



REHVA amendment proposal ITRE Draft Report  
on EPBD review

Original EC proposal (COM(2016)0765)	ITRE Draft Report (2016/0381(COD))	REHVA amendment proposal to the ITRE Draft report in track-changes.
<p><b>REHVA explanatory note:</b></p> <ul style="list-style-type: none"> <li>- REHVA welcomes and highly appreciates the support of ITRE in addressing indoor environmental quality (IEQ) better in the EPBD. We suggest some further amendments to specify and strengthen the aspect of IEQ for the better health and comfort of consumers. We suggest considering also the important socio-economic factor of increased productivity linked to improved health, and comfort, as well as the related indirect financial benefits.</li> <li>- The revised EPBD should set a clear mandate for Member States to define indoor environmental quality requirements that are monitored and reported in a harmonised way in building regulations across Europe. IEQ criteria shall be part of the inspection, and ventilation systems shall be integrated within the scope of inspection, and continuously monitored alongside the energy performance of the buildings.</li> </ul>		
	<p><b>Amendment 4</b></p> <p>Proposal for a directive Recital 7 a (new) <i>(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</i></p>	<p>(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 <del>integrate considerations</del> <u>include measures for improvement of indoor climate for better health, comfort and productivity</u>, including by combining renovation with the removal of asbestos and other harmful substances, preventing the illegal removal of harmful</p>

	<i>with existing legislative acts such as Directive 2009/148/EC.</i>	substances, and facilitating compliance with existing legislative acts such as Directive 2009/148/EC.
(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	<p><b>Amendment 8</b></p> <p><b>Proposal for a directive</b></p> <p><b>Recital 9</b></p> <p>(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 <i>in accordance with the methodology set out in this Directive</i>. The smartness indicator should be <i>coherent with energy performance certificates and should be</i> used to measure buildings' capacity to use ICT and electronic systems to optimise operation, <i>performance, indoor comfort</i> 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</p>	<p>(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 <i>in accordance with the methodology set out in this Directive</i>. The smartness indicator should be <i>coherent with energy performance certificates and should be</i> used to measure buildings' capacity to use ICT and electronic systems to optimise operation, <i>performance, <u>better indoor environment for health, productivity and indoor comfort</u></i> 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</p>

savings of these new enhanced-functionalities.	new enhanced-functionalities.	occupant about the actual savings of these new enhanced-functionalities.
<p><b>REHVA Explanatory note: the exemption of buildings within an ESCO programme is not justified and seems to be misleading. On one hand the buildings with an ESCO contract undergo by default an energy audit as first step of the implementation with the systems inspected. On the other hand, the performance of buildings that are within an ESCO programme must be monitored in operation after the investment is completed to ensure that the contract was delivered. REHVA recommends formulating the requirement to better protect consumers and building owners: in case a monitored building with an ESCO contract is not performing within the stated parameters, a full inspection should be required to ascertain the reasons for non-compliance. This applies also to the ITRE Amendments 43 and 49 beside the Amendment 11 quoted below.</b></p>		
<p>(12) <i>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</i></p>	<p><b>Amendment 11</b></p> <p><b>Proposal for a directive</b></p> <p><b>Recital 12</b></p> <p>(12) Building automation and electronic monitoring of technical building systems <i>holds great potential to provide better indoor environment and significant energy savings cost-effectively 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.</i> The current possibility to opt for alternative</p>	<p>(12) Building automation and electronic monitoring of technical building systems <i>holds great potential to provide <u>better indoor environment</u> and significant energy savings <u>cost-effectively</u> 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.</i> The current possibility to opt for alternative</p>

<p>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.</p>	<p>measures is therefore deleted, <i>however it should be possible to exempt technical systems explicitly covered by an ESCO programme from the inspection requirement.</i></p>	<p>measures is therefore deleted, <i>however it should be possible to exempt technical systems explicitly covered by an ESCO programme from the inspection requirement <u>in case the system performance is monitored and the predicted performance improvement is achieved. In the event of a monitored building not performing within stated parameters then a full Inspection should be required to ascertain the reasons for non-compliance.</u></i></p>
<p>(13) To ensure their best use in building renovation, financial measures related to energy efficiency should be linked to the depth of the</p>	<p><b>Amendment 12</b></p> <p><b>Proposal for a directive</b></p> <p><b>Recital 13</b></p> <p>(13) To ensure their best use in building renovation, <b>public</b> financial measures related to energy efficiency should be linked to the depth of the renovation <b>and promote holistic building renovations as the best</b></p>	<p>(13) To ensure their best use in building renovation, <b>public</b> financial measures related to energy efficiency should be linked to the depth of the renovation <b>and promote holistic building renovations as the best</b></p>

<p>renovation, <i>which</i> should be assessed by comparing <i>energy performance certificates</i> (EPCs) issued before and after the renovation.</p>	<p><i>way of ensuring high energy performance and improved indoor comfort.</i></p>	<p><i>way of ensuring high energy performance and the <u>required indoor environmental quality for health and</u> comfort.</i></p>
<p>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;</p>	<p><b>Amendment 15</b></p> <p><b>Proposal for a directive</b> <b>Article 1 – paragraph 1 – point 1</b></p> <p>3. 'technical building system' means technical equipment for space heating, space cooling, ventilation, domestic hot water, built-in lighting, <i>elevators and escalators</i>, 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;</p>	<p>3. 'technical building system' means technical equipment for space heating, space cooling, ventilation, <u>and other equipment for controlling indoor environmental conditions</u>, domestic hot water, built-in lighting, <i>elevators and escalators</i>, building automation and control, on-site electricity and thermal energy 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;</p>
	<p><b>Amendment 16</b></p> <p><b>Proposal for a directive</b> <b>Article 1 – paragraph 1 – point 1 a (new)</b></p> <p><i>'16a. "building automation and control system" means a system comprising all</i></p>	<p><i>'16a. "building automation and control system" means a system comprising all</i></p>

	<p><i>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'</i></p>	<p><i>products, <u>sensors</u>, software and engineering services and <u>data processing</u> for automatic controls including interlocks, monitoring, <u>recording</u>, optimisation, for operation, human intervention and management to achieve energy-efficient, economical, <u>healthy</u> and safe operation of technical building systems'</i></p>
<p>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.</p>	<p><b>Amendment 35</b></p> <p><b>Proposal for a directive</b> <b>Article 1 – paragraph 1 – point 5 – point c</b></p> <p>The smartness indicator shall cover <i>enhanced energy savings and</i> 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.</p>	<p>The smartness indicator shall cover <i>enhanced energy savings, <u>improved indoor environmental control, and peak power reductions</u></i>, 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 <u>occupant behaviour</u> 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 <u>and use</u> of the various energy <u>sources and</u> systems and district infrastructures to which the building is connected.</p>

**REHVA Explanatory note on inspection:**

- 1. REHVA promotes mandatory and regular inspection of technical building systems (TBS) that supports both proper maintenance and building performance. Third party testing through well-defined regular inspections shall be a mandatory requirement for buildings. Inspection shall be an assessment carried out by an independent professional and based on a transparent process with well-defined criteria. This can ensure proper implementation, and increased performance of buildings. BAC and electronic monitoring are tools that can support inspection if configured according to the criteria detailed in the REHVA amendment of Articles 14 and 15, paragraphs 1, points a-c. The quality management for the inspection, and testing of the system performance is as much important as having in place the BAC or electronic monitoring that provides the data. BAC and electronic monitoring can't replace independent inspection, only support the process, and make inspection more cost-effective by reducing the frequency of on-site checks.**
- 2. The functionality of communication across devices and interoperability (as described in both Articles 14 and 15, paragraph 2, point c. is not related to inspection, therefore is not appropriate here. We recommend moving this to Article 8, or to Annex I on the SI indicator. The relevant function for inspection is the aggregation and processing of different data as added now in the REHVA amendment proposal.**
- 3. Ventilation systems shall be within the scope of mandatory inspection to ensure healthy indoor environment for the health, comfort and productivity of consumers. Air-conditioning, and ventilation systems together with heating have equally significant impact on the performance of buildings. With the trend towards more insulated buildings that comply with the building codes according to the EPBD, the importance of ventilation increases, therefore the EPBD shall tackle ventilation at the same way as air-conditioning and heating.**

<p>Article 14 is amended as follows:</p> <p>(a) paragraph 1 is replaced by the following:</p> <p>'1. Member States shall lay down the necessary measures to establish a regular inspection of the accessible parts of systems</p>	<p><b>Amendment 38</b></p> <p><b>Proposal for a directive</b>  <b>Article 1 – paragraph 1 – point 7 – point a</b>          Directive 2010/31/EU          Article 14 – paragraph 1</p> <p>1. Member States shall lay down the necessary measures to establish a regular inspection of the accessible parts of systems</p>	<p>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</p>
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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.

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

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 and ensure the following transparent framework requirements:

(a) The inspection is based on defined parameter values for components and systems, with minimum standard data criteria for the testing that enables the transparent evaluation of the performance. Tests must be carried out by an independent third party.

(b) Energy use, average and peak power demands shall be reported at the level of the technical building systems, with reference to the design installed capacities. The TBS energy and power demands should be presented in context with the total energy use, average and peak power demands of the building.

(c) Based on the results of the above evaluation, the inspection should provide guidance on the potential energy savings.



<p>(b) paragraphs 2, 3, 4 and 5 are deleted and replaced by the following:</p> <p><b>‘2. As an alternative to paragraph 1</b> 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:</p> <ul style="list-style-type: none"> <li>(a) continuously monitoring, analysing and adjusting energy usage;</li> <li>(b) benchmarking the building’s energy efficiency, detecting losses in efficiency of technical building systems, and informing the person responsible for the facilities or technical building management about opportunities for energy efficiency improvement;</li> </ul>	<p><b>Amendment 39</b></p> <p><b>Proposal for a directive</b> <b>Article 1 – paragraph 1 – point 7 – point b</b> Directive 2010/31/EU Article 14 – paragraph 2 – introductory part</p> <p>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</p> <ul style="list-style-type: none"> <li>(a) continuously monitoring, <i>logging</i>, analysing and adjusting energy usage;</li> <li>(b) benchmarking the building’s energy efficiency, detecting losses in efficiency of technical building systems, and informing the person responsible for the facilities or technical building management about opportunities for energy efficiency improvement;</li> <li>(c) allowing communication with connected technical building</li> </ul>	<p>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 <b><u>be configured to provide the information required by the third-party inspection described in point 1 and to support the:</u></b></p> <ul style="list-style-type: none"> <li>(a) continuous<del>ly</del> monitoring, <i>logging</i>, analysing and adjusting <u>of</u> energy usage;</li> <li>(b) benchmarking the building’s energy efficiency, detecting losses in efficiency of technical building systems, and informing the person responsible for the facilities or technical building management about opportunities</li> </ul>
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<p>(c) allowing communication with connected technical building systems and other appliances inside the building, and being interoperable with technical building systems across different types of proprietary technologies, devices and manufacturers.</p>	<p>systems and other appliances inside the building, and being interoperable with technical building systems across different types of proprietary technologies, devices and manufacturers.</p>	<p>for energy efficiency improvement;</p> <p>(c) <u>aggregation of all relevant data in one place and then transmit it for evaluation is the important point here</u></p> <p><del>allowing communication with connected technical building systems and other appliances inside the building, and being interoperable with technical building systems across different types of proprietary technologies, devices and manufacturers.</del></p>
<p><b>3. As an alternative to paragraph 1</b> Member States may set requirements to ensure that residential buildings with centralised technical building systems of a</p>	<p><b>Amendment 41</b></p> <p><b>Proposal for a directive</b> <b>Article 1 – paragraph 1 – point 7 – point b</b> Directive 2010/31/EU Article 14 – paragraph 3 – introductory part</p> <p>3. Member States may set requirements to ensure that residential buildings with centralised technical building systems of a cumulated effective rated output of over <b>12 kW are equipped</b></p>	<p>3. Member States may set requirements to ensure that residential buildings with centralised technical building systems of a cumulated effective rated output of over <b>12 kW are equipped</b></p>

<p>cumulated effective rated output of over 100 kW are equipped:</p> <p>(a) with continuous electronic monitoring that measures systems' efficiency and inform building owners or managers when it has fallen significantly and when system servicing is necessary, and</p> <p>(b) with effective control functionalities to ensure optimum generation, distribution and use of energy.';</p>		<p>(a) with continuous electronic monitoring that measures systems' efficiency and inform building owners or managers when it <del>has fallen significantly</del> <u>requires attention</u> and/or when system servicing is necessary, and</p> <p>with effective control functionalities to <del>ensure</del> <u>enable</u> optimum generation, distribution and use of energy</p>
<p>(8) Article 15 is amended as follows:</p> <p>(a) paragraph 1 is replaced by the following:</p> <p>'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</p>	<p><b>Amendment 44</b></p> <p><b>Proposal for a directive</b></p> <p><b>Article 1 – paragraph 1 – point 8 – point a</b></p> <p>Directive 2010/31/EU</p> <p>Article 15 – paragraph 1</p> <p>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 <b>12kW</b>. The inspection shall include an</p>	<p>1. Member States shall lay down the necessary measures to establish <u>a transparent process with clearly defined criteria for</u> regular inspection of the accessible parts of <u>ventilation</u>, and 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</p>

<p>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.’;</p>	<p>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.</p>	<p>of a cumulated effective rated output of over <b>12kW</b>. The inspection shall include an assessment of the <u>ventilation</u> and air-conditioning <u>system</u> efficiency, and <u>its</u> sizing compared to the <u>ventilating and</u> cooling requirements of the building. <u>The inspection should be based on transparent framework requirements:</u></p> <p><u>(a) The inspection is based on defined parameter values for components and systems, with minimum standard data criteria for the testing that enables the transparent evaluation of the performance. Tests must be carried out by an independent third party.</u></p> <p><u>(b) Energy use, average and peak power demands shall be reported at the level of the technical building systems, with reference to the design installed capacities. The TBS energy and power demands should be presented in context with the total energy use, average and peak power demands of the building.</u></p> <p><u>(c) Based on the results of the above evaluation, the inspection should provide guidance on the potential energy savings.</u></p>
<p>(b) paragraphs 2, 3, 4 and 5 are deleted and replaced by the following:</p>	<p><b>Amendment 45</b>  <b>Proposal for a directive</b>  Article 1 – paragraph 1 – point 8 – point b  Directive 2010/31/EU</p>	

<p><b>‘2. As an alternative to paragraph 1</b> 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:</p> <p>(a) continuously monitoring, analysing and adjusting energy usage;</p> <p>(b) benchmarking the building’s energy efficiency, detecting losses in efficiency of technical building systems, and informing the person responsible for the facilities or technical building management about opportunities for energy efficiency improvement;</p> <p>(c) allowing communication with connected technical building systems and other appliances inside the building, and being interoperable with technical building systems across different types of proprietary technologies, devices and manufacturers.</p>	<p>Article 15 – paragraph 2 – introductory part</p> <p>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:</p>	<p>2. Member States may set requirements to ensure that residential buildings with centralised technical building systems of a cumulated effective rated output of over <b>12 kW are equipped</b> with building automation and control systems. These systems shall <u>be configured to provide information used by the third-party inspection as described in point 1 and support:</u></p> <p>(a) continuous monitoring, <b>logging</b>, analysing and adjusting energy usage;</p> <p>(b) benchmarking the building’s energy efficiency, detecting losses in efficiency of technical building systems, and informing the person responsible for the facilities or technical building management about opportunities for energy efficiency improvement;</p> <p>(c) <u>aggregation of all relevant data in one place and then transmit it for evaluation is the important point here</u></p> <p><del>allowing communication with connected technical building systems and other appliances inside the building, and being interoperable with technical</del></p>
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		<p>building systems across different types of proprietary technologies, devices and manufacturers.</p>
<p><b>3. As an alternative to paragraph 1</b> 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</p> <ul style="list-style-type: none"> <li>(a) with continuous electronic monitoring that measures systems' efficiency and inform building owners or managers when it has fallen significantly and when system servicing is necessary, and</li> <li>(b) with effective control functionalities to ensure optimum generation</li> </ul>	<p><b>Amendment 47</b></p> <p><b>Proposal for a directive</b> <b>Article 1 – paragraph 1 – point 8 – point b</b> Directive 2010/31/EU Article 15 – paragraph 3</p> <p>3. Member States may set requirements to ensure that residential buildings with centralised technical building systems of a cumulated effective rated output of over <b>12 kW are equipped:</b></p>	<p>3. Member States may set requirements to ensure that residential buildings with centralised technical building systems of a cumulated effective rated output of over <b>12 kW are equipped</b></p> <ul style="list-style-type: none"> <li>(a) with continuous electronic monitoring that measures systems' efficiency and inform building owners or managers when it <del>has fallen significantly</del> <b>requires attention</b> and <b>/or</b> when system servicing is necessary, and</li> <li>(b) with effective control functionalities to <del>ensure</del> <b>enable</b> optimum generation, distribution and use of energy</li> </ul>

**REHVA explanatory notes:**

- To the deletion of the part “expressed in final and primary energy”: this text is not correct, REHVA suggests deleting it from the amendment. The energy need is calculated as first step, after adding system losses it becomes energy use, then the delivered energy to the system is defined, and finally primary energy is calculated. Therefore, in this context “energy need” was correct (and follows overarching EPB standard definitions).
- REVHA appreciates adding indoor air quality to the EC proposal. However, apart from this point, the original wording of the EC proposal is better. If the minimum IEQ levels are defined by the Member States or regions, these levels should be reached, rather than “maximized”. The key point is that the EPBD shall mandate Member States to set the minimum levels. Unless it is possible to define and mandate harmonized EU minimum criteria, but this is probably not feasible at the current stage.

<p>The energy needs for space heating, space cooling, domestic hot water and <i>adequate</i> ventilation shall be calculated in order to <i>ensure minimum health</i> and comfort levels defined by Member States.</p>	<p><b>Amendment 54</b></p> <p><b>Proposal for a directive</b>  <b>Annex I – paragraph 1 – point 1 – point b</b>          Directive 2010/31/EU          Annex I – point 2 – subparagraph 1</p> <p>The energy needs, <i>expressed in final and primary energy</i>, for space heating, space cooling, domestic hot water, <i>lighting</i> and ventilation shall be calculated in order to <i>maximise health, indoor air quality</i> and comfort levels defined by Member States <i>at national or regional level</i>.</p>	<p>The energy needs, <del><i>expressed in final and primary energy</i></del>, for space heating, space cooling, <u><i>control of indoor environment</i></u>, domestic hot water, <i>lighting</i> and <u><i>adequate</i></u> ventilation shall be calculated in order to <del>maximize</del> <u><i>ensure minimum health, health, indoor environmental quality and</i></u> comfort levels defined by Member States <i>at national or regional level</i>.</p>
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	<p><b>Amendment 58</b>  <b>Proposal for a directive</b>  <b>Annex I – paragraph 1 – point 1 a (new)</b></p> <p><i>1 a. The following annex is added:</i></p> <p><i>'ANNEX Ia</i></p> <p><i>Common general framework methodology for the calculation of a 'smartness indicator' for Buildings as referred to in Article 8, paragraph 6</i></p> <p><i>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.</i></p>	<p><i>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, <u>indoor environment</u> and overall performance.</i></p>
	<p><i>(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 and/or on-site generation by re-managing its own resources;</i></p>	<p><i>(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 and/or on-site generation; <del>by re-managing its own resources;</del></i></p>