certification and compliance checking.

Amendment 32

Proposal for a directive

Recital 18

Text proposed by the Commission

(18) The provisions of this Directive should not prevent Member States from setting more ambitious energy performance requirements at building level and for

Amendment

(18) The provisions of this Directive should not prevent Member States from setting more ambitious energy performance **and indoor air quality** requirements at

building elements as long as such measures are compatible with Union law. It is consistent with the objectives of this Directive and of Directive 2012/27/EC that these requirements may, in certain circumstances, limit the installation or use of products subject to other applicable Union harmonisation legislation, provided that such requirements should not constitute an unjustifiable market barrier.

building level and for building elements as long as such measures are compatible with Union law. It is consistent with the objectives of this Directive and of Directive 2012/27/EC that these requirements may, in certain circumstances, limit the installation or use of products subject to other applicable Union harmonisation legislation, provided that such requirements should not constitute an unjustifiable market barrier.

Amendment 33

Proposal for a directive Recital 18 a (new)

Text proposed by the Commission

Amendment

(18a) Member States should base their calculation of the energy performance of a transparent or translucent building element of the building envelope on its energy balance, meaning taking energy losses as well as energy gains from passive solar irradiance into account.

Amendment 34

Proposal for a directive Recital 18 b (new)

Text proposed by the Commission

Amendment

(18b) Cities, regional and local authorities show already the example by implementing energy efficiency measures, building renovation schemes and enabling self-generation. Bodies such as the Covenant of Mayors, smart cities and communities or 100 % renewable energy communities contribute through the actions of their members to increase energy performance and allow the sharing of best practices for energy transition. Projects at a district level

showcase, in particular, the need to consider the function of buildings integrated in a local energy system, local mobility plan and their ecosystem in general.

Amendment 35

Proposal for a directive Recital 18 c (new)

Text proposed by the Commission

Amendment

(18c) It is important to build multi-level governance strategies and macro-regional collaboration in line with the climate diversity of the Union and the challenges that climate change poses to different regions.

Amendment 36

Proposal for a directive Recital 18 d (new)

Text proposed by the Commission

Amendment

(18d) This Directive should be an additional instrument in the framework of the Energy Union and the Union's new energy governance to tackle energy poverty. For that reason, it encourages the Union to produce a clear common definition of energy poverty, and calls for the existing studies to be considered with a view to finding a possible definition as soon as possible.

Amendment 37

Proposal for a directive Article 1 – paragraph 1 – point 1 Directive 2010/31/EU Article 2 – point 3

Text proposed by the Commission

3. technical building system means technical equipment for space heating, space cooling, ventilation, domestic hot water, built-in lighting, building automation and control, on-site electricity generation, on-site infrastructure for electro-mobility, or a combination of such systems, including those using energy from renewable sources, of a building or building unit;

Amendment

3. technical building system means technical equipment, for space heating, space cooling, ***indoor air quality***, ventilation, ***water systems***, domestic hot water, built-in lighting, building automation and control ***including energy management***, on-site electricity generation, on-site infrastructure for electro-mobility, or a combination of such systems, including those using energy from renewable sources, of a building or building unit;

Amendment 38

Proposal for a directive

Article 1 – paragraph 1 – point 1 a (new)

Directive 2010/31/EU

Article 2 – point 3 a (new)

Text proposed by the Commission

Amendment

(1a) in Article 2, the following point is inserted:

‘3a. “decarbonised building stock” means a highly energy efficient building stock which has been renovated to at least nZEB level and where the remaining energy needs are met by renewable energy sources;’

Amendment 39

Proposal for a directive

Article 1 – paragraph 1 – point 1 b (new)

Directive 2010/31/EU

Article 2 – point 19 a (new)

Text proposed by the Commission

Amendment

(1b) in Article 2, the following point is inserted:

“19a. “trigger point “means an

opportune moment, for example from a cost-efficiency or disruption perspective, in the life cycle of a building for carrying out energy renovations ;'

Amendment 40

Proposal for a directive

Article 1 – paragraph 1 – point 2 – point a

Directive 2010/31/EU

Article 2a – paragraph 1

Text proposed by the Commission

(a) the *first* paragraph *consists of Article 4* of the *Directive 2012/27/EU on energy efficiency*¹⁶, *other than its last subparagraph*;

Amendment

(a) the *following* paragraph *1* is *inserted*:

“1. Member States shall establish a long-term renovation strategy for mobilising investment in the renovation of the national stock of residential and commercial buildings, both public and private, with the aim of encouraging and guiding the transformation of the building stock into a highly energy efficient and decarbonised building stock by 2050. That strategy shall encompass:

(a) an overview of the national building stock based, as appropriate, on statistical sampling;

(b) identification of cost-effective approaches to renovations relevant to the building type and climatic zone, taking into account trigger points in the life-cycle of a building;

(c) policies and measures to stimulate cost-effective deep renovations of buildings, including staged deep renovations;

(d) a forward-looking perspective to guide investment decisions of individuals, the construction industry and financial institutions;

- (e) an evidence-based estimate of expected energy savings and wider benefits;*
- (f) complementary and/or alternative measures to renovation, such as energy performance contracting, independent and easily accessible energy advisory services, measures aimed at improving consumer behaviour or connection to efficient district heating and cooling system;*
- (g) policies and actions with quantifiable objectives to target the worst performing segments of the national building stock, households subject to energy poverty and to split-incentive dilemmas for renovations;”*

Amendment 41

Proposal for a directive

Article 1 – paragraph 1 – point 2 – point a a (new)

Directive 2010/31/EU

Article 2a – paragraph 1 a (new)

Text proposed by the Commission

Amendment

- (aa) the following paragraph is added:*
- “1a. Member States shall map their existing building stock according to age, typology and energy supply, in order to develop the binding milestones and measures for the renovation needs, taking into account the national energy system.*
- Member States shall monitor their progress in meeting milestones. Findings should be made available to the public at least every third year, where an update of the strategy also has to be submitted to the Commission.*
- Member States shall ensure a public consultation on the long-term renovation strategy at least three months before the submission of the strategy to the Commission. The result of the public consultation shall be published as an*

annex along with the strategy.”

Amendment 42

Proposal for a directive

Article 1 – paragraph 1 – point 2 – point a b (new)

Directive 2010/31/EU

Article 2a – paragraph 1 b (new)

Text proposed by the Commission

Amendment

(ab) the following paragraph is added:

“1b. Long-term renovation strategies shall be accompanied by national action plans. Member States shall adopt national action plans setting out the measures for implementing, evaluating and monitoring the progress towards the achievement of the goals established under the long-term renovation strategies. The public shall participate in the preparation of the national action plans in line with the requirements of Directive 2001/42/EC on the assessment of certain plan and programmes on the environment.”

Justification

The measures to attain, monitor and evaluate the achievement of the decarbonisation goals set in the long-term renovation strategies for the national building stocks should be clearly specified in action plans prepared at national level. Public participation shall be ensured in the preparation and adoption of the national action plans.

Amendment 43

Proposal for a directive

Article 1 – paragraph 1 – point 2 – point a c (new)

Directive 2010/31/EU

Article 2a – paragraph 1 c (new)

Text proposed by the Commission

Amendment

(ac) the following paragraph is added:

“1c. Member States shall specify how their milestones contribute to achieving the Union’s energy efficiency target of

30 % by 2030 in accordance with Directive 2012/27/EU and the energy union's renewable energy target in accordance with Directive 2009/28/EU and with the Union's target of reducing greenhouse gas emissions by at least 80 % by 2050.

Amendment 44

Proposal for a directive

Article 1 – paragraph 1 – point 2 – point b

Directive 2010/31/EU

Article 2a – paragraph 2 – subparagraph 1

Text proposed by the Commission

In their long-term renovation strategy referred to in paragraph 1, Member States shall set out a roadmap with clear milestones and measures to deliver on the long-term 2050 goal to **decarbonise their national** building stock, with specific milestones for 2030.

Amendment

In their long-term renovation strategy referred to in paragraph 1, Member States shall set out a roadmap with clear milestones, **actions** and measures to deliver on the long-term 2050 goal **to substantially improve the energy efficiency and to achieve a highly energy-efficient and decarbonized** building stock, with specific milestones for 2030 **and 2040**.

When setting those milestones, Member States shall specify how they contribute to achieving the Union's energy efficiency target in 2030 in accordance with the Union's target to reduce greenhouse gas emissions by 80 % to 95 % by 2050.

In addition, the long term renovation strategy shall establish specific measures and financing instruments to decrease energy demand and contribute to the alleviation of energy poverty.

Amendment 45

Proposal for a directive

Article 1 – paragraph 1 – point 2 – point b

Directive 2010/31/EU

Article 2a – paragraph 2 – subparagraph 2

Text proposed by the Commission

In addition, the **long term** renovation strategy shall contribute to the alleviation of energy poverty.

Amendment

In addition, the **long-term** renovation strategy shall contribute to the alleviation of energy poverty **and set out a roadmap with clear milestones and measures to renovate the social housing stock. In order to ensure and maintain a healthy indoor climate, Member States shall map out and address unexpected and unwanted health and comfort side-effects of building renovations.**

Amendment 46

Proposal for a directive

Article 1 – paragraph 1 – point 2 – point b

Directive 2010/31/EU

Article 2a – paragraph 2 a (new)

Text proposed by the Commission

Amendment

2a. The long-term strategy shall also encourage the uptake of smart technologies in the building sector and encompass initiatives looking at skills and education related to the deployment of smart and connected technologies in buildings, and policies and actions aiming to accelerate the technological transition towards smart and connected buildings.

Amendment 47

Proposal for a directive

Article 1 – paragraph 1 – point 2 – point b

Directive 2010/31/EU

Article 2a – paragraph 3 – point a

Text proposed by the Commission

Amendment

(a) the aggregation of projects, to make it easier for investors to fund the renovations referred to in points (b) and (c) in paragraph 1;

(a) assisting project developers with the preparation, implementation and monitoring of their energy renovation projects, and mechanisms for the aggregation of projects, to make it easier for investors to fund the renovations

referred to in points (b) and (c) in paragraph 1;

Amendment 48

Proposal for a directive

Article 1 – paragraph 1 – point 2 – point b

Directive 2010/31/EU

Article 2a – paragraph 3 – point b

Text proposed by the Commission

(b) de-risking energy efficiency operations for investors and the private sector; and

Amendment

(b) de-risking energy efficiency operations for investors and the private sector, ***such as by supporting the disclosure of loan-level performance data related to energy renovations, the development of a valuation framework linking energy efficiency with increased property values, encouraging the refinancing of portfolios of assets related to energy renovations;*** and

Amendment 49

Proposal for a directive

Article 1 – paragraph 1 – point 2 – point b

Directive 2010/31/EU

Article 2a – paragraph 3 – point b a (new)

Text proposed by the Commission

Amendment

(ba) making available independent and easily accessible energy advisory services as well as accessible and transparent advisory tools, such as single points of contact for consumers which provide information about the structuring and provision of finances for building renovations and support users in taking steps to improve energy efficiency in buildings, including deep or staged-deep renovations, the choice of materials and technologies and monitoring of energy performance results;

Amendment 50

Proposal for a directive

Article 1 – paragraph 1 – point 2 – point b

Directive 2010/31/EU

Article 2a – paragraph 3 – point b b (new)

Text proposed by the Commission

Amendment

(bb) facilitating the aggregation of SMEs to enable them to offer packaged solutions to potential clients; and

Amendment 51

Proposal for a directive

Article 1 – paragraph 1 – point 2 – point b

Directive 2010/31/EU

Article 2 a – paragraph 3 – point c a (new)

Text proposed by the Commission

Amendment

(ca) creating multi-level governance that includes all the regions, and, as far as possible, local governments, together with experience on the energy efficiency of buildings developed as part of projects such as MARIE, SHERPA, ELIH-MED and PROFORBIOMED.

Amendment 52

Proposal for a directive

Article 1 – paragraph 1 – point 2 – point b a (new)

Directive 2010/31/EU

Article 2a – paragraph 3 a (new)

Text proposed by the Commission

Amendment

***(ba) the following paragraph is added:
'3a. The Commission shall be empowered to adopt delegated acts in accordance with Article 23 to supplement this Article with further criteria for the long-term renovation strategy.'***

Amendment 53

Proposal for a directive
Article 1 – paragraph 1 – point 2 a (new)
Directive 2010/31/EU
Article 4 – paragraph 2 – point a

Present text

(a) buildings officially protected as part of a designated environment or because of their special architectural or historical merit, in so far as compliance with certain minimum energy performance requirements would unacceptably alter their character or appearance;

Amendment

2a. In Article 4(2), point a is replaced by the following:

“(a) buildings officially protected as part of a designated environment or because of their special architectural or historical merit, **or non-protected residential buildings constructed from natural materials, to adhere to traditions, with manual labour, in insignificant numbers every year^{1a}**, in so far as compliance with certain minimum energy performance requirements would unacceptably alter their character, **uniqueness** or appearance;

^{1a} In numbers not exceeding one thousandth of the number of construction projects per year in the Member State.”

Amendment 54

Proposal for a directive
Article 1 – paragraph 1 – point 3 – point a
Directive 2010/31/EU
Article 6 – paragraph 1 – subparagraph 2

Text proposed by the Commission

(a) in paragraph 1, the second subparagraph is **deleted**;

Amendment

(a) in paragraph 1, the second subparagraph is **replaced by the following**:

“Streamlined with the requirement to achieve nZEB standard, Member States shall ensure - in compliance with Article 15(8) of Directive... * and Article 14 of Directive ... [the Energy Efficiency Directive] that, before construction starts, the technical, environmental and economic feasibility of high-efficiency alternative systems such as decentralised

energy supply systems based on renewable sources, cogeneration, district or block heating based on renewable sources as well as highly efficient heat pumps as defined in Annex VII to Directive 2009/28/EC, is considered.

** Directive COM(2016) 767 final/2 on the promotion of the use of energy from renewable sources (recast)’*

Justification

In order to reduce administrative burden for Member States while enabling their compliance with Art 15 § 8 of the Renewables Directive (recast) and Art 9, paragraph 3, c Directive 2010/31/EU, provisions on feasibility assessment of highly energy efficiency alternative systems should be streamlined. It must be noted that this requirement reduces the risk of lock-in effects and stranded assets bearing in mind that installed devices tend to last for more than 25 years on average.

Amendment 55

Proposal for a directive

Article 1 – paragraph 1 – point 3 a (new)

Directive 2010/31/EU

Article 7 – paragraph 1 a (new)

Text proposed by the Commission

Amendment

(3a) In Article 7, the following paragraph is inserted after the first paragraph:

“Member States shall ensure that improvements in energy performance contribute to achieving a healthy and comfortable indoor environment.”

Amendment 56

Proposal for a directive

Article 1 – paragraph 1 – point 4

Directive 2010/31/EU

Article 7 – paragraph 5

Text proposed by the Commission

Amendment

(4) in Article 7, the fifth subparagraph is *deleted*;

(4) in Article 7, the fifth subparagraph is *replaced by the following*:

"Streamlined with the requirement to achieve nZEB standard, Member States shall ensure - in compliance with Article 15(8) of Directive ... and Article 14 of Directive ... [the Energy Efficiency Directive] that, before construction starts, the technical, environmental and economic feasibility of high-efficiency alternative systems such as decentralized energy supply systems based on renewable sources, cogeneration, district or block heating based on renewable sources as well as highly efficient heat pumps as defined in Annex VII of Directive 2009/28/EC, is considered.*

** Directive COM(2016) 767 final/2 on the promotion of the use of energy from renewable sources (recast)'*

Justification

In order to reduce administrative burden for Member States while enabling their compliance with Art 15 § 8 of the Renewables Directive (recast) and Art 9, paragraph 3, c Directive 2010/31/EU, provisions on feasibility assessment of highly energy efficiency alternative systems should be streamlined. It must be noted that this requirement reduces the risk of lock-in effects and stranded assets bearing in mind that installed devices tend to last for more than 25 years on average.

Amendment 57

Proposal for a directive

Article 1 – paragraph 1 – point 5 – point a

Directive 2010/31/EU

Article 8 – paragraph 1 – subparagraph 3

Text proposed by the Commission

(a) in paragraph 1, the third subparagraph is *deleted*;

Amendment

(a) in paragraph 1, the third subparagraph is *replaced by the following*:

"Member States shall require hydronic balancing of newly installed or replaced heating systems and provide incentives for hydronic balancing of existing heating

systems. Member States shall also require hydronic balancing when heat generators are replaced in existing buildings, unless the system is already balanced.

Member States shall require that new buildings are equipped with self-regulating devices that regulate room temperature levels in each individual room. In existing buildings, the installation of self-regulating devices to individually regulate the room temperature shall be required when heat generators are replaced."

Justification

Hydronic balancing prevents that radiators installed at a remote location of the heating pump are not sufficiently supplied with hot water whereas radiators near the pump are oversupplied. It provides constant temperature levels and optimal energy use. Self-regulating devices that regulate room temperature and hydronic balancing are very cost efficient measures to save energy in buildings. In some Member States thermostatic radiator valves are standard since 1978, in other simple radiator valves are used in large scope. Replacing the remaining simple valves would grant 4% of the EU energy reduction goals for 2020. The replacement of simple radiator valves in one building saves on average 13% to 19% of the energy needed to heat the building. The payback time of those measures is only a couple of months.

Amendment 58

Proposal for a directive

Article 1 – paragraph 1 – point 5 – point b – introductory part

Directive 2010/31/EU

Article 8 – paragraph 2

Text proposed by the Commission

Amendment

(b) paragraph 2 *is replaced by the following:*

(b) *the following subparagraphs are inserted at the end of paragraph 2,:*

(The aim of the AM is to conserve Art 8, § 2 of Directive 2010/31/EU)

(In line with the Directive concerning common rules for the internal market in electricity (recast), in particular Articles, 19-22, 18 and Annex III.)

Justification

Accurate smart meters can achieve both: enabling consumer participation and contributing to energy savings in buildings through consumer awareness. The provisions on intelligent metering should therefore not be removed from this Directive. Member States shall continue to encourage the introduction of intelligent metering systems in accordance with the revised Electricity Directive, whenever a building is constructed or undergoes major renovation, as this will also allow a more cost-efficient deployment.

Amendment 59

Proposal for a directive

Article 1 – paragraph 1 – point 5 – point b

Directive 2010/31/EU

Article 8 – paragraph 2 – subparagraph 1

Text proposed by the Commission

Member States shall ensure that in all new non-residential buildings and in all existing non-residential buildings undergoing major renovation with more than ten parking spaces, at least one of every **ten** is **equipped with a recharging point** within the meaning of Directive 2014/94/EU on the deployment of alternative fuels infrastructure, which is capable of **starting and stopping charging in reaction** to price signals. This requirement shall apply to all non-residential buildings, with more than ten parking spaces, as of 1 January 2025.

Amendment

Member States shall ensure that in all new non-residential buildings **with more than ten parking spaces** and in all existing non-residential buildings undergoing major renovation with more than ten parking spaces **inside or physically adjacent to the building, where that renovation affects the electrical infrastructure of the building or of the parking spaces**, at least one of every **three** is **furnished with suitable pre-cabling or ducting to enable the construction of a recharging point** within the meaning of Directive 2014/94/EU on the deployment of alternative fuels infrastructure, **and at least one recharging point within the meaning of Directive 2014/94/EU is constructed** which is capable of **dynamically reacting** to price signals, **with the power of at least 7kW on every parking space with a recharging point**. This requirement shall apply to all non-residential buildings, with more than ten parking spaces, as of 1 January 2025.

¹⁷ OJ. L 307, 28.10.2014, p. 1.

¹⁷ OJ. L 307, 28.10.2014, p. 1.

Justification

For new non-residential buildings, the requisite electronic infrastructure can be integrated into the planning from the beginning. It is therefore wise to make new buildings future-proof by fitting pre-cabling or ducting. For existing non-residential buildings, the obligation should be relaxed to apply only in cases where the renovation affects the parking area or the electrical infrastructure of the building. A symbolic charging point should be installed in parking areas.

Amendment 60

Proposal for a directive

Article 1 – paragraph 1 – point 5 – point b

Directive 2010/31/EU

Article 8 – paragraph 3

Text proposed by the Commission

3. Member States shall ensure that ***newly built*** residential buildings and those undergoing major renovations, with more than ten parking spaces, include the pre-cabling to enable the installation of recharging points for electric vehicles for every parking space.

Amendment

3. Member States shall ensure that ***new*** residential buildings and those undergoing major renovations, ***insofar as the renovation includes the electric infrastructure or the car park***, with more than ten parking spaces ***inside or physically adjacent to the building***, include the ***appropriate*** pre-cabling ***or pre-ducting*** to enable the installation of recharging points for electric vehicles ***in line with best available technology*** for every parking space.

Amendment 61

Proposal for a directive

Article 1 – paragraph 1 – point 5 – point c

Directive 2010/31/EU

Article 8 – paragraph 5

Text proposed by the Commission

5. Member States shall ensure that, when a technical building system is installed, replaced or upgraded, the overall energy performance of the complete altered system is assessed, documented it and passed on to the building owner, so that it remains available for the verification of

Amendment

5. Member States shall ensure that, when a technical building system is installed, replaced or upgraded, the overall energy ***and, where relevant, indoor air quality*** performance of the complete altered system is assessed, documented it and passed on to the building owner, so

compliance with the minimum requirements set pursuant to paragraph 1 and the issue of energy performance certificates. Member States shall ensure that this information is included in the national energy performance certificate database referred to in Article 18(3).

that it remains available for the verification of compliance with the minimum requirements set pursuant to paragraph 1 and the issue of energy performance certificates. Member States shall ensure that this information is included in the national energy performance certificate database referred to in Article 18(3).

Amendment 62

Proposal for a directive

Article 1 – paragraph 1 – point 5 – point c

Directive 2010/31/EU

Article 8 – paragraph 6 – subparagraph 2

Text proposed by the Commission

The smartness indicator shall cover flexibility features, enhanced functionalities and capabilities resulting from more interconnected and built-in intelligent devices being integrated into the conventional technical building systems. The features shall enhance the ability of occupants and the building itself to react to comfort or operational requirements, take part in demand response and contribute to the optimum, smooth and safe operation of the various energy systems and district infrastructures to which the building is connected.;

Amendment

The smartness indicator shall cover flexibility features, enhanced functionalities and capabilities resulting from more interconnected and built-in intelligent devices being integrated into the conventional technical building systems. The features shall enhance the ability of occupants and the building itself to react to **indoor air quality and thermal** comfort or operational requirements, take part in demand response and contribute to the optimum, smooth, **healthy** and safe operation of the various energy systems and district infrastructures to which the building is connected.;

Amendment 63

Proposal for a directive

Article 1 – paragraph 1 – point 6 – point a

Directive 2010/31/EU

Article 10 – paragraph 6

Text proposed by the Commission

6. Member States shall link their financial measures for energy efficiency improvements in the renovation of

Amendment

6. Member States shall link their financial measures for energy efficiency improvements in the renovation of

buildings to the energy savings achieved due to such renovation. These savings shall be determined by comparing energy performance certificates issued before and after renovation.

buildings to the energy savings *and non-energy benefits such as indoor air quality improvements* achieved due to such renovation. These savings *and improvements* shall be determined by comparing energy performance certificates issued before and after renovation, *or the results of another relevant, transparent and proportionate method that shows the improvement in energy performance and non-energy benefits such as indoor air quality, and that delivers meaningful information to support the mobilisation of private and public finance for investments in buildings to improve energy efficiency or indoor air quality. Those certificates shall be provided also in a digital version with the possibility to include the relevant information in order to model and project the impact of building improvements. Where a new energy performance certificate demonstrates an improvement in the building energy efficiency, its cost may be included in the incentive provided by the Member State.*

Amendment 64

Proposal for a directive

Article 1 – paragraph 1 – point 6 – point b

Directive 2010/31/EU

Article 10 – paragraph 6a

Text proposed by the Commission

6a. When Member States put in place a database for registering EPCs it shall allow tracking the actual energy consumption of the buildings covered, regardless of their size and category. The database shall contain the actual energy consumption data of buildings frequently visited by the public with useful floor area of over 250 m² which shall be regularly updated.

Amendment

6a. When Member States put in place a database for registering EPCs it shall allow tracking the actual energy consumption of the buildings covered, regardless of their size and category. The database shall contain the actual energy consumption data of *public buildings with useful floor area of over 250 m² and* buildings frequently visited by the public with useful floor area of over 250 m² which shall be regularly updated.

Amendment 65

Proposal for a directive

Article 1 – paragraph 1 – point 6 a (new)

Directive 2010/31/EU

Article 11 – paragraph 9 a (new)

Text proposed by the Commission

Amendment

(6a) in Article 11 the following paragraph is added:

‘9a. The Commission shall assess the need for further harmonisation of energy performance certificates in accordance with Article 11, taking into account the feasibility of introducing national sample-based systems to monitor them.’

Amendment 66

Proposal for a directive

Article 1 – paragraph 1 – point 7 – point a

Directive 2010/31/EU

Article 14 – paragraph 1

Text proposed by the Commission

Amendment

1. Member States shall lay down the necessary measures to establish a regular inspection of the accessible parts of **systems used for heating buildings, such as the heat generator, control system and circulation pump(s)** for non-residential buildings with total primary energy use of over 250MWh and for residential buildings with **a centralised technical building system** of a cumulated effective rated output of over 100 kW. That inspection shall include an assessment of the **boiler** efficiency and the **boiler** sizing compared with the heating requirements of the building. The assessment of the **boiler** sizing does not have to be repeated as long as no changes were made to the heating system or as regards the heating requirements of the building in the meantime;

1. Member States shall lay down the necessary measures to establish a regular inspection of the accessible parts of the heat generator for non-residential buildings with total primary energy use of over 250MWh and for residential buildings **with a heat generator** of a cumulated effective rated output of over 100 kW. That inspection shall include an assessment of the **heat generator** efficiency and **the heat generator** sizing compared with the heating requirements of the building, **of the effectiveness of individually controlling the room temperature in each room and of hydronic balancing of the heating system**. The assessment of the **heat generator** sizing **and the hydronic balancing** does not have to be repeated as long as no changes were made to the heating system or as regards the heating requirements of the building in the

meantime;

Amendment 67

Proposal for a directive

Article 1 – paragraph 1 – point 7 – point b

Directive 2010/31/EC

Article 14 – paragraph 2 – point a

Text proposed by the Commission

(a) continuously monitoring, analysing and adjusting energy usage;

Amendment

(a) continuously monitoring, analysing and adjusting energy usage ***as well as ventilation and/or other elements linked to good indoor air quality;***

Amendment 68

Proposal for a directive

Article 1 – paragraph 1 – point 7 – point b

Directive 2010/31/EU

Article 14 – paragraph 3 – point b

Text proposed by the Commission

(b) with effective control functionalities to ensure optimum generation, distribution and use of energy.;

Amendment

(b) with effective control functionalities to ensure optimum generation, distribution, ***storage*** and use of energy, ***including individual room temperature and dynamic hydraulic balancing functionalities.***

Amendment 69

Proposal for a directive

Article 1 – paragraph 1 – point 7 – point b

Directive 2010/31/EU

Article 14 – paragraph 3 a (new)

Text proposed by the Commission

Amendment

3a. Notwithstanding paragraph 1 Member States may take measures to ensure that adequate advice is given to users concerning the replacement of heat generators, other modifications to the

heating system and alternative solutions to assess the efficiency and appropriate size of the heating generator. The overall impact of that approach shall be equivalent to the impact arising from the measures taken pursuant to paragraph 1;

Justification

Some Member States already have equivalent measures to inspections such as advice systems in place which have shown to be successful to increase the energy efficiency of heating systems. This flexibility and alternative measure should be kept for Member States.

Amendment 70

Proposal for a directive

Article 1 – paragraph 1 – point 7 – point b

Directive 2010/31/EU

Article 14 – paragraph 3 b (new)

Text proposed by the Commission

Amendment

3b. Technical building systems explicitly covered by a contractual arrangement on an agreed level of energy efficiency improvement or other agreed energy performance criterion, such as energy performance contracting as defined in Article 2(27) of Directive 2012/27/EU shall be exempt from paragraph 1.

Justification

The role of energy performance contracts in increasing the energy efficiency of buildings must be increased, as those contracts offer a holistic approach to renovations, including financing, implementation of construction work and energy management. In entering into an energy performance contract, the building owner enters into a contract with an energy efficiency company regarding the implementation of energy efficiency measures. Inspections and audits are part of the contract.

Amendment 71

Proposal for a directive

Article 1 – paragraph 1 – point 8 – point a

Directive 2010/31/EU

Article 15 – paragraph 1

Text proposed by the Commission

1. Member States shall lay down the necessary measures to establish a regular inspection of the accessible parts of air-conditioning systems for non-residential buildings with total primary energy use of over 250MWh and for residential buildings with a centralised technical building system of a cumulated effective rated output of over 100 kW. The inspection shall include an assessment of the air-conditioning efficiency and the sizing compared to the cooling requirements of the building. The assessment of the sizing does not have to be repeated as long as no changes were made to this air-conditioning system or as regards the cooling requirements of the building in the meantime;

Amendment

1. Member States shall lay down the necessary measures to establish a regular inspection **and to monitor the need for maintenance** of the accessible parts of air-conditioning systems for non-residential buildings with total primary energy use of over 250MWh and for residential buildings with a centralised technical building system of a cumulated effective rated output of over 100 kW. The inspection shall include an assessment of the air-conditioning efficiency and the sizing compared to the cooling requirements of the building. The assessment of the sizing does not have to be repeated as long as no changes were made to this air-conditioning system or as regards the cooling requirements of the building in the meantime;

Amendment 72

Proposal for a directive

Article 1 – paragraph 1 – point 8 – point b

Directive 2010/31/EC

Article 15 – paragraph 2 – point a

Text proposed by the Commission

(a) continuously monitoring, analysing and adjusting energy usage;

Amendment

(a) continuously monitoring, analysing and adjusting energy usage **as well as ventilation and/or other elements linked to good indoor air quality;**

Amendment 73

Proposal for a directive

Article 1 – paragraph 1 – point 8 – point b

Directive 2010/31/EU

Article 15 – paragraph 3 – point b

Text proposed by the Commission

(b) with effective control

Amendment

(b) with effective control

functionalities to ensure optimum generation, distribution and use of energy.;

functionalities to ensure optimum generation, distribution, *storage* and use of energy.;

Amendment 74

Proposal for a directive

Article 1 – paragraph 1 – point 8 – point b

Directive 2010/31/EU

Article 15 – paragraph 3 a (new)

Text proposed by the Commission

Amendment

3a. Notwithstanding paragraph 1, Member States may take measures to ensure that adequate advice is given to users concerning the replacement of air-conditioning systems, other modifications to the air-conditioning system and alternative solutions to assess the efficiency and appropriate size of the air-conditioning system. The overall impact of that approach shall be equivalent to that arising from paragraph 1.

Justification

Some Member States should have the flexibility to opt for equivalent measures to inspections such as advice systems in place. This flexibility and alternative measure should be kept for Member States.

Amendment 75

Proposal for a directive

Article 1 – paragraph 1 – point 8 – point b

Directive 2010/31/EU

Article 15 – paragraph 3 b (new)

Text proposed by the Commission

Amendment

3b. Technical building systems explicitly covered by a contractual arrangement on an agreed level of energy efficiency improvement or other agreed energy performance criterion, such as energy performance contracting as

defined in Article 2(27) of Directive 2012/27/EU shall be exempt from paragraph 1.

Justification

The role of energy performance contracts in increasing the energy efficiency of buildings must be increased, as those contracts offer a holistic approach to renovations, including financing, implementation of construction work and energy management. In entering into an energy performance contract, the building owner enters into a contract with an energy efficiency company regarding the implementation of energy efficiency measures. Inspections and audits are part of the contract.

Amendment 76

Proposal for a directive

Article 1 – paragraph 1 – point 9

Directive 2010/31/EU

Article 19

Text proposed by the Commission

(9) *in* Article 19, ‘2017’ is replaced by ‘2028’;

Amendment

(9). Article 19 is replaced by *the following*:

“Article 19

Review

The Commission, assisted by the Committee established by Article 26, shall evaluate this Directive by 1 January 2024, in the light of the experience gained and progress made during its application, and, if necessary, make legislative proposals.

It shall publish, by the end of 2020, an impact assessment on the possible expansion of the Directive’s scope, given its possible revision in 2024, with a view to providing for the inclusion of the embodied energy required to construct a building and its building components.”

Amendment 77

Proposal for a directive

Article 1 – paragraph 1 – point 11

Directive 2010/31/EU

Article 23 – paragraph 2

Text proposed by the Commission

2. The power to adopt delegated acts referred to in Article 5, 8 and 22 shall be conferred on the Commission for ***an indeterminate*** period of ***time from*** [date of ***the*** entry into force...].

Amendment

2. The power to adopt delegated acts referred to in Article 5, 8 and 22 shall be conferred on the Commission for ***a*** period of ***5 years from XXX*** [date of entry into force ***of the Directive***]. ***The Commission shall draw up a report in respect of the delegation of power not later than nine months before the end of the five-year period.***

Amendment 78

Proposal for a directive

Annex I – paragraph 1 – point 1 – point a

Directive 2010/31/EU

Annex I – point 1 – subparagraph 1

Text proposed by the Commission

The energy performance of a building shall reflect its typical energy use for heating, cooling, domestic hot water, ventilation and lighting.

Amendment

The energy performance of a building ***is to be determined on the basis of the estimated or actual energy usage for heating, cooling, domestic hot water, ventilation and lighting and*** shall reflect its typical energy use for heating, cooling, domestic hot water, ventilation and lighting.

Justification

Der Text aus dem aktuellen Anhang I der Richtlinie 2010/31/EU wurde wieder eingeführt. Um die Gesamtenergieeffizienz eines Gebäudes zu bestimmen, ist es nicht ausreichend einzig den Primärenergiebedarf zu evaluieren. Zuerst sollte die Energiemenge berechnet werden, die gebraucht wird, um den typischen Energieverbrauch eines Gebäudes zu decken. Dieser Endenergieverbrauch und der Primärenergiebedarf eines Gebäudes sollten zur Bewertung der Gesamtenergieeffizienz verwendet werden. Die Primärenergie beschreibt vielmehr die Qualität der verwendeten Energie als die Menge der Energie, die zur Deckung des Energiebedarfs eines Gebäudes nötig ist.

Amendment 79

Proposal for a directive

Annex I – paragraph 1 – point 1 – point a

Text proposed by the Commission

Member States shall **describe their** national calculation methodology following the national annex framework of related European standards developed under mandate M/480 given by the European Commission to the European Committee for Standardisation (CEN).;

Amendment

Within two years after the approval by formal vote in CEN, Member States shall **implement and apply the EPB standards in the** national calculation methodology following the national annex framework of related European standards developed under mandate M/480 given by the European Commission to the European Committee for Standardisation (CEN).

Justification

An EU approach to accelerate innovation and energy savings across Europe is indispensable to avoid fragmentation of the internal market. The EPB standards, which were recently approved by National Standard Bodies, make it possible to calculate the energy performance of buildings across the EU using the same methodologies. These methodologies rely on the most recent data, helping the market uptake of the most efficient heating technologies. A transitional period of two years will enable planners and architects to put these EPB standards to the test and resolve any remaining inconsistencies.

Amendment 80

Proposal for a directive

Annex I – paragraph 1 – point 1 – point b

Directive 2010/31/EU

Annex I – point 2 – subparagraph 1

Text proposed by the Commission

The energy needs for space heating, space cooling, domestic hot water and adequate ventilation shall be calculated in order to **ensure minimum** health and comfort levels defined by Member States.

Amendment

The energy needs for space heating, space cooling, domestic hot water and adequate ventilation, **expressed as delivered energy and primary energy**, shall be calculated in order to **maximise requirements for** health, **indoor air quality** and comfort levels defined by Member States. **Particular attention shall be paid to avoiding the temperature on any inner surface of the building dropping below the dew-point temperature and to avoiding overheating.**

Justification

Overheating is an equally important problem that affects the health and comfort of building users, as well as the energy performance of buildings.

Amendment 81

Proposal for a directive

Annex I – paragraph 1 – point 1 – point b (new)

Directive 2010/31/EU

Annex 1 – point 2 – subparagraph 3 a (new)

Text proposed by the Commission

Amendment

Member States shall ensure that calculation methodologies and primary energy factors for different on-site renewable energy carriers and conversion technologies duly reflect the characteristics of the specific energy carrier in view of the overall energy system, in particular the potential alternative use of the energy carrier that is converted and consumed on-site and the export potential for off-site use of energy generated on-site.

Justification

Different forms of on-site RES have different characteristics i.e. they have alternative uses, interact differently with the overall energy system etc. Hence the PEFs for the purpose of determining the energy performance requirements should be differentiated according to two major groupings: 1) Conversion technologies, which use a RES resource generated on-site and which cannot be exported (ambient heat) or conversion technologies, which use a RES resource generated on-site and which can be exported (micro-wind) 2) Conversion technologies, which use a RES resource that is not generated on-site (pellets for pellet boilers).

Amendment 82

Proposal for a directive

Annex I – paragraph 1 – point 1 – point c a (new)

Directive 2010/31/EU

Annex I – point 5 a (new)

Text proposed by the Commission

Amendment

(ca). the following point is added:

“5a. When calculating the energy performance of a transparent or translucent building element of the building envelope, Member States should consider its energy balance, meaning taking energy losses as well as energy gains from passive solar irradiance into account, combined with all relevant aspects from points 3, 4 and 5.”

Justification

Member States are so far not guided to for the calculation of the energy performance of building elements that form part of the building envelope. Common calculation methods could improve the level playing field in the internal market.

PROCEDURE – COMMITTEE ASKED FOR OPINION

Title	Energy performance of buildings
References	COM(2016)0765 – C8-0499/2016 – 2016/0381(COD)
Committee responsible Date announced in plenary	ITRE 12.12.2016
Opinion by Date announced in plenary	ENVI 12.12.2016
Rapporteur Date appointed	Anneli Jäätteenmäki 20.2.2017
Discussed in committee	29.5.2017
Date adopted	7.9.2017
Result of final vote	+: 53 –: 0 0: 6
Members present for the final vote	Marco Affronte, Catherine Bearder, Ivo Belet, Biljana Borzan, Lynn Boylan, Paul Brannen, Soledad Cabezón Ruiz, Nessa Childers, Birgit Collin-Langen, Mireille D’Ornano, Miriam Dalli, Seb Dance, Stefan Eck, José Inácio Faria, Karl-Heinz Florenz, Arne Gericke, Julie Girling, Sylvie Goddyn, Jytte Guteland, Anneli Jäätteenmäki, Jean-François Jalkh, Benedek Jávor, Karin Kadenbach, Urszula Krupa, Peter Liese, Norbert Lins, Valentinas Mazuronis, Susanne Melior, Massimo Paolucci, Gilles Pargneaux, Piernicola Pedicini, Bolesław G. Piecha, Pavel Poc, Frédérique Ries, Annie Schreijer-Pierik, Davor Škrlec, Renate Sommer, Claudiu Ciprian Tănăsescu, Ivica Tolić, Nils Torvalds, Adina-Ioana Vălean, Jadwiga Wiśniewska, Damiano Zoffoli
Substitutes present for the final vote	Nicola Caputo, Jørn Dohrmann, Elena Gentile, Jan Huitema, Merja Kyllönen, Stefano Maullu, Mairead McGuinness, Keith Taylor, Carlos Zorrinho
Substitutes under Rule 200(2) present for the final vote	Bendt Bendtsen, Norbert Erdős, Jill Evans, György Hölvényi, Barbara Lochbihler, Olle Ludvigsson, Elżbieta Katarzyna Łukacijewska

FINAL VOTE BY ROLL CALL IN COMMITTEE ASKED FOR OPINION

53	+
ALDE	Catherine Bearder, Anneli Jäätteenmäki, Valentinas Mazuronis, Frédérique Ries, Nils Torvalds
ECR	Jørn Dohrmann, Arne Gericke, Julie Girling, Urszula Krupa, Bolesław G. Piecha, Jadwiga Wiśniewska
EFDD	Piernicola Pedicini
ENF	Mireille D'Ornano, Sylvie Goddyn, Jean-François Jalkh
GUE/NGL	Lynn Boylan, Stefan Eck, Merja Kyllönen
PPE	Ivo Belet, Bendt Bendtsen, Birgit Collin-Langen, Norbert Erdős, José Inácio Faria, Karl-Heinz Florenz, György Hölvényi, Peter Liese, Norbert Lins, Elżbieta Katarzyna Łukacijewska, Stefano Maullu, Mairead McGuinness, Annie Schreijer-Pierik, Renate Sommer, Ivica Tolić, Adina-Ioana Vălean
S&D	Biljana Borzan, Paul Brannen, Soledad Cabezón Ruiz, Nicola Caputo, Nessa Childers, Miriam Dalli, Seb Dance, Elena Gentile, Jytte Guteland, Karin Kadenbach, Olle Ludvigsson, Susanne Melior, Massimo Paolucci, Gilles Pargneaux, Pavel Poc, Claudiu Ciprian Tănăsescu, Damiano Zoffoli, Carlos Zorrinho
VERTS/ALE	Benedek Jávor

0	-

6	0
ALDE	Jan Huitema
VERTS/ALE	Marco Affronte, Jill Evans, Barbara Lochbihler, Davor Škrlec, Keith Taylor