



**2016/0381(COD)**

24.4.2017

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## **DRAFT REPORT**

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))

Committee on Industry, Research and Energy

Rapporteur: Bendt Bendtsen

### ***Symbols for procedures***

- \* Consultation procedure
- \*\*\* Consent procedure
- \*\*\*I Ordinary legislative procedure (first reading)
- \*\*\*II Ordinary legislative procedure (second reading)
- \*\*\*III Ordinary legislative procedure (third reading)

(The type of procedure depends on the legal basis proposed by the draft act.)

### ***Amendments to a draft act***

#### **Amendments by Parliament set out in two columns**

Deletions are indicated in ***bold italics*** in the left-hand column. Replacements are indicated in ***bold italics*** in both columns. New text is indicated in ***bold italics*** in the right-hand column.

The first and second lines of the header of each amendment identify the relevant part of the draft act under consideration. If an amendment pertains to an existing act that the draft act is seeking to amend, the amendment heading includes a third line identifying the existing act and a fourth line identifying the provision in that act that Parliament wishes to amend.

#### **Amendments by Parliament in the form of a consolidated text**

New text is highlighted in ***bold italics***. Deletions are indicated using either the **■** symbol or ~~strikeout~~. Replacements are indicated by highlighting the new text in ***bold italics*** and by deleting or striking out the text that has been replaced.

By way of exception, purely technical changes made by the drafting departments in preparing the final text are not highlighted.

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## DRAFT EUROPEAN PARLIAMENT LEGISLATIVE RESOLUTION

**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))**

**(Ordinary legislative procedure: first reading)**

*The European Parliament,*

- having regard to the Commission proposal to Parliament and the Council (COM(2016)0765),
  - having regard to Article 294(2) and Article 194(2) of the Treaty on the Functioning of the European Union, pursuant to which the Commission submitted the proposal to Parliament (C8-0499/2016),
  - having regard to Article 294(3) of the Treaty on the Functioning of the European Union,
  - having regard to Rule 59 of its Rules of Procedure,
  - having regard to the report of the Committee on Industry, Research and Energy and the opinion of the Committee on the Environment, Public Health and Food Safety (A8-0000/2017),
1. Adopts its position at first reading hereinafter set out;
  2. Calls on the Commission to refer the matter to Parliament again if it replaces, substantially amends or intends to substantially amend its proposal;
  3. Instructs its President to forward its position to the Council, the Commission and the national parliaments.

### **Amendment 1**

#### **Proposal for a directive**

#### **Recital 6**

*Text proposed by the Commission*

(6) The Union is committed to developing a secure, competitive and decarbonised energy system by 2050<sup>12</sup>. 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-

*Amendment*

(6) The Union is committed to developing a secure, competitive and decarbonised energy system by 2050. To **achieve** this goal, **it is vital that the existing building stock, which is responsible for about 36 % of all CO<sup>2</sup> emissions in the Union, is highly energy efficient and decarbonised up to nearly zero-energy standard** by 2050. **To that end, Member States and investors need a clear vision to guide their policies and**

term (2050) objectives.

*investment decisions, which includes well-defined national milestones and actions for energy efficiency to achieve the short-term (2030), mid-term (2040) and long-term (2050) objectives.*

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<sup>12</sup> Communication on an Energy roadmap 2050, (COM(2011) 885 final).

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<sup>12</sup> Communication on an Energy roadmap 2050, (COM(2011) 885 final).

Or. en

## Amendment 2

### Proposal for a directive Recital 6 a (new)

*Text proposed by the Commission*

*Amendment*

***(6a) The 2015 Paris Agreement on climate change (COP 21) 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 based 100 % on renewables by 2050 at the latest, which can be achieved only by reducing our energy consumption and making full use of the 'energy efficiency first' principle.***

Or. en

## Amendment 3

### Proposal for a directive Recital 7

*Text proposed by the Commission*

*Amendment*

(7) The provisions on long-term renovation strategies provided for in

(7) The provisions on long-term renovation strategies provided for in

Directive 2012/27/EU of the European Parliament and of the Council<sup>13</sup> should be moved to Directive 2010/31/EU, where they fit more coherently.

Directive 2012/27/EU of the European Parliament and of the Council<sup>13</sup> should be moved to Directive 2010/31/EU, where they fit more coherently, ***and updated to clarify the ambitions of a highly energy efficient and decarbonised building stock. The long-term renovation strategies and the renovations they stimulate will contribute to boost growth and competitiveness through the creation of local, non-outsourcable jobs, and provide clean and affordable energy to consumers.***

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<sup>13</sup> 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).

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<sup>13</sup> 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).

Or. en

#### Amendment 4

##### Proposal for a directive Recital 7 a (new)

*Text proposed by the Commission*

*Amendment*

***(7 a) To facilitate the cost effective achievement of the Union's climate and energy goals as well as cost-efficient renovations in buildings, national long-term renovation strategies should integrate considerations for improvements to health and indoor climate, including by combining renovation with the removal of asbestos and other harmful substances, preventing the illegal removal of harmful substances, and facilitating compliance with existing legislative acts such as Directive 2009/148/EC.***

Or. en

## Amendment 5

### Proposal for a directive Recital 7 b (new)

*Text proposed by the Commission*

*Amendment*

***(7 b) To achieve a highly energy efficient and decarbonised building stock, and to ensure that the long-term renovation strategies will deliver the renovations needed, Member States must outline measurable, targeted actions, including for the worst performing segments of the national building stock, for energy-poor consumers, for social housing and for households subject to split-incentive dilemmas.***

Or. en

## Amendment 6

### Proposal for a directive Recital 7 c (new)

*Text proposed by the Commission*

*Amendment*

***(7 c) National long-term renovation strategies should specify their expected output and contribution to achieving the overall energy efficiency target of 30 % by 2030 in accordance with Directive 2012/27/EU, taking into account that every 1 % increase in energy savings reduces gas imports by 2,6 % and thereby contributes actively to the Union's energy independence.***

Or. en



## Amendment 7

### Proposal for a directive Recital 7 d (new)

*Text proposed by the Commission*

*Amendment*

***(7 d) Ambitious goals for deep renovation of the existing building stock will create millions of jobs in the Union, in particular in small and medium-sized enterprises. In that context, it is necessary for Member States to provide a clear link between their national long-term renovation strategies and adequate initiatives to promote skills and education in the construction and energy efficiency sectors.***

Or. en

## Amendment 8

### Proposal for a directive Recital 9

*Text proposed by the Commission*

*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 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.

(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 ***in accordance with the methodology set out in this Directive***. The smartness indicator should be ***coherent with energy performance certificates and should be*** used to measure buildings' capacity to use ICT and electronic systems to optimise operation, ***performance, indoor comfort*** 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.

Or. en

## Amendment 9

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

##### *Amendment*

(10) Innovation and new technology also make it possible for buildings to support the overall decarbonisation of the economy, ***including the transport sector***. For example, buildings can leverage the development of the infrastructure necessary for ***deployment of*** the smart charging of electric vehicles ***and*** also provide a basis for Member States, if they choose to, to use car batteries as a source of power, ***while ensuring that electric vehicles infrastructure is integrated in urban planning efforts in Member States***. To reflect this aim, the definition of technical building systems should be extended.

Or. en

## Amendment 10

### 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

##### *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. **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.

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. **Furthermore**, 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 explored further, including as solutions for assisting energy-poor consumers**. Provisions related to inspections are amended to ensure a better result from inspections.

Or. en

## Amendment 11

### Proposal for a directive Recital 12

#### *Text proposed by the Commission*

(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

#### *Amendment*

(12) Building automation and electronic monitoring of technical building systems **holds great potential to provide cost-effective and significant energy savings both for consumers and businesses. Notably for large installations, building automation and electronic monitoring of technical building systems have proven to be effective and can, in some cases, replace** inspections in large non-residential and multifamily buildings of a sufficient size that allow a payback of less than three years **as it enables acting on the information provided, thereby securing energy savings over time**. The current possibility to opt for alternative measures is therefore deleted, **however it should be**

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.

*possible to exempt technical systems explicitly covered by an ESCO programme from the inspection requirement.* 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 (*EPC*) role. In addition, existing regular safety inspections and programmed maintenance work will remain an opportunity to provide direct advice on energy efficiency improvements.

Or. en

## Amendment 12

### Proposal for a directive

#### Recital 13

##### *Text proposed by the Commission*

(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.

##### *Amendment*

(13) To ensure their best use in building renovation, *public* financial measures related to energy efficiency should be linked to the depth of the renovation *and promote holistic building renovations as the best way of ensuring high energy performance and improved indoor comfort. Such renovations* should be assessed by comparing EPCs issued before and after the renovation *where proportionate to the volume of the renovation, or by similar adequate and proportionate documentation methods.*

Or. en

## Amendment 13

### Proposal for a directive Recital 13 a (new)

*Text proposed by the Commission*

*Amendment*

***(13 a) Financial mechanisms and incentives should have a central position in the national long-term renovation strategies and be actively promoted by Member States, including by facilitating energy efficient mortgage standards for certified energy efficient building renovations, promoting investments for public authorities in an energy efficient building stock, such as by tackling disincentivising accounting standards and by providing accessible and transparent advisory tools for consumers on their financing options for energy efficient renovations in buildings.***

Or. en

## Amendment 14

### Proposal for a directive Recital 19

*Text proposed by the Commission*

*Amendment*

(19) The objectives of this Directive, namely to reduce the energy needed to meet the energy demand associated with the typical use of buildings, cannot be adequately achieved by the Member States acting alone. The objectives of the Directive can be more effectively ensured by acting at Union level because this guarantees consistency shared objectives, understanding and political drive. Therefore, the Union adopts measures in accordance with the principle of subsidiarity as set out in Article 5 of the Treaty on the European Union. In accordance with the principle of

(19) The objectives of this Directive, namely to reduce the energy needed to meet the energy demand associated with the typical use of buildings, cannot be adequately achieved by the Member States acting alone. The objectives of the Directive can be more effectively ensured by acting at Union level because this guarantees consistency shared objectives, understanding and political drive. Therefore, the Union adopts measures in accordance with the principle of subsidiarity as set out in Article 5 of the Treaty on the European Union. In accordance with the principle of

proportionality, as also set out in that Article, this Directive does not go beyond what is necessary to achieve those objectives.

proportionality, as also set out in that Article, this Directive does not go beyond what is necessary to achieve those objectives. ***It fully respects the Member States' competences t in accordance with Article 194(2) of the Treaty on the Functioning of the European Union.***

Or. en

## Amendment 15

### 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, ventilation, domestic hot water, built-in lighting, ***elevators and escalators***, 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;

Or. en

## Amendment 16

### Proposal for a directive

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

Directive 2010/31/EU

Article 2 – point 16 a (new)

#### *Text proposed by the Commission*

#### *Amendment*

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

***'16a. "building automation and control system" means a system comprising all***

*products, software and engineering services for automatic controls including interlocks, monitoring, optimisation, for operation, human intervention and management to achieve energy-efficient, economical and safe operation of technical building systems'*

Or. en

## **Amendment 17**

### **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<sup>16</sup>, other than its last subparagraph;*

*Amendment*

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

*'1. Member States shall establish a long-term strategy for mobilising investment in the renovation of the national stock of residential and commercial buildings, both public and private. This strategy shall encompass:*

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

*(b) identification of cost-effective approaches and actions to stimulate technology neutral renovations relevant to the building type and climatic zone, considering relevant trigger points in the life-cycle of the building;*

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

*(d) policies and actions to target the worst performing segments of the national building stock, households subject to*

*energy poverty and households subject to split-incentive dilemmas for renovations;*

*(e) policies and actions to target all public buildings, including social housing;*

*(f) an overview of national initiatives to promote skills and education in the construction and energy efficiency sectors;*

*(g) a forward-looking perspective to guide investment decisions of individuals, the construction industry, public institutions including municipalities, and financial institutions;*

*(h) an evidence-based estimate of expected energy savings and wider benefits, including non-economic benefits such as health.*

*[The amendment of the rapporteur is based on Article 4(1) of Directive 2012/27/EU, with additional text in points (b), (g) (formerly (d)) and (h) (formerly (e)). Three additional points (d), (e) and (f) have been inserted.*

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<sup>16</sup> OJ L 315, 14.11.2012, p. 13

Or. en

## Amendment 18

### Proposal for a directive

#### Article 1 – paragraph 1 – point 2 – point b

Directive 2010/31/EU

Article 2 a – paragraph 2 –subparagraph 1

#### *Text proposed by the Commission*

2. 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,

#### *Amendment*

2. In their long-term renovation strategy referred to in paragraph 1, Member States shall set out a roadmap with clear milestones and *actions* to deliver on the long-term 2050 goal to *ensure a highly energy efficient and decarbonised*



with specific milestones for 2030.

national building stock, with specific milestones for 2030 **and 2040**.

Or. en

## Amendment 19

### Proposal for a directive

#### Article 1 – paragraph 1 – point 2 – point b

Directive 2010/31/EU

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

*Text proposed by the Commission*

*Amendment*

***Member States shall specify how their milestones contribute to achieving the Union's energy efficiency target of 30 % in 2030, in accordance with Directive 2012/27/EU and with the Union's target to reduce greenhouse gas emissions by at least 80 % by 2050.***

Or. en

## Amendment 20

### 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*

*Amendment*

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

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

Or. en

## Amendment 21

### Proposal for a directive

#### Article 1 – paragraph 1 – point 2 – point b

Directive 2010/31/EU

Article 2a – paragraph 3 – introductory part

*Text proposed by the Commission*

3. To guide investment decisions as referred to in **point (d)** in paragraph 1, Member States shall introduce mechanisms for:

*Amendment*

3. To guide investment decisions as referred to in **points (b) to (e)** in paragraph 1, Member States shall introduce mechanisms for:

Or. en

## Amendment 22

### 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*

(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;

*Amendment*

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

Or. en

## Amendment 23

### 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, ***e.g. by subjecting the factor for collateral with certified energy efficiency renovations to lower risk weighting in***

*capital requirements;*

Or. en

## **Amendment 24**

### **Proposal for a directive**

#### **Article 1 – paragraph 1 – point 2 – point b**

Directive 2010/31/EU

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

*Text proposed by the Commission*

*Amendment*

*(c a) the guidance of investments into an energy efficient public building stock and tackling possible legal limits such as the interpretation of accounting rules for public authority debt; and*

Or. en

## **Amendment 25**

### **Proposal for a directive**

#### **Article 1 – paragraph 1 – point 2 – point b**

Directive 2010/31/EU

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

*Text proposed by the Commission*

*Amendment*

*(c b) accessible and transparent advisory tools, such as one-stop-shops for consumers, informing of available financial instruments for energy efficiency renovations in buildings.*

Or. en

## **Amendment 26**

### **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 inserted:***

***3 a. Each Member State shall carry out a public consultation on the draft long-term renovation strategy at least three months prior to the submission of its long-term renovation strategy to the Commission. The result of the public consultation shall be published in summarised form as an annex to the strategy.***

Or. en

## **Amendment 27**

### **Proposal for a directive**

#### **Article 1 – paragraph 1 – point 2 – point b b (new)**

Directive 2010/31/EU

Article 2a – paragraph 3b (new)

*Text proposed by the Commission*

*Amendment*

***(bb) the following paragraph 3b is inserted:***

***3 b. Each Member State shall report on the implementation of its long-term renovation strategy in accordance with Article 19 (a) of the Governance Regulation (XXX), as a part of their integrated national energy and climate progress report.***

Or. en

## **Amendment 28**

### **Proposal for a directive**

#### **Article 1 – paragraph 1 – point 4**

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*Text proposed by the Commission*

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

*Amendment*

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

***“Member States shall encourage, in relation to buildings undergoing major renovation, the consideration and taking into account of high-efficiency alternative systems, in so far as this is technically, functionally and economically feasible.”***

Or. en

## Amendment 29

### 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*

2. 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<sup>17</sup>, ***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.

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<sup>17</sup> OJ L 307, 28.10.2014, p. 1

*Amendment*

2. Member States shall ensure that in all new non-residential buildings and in all existing non-residential buildings ***with more than ten parking spaces*** undergoing major renovation ***related to the electrical infrastructure of the building or the parking lot***, at least one of every ten is equipped with ***adequate pre-cabling or pre-tubing, in order to enable installation of a recharging point within the meaning of Directive 2014/94/EU on the deployment of alternative fuels infrastructure, with the power of at least 7kW on every parking space***. This requirement shall apply to all non-residential buildings, with more than ten parking spaces, as of 1 January 2025.

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<sup>17</sup> OJ L 307, 28.10.2014, p. 1

Or. en

## Amendment 30

### 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 **related to the electrical infrastructure of the building or the adjacent or built-in parking lot**, with more than ten parking spaces, include the **adequate pre-cabling or pre-tubing with the power of at least 7kW** to enable the installation of recharging points for electric vehicles for every parking space.

Or. en

## Amendment 31

### Proposal for a directive

#### Article 1 – paragraph 1 – point 5 – point b

Directive 2010/31/EU

Article 8 – paragraph 4

#### *Text proposed by the Commission*

4. Member States may decide not to set or apply the requirements referred to in paragraphs 2 and 3 to public buildings **which** are already covered by Directive 2014/94/EU.;

#### *Amendment*

4. Member States may decide not to set or apply the requirements referred to in paragraphs 2 and 3 to public buildings **provided that they** are already covered by **comparable requirements according to** Directive 2014/94/EU.

Or. en

## Amendment 32

### Proposal for a directive

#### Article 1 – paragraph 1 – point 5 – point b

Directive 2010/31/EU

Article 8 – paragraph 4 a (new)

*Text proposed by the Commission*

*Amendment*

**4 a. Member States shall ensure that public parking lots operated by private entities are subject to the same requirements referred to in paragraphs 1 and 2.**

Or. en

## Amendment 33

### Proposal for a directive

#### Article 1 – paragraph 1 – point 5 – point b

Directive 2010/31/EU

Article 8 – paragraph 4 b (new)

*Text proposed by the Commission*

*Amendment*

**4 b. Member States shall ensure that there are simplified permitting and approval procedures for owners and tenants to enable the deployment of recharging points in existing residential and non-residential buildings.**

Or. en

## Amendment 34

### Proposal for a directive

#### Article 1 – paragraph 1 – point 5 – point c

Directive 2010/31/EU

Article 8 – paragraph 6 – subparagraph 1

*Text proposed by the Commission*

*Amendment*

6. The Commission is empowered to adopt delegated acts in accordance with

6. The Commission is empowered to adopt delegated acts in accordance with

Article 23 supplementing this Directive with a *definition of* 'smartness indicator' and with the conditions under which the 'smartness indicator' would be provided as additional information to prospective new tenants or buyers.

Article 23, supplementing this Directive with a 'smartness indicator' *in accordance with the design and methodology set out in Annex Ia* and with the conditions under which the 'smartness indicator' would be *connected to the energy performance certificates referred to in Article 11 and would be* provided as additional information to prospective new *investors*, tenants or buyers.

Or. en

### **Amendment 35**

#### **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 *enhanced energy savings and* 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.

Or. en

### **Amendment 36**

#### **Proposal for a directive**

#### **Article 1 – paragraph 1 – point 6 – point a**



*Text proposed by the Commission*

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.

*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, ***where proportionate to the volume of the renovation, or by using standard values for calculation of energy savings in buildings or similar relevant, transparent methodology for documentation.***

Or. en

**Amendment 37**

**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 m<sup>2</sup> 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 m<sup>2</sup> which shall be regularly updated.

Or. en

## Amendment 38

### 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*

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.;

*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 **70** 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. The assessment of the **heat generator** 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.;

Or. en

## Amendment 39

### Proposal for a directive

#### Article 1 – paragraph 1 – point 7 – point b

Directive 2010/31/EU

Article 14 – paragraph 2 – introductory part

*Text proposed by the Commission*

2. ***As an alternative to paragraph 1*** Member States may set requirements to ensure that non-residential buildings with total primary energy use of over 250 MWh per year are equipped with building automation and control systems. These

*Amendment*

2. Member States may set requirements to ensure that non-residential buildings with total primary energy use of over 250 MWh per year are equipped with building automation and control systems. These systems shall be capable of:

systems shall be capable of:

Or. en

#### **Amendment 40**

##### **Proposal for a directive**

##### **Article 1 – paragraph 1 – point 7 – point b**

Directive 2010/31/EU

Article 14 – paragraph 2 – point a

*Text proposed by the Commission*

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

*Amendment*

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

Or. en

#### **Amendment 41**

##### **Proposal for a directive**

##### **Article 1 – paragraph 1 – point 7 – point b**

Directive 2010/31/EU

Article 14 – paragraph 3 – introductory part

*Text proposed by the Commission*

3. ***As an alternative to paragraph 1***  
Member States may set requirements to ensure that residential buildings with centralised technical building systems of a cumulated effective rated output of over **100** kW are equipped:

*Amendment*

3. Member States may set requirements to ensure that residential buildings with centralised technical building systems of a cumulated effective rated output of over **70** kW are equipped:

Or. en

#### **Amendment 42**

##### **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.** *Member States may decide not to apply paragraph 1 to buildings that comply with paragraph 2 or 3.*

Or. en

#### **Amendment 43**

##### **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 point (27) of Article 2 of Directive 2012/27/EU shall be exempted from the requirements laid down in paragraph 1.*

Or. en

#### **Amendment 44**

##### **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*

*Amendment*

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

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.

over 250MWh and for residential buildings with a centralised technical building system of a cumulated effective rated output of over **12kW**. 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.

Or. en

## **Amendment 45**

### **Proposal for a directive**

#### **Article 1 – paragraph 1 – point 8 – point b**

Directive 2010/31/EU

Article 15 – paragraph 2 – introductory part

#### *Text proposed by the Commission*

2. ***As an alternative to paragraph 1***  
Member States may set requirements to ensure that non-residential buildings with total primary energy use of over 250 MWh per year are equipped with building automation and control systems. These systems shall be capable of:

#### *Amendment*

2. Member States may set requirements to ensure that non-residential buildings with total primary energy use of over 250 MWh per year are equipped with building automation and control systems. These systems shall be capable of:

Or. en

## **Amendment 46**

### **Proposal for a directive**

#### **Article 1 – paragraph 1 – point 8 – point b**

Directive 2010/31/EU

Article 15 – paragraph 2 – point a

#### *Text proposed by the Commission*

(a) continuously monitoring, analysing

#### *Amendment*

(a) continuously monitoring, ***logging***,

and adjusting energy usage;

analysing and adjusting energy usage;

Or. en

#### **Amendment 47**

##### **Proposal for a directive**

##### **Article 1 – paragraph 1 – point 8 – point b**

Directive 2010/31/EU

Article 15 – paragraph 3

*Text proposed by the Commission*

3. *As an alternative to paragraph 1*  
Member States may set requirements to ensure that residential buildings with centralised technical building systems of a cumulated effective rated output of over **100 kW**

*Amendment*

3. Member States may set requirements to ensure that residential buildings with centralised technical building systems of a cumulated effective rated output of over **12 kW are equipped:**

Or. en

#### **Amendment 48**

##### **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. Member States may decide not to apply paragraph 1 to buildings that comply with paragraph 2 or 3.**

Or. en

#### **Amendment 49**

##### **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 covered by a contractual arrangement on an agreed level of energy efficiency improvement or another agreed energy performance criterion, such as energy performance contracting as defined in point (27) of Article 2 of Directive 2012/27/EU shall be exempted from the requirements laid down in paragraph 1.**

Or. en

## **Amendment 50**

**Proposal for a directive**  
**Article 1 – paragraph 1 – point 9**  
Directive 2010/31/EU  
Article 19

*Text proposed by the Commission*

*Amendment*

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

(9) in Article 19, ‘2017’ is replaced by ‘2024’;

Or. en

## **Amendment 51**

**Proposal for a directive**  
**Article 1 – paragraph 1 – point 9 a (new)**  
Directive 2010/31/EU  
Article 19 –paragraph 1 a (new)

*Text proposed by the Commission*

*Amendment*

**(9 a) in Article 19, the following paragraph is added:**

***'The Commission shall, in particular, assess the need for further harmonisation of energy performance certificates in accordance with Article 11 of this Directive as well as the feasibility of***

*introducing the concept of a building renovation passport, as a part of the recommendations section of the energy performance certificates, in order to provide a long-term, step-by-step renovation roadmap for a specific building.'*

Or. en

## Amendment 52

### Proposal for a directive

#### Article 1 – paragraph 1 – point 10

Directive 2010/31/EU

Article 20 – paragraph 2 – subparagraph 1

#### *Text proposed by the Commission*

Member States shall in particular provide information to the owners or tenants of buildings on energy performance certificates, their purpose and objectives, on cost-effective ways to improve the energy performance of the building and, **where appropriate**, on financial instruments available to improve the energy performance of the building.

#### *Amendment*

Member States shall in particular provide information to the owners or tenants of buildings on energy performance certificates, their purpose and objectives, on cost-effective ways to improve the energy performance of the building and on financial instruments available to improve the energy performance of the building.

Or. en

## Amendment 53

### Proposal for a directive

#### Annex I – paragraph 1 – point 1 – point a

Directive 2010/31/EU

Annex I – point 1 – subparagraph 3

#### *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

#### *Amendment*

Member States shall describe their national calculation methodology, **taking into account** the national annex framework of related European standards developed under mandate M/480 given by the



## Amendment 54

### 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, *expressed in final and primary energy*, for space heating, space cooling, domestic hot water, *lighting* and ventilation shall be calculated in order to *maximise health, indoor air quality* and comfort levels defined by Member States *at national or regional level*.

## Amendment 55

### Proposal for a directive

#### Annex I – paragraph 1 – point 1 – point b

Directive 2010/31/EU

Annex I – point 2 – subparagraph 2

#### *Text proposed by the Commission*

The calculation of primary energy shall be based on primary energy factors per energy carrier, which may be based on national or regional annual weighted averages or on more specific information made available for individual district system.

#### *Amendment*

The calculation of primary energy shall be based on primary energy factors per energy carrier, which may be based on national or regional annual, *seasonal or monthly* weighted averages or on more specific information made available for individual district system.

## Amendment 56

### Proposal for a directive

#### Annex I – paragraph 1 – point 1 – point b

Directive 2010/31/EU

Annex I – point 2 – subparagraph 3

*Text proposed by the Commission*

***Primary energy factors shall discount the share of renewable energy in energy carriers so that calculations*** equally treat:  
(a) the energy from renewable ***source*** that is generated on-site (behind the individual meter, i.e. not accounted as supplied), and  
(b) the energy from renewable energy sources supplied through the energy carrier.

*Amendment*

***The calculations*** shall equally treat: (a) the energy from renewable ***sources*** that is generated ***and used*** on-site (behind the individual meter, i.e. not accounted as supplied), and (b) the energy from renewable energy sources supplied through the energy carrier.

Or. en

## Amendment 57

### Proposal for a directive

#### Annex I – paragraph 1 – point 1 – point b

Directive 2010/31/EU

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

*Text proposed by the Commission*

***The application of primary energy factors shall ensure that the optimal energy performance of the building is pursued, irrespective of energy source and energy mix, including within the national building codes, thereby also supporting the national implementation of the requirements of Article 9.***

*Amendment*

Or. en

## Amendment 58

### Proposal for a directive

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

*Text proposed by the Commission*

*Amendment*

***1 a. The following annex is added:***

***'ANNEX Ia***

***Common general framework methodology for the calculation of a 'smartness indicator' for Buildings as referred to in Article 8, paragraph 6***

***1. The Commission shall lay down a common general framework methodology to determine the smartness indicator value, rating the ability of a building or building unit to adapt its operation to the needs of the occupant and the grid and to improve its energy efficiency and overall performance.***

***The methodology shall take into account a number of features including smart meters, building automation and control systems, smart thermostats, built-in home appliances, smart recharging points for electric vehicles, energy storage and the interoperability of these features. Those impacts shall be assessed for potential benefits for the energy efficiency and performance levels, as well as the enabled flexibility, indoor climate conditions and comfort of the relevant building or building unit.***

***2. The smartness indicator shall be determined and calculated in accordance with three key functionalities relating to the building and its technical building systems:***

***(a) the ability to maintain, efficiently, high building performance and operation through the reduction of energy demand and a greater use of energy from renewable sources including the ability of the building to manage its own demand or on-site generation by re-managing its own resources;***

*(b) the ability to adapt its operation mode in response to the needs of the occupant ensuring high standards of indoor health and climate conditions, paying due attention to the availability of user-friendly displays and remote controllability; and*

*(c) the flexibility of a building's overall electricity demand, which shall be measured in terms of how much of the building's load can be shifted at any one time in terms of kW peak, and the capacity in terms of kWh of how much of that flexibility can then be delivered to the grid, including offtake and injection.*

*This would enable and support the active participation of consumers in the electricity supply market in accordance with the Directive 2009/72/EC of the European Parliament and of the Council\*.*

*The framework methodology shall take into account European standards, in particular those developed under mandate M/480.*

*3. The framework methodology shall ensure full interoperability between smart meters, building automation and control systems, built-in home appliances, smart thermostats within the building and promote the use of European standards including the Smart Appliances Reference ontology. The smartness indicator shall consider and set a value on openness to third-party systems, for infrastructure such as the electricity grid, electric vehicle infrastructure and demand-response aggregators, with a view to ensuring compatibility in communications, systems control and relevant data or signals transmission.*

*4. The framework methodology shall include the data handling process within a building or beyond a building's boundaries, which could include data originating in or received by the building itself or the user or occupant. This*

*process shall be based on protocols that allow authenticated and encrypted message exchanges between the occupant and the relevant products or devices within the building. In particular when processing personal data, such as data coming from frequent and remote metering or sub-metering or processed by smart-grid operators, the principles of occupant ownership, data protection, privacy and security shall be ensured. This common methodology framework shall cover real time data and energy-related data coming out of cloud based solutions and shall ensure the security of data, smart meter readings and data communications, and the privacy of final customers, in compliance with relevant Union data protection and privacy law.*

*5. The framework methodology shall take into account the positive influence of existing communication networks, in particular the existence of high-speed-ready in-building physical infrastructure, such as the voluntary 'broadband ready' label, and the existence of an access point for multi-dwelling buildings, in accordance with Article 8 of Directive 2014/61/EU of the European Parliament and of the Council\*\*.*

*6. The framework methodology shall set out the most appropriate format or visual representation of the smartness indicator parameter and shall be simple, transparent, and easily understandable for consumers, owners, investors, and demand response market participants. It shall complement the energy performance certificate.*

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*\* Directive 2009/72/EC of the European Parliament and of the Council of 13 July 2009 concerning common rules for the internal market in electricity (OJ L 211, 14.8.2009, p. 55).*

*\*\* Directive 2014/61/EU of the European Parliament and of the Council*

*of 15 May 2014 concerning measures to reduce the cost of deploying high-speed electronic communication networks (OJ L 155, 23.5.2014, p. 1).'*

Or. en

## **EXPLANATORY STATEMENT**

The Union's building stock consumes a substantial part of Europe's final energy demand, in particular by fossil fuels. A better performing building stock holds a significant potential for improved energy security and reduced imports of energy to Europe, lower energy bills for European energy consumers, healthier living conditions as well as increased growth and jobs, in particular in SMEs.

To fulfil our international commitments under the COP21 agreement and to achieve the Union's own targets for decarbonisation and energy efficiency in a cost-effective manner, the non-ETS sectors - such as buildings and transport - must deliver on their potential. An ambitious and future-proof Directive for the Energy Performance of Buildings is therefore needed to secure a highly energy efficient and decarbonised European building stock.

### **Long-term planning and actions by Member States reinforced**

A key element to secure the needed renovations of the building stock is the national long-term renovation strategies, comprised in the national climate and energy plans of the Governance Regulation.

The rapporteur recommends strengthening the requirements to the content of the national long-term renovation strategies, in order to deliver the needed renovations in particular of the existing building stock. Member States must, with due consideration to subsidiarity, ensure comprehensive and ambitious renovation strategies, outlining specific actions to target the worst performing building stock, tackle split-incentives, consider relevant trigger points in the life cycle of a building, tackle legal accounting limits for public investments, and ensure access to information about financial instruments available for energy renovations for consumers.

### **Proportionate electro-mobility requirements**

The Commission's proposal aims at using the revision of the Directive to contribute further to decarbonisation of transport by using the infrastructure around buildings to facilitate the rollout of electric mobility infrastructure.

The rapporteur suggests focusing the requirements of the Directive to either pre-cabling or pre-tubing, to ensure a proportionate cost-level, and to focus the requirement only on related renovations, i.e. electrical infrastructure or parking lot, to ensure that incentives to renovate are not undermined. Additionally, the rapporteur strengthens the requirement towards public buildings and public parking lots operated by private entities, to ensure that public authorities contribute adequately.

### **Better regulation and good incentives for renovations**

The Commission's original proposal includes several suggested updates of the existing Directive to ensure less administrative burdens when renovating and give better conditions for carrying out energy renovations.

The rapporteur builds on that proposal in order to ensure better regulation and proper incentives to carry out energy renovations. The suggestions include strengthening the elements of the proposal concerning the use of building automation, to clarify its value in its

own right, and to clarify its use as alternative to inspections for simplification purposes. The rapporteur also outlines the specific conditions, scope and purpose for the delegation of competences to the Commission to develop a smartness indicator. The Rapporteur furthermore suggests clarifying the documentation requirements for energy savings achieved by renovations to ensure proportionality by introducing alternative and adequately secure documentation options, thereby not undermining incentives to conduct renovations.

### **Correct picture of buildings' energy performance**

The Commission proposes that the calculation of the Primary Energy Factor (PEF) shall discount and give equal treatment to renewables produced on-site and off-site. The PEF is used for the calculation of the energy performance of a building.

The rapporteur argues to maintain the reference to equal treatment of on-site and off-site renewables, to ensure cost-effective rollout of renewables, but deletes the reference to obligatory discounting, as this entails a risk of undermining the correct picture of buildings' actual energy consumption and performance. Thereby, incentives to make energy efficiency improvements could be undermined. All other PEF-issues remain regulated by Energy Efficiency Directive and Renewable Energy Directive.



**ANNEX: LIST OF ENTITIES OR PERSONS  
FROM WHOM THE RAPPORTEUR HAS RECEIVED INPUT**

<b>Organization</b>
European Building Automation and Controls Association, EU.bac
Velux
Danish Energy Association
Rockwool
DG Energy
Veolia
Schöck
DONG Energy
Estonian Energy Ministry
Buildings Performance Institute Europe, BPIE
AFCO Worldwide
European Heat Pump Association, EHPA
KREAB
EUFORES
Confederation of Danish Industries, DI
Active House Alliance
European Alliance to Save Energy, EU-ASE
EUROPEAN RENEWABLE ENERGIES FEDERATION asbl
Schneider Electric
EpiCenter
EON
Danish District Heating Association, DANVA
Electric Underfloor Heating Alliance
ENEL SPA
Confederation of Danish Enterprises
Novozymes
Euroheat & Power
UNION FRANCAISE DE L'ELECTRICITE
Bosch
AmCham EU
The Danish Construction Association
Danish Ministry for Climate and Energy
Eco Council Denmark
Smart Energy Demand Coalition EU
WWF
Danish Association of Construction Clients, DACC
Local Government Denmark
European Historic Houses Association
International Union of Property Owners
Director General of the European Property Federation
Council of European Municipalities and Regions
Orgalime

CEZ group
Eni
European Environmental Bureau (EEB)
Climate Action Network Europe
European Energy Forum
HydrogenEurope
GD4S coalition
Eurelectric
SolarPowerEurope
WindEurope
FireSafeEurope
VOEWG
Swedish PermRep
Green Building Council Denmark
Confederation of Norwegian Enterprise
REHVA
ENGIE
Statoil
E.on
Fleishman Hillard
GRDF
Saint Gobain
PlasticsEurope
European Construction Industry Federation
Grace Public Affairs
Smart Energy Demand Coalition
European Forum for Manufacturing
British Chamber of Commerce in Belgium
Council of Gas Detection and Environmental Monitoring (CoGDDEM)
European Facility Management Coalition
EuroCommerce
EDSO for Smart Grids
EnerginetDK
EnergyCoalition
Danfoss
Grundfoss
EnergiWatch
Cembreau
EDF
Dalkia
Enel
BDEW - German Association of Energy and Water Industries
EPEE
European Builders Confederation (EBC)
Eurima
EuroAce - European Alliance of Companies for Energy Efficiency in Buildings
FIEC - European Construction Industry Federation

Tesla
CoGen
European Federation of Building and Woodworkers
European Aluminium
Fédération du Commerce et de la Distribution
Knauf Insulation
The European Chemical Industry Council, CEFIC
CableEurope
BASF
ABB
Norsk Hydro ASA
CEMEX
Association of North German Chambers of Commerce and Industry
European Engineering Industries Association
International Energy Agency
European Copper Institute
BDR Thermea
EC Power A/S
Platform for Eletro-Mobility
European Solar Thermal Industry Federation (ESTIF)
German Federation of Companies in the Gas and Water Industry (figawa)
Glass for Europe
Shell
GreenEnergyOptions, GEO
SustainSolutions
European Mortgage Federation
European Construction Industry Federation
Siemens
Vattenfall
EUnited
HSSE
Dow
Renault Group
Transport & Environment
Bellona
Austrian Federal Economic Chamber (WKÖ)
Vestas
Housing Europe
Danish Social Housing Federation
Dutch Social Housing Federation
French Social Housing Federation
German Social Housing Federation
European Union of House builders and Developers
BEUC
World Green Building Council (WorldGBC)
Snam S.p.A.
BDI/BDA The German Business Representation

European Federation of Intelligent Energy Efficiency Services
German Retail Federation
Architects' Council of Europe - Conseil des Architectes d'Europe
Swedish Petroleum and Biofuel Institute
AFEP
Cercle de l'Industrie
ES-SO European Solar Shading Organization
E3G - Third Generation Environmentalism
European Economic and Social Committee
European Heating Industry (EHI)
Federal Chamber of German Architects
European Federation of National Organisations Working with the Homeless
NALCO Water
Avisa Partners
LightingEurope AISBL
BMW Group
Ecofys
Danske Arkitektvirksomheder
United Technologies Corporation UTC
EU association for engineering building services and installers
European Geothermal Energy Council
AEBIOM
EuroFuel
Rud-Pedersen
Client Earth