

RENEWABLE FUELS FOR THE MOBILITY SUPPLY CHAINS IN LOMBARDY

Manifesto for environmentally, economically, and socially sustainable mobility, to be pursued with a fair and rational transition to technology neutrality.

- Repositioning as of 20 July 2023 -

Foreword

The general objectives of this Manifesto are **to maintain the competitiveness of the mobility industry, to strengthen the regional identity and to take effective action towards greater sustainability of the system.**

The automotive industry in Lombardy has over 1,000 companies, 50,000 employees, a turnover of 20 billion and a high export and **innovation** rate.

The study and marketing of renewable and low-carbon fuels are useful for the pursuit of the shared goals of environmental improvement and decarbonisation of the transport sector at national, EU and global level, and for the protection of internal combustion engine production, in which our region holds undisputed leadership.

The automotive and fuel industrial sectors not only constitute global excellences and have been strategic assets for our Country for years, but they have all the innovative, technological, and professional capabilities to make a winning contribution to the challenges that climate change is bringing us.

The automotive industry can also be the engine of an unprecedented industrial, economic, and social revolution in the 21st century.

The recovery of a greater degree of energy security/independence would also safeguard the Fuel Refining and Distribution sector, with adequate programmes to support reconversion, a dimension that should also be taken up from a national perspective. It is therefore necessary to strengthen the Distribution Network for low-emission liquid and gaseous fuels and also recognise its role in the infrastructure for HPC recharging.

It is the task of everyone, institutions, industry, business associations and trade unions, universities and research and technology transfer centres, **to create the conditions for a gradual and rational transition characterised by technological neutrality**, avoiding inappropriate acceleration that would cause our continent to **lose a leadership gained over a hundred years of research, innovation, and entrepreneurial choices.**

The Dual Challenge Induced by the Green Deal/Next Generation EU

When defining strategies to achieve the targets, one cannot disregard the fact that the European car and commercial vehicle fleet will still consist of more than 70% internal combustion engine (ICE) vehicles by 2030, especially with regard to heavy transport. Furthermore, a European strategy for renewable and low-carbon fuels must be supported, while ensuring that the industrial fabric can cope with the transition in a sustainable manner. Given the choices made by European decision makers and consequently vehicle manufacturers, **the challenge for our component manufacturers is twofold:**

- To remain **competitive in traditional technologies** that will remain globally relevant for decades.
- **To enter new technologies** that, on the one hand, threaten products and skills, but on the other represent **an opportunity** to be seized thanks to the expertise they possess: **know-how**, this, which is proving to be a winner to design new and better performing vehicles, at competitive prices and with components that are reduced in number, less bulky and lighter, also to compensate for the volumes and weights of batteries.

The **future** holds a **plurality of tractions, each with its own elective mission**, at the service of the end customer, who will choose on the basis of the performance required for their needs, compliance with environmental constraints, and the TCO-Total Cost of Ownership calculated over the entire ecological life span as measured by Life Cycle Assessment (LCA) analyses.

Next Generation EU and the National Italian Recovery and Resilience Plan/Complementary Fund represent an opportunity **to provide the sector and its companies with adequate resources** to mitigate the impact of ongoing and expected change, including by investing in renewable and alternative fuels. The use of biofuels is also an opportunity to implement the transformation of industrial sites, safeguarding the environment and employment.

The 'Fit for 55' proposal, the Green Deal and European Standardisation Proposals

If the proposed legislation that has been under discussion in the EU for some time did not take this into account:

- would cause immediate industrial repercussions in Europe, bringing forward the phase-out of internal combustion engine vehicles by at least five to seven years from 2035;
- would cause a strong acceleration of the transition process of component suppliers linked to the production of conventionally powered vehicles, with the effect of bringing many activities to a halt due to the impossibility of managing an abrupt reconversion;
- would not allow the transformation of the fossil fuel the production, storage and distribution sector towards the production, storage, and distribution of low and free carbon products.

The dreaded economic and social storm would be inevitable: **for Lombardy, at least 15/20 thousand jobs at risk (for Italy, 70 thousand)**, without excluding for Italy and Europe the collapse of the entire automotive

industry and the risk of a significant loss of competitiveness of the European production sector in the global scenario, even to the advantage of other continents (North America and China).

Even the most recent study by CLEPA (the European Association of Automotive Suppliers) points out that Italy is the country with the least resilience and risks losing around 73,000 jobs by 2040 (500-600,000 in Europe), of which 67,000 already in the period 2025-2030. These are losses that new professions related to the development of e-mobility will not be enough to compensate for. As an alternative, CLEPA proposes a fairer and more rational strategy, based on the "**mixed technology**" concept, which would greatly mitigate the employment, social and economic impacts of the pursuit of EU objectives, while ensuring their achievement within a reasonably acceptable timeframe (Ref. CLEPA Study - PwC Strategy& - Electric Vehicle Transition Impact Assessment Report 2020 - 2040).

The proposals of Lombardy Region and representatives of the automotive and fuel supply chains

The subscribers' proposals are based on the **principle of technological neutrality**, which gives equal dignity and support to **all tractions and industrial solutions**, including advanced endothermic engines and/or engines powered by non-fossil or low-carbon fuels and electric motors:

- **Adherence to climate improvement targets**, provided they are shared and in line with the UN **Agenda 2030 of the United Nations**, avoiding unnecessary and above all potentially risky accelerations for the economic and social resilience of the national system;
- consequent reshaping of **the European Commission's climate package** in terms of content and timing of implementation, also with regard to the revision of the regulations on CO2 emissions from new cars and commercial vehicles;
- **definition of an inclusive, neutral, clear, and stable legal and regulatory framework, resulting from a decarbonisation strategy open to the maintenance and evolution of existing technologies and the enhancement of new solutions;**
- **focus on defining policies on alternative energy** vectors (electricity, LPG and its bio and renewable developments, methane and biomethane, hydrogen, e-fuel and fuels from biomasses, biofuels also used in purity), assessing their performance and environmental parameters **over their entire life cycle** (adopting a Life Cycle Assessment - LCA - methodology, from production to operation including disposal);
- **introduction of intermediate targets to assess the evolution of available alternative technologies.**

The parties adhering to the Manifesto, coordinated by Lombardy Region, have therefore started a path of political, industrial and commitment and dialogue to raise awareness of the shared method, to understand the consequences of an ideological vision of the problem, and to promote moments of in-depth analysis and work, in order to identify tangible solutions that can be adopted in a short time.

Therefore, they shared an initial version of the Manifesto on 29 March 2022, signing a first text with political and operational features.

The results of the first version of the Manifesto and the method of dialogue have so far been evident,

with a position adopted at national level, a synergy with the relevant Members of the European Parliament, and finally an openness to dialogue for the drafting of the final legislative texts.

One of the results was the recent stance on aviation, where the EU took an important step towards reducing emissions in the aviation sector with the principle that fuel suppliers at EU airports will be obliged to provide an increasing share of sustainable fuels and aircraft operators will have to increase their use.

The Repositioning

The Lombardy Regional Ministry for Economic Development, in conjunction with all the stakeholders involved in the Manifesto, has entrusted the Lombardy Mobility Cluster with the definition of a Paper on Renewable Fuels, with the aim of systematically collecting, analysing, defining, and comparing alternative solutions to traditional fuels, again with the aim of maintaining the competitiveness of the mobility industry and achieving environmental sustainability.

The focus of the work, which was co-ordinated by the Cluster, but which saw the participation and contribution of many stakeholders in this Manifesto, was therefore the analysis of different energy sources. The paper analysed and compared the plurality of solutions available in the short, medium, and long term, with regard to the entire life cycle of the vehicle and the fuel/energy carrier used.

The industrial scalability of a wide range of technological options that, in combination, could contribute to the achievement of the ambitious targets for the reduction of greenhouse emissions must be linked to a correct calculation of emissions and the adoption of a technologically neutral and rational approach.

The data related to the renewable fuels referred to in the Paper, where the following renewable fuels were compared:

- Biomethane/BioLNG
- Bio-LPG
- Renewable DME
- HVO (hydrotreated vegetable oil)
- E-fuels (electrofuels)
- Hydrogen

The conclusions were comforting: **the renewable fuels considered can certainly make a significant contribution to environmental needs, with the same engine.** There is a need to promote specific aid measures to support the supply chain and research and production activities, because these could, along the way, close the gap that still exists in terms of availability, cost and ease of sourcing, disposal, and distribution.

Renewable fuels can be produced from scraps/waste in a sustainable, continuous manner and without depleting the planet's resources, also using renewable sources such as biomass, energy crops and organic waste.

Indeed, they have the ability to reduce the amount of CO₂ remaining in the atmosphere to virtually zero due to the re-absorption of CO₂ in their production/use cycle.

They also reduce dependence on imported fossil fuels, improving economic and political stability and energy security, and generate **new jobs in agriculture, transport, and industry**.

Regardless of the support and investment modalities, it is important to **ensure a close connection between the production sector, the research sector, automotive and aerospace-related sectors, and intermediary economic entities**, also with a view to pooling tested solutions.

An example is the recent **Aspen Institute** study on new mobility and biofuels. The study shows that a full ecological transition in the mobility sector will take at least fifty years and that electric motor technology alone will not be sufficient to ensure this transition, while the role of sustainable fuels may be important.

This **Manifesto**, therefore, resumes a path, relaunches it and shares in this new version an attached working document, the **Paper "Renewable fuels and the vision of the Lombardy automotive industry"**. The data used, analysed, and compared in the attached document are taken from sources available and usable by the signatories and can therefore be integrated and better defined with the contribution of other subjects, in a framework of continuous comparison and updating.

It was signed at Palazzo Lombardia by the Regional Ministry for Economic Development and representatives of: Lombardy Mobility Cluster, Lombardia Cluster Aerospazio, ANFIA - the Italian Association of the Automotive Industry, Confindustria Lombardia, Confindustria Energia, ENI, UNEM - Unione Energie per la Mobilità, Assopetroli-Assoenergia, Federchimica-Assogasliquidi, Federmetano, Assogasmetano, Federmotorizzazione, Federazione italiana gestione impianti stradali carburanti.

Milano, July 20, 2023