Transport is responsible for 27% of total greenhouse gas emissions in the EU and several pieces of legislation have failed to bring about major changes. The EU executive has already admitted that by 2030, oil will still drive Europe’s cars.

The European Commission is now re-visiting the Renewable Energy Directive (RED II) as part of the EU Green Deal and electrification is seen as the main way to decarbonise the EU transport sector.

However, in the medium-term critics suggest that EU policymakers should focus on realistic ways to reduce the use of oil.

In this special report, EURACTIV will analyse the multidimensional role of first-generation biofuels, the prospect of electric cars as well as the future of multipliers in achieving transport goals.
EU’s dismissal of crop-based biofuels will impede transport decarbonisation: industry

EU farmers chief: Commission is ‘ultra-orthodox’ on biofuels’ sustainability

Ethanol boss: electric vehicles are not the future, but part of it

Commission admits fossil fuel share ‘likely’ higher in transport without multipliers

Will RED III fuel a revolution for renewable energy in road transport?
EU’s dismissal of crop-based biofuels will impede transport decarbonisation: industry

By Sean Goulding Carroll | EURACTIV.com

The EU’s decision to cap the share of crop-based biofuels in the bloc’s energy mix risks hampering efforts to decarbonise the transport sector, industry has warned ahead of the revision of the renewable energy directive.

Environmentalists, on the contrary, say the EU executive is not going far enough in stemming the use of biofuels, arguing that fuels from virgin crops cannot be sustainable.

The updated renewable energy directive proposal, due to be presented on 14 July as part of a broader package of climate legislation, upholds a limit on the use of so-called first-generation biofuels made from food crops.

A 2015 update of the directive placed a 7% limit on how much crop-based biofuel can be used in the transport sector, and counted towards the renewable energy goals of EU member states.

“The contribution of biofuels from food and feed crops for decarbonisation is limited due to their impact on indirect land use change and their contribution should be minimised,” states a leaked proposal, seen by EURACTIV.

Indirect land use change (ILUC) refers to the designation of land for biofuel production that would otherwise be reserved for agricultural use. Environmentalists say this could lead to areas such as forests and wetlands being converted for agriculture, releasing large amounts of carbon and cancelling out emissions savings made in industry.

The draft proposal sets a target of sourcing 38-40% of energy from renewables by 2030, with the renewables target for transport rising from 15% to 26%.

INDUSTRY CALLS FOR BIOFUELS TO BE “UNLEASHED”

Emmanuel Desplechin, Secretary General of ePURE, the European renewable ethanol association, welcomed the higher targets for renewables in transport, but criticised the EU executive’s dismissal of first-
generation biofuels.

"Unfortunately, the Commission has recently shown it still seems inclined to seek to minimise the contribution of crop-based biofuels from the road transport energy mix – even though such biofuels have been the main contributor to displacing fossil fuel and are essential to meeting 2030 greenhouse gas emissions reduction targets," Desplechin said in emailed comments.

"Without liquid and gaseous biofuels, 99.97% of EU road transport energy would be fossil," he added.

Transport, which currently accounts for around 27% of EU emissions, is the only sector that has seen emissions increase in recent years, due in part to its high reliance on fossil fuels. Despite efforts to decarbonise the sector, a 2019 study found renewables made up less than 10% of transport fuel.

The European Biodiesel Board (EBB), an industry group representing biodiesel producers, warned the limit on crop-based biofuels will harm efforts to cut emissions from heavy vehicles, such as vans, buses, and trucks.

"Today, crop-based biofuels such as biodiesel are the main contributor to transport decarbonisation, have a positive impact on protein production and contribute to the circular economy. Therefore, the existing cap on sustainable crop-based biofuels should also be reassessed upwards to unleash their full potential," EBB Secretary General Xavier Noyon told EURACTIV.

Noyon cautioned that the incorporation of renewable energy into road transport should not be "artificially inflated by excessive multipliers".

Multipliers act as an incentive to use certain energy sources by allowing them to be counted at a higher value against EU targets. For example, waste-based biofuels, such as used cooking oil, have a multiplier of two, meaning they can be double counted towards targets.

The crop-based biofuel industry is a frequent critic of these multipliers, arguing that they allow EU countries to give the impression that they are using more renewables than is the case.

The proposal also increases the sub-target for ‘advanced biofuels’ – made from non-food sources such as forestry or agricultural waste – from 3.5% to 5.5%.

The increased mandate was welcomed by Gloria Gaupmann, chair of the Advanced Biofuel Coalition, who said it was key to driving investment in advanced biofuel production capacity.

Several EU countries have yet to fully incorporate the 2019 renewable energy directive update into law, leading some in the industry to worry that the frequent revision of standards will harm investment levels.

"This focus will help companies to continue investing during the regulatory uncertainty inevitable to any policy revision," said Gaupmann.

GREEN ACTIVISTS CRITICISE “BIOFUELS MESS”

But environmentalists say moves to limit crop-based biofuels do not go far enough.

Alex Mason, senior policy officer at WWF’s European Policy Office, called the European Commission’s analysis of the draft renewable energy directive update “confused and unscientific,” and said it goes against the advice of its own inhouse scientific body, the Joint Research Centre.

"[Dedicated biofuel and energy crops] typically increase emissions compared to fossil fuels but the Commission projects big increases in their use and isn't even considering new restrictions – on the basis that this isn't something that has been the subject of public debate," he told EURACTIV via email.

Clean mobility NGO Transport & Environment criticised the EU executive for setting higher renewable targets for transport “without fixing the biofuels mess”.

"Instead of just limiting crop-based biofuels, it should phase them out of the transport target in 2030 and follow the several EU countries which are excluding palm oil and soy biofuels much earlier," Laura Buffet, energy director at T&E, told EURACTIV in emailed comments.

Buffet said that while advanced biofuels can play a role in decarbonising transport, the Commission’s decision to raise the advanced biofuels target could have unintended consequences.

"Going for a higher target could drive unsustainable practices and divert some feedstocks from their existing uses in other sectors, going against the EU's principles on waste and circular economy," she added.
The European Commission’s insistence on capping conventional biofuels is “ultra-orthodox” as it deprives farmers of a potential market outside the Common Agricultural Policy (CAP) while simultaneously hindering agriculture’s environmental potential, the head of EU farmers’ association told EURACTIV in an interview.

“The Commission is taking a very ultra-orthodox approach to the sustainability criteria,” Pekka Pesonen, secretary-general of the EU farmers and cooperatives association (COPA-COGECA) said.

The EU executive is currently revisiting the Renewable Energy Directive (RED II) as part of the EU Green Deal to decarbonise the EU transport sector among others.

Although all stakeholders admit that the future of mobility lies in electric cars, the EU has admitted that by 2030, Europe’s cars will still drive mostly on oil.

The thorny issue is how Europe will be able to decarbonise the sector by 2030 in a realistic and sustainable manner, considering that vehicles with internal combustion engines will still be prevalent on EU roads.

Critics suggest that although the executive acknowledges that electrification will not come before 2030, it lacks a credible strategy to decarbonise transport by 2030.

Crop-based biofuels, like biodiesel and bioethanol, are seen by many as an alternative but the Commission seems to insist on a 7% cap, citing sustainability reasons, such as indirect...
land use change (ILUC).

“If we stick to the 7% cap, we lose a potential market outside the CAP. And that’s why we encourage European institutions to revise it upwards, we are not going to dominate the market, but the reality is that we need the conventional biofuel sector in a sustainable manner. And we need advanced biofuels on top of each other,” Pesonen said.

Pesonen added that these artificial limitations do not respect the “real world” and result in creating a bottleneck for the sector to utilise its full potential.

“It’s a valuable addition to crop rotation, we can actually reduce the use of mineral fertilisers to a certain extent, and it actually provides a valuable addition to the agricultural activity,” he said.

“In the forest side, we have a very good track record in increasing our forest cover and also carbon stock. And in fact, we have heavier timber in our forests, thanks to the management practices,” he added.

Regarding forests, EURACTIV was informed that the Confederation of European Forest Owners and COPA-COGECA have sent a letter to Commission Vice-President Frans Timmermans warning that the ongoing debate over RED II revision and forest biomass does not reflect the success stories on the ground.

Yet, Pesonen said such a market could potentially generate some additional income for farmers: “Because economics in agriculture is not in the best of conditions at the moment.”

**FOOD VERSUS FUEL**

Environmental NGOs have long argued that relying on crop-based biofuels leads to a hike in food prices, considering that crops are being used to fill cars’ tanks rather than to feed people.

NGO Transport and Environment in 2017 published a review of several scientific studies suggesting that biofuels increase food prices.

On the other hand, the European Commission’s 2020 Renewable Energy Progress Report says that in recent years, no correlation has been observed between food prices and biofuel demand.

“Any impact on food prices is small compared to other dynamics in the global food market. Most member states did not observe any impacts on prices due to increased bioenergy demand within their countries,” the report reads.

Commenting on the food versus fuel debate, Pesonen said not only the food prices will not increase, but the food sector stands to benefit.

“We have actually brought in volumes of energy-rich oil component that is mainly used by the food industry in other forms like foodstuffs processing,” he said, referring to the supply oils, biodiesel, raw material and plant oils.

**NOT A GOOD GOVERNANCE STORY**

The current RED II legislation process has not been considered a good governance story.

Its impact assessment was rejected twice by the Regulatory Scrutiny Board (RSB), an independent body within the Commission that advises the College of Commissioners.

The Commission never went back to RSB for a third assessment as it was not obliged to and instead moved on with the RED II legislation.

But the first impact assessment of RED III was also recently rejected by the RSB.
Looking at electric vehicles as the only option for the decarbonisation of Europe’s transport sector is wrong and we should take into account all available sustainable solutions, Valérie Corre from the European Renewable Ethanol Association (ePURE) told EURACTIV in an interview.

“The electric vehicle is not the future, it’s part of the future, just like bioethanol, hydrogen,” said Corre, who is ePURE’s vice-president and also director of regulatory affairs Alcohol/Ethanol EU for Tereos.

“We need to diversify, to avoid past mistakes by relying on just one solution,” she said, adding that the more Europe diversifies, the less dependent it will be.

The European Commission is re-visiting the Renewable Energy Directive (RED II) as part of the EU Green Deal and electrification is seen as the main way to decarbonise the EU transport sector.

However, in the medium-term, critics suggest that EU policymakers should focus on realistic ways to reduce the use of oil, such as conventional and advanced biofuels.

ELECTRIC VEHICLES ARE NOT ZERO EMISSION CARS

Corre went on to say that diversification is consistent with the principle of technology neutrality, but in order to achieve this technology neutrality, car emissions must be measured on a fair basis.

“Today, we are only measuring car emissions at the tailpipe, basically favouring electric vehicles, but electric vehicles are not zero emission cars if you take all the emissions, including the upstream emissions from electricity production,” she said.

According to Corre, if Europe wants to make good use of this principle of technology neutrality and use every alternative to achieve its very ambitious decarbonisation target, it needs to count properly CO2 emissions from cars.

The EU has admitted that by 2030,
Europe’s cars will still drive mostly on oil. Corre said electric cars would eventually develop but until then, alternatives should be considered.

“90% of the cars in 2030 will be combustion engine vehicles. Electric cars will develop, but at least by 2030, and probably beyond that, we need to decarbonise cars on the market. And we do that by using ethanol, that’s one option.”

The ethanol boss also referred to the high cost of current electric cars, which does not make them readily affordable to everyone. “We need to make sure that the decarbonisation of transport doesn’t leave anyone behind,” she said.

THE ‘ILUC’ QUESTION AND INVESTMENTS

Crop-based biofuels, like biodiesel and bioethanol, are seen by many as an alternative but the Commission seems to insist on a 7% cap introduced in 2015, citing sustainability reasons, such as indirect land use change (ILUC).

ILUC refers to the designation of land for biofuel production that would otherwise be reserved for agricultural use. Environmentalists say this could lead to areas such as forests and wetlands being converted for agriculture, releasing large amounts of carbon and cancelling out emissions savings made in industry.

For Corre, both Globiom study and the European Commission’s 2019 delegated regulation have sorted out the issue:

“These two documents clearly made a distinction between good and bad biofuels and bioethanol produced in Europe clearly falls in the category of the good biofuels. The risk of creating ILUC in Europe is very low, and sometimes even null.”

“Why would the EU – when we know that we have potential domestic production of good biofuels – not make good use of it?” she said, adding that all the back and forth in biofuels legislation in Europe is “hindering innovation” and investment.

UCO PART OF THE MIX

Asked about the sustainability of imported Used Cooking Oil (UCO) and the ongoing debate over its link to palm oil, Corre backed very stringent sustainability criteria to make sure that these UCOs are sustainable.

“We need to have every option, especially the locally produced ones […] we don’t have anything against UCO in particular, it’s one product for the mix.”
Commission admits fossil fuel share ‘likely’ higher in transport without multipliers

By Sarantis Michalopoulos | EURACTIV.com

Without multipliers – a statistical methodology used to encourage the uptake of renewable energy in transport, primarily in electric cars – the share of fossil fuels in transport is “likely” to be higher than the official figures published by Eurostat, a European Commission source told EURACTIV.

The issue of multipliers has taken centre stage in the debate over greener transport in light of the upcoming revision of the RED II legislation designed to help meet Europe’s climate goals. A number of energy stakeholders have opposed multipliers saying they don’t represent the reality on the ground.

Multipliers are used to incentivise member states to use renewable energies to speed up transport’s decarbonisation and are applied primarily to electric cars: A multiplier of five means that for every two electric cars, ten will be counted in the final analysis.

Citing Eurostat, the Commission says renewables in the transport sector represented 8.9% in 2019.

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“Eurostat applies the calculation rules set out in the Renewable Energy Directive (RED) to determine the share of renewable energy in transport, which applies multipliers for some types of renewable energy. The figure of 8.9% represents the ‘real’ share according to this methodology,” said the Commission source, who asked not to be named.

“This being said, it is acknowledged that applying methodologies that do not use such multipliers, the estimated share of fossil fuels is likely to be higher,” the source added.

Multipliers apply to other renewables such as waste-based biofuels, like used cooking oil (which is double-counted).

However, this methodology has triggered the strong reaction of several energy stakeholders who said an artificial reality has been created which in practice favours fossil fuels.

THE DOOR IS OPEN FOR IMPROVEMENTS

EURACTIV reported in April that without multipliers, according to calculations, the real percentage of renewables in the road transport sector is a meagre 6.3%.

At a workshop earlier this month, around 43% of energy stakeholders requested a 24% target for renewables in the transport sector but without multipliers.

Asked if the EU executive considers removing multipliers in RED III, the Commission source replied: “The Commission is preparing a review of RED II. This includes the assessment of improvements of the transport-related provisions of the Directive, including on the use of multipliers.”

Contacted by EURACTIV, the European Biodiesel Board (EBB) Secretary-General Xavier Noyon said that while RED II multipliers are key to incentivise the usage of more expensive raw materials such as wastes and residues, disproportionate multipliers should be eliminated.

“Unreasonably high multipliers, above X2, amount to reducing the renewable energy target and artificially inflate the GHG emissions savings,” he said.

Similarly, Valérie Corre from the European Renewable Ethanol Association (ePURE) told EURACTIV in an interview that innovative biofuels need to be supported but not all of them.

“[A multiplier] is hiding the fact that the transport sector still depends very much on oil and fossil fuels,” she said, adding that a specific target for those biofuels should be set with a penalty if the target is not achieved.

EU farmers do not see multipliers in a positive light either.

The secretary-general of the EU farmers’ association Copa-Cogeca, Pekka Pesonen, told EURACTIV in 2018 that using multipliers for electricity, for instance, pushes aside the fact that a big part of electricity is actually produced by unsustainable methods.

“We are transparent, and we fulfil the minimum requirements for the arable crops that we produce,” he said, referring to crop-based biofuels.

EURACTIV also contacted the European Automobile Manufacturers’ Association (ACEA) asking how multipliers have affected electric cars, but no response has been provided by the time of the publication.
As part of its ambitious Green Deal roadmap, the European Commission is set to unveil a new package of energy and climate legislation on Bastille Day, 14 July – potentially kicking off a revolution in EU road transport policy.

Emmanuel Desplechin is the secretary-general of ePURE.

Among the biggest initiatives is a review of the Renewable Energy Directive, RED III. When it comes to sustainable biofuels, this will be the Commission’s chance to fix what it did not quite get right the first and second times around on policies intended to encourage the uptake of renewable energy in transport.

The early signals are – as is so often the case with EU policymakers on the subject of biofuels – mixed. The Commission seems ready to dramatically boost its 2030 target for renewables in transport from what had been 14% to 26% — a positive step that will help build momentum on the road to carbon-neutrality.

But at the same time the Commission appears determined to minimise the use of crop-based biofuels – even though such biofuels have been the main contributor to displacing fossil fuel from road transport; even though they are essential to meeting the new, higher 2030 targets; and even though they can make a longer-term contribution to 2050 goals.

The Commission’s 2030 overall goal is to reduce EU emissions by 55%. To achieve it, the Commission’s so-called ‘Fit for 55’ package will include major revisions of energy, transport and climate legislation.

Several of these new proposals are likely to have a major impact on the EU biofuels sector – besides RED III there is the CO2 standards for cars.

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Regulation, the revamp of the Effort Sharing Regulation and the Emissions Trading System with the possible inclusion of transport, and changes to the Energy Taxation Directive to de-incentivise fossil fuels.

**WILL FIT FOR 55 BE FIT FOR PURPOSE?**

There’s a lot at stake. What mix of technologies will be deployed to reduce transport emissions, considering the current and future makeup of the EU vehicle fleet? What role will renewable and low-carbon liquid fuels play in the transport energy mix now in the coming decades? What will be the economic and societal impact of the EU’s climate proposals?

Europe’s renewable ethanol sector already contributes significantly to transport decarbonisation, helping displace the use of fossil fuel in road transport and reducing greenhouse-gas emissions from petrol cars. Without liquid and gaseous biofuels 99.97% of the EU road transport energy would be fossil. How these new proposals play out will determine whether their contribution continues or is hindered in a way that makes transport decarbonisation even more difficult to achieve than it has been already.

Let’s look at how some of the key Fit for 55 components could be refined in order to boost the role of sustainable renewable low-carbon liquid fuels in the Green Deal.

**Renewable Energy Directive (RED III):** The revision of the RED will be the third such overhaul since the legislation was enacted in 2009.

At each milestone, the Commission relies on outdated and irrelevant arguments to minimise the contribution of crop-based biofuels from the road transport energy mix. For example, the Commission’s oft-stated “food vs fuel” concerns have long been debunked and the thorny issue of indirect land use change emissions has been dealt with through the progressive phase out of palm oil.

For RED III to succeed it needs to: focus on higher targets for renewable energy; unleash the potential of crop-based ethanol now that sustainability issues have been settled (including by the Commission itself, which regularly confirms it in its annual Renewable Energy Progress Report); and encourage the wider deployment of advanced biofuels.

**Effort Sharing Regulation:** The ESR has not been perfect, but it is one of the few pieces of legislations where Member States have binding targets for emissions reduction, instead of leaving it all to the market. Instead of doing away with it, the EU needs to redouble its efforts by raising ambitions for decarbonisation of sectors that have proven difficult, such as transport.

**Emissions Trading System:** A successful decarbonisation policy in transport should ensure coherence between car manufacturers, fuel suppliers and retailers. Including road transport in the existing ETS would seriously disrupt the existing growing synergy between these stakeholders, hamper efforts to reduce emissions from transport, increase fuel prices and create social discontent. A parallel system for transport and buildings could allow for setting the right price of carbon in transport but should not replace the Effort Sharing binding ambitions.

**Energy Taxation Directive:** The EU needs to bring energy taxation in line with its climate goals by incentivising renewable and low-carbon fuels. That means moving away from volume-based taxation to carbon intensity. Such a system would not harm motorists but would make a business case for investments in renewable low-carbon fuels.

**Alternative Fuels Infrastructure Directive:** The EU needs to keep sustainable biofuels in the scope of the AFID. These fuels are mature, cost-effective technologies that make a big impact on decarbonising transport; the EU should do a better job of mobilising solutions that work today in addition to supporting the market development for new technologies and related infrastructure, including higher biofuels blends.

**CO2 standards for cars and vans:** Just like there’s no single type of automobile, there’s no single miracle technology for reducing automobile emissions. And we need to judge the emissions of these technologies fairly, moving away from a Tank-to-Wheel approach and towards Well-To-Wheel, which makes the distinction between fossil and biogenic CO2. In the meantime (i.e. by 2030), an incentive for the uptake of renewable/low-carbon energy should be introduced.

It’s clear the EU needs an energy revolution in order to achieve its Green Deal ambitions. We’ll find out soon whether it is one that really benefits all Europeans or just a select few.