

The revision of the Energy Performance of Buildings Directive should allow all technologies to contribute to the decarbonisation of the EU's building stock in off-grid areas

Liquid Gas Europe is wholeheartedly committed to the reduction of greenhouse gas (GHG) emissions in the EU. Buildings in rural areas face specific challenges. However, rural areas face specific challenges that require consideration. Energy efficiency levels are significantly lower in rural regions, due to the nature of many of the prevalent buildings which tend to be older and widely in need of renovation. At the same time, energy affordability and availability is particularly critical in rural areas, due to generally lower incomes, reduced energy choices and, again, poor insulation of buildings. Fuel poverty tends to be more acute in rural areas than in cities.

The revision of the Energy Performance of Buildings Directive (EPBD) opens an opportunity for policymakers to set up a pathway to cleaner and more efficient buildings in Europe. 25% of all buildings in the EU are in rural areas, and of these 75% are off the grid, i.e., not a part of the gas grid. The rural and off-grid building stock should be looked at particularly closely, given that nearly 25% of people in rural areas are at risk of poverty or social exclusion¹. The current fuel mix in off-grid areas is still dominated by the usage of heating oil and coal. Liquid gases offer environmental benefits such as lower GHG emissions and less air pollution in comparison to the currently used options. At the same time, they are a cost-effective option for consumers facing financial difficulties, as they do not require expensive storage facilities and can be transported easily at ambient temperatures. In addition, renewable liquid gases (e.g. rLPG/bioLPG) act as a drop-in replacement for LPG, removing the need for new and expensive infrastructure. We are strongly convinced that consumers' choices and needs should be at the core of the new EPBD.

Liquid Gas Europe calls on Members of the European Parliament and representatives of the Member States in the Council to act upon the following recommendations:

1. Respect the principle of technology neutrality to effectively decarbonise the EU building stock by introducing a mixed technology approach to EPBD: use the potential of electricity as well as liquid gases to decarbonise rural buildings.
2. Ensure renewable gases such as rLPG, bioLPG and rDME are recognised for their contribution to the decarbonisation of buildings.
3. Increase consumers' awareness of indoor and outdoor air quality.

1. Respect the principle of technology neutrality to effectively decarbonise the EU building stock

The EU is characterised by a varied building stock that reflects the history, cultural traditions, geography and climatic conditions of its Member States. Also, within the Member States, the building stock is not homogenous. Rural areas have a greater proportion of homes built before the establishment of building performance standards. Rural properties are more varied in shape and character than urban homes and are typically older, and therefore harder-to-treat.

Liquid Gas Europe believes that consumers' varying needs should not be overlooked. The new EPBD should not establish *a priori* which technology is the best to drive the decarbonisation of the EU buildings stock. A one-size-

¹ Ecuity Consulting, (2018) "Scenarios for decarbonising homes in Europe's rural areas", pp. 1-4

fits-all approach based on electrification fails to consider the diversity of the EU's building stock and the different needs of rural and off-gas-grid buildings. Relying solely on electricity as a heating source for households or businesses in rural areas would require new infrastructure and new backup options to manage a higher energy demand. At the same time, the transition of rural heating from heating oil to liquid gases and renewable liquid gases offers a great decarbonisation potential.

In this respect, any potential bans on boilers would hinder the decarbonisation process in off-grid and rural areas and would have a detrimental impact on the development of renewable liquid fuels in the future. Whether a heating technology is carbon-free or not depends on the fuel type, not the type of boiler. The decarbonisation of heating will be achieved most efficiently through a technology-neutral approach focused on the eventual defossilisation of heating systems.

Liquid Gas Europe believes that a mixed technology approach is the best solution to tackle the decarbonisation of buildings within the EU. The mixed technology approach would safeguard consumers' choices while guaranteeing that the 2050 climate targets are met cost-effectively.²

2. Ensure renewable gases can contribute to the decarbonisation of buildings

The Commission's Energy System Integration Strategy sets out that renewable gases have an important role to fulfil in Europe's energy system. They will be particularly important in reducing emissions in so-called hard-to-treat buildings, where electrification does not present the most cost-effective and energy-efficient decarbonisation option. Rural buildings that are off the gas grid are often hard-to-treat. As energy poverty is more widespread – almost 25 % of people in rural areas are at risk of poverty or social exclusion – and as the building stock tends to be older, deep renovations and electrification are not a realistic option for many rural households.

The current description of a "zero-emission building", whose primary energy consumption is "fully covered by energy from renewable sources generated on-site" is concerning. Together with language on "zero direct emissions building" this would seem to prevent any building from using renewable fuels to generate renewable heat and/or renewable electricity on-site. This generated on-site requirement constitutes an unjustified market barrier. It would narrow down consumers' choices to solar power, wind turbines, and heat pumps while excluding the use of renewable gases such as bioLPG and rDME. This would be problematic for many buildings, including hard-to-treat, rural buildings with limited space for solar PV and wind generation.

Liquid gases are highly compatible partners for hybrid heating systems. Removing the need for zero 'direct' emissions and the need for 'generated on-site' from the description would stimulate the development of renewable fuels for heating but also for on-site cogeneration from renewable fuels, thus enabling more of the building's electricity demand to be met by on-site generation.

BioLPG, rDME and other renewable gases, even if not generated on-site, are of non-fossil origin and provide immediate emissions reductions compared to other heating fuels. They have an important contribution to make in decarbonising the European building stock in new buildings and in reducing emissions from existing buildings.

3. Increase consumer's awareness of indoor and outdoor air quality

Buildings impact our health and well-being. Liquid Gas Europe welcomes the increased attention to air quality in the revised proposal. Besides increasing standards for indoor air quality, we believe consumers should become more aware of a building's impact on outdoor air quality.

EPCs should feature information on air pollutant emissions and indoor and outdoor air quality of buildings. For example, consumers are well aware of the impact of their mobility choices on air pollution, but this is not the

² Ecuity Consulting, (2019) "A practical approach: Analysis of Off-Grid Decarbonisation Pathways", pp. 27-28



case for their heating choices. We believe clear messages on the environmental impact of heating systems would help consumers choose less polluting heating options and thus improve local outdoor air quality.

Furthermore, the minimum energy performance standards should include standards related to air pollutant emissions and indoor and outdoor air quality.

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About Liquid Gas Europe

Liquid Gas Europe is composed of national LPG associations, main LPG suppliers, distributors and equipment manufacturers of LPG and renewable LPG including bioLPG, renewable DME (rDME) and other drop-in and complementary gases.

Liquid gases are acknowledged in Europe as the clean, available and innovative alternative energy of choice, that brings great benefits today to all users and will continue to deliver even more value in the future.



AMENDMENTS

Amendment 1

Art. 2	
Text proposed by the European Commission	Proposed Amendment
<p>‘zero-emission building’ means a building with a very high energy performance, as determined in accordance with Annex I, where the very low amount of energy still required is fully covered by energy from renewable sources generated on-site, from a renewable energy community within the meaning of Directive (EU) 2018/2001 [amended RED] or from a district heating and cooling system, in accordance with the requirements set out in Annex III;</p>	<p>‘zero-emission building’ means a building with a very high energy performance, as determined in accordance with Annex I, where the very low amount of energy still required is fully covered by energy from renewable sources generated on-site, from a renewable energy community within the meaning of Directive (EU) 2018/2001 [amended RED] or from a district heating and cooling system, in accordance with the requirements set out in Annex III;</p>
Justification	
<p>All renewable energy sources should be allowed to contribute to the decarbonisation of the EU’s building stock. Whether the renewable energy is generated on site or not should not be used as a criterion to privilege certain renewable energy sources. Requiring that all energy is produced on site constitutes an undue discrimination and limits the contribution of renewable gases to the decarbonisation of European buildings.</p>	

Amendment 2

Art. 11	
Text proposed by the European Commission	Proposed Amendment
<p>Member States may set requirements related to the greenhouse gas emissions of, or to the type of fuel used by heat generators provided that such requirements do not constitute an unjustifiable market barrier.</p>	<p>Member States may set requirements related to the greenhouse gas emissions of, or to the type of fuel used by heat generators provided that such requirements do not constitute an unjustifiable market barrier.</p>
Justification	
<p>The proposed legal basis for national bans is not compatible with the principle of technological neutrality. Art. 11 would hamper the contribution of certain technologies to the EU’s decarbonisation efforts. Amending Art. 11 would lead to a mixed-technology approach that is the best solution to decarbonise our diverse building stock, all while ensuring that consumers’ choices and buildings specificities are at the core of each policy.</p>	

Amendment 3

Art. 15 para. 10



Text proposed by the European Commission	Proposed Amendment
<p>From 1 January 2027 at the latest, Member States shall not provide any financial incentives for the installation of boilers powered by fossil fuels, with the exception of those selected for investment, before 2027, in accordance with Article 7(1)(h)(i) third hyphen of Regulation (EU) 2021/1058 of the European Parliament and the Council and with Article 73 of Regulation (EU) 2021/2115 of the European Parliament and the Council⁶⁰ on the European Regional Development Fund and on the Cohesion Fund⁶¹ on the CAP Strategic Plans.</p>	<p>From 1 January 2027 at the latest, Member States shall not provide any financial incentives for the installation of boilers powered by fossil fuels, with the exception of using renewable fuels or its blends, or those selected for investment, before 2027, in accordance with Article 7(1)(h)(i) third hyphen of Regulation (EU) 2021/1058 of the European Parliament and the Council and with Article 73 of Regulation (EU) 2021/2115 of the European Parliament and the Council⁶⁰ on the European Regional Development Fund and on the Cohesion Fund⁶¹ on the CAP Strategic Plans.</p>
Justification	
<p>Liquid Gas Europe believes that the technology neutrality principle should be respected. As boilers are compatible with both fossil and renewable/sustainable fuels, phasing out financial incentives would slow-down the decarbonization of the EU building stock in rural areas. Liquid Gas Europe is convinced that all technologies should make their part in the energy transition, to ensure that no one is left behind.</p>	

Amendment 4

Annex III, para. 1	
Text proposed by the European Commission	Proposed Amendment
<p>Only where, due to the nature of the building or lack of access to renewable energy communities or eligible district heating and cooling systems, it is technically not feasible to fulfil the requirements under the first paragraph, the total annual primary energy use may also be covered by energy from the grid complying with criteria established at national level.</p>	<p>Only where, due to the nature of the building or lack of access to renewable energy communities or eligible district heating and cooling systems, it is technically not feasible or cost-effective to partially or fully comply with the requirements under the first paragraph, the remaining share or all of the total annual primary energy use may also be covered by renewable energy from the grid documented with Guarantees of Origin. For buildings that are not connected to the grid or where it is not technically feasible or cost efficient due to the nature of the building to fulfil the requirements under the first paragraph, the total annual primary energy can be fully covered from other renewable energy sources produced off-site.</p>
Justification	
<p>The majority of buildings in rural areas are not connected to the electricity or gas grid. It is technically not feasible or cost-efficient for consumers to rely on renewable energy produced on-site. To achieve a fully decarbonised building stock by 2050, such buildings should be able to utilise other readily available renewable energy sources produced off-site, such as renewable liquid gases, to be granted the status of a zero-emissions</p>	



building. The Annex already recognizes this and offers a solution, but only to those that are connected to the grids, limiting options for off-grid buildings.

Amendment 5

Art. 2, para. 2	
Text proposed by the European Commission	Proposed Amendment
<p>‘nearly zero-energy building’ means a building with that has a very high energy performance, as determined in accordance with Annex I, which cannot be lower than the 2023 cost-optimal level reported by Member States in accordance with Article 6(2) and where the nearly zero or very low amount of energy required should be is covered to a very significant extent by energy from renewable sources, including energy from renewable sources produced on-site or nearby;</p>	<p>‘nearly zero-energy building’ means a building that has a very high energy performance, as determined in accordance with Annex I. The nearly zero or very low amount of energy required should be covered to a very significant extent by energy from renewable sources, including energy from renewable sources produced on-site or nearby;</p>
Justification	
<p>Whether the renewable energy is generated on-site or not should not be used as a criterion to privilege certain renewable energy sources. Requiring that all energy is produced on-site constitutes an undue discrimination and limits the contribution of renewable gases to the decarbonisation of European buildings and no distinction should be made between renewable energy produced on-site or not.</p>	