

24<sup>th</sup> March 2017

## **NGVA Europe views on the Revision of the Directive 2009/33/EC on Promotion of Clean and Energy Efficient Road Transport Vehicles**

NGVA Europe is the European stakeholder that promotes the use of natural and renewable gas as a fuel mainly in the transportation sector.

Information on the organization and its activities can be found at [www.ngva.eu](http://www.ngva.eu)

We are registered in the register of interest representatives with the number: **1119946481-54**

**Aim:** Increase the demand and deployment of cleaner vehicles, while decreasing overall CO2 footprint and pollutant emissions of the road transport sector

**Goals:**

- Harmonise public procurement in order to reach economy of scale for the most environmentally friendly vehicles
- Guarantee technology neutrality
- Simplify the public procurement process

**NGVA Europe view:**

Transportation sector is facing a challenging period where it is asked to play a key role in supporting the decarbonisation process and in guaranteeing a better air quality, especially in the high density urban agglomerations that will continue to ask for clean and affordable solutions for personnel mobility and goods transport.

Cost of the energy, energy security and availability, distribution infrastructure, energy density are key elements to be considered when looking for the transformation of such a complex system towards a more sustainable and decarbonised one. Concerning the use of the energy, transport solutions have to be conceived carefully starting from the customer needs, considering the different vehicle mission profiles, geographical conditions and, of course, local market conditions.

This means that while global approach is fundamental to share a strategic vision and, from an industrial standpoint, to guarantee product competitiveness, local conditions will drive the deployment of the matching among fuels and powertrain technologies, asking for a multiplication of solutions: no silver bullet solution exists and a technology neutral approach is needed.

The use of natural gas represents one of the most effective key solutions to fight climate change and improve air quality in a cost-efficient way, particularly in the transport sector. CNG and LNG are in measure to sustain in a very efficient way a large variety of transportation modes with an immediate effect on GHG emissions and local pollutant reduction. Moreover, they both can be produced from several renewable energy sources, firstly from waste organic biomasses through anaerobic digestion processes and, secondly, directly converting CO<sub>2</sub> and renewable H<sub>2</sub> produced from green electricity. Under this perspective, the beneficial effect from the use of NG, already as low carbon fuel, is supported also on the Well-to-Tank side, with a huge potential in reducing overall GHG emissions.

Over the GHG performance, natural gas is the cleanest fuel able to guarantee all over the operating conditions a particulate free combustion, aromatic free and near-to-zero NMHC (Non Methanic Hydrocarbons) as well as dramatically reduced NO<sub>x</sub> (and particularly NO<sub>2</sub>) emissions. For these reasons both regulated and non-regulated emissions (e.g. ozone promoters, aldehydes, PAH) make Natural Gas the right fuel to approach the air quality issue, particularly in the urban areas.

Vehicle technologies are mature, affordable, safe and ready to provide a fast and strong contribution to the transportation challenge; at the same time, important technologies improvement in terms of efficiency are expected even in the short term thanks to a wider development of fully dedicated high efficient and clean engines. The use of the public procurement to stimulate the purchase of clean vehicles is fundamental to support captive fleets using alternative fuels. This can apply to passenger cars (taxis, company cars, car sharing) and light delivery vans (last mile delivery, urban freight distribution) as well as to heavy duty applications (intercity logistic and mobility, refuse collect trucks and buses). As an example, CNG buses represent a very cost-efficient way to decrease the overall CO<sub>2</sub> impact but, above all, to contribute to a better air quality, with less pollutant and low noise emissions: Madrid city public bus fleet counts with more than 1200 CNG buses, refuelling at its own refuelling station points. From the GHG standpoint the benefit is even dramatically increased when using renewable methane coming from waste organic biomasses conversion, a real 0 km fuel locally produced.

**Request:**

- **The need of clear definition of “clean vehicle”.** New terms as “low-emission” and “zero-emission” vehicle are being used, also as part of the communication on the European strategy for low-emission mobility (COMM (2016) 501 final). There is a need to clearly define both terms with a technology neutral approach, with clear distinction among CO<sub>2</sub>/GHG emissions and local pollutants (NO<sub>x</sub>, NMHC, PM...).
  - Under the same perspective when addressing electric mobility it is fundamental to better **distinguish on the level of electrification**: today even low voltage (12V/48V) system (mild hybrids) are within the hybrid category, with clearly different GHG / pollutant benefits compared to High Voltage PHEV or REEV architectures.
-

- Clearly **consider CO<sub>2</sub>/GHG emissions from a global Well to Wheel** approach, where renewables can be taken into account: low carbon fuel like natural gas can be considered from low emission to zero emissions when considering renewable gas.
  - Need for evaluating the Car Labelling directive (Directive 1999/94/EC) and **include local noxious pollutants** as part of the labelling to ensure a fast and effective response to the air quality issues.
  - The revision of the CVD should clearly become the **mechanism to stimulate the purchase of clean vehicles**.
  - **Support the achieving of local air quality objectives** (specially reduction of NO<sub>2</sub> and PM/PN) should be prioritise by incentivising the use of alternative fuels, such as natural gas, that can contribute to a better air quality, mainly in cities. This should be aligned with city policies and measures that are banning certain technologies (mainly diesel) from their urban areas. *NGVs are extremely low pollution = no ban in European cities.*
  - **Evaluate and coordinate the synergies with other current policies.** The Directive of alternative fuels (20014/94/EU) encourage Member States to offer an appropriate number of gas refuelling points (CNG, LNG), also in urban and highly populated areas by 2020; therefore the possibility to support the opening refuelling stations that can both serve public fleets and private owner cars running on alternative fuels (CNG) should be taken into account.
  - **Alternative fuel mandates for cities/public procurement** as minimum % setting over the fleet with a minimum of two-technologies (e.g. 25% natural gas, 25% other alternative propulsions, 50% open with growing target for clean vehicles).
  - **Acknowledgement of external cost.** A cost-analysis study on emission reduction vs costs should be done. Noise should also be considered, if no standard rule for noise emissions can be found short hand, alternatives like CNG and LNG with 50% perceived lower noise emission should be promoted for urban use also during night operations.
  - An **additional bonus for technologies being better than EURVI/Euro 6** should furthermore be introduced, similar to the EEV standard under EURV/Euro 5, here pollutants stand out, e.g. CNG/LNG have lower emissions than EURVI/Euro 6. Moreover natural gas has also clear benefits with regard to **non-regulated emissions**: aldehydes, PAH (Polycyclic Aromatic Hydrocarbons) and Ozone Promoters are extremely reduced due to the composition of the fuel. Because of its nature natural gas provide also excellent performance under **Real Driving conditions**, being less affected from cold/hot ambient conditions and transient operations. This is in line with the request included in the ex-post evaluation of the directive 2009/33/EC done by Ricardo (date 21 September 2015) about to encourage higher level of ambition with regards to clean vehicles.
-