

NGV ITALY'S VISION ON AFID REVISION

NATURAL AND RENEWABLE GAS FOR A CLEAN ENERGY TRANSITION

On June 8, 2021, NGV Italy had the honor to host together with the Italian MEP, Carlo Fidanza, a talk addressing strategic issues related to the AFID revision. This document condensates the main takeaways of discussions in a vision shared with other MEPs and representatives from European Associations and companies interested in promoting methane, bio-methane, biofuels, blended fuels and hydrogen for transport.

- The AFID Directive introduced the common goal of promoting an increasing use of alternative fuels through the development of an adequate infrastructure system. The preparation of national plans for the deployment of gas stations and charging points, in an appropriate number to allow the spreading of new fuels and energy drivers, has thus contributed to this goal but today we have to strengthen this program.
- The transport sector is the most challenging to decarbonise and the effort required in the short-mid-term in order to reduce polluting emissions pose the need to be inclusive: we need green molecules in addition to green electrons.
- The 2014 directive was marked by technological neutrality with the aim of making Europe the world leader in decarbonization. Therefore, at the time, a spectrum of fuels such as gases was identified both in the form of LPG, CNG, LNG, biomethane, electricity, hydrogen, biofuels and synthetic fuels in different forms which have all been included in the text of the directive as solutions to be promoted according to the national plans from Member States. Technological neutrality is a fundamental principle to be kept and reinforced, also to allow Member States' choices as function of most suitable options in order to pursue the European leadership in the transport industry and at the same time obtain immediate and long term reduction in emissions.
- Behind fuels, engine design and vehicle production, there are state of the art technical expertise and industrial excellences, represented by NGV Italy's associates, that should not be penalized, as these are also relevant to exporting solutions outside Europe.
 - Today, these sectors and industries are evolving towards the production of innovative and sustainable fuels like biomethane, liquid methane, dual fuels motor vehicles, components for light and heavy means of transport, infrastructure and storage solutions, as well as new concept for distribution and methane use, for example in road, sea and rail transport. So much has been invested in these industrial chains in recent years, thus Europe and Italy can't leave these industrial operators behind because their expertise and technologies are central to the ecological transition.

- We can count on a system approach that already relies on existing infrastructures and supply chains that reaches the consumer immediately and efficiently from well to wheel. Today we have more than 2 million km of gas networks already existing in Europe and almost – and fast growing – 4,500 L-CNG stations. This system not only allows us to use what we already have but allows us to innovate. We must therefore consider all the option, set targets for 2030 or 2050, but we also need to act immediately, in multiple ways including biofuels and blended fuels.
- The market should enhance all bio-components through the crediting system and guarantees of origin that allow a more liquid market and a clear recognition of biofuels' contribution. Without establishing a crediting scheme for biofuels in Europe OEMs will hardly offer CNG vehicles (and ICE in general). Not to lose European capacity, jobs and technical know-how (also to continue exporting outside our continent) legislation needs to both work to incorporate biofuels in the CO2 regulation and to avoid bans on technologies.
 - Biofuels, and especially biomethane, are a growing opportunity. Italy, for example, has 1.9 billion euros available for the promotion of biomethane thanks to the inclusion of this issue in the Italian recovery plan and has already promoted utilization of biomethane in the transport sector, allowing a potential contribution up to 100% by 2026. At European level, however, it is necessary to keep flexibility on potential options to decarbonise to pursue adequate results.
- Within the framework of the Green Deal, 2021 is the year of crucial legislative dossiers for the mobility and fuel sectors, with a series of regulations and strategies that are being discussed and put forward on which we should pay the most attention to.
- In particular, on 14 July, the European Commission will present the “fit for 55” package, which will contain 12 pieces of legislation, including the revision of the AFID Directive. It is therefore of paramount importance to highlight critical priorities such as:
 - reaffirm the principle of technological neutrality in order to develop market options where all technologies can coexist and can be developed without discrimination. In many cases, the transposition of AFID has been mainly based on the development of electricity, leaving behind other alternative fuels, i.e. green gases and biofuels, that we consider essential for the energy transition in more immediate and equitable form;
 - promote and support the biomethane and biofuels industry, that meet the requirements of the circular economy in their production process, as a clear contributor to reducing transport sector emissions;
 - promoting the development of natural and bio-methane (CNG and LNG) infrastructures for the transport sector, also considering these can serve as prerequisite for the development of hydrogen uses, as the hydrogen supply chain shares its logistics, general architecture, components and cryogenics with the one developed for LNG.
- On 11 June, a meeting at the Energy Council has been hosted on the subject of the TEN-E regulation, which is a step that we can describe as encouraging for our desire to maintain gas infrastructures while also moving towards new models of renewable sources such as hydrogen. This meeting has also initiated a period of European initiatives with high added value. The meeting was important

considering that few months ago 11 countries declared that they wanted to keep fossil fuels out of the TEN-E regulation revision. We need to keep credible options available to citizens and taxonomy delegated acts should confirm the need to work on immediate solutions such as the ones based on gas utilization.

- We all need a just and inclusive transition. To achieve it we must agree that, without the use of an ample range of sources and technologies, we need technologies and solutions to have a doable and painless ecological transition, where the target is decarbonisation and not “electrification”, as sometimes the EU energy debate seems to be focused on. This is especially true when considering the social aspects related to the very significant additional costs any “only-electric mobility” paradigm would bring. This is true in the private mobility where not all the end users can afford BEVs, but it is also valid in the heavy transport sector, to keep viable solutions to moving goods throughout Europe.
- Again, solutions must be context-driven and consider their outcome with a life-cycle assessment for emissions and with a total cost of ownership approach for consumers. For instance, any 10,000 € incentive on an electric car (e.g. the in Romania), you could have the same money for gas upgrading of 10-15 CNG cars, with an immediate emissions’ reduction both for CO2 and local pollutants, which would not be the case for electricity if you consider coal share in the power generation mix.
- For these reasons we must keep central the technological neutrality pattern already approved in 2014, as the ecological transition of the transport system can only be addressed if we look at a wide spectrum of solutions. In the short-mid term methane, biomethane and blended fuels can facilitate a faster decarbonisation of transport and lead the way to the inclusion of hydrogen in transport.
- In this framework, it would highly inappropriate and indeed wrong to have policy defining in a deterministic way any “winner”, which would restraint options and would undoubtedly raise costs of the process . Also, it would be very difficult to understand substantial changes in any process with respect to investments that have been promoted and are happening throughout Europe in the low-carbon transport sector (CNG-LNG and bio) to promote more sustainable fuels in the light of a progressive target of net zero emissions. It is therefore necessary to continue on this path taking into account sustainability and also meeting the interests of the market. Environmental sustainability and economic sustainability must go hand in hand. You have to be environmentally conscious, i.e. ambitious but pragmatic at the same time.
- Italy has played an important role at the European level in the alternative fuels promotion and development. Over the years, the Italian MEP Carlo Fidanza, under his role of relator of the DAFI Directive, contributed with other colleagues of the European Parliament to pave the way to the technology neutrality and fuel diversity pursuing the ecological transition of the transport sector, with a vast consensus by the Parliament and all sector players. DAFI's ongoing delivery is the witness of its success, to be further strengthened and not structurally changed, to capitalize on the investments that the legislation has fostered: more stations and more biofuels contribution in the system are the facts to build upon.

- Several opportunities and challenges to address from a policy point of view are:
 - **Opportunities:** it is very important that amendments to the strategy for "sustainable and smart mobility" have recently been deposited, also by some parliamentarians both by Carlo Fidanza and other political groups, that support the need to include in the CO2 regulation for commercial vehicles and passenger cars the calculation of the renewable component of fuels to achieve CO2 limits; we hope this will be reflected in the proposal that the European Union will have to make shortly. This regulation could indeed, if not well addressed, confound the correct long term ambition with the need to arrive at that goal in a well-structured and affordable manner. And it could indeed de facto impede achieving it. As a simple paradox, consider that it could allow to consider an electric car fully supplied by coal power electricity compliant with "zero" emissions, while a 100% biomethane car would be considered being polluting. And – to add a significant information to the picture – vehicles in California running on biomethane removed more carbon dioxide from the atmosphere than they emitted for the first time in 2020 as the carbon intensity of the fuel continues to drop, according to new data from California's Air Resources Board (CARB)¹.
 - **Challenges:** the DAFI has an element of great concern. The Commission has made public a consultation on the so-called state aids with the aim of reducing atmospheric emissions "guidelines for state aid for climate and environmental protection and energy" of 2022. One of the proposals by the Commission is to reduce the possibility of intervention of the member states on the purchase of gas vehicles because, according to the Commission, gas is a fossil fuel. This can indeed be a substantially counterproductive measure as it doesn't consider neither the fundamental transitional role of gas in reducing emissions (also considering local pollutants which are crucial for air quality) immediately achieving net zero emissions, nor the fundamental role that gas infrastructures and the development of gas (and with "gas" we mean natural, biomethane, synthetic gas and hydrogen) could have on mobility net zero emissions goal. There is a strong contradiction in this and we hope the Parliament will address the theme and suggest the needed changes. Natural gas and biomethane now, and hydrogen in the medium term, are a fundamental element for the economic development but also for mitigating the environmental impact of mobility.
- In addition, and to have appropriate benchmarks and targets, calculating emissions can't be based on "tank to wheel" as this is clearly determining only ex-ante the solution, but it is not considering the overall impact, which is correctly addressed by a life cycle assessment.
Also, considering the recent IEA Report on Critical Materials², we need to carefully assess the risks related to availability and sustainability components for EVs.
Through the reconfirmation of DAFI principles and the revision of the emissions calculation methodology we will really promote options that will benefit industry and consumers at the same time.
- Finally, it is also relevant to consider the evolution of the utilization of gas (LNG) in the shipping sector, where no alternative credible solutions will be available at least in the next decade. Therefore, appropriate measures to stimulate higher and more rapid penetration of LNG and bio-LNG should be strongly promoted.

¹ <https://www.reuters.com/business/autos-transportation/californias-renewable-natural-gas-vehicles-turn-carbon-negative-2020-2021-06-02/>

² <https://www.iea.org/reports/the-role-of-critical-minerals-in-clean-energy-transitions/mineral-requirements-for-clean-energy-transitions>