BRIEFING FOR HEAD OF CABINET STEFANO GRASSI

MEETING WITH JOHN COOPER – FUELSEUROPE DIRECTOR GENERAL

22 October 2021 at 14.00h

SCENE SETTER

FuelsEurope represents the interest of 40 Companies operating refineries in the EU. Members account for almost 100% of EU petroleum refining capacity and more than 75% of EU motor fuel retail sales.

FuelsEurope is concerned about the increasing focus on e-mobility in the EU's decarbonisation strategy and argues that low carbon liquid fuels such as sustainable biofuels, renewable hydrogen and power-to-liquids are a necessary complement to electric mobility especially for long haul heavy duty road transport, aviation, and marine, as well as for petrochemical feedstocks, lubricants and other products.

Further, they are of the view that low carbon fuels have the advantage that they can contribute to decarbonisation by reducing emissions of all the vehicles in circulation, while the rollout of electric vehicles will take much longer to provide significant results.

FuelsEurope also organises the refining forum with the Commission. The EU Refining Forum was launched in 2013 and maintained by the previous Commissioner for Energy. It debates energy policy issues, which impact the refining industry as well as security of supply of oil and petroleum products in the EU.

Although the role of refined products, along with the electrification of the transport sector, will decrease in the forthcoming decades, refined products have still an important role in the petrochemical industry, producing plastics used in our daily life. Circular economy will result in more efficient use of materials, however, production will remain important. Moreover, refining employs more than 100 thousand people in the EU, and a lot more indirectly in the petrochemicals.

DG Energy is therefore open to continue with the current format of the EU Refining Forum as the Green Deal and new policy initiatives may have significant impact on the European refining sector and other energy-intensive industries participating in the forum.

LINES TO TAKE

Transport decarbonisation and biofuels

- Implementing the Green Deal, achieving climate-neutrality by 2050 will require a deep transformation of our economy and of the way we produce and consume energy. On the cost-effective path towards climate-neutrality, we proposed to step up our greenhouse gas reduction target to at least 55% by 2030.

- The transport sector plays a key role in this context, as it is responsible for 32% of final energy consumption and 24% of total greenhouse gas emissions. In addition, the transport sector relies on oil for 94% of its energy needs.

- Decarbonising the transport sector will require a gradual transformation of the entire transport system and hence an integrated approach to transport policy. The Commission has outlined its vision to decarbonise transport in the Energy System integration and the Sustainable and Smart Mobility Strategy:

    - We consider that transport should be electrified wherever possible (e.g. passenger cars, light duty vehicles, rail, coastal or inland ships, etc) and be powered by increasing levels of renewable electricity.

    - Second, increasing shares of sustainable renewable fuels will be needed to decarbonise those transport uses that cannot be electrified, such as aviation and maritime. Our projection show that both biofuels as well as H2 and H2-

based synthetic fuels will need to play an important role in this sector.

- The Fit for 55 package includes a number of proposals that provide incentives for the deployment of renewable fuels. This includes in particular
    - The proposal for the revision of the renewable energy directive
    - The Refuel initiatives for the maritime and aviation sector

Measures in the Renewables Energy Directive (RED):

- RED sets transport-wide targets for renewable energy including a new target of -13% for GHG intensity of fuels supplied to transport sector, across all modes.
- It further sets new sub-target for renewable fuels of non-biological origin (RFNBOs) (2.6% by 2030) and advanced biofuels (2.2% by 2030) across all modes. The use of these fuels in the maritime and aviation sector is incentivized by the use of multipliers.

Measures in Refuel aviation:

- The measures taken under the RED are closely related to the proposed measures under Refuel EU aviation which include:
    - Obligation on airlines to uplift (SAF-blended) aviation fuel prior to flights
    - Obligation on fuel suppliers to distribute sustainable renewable fuels in increasing amounts over time;
- Ambitious targets focusing on innovative, sustainable and scalable fuel technologies, which ram put over time (5% by 2030, 32% by 2040, 63% by 2050). Sub-targets on RFNBOs: 0,7% by 2030, 8% by 2040, 28% by 2050.

- Sustainable aviation fuels (SAF) supplied for aviation under ReFuelEU Aviation contribute to RED targets.
- We are further working on the implementation of the existing legislation that is relevant for the promotion of renewable fuels. This concerns in particular rules for the production of renewable hydrogen from grid electricity as well as a methodology to determine emissions savings.

Next steps:

- Discussions with MS have started on all files and files are being attributed in EP to respective committees.
- Hoping for smooth co-legislative process. Discussions are making good progress under Slovenian Presidency.

Carbon Capture & Storage (CCS) and Carbon Capture & Use (CCU)

- We need to support CCS and CCU technologies today since these emerging technologies are needed to achieve climate neutrality in 2050. Industrial projects have long lead times and project developers are often faced with scale-up challenges and fierce global competition, in particular in the energy-intensive industries, where large amounts of products will have to be produced through entirely new processes.
- The EU supports CCS and CCU research through Horizon Europe and large-scale demonstrations through the Innovation Fund.
- However, the EU budget alone cannot and should not bridge the entire financing gap for CCUS or the future hydrogen economy. For CCUS and hydrogen to fulfil their decarbonisation potential, additional support needs to come both from support mechanisms available through the Member States willing to

enable this option for decarbonisation of their economy, but most of all from companies investments for the future.

- And let's not forget that we have given the Member States a powerful investment tool that can also be used for CCUS project. The Next Generation EU is a more than €800 billion temporary recovery instrument to help repair the immediate economic and social damage caused by the Covid-19 pandemic.
- The Commission is preparing a key communication to complete the Fit for 55 package: the Communication "Restoring Sustainable Carbon Cycles" will outline a long-term vision for the creation of sustainable carbon cycles (including capture, storage, and use of CO2) in a climate-neutral EU economy and to kick-start the development of the necessary technological and nature-based solutions. The Commission services are working hard to take this into consideration with a view of adopting the Communication on 14 December.
- In order to increase awareness of CCS and CCU and also to stimulate policy debate with stakeholders on 11 October we held the first high-level CCUS Forum. It gathered almost 400 participants and provided useful material for our work. We encourage you to get involved and follow our next steps as regards the Forum.

Refining Forum

- The refining industry, as carbon intensive sector, will be deeply impacted by the transition to a carbon neutral economy. We consider that the forum could help to improve the mutual understanding of the challenges the refining industry faces.
- This however, requires that the forum focusses on forward looking subjects such as the promotion of renewable and low

carbon fuels and other aspects linked to the implementation of European Green Deal.

- What is your vision of the future of the forum and how can we ensure the relevance of the forum?

DEFENSIVES

How does Commission see the future of conventional biofuels?

- The Commission considers that the contribution of biofuels produced from food and feed crops towards decarbonisation is limited and their use should be minimised. Against this background, the Renewable Energy Directive introduced limits for conventional biofuels and focusses on the promotion of biofuels produced from wastes and residues such as advanced biofuels.

Do you think that biofuels are required for decarbonising transport?

- Decarbonising the transport sector will require a transformation of the entire transport system and hence an integrated approach to transport policy, including both increasing the efficiency of the transport system and its vehicles and replace fossil with renewable and low-carbon fuels.
- Research shows that there is no single clean fuel solution for the future of mobility. All main alternative fuel options must be pursued, with a focus on the needs of each transport mode. Electrification is going to play an increasingly important role for passenger cars and light duty vehicles. Advanced biofuels are needed to decarbonize sectors difficult to electrify, such as aviation and maritime.

Why is the 7% cap for conventional biofuels still needed? By excluding palm oil, the issue of ILUC has been addressed.

- High ILUC-risk feedstock are phased out because there is the strong evidence that their production does not achieve emissions

savings. Their promotion under the RED is therefore not justified. This does not mean that that the issue of ILUC does not apply at all to other types of conventional biofuels. The Commission considers that the contribution of all types of conventional biofuels towards decarbonisation of the transport sector is limited.

Question: The RED and the Refuel initiatives are overlapping.

- The RED and the Refuel initiatives are complementary. The RED sets an overarching target for the use of all types of renewable energy in all transport modes focusing on the right solution for each mode. We consider that electrification represents the main solution for road transport while we will need renewable fuels to decarbonise the maritime and aviation sector.
- The Refuel initiatives will contribute towards the achievement of the targets and creates a pull effect for renewable fuels.

Question: The criteria to account hydrogen under the renewable energy target for the transport sector that are proposed in the draft delegated act on additionality are too strict.

- The Commission is requested under RED II to set out methodologies ensuring that the use of renewable fuels of non-biological origin (RFNBOs) is contributing to the decarbonisation effort. This concerns in particular rules for the production of renewable hydrogen from grid electricity as well as a methodology to determine emissions savings. The delegated act is specific for renewable hydrogen counted towards the renewables target in the transport sector under REDII.
- We are aware of the importance of this topic for the uptake of the renewable hydrogen market and we are looking at it in a way that

supports the achievement of the goals of the EU Hydrogen Strategy, which gives a key role for RES Hydrogen to achieve climate neutrality.

- The obligation to adopt this delegated act stems from existing legislation and applies independently from the ongoing revision of REDII. The delegated act will therefore determine the regulatory framework for the production of RFNBOs for at least 3 years.
- Services are working on how to translate input into delegated act that corresponds with regulatory requirements including how to implement additionality requirements, including requirements for temporal and geographical correlation.
- It would not be appropriate, however, to comment on the leaked text. Work on these methodologies is still ongoing. They have not yet been politically validated. The Delegated Act will be adopted by the Commission by end of the year.

Contributors

Transport: [redacted], ENER C2, ext [redacted], CCS [redacted], ENER C2, ext [redacted] Refining forum: [redacted], ENER, A4, ext. [redacted]

BACKGROUND

GHG emission based approach in the RED II review proposal

According to the Energy System Integration Strategy, both renewable fuels (biofuels and RFNBOs) and Electric Vehicles (EVs) will be necessary to achieve climate neutrality. They will however have very different roles in decarbonising transport: First, transport should be electrified wherever possible (e.g. passenger cars, light duty vehicles, rail, coastal or inland ships, etc) and be powered by increasing levels of renewable electricity. Second, increasing shares of sustainable renewable fuels will be needed to decarbonise existing fleets and "reserved" for those transport uses that cannot be electrified, such as aviation and maritime.

After bilateral discussions, DG ENER proposed to apply a hybrid approach to promote the use of both renewable fuels and renewable electricity in the transport sector. To this end, the proposal sets out a GHG intensity reduction target of 13% for all transport fuels that needs be achieved by 2030[1]. In addition, the Member States would need to ensure the achievement of sub-targets of 2.6% RFNBOs and 2.2% advanced biofuels. The sub-targets for RFNBOs and advanced biofuels are required because these fuels are not yet cost-competitive with mature fuels such as conventional biofuels. The energy-based sub-targets represent a suitable instrument to ensure investments into additional production capacity of these innovative fuels because they create a secure offtake market for these fuels, which is essential to ensure the bankability of projects. Important elements of RED II including the limits and the phase out for certain types of conventional biofuels and the limit for biofuels produced for Annex IX Part B would be maintained. Other elements, including a credit mechanism would be added to improve the functioning of the mechanism.

The achievement of the targets will be ensured by a set of mutually reinforcing measures including not only the supply obligation in the RED but also the Refuel initiatives and reviews of the CO_2 standards for cars and the AFID.

How would the emission reduction obligation work?

Member States will be required to oblige fuel suppliers to supply the market with an amount of renewable fuels and renewable electricity that reduces the average emission intensity by [x%] compared to a fossil fuel baseline. The contribution of renewable fuels to the achievement of this target is accounted according the emission savings they achieve compared to petrol and diesel (in case of renewable fuels) and fossil-based electricity (in case of renewable electricity). The share of renewable electricity would be based on the

[1] compared to a fossil fuel baseline of 94 g CO2eq/MJ

average share reported by Eurostat for the year N-2[2]. The emission intensity of renewable electricity is assumed to be zero. Applying assumptions about the average emission savings of different types of fuels allows comparing the incentives given the emission-based approach compared to RED II, which applied multipliers to promote differ types of fuels.

Table 1: Comparison of incentives

	RED II	Original proposal	Proposal for the hybrid	
	Energy-based multiplier	Energy-based multiplier	Emission savings(gCo2eq/MJ	Corresponding multiplier
RES electricity (100% savings compared to 183 g/Co2eq/MJ)	4	2,5	183	3,9
Advanced biofuels (85% savings compared to 94 g/Co2eq/MJ)	2	2	80	1,7
Annex IX B biofuels (85% savings compared to 94 g/Co2eq/MJ)	2	1,2	80	1,7
Conventional biofuels (50% savings compared to 94 g/Co2eq/MJ)	1	1	47	1,0
H2 and e-fuels (90% savings compared to 94 g/Co2eq/MJ)	1	2	85	1,8

Table 1 shows that the proposed approach provides similar incentives for the promotion of renewable electricity than the current multipliers set out in RED II. The main difference is that renewable fuels producers would usually determine the emission savings of each batch of fuels individually. In this context, it should be noted the proposal includes several amendments to the methodology that is applied to determine the GHG emissions savings of biofuels. These changes aim to reduce the options to increase the GHG savings by realising windfall profits and reduce the risk of resource competition. This will in particular lead to lower estimates of the emissions savings of conventional biofuels.

The approach sets a framework that is very beneficial for suppliers of renewable electricity as they can contribute to the obligation at a low price tag as they have to cover only the costs for the recharging infrastructure. Costs for the production of renewable electricity and costs for the purchase of vehicles are covered by other policy instruments (e.g. support schemes and CO_2 standards for cars).

How does the proposed credit mechanism work?

Most Member States focus currently in the implementation of the RED on the promotion of renewable fuels. While renewable electricity is eligible to count towards the RES target in transport, Member States are not required to cover them in the supply obligation.

The proposal addresses the matter by introducing a credit mechanism for renewable electricity, which would allow charging point operators to receive credits for supplying renewable electricity to EVs. The number of credits charging point operators could receive would correspond to the contribution of the renewable electricity towards the achievement of the supply obligation. They could sell these credits to liquid fuel suppliers, who would use them to fulfil their obligations. The price for the credits would be determined by the compliance costs of fuel suppliers with the supply obligation, which normally equal the price differential between renewable fuels and conventional fuels. This would provide a

[2] This share is estimated to reach by 2030 on average 65% in the EU.

significant additional revenue stream for charging point operators and hence contribute to the financial viability of publically accessible recharging infrastructure, which often operate at a loss today. Similar mechanisms are already in use or discussed as part of national implementation of REDII in DE, FR and NL. The inclusion of households or other dedicated recharging infrastructure would remain optional, given that the EU wide implementation of such a requirement would be challenging and would have less added value given that private recharging infrastructure does not face the same financing challenges as public recharging infrastructure.

How are conventional biofuels treated?

A GHG-based approach might in principle incentivise conventional biofuels given their relatively lower costs per unit of GHG saved. In order to counter this effect, the proposal aims to stick as much as possible to the political agreement achieved on conventional biofuels during the RED II negotiations. This agreement rests on three pillars.

- A Member State specific limit to the contribution of all conventional biofuels based on the share of such fuels in 2020 (with a maximum of 7% of transport energy consumption)
- A gradual phase-out of the contribution of high ILUC-risk biofuels (e.g. palm oil)
- An opt-out clause that makes the contribution of conventional biofuels optional. Member States that use less than 7% conventional biofuels are allowed to reduce the RES-T target, accordingly (up to 7% if no conventional biofuels are used).

Both the 7% limit as well as the phase-out are maintained. Given that the RES-T target was abolished, the opt-out clause could not be maintained in its current form but the proposal aims to keep the spirit of the provision. The Member States would be allowed to reduce the GHG emissions reduction target by 0,5 percentage point for each percentage point they remain below the 7% limit (assuming 50% savings). This provision ensures that the promotion of conventional biofuels is driven by national policy considerations rather than the targets set out for renewables in the RED.

Deviating further from the compromise would create another obstacle for the negotiations and could delay the adoption of the package. It would also risk undermining the position of the EU in the ongoing WTO panel launched by Indonesia and Malaysia on biofuels. The opt-out plays an important role in the defence of the EU's position.

EU Refining Forum

The EU Refining Forum – regular gathering of stakeholders from the refining and associated sectors co-organised by the Commission and FuelsEurope - was launched in 2013 and maintained by the previous Commissioner for Energy.

It has met twice a year – in a high-level format with the participation of the Commissioner and in a technical format. It debates energy policy issues, which impact the refining industry as well as security of supply of oil and petroleum products in the EU.

The EU Refining Forum provided room for discussions on planned and future EU regulatory proposals and policy initiatives with the industry, Member States and non-governmental or international organisations. Refining industry, as carbon intensive sector, will be deeply impacted by the transition to a carbon neutral economy, and the forum helps them to understand the challenges they face and involve them in policy preparation.

Although the role of refined products, along with the electrifications of the transport sector, will decrease in the forthcoming decades, refined products have still important role in the petrochemical industry, producing plastics used in our daily life. Circular economy will result in more efficient use of materials, however, production will remain important. Moreover, refining employs more than 100 thousand people in the EU, and a lot more indirectly in the petrochemicals.

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John Cooper was appointed Director General, FuelsEurope and Concawe in April 2015. He started his career in the motor industry working on future powertrains, and after 3 years moved to BP Downstream where he now has 27 years of experience. His previous role was leading BP's compliance strategy for with renewables regulation. He has also had business leadership roles in aviation fuels and lubricants, transport energy policy, and fuels technology, in the UK and USA, and has represented the UK fuels industry at the UK Automotive Council Technology Group. He holds a BA in Engineering from Cambridge University and Chairs the Board of Industrial Advisors at Cambridge University Engineering Department.