

## AEGPL Response to the European Commission Public consultation on the evaluation of the Machinery Directive

AEGPL, the European LPG Association, welcomes the opportunity to share with the European Commission its views on the Machinery Directive. AEGPL fully shares with the European Commission the overall goal to ensure that pieces of machinery sold in the EU meet high health and safety standards and that they can be freely sold in any EU country.

AEGPL represents LPG distributors as well as LPG equipment manufacturers. Among our membership, some companies manufacture pieces of machinery powered by LPG or kits designed to retrofit those running on diesel or petrol so that they can use LPG as an energy source. Using LPG as an energy source brings about important environmental benefit, compared to conventional fuels, which currently are very predominant in this sector. According to the IPCC guidelines for national GHG inventories, LPG emits 10% less CO<sub>2</sub> than gasoline and 15% less than diesel.<sup>1</sup> If looked from a lifecycle perspective, LPG's environmental is even better, as its production is much less carbon intensive.<sup>2</sup>

In terms of pollutant emissions, LPG's environmental footprint is excellent as its combustion produces low NO<sub>x</sub> and almost no particulate matter.<sup>3</sup> Considering that the sole Non-Road Mobile Machinery sector is accountable for 15% of the NO<sub>x</sub> and 5% of the PM emitted in the EU,<sup>4</sup> AEGPL believes that a wider uptake of LPG can bring about significant benefits for air quality in the EU and help Member States to fulfil their commitments under the recently approved NEC Directive.

Unfortunately, some of our member companies have experienced in the past some issues in approving new machinery powered by LPG or in retrofitting existing pieces of machinery so that they can use LPG as their energy source.

### **On third party authorisation bodies and Directive 97/68/EC**

Directive 97/68/EC sets emission limits for internal combustion engines for non-road mobile machinery (NRMM) powered by gasoline and diesel. Some of our members have experienced significant delays in authorisation procedures from third party bodies because the limits that apply to LPG products were not codified in the legislation. Therefore, it was not clear what limits should apply to NRMM powered by LPG. For this reason we welcome the new Regulation (EU) 2016/1628 on emission limits for NRMM, which will enter into force on 1 January 2017, as it increases legal clarity on this issue.

We also welcome the new article 60.1, which focuses on the practice of retrofitting, which we believe is crucial to effectively and immediately start cutting emissions from the NRMM sector. This is because the vast majority of the most polluting engines powering these tools have a very long life – sometimes up to two or three decades – therefore users are not so often in a position to renew their existing equipment

---

<sup>1</sup> 2004/156/EC

<sup>2</sup> The JEC Well-to-Wheels report highlights that the production of LPG is much less carbon intensive than the production of gasoline and diesel. See JEC (2014), WELL-TO-WHEELS Report Version 4.a

<sup>3</sup> AEGPL (2011), Beyond the Gas Grid – An LPG Industry Roadmap, available online at [http://aegpl.eu/media/63958/beyond%20the%20gas%20grid\\_aegpl\\_2011.pdf](http://aegpl.eu/media/63958/beyond%20the%20gas%20grid_aegpl_2011.pdf)

<sup>4</sup> European Commission (2015), Review of the legislative instrument on emissions from engines in non-road mobile machinery, available online at: <http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52014SC0282&rid=1#page=6>

and replace it with more efficient models. Unfortunately, article 60.1 only refers to retrofit emission control devices, which surely are important to cut pollutant emissions, but options that are able to bring about a wider range of benefits are available.

As explained earlier, retrofitting a piece of machinery so that it switches from conventional liquid fuels to LPG can cut not only pollutant, but also CO<sub>2</sub> emissions. In addition, it also greatly reduces running costs, as LPG is cheaper than both gasoline and diesel. According to European Commission figures, across the EU LPG is 44% to 63% cheaper than gasoline and 39% to 60% cheaper than diesel.<sup>5</sup> Therefore, we believe that the EU should put forward measures aimed at stimulating the practice of retrofitting pieces of machinery to LPG.

### **Current barriers to retrofitting**

However, significant barriers to retrofitting pieces of machinery currently exist. Retrofitting machinery engines – but also much more complicated ones, such as car engines – to LPG is a common practice, based on a mature technology. From a technical perspective, replacing a machinery carburetor designed to run on petrol or diesel with one designed to run on LPG is an easy task with low associated risks. EU rules require that, in order to lawfully do this, the piece of machinery needs to be re-approved as it underwent a substantial change, hence the risks connected to its use need to be re-assessed.

This often makes extremely problematic to lawfully retrofit old pieces of machinery, for which the documentation containing the relevant technical information is no longer available. It is even more complicated, if not impossible, if these pieces of machinery were not mass produced. Although we agree with the Commission that it is of utmost importance to protect the health and safety of machinery users, we also believe that these practical circumstances hinder the potential of this sector to help the EU to reach its decarbonisation and air quality goals. This is also because pieces of machinery that are 10 or 15 years old might not be replaced before one or even two decades, hence the effects of the introduction of stricter emission limits for machinery are, more often than not, far away in the future.

For this reason, we believe that the Machinery Directive should include provisions ensuring that the relevant documentation is stored (either by the European Commission, by Member States or by manufacturers) and made available to companies specialised in retrofitting machinery. We do understand that this may be challenging for small scale productions or for products whose documentation is no longer available. We believe that, in the case of retrofitting these pieces of machinery to LPG, the European Commission should consider a relaxation of the rules, considering that the technology is mature and that low risks are connected to it.

---

<sup>5</sup> Data retrieved from European Commission Weekly Oil Bulletin