Meeting with [Name] (FuelsEurope)

Scene setter

You will have a meeting with [Name] FuelsEurope, the European Association representing the refining industry.

You have had an interaction with [Name] at the Ambrosetti event on the 22nd June 2023, where you briefly exchanged on fuels industry and its future business models. The aim of this meeting, as proposed by [Name], is to continue the discussion with a focus on how to create opportunities for the industry to invest successfully into the energy transition.

[Name] has been actively participating in climate action debate since many years, by providing inputs towards the development of the Climate Long Term Strategy, the Green Deal, and the ‘Fit for 55’ legislative proposals.

FuelsEurope supports the EU objective of net climate neutrality by 2050. Building on their “Vision 2050” (from 2018), FuelsEurope has developed a comprehensive potential pathway “CleanFuelsForAll”, of how the refining industry can contribute to meeting the 2050 climate neutrality challenge, with the production of sustainable low carbon liquid fuels, including RFNBOs and recycled carbon fuels (RCFs), at the heart of this transition.

FuelsEurope claims that large investments (between €400 to €650 billion) will be needed to develop low-carbon liquid fuels for road, maritime and aviation transport by 2050 (See background for a summary).

Main objectives of the meeting:

- Highlight the latest policy developments around the Renewable Energy Directive, ReFuelEU for aviation and FuelEU maritime and their role in incentivising and accelerating the transition to sustainable fuels in the transport sector.
- Ask on the position of the sector regarding NZIA and notably the proposal to require oil and gas companies to contribute proportionally to the EU objective of 50 Mt of storage capacity by 2030.
- Highlight the latest widening in scope of the Innovation Fund to the transport sector and its potential role to finance innovative projects in sustainable fuels.
- Enquire on what the sector expects as offtakers in the upcoming pilot auction on hydrogen and on what else is needed to ensure the development and uptake of low-carbon fuels in the transport sector, for example on RFNBO certification.

Proactive points

Latest Policy Developments

- The transport sector has a key role to play for the targets in the EU Climate Law, but it also remains one of the sectors where fossil fuel dependency remains high.
- The revised Renewable Energy Directive (REDII+) is the main instrument for decarbonisation of transport fuels and energy. REDII+ has substantially increased the ambition and requires fuel suppliers to provide a share of renewable fuels and renewable electricity of at least 29 % by 2030 (replacing the current obligation of 14%); or to reach a greenhouse gas intensity reduction of at least 14.5 % by 2030, compared to the baseline (the fossil fuel comparator of 94g CO2eq/MJ).
- To incentivise the production and deployment of renewable and low carbon fuels, the REDII+ has defined a sub-target where the combined share of advanced biofuels and
of renewable fuels of non-biological origin (RFNBOs) is at least 5.5% in 2030, with a minimum share of 1% to be ensured for the RFNBOs.

- The revised CO2 standards for new cars and vans are sending the signal that the shift to zero-emission mobility is irreversible and accelerating, while the negotiations on the proposed revision of the CO2 emission standards Regulation for HDV are ongoing.

- Sustainable Aviation Fuels (SAF) are also expected to play a key role in decarbonising air transport. The cost differential with fossil jet fuel is the main barrier for upscaling; competition with other end uses (i.e., road diesel fuel), constrained supply potential of certain sustainable feedstocks as well as limited/low technological maturity for some fuel pathways is equally relevant.

- The minimum SAF uptake volumes mandated in ReFuelEU Regulation (mandatory SAF uplifting at airports starts at 2% in 2025 and reaches 70% of jet fuel volumes supplied at airports by 2050 with dedicated sub-targets for RFNBOs) are designed to trigger performance and innovation at once. Food/feed-based biofuels are in fact not eligible to count towards the ReFuelEU targets to avoid increasing demand in this new market segment for feedstock categories with doubts cast on their effective GHG emissions reduction potential over their lifecycle and that for this very reason are capped under the Renewable Energy Directive. Conversely, as a result of co-decision, ‘pink’ hydrogen (electrolysed using nuclear electricity) is eligible to count towards the target of the Regulation despite not being renewable.

- Aviation is inherently global: there is no internationally harmonised definition of SAF, nor uniform approaches of the methodologies that are best suited to count their emissions. Commission services and agencies (CLIMA, MOVE, EASA in particular) contribute pro-actively and work closely together at the international level (ICAO). Yet, the urgency of the climate challenge we face, and the long lifespan of aircrafts mean that lowering our ambition levels is not an acceptable option.

- In fact, the stringency of ETS for Aviation increases remarkably with the recent revision with free allowances phased out over the next few years along with a strengthened linear reduction factor. We are confident that this is a key signal to the market – alongside provisions of ReFuel EU – to trigger the sector’s transition from fossil jet to renewables: with a mid-term perspective in mind, this is not limited to drop-in options.

- In addition, the revised ETS Directive provides that 20 million allowances (around 1.7bn EUR at 85 EUR/tCO2) will be made available on a first-come first-served basis to support the uptake of SAF on ETS flights from the beginning of 2024. Support to eligible fuels varies subject to their decarbonisation potential and is geared towards rewarding first movers while incentivising all operators on the market, and accelerating the deployment curve for SAF, especially the most promising in terms of emissions curbing.

- The other inherently global transportation mode – shipping – has experienced a major surge in its level of ambition with the Revised GHG Reduction Strategy adopted at IMO in July this year. The policy measures that are being shaped to reach the in-sector zero target by 2050, and its intermediate checkpoints, confirm the relevance and the timeliness of expanding the ETS scope to the shipping sector as well as the demand-side measures put in place by the FuelEU Maritime Regulation.
Briefing for Director-General Kurt Vandenberghe
Meeting with Fuels Europe
Brussels, 12 October 2023; from 11:00
BASIS 2366

- But our industries also need to be assured that CCS is a real mitigation option for them. This actually includes also refining and petrochemicals. What is your position on our proposal in NZIA that the oil and gas sector needs to contribute to the EU objective of 50 million ton of storage capacity by 2030?

Innovation Fund

- The ETS-funded Innovation Fund in one of the key instruments in shortening time-to-market for fuel technologies that have not yet reached technological and commercial maturity. In the latest revision of the ETS Directive, its scope has also been widened to the aviation and maritime sectors as well as the consumption of fuels in the sectors of buildings and road transport.

- Even before the formal extension of the scope, the Fund has already been supporting the scale up of such technologies. In the six calls for proposals that the Innovation Fund has organized since 2020, it has selected 3 projects related with the production of fuels for the aviation sector, all of them as part of the large-scale calls. One of them (HySkies) will be producing in Sweden synthetic fuel combining renewable hydrogen (200MW electrolyser) and captured CO2, planning to produce 82,000 tonnes of SAF and 9,000 tones of renewable diesel annually. Another one (BioOstrand, also in Sweden) will be producing bio-fuels by converting paper pulp biomass waste into SAF and naphtha.

- The Fund will now also directly support breakthrough innovative technologies and infrastructure, including production of low- and zero-carbon fuels, to decarbonise the maritime, aviation, rail and road transport sectors (including collective forms of transport such as public transport and coach services) and will adapt its methodologies, particularly on GHG avoidance aspects, to this new expanded scope.

- For aviation, it may also support electrification and actions to reduce the overall climate impacts of aviation, taking account impact beyond those of CO2 emissions (such as soot particles, nitrogen oxides or oxidized sulphur)

- For Maritime, the Fund will also target the electrification of the sector, include actions dedicated at the reduction of black carbon emissions, and insert evaluation criteria assessing biodiversity protection and for reducing noise and water pollution.

- Both sectors could benefit from additional support from the Innovation Fund, as they could benefit directly or indirectly from projects that are not tagged as “maritime” or “aviation” projects but that could play an essential role to make sustainable alternative fuels, or cross-cutting technologies more competitive and available at scale.

- The next big call for grants from the Innovation Fund and a €800 million for auctions for RFNBO Hydrogen will open in November this year and we hope to receive good projects to support the decarbonisation of the aviation and the maritime transport among them.

- As this auction will be sectorial neutral regarding the off-takers and the use produced hydrogen is directed for. Given the relevant technological synergies that refineries may find in the production of renewable hydrogen with the already existing infrastructure and installation, refineries are expected to be able to present highly competitive bids in
the auction call. **Do you expect strong applications from the refinery sector for e-fuels, especially in the maritime and aviation sector as well?**

- DG CLIMA values the strong involvement of the fuel manufacturing industry in the decarbonisation, and looks forward to continued dialogue in this regard.

**Reactive points**

*Sustainable, non-fossil fuels can play a role complementary to electrification and hydrogen for decarbonising transport, even though lower efficiency and costs (which are currently high) are limiting that role. While they are recognised in regulations for aviation and maritime transport, they are not mentioned in CO2 standards.*

- While electrification remains the main option for the decarbonisation of new vehicles, RFNBOs along with advanced biofuels will play an important role to achieve the required GHG emission reduction in transport. These fuels will need to be prioritised for those transport sectors and segments that are ‘hard to decarbonise’, such as aviation and maritime, where electrification is not possible, in order to reach the climate neutrality objective. For the road segment, these fuels can be used to reduce emissions from the existing stock of vehicles, while the new vehicles will progressively become zero-emission. This offers ample opportunities for the development of decarbonised fuels.

- The revised Renewable Energy Directive incentivises the uptake of renewable and low carbon fuels, with a specific focus on the promotion of innovative renewable fuels, such as advanced biofuels and the RFNBOs.

- There are also important synergies with other instruments, such as strengthened emissions trading system (ETS) where a new ETS2 has been created to drive the emission reductions in other sectors not yet covered by ETS, that is road transport and buildings.

- Another complementary instrument is the revised Energy Taxation Directive (ETD) aiming to align the taxation of energy products with EU climate and energy policies, and in this way helping to ensure that the taxation of fuels, and electricity reflects their impact on the environment and climate.

**Under the revised CO2 standards for cars and vans regulation, FuelsEurope calls the Commission to make a proposal which includes all CO2 neutral fuel options, synthetic fuels and biofuels, that, according to FuelsEurope, will spur EU investments.**

- The Commission and the EU are committed to economy-wide climate neutrality by 2050. Transport is a sector where emissions are increasing, so we need to increase our efforts.

- The Commission has acknowledged the decision by the European Parliament and the Council to include a recital on CO₂ neutral fuels in the revised regulation on CO₂ standards for cars and vans. The Recital (11) states that “Following consultation with stakeholders, the Commission will make a proposal for registering after 2035 vehicles running exclusively on CO₂ neutral fuels in conformity with Union law, outside the scope of the fleet standards, and in conformity with the Union's climate-neutrality objective”.

- The Commission has committed through a statement made in the Council to submit proposals to give effect to the provision included in the Regulation for allowing the registration of cars and vans exclusively running on e-fuels (not biofuels) after 2035. A proposal for such a system is being prepared and will soon be discussed with Member States and stakeholders.
**Background**

**FuelsEurope:** formed in 1989, is a division of the European Petroleum Refiners Association, operating in Belgium. The association, whose members are about 40 oil and gas companies that operate petroleum refineries in the European Economic Area, is comprised of the FuelsEurope and Concawe divisions, each having separate and distinct roles and expertise, but administratively consolidated.

FuelsEurope provide an expert opinion on the production process, distribution and use of industry’s products. The aim is to achieve a regulatory framework that promotes EU excellence in technologies contributing to the energy transition and climate goals; supports a sustainable and competitive EU industry; and protects human health and the environment.

**Clean Fuels for All - A pathway to climate neutrality**

In the Pathway paper, FuelsEurope foresees that, by 2050, every litre of liquid fuel for transport would become net climate neutral, enabling the decarbonisation of aviation, maritime and road transport. This pathway would require an estimated €30 to €40 billion investment between 2020 and 2030, including the creation of advanced biofuel and e-fuel plants, increasing the production of low-carbon liquid fuels up to 30 Mtoe/y in 2030.

Major investments could start in the next years, with first-of-a-kind biomass-to-liquid and e-fuel plants coming into operation at an industrial scale no later than 2025.

By 2050, the total investment needed would be estimated between €400 and €650 billion, enabling the availability of 150 Mtoe of low-carbon liquid fuels.

By adding Carbon Capture and Storage (CCS), the capture of emissions in biofuel production, and, in combination with electrification and hydrogen technologies, FuelsEurope estimates that road transport would reach climate neutrality by 2050.

However, to be successful, a broad multi-stakeholder partnership and investor confidence, as well as political vision, is needed.

**FuelsEurope recent positions/statements**

**The Net Zero Industry Act:** While welcoming the NZIA and its aim of promoting the ramp-up of critical technologies and their deployment, FuelsEurope calls for the NZIA to set up additional measures to maximize refining industry contribution and to enhance investments in the energy transition:

- Establish a framework which supports and incentivises private investments for the deployment of renewable, low or zero-carbon technologies & products along the whole value chain;

- Promote the conversions/repurposing/upgrading of existing refinery assets for the production of low-emission fuels/energy; therefore, enlarging the scope of the act, keeping a technology-open approach, allowing all technologies with GHG abatement potential to be scaled up;

- Include renewable & low-carbon fuels as defined in the RED as well as a wider range of renewable and low-carbon liquid fuels production technologies;
Explicitly refer to the research and development for the production processes for upgrading/conversion of biomass wastes and residues including - among others - enzymatic/cellulosic, Fischer-Tropsch, Gasification and Pyrolysis technologies;

Include CCU, along with measures to create an efficient CO2 market in support of the development of CCS.

The Opinion on the ‘Review of the CO2 emission standards for heavy-duty vehicles’ by the European Economic and Social Committee

FuelsEurope was co-rapporteur of the Opinion which essentially calls for a life-cycle approach to “avoid road transport decarbonisation leading to a shift of emissions upstream in the value chain.” The Opinion advocates for a “diversified technology strategy, with sustainable fuels complementing BEVs and hydrogen vehicles, while these two technologies develop and widen their domestic EU basis”, and that “the technology-neutral option presents numerous advantages. It would notably mitigate the risks both in technology development and in the security of supply.”

Furthermore, the Opinion highlights that “the methodology distinguishing between linear CO2 emissions (from fossil fuels) and circular or net-zero emissions (from e-fuels and sustainable biofuels), in a life-cycle context, shows that efficient ICE and hybrid vehicles, fuelled by sustainable biofuels and e-fuels, have a carbon footprint comparable to that of BEVs using fossil-based electricity”.

Finally, the Opinion states that the HDV CO2 regulation based on the “tailpipe” approach needs to be complemented by other policy instruments to incentivise the use of renewable, non-fossil fuels for the part of the fleet running on internal combustion engines (ICE).

Joint letter on Delegated Act GHG methodology RFNBO/RCF

FuelsEurope welcomes the adoption of the Delegated Acts setting out a detailed methodology with the required criteria to provide a stable framework to rule the production of the RFNBO/RCF in the close future. However, based on assessment of FuelsEurope, including a number of case studies, the letter raises concerns about the risk of diverging interpretation of the rules, in absence of a clear certification framework that may hamper the scale-up of the EU’s RFNBO market.

In this regard, FuelsEurope calls for the completion of comprehensive certification framework for RFNBOs, and puts forward certain recommendations, so that a clear and unique interpretation of the relevant aspects of DAs can be ensured by the accredited certification bodies.