



**Commission's Communication COM(2009) 279/4, June 2009**  
**A sustainable future for transport: Towards an integrated,  
technology-led and user friendly system**

**NGV System Italia's (Association of the Italian Industry for natural gas vehicles) contribution to a formulation of concrete policy proposals and to the subsequent adoption of a White Paper on the future of Transport following the Communication from the Commission 'A sustainable future for transport: Towards an integrated, technology-led and user friendly system'**

NGV System Italia is the association of the Italian Industry for natural gas in transport, dates back to 1996, bringing together Italian companies whose products allow and ease the use of natural gas and biomethane in transport.  
[www.ngvsystem.com](http://www.ngvsystem.com)

NGV System Italia very much looks forward the adoption of a White Paper on the future of Transport and hereby submits to the Commission its contribution to the debate, in particular to the par. 3.4 ('Increasing scarcity of fossil fuels') and 4.3 ('More environmentally sustainable transport') of the Commission 'A sustainable future for transport: Towards an integrated, technology-led and user friendly system'.

NGV System Italia shares the view stated in the Communication that lowering consumption of non renewable resources is essential for all aspects of transport systems and their use and that undesired environmental consequences of transport activity will require further action taken (in particular on noise, air pollutant emissions and greenhouse gas emissions) particularly considering that:

- fleet renewal with new vehicles, preferably powered with alternative fuels, is bridging to a sustainable mobility;
- further infrastructure investments for the development of the refueling stations of alternative fuels can no longer be delayed.

From the point of view of the well-to-tank CO<sub>2</sub> balance, pollutants and noise an **interesting option for the transport is provided by the use of biomethane** as a fuel, generated both by the anaerobic fermentation of organic compounds and/or by thermal gasification of biomass. After the product has been upgraded to biomethane, by eliminating other gases and all impurities, it can be used directly in the engines or injected in the natural gas grid. Studies show that on the 2030 scenario, biomass could provide a contribution of approximately 15-16% on energy base in the European Union.

Furthermore security of energy supply is an increasing global concern, particularly following recent surging oil prices and increasing worries about the reliance on imports from less politically stable areas, so there is an evidence that an efficient Europe-wide production and distribution of biogas could be part of the answer.

An Europe-wide biogas-feed-in strategy will result in the creation of 2.7 million new jobs within the EU. Employment will be generated mainly in agriculture, in the manufacture, construction and management of biogas plants and biogas purification plants. An efficient biogas-feed-in strategy will be built around the concept of 'biogas corridors': such corridors consist of biomass plantations established alongside the pipelines, so that the green gas can be fed into Europe's main natural gas grid without the need for additional pipelines and infrastructures.

In this view biomethane for transport is becoming increasingly interesting as an alternative fuel and for this reason **NGV System Italia asks for a strong political drive to develop biogas and ensure security of energy supply and environmental friendly mid-long term solution for transport.**



NGV System Italia has seen that the potential is anyway remarkable, and for sure biogas deserves to be included in the European transport policies framework, besides that of the other gas applications in the residential, industry and productive sectors.

NGV System Italia has also seen that biomethane is an optimum "strategic partner" for CNG, as it is a renewable energy source, which can take profit from the same infrastructures.

But it must be also clear that spread of the use of biomethane in the mid-term is linked to the development today of the natural distribution network of compressed natural gas which is also a fuel gifted with environmental friendly characteristics.

Compressed natural gas (CNG) is a 'clean' gas and a true alternative today whose efficiency and reliability have been proven with a very good performance in terms of both gas emissions and noise reduction, delivering substantial benefits to the community, including increased energy security.

Furthermore, mixing a controlled quantity of Hydrogen into Natural Gas (CNG/H<sub>2</sub> mixtures for Internal Combustion Engines) provides additional benefits in terms of emissions reduction without requiring a 'revolution' of the engine system, but only an 'evolution' based on the Natural Gas technologies already existing.

Environmental benefits are an additional reduction of CO<sub>2</sub> emissions (higher H/C ratio), a reduction in THC and CO emissions (higher H/C ratio, reduction in flame quenching phenomena) and potential increasing in engine efficiency (higher combustion speed).

All by using the technology developed within CNG applications, promoting the use of CNG/H<sub>2</sub> blends may speed up the process to develop the future Hydrogen scenario, boosting the production and distribution pathway as well as the specific regulations and service rules.

It has been above-reported the importance to promote CNG as alternative fuels and as a bridge to even cleaner solutions such a biomethane an mixtures natural gas/hydrogen and the reasons why politicians and decision makers at the national and EU level must be sensitive to this theme and consider CNG and biomethane/mixtures CNG/H<sub>2</sub> must be part of the EU strategy for sustainable energy and mobility for Europe.