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Issue 25-03
Wednesday
12 March 2025

Argus Biofuels Outlook

Overview

The recent import tariff hike and the changes in biofuel credits continued to impact the US market in February, and to reverberate across other major poles. Dwindling RIN credit generation is in line with reports of biodiesel producers idling facilities or extending maintenance periods amid regulatory uncertainties, while imports of renewable diesel and UCO came to a halt. Feedstock prices have been on the rise since January as the market shifted to 45Z, and RIN prices rose alongside to try to keep margins positive, but at the start of March, SRE concerns and delays to the EPA's 2026 mandate drove RIN selling, squeezing RD margins and keeping biodiesel margins in negative territory.

Asia-Pacific HVO, SAF and UCO sellers have turned again to the European market, given the lack of appetite to export to the US, while Brazilian regulators postponed indefinitely the B15 implementation to avoid further tightening in soybean oil and tallow availability.

In Europe, HVO prices continued to correct downwards after spiking in November 2024 when supply crunched, despite some renewed demand in Germany and the Netherlands, which has also encouraged the use of biodiesel, supporting prices and premiums over fossil diesel. But the slowness in countries transposing RED III brings additional uncertainty to demand in the medium term, and even 2026 could turn out to be a RED II year with only marginal growth on current levels. To a lesser extent, SAF prices also decreased on the month as market players awaited more clarity on the flexibility mechanism, released in late February.

Key biofuel prices, prompt

	Jan 25	Feb 25	Mar 25e	Apr 25e
Europe				*$/t*
RED FAME 0°C CFPP fob ARA	1,173	1,195	1,203	1,207
RED Rapeseed OME fob ARA	1,229	1,237	1,253	1,257
RED UCOME fob ARA	1,404	1,413	1,466	1,475
RED HVO fob ARA (Class I)	1,685	1,632	1,633	1,624
RED HVO fob ARA (Class II)	1,879	1,759	1,743	1,734
SAF fob ARA (Class II)	1,831	1,780	1,763	1,771
Bionaphtha fob ARA	1,601	1,606	1,570	1,576
UCO cif ARA	1,076	1,079	1,114	1,106
Ethanol Regular fob ARA	880	907	902	948
US (biofuels)				*¢/USG*
Ethanol Chicago	168	175	158	170
Ethanol USGC	181	186	172	184
B100 Chicago	344	360	338	337
R100 (UCO) del California	472	484	476	468
US feedstocks (US Gulf coast del rail)				*¢/lb*
Soybean oil crude degummed	46	48	47	47
Tallow bleached fancy	47	53	49	49
UCO	48	53	49	49
South America				*$/t*
Anhydrous fob Santos	644	683	644	668
Asia-Pacific				*$/t*
RED HVO Class II fob Singapore	1,807	1,690	1,681	1,672
UCO fob China	970	982	1,002	1,007
RED Ucome fob China	1,056	1,088	1,142	1,150

EUROPE

Summary

This month

European biofuel markets were relatively quiet for a second month, with little change in drivers since January. Biodiesel prices rose across most grades, supported by firm rapeseed oil (RSO) and used cooking oil (UCO) prices, and premiums widened on continued weakness in diesel markets. But hydrotreated vegetable oil (HVO) and sustainable aviation fuel (SAF) prices declined for a second month as European hydrotreatment capacity is fully back on line from November's supply crunch, keeping the market well supplied. SAF returned to a premium over HVO, as production fundamentals dictate, but the spread between the products remains unusually tight. SAF markets were slow to pick up at the start of the year as the market waited for further clarity on flexibility mechanisms for meeting the ReFuelEU Aviation target.

Next month

Biodiesel premiums to diesel are expected to widen further this month as bearish sentiment weighs on diesel markets following recent Opec announcements and US trade tariffs. Waste-based grades will see the largest rise as supply constraints in Asia-Pacific continue supporting UCO prices. Ethanol prices will remain supported by a tight grain complex in Europe for the end of this marketing year, widening spreads to gasoline.

3-6 months ahead

Demand across all biofuels is forecast to rise heading into the summer, tracking the seasonal rise in transport fuel demand, but prices for biodiesel, HVO and SAF are all expected to weaken as the new rapeseed harvest begins, easing European vegetable oil prices and expectations of continued weakness in diesel and gasoline markets. UCO prices have remained stubbornly firm in recent months, which should keep waste-based grades more supported than crop-based.

The European Commission has sent infringement warnings to several member states for overdue transpositions of RED amendments, which could result in some member states revising national legislation later this year. The deadline for transposing RED III is realistically going to be missed by all member states, but draft proposals from the Netherlands should prompt other governments to accelerate efforts — although four member states are now in the firing line to transpose RED II, which is long overdue.

6-12 months forward

We now assume governments will target 2026 for the introduction of new targets under RED III transpositions, and this is reflected in our HVO demand forecast. This will translate to a modest uplift in HVO, SAF and waste-based biodiesel prices, which now reflects the latest downward revisions to fossil fuel forecasts. We forecast the SAF-HVO Class II price spread to continue in positive territory, but price dynamics might be impacted by anti-dumping duties currently imposed to the road blending component, but not to the aviation biofuel.

Regulation

EU urges members to transpose RED II revisions

The European Commission has issued notices urging multiple member states to finalise the national transposition of the second Renewable Energy Directive (RED II) amendments from 2023 as part of February's infringement package. Bulgaria, Cyprus, France, Italy, the Netherlands, Slovakia, Spain and Sweden must transpose RED II 2023 into national law, which aims to simplify and accelerate procedures for permitting the installation of renewable generation, storage and related grid infrastructure in member states.

Belgium, Estonia, Latvia and Romania must still fully transpose the original 2018 version of RED II, which notably set a binding target for member states to generate 42.5pc of their energy from renewables by 2030.

The member states will now have two months to fully transpose the directive into national law, or will potentially be referred to the EU's Court of Justice.

EBB proposes changes to RED implementation

The European Biodiesel Board (EBB) has submitted a proposal to the European Commission asking for a series of changes to RED's implementing legislation. Most of the suggested changes focus on the role of voluntary schemes and certification bodies to address potential fraud in the biofuel industry, such as expanding the number of economic operators that may be audited to traders and blenders, and lowering the volume threshold for auditing points of origin for Annex IX part A feedstocks.

The EBB also suggested that more data and proof be required for feedstock sustainability documentation, retroactively

voiding proof of sustainability paperwork in cases of fraud, stricter rules for mass balancing of fuels, mandatory C14 testing on all biofuels and blends imported by the EU, a requirement that SAF not be used in road transport to prevent circumvention of duties on HVO, testing methods to differentiate between physical HVO and SAF, and a 20pc or higher SAF blend customs code.

Commission adopts SAF support rules under ETS

The European Commission has adopted a regulation that sets out the rules for the annual calculation of the price difference between fossil fuel kerosine and alternative aviation fuels, to be used for support designed to cover "all or part of the price difference" when flights covered by the EU emissions trading system (ETS) use clean aviation fuels.

The support is being provided through the allocation of 20mn EU ETS allowances to the aviation sector, with an estimated value of €1.6bn ($1.7bn). The commission will publish the price differences by 31 May, and by 31 August it will release the allocation of allowances for each commercial airline that applied for support under the mechanism in 2024.

Dutch government prepares changes to mandate

The Dutch ministry of infrastructure and water management released the results and responses to the initial consultation on its proposed RED III transposition, which was published in November. The Dutch emissions authority announced that it will be removing the proposed aviation subcategory from the next version of the legislation, leaving land, inland shipping and maritime.

The consultation feedback broadly supported laying out the obligation beyond 2030 to 2035-40 to help support investments. The government is considering the options for an extension and will "come back to this at a later time". The government also stated that it does not intend to change obligation levels after implementation to provide market certainty and intends to remain at a 14.5pc greenhouse gas reduction mandate.

Other feedback asked for the cap on fuels produced from feedstocks found in Annex IX part B of RED III to be raised and to allow Annex IX-B fuels to be used in the maritime sector, as well as raising the overall Annex IX part B limit, but the government has said it is limited by the EU legislation in raising this limit.

The government is aiming to address other key questions in a second consultation over the summer.

Norway identifies misclassified tallow-based biofuels

The Norwegian Environment Agency (NEA) said 10 companies failed to provide adequate sustainability documentation for biofuels made from animal fat and that these biofuels were misclassified as "waste" and "residues".

According to the NEA, the misclassification totals 1.3bn litres of biofuels, representing 30pc of all biofuels reported since 2017 and half of all biofuels reported as waste and residue, and the 2017-23 biofuel statistics will be updated as a result.

The NEA has adopted changes to biofuels sales requirements from 1 January 2025, including fines for non-compliance with its biofuel mandate. If an obligated party is in a deficit in a year, the agency may require the party to oversupply biofuels the next year to make up the shortfall.

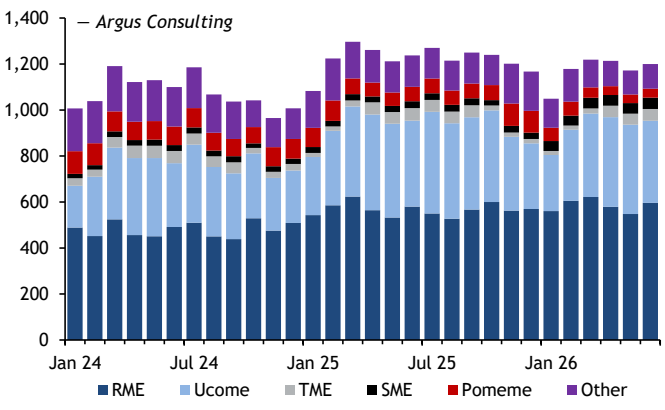
Demand

Biodiesel

Has peak biodiesel already happened?

Most European countries have now published their biofuel consumption data for November, and we expect biodiesel consumption to have dropped 7pc on the month to 965mn litres in November. We now expect rapeseed oil methyl ester (RME) consumption to have been 476mn l in November, down 10pc on the month despite RME demand typically rising over the winter months. Used cooking oil methyl ester (Ucome) demand is expected to have dropped 19pc to 229mn l in November, reflecting seasonally lower consumption going into winter. We expect RME demand will have picked up again through December and January, respectively up 7pc and 11pc. Ucome demand is forecast to have held flat through to January, before picking up again

European biodiesel demand *mn litres*



in February and some more in March, as winter grades are replaced by other grades.

Supported by higher targets and lower compliance ticket carry-overs in Germany and the Netherlands, the biodiesel market will recover some lost ground this year compared with 2024. On the back of this support, we expect biodiesel demand to rise by around 14pc to over 14.7bn l in 2025, which would mark a changing tide for the European biodiesel market after a challenging 2024 plagued by ticket carry-overs and large import volumes of double-counting biodiesel, both contributing to depressing physical demand. But 2025 volumes will still leave biodiesel consumption short of the highs of 15.0bn l in 2023. Diesel consumption is expected to slip in subsequent years and with it biodiesel consumption, so 2023 will likely have seen peak biodiesel in Europe — provided B7 remains the only grade available at the pump, as there remains little progress on increasing B10 availability, despite being approved under Germany's Fuel Quality Directive.

Polish winter grades light on Fame

Poland's biodiesel consumption fell 41pc to 65mn l in November, which followed an annual trend of Polish biodiesel consumption easing over the winter months. It appears that the winter grade carries less biodiesel compared with the summer and intermediate grades. Across the last four winters, biodiesel consumption has been 23pc lower compared with the rest of the year, even accounting for lower diesel consumption.

Poland's overall energy-based target for 2024 was 9.1pc. But a reduction factor of 0.85 applies for feedstock sourced in the European Economic Area, setting the target at 7.7pc. Furthermore, penalties for missing the target only apply for up to 80pc of this reduced target, so obligated parties can avoid penalties by blending just 6.2pc. As this sits below the 7pc blend wall, this allows obligated parties to blend lower volumes in winter and make up for the deficit in the rest of the year. What exacerbated the drop this year is the higher ethanol blend rate in Poland, which averaged 6.5pc across 2022 and 2023, but is expected to have been around 8.1pc in 2024, easing the need to blend biodiesel in winter-grade diesel.

HVO

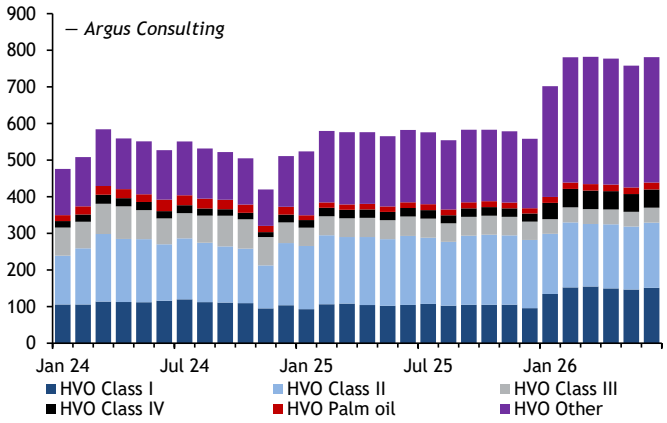
Rising but fragile demand

We expect HVO consumption to have dropped 17pc to 420mn l in November, when shutdowns at Europe's three largest hydrotreatment plants, accounting for about half

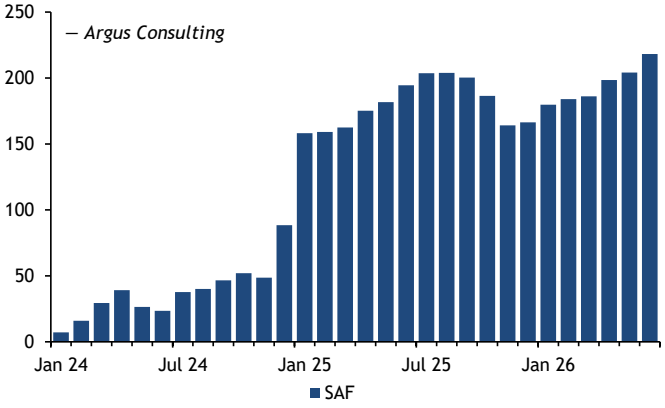
European demand outlook *mn litres*

Product	Jan 25	Feb 25	Mar 25	Apr 25	May 25	Jun 25	2Q25	3Q25	4Q25	1Q26	2Q26
Biodiesel											
POMEME	84	89	68	60	59	63	181	190	257	163	115
RME	543	586	624	564	533	580	1,677	1,645	1,732	1,788	1,723
SME	26	24	27	26	26	30	82	89	80	133	141
TME	17	19	26	53	50	55	158	154	59	59	149
UCOME	253	324	392	416	408	374	1,198	1,258	1,005	915	1,136
Other	160	183	159	142	135	137	414	398	475	389	321
Total	**1,083**	**1,224**	**1,297**	**1,261**	**1,212**	**1,237**	**3,710**	**3,735**	**3,608**	**3,447**	**3,586**
HVO											
HVO Class I	93	106	108	104	102	105	311	315	306	442	448
HVO Class II	173	188	182	186	182	189	556	544	567	512	525
HVO Class III	50	52	51	52	52	53	157	154	152	122	121
HVO Class IV	21	23	23	23	22	23	69	69	69	145	148
HVO Palm oil	13	15	15	15	15	16	46	48	47	51	55
Other	174	195	197	196	192	198	585	584	579	992	1,019
Total	**524**	**580**	**576**	**576**	**565**	**582**	**1,724**	**1,713**	**1,720**	**2,265**	**2,316**
SAF											
SAF	158	159	162	175	182	195	551	608	517	550	621
Ethanol											
Ethanol 1G	521	523	541	565	559	579	1,703	1,742	1,645	1,712	1,865
Advanced ethanol	134	135	136	143	141	149	433	441	406	465	507
Total	**655**	**657**	**677**	**708**	**700**	**729**	**2,136**	**2,183**	**2,051**	**2,177**	**2,372**
Grand Total	**2,262**	**2,461**	**2,550**	**2,545**	**2,477**	**2,549**	**7,570**	**7,631**	**7,379**	**7,889**	**8,274**

European HVO demand *mn litres*



European SAF demand *mn litres*



of Europe's production capacity and starting a tsunami in European HVO supply, resulted in a sharp price rise and a drop off in consumption. The supply crunch had eased by the end of November, and we expect HVO consumption will have rebounded 22pc in December. We expect HVO demand to rise 9pc to 6.8bn litres in 2025, setting a new high for HVO consumption in Europe as demand rises in most countries, with a more substantial uptick expected in Germany than in other markets.

As the marginal compliance option in most markets, HVO demand is more prone to be impacted by legislative changes and market volatility. Conversely, transposition of RED III targets should spell rising consumption of HVO as ethanol and biodiesel are limited by technical blend walls and compliance options that are not liquid biofuels are limited by the vehicle fleet, e.g. electric, CNG or LPG vehicles.

SAF

Clarity on flexibility mechanism

Now entering the third month of the ReFuelEU Aviation legislation, the European Commission has provided some additional guidance on its implementation. The report published on 27 February includes an assessment of options for the flexibility mechanism, and a number of frequently asked questions and lists of airports, aircraft operators and competent authorities covered by the legislation were also published. The report concludes that the SAF market is well set up to supply SAF in most member states without a mechanism allowing for virtual SAF trading across the EU. Although this does not mean SAF will end up being supplied at every airport, it does imply that every fuel supplier will have to meet the 2pc target, without the option to trade virtual compliance tickets. The report suggests this will result in SAF supply reaching the 2pc target in most member states.

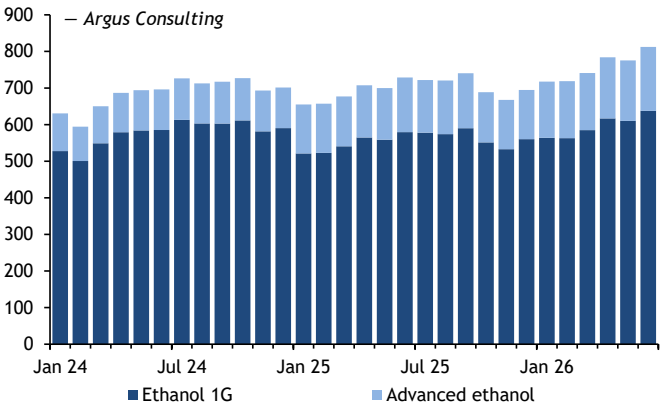
We expect European SAF demand to come close to 2.2bn l in 2025. Although relatively even geographical distribution is now more likely, the distribution of SAF demand across the year will become clearer as consumption data is published in the coming months. We expect SAF demand to have been slower at the start of the year, but that it will pick up into spring as obligated parties become more comfortable with the new obligation. Road biofuel demand has a strong correlation with diesel and gasoline demand, but this relationship will be less pronounced with SAF demand for now as mandate levels are still far away from technical blend limits.

Ethanol

Steady ethanol markets track gasoline

We expect ethanol demand to have dropped 5pc to 693mn l in November, slightly outpacing the drop in gasoline consumption, which eased by 3pc. The fall in consumption aligned with a drop in ethanol imports. We expect ethanol consumption to have lifted 1pc in December, with gasoline consumption flat as ethanol prices hit their lowest monthly average since February 2024, which would have incentivised discretionary blending.

European ethanol demand *mn litres*



A seasonal low in gasoline consumption in January is expected to have dragged down ethanol consumption 9pc in January to 640mn l, before staying flat in February. We expect ethanol consumption for 2025 to see a slight increase of around 2pc on last year's demand. A drop is expected for gasoline consumption, implying a slight increase in ethanol blend rate next year.

Feedstocks

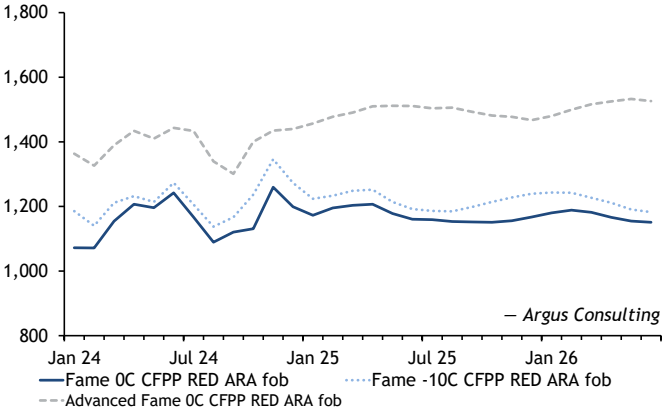
RSO demand unseasonally low in November

We expect RSO consumption for biofuels in November to have been around 460,000t, which is 21pc lower than a year prior. RSO prices in November reached their highest price since 2022, driven by a sharp rise in palm oil prices propping up the wider vegetable oil complex. The tightness resulted in RME trading above Ucome for a day, the first time this has happened in two years as Ucome carries higher value under most European mandates. Poland's drop in biodiesel demand for its winter grades in November was more drastic this year than in previous years, partly owing to higher ethanol consumption, also lowering the need for RSO for biofuels. We expect RSO consumption for European biofuels demand to have lifted in December and will have continued to recover going into this year's first quarter.

Record UCO demand expected for 2025

Despite little progress in transposing RED III, the EU and UK SAF mandates are now in place, which will contribute to European UCO consumption rising 50pc to 7.7mn t in 2025, as the most popular waste-based feedstock for hydrotreatment. The new Clean Fuel Production Credit (45Z) in the US has excluded biofuels made from foreign UCO from being eligible for the credit, reducing demand for the feedstock from US producers, which should redirect volumes from Asia-Pacific and ease pressure on UCO supply in the short term.

European FAME prices *$/t*



Prices

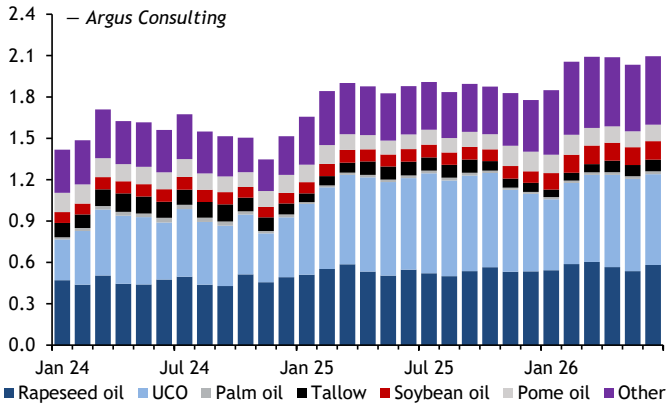
Biodiesel

Premiums gain on diesel losses

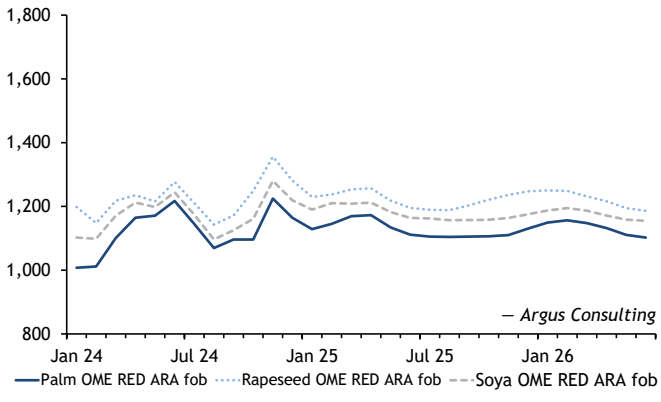
Biodiesel prices saw marginal gains across most grades in February, with RME prices firming 0.7pc to $1,237/t and Ucome prices up 0.6pc to $1,413/t, despite the average underlying diesel price contracting in February, down 1.3pc on January. This caps off a very quiet first two months for biodiesel prices in 2025.

Biodiesel premiums over diesel are expected to make sharp gains in March as diesel prices continue to fall and feedstock prices hold firm, widening the spread by around $80/t for crop-based grades and $120/t for waste-based grades. We expect outright prices to ease over the summer as the new rapeseed harvest begins, reducing supply pressures on European vegetable oils and tracking further weakness in diesel prices. Going into the third quarter, RME prices should find the usual support of higher demand for winter diesel grades,

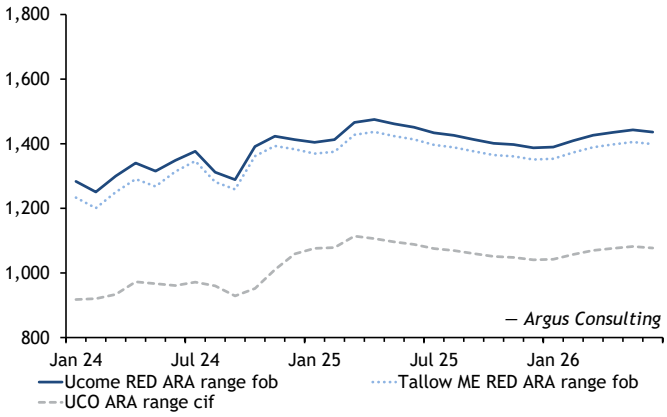
Biodiesel and HVO feedstock demand *mn t*



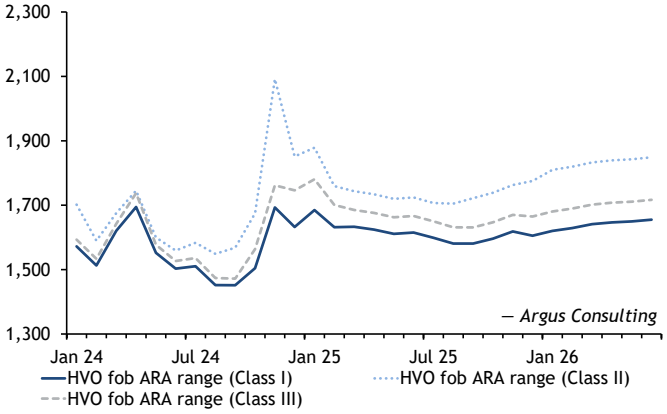
European crop-based biodiesel prices *$/t*



European waste-based biodiesel prices *$/t*



European HVO prices *$/t*



but still limited by a weaker outlook for diesel prices this year, which have fallen on the back of recent announcements related to Opec production and US tariffs.

Waste-crop spread supported by tickets

Ucome prices are expected to open the spread to crop-based grades going into the summer, supported by stable UCO prices and falling vegetable oil prices, although Ucome prices will still lose value over the summer months, pulled down by losses in Fame 0 and diesel prices. Weak macro-economics in China are expected to lead to reduced UCO generation and to impact availability.

Nonetheless, Ucome prices are forecast to sustain a spread over Fame 0 prices of around $250/t for most of the year, holding a higher premium than most of last year. Advanced Fame 0 premiums to Ucome have tightened in the past week, down to $25/t on 6 March, with market participants reporting a fall in German advanced product demand. But we maintain our expectation that Advanced Fame 0 spreads will widen later in the year as a result of higher ticket prices compared with previous years, following on from higher targets and restricted ticket hangovers from previous obligation periods.

HVO

Imports pressure HVO prices

UCO-based HVO Class II prices dropped 6.3pc to $1,759/t in February, continuing the climb down following the market tightness in November, as domestic capacity and imports rise compared with the second half of 2024.

Although no HVO shipments arrived in Europe from Neste's Singapore refinery in the final months of last year, we expect over 115mn l of HVO has been imported from Singapore across January to February, and a further 150mn l is scheduled to land over March to April. This is a result of Neste's refinery returning to full capacity after facing several downtime periods in the second half of 2024. The other driver is that Neste's exports to the US have collapsed, dropping from an average 126mn l/month in 2023 and the first three quarters of 2024 to 36mn l in the fourth quarter, and no shipments so far in 2025.

A number of shipments also made their way to Europe from the US, with deliveries in February totalling just under 95mn l, with the majority coming from Valero and Darling's Diamond Green Diesel facility on the Gulf coast. Of these shipments, 36mn l went straight to the UK and Norway, which do not impose anti-dumping and countervailing duties on North American biodiesel and HVO, and the remaining landed in the Amsterdam-Rotterdam-Antwerp (ARA) region. Alongside shipments of HVO, there have also been deliveries of SAF from the US to the UK.

Imports and domestic HVO capacity are keeping the European market well supplied as producers are eagerly awaiting RED III transpositions by member states to raise the outlook for HVO demand over the coming years. As a result, we expect HVO prices to ease slightly across the forecast period, but staying relatively stable, with price support from feedstock costs likely to be offset by a sluggish diesel price forecast.

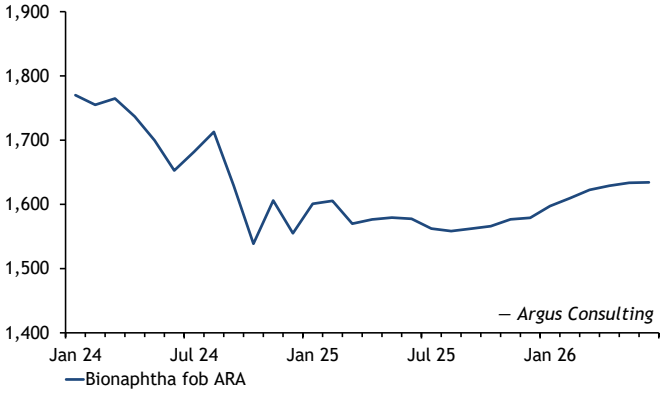
Bionaphtha

Prices hold steady through February

Bionaphtha prices were up 0.3pc to $1,606/t in February, holding flat for the first three weeks and then trending downwards into March, reflecting recent falls in HVO and

European bionaphtha prices

$/t



SAF prices. Bionaphtha prices typically trend with movements in other hydrotreated products and UCO as the most popular hydrotreating feedstock, which in recent months have converged on systemic oversupply for hydrotreated products and UCO supply tightness in Asia-Pacific.

Demand from the petrochemical sector for sustainable polymer feedstocks has remained quiet since January, so we expect a lack of consistent demand drivers will result in bionaphtha prices holding relatively flat this year.

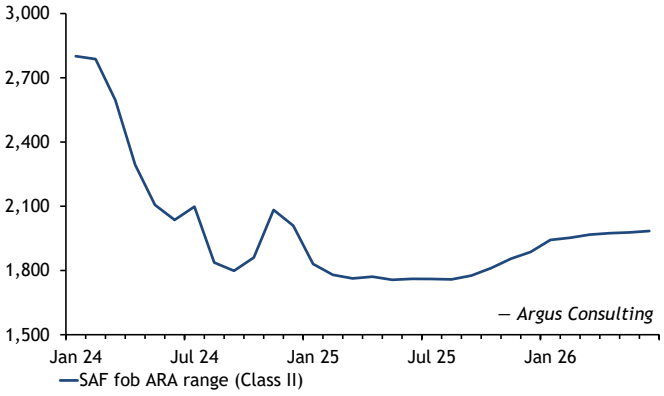
SAF

SAF prices regain premium to HVO

SAF prices declined for a third consecutive month in February, down 2.8pc to $1,780/t, the lowest monthly average price to date. High global capacity is weighing on the European SAF market, and demand has not yet picked up on the ReFuelEU Aviation 2pc target. In particular, parties have been waiting for the release of the SAF flexibility mechanism report from the EU, which is now available and has addressed uncertainties from the original regulation.

European SAF prices

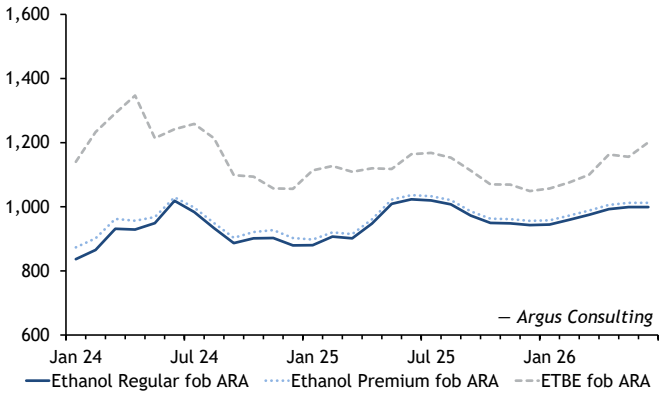
$/t



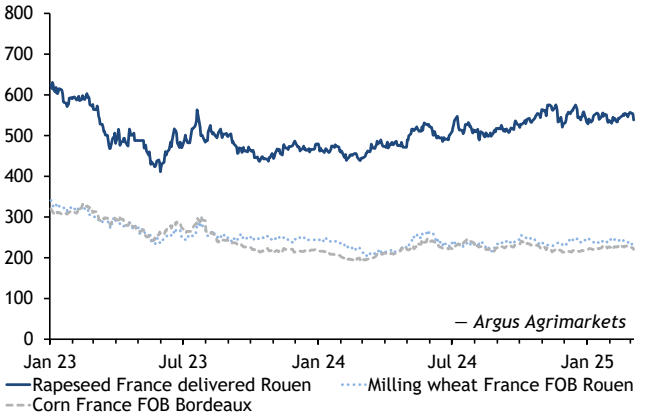
European price outlook $/t

Product	Jan 25	Feb 25	Mar 25	Apr 25	May 25	Jun 25	2Q25	3Q25	4Q25	1Q26	2Q26
Crop-based biodiesel											
FAME 0 fob ARA	1,173	1,195	1,203	1,207	1,178	1,160	1,182	1,155	1,158	1,183	1,157
FAME -10 fob ARA	1,224	1,233	1,248	1,252	1,214	1,192	1,219	1,190	1,227	1,237	1,195
Advanced FAME 0 fob ARA	1,457	1,478	1,491	1,510	1,512	1,511	1,511	1,501	1,475	1,498	1,528
PME fob ARA	1,129	1,145	1,169	1,173	1,134	1,111	1,139	1,105	1,116	1,151	1,115
RME fob ARA	1,229	1,237	1,253	1,257	1,218	1,195	1,223	1,194	1,235	1,243	1,199
SME fob ARA	1,190	1,210	1,208	1,212	1,182	1,164	1,186	1,159	1,166	1,189	1,161
Waste-based biodiesel											
UCOME fob ARA	1,404	1,413	1,466	1,475	1,462	1,451	1,463	1,424	1,395	1,408	1,438
TME fob ARA	1,369	1,375	1,428	1,437	1,424	1,413	1,425	1,387	1,359	1,372	1,401
UCO cif ARA	1,076	1,079	1,114	1,106	1,096	1,088	1,097	1,068	1,046	1,056	1,078
HVO											
HVO Class I fob ARA	1,685	1,632	1,633	1,624	1,611	1,615	1,617	1,587	1,607	1,630	1,650
HVO Class II fob ARA	1,879	1,759	1,743	1,734	1,720	1,724	1,726	1,711	1,759	1,821	1,843
HVO Class III fob ARA	1,780	1,701	1,685	1,676	1,662	1,667	1,668	1,637	1,661	1,691	1,712
SAF											
SAF fob ARA	1,831	1,780	1,763	1,771	1,756	1,761	1,763	1,765	1,851	1,954	1,979
Bionaphtha											
Bionaphtha fob ARA	1,601	1,606	1,570	1,576	1,579	1,578	1,578	1,561	1,574	1,610	1,632
Ethanol											
Ethanol Regular fob ARA	880	907	902	948	1,009	1,023	993	1,000	947	960	997
Ethanol Premium fob ARA	898	920	915	961	1,022	1,036	1,007	1,013	960	973	1,010
ETBE fob Rotterdam	1,113	1,127	1,109	1,120	1,118	1,164	1,134	1,145	1,063	1,078	1,173

European ethanol and ETBE prices *$/t*



Biofuel agricultural feedstock prices *$/t*



The decline in SAF prices was lower than for HVO, and SAF has regained a small premium to HVO Class II after being at a discount for four weeks, and on 10 March the differential between both grades was at a tiny $25/t. SAF production incurs additional processing costs above HVO production, so SAF holding a discount to HVO is an unsustainable market dynamic. We have maintained this in our forecast, but with anti-dumping duties applied to Chinese and US HVO, but not to SAF, it is possible that imported SAF can be cheaper than European HVO.

Ethanol and ETBE

Ethanol-gasoline spread to widen

Prices for regular and premium ethanol grades were up 3.0pc and 2.5pc to $907/t and $920/t, respectively, supported by a modest rise in European grain prices. Ethanol prices are expected to dip in March on the back of a sharp drop in gasoline prices, which have dropped 5pc in the first week of March. Gasoline prices are expected to slightly recover in the following months, but more importantly for ethanol are grain markets holding firm until the summer, which will support ethanol prices going into the peak demand season. We expect regular-grade ethanol prices will have risen to $1,022/t by June, before weakening the rest of the year on weaker prices for both feedstock and gasoline.

Fundamentals

Agriculture

CBOT fund positions pressure global oilseed prices

Geopolitics has overshadowed the fundamentals of grain and oilseed markets recently, pushing climate risks into the background as tariff threats by the US against Canada, Mexico and China come to fruition. Consequently, the European market cannot withstand the downward pressure initiated by the funds in Chicago selling their positions in the futures market. China, in response, is not standing idly by and is imposing tariffs on US grains and oilseeds. But nothing is set in stone yet, doubts persist, and possible position reversals may keep short-term volatility elevated. Although global trade remains uncertain, the reality of low rapeseed and sunflower seed stock availability until the next harvest limits the potential decline of European rapeseed prices. The strengthening of the euro against the dollar, at a time when European investment plans are multiplying, leads us to only slightly revise down the value of European rapeseed to around $540/t in the second quarter.

Whether or not trade between the US and Canada resumes will be a major focus point for the market in the short term. Without the US as an outlet for its canola oil, Canada could turn its focus to the European market, where import needs are already expected to reach a record level in 2025-26. There is also potential for record-breaking rapeseed production in Eastern Europe for the upcoming marketing year, which could reduce the spring risk window. Therefore, growing conditions will be crucial for balancing the European oilseed market. Moreover, the sunflower planting window is approaching, and the market will be watching for new field reports confirming any changes in European acreage.

European grains pressured by weak export demand

The coming months will also be crucial for assessing grain production potential in the northern hemisphere, but weakening international demand is weighing on European prices until the harvest. Chinese buyers are absent from the market so we have lowered our price estimate to around $260/t for wheat and $235/t for corn over the spring. Demand for French wheat remains low as exporters struggle to compete against

high southern hemisphere stocks, which is reassuring importers of high supply availability. But the return of buyers from North Africa should support prices, as should the increase in import needs in the Middle East in the 2025-26 campaign.

Fossil fuel demand and prices

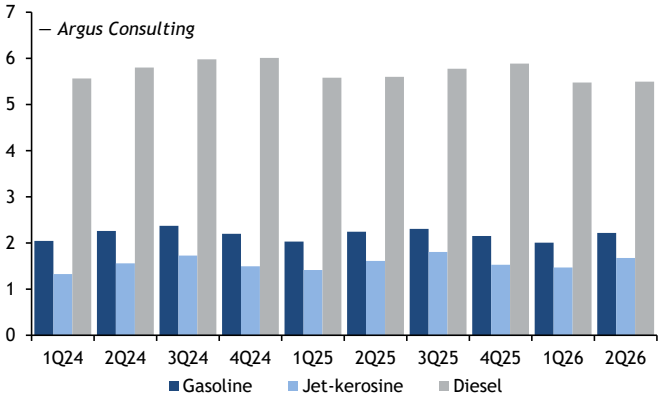
Gasoline market tightens amid refinery maintenance

Gasoline crack spreads strengthened significantly in February across all major refining regions, with northwest Europe experiencing the largest rise. Cracks increased by $4.03/bl to $9.96/bl, driven by planned and unplanned refinery maintenance that removed an estimated 1mn b/d of crude distillation unit (CDU) capacity. Despite stocks in ARA reaching record highs in the first half of February, prices continued to rise, supported by a notable 18pc month-on-month increase in exports. But exports to West Africa remained weak compared with historical levels, partly owing to technical difficulties at Nigeria's Dangote refinery.

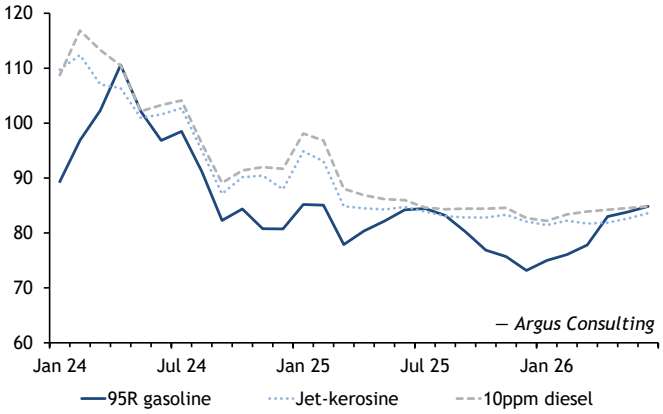
Diesel market remains tight despite global supply shifts

Diesel crack spreads continued to gain in February, particularly west of Suez, owing to sustained tightness from refinery

European fuel demand *mn b/d*



European fuel prices *$/bl*



turnarounds and unexpected outages in Europe. The closure of 380,000 b/d of CDU capacity in Europe this year could result in a loss of approximately 200,000 b/d of diesel output, increasing import requirements. Additionally, the Mediterranean Sea's designation as an emissions control area from May could boost marine gasoil demand by 80,000 b/d.

The shifting political and trade context could presage a rebound in fossil diesel consumption in the short term. Although supplies west of Suez are expected to fall, refinery capacity additions east of Suez, including 220,000 b/d of diesel hydrocracking capacities in Asia Pacific and 100,000 b/d in Russia, could offset the impact of European refinery closures, assuming no further delays.

The northwest Europe jet fuel crack strengthened in line with diesel, climbing by $2.36/bl on the month to $17.96/bl in February. Regional unplanned refinery outages are being offset by an increase in flows from east of Suez as arbitrage economics improve. Although air travel demand is expected to pick up as we enter spring, deliveries through the Red Sea should slowly resume, further balancing the market.

NORTH AMERICA

Summary

This month

US renewable diesel (RD) production remained severely curtailed even as relative RIN strength underpinned margins from higher feedstock costs. January RIN generation showed US biodiesel production was down 63pc year on year, while the expiry of the blender's tax credit (BTC) halted RD imports and led to a 92pc drop in biodiesel deliveries on year-ago levels. February D4 prices rose by $0.13/RIN, or 18pc from the month prior, as markets responded to rising feedstock costs and the lack of BTC value to shore up margins. A recently idled biodiesel producer noted operational losses of $0.30-0.50/USG.

The month ahead

Fresh small refinery exemption (SRE) concerns weighed on RIN values eroding renewable diesel and biodiesel margins. A looser SRE waiver policy is expected under the new US administration, sparking heavy selling at the start of March as the Supreme Court is expected to determine a venue for Clean Air Act cases later this month. Feedstock prices are expected to correct lower on expectations of sustained lower demand and a continued lack of completed 45Z guidance. Raised tariffs on Chinese goods are expected to severely handicap US soybean oil, although backed-up US volumes could be used to meet a potential drop off in Canadian canola oil imports. A flood of trade announcements, countermeasures and pauses are set to drive heightened volatility for months to come. A procedural dismissal of California's stringent reform package prompted Low Carbon Fuel Standard (LCFS) prices to plunge to five-month lows.

3-6 months ahead

Tighter California LCFS targets expected for 1 April could now be delayed until 30 June, although the California Air Resources Board (CARB) may be able to apply new carbon-intensity (CI) scores to some or all of the first-quarter volumes. British Columbia is set to require that 8pc of its diesel pool is made up of Canadian-produced renewable content from April onwards. Upcoming tariffs and countermeasures between the US and its largest trading partners have threatened to cut off vital export outlets that serve to balance US biofuel and agricultural supply.

The Environmental Protection Agency's (EPA) approval of year-round E15 for eight Midwestern states would see a 1 RVP waiver required for E10 blends removed starting 28 April, yet a one-year delay in the states of South Dakota and Ohio will blunt the growth in blend rates.

6-12 months ahead

A Canadian trade investigation into US RD could see the country level duties on US product by September. The duties would be in place for five years, and can impact trade flows as Canada accounted for a significant share of US RD imports in 2024.

US producers continue to await final 45Z and climate smart agriculture (CSA) guidance, all while rapidly evolving trade policy and SREs may send conflicting signals. Lacking operational certainty, US producers will increasingly turn to sustainable aviation fuel (SAF) output to generate additional margin, while lobbying for a more aggressive 2026 mandate. We expect the EPA to set the 2026 mandate using available advanced biofuel production capacity as guidance as its prior focus on possible feedstock constraints when establishing the 2023-25 set rule led to a gross understatement of advanced blend requirements.

Regulation

US EPA approves year-round E15 in eight states

The US EPA has confirmed that gasoline blended with up to 15pc ethanol (E15) can be sold year-round from 28 April in Illinois, Iowa, Minnesota, Missouri, Nebraska, Ohio, South Dakota and Wisconsin. Currently, E15 is unavailable during the summer months owing to fuel volatility restrictions on gasoline under the Clean Air Act. The act already contains an exemption for E10 blends, and the EPA has granted emergency waivers for E15 in the past. To gain year-round E15 access, the states are set to opt out of the Clean Air Act's fuel volatility waiver. The change will also require conventional gasoline blendstock (CBOB) sold in those states to move to a lower 8 psi reid-vapor pressure (RVP), compared with the current 9 psi RVP.

Following the announcement, Kansas, Ohio and South Dakota all requested a one-year delay to implement the change, and so far the EPA has approved the delay for Ohio and South Dakota. Oil groups have fought to delay the expansion of E15, claiming it would require up to two years to make the necessary infrastructure and refining changes to the lower-volatility gasoline blendstock for E15 blending.

A group of bipartisan lawmakers also reintroduced legislation amending the Clean Air Act and extending the E10 volatility waiver to E15 blends, removing the need for emergency waivers.

US SRE lawsuits progress

The US 5th Circuit Court of Appeals granted a request from Calumet's 57,000 b/d refinery in Shreveport, Louisiana, to pause a recent EPA action denying the refinery relief from its 2023 obligations under the federal Renewable Fuel Standard. The stay will remain as the court continues reviewing the legality of the EPA's rejection.

The Supreme Court has said it will hear arguments about the proper venue for Clean Air Act lawsuits, which involves the EPA rejections of various small refineries' requests for hardship exemptions from the Renewable Fuel Standard (RFS), and the agency's denials of state plans for addressing ozone-forming NOx emissions.

California's LCFS revisions potentially delayed

California's recently agreed revisions to its LCFS programme, which were planned to start this year, have been disapproved by the state's procedural watchdog, stating the language was too vague or broad under California law. The California Air Resources Board will now revise and resubmit the rule, but the likely need for a public hearing could delay the state's intent to apply tough new targets to fuels supplied this year.

CARB staff believe it can apply its tougher 9pc carbon-reduction requirement to first-quarter fuel deliveries if the resubmitted rulemaking is approved by 30 June. Even should the rulemaking miss the deadline, CARB may consider working to apply the standards to a portion of the year. The reforms were set to take effect on 1 April, driving disillusionment among stakeholders.

British Columbia mandates domestic renewables

Starting on 1 April, British Columbia will require that diesel supplied in the state must contain a minimum of 8pc of biofuels from Canadian producers, up from 4pc currently, to further support the domestic industry as US policy changes lower the competitiveness of foreign biofuels. British Columbia has also introduced a similar requirement for gasoline, which must contain a minimum of 5pc of biofuels from Canadian producers starting in 2026.

Under British Columbia's LCFS programme, diesel and gasoline supplied in the state must meet a CI reduction of at least 18.3pc, rising to 20.6pc next year.

Canada weighs duties on US renewable diesel

Canada's customs agency launched an investigation that could result in duties on US renewable diesel imports, if understood that dumping and subsidising have caused injury to the Canadian biofuels industry. The agency will issue a preliminary decision by 5 May and the Canadian International Trade Tribunal will issue an order by 4 June. Final duties could be imposed by September 2025, and be in place for five years.

Washington bill advances with tighter LCFS targets

Modifications to Washington's LCFS targets have been approved by the state's House Appropriations Committee, calling for CI reductions to be increased from 2.5pc currently to 5pc in 2026, and for the CI target to increase by up to 4pc annually for subsequent years to 2038. The committee also approved a 45pc reduction target by 2038 unless the state is not meeting electrification or other carbon-reduction targets in 2030.

The bill will now be voted on by lawmakers and must pass through the state house and state senate.

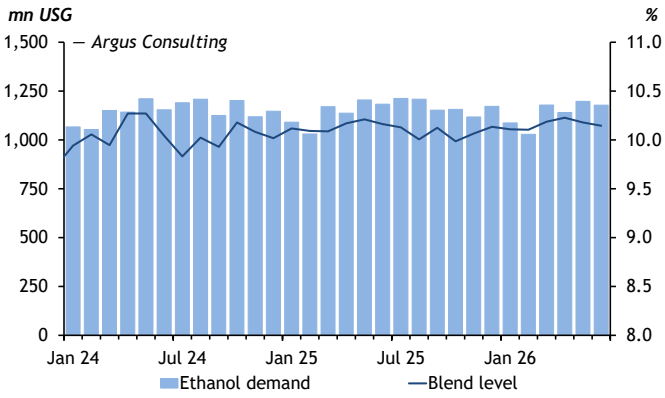
Demand

Ethanol

Tariffs threaten export outlets, E15 offers respite

A flurry of tariffs and countermeasures between the US and its largest trading partners during February and early March threatened to cut off vital export outlets that serve to balance US ethanol supply. The US exported 10pc of its record production last year, with Mexico and Canada accounting for 40pc of total US ethanol exports. Canada, the largest recipient of US ethanol exports last year at 35pc, has left the biofuel off a first round of tariffs announced on 4 March.

US ethanol demand and blend level



But US ethanol is included in a second round of tariffs under consideration for later in March, if the US does not remove tariffs on other Canadian goods — the US announced on 6 March the implementation of 25pc tariffs on Canada and Mexico was delayed to 2 April.

US ethanol inventories surged to five-year highs in the last week of February as traders noted a lack of Canadian buying ahead of possible tariffs.

Although tariff action could see US product back up in the domestic market, the recent EPA approval of year-round E15 for eight Midwestern states as well as the reintroduction of legislation looking to extend year-round E15 without the need for emergency waivers is expected to see growth in US blend rates. Yet the impact of this could be blunted in 2025 as at least three states have requested a one-year delay of implementation.

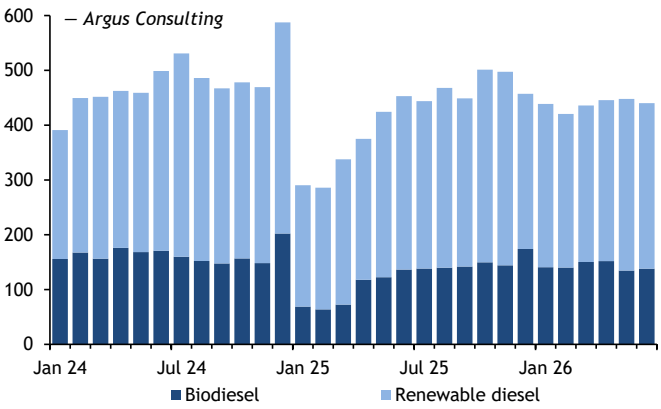
US ethanol blend rates are set to average 10.11pc this year, up from 10.02pc in 2024, taking average ethanol demand to 902,000 b/d for 2025. Total demand is forecast at over 10.8mn b/d this year compared with 10.7mn b/d in 2024.

Renewable diesel

Production curtailed as margins crumble

Renewable diesel demand remained stunted as the lower 45Z value and softer RINs eroded margins, leaving many producers off line, running at reduced rates, or conducting maintenance. Renewable diesel blend rates tumbled to 4.23pc in January from an average of 6.55pc during the fourth quarter of 2024. US renewable diesel margins lost an average of a third of their value over the course of February.

US biodiesel and RD consumption ***mn USG***



The release of January RIN generation data showed how dire the situation has become as producers grapple with incomplete 45Z guidance, low LCFS pricing, and a lack of sufficient D4 RIN strength to underpin margins. D4 generation tumbled 28pc on the year and 46pc month on month to the lowest in over two years. Domestic renewable diesel production declined 31pc compared with December 2024, and was down 6pc on the year.

The US registered no renewable diesel imports during January, down from 3,300 b/d in December 2024 and 18,600 b/d during the same period last year, as the expiry of the BTC discouraged foreign barrels. US renewable diesel imports accounted for nearly 731mn D4 and D6 RINs in 2024.

January RIN generation implied US renewable diesel producers were operating at just over 56pc of nameplate capacity during the month, down from 82pc the month prior and 72pc in the same period last year.

US biofuel demand outlook

Product	Jan 25	Feb 25	Mar 25	Apr 25	May 25	Jun 25	2Q25	3Q25	4Q25	1Q26	2Q26
Biofuel											*mn USG*
Ethanol	1,091	1,030	1,170	1,137	1,204	1,183	3,524	3,573	3,446	3,295	3,516
Biodiesel	69	64	73	118	123	137	377	420	468	431	425
Renewable Diesel	221	222	265	257	302	316	875	940	988	864	909
Total	**1,381**	**1,316**	**1,508**	**1,512**	**1,629**	**1,636**	**4,777**	**4,933**	**4,902**	**4,590**	**4,850**
Biodiesel and renewable diesel feedstocks											*mn lbs*
Canola oil	128	102	127	153	204	173	530	604	808	517	571
Corn oil	266	253	292	335	407	418	1,160	1,263	1,542	1,164	1,244
Soybean oil	810	760	985	1,114	1,353	1,385	3,852	4,030	3,715	3,608	4,094
Tallow	427	485	464	431	461	536	1,428	1,717	2,201	1,944	1,512
Yellow grease	388	378	462	544	482	603	1,629	1,755	1,756	1,728	1,734
Other	42	52	68	85	107	99	291	292	316	233	314
Total	**2,062**	**2,031**	**2,397**	**2,662**	**3,013**	**3,215**	**8,891**	**9,660**	**10,337**	**9,194**	**9,469**

Our first-quarter demand outlook was trimmed to 709mn USG to reflect curtailed production and a halt of imports, climbing back to 988mn USG in the fourth quarter, but still 2pc lower than our previous estimate.

Biodiesel

Production tumbles on fresh closures

The landscape for US biodiesel production was even more austere than for RD, with January RIN generation data showing a 46pc month-on-month decline in biodiesel output, and down 63pc on year-ago levels. Biodiesel imports tumbled 90pc on the month, down more than 92pc on year-ago levels amid the expiry of the BTC credit. US biodiesel imports accounted for over 606mn D4 RINs in 2024.

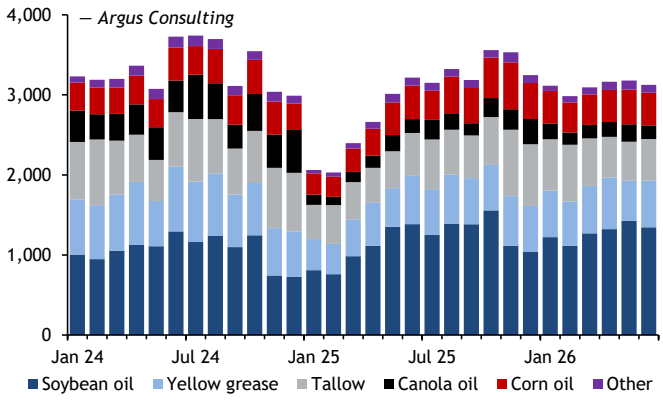
January RIN generation implied US biodiesel producers were operating at just 39pc of nameplate capacity during the month, down from 70pc during the same period last year, and an average of 83pc capacity during 2024.

The challenging margin environment led Western Dubuque to idle its 4,100 b/d Farley, Iowa, biodiesel plant. The multi-feedstock plant had been shut since late December and would have run losses at 30-50¢/USG had it continued running.

FutureFuel opted to extend maintenance at a its 60mn USG/yr Batesville, Arkansas, facility by one month, citing severe weather. FutureFuel had already extended maintenance in early February, noting that the company would be closely monitoring the 45Z credit. The facility has been off line since late December.

Last year, deteriorating economics drove Chevron-REG to close two biodiesel plants in Iowa and Wisconsin with a combined 5,000 b/d of biodiesel capacity, while Delek idled three facilities in Texas, Arkansas and Mississippi that had a combined capacity of 2,600 b/d. Hero BX also made the decision to idle two facilities, totalling approximately 4,500 b/d starting in January, citing a lack of clarity on future tax incentives.

US biodiesel and RD feedstocks demand ***mn lbs***



We have trimmed our demand forecast for 2025 to 1.47bn USG, with blend rates during the first quarter averaging just 1.40pc, a level not seen since January 2015. We expect demand to recover during the second half of 2025 as markets recalibrate to 45Z, stronger RIN and LCFS prices, potential tariffs and a lack of imports. We expect biodiesel demand to recover to 1.72bn USG for 2026 as we assume the EPA will set advanced mandates in line with available production capacity.

Feedstocks

Markets continue to recalibrate to 45Z

US feedstock demand continued to recalibrate to the exigencies of the CI-based 45Z Clean Fuel Production Credit, adjusting feedstock slates to best optimise margins.

Soybean oil still plays a dominant role in the US feedstock slate, making up for a sharp decline in canola oil and a temporary halt on eligibility of foreign used cooking oil (UCO) for renewable diesel and biodiesel pathways. We expect soybean oil to make up 39pc of first-quarter demand, up from 37.5pc during the same period last year as producers face more limited options from abroad.

Canola oil is set to plunge to 5.7pc of the US feedstock slate, down from 8.8pc the year prior as preliminary guidance under the 45ZCF-GREET life-cycle analysis model shows the high-yield vegetable oil is not currently eligible for any credit.

US producers are likely to start shifting to greater use of tallow as initial guidance indicated that renewable fuels produced using foreign tallow would be eligible for the 45Z credit. We see tallow making up 21.3pc of the first-quarter feedstock slate, up from 18.1pc during the same period last year. We foresee increased imports from Australia, Brazil and the UK bridging the gap between some of the tapped out domestic supply, but also from the lack of imported UCO.

The limitation on imported UCO eligibility for the 45Z credit as well as mounting tariffs on Chinese UCO are set to erode the US' reliance on UCO in 2025. Tariffs on Chinese UCO rose by 20pc this year. Strong Chinese UCO demand and a halt on Indonesian UCO and Pome oil exports earlier in the year tightened waterborne markets. We foresee UCO use declining to 18.7pc of the total US feedstock slate during the

first quarter, down from 22.3pc during the same period last year. Conversely, we have sharply reduced our yellow grease demand outlook for 2025 to 6.4bn lbs.

Corn oil will feature prominently as the preferred feedstock in 2025, yielding the highest 45Z credit value for all fuels under current guidance. We see 2025 DCO consumption averaging 398mn lbs per month, up 7pc from 372mn lbs per month last year. DCO is set to make up 12.7pc of the first-quarter 2025 feedstock pool, from 11.1pc in the same period last year, and rise to as high as 15pc by the fourth quarter.

Credits

RINs/RVO

D4 RIN generation at historic lows

RIN generation kicked off 2025 with a 7.7pc year-on-year decline in total credit generation to 1.76bn credits, led by the lowest D4 output in more than two years. D4 RIN generation tumbled 28pc on the year to 486mn credits, marking the lowest level since October 2022 as deteriorating biodiesel and renewable diesel economics, limitations on the use of foreign UCO, and a halt of renewable diesel imports weighed heavily on D4 generation. Biodiesel output was acutely impacted, with output tumbling 63pc on year-ago levels and blend rates dropping to the lowest in a decade.

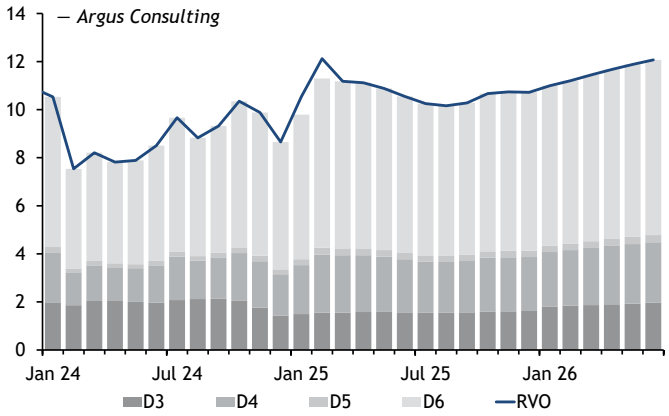
D6 output managed to climb 3.2pc on the year to 1.245bn credits as US ethanol consumption increased by more than 2.3pc over the same period.

D4 RIN strength underpins margins, yet SRE fears mount

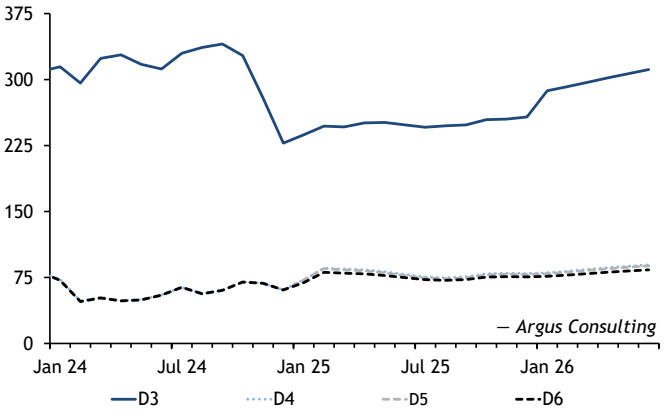
February D4 prices rose $0.13/RIN, or 18pc from the month prior as markets responded to rising feedstock costs and the lack of blender's tax credit (BTC) value to shore up margins. Renewable diesel producers that were getting a $1.00/USG BTC for transportation fuel are now facing CI-dependent 45Z returns ranging from an estimated $0.22/USG for soybean oil to $0.79/USG for distillers corn oil (DCO). Soybean oil-based biodiesel producers' tax credit returns shrunk to just $0.26/USG from a previously guaranteed $1.00/USG, severely crippling the competitiveness of crop-based biodiesel fuel relative to waste-based renewable diesel.

We have revised our RIN forecasts lower to reflect falling feedstock costs and mounting small refinery exemption (SRE)

Argus RVO breakdown by RIN category *¢/USG*



RIN price forecast *¢/RIN*



US RIN & LCFS price outlook

Credit	Jan 25	Feb 25	Mar 25	Apr 25	May 25	Jun 25	2Q25	3Q25	4Q25	1Q26	2Q26
RIN											*¢/RIN*
D3	237	247	246	251	251	248	250	247	256	292	307
D4	72	86	85	84	81	78	81	75	80	82	88
D5	72	85	84	83	80	77	80	74	78	81	87
D6	69	81	80	79	77	75	77	72	76	78	82
RVO ¢/USG	11	12	11	11	11	11	11	10	11	11	12
LCFS											*$/t*
California LCFS	72	68	66	65	64	65	65	72	86	100	114

concerns. The lack of renewable diesel and biodiesel production, alongside fresh closures and idled plants, is set to weigh on feedstock pricing this year, pressuring our RIN outlook through the fourth quarter, when we now see D4 prices averaging $0.79/RIN, compared with $0.88/RIN in last month's projections. This outlook must be reconciled with the chance for sharp reductions in advanced biofuel output to eventually tighten RIN balances, driving prices higher.

The US Supreme Court is set to hear arguments on 25 March regarding the proper venue for Clean Air Act lawsuits including SREs. The Clean Air Act says that regulations that are "nationally applicable" should be heard in the DC Circuit, which is considered more deferential to executive agencies, while "local or regional" actions should be heard in regional courts. The EPA faces 152 pending SRE petitions spanning 2016-2025, and the new US administration is unlikely to weigh in before the Supreme Court decides venue. The resulting limbo has led some impacted refiners to seek stays on some SRE rejections issued in the final days of the Joe Biden administration. The new administration is expected to issue SREs more liberally, which would effectively trim biofuel demand and pressure RIN prices.

D3 market tracks lower

The pressure from falling feedstock costs and fresh selling ahead of an expected loosening of the SRE policy has weighed on our outlook for D3 pricing in 2025, which we now see averaging $2.49/RIN, down from $2.64/RIN in the previous issue.

Softer feedstock values and mounting SRE concerns pressured the D5 component of our theoretical D5 plus cellulosic waiver credit (CWC) value. CWCs have historically afforded obligated parties an alternative method to achieve compliance should targets outstrip production. Although an official CWC is not currently available under the current RFS regulations, the EPA's proposed 2024 partial cellulosic waiver did make new methodology for calculating the CWC available for comment. The EPA's partial 2024 cellulosic waiver trimmed the 2024 requirement to 880mn USG. This meant a contraction of 210mn USG, or 19pc, which sparked D3 credits to shed a third of their value over the second half of last year.

LCFS

Market rout as reforms face possible delay

California Low Carbon Fuel Standard (LCFS) credit prices shed $16.5/t, or 22pc, to $57/t, a level not seen in more than five months as the California Office of Administrative Law (OAL) rejected a stringent reform package citing procedural and lack of clarity concerns. CARB now has 120 days to revise and resubmit its rulemaking, which may likely require a public hearing of at least 15 days for any substantive changes.

The regulatory delay saw selling carry through into early March, with prompt credits sinking under the $55/t mark. We turned particularly bearish for the first half of 2025, with prices now set to average $67/t, while a late-June implementation of a 9pc stepdown could see prices end the year as high as $91/t. We do not view the reform package driving further increases in pricing this year, given the size and weight of the surplus credit bank, currently covering more than 1.5 times all of the 2023 obligations and expected to continue to grow rapidly, as LCFS credits do not expire. We trimmed our first-quarter 2026 forecast to $100/t, with prices averaging $114/t in the second quarter.

Prices

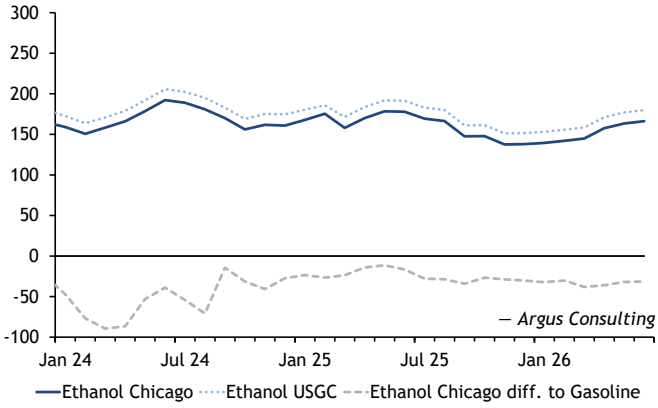
Ethanol

Tariff actions see pricing whiplash, threaten foreign sales

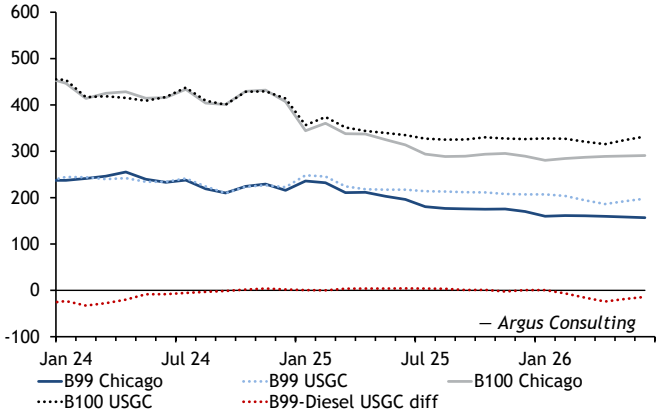
Lower corn valuations and swollen ethanol inventories are set to weigh heavily on ethanol pricing in March with prices at the Chicago Argo ethanol hub tumbling to $1.58/USG before a recovery in corn prices ahead of the summer season pick up. We forecast ethanol prices averaging $1.71/USG during the summer gasoline season from June to August. Prices are then poised to drop to $1.41/USG during the fourth quarter as product inventories are likely to build up amid weaker winter demand.

The US ethanol industry remains heavily dependent on exports to maintain a healthy supply balance, exporting 10pc of its record output in 2024. Foreign sales proved strong to start the year, but widespread tariff action could see disruptions to badly needed export outlets. January US exports rose by 1.9pc month on month to 151,700 b/d, marking the highest level since April 2024 and up by 32pc on year-ago levels. Large purchases from India as the country moves toward an E20 blending target have helped shore up US producer margins. Even though India has imposed a ban on ethanol imports for fuel purposes, industrial ethanol imports continue to be allowed. Ethanol imports have actually risen in the past two years, because domestic production has been redirected from the chemical industry to the ethanol blending programme.

US ethanol prices ¢/USG



US biodiesel prices ¢/USG



Purchases from Colombia, Jamaica and Peru also grew by double digits on the month. Exports to Canada dropped 14pc as the country curbed purchases ahead of an anticipated 25pc tariff regime.

Biodiesel

Prices slump as feedstocks correct downwards

Biodiesel prices are poised to plunge this year as material cuts to production and negative margins drive down feedstock costs as markets recalibrate to lower tax credit values provided by the 45Z. Despite tightening supply of biodiesel from plant closures, idled facilities and a lack of imported barrels, US producers will struggle to sell product at premiums to conventional diesel, which is currently required to protect margins. A recently idled facility cited operational losses of $0.30-0.50/USG since the new year.

B99 US Gulf coast values are set to tumble nearly 9pc month on month to $2.24/USG. We see a particularly weak second half of the year with prices averaging $2.11/USG as soybean oil markets correct lower. B99 prices are likely to stay at a premium to conventional diesel for the bulk of 2025 as struggling biodiesel producers look to secure returns.

The premium of biodiesel-produced RINs to the BOHO spread reached as high as $0.35/USG before collapsing to just $0.18/USG at the start of March, an indication of deteriorating biodiesel margins. The sharp decline in LCFS values has provided macro headwinds to sellers aiming product at California.

Our bullish outlook on RINs and LCFS for the first half of 2026, and rebounding feedstock prices should support US Gulf coast B100 prices averaging $6.02/USG during the first half of 2026, rising 2.2pc from $5.89/USG in the fourth quarter of 2025. This should also allow B99 to revert to discounts to conventional diesel as more advantageous credit markets drive increased margins.

Renewable diesel

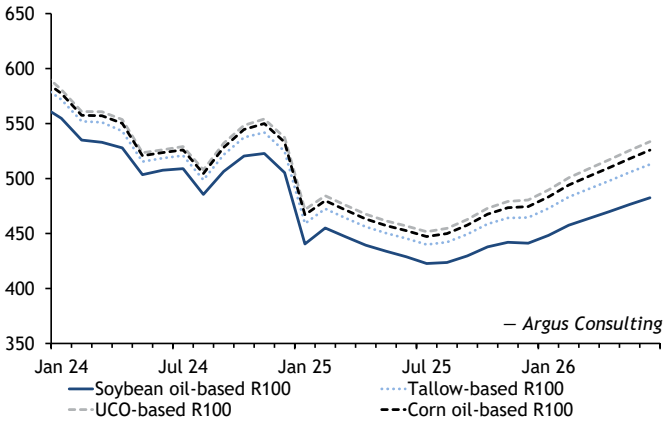
Prices under pressure as credit stack, feedstocks soften

R100 prices found support in February as particularly strong feedstock pricing and residual RIN strength underpinned valuations. The industry continues to grapple with the lack of complete guidance on the 45Z, with many producers unsure if the credit will be included in first-quarter earnings data.

Outsized RIN strength added some support to curtailed renewable diesel margins, with renewable diesel-generated D4 RINs holding a $0.45/USG premium to the BOHO spread. This premium narrowed to just $0.38/USG during the first week of March as SRE fears crept into the marketplace.

The loss of relative RIN strength drove feedstock prices to recalibrate lower, particularly as a whiplash of tariff news roiled soybean oil markets. Lacking RIN strength, feedstock prices must adjust lower to buttress margins, particularly as

US renewable diesel prices ¢/USG



lower margins continue to result in many idled facilities and economically motivated maintenance.

R100 prices will decline 1.8pc month on month as feedstock prices post average losses of 5.2pc. Average R100 prices are set to decline to $4.34/USG during the second quarter from $4.52/USG in the first as softer credit prices, a weaker California diesel basis, and a 2pc drop in feedstock pricing pressure the marketplace.

Stronger RIN and LCFS values will support the environmental attributes stack heading into 2026, while stronger feedstock prices will prompt R100 prices to average $4.63/USG during the first quarter of 2026, rising to $4.85/USG during the second quarter.

SAF

Prices descend amid conventional jet rout, imports surge

Sustainable aviation fuel (SAF) prices are set to decline 9pc from February to $3.72/USG amid material losses in California conventional jet pricing, while short-to-medium term RIN and LCFS losses provide headwinds. Prices are forecast to average $3.74/USG in 2025, down from $5.18/USG the previous year as a weaker credit stack and sharply lower jet basis pressures valuations. California conventional jet prices are forecast to average just $2.05/USG this year, down 16pc from 2024, while a potential delay to the implementation of CARB reforms erode the credit stack.

SAF prices are expected to recover to $3.91/USG over the course of the first half of 2026 as credit prices and tallow prices rebound.

We anticipate SAF supply to grow this year as tallow-based SAF earns an additional $0.52/USG of 45Z credit value, or nearly 84pc over tallow-based R100. Given significant margin compression in the renewable diesel space, we expect many facilities to shift more production to SAF even in the absence of a US mandate and peripheral credit and yield penalties.

January RIN data showed that SAF imports did not drop off as anticipated with the loss of the BTC. SAF imports surged 132pc month on month to the highest since September 2024. The unexpected increase in SAF imports could be driven by the need to fulfil existing offtake agreements, or perhaps RIN and LCFS values were sufficient to make the arbitrage viable. SAF imports accounted for 65pc of US SAF consumption last year.

Although we expect more SAF production to come on line this year and more RD production to shift to SAF given the exigencies of the 45Z credit, much of this product could be aimed abroad at the EU and UK, where SAF mandates have commenced. Excess production could also find its way to British Columbia, which does not appear to place any limitations on US SAF and has favourable LCFS prices.

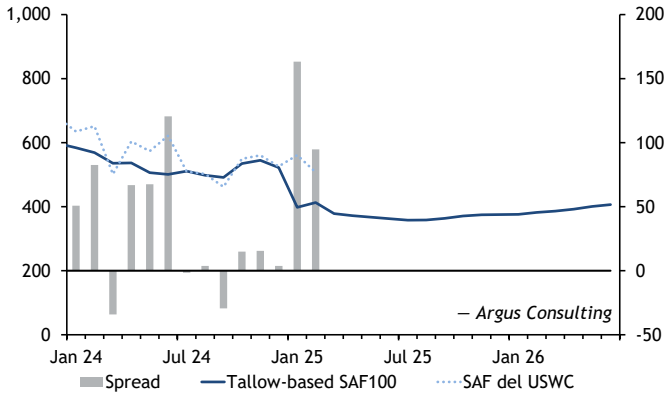
Feedstock

Prices retreat as demand wanes, credits weaken

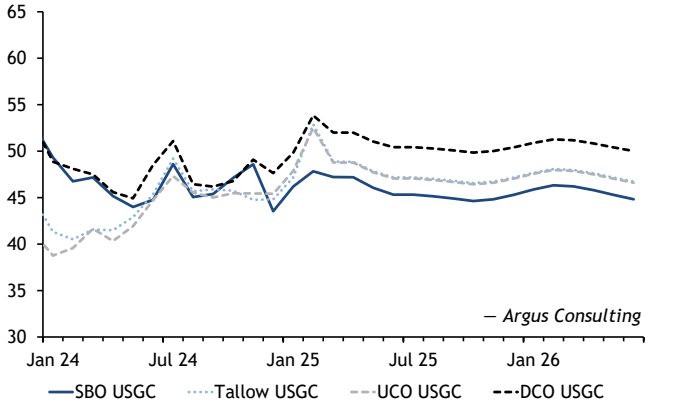
US feedstock pricing is set to succumb to the lack of demand from biodiesel producers faced with negative margins and US renewable diesel producers idling, conducting turnarounds, or reducing runs until greater clarity materializes around the 45Z credit. Fresh RIN weakness that had been lending support to the margin environment saw feedstock prices capitulate in the opening week of March.

Tallow prices led the decline, slipping 8pc on the month to $0.49/lb as current, preliminary 45Z guidance places no restrictions on tallow imports. The US turned to Australia and

US SAF prices ¢/USG



US biofuel feedstock prices ¢/lb



Brazil earlier this year to satisfy the gap left by UCO imports and has increasingly turned to the UK as a rapidly growing supplier of tallow. We expect the UK is supplying category 3 tallow, which does not receive double-counting under the EU Renewable Energy Directive.

A flood of trade announcements, countervailing measures and temporary pauses have roiled US soybean oil markets, pressuring prices up front despite otherwise bullish fundamentals. Chinese tariffs will handicap the competitiveness of US soybean oil, with a more pronounced impact during the autumn harvest period, when we see prices bottoming for the year at $0.45/lb.

Initial 45Z guidance shows DCO as the most advantaged feedstock available to US producers. We see DCO prices averaging $0.51/lb this year, running at premiums of $0.04/lb to soybean oil. Renewable diesel producers running DCO can earn more than 3.5 times more than soybean oil under 45Z, and around 16pc more credit value than UCO or tallow.

US biofuel price outlook

Product	Jan 25	Feb 25	Mar 25	Apr 25	May 25	Jun 25	2Q25	3Q25	4Q25	1Q26	2Q26
Ethanol											*¢/USG*
Ethanol Chicago	168	175	158	170	178	178	175	161	141	142	162
Ethanol USGC	181	186	172	184	192	191	189	175	155	156	176
Biodiesel											*¢/USG*
B99 Chicago	236	232	211	212	203	196	204	178	174	161	158
B99 USGC	248	246	224	218	217	217	218	213	209	202	192
B100 Chicago	344	360	338	337	325	314	325	291	293	284	290
B100 USGC	357	374	351	344	340	335	339	326	328	325	324
Renewable diesel (del California)											*¢/USG*
R100 (soybean oil)	440	455	447	439	434	429	434	425	440	457	476
R100 (tallow)	459	472	464	456	450	445	451	444	462	482	505
R100 (UCO)	472	484	476	468	461	457	462	456	478	500	525
R100 (corn oil)	467	480	471	463	457	453	458	452	472	493	518
SAF (del California)											*¢/USG*
SAF100 (tallow)	398	413	378	372	367	362	367	360	374	381	400
Feedstocks (US Gulf coast del rail)											*¢/lb*
SBO crude degummed	46	48	47	47	46	45	46	45	45	46	45
Tallow bleached fancy	47	53	49	49	48	47	48	47	47	48	47
UCO	48	53	49	49	48	47	48	47	47	48	47
Distillers corn oil	50	54	52	52	51	50	51	50	50	51	50

Fundamentals

Agricultural prices

Tariff policies weigh on soybean markets

Agricultural markets are on edge as they deal with the consequences of trade announcements from the new US administration that continues to shift lines, leading to uncertainty. Changes to tariff policy are causing US investors to fear the worst, leading funds to liquidate their positions in corn and soybeans futures. In response to US actions, Chinese retaliatory tariffs of 10pc on soybeans are significantly reducing the competitiveness of US-origin products, especially as China represents a major share of US agricultural exports.

Markets are largely under pressure as they await clearer responses from Canada and Mexico. The upheaval in trade flows and power dynamics is at the centre of everyone's attention, and it will take some time for the situation to stabilise. In this context, we are revising our price forecasts for US soybeans, corn and wheat downward for the coming months, despite the fundamentals suggesting market tightness remains. Soybeans in particular will be handicapped by changes in Chinese policy, and price weakness may be more

pronounced for the new US harvest arriving next autumn. But until then, new announcements and regulations will likely lead to continued market volatility and shift demand flow fundamentals.

For the coming months, crop estimates in South America are uncertain as the region faces unpredictable weather resulting in both heat waves and excessive rain – in turn worsening uncertainty for the US market over planted area estimates for the upcoming year.

Fossil fuel demand and prices

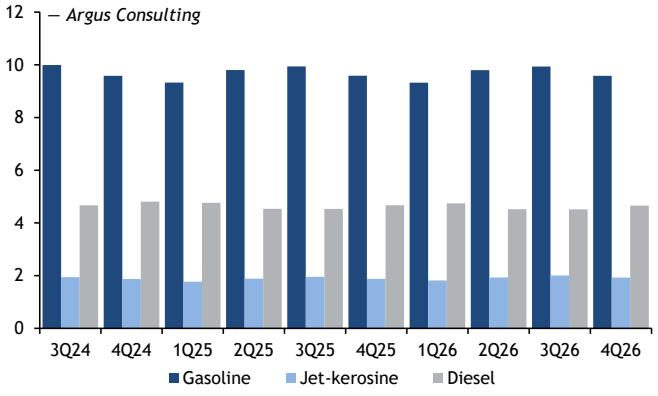
Gasoline cracks supported by tariff uncertainty

Light distillate prices are unusually strong in the US Gulf coast, driven by refinery maintenance and the closure of LyondellBasell's Houston refinery, which exacerbated supply tightness. Gasoline cracks strengthened in February, up $2.43/bl on the month and forecast to rise further in the coming months. Naphtha cracks were also approaching a seven-year high of $5.51/bl in February, up by $3.94/bl on the month. Uncertainty over US tariffs on Canada and Mexico initially propped up sentiment, although the impact remains muted following the repeal of the tariffs shortly after their implementation.

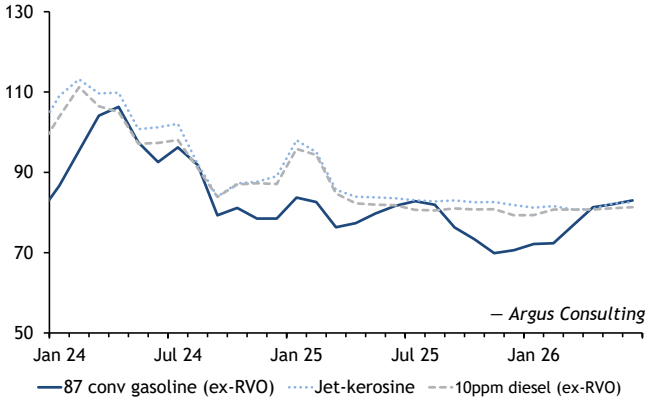
Diesel market tightens on refinery closures

Diesel crack spreads made further gains in February, supported by tightness in the Atlantic from refinery turnarounds and unexpected outages in Europe. Heating demand in the US remained supportive, declining more slowly than expected, which helped maintain diesel prices. The closure of refineries in Houston and California is expected to tighten the US market, reducing domestic diesel output and increasing reliance on imports. Uncertainty over US tariffs on Canadian products could also redirect Canadian diesel to Europe or Latin America, further impacting the US supply balance. Policy uncertainties have led to stagnation in renewable diesel and biodiesel consumption, boosting fossil diesel demand, as evidenced by a lull in RIN generation data. Despite these factors, diesel cracks are expected to fall in the near term as US output climbs on recovering utilisation and higher diesel yields, while supply east of Suez remains ample.

North America fuel demand *mn b/d*



North America (USGC) fuel prices *$/bl*



SOUTH AMERICA

Regulation

Brazil delays B15 mandate

Brazil's national energy policy council CNPE indefinitely delayed any further increases to the biodiesel blend mandate, which will now stay at the current level of 14pc. According to the Fuel of the Future regulation, approved last October, the biodiesel mandate was scheduled to increase to 15pc this March, and a further 1pc annually, up to 20pc in 2030.

CNPE decided to halt the mandate increase to slow food inflation, according to Brazil's energy minister. Soybean oil cif Sao Paulo prices in February were nearly 40pc higher on the year. The decision was also influenced by a rising number of complaints lodged with hydrocarbon regulator ANP of non-compliance to the current B14 mandate.

Demand

Ethanol

Corn ethanol boosts interharvest production in Brazil

In what is usually a quiet month, the Brazilian ethanol market came alive in January, with a remarkable 28.5pc surge in production on the year, driven by robust growth in corn ethanol production, which offset some of the expected month-on-month decline on the back of a tight sugarcane off-season. Corn ethanol accounted for 96.3pc of total ethanol production in January, furthering its new role in maintaining domestic supply amid lower sugarcane crushing during the crop's interharvest. The 3.7pc contribution from sugarcane-based ethanol was also higher than in January 2024, as the sugar-ethanol mix also went up, with 76.2pc of the output dedicated to ethanol production, compared with 64.6pc a year earlier. The shift underscores the strategic pivot towards ethanol, typically observed at the end of the harvest, amid suboptimal sugarcane quality for sugar production.

In Brazil's north and northeast regions, ethanol inventories were higher at the end of January compared with the same time last year, supporting indications of a well-supplied market. The regions also experienced more regular rainfall in January, which is expected to positively impact output for the next crop year. Although we expect this year's harvest to be smaller than the 2024-25 marketing year (MY), because of last year's wildfires, we forecast ethanol production to ramp up across the first quarter, reaching 2.3bn litres by April.

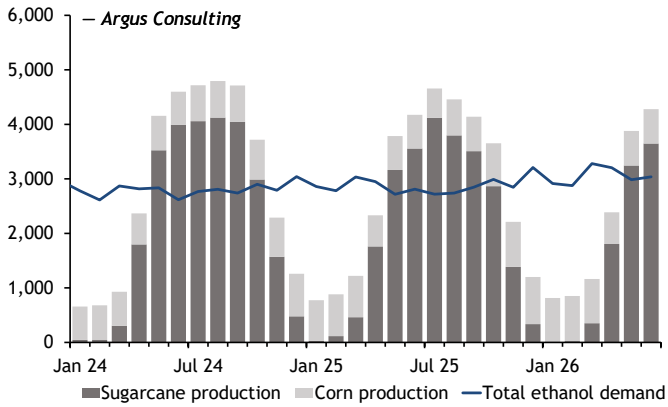
Competitive pricing fuels growth

Ethanol demand in Brazil is anticipated to have remained strong in January, driven by competitive pricing against gasoline. Although delays in ANP reporting have pushed back the release of ethanol sales data to the second week of March, we expect demand stood at 2.9bn l, marking a 2.9pc increase from the same month last year. The competitive pricing of ethanol, bolstered by increased corn ethanol production and higher carryover stocks, played a pivotal role in sustaining demand. In February and March, we expect flex-fuel vehicle drivers in the main consuming states will continue to favour ethanol over gasoline, further supporting domestic consumption levels. Ethanol demand is forecast to reach 3bn l in March, which could be supported further by the advent of an early start to sugarcane crushing.

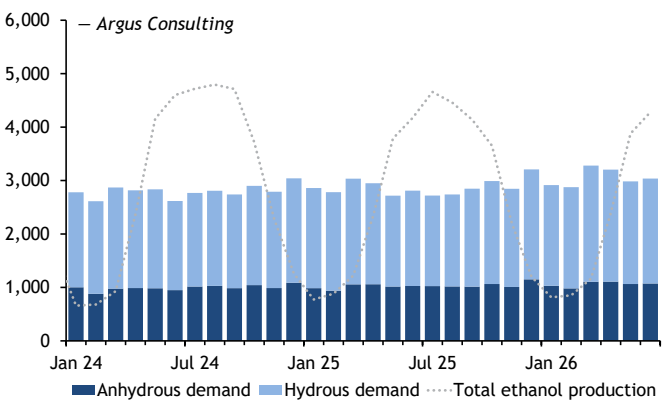
Reciprocal tariffs may hit Brazilian market dynamics

The imposition of tariffs on Brazilian ethanol by the US could have significant implications for Brazil's domestic and export

Brazilian ethanol production *mn litres*



Brazilian ethanol demand *mn litres*



markets in the months ahead. The US plan for "reciprocal tariffs" aims to match tariffs that foreign countries impose on US exports. Currently, Brazil charges an 18pc tariff on US ethanol, while the US imposes only a 2.5pc tariff on Brazilian ethanol.

If the US were to increase its tariffs to match Brazil's, it could disrupt the already declining ethanol trade between the two countries, leading to a further oversupply in Brazil's domestic market and to a price drive-down. The new tariffs could also impact alcohol-to-jet sustainable aviation fuel (SAF) production in the US relying on Brazilian ethanol as a feedstock – at this stage, the only company doing so is LanzaJet in Georgia. The company has stated it can and does use other feedstocks, Brazilian sugarcane ethanol does have a lower CI footprint compared to corn-based ethanol.

The overall impact of tariffs on the Brazilian market will depend on several factors, including global trade dynamics and domestic production levels, but it will certainly raise prices for US consumers.

Trade fluctuations combine with export challenges

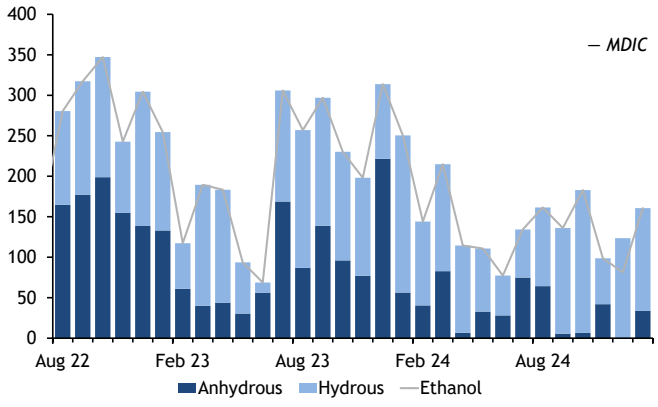
Brazil's ethanol exports dropped 29pc on the year in January, totalling 181.9mn l. South Korea was the primary destination, receiving 59pc of the shipments, followed by the US and the Netherlands. The decline in exports was driven by strong domestic demand, which took precedence over international markets. Conversely, ethanol imports more than tripled, reaching 21.3mn l, with Argentina and Paraguay being the main suppliers. The increase in imports highlights the need to supplement domestic supply amid production challenges.

Biodiesel

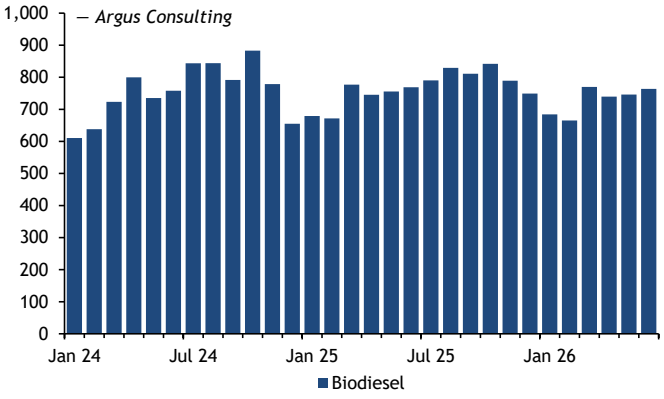
Brazil faces compliance challenges and law changes

Non-compliance with Brazil's biodiesel blending mandate continued into the new year as biofuel prices rose, only

Brazilian net ethanol exports *mn litres*



Brazilian biodiesel demand *mn litres*



weeks before the blending rate was set to climb to 15pc from 14pc. Biodiesel sales stood at 679mn l in January, at an estimated 13.8pc blend with diesel. The widening gap between the prices of biodiesel and fossil diesel is undoubtedly linked to some distributors not hitting the 14pc blend mandate.

In response to this and to avoid a sudden increase in demand that could propel even higher biodiesel prices, Brazil's national energy policy council (CNPE) indefinitely delayed the planned increase of the biodiesel blending mandate to 15pc, which was scheduled to come into effect in March. This decision aims to guarantee lower food prices amid rising soybean oil prices. We now expect Brazilian biodiesel demand will only reach 9.2bn l this year, rather than the 9.8bn l predicted under the premise of a B15 mandate.

Questions over future blend rate increases

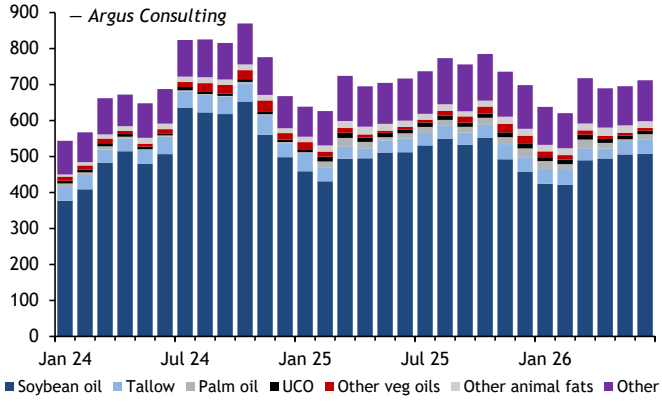
The indefinite delay of the B15 mandate also raises questions about the long-term feasibility of increasing the biodiesel blend rate to 20pc by 2030. With biodiesel prices significantly higher than those for Diesel A (the wholesale diesel grade before biodiesel blending), the market must address the economic viability of higher blend rates. The potential for increased non-compliance and the need for enhanced regulatory oversight further complicate the outlook. Brazilian fuel retailers have also raised concerns about market irregularities, such as competitors not complying with biodiesel blending and decarbonisation credit (Cbio) targets, highlighting the need for stricter enforcement and regulatory improvements to ensure a level playing field in the market.

Feedstocks

SBO share in Brazilian demand falls on rising costs

The rising costs of soybean oil led to a drop in its share of total feedstock demand in Brazil to 72pc in January, three

Brazilian biodiesel feedstock demand *'000t*



percentage points lower from 75pc in December 2024. Absolute volumes also fell to the lowest since February 2024, before the country had implemented the B14 mandate. A greater reliance on tallow made up for the falling soybean oil share over the month, but with the US tallow market becoming increasingly tight, the rest of this year might spark a fight over tallow supplies between the domestic and export markets.

The availability of tallow in Brazil is already expected to decrease this year owing to a slowdown in cattle slaughter, but as US producers are already nearing the maximum capitalisation of their domestic tallow supply market, the desire to import tallow for US biofuels production is expected to grow, funded by carbon intensity-dependent tax credit such as the 45Z and Low Carbon Fuel Standard.

In the months ahead, we expect Brazilian feedstock demand will be weaker than previously expected owing to the indefinite delay in its B15 mandate. We now expect total feedstock demand in 2025 will remain similar to that in 2024. Soybean oil demand is expected to remain roughly at 6mn t, whereas demand for tallow is expected to fall by 14pc to 430,000t.

Brazilian biofuel demand outlook

Product	Jan 25	Feb 25	Mar 25	Apr 25	May 25	Jun 25	2Q25	3Q25	4Q25	1Q26	2Q26
Ethanol demand											*mn litres*
Anhydrous ethanol	986	938	1,058	1,060	1,017	1,027	3,104	3,058	3,224	3,121	3,248
Hydrous demand	1,874	1,843	1,978	1,890	1,701	1,783	5,374	5,248	5,820	5,951	5,978
Ethanol demand	2,861	2,782	3,036	2,950	2,718	2,811	8,478	8,307	9,043	9,072	9,226
Ethanol production											*mn litres*
Sugarcane ethanol	29	117	462	1,761	3,164	3,558	8,482	11,425	4,588	392	8,700
Corn ethanol	745	766	759	570	623	618	1,811	1,834	2,477	2,438	1,847
Ethanol production	774	883	1,221	2,331	3,786	4,176	10,293	13,259	7,065	2,830	10,547
Biodiesel demand											*mn litres*
Biodiesel	679	672	777	746	756	769	2,270	2,431	2,380	2,120	2,249
Feedstock demand											*'000t*
Soybean oil	459	431	494	495	511	512	1,518	1,613	1,503	1,335	1,508
Tallow	48	39	33	28	34	38	100	104	116	116	102
Palm oil	5	16	25	18	9	15	41	50	65	62	37
UCO	6	13	14	12	12	11	34	35	40	37	31
Other vegetable oils	22	14	13	9	6	7	22	39	64	41	24
Other animal fats	15	17	19	21	19	17	58	48	56	56	63
Other	84	95	125	112	114	117	343	377	376	329	332
Total	**639**	**626**	**724**	**695**	**704**	**717**	**2,116**	**2,266**	**2,219**	**1,976**	**2,097**

Anhydrous ethanol: free of water and at least 99pc pure, and used in gasoline blends, currently set at 27pc. Anhydrous fuel meets all the requirements of the ASTM D4806.
Hydrous ethanol: contains water and has a purity of 96pc. Can be used in Brazil as a 100pc gasoline substitute in flex-fuel vehicles.

Prices

Ethanol

A volatile month for Brazilian ethanol

March has been a month of volatility for the Brazilian ethanol market, marked by geopolitical tensions and shifting domestic production trends. Brazilian ethanol prices have fluctuated significantly in recent weeks, climbing to $698/t on 19 February before falling to $646/t by 7 March, influenced by the announcement of new tariffs and the evolving landscape in corn and sugarcane ethanol production.

The announcement of reciprocal tariffs on imports from various countries into the US has sent ripples through the ethanol market. The proposed tariffs aim to match the import tariffs that foreign countries impose on US exports, with Brazil's 18pc tariff on US-sourced ethanol being a listed example. This disparity has long frustrated US producers, who rely heavily on export markets because of the limited domestic growth opportunities. Should the US impose tariffs equivalent to Brazil's, it could further hinder the already diminishing ethanol trade between the two nations, resulting in an increased surplus in Brazil's domestic market and potentially lowering prices.

On the domestic front, market participants have expressed concerns over the heightened interest in Brazilian corn this season. This increased demand is expected to boost competition within national industries, subsequently driving up corn and ethanol prices. The potential increase in corn prices because of the tariffs could also elevate ethanol production costs, putting upward pressure on ethanol prices.

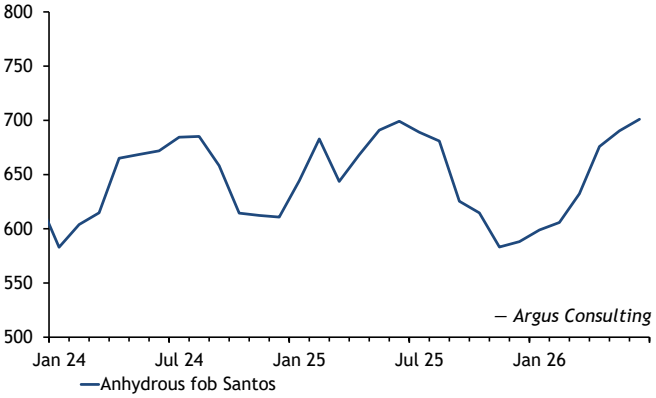
Given the current landscape, we anticipate Brazilian ethanol prices could continue a bullish trend over the second quarter, rising to $644/t by June. But in the near term, we expect ethanol prices to fall this month, driven by a 7.7pc drop in the value of gasoline from February. Beyond the second quarter, there is the potential for greater fluctuations depending on the evolving geopolitical and economic conditions, and the market remains dynamic and unpredictable, necessitating close monitoring.

Biodiesel

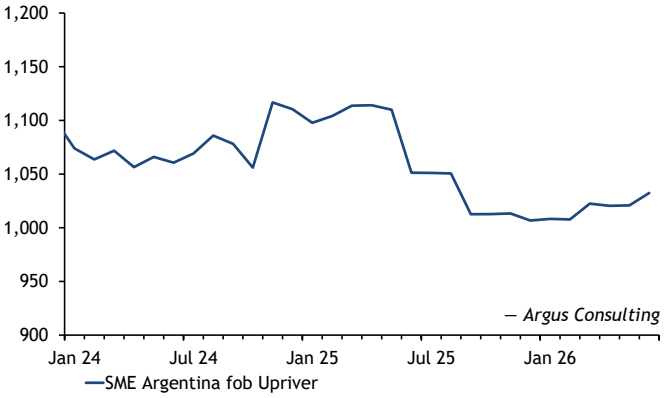
Argentinian SME prices surge on EU import revisions

Argentinian soybean oil methyl ester (SME) fob Upriver prices surged to $1,153/t at the start of March, following a suspected revision to the EU's minimum import price (MIP). This sharp increase has caught the attention of market participants, as there have been no confirmed reports of new SME shipments from Argentina landing in Europe over the first quarter of this year. Vessel tracking data indicates that

Brazilian ethanol prices *$/t*



Argentina biodiesel prices *$/t*



South American biofuel price outlook

Product	Jan 25	Feb 25	Mar 25	Apr 25	May 25	Jun 25	2Q25	3Q25	4Q25	1Q26	2Q26
Brazilian ethanol											*$/t*
Anhydrous fob Santos	644	683	644	668	691	699	686	665	595	612	689
Argentinian biodiesel											*$/t*
SME Argentina fob Upriver	1,098	1,104	1,114	1,114	1,110	1,051	1,092	1,038	1,011	1,013	1,025

there are currently no shipments en route to Europe. Argentina exported 58,000t in the fourth quarter of 2024, but trade with Europe has increasingly dried up owing to prices being pushed to unfavourable levels for arbitrage.

More recently, vessel tracking data has pointed more towards biodiesel being sent from Argentina to Brazil — an expected shift while European prices remain unfavourable.

Looking ahead, we expect prices to start declining by the end of the second quarter, falling to $1,051/t. Beyond this, prices are anticipated to follow the bearish trend in European SME prices, albeit with a lag. We forecast a decrease to $1,013/t in September, and to as low as $1,007/t by December.

ASIA-PACIFIC

Regulation

Indonesia raises Pome oil taxes retrospectively

Indonesia's finance ministry has notified palm oil mill effluent (Pome) oil exporters of an additional $20/t duty on cargoes exported in July 2023-September 2024. The funds will be paid to the palm oil plantation fund management agency, which subsidises the country's palm oil industry and the biodiesel blending programme.

The notice reclassifies Pome oil to now fall under a new "oil cake" classification, with a duty rate of $25/t. Pome oil exported under the original HS code 2306.90.90 was subject to a $5/t export duty at the time of export in the 15-month period. Many exporters have rejected the claim and are seeking legal representation to challenge the retroactive tax bill.

Indonesia's trade ministry stopped issuing export approvals for used cooking oil (UCO) and Pome oil on 8 January, which has led to protests from feedstock exporters and meetings with local associations. Market participants expect that any progress in lifting the export ban is unlikely to come before the end of March.

India considers upping ethanol target

On 11 February, India's oil and gas ministry stated that it expects that ethanol blending with gasoline will reach 20pc by March, six months earlier than its original target for the November 2025-October 2026 ethanol supply year. An average blend rate of 19.6pc was achieved in January, and on 26 February the ministry said it is considering introducing higher blend targets beyond the current level of 20pc.

CPO reference prices fall on weaker palm oil

Palm oil prices have retreated in recent weeks on lower demand as price-sensitive consumers have instead turned to importing cheaper soybean oil following record production highs in North and South America.

Malaysia's crude palm oil (CPO) reference price, which is used to set the export duty, fell from 4,817.70 ringgit/t ($1,084/t) for February to 4,390.37 ringgit/t ($983/t) for March, the lowest since November 2024, when palm oil prices started rising on production constraints. As the reference price exceeds 4,050 ringgit/t, the export duty remained at 10pc, its highest level.

Indonesia's reference price was almost flat on the month, down from $955.44/t in February to $954.50/t in March. Export duties have remained unchanged at $124/t for CPO, $71/t for refined, bleached, and deodorised (RBD) olein, $32/t for biodiesel, $10/t for Pome oil and $59/t for Pfad.

Prices

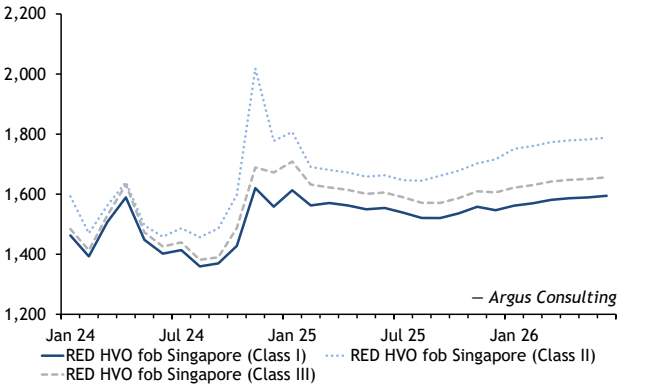
HVO and SAF

HVO and SAF prices continue to fall

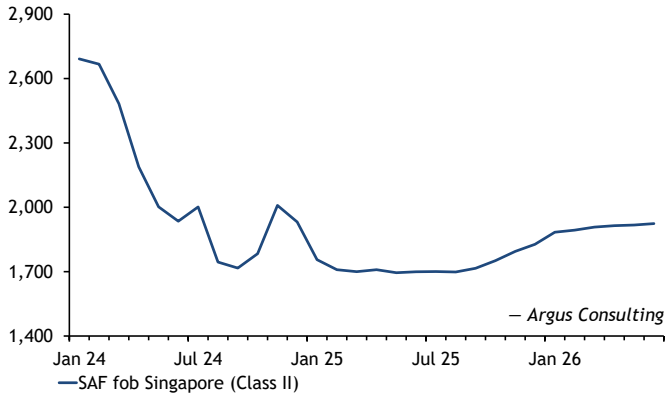
Hydrotreated vegetable oil (HVO) Class II fob Singapore prices were down by 6.4pc to $1,690/t in February, a larger loss than the 3.1pc and 4.5pc declines posted by Class I and Class III, respectively. There was little change to HVO market fundamentals from January, but Singapore grades benefited from improved freight rates, which dropped by $3/t. A weak diesel complex will weigh on HVO prices for the rest of the year, but this will also result in freight rates declining further, from $69/t in February to $60/t by July, which should narrow the ARA-Singapore spread between hydrotreated products.

Sustainable aviation fuel (SAF) Class II fob Singapore prices also contracted in February, down 2.7pc to $1,709/t, an all-time low. SAF prices are forecast to remain weak until June as capacity surplus weighs on the market, but are expected to regain strength later in the year.

Asia-Pacific HVO prices *$/t*



Asia-Pacific SAF prices $/t

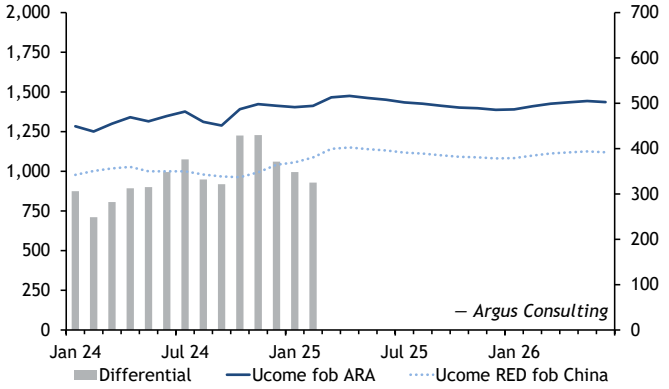


Biodiesel

Ucome prices maintain upward trend

Used cooking oil methyl ester (Ucome) fob China prices rose to a 22-month high in February, up 3.0pc to $1,088/t, tracking rises in European Ucome prices. Prices have also been supported by the European Commission slightly reducing the minimum anti-dumping duty applied to biodiesel producers from 22.8pc to 21.7pc. February marked a fourth consecutive month of rising prices, with additional support coming from higher buying interest in Asia-Pacific. In addition to rising biobunkering demand in Singapore, there have reportedly been higher purchases in Malaysia as domestic palm oil prices drove up the cost of domestic biodiesel production, favouring imports from China.

Ucome prices $/t



Prices are forecast to rise to $1,142/t in March and then hold firm at an average of $1,140/t over the coming quarter, before weakening over the summer, in line with our forecasts for European Ucome and with the expected weakness in the vegetable oil and diesel markets. Our forecast holds the expectation that product will be exported to the European market with an anti-dumping duty of 21.7pc applied, and we will continue monitoring the market for shifts in market fundamentals.

Feedstock

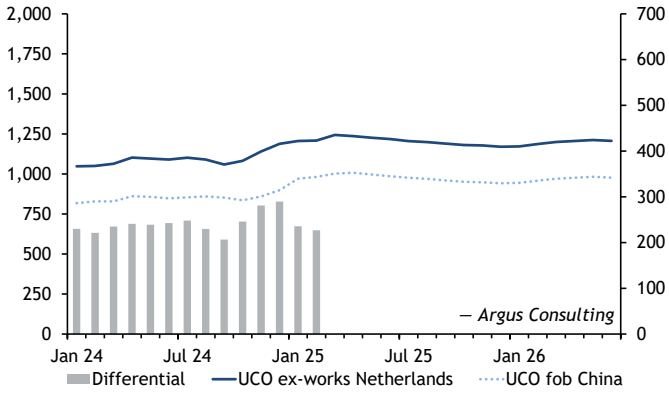
UCO prices at two-year highs

Holding onto an upwards trajectory, UCO fob China prices rose for a fifth consecutive month, up 1.2pc in February to $982/t and marking the highest monthly average since February 2023. Prices had initially jumped in December when China revoked a 13pc tax rebate on UCO exports, but continued rising in response to feedstock constraints across Asia-Pacific. At the start of the year, Indonesia halted all export approvals for UCO and Pome oil as part of market restructuring to ensure sufficient domestic feedstock for its rising biofuel obligations. The knock-on effect from this decision was reduced availability of advanced feedstock for export. But UCO prices rising in February also tracks with similar rises in previous years, as Chinese export activity typically slows around the lunar new year.

Asia-Pacific biofuel price outlook $/t

Product	Jan 25	Feb 25	Mar 25	Apr 25	May 25	Jun 25	2Q25	3Q25	4Q25	1Q26	2Q26
Biodiesel											
RED Ucome fob China	1,056	1,088	1,142	1,150	1,140	1,131	1,140	1,110	1,087	1,098	1,121
HVO											
HVO Class I fob Singapore	1,613	1,563	1,570	1,563	1,550	1,554	1,555	1,527	1,547	1,571	1,590
HVO Class II fob Singapore	1,807	1,690	1,681	1,672	1,658	1,663	1,664	1,651	1,699	1,761	1,783
HVO Class III fob Singapore	1,709	1,632	1,622	1,614	1,601	1,605	1,607	1,577	1,601	1,631	1,651
SAF											
SAF Class II fob Singapore	1,756	1,709	1,700	1,709	1,695	1,700	1,701	1,705	1,791	1,895	1,918
Feedstock											
UCO fob China	970	982	1,002	1,007	997	985	996	968	947	957	979

UCO prices *$/t*



We expect UCO prices will hold firm over the coming months, in part supported by palm oil prices, but also by weakening macroeconomics in China, as both should lead to reduced UCO generation and availability.

It is possible a sharp drop in demand from US refiners will weigh on the supply and demand balance, pushing down UCO prices. And it remains to be seen how rising demand for biodiesel in Singapore and the biofuel pilots in China will shore up the UCO demand picture.

Trade

Biodiesel and UCO

China data delayed for lunar new year

As in previous years, China has delayed the release of new export data owing to the lunar new year celebrations, which started at the end of January. In previous years, China's UCO and biodiesel exports notably dipped in either January or February depending on the date the celebrations started, so it is likely exports in either month will post dips this year too. But this year, the decline would be exacerbated as guidance for the 45Z tax credit in the US has excluded biofuels produced with foreign UCO. The timing of the guidance may not have impacted exports to the US in January, but certainly will have weighed on any discussions for UCO loading in February. Conversely, we expect European Ucome and HVO producers will purchase a higher volume of UCO this year than last given the duties in place on biodiesel and HVO.

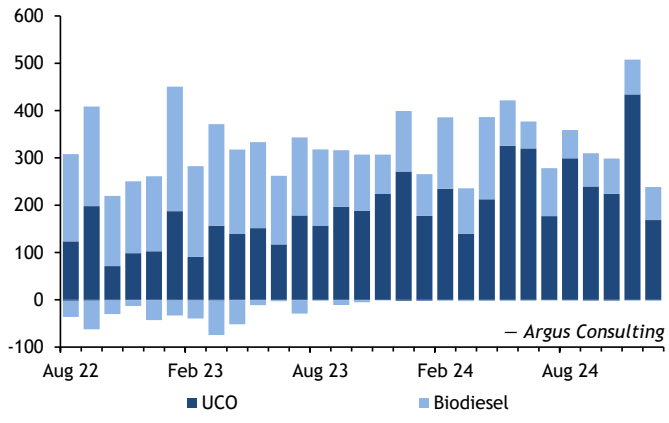
But China's focus on its own domestic biofuel consumption rose last year in the wake of Europe's duties, and it conducted a series of SAF, HVO and biodiesel blending trials through 2024. Singapore's consumption of Chinese biodiesel also rose last year, positioning itself as a biobunkering hub. As voyages between Singapore and Europe are in the scope of the FuelEU Maritime legislation, Singapore's trend of rising biodiesel imports from China should continue to firm, marking 2025 as a year to watch as trade flows realign.

Palm oil

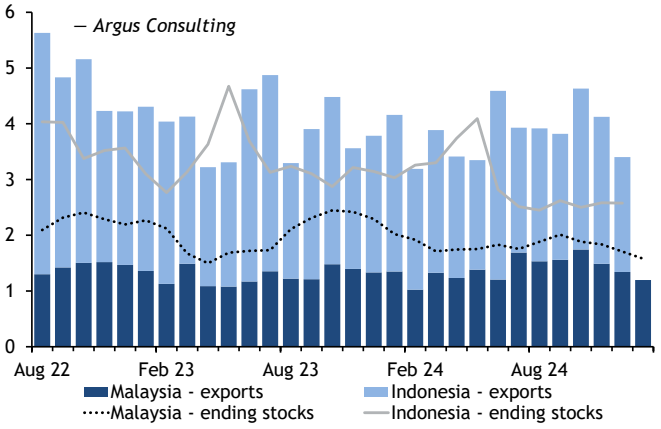
Indonesia exports fall on high prices

Indonesian palm oil exports fell in November, down 8.7pc to 2.64mn t, followed by a further drop of 22pc to 2.06mn t in December, the lowest monthly figure since May 2024. Despite the consecutive drop in exports, ending stocks were up by just 3.2pc to 2.58mn t in November, and flat on the month in December. The sharp decline in exports reflected the rise in palm oil prices towards year-end, driven by palm oil production difficulties that resulted in many usual buyers turning to rival vegetable oils such as soybean oil. Indonesian crude palm oil production ended 2024 at 48mn t, 2mn t lower than at the end of 2023, and equivalent to a full month of exports, which led to a tight market towards the end of the year as production was not keeping pace with demand.

China biofuels and feedstock trade *'000t*



Asia-Pacific palm oil trade *mn t*



Malaysian stocks at 20-month lows

Malaysia exported 1.2mn t of palm oil in January, down 11pc on the month. Stocks ended at 1.6mn t, an 8pc drop on the month, resulting from production falling for a fifth consecutive month. Malaysia's production slightly increased last year, but at 19.4mn t, this was a rise of 0.7mn t, which was insufficient to offset wider market tightness. And with production in Malaysia and Indonesia falling towards the end of the year, rising prices were an inevitable outcome as markets tightened.

Palm prices have eased since November, owing to weakness in soybean oil markets, but the declines were mitigated by low palm oil productivity. Market participants expect production should improve in the coming months, easing supply constraints. Prices are expected to continue easing in the first half of the year. But Indonesia's new B40 mandate calls on more feedstock for biodiesel production, and a tighter market this year continues to lend support to firmer prices.

GLOBAL SUPPLY

Global Supply

Europe

Hungary's Mol has completed co-processing trials to produce SAF and HVO using UCO and cashew nutshell oil, respectively, at its 115,000 b/d Bratislava refinery in Slovakia.

Finnish refiner Neste has delayed the start date of its Rotterdam biorefinery expansion by a year to 2027, citing poor financial performance and challenges in the contractor market.

Spanish renewables developer RIC Energy has accelerated efforts for its 100,000 t/yr e-SAF plant in Cantabria, with plans to develop a nearby hydrogen electrolysis facility that will act as feedstock for the e-SAF plant coming on line by 2030.

Austrian state-owned OMV Petrom has begun construction of a 250,000 t/yr HVO and SAF plant on the site of its 85,000 b/d Petrobrazi oil refinery in Romania. The plant will use UCO and animal fats as feedstock and is expected to come on line by 2028 at a total cost of €750mn ($788mn)

The UK's SSE Thermal has taken FID on its 300MV Tarbert Next Generation power station in Kerry, Ireland, fuelled by HVO and expected on line by 2027.

The German government is seeking a developer for an e-SAF production plant utilising PtL in Lusatia, eastern Germany, with funding of up to €400mn to support construction.

French developer Verso Energy signed an agreement with Oulu's local government in Finland to develop an 80,000 t/yr e-SAF plant in the city's port area of Oritkari. The facility will source biogenic CO_2 from local paper and pulp mills and is expected to cost €1.4bn.

Haffner Energy announced a long-term SAF offtake agreement and financing contract with SAF aggregator Atoba Energy for SAF from its 60,000 t/yr alcohol-to-jet production facility in Paris-Vatry airport, France, expected on line by 2028. Further details of the offtake have not been disclosed.

Portugal's Galp has received a €430mn loan from the European Investment Bank for its upcoming 270,000 t/y HVO and SAF facility at its 226,000 b/d Sines oil refinery. The plant is now expected to come on line in the first half of 2026, delayed from the original start-up date in 2025.

The UK government has committed £200mn ($253mn) for investment in clean energy at Petroineos' 150,000 b/d Grangemouth refinery, which is due to be closed permanently.

North America

Clean energy group XCF has begun commercial production of SAF at its 38mn USG/yr Reno renewable diesel and SAF facility in Nevada, US.

Canada's Imperial Oil will start operations at its 20,000 b/d RD plant at its Strathcona refinery near Edmonton, Alberta, by mid-2025 using canola, soy and sunflower oils along with hydrogen derived from natural gas as feedstock.

Green Plains has indefinitely idled its 120mn USG/yr ethanol plant in Fairmont, Minnesota, citing challenging market conditions and regional factors.

Western Dubuque has idled its 36mn USG/yr biodiesel plant in Farley, Iowa, citing uncertainty on the new clean fuel production credit, 45Z.

Chemical and biofuel producer FutureFuel has delayed the restart of its 60mn USG/yr biodiesel plant in Batesville, Arkansas, after announcing maintenance in late December, citing uncertainty and lack of official guidance on the 45Z credit.

Blue Biofuels has procured land in Frostproof, Florida, to build its 3mn USG/yr cellulosic ethanol plant and aims to begin construction later this year.

US biofuel producer Gevo has begun engineering works to restructure its 65mn USG/yr ethanol plant to produce SAF as part of its $210mn acquisition of Red Trail Energy.

Phillips 66 is considering co-processing RD and SAF at its 258,500 b/d Bayway refinery in New Jersey, subject to more northeastern US states adopting low carbon fuel standards.

Aviation fuel provider AvFuel has extended its operations to supply a 30pc SAF blend at the new delivery points of Linden, New Jersey; Port Everglades, Florida; and Pasadena, Texas.

State-owned Development Bank of Japan (DBJ) and Mitsui's subsidiary OSK Line have invested an undisclosed sum in California's e-SAF producer Twelve Benefit.

Calumet has received an initial loan of $782mn from the US Department of Energy for the expansion of its 330mn USG/yr SAF and RD plant in Great Falls, Montana, expected to be fully operational by 2028.

South America

Brazilian state-controlled Petrobras has begun testing co-processed jet fuel with 1pc renewable content at its 239,000 b/d Reduc oil refinery in Rio de Janeiro. Petrobras also announced it has started a feasibility study for an alcohol-to-jet SAF plant at its 434,000 b/d Replan oil refinery, Sao Paulo, with an ethanol processing capacity of 10,000 b/d.

Brazilian sugarcane producer Agroterenas has received regulatory approval to commence operations at it at its 350,000 l/d (2,205 b/d) hydrous ethanol plant in Estrela do Oeste, Mato Grosso.

Brazilian biofuel producer Bahia Bioenergia has received R39.6mn ($6.8mn) from regional development bank BNB to modernise infrastructure and increase efficiency of its mill operations in northeast Bahia, which is expected to restart sugarcane crushing operations later in 2025.

Brazilian sugar and ethanol producer Atvos secured ISCC and ISCC plus certifications to export ethanol and its derivatives to be used for SAF production in Europe, Asia, and other markets. Another ISCC EU Corsia certification has been granted to Vibra, to sell SAF from its fuel terminals at Rio de Janeiro international airport, and from its terminal in Cubatao, Sao Paulo.

The US' Cargill has acquired an additional 50pc stake to reach full ownership of Brazilian ethanol producer JSC Bioenergy, for an undisclosed amount.

Asia-Pacific

BP has temporarily halted development of its 10,000 b/d RD and SAF plant in Kwinana, Western Australia, citing absence of key policy support measures and uncertainty in investment decisions in the country.

Nippon Paper Industries, Sumitomo and Green Earth reported plans to form a joint venture to build a 1mn l/yr ethanol plant at Nippon Paper's Iwanuma Mill in Japan's Miyagi prefecture. The plant will use wood chips as feedstock and is expected to begin commercial operations by 2027.

Singapore Airlines has signed an initial agreement with US-based Aether Fuels to procure neat SAF from Aether's 100 USG/d Fischer-Tropsch-SAF pilot plant in Chicago, which is expected to come on line later this year.

Japan's Eneos started supplying blended SAF to Skymark Airlines between February and March, for flights from Haneda airport, Tokyo, to Naha airport in Okinawa.

China's Sinopec has delivered its initial batch of 500t of blended SAF to Hong Kong International Airport, sourced from its 100,000 t/yr SAF plant in Zhenhai, Zhejiang province.

Indian state-owned refiner HPCL will partner with Boeing to advance the development of SAF in India by exploring opportunities to scale up SAF production, support the certification of domestically produced SAF, and advocate on policies for a robust SAF ecosystem.

Rio Tinto has completed biofuel trial runs using 10mn l of RD supplied by Neste's Singapore biorefinery, for its transportation and mining operation in Pilbara, Australia.

The federal Australian Renewable Energy Agency has pledged A$2.4mn ($1.51mn) to Viva Energy for reconditioning its fuel tank at the Pinkenba fuel terminal to supply blended SAF supply at Brisbane airport and pledged $5.1mn to Licella to conduct a feasibility study for a 60mn l/yr AtJ SAF plant using sugarcane waste at the Isis sugar mill near Brisbane.

Middle East

Saudia Arabia's Red Sea Global has signed a SAF supply deal with Saudi Red Sea International Airport's operator Daa International to make a 35pc SAF blend jet fuel option available for Fly Red Sea, a subsidiary of Red Sea for flights out of Riyadh, Jeddah, Dammam and Dubai.

Africa

South Africa's Sasol has signed an agreement with Anglo American's subsidiary De Beers to trial feedstock production for RD at four locations in South Africa. De Beers will be responsible for providing feedstocks for RD production.

ISCC granted Italian Eni's farm aggregator Janari Farms its first ISCC EU low ILUC certificate in Kenya. Janari Farms grows castor beans on severely degraded land, used as feedstocks to produce biofuels.

Argus *Biofuels Outlook* is published by Argus Media group

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London, WC1X 8NL
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ISSN: 2752-6976

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