

MORE THAN A MANIFESTO

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We, European Fuel Manufacturers, offer the EU, its citizens, and businesses sustainable, affordable, and reliable liquid fuels, and products for industry.

The right EU policy framework will enable us to make a significant contribution and investment to help the EU successfully deliver climate neutrality by 2050, ensure a secure supply of energy, and foster innovative, EU-based, globally competitive industry.



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What is "success" for Europe?

- The EU achieves net-zero greenhouse gas (GHG) emissions by 2050.
- Citizens have access to energy when and where they need it to travel, to heat their home, to live a quality life – and are able to pay the bill.
- Critical infrastructure, i.e. hospitals, public transport and services rely on an uninterrupted and affordable supply of energy.
- All of this in a society capable of overcoming the next pandemic, the next international conflict and all the unforeseeable global crises behind the corner.
- And an internationally competitive, innovative, sustainable industry thrives in the EU. Creating wealth, offering quality jobs and providing business for many small and large companies.

FuelsEurope represents the industry manufacturing and supplying liquid fuels and other products. We stand behind the Paris Agreement and embrace the net-zero GHG objective. Significant policy improvements are needed to unlock investments and technologies to meet the 2050 target, and we are ready to cooperate with the EU to impact-assess the relevant regulations.

Our industry is part of the solution in the journey to climate neutrality:

- By replacing fossil molecules with renewable molecules in our products.
- By cutting the carbon footprint of our operations.
- By enabling decarbonisation of other industries.

We are contributing to the **crucial and ambitious objectives of the EU**, namely:

1. CLIMATE NEUTRALITY BY 2050 IN THE EU - for the planet

2. A SECURE SUPPLY OF ENERGY AND A RESILIENT EU - for the EU economy

3. AN INNOVATIVE, EU-BASED, GLOBALLY COMPETITIVE INDUSTRY AND THE PROTECTION OF EVERYBODY'S WELFARE – for citizens

To help meet these objectives, we offer the EU our cooperation for urgently designing a comprehensive **EU Strategy for the Transition of Liquid Fuels and Products**, as part of the regulatory blueprint of the upcoming EU institutional cycle.

Simply put: let's build together the business case to deliver on the clean energy transition.

Clean fuels and energy projects of FuelsEurope's Members in Europe:

1. GREEN HYDROGEN: 18 projects beyond Final Investment Decision (FID). 4 further projects (pre-FID) currently announced.

2. RENEWABLE LIQUID FUELS: 27 projects beyond Final Investment Decision (FID) – including some already operational. 10 further projects (pre-FID) currently announced. FuelsEurope's Clean Fuels for All¹ outlines a potential pathway to 2050 to develop lowcarbon liquid fuels (LCLF) for road, maritime and air transport. To deliver such pathway an investment estimated between €400 to €650 billion will be needed.

€650 Billion of INVESTMENTS for the TRANSITION

• Green hydrogen projects

Renewable liquid fuels projects

Climate neutrality by 2050 in the EU - for the planet

Scientific findings are clear: immediate action is needed, and no effort should be spared to tackle climate change. In December 2023, COP 28 recognised the need of "*transitioning away from fossil fuels in energy systems, in a just, orderly and equitable manner*". It also called for utilising zero- and low-carbon fuels and technologies such as carbon capture, utilisation and storage to accelerate efforts towards net-zero energy systems.

WHAT DOES OUR INDUSTRY HAVE TO OFFER?

Leveraging on innovation, our industry is gradually replacing fossil feedstock with renewable and sustainable raw materials, thus reducing the GHG emissions from manufacturing and use of its products. Concurrently, our industry is, in a responsible way, avoiding disruptions in energy supply to the EU economy and citizens and contributing to the EU climate objectives.

According to the **International Energy Agency** (IEA)²: "*Refineries are well-suited for the deployment of low-emission hydrogen* [...] without the need for new end-user equipment". Moreover, "The integration of bioenergy represents another opportunity for refiners to make an active contribution to net-zero transitions by helping to scale up the cost-effective production of liquid biofuels."

NOT JUST PLANS, BUT ACTIONS

- **Transformation of our industrial assets**: Some conventional refineries in Europe have already been converted into biorefineries, replacing petroleum by 100% sustainable biomass, alongside new renewable fuel plants. As a result, renewable, circular carbon has completely replaced fossil carbon. Other refineries are co-processing a mix of fossil feedstock and sustainable biomass, gradually reducing the carbon footprint of products.
- Investments in Clean Energy: According to the IEA³, investments in Clean Energy Technologies from our sector have increased sharply. Moreover, some companies headquartered in the EU dedicate 15 to 25% of their total capital spending to clean energy projects (well above the oil and gas global investment average of 2.7%)
- Innovation: The EU leads in innovation on advanced biofuels. According to the Joint Research Center (JRC)⁴, in 2017-2019 the EU had twice as many high-value patents than the US, and 5.5 times more than China.
- 2 The Oil and Gas Industry in net-zero Transitions, IEA, Nov 2023
- 3 The Oil and Gas Industry in net-zero Transitions, IEA, Nov 2023
- 4 Clean Energy Technology Observatory: Advanced Biofuels in the European Union 2022 Status Report on Technology Development, Trends, Value Chains and Markets, JRC, Nov 2022
- 5 Clean Energy Technology Observatory: Advanced Biofuels in the European Union 2022 Status Report on Technology Development, Trends, Value Chains and Markets, JRC, Nov 2022
- **6** Use of Renewable Energy for Transport in Europe, EEA, Oct 2023

THE EU HOSTS NEARLY A THIRD OF ALL INNOVATING COMPANIES IN THE FIELD OF ADVANCED BIOFUELS (SOURCE: JRC⁵)



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TO DELIVER, WE NEED COLLABORATION WITH THE EU

This is only the start. For our industry to unlock its full potential for the energy transition, we offer to cooperate with the legislator to:

- Design a clear and predictable regulatory framework enabling the development of markets for renewable fuels and other products.
- Enable temporary public support to clean technologies for clean molecules, in R&D, pilot plants, reconversion of existing plants or first at-scale manufacturing phase.
- Develop a technology-open approach to legislation, allowing all promising clean technologies, over the life-cycle, to compete and complement each-other.

THE SHARE OF ENERGY FROM RENEWABLE SOURCES INCREASED TO 8.7%.

THE SHARE OF ENERGY FROM RENEWABLE SOURCES USED FOR TRANSPORT IN THE EU INCREASED TO 8.7% IN 2022 (SOURCE EEA⁶) AND IT IS CONTINUOUSLY INCREASING, AS PER THE REGULATORY TARGETS FOR ROAD TRANSPORT, AVIATION AND MARITIME



2022

2. A secure supply of energy and a resilientEU - for the EU economy

Whether in the form of molecules or electrons, energy is essential to our life and economy. Industry, mobility and the welfare of citizens depend on a secure, reliable, competitive and affordable energy supply.

The pandemic, the war in Ukraine and the resulting inflation and setback of the EU economy have demonstrated the vulnerability of our society to global crises. In anticipation of future global crises, the EU needs a strong domestic industry for production, distribution and storage of energy, complemented by international free trade with reliable partners.

The **IEA**⁷ highlighted that "*Governments need to be vigilant for risks to the affordability and security of supply*". Legislators should be mindful of the importance of security of energy supply and resilience offered by the EU fuel and products industry. The European Court of Auditors, in their report⁸ on sustainable biofuels in transport, conveys a similar warning.

WHAT DOES OUR INDUSTRY HAVE TO OFFER?

Liquid fuels, mostly manufactured in our industrial assets throughout Europe, provides 97%⁹ of the energy to move goods and people in Europe.

An extensive distribution and storage network delivers fuels at every corner of the continent. For more than a century, it has meant secure supply of liquid energy for transport and industry.

Even during the recent global crises, refinery products kept flowing: EU citizens and industries relying on our fuels and products have been seamlessly supplied.

In the ongoing transition, fossil raw materials are being replaced by biomass including agricultural and forestry residues, municipal waste, non-recyclable plastic, CO_2 -free hydrogen and recycled CO_2 . As these raw materials are mostly domestic, energy security will improve, complemented by trade relationships with key international partners. Finally, the creation of new local value chains and a new, decentralised, energy production model across Europe will also support the circular economy.

- 7 The Oil and Gas Industry in Net Zero Transitions, IEA, Nov 2023
- 8 The EU's Support for Sustainable Biofuels in Transport, European Court of Auditors, Nov 2023
- **9** Final Energy Consumption in Transport by Type of Fuel, Eurostat, 2021



RECHARGING POINTS SOME EXAMPLES FROM FUELSEUROPE'S MEMBERS:

Company 1+2+3+4+5, Mediterranean Countries & Iberian Peninsula: 22064 Company 6+7+8, Benelux: 25000 Company 9+10+11+12, Central-Eastern Europe: 2936 Company 13, Nordics & Baltics: 530



NOT JUST PLANS, BUT ACTIONS

- Sustainable biomass for biofuels is available in the EU¹⁰ and, complementary, in non-EU regions through long-term partnerships (resulting also in social and environmental benefits in less developed regions).
- Green and low-carbon hydrogen consumed in our industrial assets to produce transport fuels can rapidly accelerate the development of EU's industrial hydrogen hubs and boost the demand.
- Recycled carbon and green / blue hydrogen for synthetic fuels are being made available, by investments for CO₂ capture and transport, and by the installation of electrolysers and steam reformers with CO₂ capture.
- Our industry is installing refuelling points for 100% renewable fuels, and hydrogen, as well as electric recharging points in service stations throughout Europe.
- Alongside the 100% renewable fuels, the carbon intensity of conventional fuels is also reduced through higher shares of renewable fuels.
- Our industrial assets leverage their technical flexibilities to adapt to new operations, process new feedstocks and make use of new energy sources, not only to decarbonise but also keep the market supplied in case of unforeseen disruptions.
- The EU's military defence system depends on reliable and quickly accessible supply of liquid fuels, both in peacetime and more importantly to face steep increase in demand in case of conflicts and geopolitical crises.

TO DELIVER, WE NEED COLLABORATION WITH THE EU

S&P Global is currently performing for Concawe a study on the future of refining and liquid fuels production in the EU, addressing the risks that political choices relegating liquid renewable fuels to a marginal role may have on the EU security of energy supply. Competitive industrial fuel production facilities may prematurely close, without having the opportunity to decarbonise and convert to the production of renewable fuels and products. Consequently, entire regions of the EU may be left strategically vulnerable to inadequate access to secure liquid energy.

10 Sustainable Biomass Availability in the EU to 2050, Imperial College London 2021



SERVICE STATIONS OFFERING 100% RENEWABLE FUELS SOME EXAMPLES FROM FUELSEUROPE'S MEMBERS:

Company 1+2, Mediterranean Countries 1 Iberian Peninsula: 1400 Company 3, Benelux: 1300 Company 4, Central-Eastern Europe: 488 Company 5+6, Nordics & Baltics: 1006

3. An innovative, EU-based, globally competitive industry and the protection of everybody's welfare – for citizens



A vibrant domestic industry is at the core of the economic value creation that sustains our very way of life. Alarmingly, the EU is witnessing a growing flow of investments directed to other regions in the world, where better competitive conditions are offered through a combination of subsidies and regulatory incentives.

A massive relocation of the EU industrial assets would result in:

- Heavy losses of direct, indirect and induced jobs, and economic value.
- Heavy dependence on imports for strategic goods.
- Net environmental and social losses, when the relocation is to regions with less ambitious objectives in GHG reduction, protection of the environment and safeguard of workers' rights.

In order to ensure a fair and just energy transition for all citizens throughout Europe, mobility and domestic heating must be affordable and accessible, while employment and workers' rights are key European values to protect.

WHAT DOES OUR INDUSTRY HAVE TO OFFER?

Innovation: According to the **IEA**¹¹, the EU fuel manufacturing industry has a huge potential to innovate for the energy transition.

Circular economy: A competitive fuel manufacturing industry means a competitive EU industrial system. The energy transition offers the opportunity to contribute to the circular economy, in synergy with the agricultural value chain or through the recycle of plastics and the reuse of carbon.

Investment capacity: The transition to climate neutrality has a cost, and our industry can help mitigating the burden on citizens and businesses. The conversion of our existing industrial assets to the production of renewables, and the reuse of our extensive infrastructures for products distribution and storage will reduce the capital requirements of the transition.

Affordability: Renewable fuels in road transport, complementary to electrification, will give choices to citizens and enterprises to affordably meet their mobility needs while contributing to decarbonisation .

High quality jobs: Our industry offers well-paid quality jobs to a highly skilled workforce. It is a high-tech industry, integrating the wealth of diverse skills to deliver at cutting edge in the global competitive environment.

NOT JUST PLANS, BUT ACTIONS

- As shown in our clean energy project map, many projects are ongoing for the transition of refineries and the
 production of renewable, non-fossil or low-carbon fuels and products.
- The conversion of conventional (petroleum) refineries into biorefineries reduces the original production capacity of fuels in ratio of 1 to 10. The resulting production capacity should suffice to meet the expected market demand for road fuels, significantly reduced as a result of the growth in electromobility, avoid stranded assets, and maintain – direct, indirect and induced – quality jobs.
- Thousands of service stations across Europe offer already today 100% renewable fuels. These fuels
 are compatible with existing cars and trucks and, side by side with electromobility, allow a fast
 decarbonisation of road transport.

11 The Oil and Gas Industry in Net Zero Transitions, IEA, Nov 2023

WORKFORCE EDUCATION LEVEL: OVER 90% OF FUELSEUROPE MEMBERS' WORKFORCE HAS SECONDARY EDUCATION OR HIGHER¹².

TO DELIVER, WE NEED COLLABORATION WITH THE EU

The clean transition of our industry, and the huge investments needed, makes it vulnerable to the loss of international competitiveness. We believe that:

Our industry and assets are strategic for the EU now and in the future, to decarbonise transport and provide sustainable feedstocks for its petrochemical, pharmaceutical and other industries.

It is important to identify the key regulatory conditions to enable investments in renewable fuels and products to build the business case to unlock the resources for an accelerated transition.

Many complementary pathways for transport decarbonisation, including renewable fuels, are needed to achieve the EU objectives while minimising costs to our society. In the case of road transport, the $\rm CO_2$ standards regulation should allow renewable fuels to complement electromobility: it will result in faster decarbonisation of existing vehicles, and offer solutions for new vehicles in hard to electrify applications.

OUR STRATEGIC ASSETS ACROSS EUROPE

EUROPEAN REFINERIES ARE AT THE CORE OF INTEGRATED INDUSTRIAL VALUE CHAINS, PROVIDING NOT JUST FUELS, BUT ALSO PETROCHEMICAL FEEDSTOCK, BITUMEN, LUBRICANTS, SOLVENTS, WAX AND OTHER PRODUCTS.

 Integrated refinery / Steam cracker location

Refinery location

- Steam cracker location
- Biorefineries



IN CONCLUSION

To help meet the objectives highlighted in this paper, we offer the EU our cooperation for urgently designing a comprehensive **EU Strategy for the Transition of Liquid Fuels and Products**, as part of the regulatory blueprint of the upcoming EU institutional cycle.

About us



FuelsEurope, the voice of the European fuel manufacturing industry. FuelsEurope represents with the EU institutions the interest of 40 companies manufacturing and distributing liquid fuels and products for mobility, energy & feedstocks for industrial value chains in the EU.

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