

AEGPL position paper on the European Parliament Industry Committee's Draft Report on the EU Strategy on Heating and Cooling

Background

AEGPL, the European LPG association, welcomes the European Parliament's own-initiative report on the EU Strategy on Heating and Cooling (hereinafter referred as the Strategy) and is keen to contribute to the policy debate on this topic. We believe that this debate comes in a crucial moment, in which alarming levels of air pollution are being registered in many European cities.

While the Strategy focuses on curbing GHG emissions, we believe the growing issue of air pollution should also be properly addressed. We think that there currently is a great potential to cut both air pollutant and greenhouse gas emissions originating from the heating sector, especially in those areas not covered by the natural gas grid (EU off-grid). In those areas, solid and liquid fuels, connected to high pollutant emissions, constitute 72% of the residential energy mix. **Although off-grid areas only represent 16,8% of the total residential energy demand, they generate respectively 44% and 58% of the total NOx and particulate emissions.**¹

In the EU residential off-grid sector, liquid and solid fuels' share has grown by 5% from 2003 to 2013, which has led to a stark increase of particulate and NOx emissions, despite a roughly unchanged energy consumption. Compared to 2003, **the emissions of particulate matter** from EU off-grid households **increased by 25%**. In 2013, these emissions accounted for 680.000 tonnes of PM, the equivalent of 6,4 times the total emissions from the power generation sector in the UK in the same year. From 2003 to 2013, **total NOx emissions** from EU off-grid households **increased by 12,5%**.

A higher uptake of LPG could greatly help, because it is a low-polluting fuel. An LPG boiler typically emits between 60% and 85% less NOx than a heating appliance running on coal or biomass, and 40% less than heating oil.

In terms of particulate matter, , a biomass stove can generate up to 4000 times higher emissions than an LPG appliance for the same thermal output. Moreover, compared to coal and heating oil appliances, an LPG boiler respectively has 100 times and 10 times lower emissions.²

Policy recommendations

AEGPL is fully supportive of EU's effort to decarbonise the residential heating sector. However, we believe that **the EU should also be cautious about possibly cutting CO2 emissions at the expense of air quality**, for instance in supporting unconditionally the further use of biomass in heating. In addition to the air pollution issue related to biomass, it should be noted that the current EU policy framework considers all biomass types as zero carbon, regardless of whether their GHG saving is effectively

¹ AEGPL analysis based on typical heating appliances emission values contained in JRC (2013), *Development of European Ecolabel Criteria for Water-based Heaters* and VHK (2011), *Development of European Ecolabel Criteria for Water-based Heaters. Policy Analysis*. Data on energy consumption sourced from Eurostat, *Complete energy balances (nrg_110a)*, AEBIOM, *2015 statistical report* and AEGPL, *2014 Statistical report*.

² *Ibid.*

demonstrated . The JRC technical report about the carbon accounting of forest bioenergy highlighted that “in most cases, the dedicated harvest of stemwood for bioenergy causes an actual increase in CO2 emissions compared to fossil fuels in the short-term (decades). In the long-term eventually it may generate GHG savings and become carbon neutral (from several decades to centuries)”.³

We think that only advanced technologies or energy sources that can help tackling simultaneously air pollution and GHG emissions should be supported. **Fuel switching to low-carbon and low-polluting fuels** can be a very efficient way to help the EU to reach its decarbonisation and air quality goals.

Proposed amendments	
Recital B. a. (new)	
<i>Draft report</i>	<i>Amendment</i>
	<i>B.a. (new) whereas in some Member States the use of biomass in households contributes to more than 50% of their national emissions of particulate matter.</i>
Recital G	
<i>Draft report</i>	<i>Amendment</i>
G. whereas natural gas is becoming ever more important in heating given that the chemical energy stored in it can be converted into heat energy highly efficiently;	G. whereas natural gas and LPG are becoming ever more important in heating given that the chemical energy stored in them can be converted into heat energy highly efficiently and that their combustion produces low CO2 and air pollutant emissions;
Article 7	
<i>Draft report</i>	<i>Amendment</i>
7. Stresses that in dense urban agglomerations it is imperative that the use of individual heating systems that depend on fossil fuels be restricted and replaced with large-scale local cogeneration systems that produce heat and electricity;	7. Stresses that in urban agglomerations affected by high levels of air pollution it is appropriate to restrict the use of individual heating systems that depend on high polluting fuels and to replace it with large-scale local cogeneration systems that produce heat and electricity or with individual heating systems running on cleaner fuels, such as gaseous fuels or electricity from low-emission sources;
Article 16.a. (new)	
<i>Draft report</i>	<i>Amendment</i>
	<i>16.a. (new) Calls on Member States to introduce restrictions to the use of heating</i>

³ JRC (2013), Carbon accounting of forest bioenergy

appliances running on solid and liquid fuels in areas affected by high level of air pollution, where alternative heating systems can be used.

LPG can have a key role in those areas not connected to the natural gas grid, especially in rural areas where the electricity network is generally less reliable, blackouts more frequent, and losses in the distribution grid relatively high.

In those areas, LPG can be the perfect partner for renewable heating systems, for instance appliances relying on solar thermal or photovoltaic technologies. LPG can solve their intermittency problems by providing low-carbon and clean heat, when the energy collected from the solar irradiation is not sufficient for satisfying households' heating needs.

Proposed amendments	
Recital 7. a. (new)	
<i>Draft report</i>	<i>Amendment</i>
	<i>7.a. (new) Underlines that fuel switching to LPG can greatly help to simultaneously cut CO2 and air pollutant emissions in areas not connected to the natural gas grid, where solid and liquid fuels constitute the majority of the residential energy mix.</i>

In addition, another no-regret option is to improve heating appliances' energy efficiency, for which there currently is a large untapped potential. In 2012, condensing gas boilers represented only around one fourth of the total number of gas boilers installed in EU25 households.⁴ Since condensing gas boilers can reduce fuel consumption by 25% compared to traditional ones, **a higher uptake can greatly help the EU to cost-efficiently reach its energy efficiency and decarbonisation goals.**

Proposed amendments	
Recital C. a. (new)	
<i>Draft report</i>	<i>Amendment</i>
	<i>C.a. (new) whereas, in 2012, only around three fourths of the gas boilers installed in EU25 were low-temperature boilers.</i>
Article 2. a. (new)	
<i>Draft report</i>	<i>Amendment</i>

⁴ EHI market statistics

2.a. (new) Considers that there is a large untapped potential to increase energy efficiency in the residential heating sector. Calls on Member States to adopt measures increasing heating systems' energy efficiency, as it is a cost-effective way to cut residential CO2 emissions.

We hope you will give our proposals due consideration in the finalisation of the European Parliament report on the Strategy. We will be happy to discuss this further with you should you have any questions.

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About AEGPL (The European LPG Association)

AEGPL is the sole representative of the LPG industry at European level, representing national LPG Associations as well as distributors and equipment manufacturers from across Europe. Our mission is to engage with EU decision-makers and the wider policy community in order to optimise the contribution that LPG - as a clean and immediately available energy source - can make to meeting Europe's energy and environmental challenges.

Annex I: EU off-grid residential energy demand and pollutant emission trends



