

Where are European biofuels heading?

Agriculture special report

February 17, 2020

S&P Global Platts Analytics



- European biofuels demand is set to reach 21 million mt in 2020 (+6.5% on year)
- Biomass based diesel to take 76% share, overall biofuels to displace 18.8 million mt of fossil fuel equivalent
- Green Deal's climate neutral by 2050 may require a revision of RED II

The EU's Green Deal has been one of the main topics for the renewable industry since beginning of this year. The Green Deal envisages Europe becoming the first climate neutral continent by 2050. Under this program, announced by the European Commission (EC) in December 2019, the EU's transition to a zero-carbon economy involves raising a 2030 sub-target of a 40% reduction in greenhouse gases (GHGs) to a range of 50%-55% which may require revisions to directives such as the Renewable Energy Directive II (RED II).

2020 targets under RED and Fuel Quality Directive (FQD)

But first things first, this year is critical for the EU with the 2020 Climate Energy Package coming to an end. Under this program, there are two directives setting targets in the transport sector: the RED which has set a volumetric target of 10% energy to be produced from renewable sources by 2020, and the Fuel Quality Directive, which sets a GHG reduction target of 6%.

The main European biofuels market, Germany adopted a GHG savings mandate of 6% in 2020 under the FQD, up from 4% last year. S&P Global Platts Analytics expects physical biofuels demand in 2020 to soar to 1.325 million mt of ethanol, up 13% year-on-year and to 2.480 million mt of biomass based diesel (BBD), up 7%. Germany will want to maximize the volume of the biofuels as high GHG-savings material is limited, but blenders will need to continue to focus on purchasing GHG-efficient biofuels, such as used cooking oil methyl ester with over 90% GHG savings. Not meeting the mandate is expensive, as obligated parties must pay a fee of Eur0.47/kg of CO₂ equivalent.

MANDATE INCREASE IN 5 MAIN EU MARKETS

	2019	2020	Mandate scheme
France			
	7.9	8.0	Biodiesel (%energy)
	7.9	8.2	Ethanol (%energy)
	1.6	1.6	Adv. Ethanol (%energy)
	1	1	Adv. Biodiesel (%energy)
Germany			
	4.0 ghg	6.0 ghg	GHG saving
		0.05	Adv. Biofuels (%energy)
Italy			
	8	9	Biofuels (%energy)
	0.8	0.8	Adv. Biofuels (%energy)
Spain			
	7.0	8.5	Biofuels (%energy)
UK			
	7.25	9.75	Biofuels (%volume)
	0.001	0.001	Adv. Biofuels (%volume)
	4.0 ghg	6.0 ghg	GHG saving

However, there could be a downside to our demand number should Germany purchase only high GHG savings material. The larger the share of high GHG savings feedstock, the lower the volume required in the transportation fuel mix.

France, Europe's second largest biofuels market, has set a mandate of 8% (from 7.9%) for BBD as well as an 8.2% mandate (from 7.9%) for ethanol in 2020. Further, France wants to push for advanced biofuels and has set minimum targets of 1.6% and 1% for advanced ethanol and BBD, respectively.

Ethanol has had a major boost in France from conversion devices allowing vehicles to run on gasoline blended with up to 85% ethanol (E85). According to data published by the National Union of Agricultural Alcohol Producers (SNPAA), sales of E85 in France totaled 240,000 mt January-November 2019 almost double the 128,600 mt consumed over the same period in 2018. This trend is expected to continue this year. France also sells E10 at the pump, consumption of which increased 18.5% on the year to 3.9 million mt in January-November, taking its share in total gasoline pool to 47.2%. Platts Analytics estimates ethanol consumption in France to reach 962,580 mt in 2020, up 3.2% from last year.

Meanwhile Spain is aiming for an 8.5% minimum target for biofuels in 2020, not differentiating between ethanol and BBD. While in many countries, which have a combined biofuels mandate, BBD demand in 2019 surged due to inexpensive FAME 0 prices and high T2 ethanol prices, the introduction of double-counting mechanism in the same year resulted to a big drop in biodiesel consumption in 2019. BBD sales in 2019 were 1.283 million mt, down 25.6% on year, while ethanol demand increased 6.9% on year to 257,330 mt, according to data from strategic oil reserves corporation CORES. For 2020 S&P Global Platts Analytics estimates Spanish BBD demand at 1.365 million mt and ethanol at 292,000mt.

Overall European biofuels demand is set to hit 21 million mt in 2020 with BBD taking a 76% share, displacing 15.2 million mt of fossil fuel equivalent and ethanol 3.6 million mt. We see an average blending rate of biofuels at 6.8% in the total fuel pool. While this looks low in light of EU's 2020 target of 10% energy in the transport sector, it is important to note that this volume is single counted and does not take into account multipliers of biofuels and other renewable sources which can be counted from 2x-5x the energy content towards the EU objective.

On the supply front, S&P Global Platts Analytics estimates European BBD production to increase 8.7% to 15.357 million mt, while ethanol production will increase 5.5% to 4.617 million mt. European ethanol plants are likely to continue to run at high rates because of attractive margins. The Ensus plant in the UK, which has a capacity of 315,000 mt a year, is expected to continue operations and to raise

its run rate at a later stage. As for Vivergo, the 331,380 mt/year plant could resume operations from the second half, which would add volume to the whole supply picture and factored into our estimates.

With UK having left the EU, it enters a transition period running to the end of 2020 during which the parties will negotiate a trade treaty. This outcome means that there will be no tariffs imposed on the EU this year, as would have been the case if the UK had exited the bloc without a withdrawal agreement. This means that for at least for another year we can expect no change in the trading status quo.

What about extra European import volumes?

S&P Global Platts Analytics does not believe that EU production will be able to keep up with the increase in demand.

This year ethanol imports could grow due to tariff adjustments on imported biofuel. Last May, the E U lifted the anti-dumping duties on US ethanol which had been in place since February 2013. Although this could mean a free flow for US product into Europe, only a few US producers are certified to access the EU market. Additionally, the International Sustainability and Carbon Certification (ISCC)

Europe requires a 50% minimum GHG savings on imports. S&P Global Platts Analytics estimates 425,000 mt of US ethanol to be imported, increasing 11.8% on year.

On the BBD front, Argentinian soybean methyl ester (SME) is capped at 1.2 million mt/year at a minimum price with no duties. However, to avoid an influx of material, no more than 37% of the annual volume can be traded within a single quarter. In 2020 we expect a 4.2% increase in SME imports from Argentina to 990,000 mt.

The restrictions on Argentine SME could benefit US soybeans. The EC in January 2019 authorized US soybeans to be used in EU biofuel production. This decision is valid until July 1, 2021, but can extend if the US can demonstrate that its soybeans meet the sustainability criteria of RED II. However, US originated feedstock also needs to be ISCC certified to be processed into biodiesel in Europe.

As for palm oil, on top of the high indirect land use change risk classification by the EU, the anti-subsidy duties of 8%-18% on Indonesian biodiesel imports were made permanent in December since their initial introduction in August. This will limit the biodiesel coming in from

S&P Global Platts

© 2020 S&P Global Platts, a division of S&P Global Inc. All rights reserved.

The names "S&P Global Platts" and "Platts" and the S&P Global Platts logo are trademarks of S&P Global Inc. Permission for any commercial use of the S&P Global Platts logo must be granted in writing by S&P Global Inc.

You may view or otherwise use the information, prices, indices, assessments and other related information, graphs, tables and images ("Data") in this publication only for your personal use or, if you or your company has a license for the Data from S&P Global Platts and you are an authorized user, for your company's internal business use only. You may not publish, reproduce, extract, distribute, retransmit, resell, create any derivative work from and/or otherwise provide access to the Data or any portion thereof to any person (either within or outside your company, including as part of or via any internal electronic system or intranet), firm or entity, including any subsidiary, parent, or other entity that is affiliated with your company, without S&P Global Platts' prior written consent or as otherwise authorized under license from S&P Global Platts. Any use or distribution of the Data beyond the express uses authorized in this paragraph above is subject to the payment of additional fees to S&P Global Platts.

S&P Global Platts, its affiliates and all of their third-party licensors disclaim any and all warranties, express or implied, including, but not

limited to, any warranties of merchantability or fitness for a particular purpose or use as to the Data, or the results obtained by its use or as to the performance thereof. Data in this publication includes independent and verifiable data collected from actual market participants. Any user of the Data should not rely on any information and/or assessment contained therein in making any investment, trading, risk management or other decision. S&P Global Platts, its affiliates and their third-party licensors do not guarantee the adequacy, accuracy, timeliness and/or completeness of the Data or any component thereof or any communications (whether written, oral, electronic or in other format), and shall not be subject to any damages or liability, including but not limited to any indirect, special, incidental, punitive or consequential damages (including but not limited to, loss of profits, trading losses and loss of goodwill).

Permission is granted for those registered with the Copyright Clearance Center (CCC) to copy material herein for internal reference or personal use only, provided that appropriate payment is made to the CCC, 222 Rosewood Drive, Danvers, MA 01923, phone +1-978-750-8400. Reproduction in any other form, or for any other purpose, is forbidden without the express prior permission of S&P Global Inc. For article reprints contact: The YGS Group, phone +1-717-505-9701 x105 (800-501-9571 from the U.S.).

For all other queries or requests pursuant to this notice, please contact S&P Global Inc. via email at support@platts.com.

For more information, please visit us online or speak to one of our sales specialists:

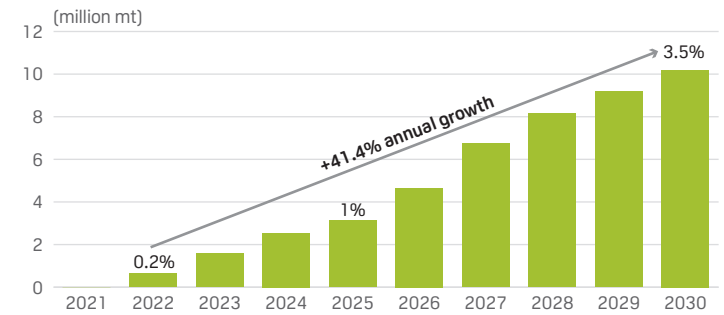
NORTH AMERICA	EMEA	LATIN AMERICA	ASIA-PACIFIC	RUSSIA
+1-800-PLATTS8 (toll-free)	+44-(0)20-7176-6111	+55-11-3818-4100	+65-6530-6430	+7-495-783-4141
+1-212-904-3070 (direct)				

Indonesia this year and likely for the next five years given anti-subsidy duties. For 2020, we see PME imports from Indonesia and Malaysia together dropping 89% on the year to 300,000 mt. However, to offset the dramatic fall in PME imports, Europe will continue to import palm oil and which will be processed into biodiesel domestically.

What happens after 2020?

While RED II will come into effect in 2021, FQD on the other hand, will not be required anymore, as it is not mentioned in the policy framework. However, individual governments are free to adopt a GHG target. With crop-based biofuels to be frozen at 2020 consumption levels, an additional 1% can be added, but cannot exceed the 7% cap. This cap policy is designed to promote advanced biofuels, which under RED II have dedicated targets of 0.2% in 2022, 1% in 2025 and 3.5% in 2030. Europe has tightened up regulations on the use of palm oil. Classified as high ILUC risk last March, the use of palm oil-based fuel will be capped at 2019 levels and will be gradually phased out from 2024 and eliminated by 2030.

ADVANCED BIOFUELS IMPLIED TARGETS



Source: S&P Global Platts Analytics

As for Green Deal, a proposal on an EU “Climate Law” is expected to be released this March which will set forth a legislative framework in view of the 2050 objective. Currently biofuels associations and other parties from the renewable industry are putting forward their interests. In June 2021, the EC may revise versions of the various directives already in place to align them with the new climate objectives, which may also affect RED II.