

World Ethanol & Biofuels Report

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RED II reform: what may change - and what not

The European Union's co-legislators (the European Parliament (EP) and the Council) are starting negotiations on almost all the files that constitute the "Fit-for-55"-package, published last summer.

The pace of getting to the respective positions of the two institutions was quicker than anticipated, and, if negotiations will take place with the same speed, the expectation is that new legislation in several areas will be in place during Q1 2023. Therefore, this is a good moment to take stock of what is on the table on alternative, renewable fuels.

Crop-based biofuels still needed

When the European Commission proposed in July 2021 its preferred revision of the Renewable Energy Directive II (RED II), the framework for RE targets in Europe until 2030, it left provisions on crop-based biofuel use pretty much untouched.

It was not stated publicly, but the Commission considered that the matter had been discussed at length and sufficiently during the RED II negotiations. Opening this chapter once again was seen as a Pandora's box exercise. Moreover, even though the Commission is not a great supporter of crop-based biofuels, it also realizes that without these fuels the targets on transport cannot be achieved.^[1]

The Council holds the same view and does not propose changes to the Commission text.^[2]

The Parliament, however, is divided over the matter. The two Committees in charge – Environment (ENVI) and Energy (ITRE) – hold opposing views. ITRE supports the Commission proposal whereas ENVI wants to set the crop cap at half the 2020 levels and an immediate, entire phase-out of soy and palm, even if these biofuels can demonstrate that they are low-ILUC risk.

The EP will have the final say here, but it is not likely that the views of ENVI will prevail, certainly not at Council level.

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There is one downside for crop-based biofuels. Their use is not allowed for the aviation mandate and has been made rather unattractive for the marine sector.^[3] So, the use of crop-based biofuels will stay limited to road transport only.

Advanced biofuels and the feedstock issue

The Commission wants advanced biofuels, i.e., biofuels made from waste and residues, the so-called Annex IX A feedstock, to have a bigger share in the decarbonization of transport. The target was increased to at least 2.2% in 2030 - this time without multiplier.^[4]

The Council agrees with this target. But it doubled the number to at least 4.4% following member states' (MS) preferences for multiplier instruments.

In the EP, ITRE left the sub-target untouched but proposes a provision: If changes are made to Annex IX A, the sub-target should be changed accordingly.

ENVI however, without changing the sub-target, adopted a provision that feedstock could be removed from Annex IX A, currently not allowed under RED II, which obviously is not a recommended recipe for new investments and investment security.

Moreover, ENVI adds a new sustainability criterion by stipulating that the waste hierarchy and the cascading principle should apply to biofuels, bioliquids and biomass fuel.

According to the waste hierarchy, waste should be prevented, if possible, re-used or recycled either before it is used to produce energy (either heat or fuel).

The cascading principle means that a raw material (e.g. wood) should be used first where it has a higher (economic) value.

However, it is unlikely that sufficient support will be found in the plenary for the ENVI proposal, with the exception of biomass fuel, but the issue of Annex IX A feedstocks could still gain some traction. The Commission will argue that any amendments would be premature as it needs to provide an analysis on this Annex later this year as required by the RED (Article 28.6).

MS, in any case, have no appetite to change anything to the Directive on this matter.

On the Annex IX there is still one important development to report. Recently a Commission Implementing Regulation was published. This among others contains an Annex (#IV) with a list of raw materials which implicitly fell under Annex IX A^[5]. It makes the discussion on feedstock even more obscure.

The new holy grail: e-fuels

The Commission wants to push so-called electrofuels (e-fuels) in all transport modes, especially in aviation and maritime. These e-fuels are becoming a kind of holy grail - like electric vehicles (EV) are for passenger transport.

Even though these novel fuels are not produced in any significant volume and certainly not at affordable prices, expectations are high. According to its own assessment, the Commission believes that it will not be before 2030 that these e-fuels, also known as Renewable Fuels of Non-Biological (RFNBOs), are available in large enough volumes.

In its proposal, the Commission set for 2030 a mandatory (transport) sub-target for MS of at least 2.6%.

The EP goes along with the Commission proposal on this sub-target.

However, the MS felt that this target was too ambitious and lowered it initially to 2.2%. Finally, a compromise was achieved, and the MS agreed to set the target at 5.2% after double counting but deleted the wording 'at least'.

Biofuels in air and water transport

The horizon for RED is 2030. For the proposed legislation the use of renewable energy in the sectors aviation and maritime the time-horizon is set at 2050.^[6] And it is in these two pieces of the legislation where the EP is far more ambitious, or less realistic, than both the Commission and the Council.

For example: the Commission proposes for the year 2050 that at least 63% of all aviation fuel should be sustainable (SAF) of which at least 28% should be a RFNBO.

The Council concurs with that view but not so the EP.

The EP proposes by 2050 sub-targets as high as 85% SAF and that at least 50% of all aviation fuel should be a RFNBO.

Various proposals on SAF targets in % and mln tonnes of oil equivalent (mtoe)*

	Commission and Council				Parliament			
	SAF (% at least)	SAF (Mtoe)	RFNBO (% at least)	RFNBO (Mtoe)	SAF (% at least)	SAF (Mtoe)	RFNBO (% at least)	RFNBO (Mtoe)
2025	2	0.8	0	0	2	0.8	0.04	0.02
2030	5	2.3	0.7	0.3	6	2.3	2	0.9
2035	20	9.5	5	2.4	20	9.5	5	2.4
2040	32	15.4	8	3.9	37	17.9	13	6.3
2045	38	18.5	11	5.4	54	26.4	27	13.2
2050	63	31.3	28	13.9	85	42.2	50	24.8

* is based on the expected consumption of aviation fuel as mentioned in the "Study supporting the impact assessment of the ReFuelEU Aviation initiative, March 2021

<https://op.europa.eu/en/publication-detail/-/publication/46892bd0-0b95-11ec-adb1-01aa75ed71a1/language-en/format-PDF/source-231440814>

We see a similar push for RFNBOs in the EP for the maritime sector, proposed by both the ITRE and ENVI Committees, whereas Commission and Council do not mention RFNBOs at all.

Both Committees, for opinion, also prefer a 100% GHG emission reduction target for 2050 whereas the Commission and Council have set a level of 75%.

The rapporteur in the EP Committee leading on maritime – the TRAN Committee – pretty much endorses the Commission proposal but the position of EP on the maritime file is still unclear. Given the proposal of the Commission and the position of the Council it is likely that neither a RFNBO target will be included in the Maritime Regulation nor that the GHG emission saving target will go beyond 75%.

News

Europe

European Union

ARA biodiesel margins remain in the black

Production margins for FAME in August 2022 rose on the month and remained above zero, F.O. Licht calculations, based on monthly averages for fob ARA spot prices, show.

One tonne of FAME 0 achieved a margin of EUR56 per tonne, against EUR12 in the prior month.

Sales prices for FAME rose, while by-product glycerine became cheaper.

At the same time, plant oil prices went down.

Bearish impacts on plant oil values included a change in Indonesia's export policy with palm oil, news on agricultural product exports from Ukraine, some arrivals of canola imports plus better-than-expected harvest results in Europe.

The weaker euro boosted prices for \$-denominated commodities like FAME, gasoil and palm oil.

Finally, the low Rhine water levels are boosting transport costs.

The RME premium over FAME 0 was at no less than EUR699 per tonne in August. This would translate into excessive RME margins – but only on the paper because of a lack of feedstock. RME prices outside were significantly lower.

Biodiesel blending cost for FAME 0 rose on lower fossil fuel prices. The August premium over gasoil for FAME 0 averaged \$603/EUR591 per tonne, up from \$396/EUR389 in June.

The higher FAME 0 prices mean that FAME 0's discount to fuel ethanol on an energetic basis fell (basis fob ARA).

European Union: Spot Margins for FAME Production in Central Europe

	2022							
Monthly Average Prices in EUR per tonne	January	February	March	April	May	June	July	August
Vegoil Price ex-mill	1,614	1,537	1,944	1,734	1,812	1,618	1,419	1,368
Vegoil Price ex-refinery	1,680	1,601	2,020	1,804	1,885	1,685	1,479	1,539
Vegoil Price DDP	1,699	1,619	2,038	1,822	1,903	1,703	1,497	1,557
Net Material Costs Biodiesel	1,676	1,592	2,007	1,799	1,879	1,641	1,451	1,519
Total Net Production Costs	1,730	1,646	2,061	1,853	1,933	1,695	1,505	1,573
Biodiesel Price Ex-Works	1,727	1,626	1,859	1,808	1,790	1,672	1,517	1,629
Producer's Margin	-3	-20	-202	-45	-143	-23	12	56

Source: Licht Interactive Data

Dry weather hits corn crop and widens grains deficit

The outlook for the 2022/23 grains balance tightened.

The deficit expected by the European Commission rose to 10.9 million tonnes from 9.8 million tonnes in its preceding report from late July. It follows a 7.8 million tonne surplus in 2021/22.

Among others, Brussels cut its projection for the corn harvest result to 59.3 million tonnes from 65.8 million, mainly because of the drought in wide parts of Europe hitting the yield potential of the crop (72.7 million).

This was the second steep cut in a row amid a severe drought. It would be the smallest harvest in seven years. The Commission did not refer to weather conditions but said the reduced outlook mainly reflected lower yield projections for Romania, France, Bulgaria and Hungary.

Its latest outlook was still higher than some market estimates, although traders say showers and cooler temperatures since mid-August may avert further yield losses.

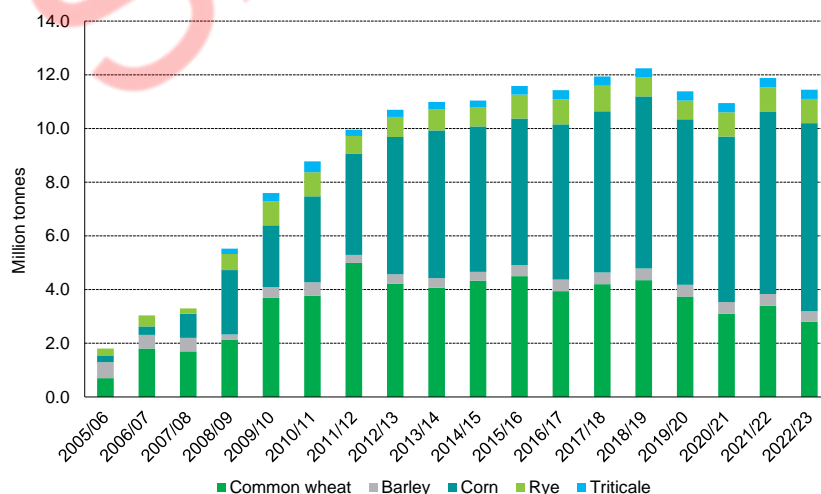
Imports cannot offset the supply-side short fall. The Commission expects corn imports at 20.0 million tonnes, revised up from 16.5 million (16.3 million).

The demand-side was hardly changed from the prior outlook, and includes

- 158.8 million tonnes of grains going into feed (of which 64.7 million of corn and 37.3 million of soft wheat (no changes (2021/22: 160.9 million; 64.6 million and 39.8 million)), and
- 11.6 million into bioethanol/DDG-production (of which 7.0 million of corn and 2.8 million of soft wheat (no changes (2021/22: 11.9 million; 6.8 million and 3.4 million)).

EU – Grains Use for Ethanol Production

EU – Grains Use for Ethanol Production



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Price Statistics

Biofuels					
	05.09.2022 - 09.09.2022	29.08.2022 - 02.09.2022	22.08.2022 - 26.08.2022	15.08.2022 - 19.08.2022	08.08.2022 - 12.08.2022
Biodiesel - Thailand, Biodiesel Reference Price 2)					THB/litre
Prompt		38.25	38.26	37.48	38.07
Ethanol - Brazil, Sao Paulo, exw, \$, anhydrous 5)					\$/m3
Prompt		558.80	568.90	617.00	660.60
Ethanol - Brazil, Sao Paulo, exw, BRL, anhydrous 5)					BRL/m3
Prompt		2877.80	2909.60	3178.80	3378.60
Ethanol - Brazil, Sao Paulo, exw, \$, hydrous 5)					\$/m3
Prompt		449.20	471.90	502.70	548.40
Ethanol - Brazil, Sao Paulo, exw, BRL, hydrous 5)					BRL/m3
Prompt		2313.40	2413.20	2590.20	2804.90
Ethanol - Brazil, Sao Paulo, exw, \$, Non-fuel, hydrous 5)					\$/m3
Prompt		480.00	511.30	550.10	574.20
Ethanol - Brazil, Sao Paulo, exw, BRL, Non-fuel, hydrous 5)					BRL/m3
Prompt		2471.80	2614.80	2834.20	2936.60
Ethanol - Brazil, BM&F, fuel, hydrous 5)					BRL/m3
Aug 2022		2500.00	2620.00	2705.00	2775.00
Sep 2022		2435.00	2535.00	2695.00	2755.00
Oct 2022		2495.00	2575.00	2715.00	2792.50
Nov 2022		2547.50	2625.00	2805.00	2875.00
Dec 2022		2600.00	2665.00	2830.00	2925.00
Jan 2023		2765.00	2830.00	3050.00	3150.00
Feb 2023		2790.00	2830.00	3050.00	3150.00
Mar 2023		2790.00	2850.00	3050.00	3150.00
Apr 2023		3195.00	3195.00	3195.00	3195.00
May 2023		3118.50	3118.50	3118.50	3118.50
Jun 2023		3118.50	3118.50	3118.50	3118.50
Ethanol - EU, NWE, T1, cif 5)					\$/m3
Prompt		895.00 -915.00	895.00 -915.00	885.00 -905.00	885.00 -905.00
Ethanol - EU, NWE, T2, fob 5)					EUR/m3
Prompt		1065.00 -1085.00	1035.00 -1045.00	1015.00 -1025.00	1025.00 -1035.00
Ethanol - USA, Midwest Average, Rack Price 4)					US cents/gallon
Prompt		287.22	283.83	278.27	270.79
Ethanol - USA, Ethanol Prices, spot 1)					\$/gallon
NYH Prompt		2.71 -2.73	2.64 -2.71	2.66 -2.68	2.47 -2.50
US Gulf Prompt		2.76 -2.78	2.77 -2.80	2.64 -2.66	2.54 -2.55
Chicago Prompt		2.66 -2.67	2.64 -2.65	2.55 -2.56	2.42 -2.43
West Coast Prompt		3.02 -3.13	2.88 -3.06	2.84 -3.02	2.74 -2.90
Ethanol - China, Jilin, Non-fuel, hydrous (incl. excise/VAT) 3)					CNY/tonne
Prompt		6600.00 -6650.00	6650.00 -6850.00	6650.00 -6900.00	6900.00 -7200.00
Ethanol - China, Jilin, (incl. excise/VAT) 3)					CNY/tonne
Prompt		7600.00 -7900.00	7600.00 -7900.00	7600.00 -7900.00	7700.00 -7950.00
Ethanol - Thailand, Fuel Ethanol Reference Price 2)					THB/litre
Prompt		28.29	28.29	28.29	28.29

	05.09.2022 - 09.09.2022	29.08.2022 - 02.09.2022	22.08.2022 - 26.08.2022	15.08.2022 - 19.08.2022	08.08.2022 - 12.08.2022
Ethanol Consumer Prices - Brazil, Consumer price 5)					BRL/m3
Prompt		3570.00	3680.00	3840.00	3860.00
Ethanol Blends - France, E-85 3)					EUR/m3
Prompt		816.00	809.25	794.75	815.71
Ethanol Blends - Sweden, E-85 3)					SEK/litre
Prompt		18.07	17.37	17.27	16.27
Ethanol Blends - Australia (QSL), E-10 2)					AUD/m3
Prompt		1630.40	1587.80	1578.40	1604.00
Ethanol Blends - Philippines, E-10 4)					PHP/litre
Prompt		71.25 -74.45	69.85 -73.05	69.15 -72.35	70.68 -72.45
Ethanol Blends - Thailand, E-10 2)					THB/litre
Prompt		37.95	37.15	37.05	37.45

Diesel

	05.09.2022 - 09.09.2022	29.08.2022 - 02.09.2022	22.08.2022 - 26.08.2022	15.08.2022 - 19.08.2022	08.08.2022 - 12.08.2022
Diesel Consumer Prices - France 4)					EUR/m3
Prompt		1959.00	1962.00	1820.00	1841.00
Diesel Consumer Prices - Germany 4)					EUR/m3
Prompt		2087.00	2013.00	1933.00	1887.00
Diesel Consumer Prices - Spain 4)					EUR/m3
Prompt		1931.00	1875.00	1811.00	1810.00
Diesel Consumer Prices - Sweden 4)					EUR/m3
Prompt		2291.00	2435.00	2293.00	2223.00
Diesel Consumer Prices - United Kingdom 4)					EUR/m3
Prompt		2116.00	2164.00	2191.00	2236.00
Diesel Consumer Prices - Australia 2)					AUD/m3
Prompt		2024.90	1857.90	1800.50	1848.70
Diesel Consumer Prices - Brazil 5)					BRL/m3
Prompt		6780.00	6830.00	6890.00	7060.00
Diesel Consumer Prices - USA 1)					US cents/gallon
Prompt		511.50	490.90	491.10	499.30

Gasoline and additives

	05.09.2022 - 09.09.2022	29.08.2022 - 02.09.2022	22.08.2022 - 26.08.2022	15.08.2022 - 19.08.2022	08.08.2022 - 12.08.2022
NW Europe, Euro-bob Oxy (Argus) 5)					\$/tonne
Aug 2022		935.24	935.02	941.67	939.07
Sep 2022		926.40	908.46	920.24	915.12
Oct 2022		875.99	856.41	862.58	852.43
Nov 2022		854.75	829.30	832.65	821.70
Dec 2022		839.66	811.10	813.63	803.79
Apr 2023		853.71	841.83	836.34	
May 2023		848.53	838.86	833.25	
Jun 2023		842.26	834.18	828.34	

Statistics

Germany

Germany: Ethanol Balance (1000 cubic metres)

	Jan-Dec 2023	Jan-Dec 2022	Jan-Dec 2021	Jan-Dec 2020	Jan-Dec 2019
Opening stocks	227.2*	217.2*	335.9*	325.6*	210.8*
Output	1165.0*	1140.0*	1240.0*	1100.0*	1028.0*
Fuel ethanol	750.0*	720.0*	800.0*	630.0*	688.0*
Non-fuel ethanol	415.0*	420.0*	440.0*	470.0*	340.0*
Imports	1150.0*	1150.0*	1032.5	1362.1	1485.1
Consumption	1930.0*	1940.0*	1975.5*	1964.7*	1941.4*
Industrial ethanol	350.0*	360.0*	370.0*	410.0*	330.0*
Potable ethanol	160.0*	160.0*	160.0*	165.0*	165.0*
Fuel ethanol	1420.0*	1420.0*	1452.8*	1389.7*	1446.4*
Exports	380.0*	340.0*	415.7	487.1	456.8
Ending stocks	232.2*	227.2*	217.2*	335.9*	325.6*

Germany: Fuel Ethanol Consumption (cubic metres)

	2022	2021	2020	2019	2018
Jan.	119576*	95580*	128832*	115063*	131368*
Feb.	106346*	85722*	120781*	109768*	110696*
Mar.	123691*	102668*	107387*	103628*	125692*
Apr.	142194*	114922*	78093*	113228*	123410*
May	119095*	131964*	112954*	131570*	132480*
Jun.	115068*	118295*	118576*	127195*	130394*
Jul.	..	124165*	141098*	126284*	132803*
Aug.	..	151084*	132703*	119449*	138890*
Sep.	..	131722*	116634*	122542*	117264*
Oct.	..	151907*	127458*	128414*	121444*
Nov.	..	124918*	109138*	127419*	118608*
Dec.	..	119854*	96005*	121877*	119941*
Jan.-Dec.	..	1452801*	1389659*	1446437*	1502990*
Jan.-Jun.	725970*	649151*	666623*	700452*	754040*

Germany: FAME/Renewable Diesel Consumption (Tonnes)

	2022	2021	2020	2019	2018
Jan.	185357	183053	240406	192955	182810
Feb.	205259	160604	226936	148525	176124
Mar.	228553	186421	243181	170042	203280
Apr.	213299	211886	207815	180567	195999
May	205435	204727	259154	185776	204937
Jun.	195001	213579	244656	191112	197075

	2022	2021	2020	2019	2018
Jul.	..	232448	299597	218476	225156
Aug.	..	253027	297464	211866	212194
Sep.	..	254546	296286	201832	190389
Oct.	..	248835	271496	198192	184905
Nov.	..	198319	229694	200637	173292
Dec.	..	186543	209092	201440	177167
Jan.-Dec.	..	2533988	3025777	2301420	2323328
Jan.-Jun.	1232904	1160270	1422148	1068977	1160225

Italy

Italy: Fuel Ethanol Consumption (cubic metres)

	2022	2021	2020	2019	2018
Jan.	466	1044	1342	1679	612
Feb.	1855	436	2624	1143	1902
Mar.	1176	979	67	1469	1693
Apr.	2373	985	1626	1735	1394
May	2717	794	763	2519	4331
Jun.	704	989	1423	3698	3537
Jul.	..	2987	3705	3504	1769
Aug.	..	1599	3084	3197	2251
Sep.	..	2726	1020	3454	1231
Oct.	..	892	1780	3144	3296
Nov.	..	1706	597	1370	2104
Dec.	..	626	54	948	1652
Jan.-Dec.	..	15763	18085	27860	25772
Jan.-Jun.	9291	5227	7845	12243	13469

Italy: Renewable Diesel Consumption (Tonnes)

	2022	2021	2020	2019	2018
Jan.	32066	54379	57688	26365	19892
Feb.	21299	57739	80207	23195	14404
Mar.	39787	46853	67783	32994	25628
Apr.	49637	51559	64652	12152	21070
May	43829	54809	52397	672	22269
Jun.	82299	44806	71831	8540	23927
Jul.	..	8155	73142	21082	23072
Aug.	..	72039	49718	18420	19153
Sep.	..	79187	33422	18081	2066
Oct.	..	75366	86395	53465	29622
Nov.	..	70034	53290	25971	32011
Dec.	..	56208	48437	51645	27787

	2022	2021	2020	2019	2018
Jan.-Dec.	..	671134	738962	292582	260901
Jan.-Jun.	268917	310145	394558	103918	127190

Portugal

Portugal: Fuel Ethanol Consumption (cubic metres)					
	2022	2021	2020	2019	2018
Jan.	3916	285	890	1081	648
Feb.	4986	394	1158	865	791
Mar.	4015	753	833	975	716
Apr.	3394	1206	530	405	399
May	2182	1232	286	484	391
Jun.	4434	1142	1614	677	780
Jul.	..	2277	1600	680	629
Aug.	..	2087	1397	724	887
Sep.	..	1925	867	400	743
Oct.	..	2171	1486	547	689
Nov.	..	1690	1628	866	843
Dec.	..	1932	1377	458	919
Jan.-Dec.	..	17094	13666	8162	8435
Jan.-Jun.	22927	5012	5311	4487	3725

Portugal: FAME/Renewable Diesel Consumption (Tonnes)					
	2022	2021	2020	2019	2018
Jan.	25259*	23772*	16895*	20100*	19248*
Feb.	47050*	20250*	15084*	22742*	19099*
Mar.	38985*	24657*	23310*	29130*	26172*
Apr.	26372*	27008*	16315*	23218*	19255*
May	25135*	35534*	19616*	29384*	28760*
Jun.	20963*	34372*	21675*	28670*	27948*
Jul.	..	32782*	23999*	30718*	24848*
Aug.	..	33333*	28605*	21565*	25462*
Sep.	..	28749*	26727*	24696*	23628*
Oct.	..	29099*	30297*	26570*	19217*
Nov.	..	28099*	29398*	29326*	21622*
Dec.	..	27488*	20986*	23871*	21111*
Jan.-Dec.	..	345143*	272907*	309990*	276370*
Jan.-Jun.	183764*	165593*	112895*	153244*	140482*

Sweden

Sweden: Ethanol Balance (1000 cubic metres)					
	Jan-Dec 2023	Jan-Dec 2022	Jan-Dec 2021	Jan-Dec 2020	Jan-Dec 2019
Opening stocks	157.9*	130.9*	115.6*	133.1*	141.8*
Output	285.0*	275.0*	285.0*	280.0*	280.0*
Fuel ethanol	230.0*	220.0*	230.0*	230.0*	230.0*
Non-fuel ethanol	55.0*	55.0*	55.0*	50.0*	50.0*
Imports	345.0*	345.0*	404.7	357.8*	317.6*
Consumption	344.0*	333.0*	261.6*	212.9*	239.5*
Industrial ethanol	55.0*	50.0*	54.0*	60.0*	49.0*
Potable ethanol	9.0*	8.0*	8.0*	8.0*	8.0*
Fuel ethanol	280.0*	275.0*	199.6	144.9	182.4
Exports	290.0*	260.0*	412.9*	442.3*	366.9*
Ending stocks	153.9*	157.9*	130.9*	115.6*	133.1*

Sweden: Fuel Ethanol Consumption (cubic metres)					
	2022	2021	2020	2019	2018
Jan.	18285	9131	11690	12098	11381
Feb.	19212	9363	11032	12554	13589
Mar.	22721	10906	10934	13204	13147
Apr.	22758	11991	11066	15771	15729
May	27108	12449	12318	17954	18126
Jun.	29258	12928	14360	16995	21468
Jul.	..	16027	15708	19289	20581
Aug.	..	24295	14637	16852	20086
Sep.	..	23449	12189	15905	17128
Oct.	..	24244	11495	15523	17586
Nov.	..	22116	9697	13933	15176
Dec.	..	22654	9785	12371	13240
Jan.-Dec.	..	199553	144911	182449	197237
Jan.-Jun.	139342	66768	71400	88576	93440

Sweden: FAME/Renewable Diesel Consumption (Tonnes)					
	2022	2021	2020	2019	2018
Jan.	114066	98751	97848	120559	116442
Feb.	124253	118392	110337	121932	108860
Mar.	130418	126188	130328	136247	129867
Apr.	141822	124794	114854	122579	106202
May	152947	117660	107712	130019	111558
Jun.	145157	105619	118170	89482	114980
Jul.	..	113089	108794	121525	104510
Aug.	..	134586	111261	114659	117940

Questions? **Speak to a Sales Rep**

