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Argus Biofuels Outlook



Overview

European HVO and SAF prices fell in November as demand tapered and record import flows softened the supply tightness that prompted price rises in October. SAF values fell sharply, dropping $720/t within two weeks after buyers locked in volumes for 2025 compliance. The German cabinet has approved its RED III draft, confirming the removal of double counting. We expect the new rule will underpin a rise in German HVO demand to 2.7bn l next year.

In the US, producers pivoted towards higher-margin SAF over RD, pushing SAF output to a record high, and towards maximising imported tallow use before its 45Z eligibility expires in 2026. But next year's outlook remains clouded by unresolved issues over the reallocation of waived SRE volumes and by the EPA's proposed foreign RIN provision.

Brazilian industry groups are lobbying for higher Renovabio targets for 2026 amid plans for a B16 mandate and expanding production capacity. The sugarcane harvest wound down in November as expected, while mills continued to favour ethanol output as sugar prices slumped to multi-year lows.

Asia-Pacific SAF and HVO prices retreated as subdued demand and rising supply weighed on sentiment. Softer HVO prices narrowed the arbitrage for exports to Europe, but RED III news could lift European prices and reopen trade opportunities in the short term.

Key biofuel prices, prompt

	Oct 25	Nov 25	Dec 25e	Jan 26e
Europe				*$/t*
RED FAME 0°C CFPP fob ARA	1,337	1,298	1,307	1,301
RED Rapeseed OME fob ARA	1,410	1,447	1,446	1,416
RED UCOME fob ARA	1,493	1,499	1,471	1,471
RED HVO fob ARA (Class I)	2,369	2,286	2,237	2,152
RED HVO fob ARA (Class II)	2,625	2,531	2,441	2,348
SAF fob ARA (Class II)	2,745	2,823	2,402	2,351
Bionaphtha fob ARA	1,668	1,840	1,895	1,774
UCO cif ARA	1,156	1,139	1,103	1,100
Ethanol Regular fob ARA	1,159	1,086	926	823
US (biofuels)				*¢/USG*
Ethanol Chicago	182	180	175	173
Ethanol USGC	192	193	184	182
B100 Chicago	403	408	393	398
R100 (UCO) del California	508	513	496	478
US feedstocks (US Gulf coast del rail)				*¢/lb*
Soybean oil crude degummed	51	51	52	53
Tallow bleached fancy	52	52	52	54
UCO	56	57	58	59
South America				*$/t*
Anhydrous fob Santos	711	716	696	654
Asia-Pacific				*$/t*
RED HVO Class II fob Singapore	2,571	2,479	2,392	2,302
UCO fob China	1,098	1,075	1,039	1,043
RED Ucome fob China	1,199	1,172	1,160	1,162

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EUROPE

Summary

This month

European biodiesel prices posted mixed moves in November. Rapeseed oil methyl ester (RME) gained 2.7pc on the month to $1,447/t, while soybean oil methyl ester (SME) and fatty acid methyl ester (Fame) 0 extended losses. Hydrotreated vegetable oil (HVO) values began to retreat as compliance-driven demand tapered toward year end, whereas sustainable aviation fuel (SAF) extended its rally before plunging by more than $720/t between 18 November and 3 December.

After months of delays, Germany's cabinet approved a Renewable Energy Directive III (RED III) draft on 10 December, moving the legislation to parliament. The draft confirms the removal of double counting, higher overall targets and the exclusion of aviation and maritime fuels. Key revisions include a higher advanced sub-quota, a lower renewable fuels of non-biological origin (RFNBOs) sub-quota, reversal of the crop cap reduction, reversal of soy exclusion and a delay to the palm oil mil effluent (Pome) oil exclusion.

Next month

January marks the start of a new compliance period, with RED III reshaping the biofuels landscape. The most significant shift is German HVO demand jumping to 2.7bn litres for 2026, alongside a recovery in German biodiesel demand from 2.1bn l to 2.7bn l. Removal of double counting will reduce the competitiveness of advanced biodiesel in Germany, boosting the share of RME and used cooking oil methyl ester (Ucome).

3-6 months ahead

Prices are expected to ease across the board as maintenance-related shortages and year-end demand spikes subside, allowing values to realign with weaker feedstock costs. Upside risk persists for ethanol, as the recent US-UK trade deal and tightening legislative restrictions leave EU supply constrained.

6-12 months forward

Robust demand from higher mandates will coincide with new capacity additions over the next year. The key structural shift will be in feedstock shares. Prices are forecast to ease from winter highs but settle above previous benchmarks. HVO Class II is projected to average $2,075/t in the second quarter of 2026, down $457/t from the fourth quarter of 2025 but up $147/t year on year.

Regulation

Germany cabinet passes RED III

The German cabinet on 10 December finally approved the RED III draft, therefore removing double counting for advanced biofuels. The bill mostly matches a RED III draft from 29 October, which no longer included aviation and maritime fuels in the quota. The law raises the 2040 target to 59pc and adjusts annual targets, starting at 16pc in 2027, up by 1pc from the first draft published in June. The bill also raises the sub-targets for advanced biofuels to 9pc by 2040.

The penalty for failing to meet the RFNBO sub-quota is set at €120/GJ, up from the previously proposed €70/GJ. The cap on Annex IX B biofuels remains unchanged from the June draft, but the new law omits a paragraph that detailed a reduction of the crop cap from 4.4pc to 3pc by 2030, therefore leaving the cap unchanged. The cabinet-approved version again makes biofuels derived from soybean oil creditable towards the greenhouse gas (GHG) quota and suggests that the exclusion of Pome oil-derived biofuels is delayed to 2027.

The law will now enter into force on the second day after its publication in the *Federal Law Gazette*. The law must now be submitted to the parliament for debate, where the parliament could initiate changes. The legislative process is expected to conclude in the first quarter of 2026.

French assembly passes amendment to reduce HVO tax

The French national assembly has passed an amendment to the 2026 finance bill to cut taxes on HVO, aiming to accelerate domestic output and decarbonisation of vehicle fleets. The amendment will set a tax rate of €12.91/MWh (or €0.12/litre) for HVO and would add the product to the list of biofuels already benefiting from lower taxes in France, which includes E85 and B100. But the French biofuels industry is not taking the decision as final, as the government can still override the national assembly's decision.

UK to apply anti-dumping duties on Chinese biofuel

The UK applied anti-dumping duties of 14.79-54.64pc on China-origin biodiesel and HVO from 25 November. The Trade Remedies Authority (TRA) investigation began in June 2024, assessing the period from 1 April 2023-31 March 2024. Duties of 14.79pc were adjusted down from the initial recommendation of 15.68pc for Zhuoyue Group, the sampled exporter, and to non-sampled co-operating exporters which

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include Weige Biological Technology, EcoCeres, Jingu Group and Haixin Energy Technology International. Higher duties were unchanged at 54.64pc for all other exporters.

UK to apply countervailing duties on US HVO

The UK TRA has recommended a countervailing duty of £257.80-303.56/t ($341.3-401.9/t) on US-origin HVO. The TRA noted that conditions for retroactive duties have not yet been met, but it will monitor imports and could change this recommendation later. The duty rate varies by company, with Phillips 66 facing a rate of £257.80/t, St Bernard Renewables a rate of £258.10/t and Diamond Green Diesel a rate of £265.82/t. All other US exporters will face a rate of £303.56/t. Interested parties can comment on the recommendation until 19 December.

The TRA has not recommended putting provisional duties in place while preparing the final recommendation, which is expected in March. The product scope includes HVO derived from oils and fats of non-fossil origin, in pure form or as included in a blend, originating in the US, but SAF is explicitly excluded from the scope of the duties.

Airline IAG asks EU to allow 2G SAF for 2030 e-SAF goal

European airline IAG has urged the EU to broaden its 2030 1.2pc e-SAF quota and reclassify it as an advanced SAF target to allow second-generation (2G) SAF produced from technologies such as alcohol-to-jet (AtJ), tyre pyrolysis oil and waste-to-fuel to count towards the quota.

The EU's ReFuelEU Aviation scheme provides little support for 2G SAF, forcing it to compete on price with HEFA-SPK. Allowing 2G SAF into the e-SAF mandate could inadvertently stall e-SAF projects that would be undercut. The airline suggested the EU might look into adopting a policy similar to the UK's HEFA-capped SAF mandate. This creates room for 2G SAF to contribute, in addition to a separate quota for e-SAF.

EU parliament approves one-year EUDR delay

The European Parliament has approved a one-year delay of the bloc's deforestation law (EUDR), allowing for a final agreement on the postponement in the coming weeks. The delay still needs to be procedurally agreed and published before the end of the year to prevent EUDR due diligence requirements from coming into effect on 31 December for commodities such as wood products, cattle, cocoa, coffee, oil palm, rubber and soya.

The parliament voted for a position similar to that of EU member states, granting firms an additional year to comply with EUDR rules. After the decision is published in the bloc's official journal, large operators and trading firms will have to comply from 30 December 2026 instead of 2025, followed by small and micro firms from 30 June 2027. Parliament has also called for a "simplification" review by 30 April 2026 to assess the EUDR's impact and administrative burden. Agreement must be reached before parliament's final plenary meeting on 15-18 December to avoid the EUDR taking effect at the end of this year.

Demand

Biodiesel

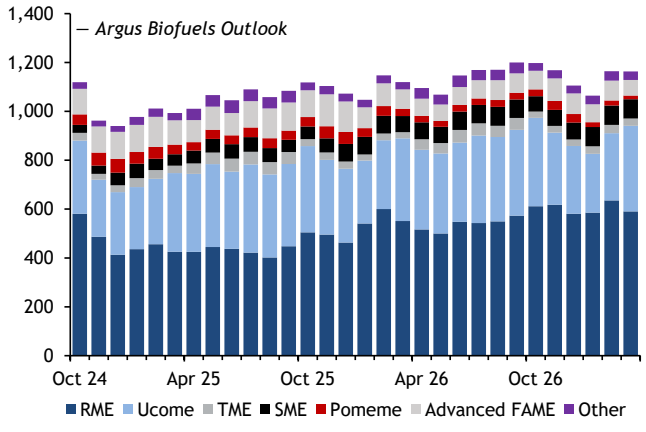
German legislation drives biodiesel demand shifts

Total biodiesel demand is expected to have risen 2pc on the month in September to 1.08bn l, tracking underlying diesel consumption, which gained 6pc over the same period. This increase was driven by an 11pc surge in RME as seasonal winter demand ramps up, expected to hit a peak of 600mn l in February 2026.

The German market is expected to be the biggest biodiesel consumer in Europe, just above France, contributing 2.1bn l of the 12.6bn l of European biodiesel demand expected in 2025. Germany is anticipating large shifts in biofuels demand following the RED III legislation changes approved by the cabinet on 10 December. For biodiesel, the phasing out of double counting for advanced biofuels will lessen the competitiveness of advanced biodiesel, which has had the biggest share of the German market over the past three years.

We expect the removal of double counting to materialise in an overall increase in German biodiesel consumption

European biodiesel demand ***mn litres***



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to 2.7bn l, with the share of RME rising from 18pc to 46pc, displacing advanced biodiesel.

One last year for Pome oil in Germany

Pome oil is currently a single-counting advanced feedstock in Germany but the RED III draft this summer proposed to exclude it from 2026. The latest draft approved by the cabinet suggests that Pome is excluded only from 2027, with some clarifications pending. Our forecast assumes exclusion of Pome oil from 2027, therefore still allowing consumption next year.

Recent market activity for Pome methyl ester (Pomeme) in Germany has highlighted that market participants have been preferring the grade over advanced Fame as its single-counting status would no longer be a disadvantage in a system without double counting. But we still expect advanced Fame and Pomeme demand to ease overall, with more competition from RME and Ucome.

Furthermore, higher prices for advanced HVO will likely make HVO producers more competitive buyers for Pome oil and advanced feedstock going into next year.

HVO

2026 advanced demand spike looms, 2027 revised up

The German cabinet adopted RED III on 10 December, confirming the removal of advanced double counting from 1 January 2026. German demand for HVO is projected to surge in 2026. Total HVO demand is expected to have reached its highest for 2025 in November at 569mn l, with a brief easing in December before being dwarfed by January demand, with a 32pc month-on-month increase to 705mn l.

Much of the anticipated jump in HVO demand was attributed to advanced HVO, but the cabinet-approved RED III draft suggests Pome oil can contribute up to 2027, suggesting that HVO Class IV made from Pome oil will also play a larger role in Germany next year. Total HVO demand in Germany is expected to rise to 2.7bn l next year, with 1.7bn l of advanced HVO, 0.6bn l of HVO Class IV, 0.3bn l of HVO Class II, and some contributions from other grades.

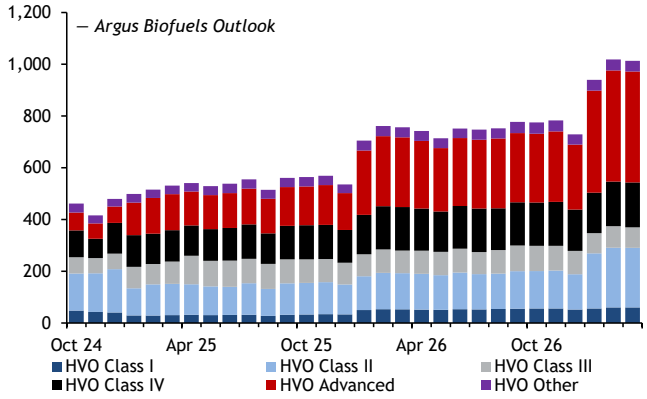
Our previous forecast for 2027 expected HVO demand in Germany to halve from 2026 levels due to an excess of tickets carried over from previous years. But the latest German RED

European demand outlook *mn litres*

Product	Oct 25	Nov 25	Dec 25	Jan 26	Feb 26	Mar 26	1Q26	2Q26	3Q26	4Q26	1Q27
Biodiesel											
RME	505	496	463	541	600	551	1,692	1,565	1,666	1,810	1,811
SME	52	58	72	72	73	66	210	211	229	197	237
UCOME	353	306	302	258	282	338	878	978	1,055	935	867
TME	28	30	29	25	28	26	78	137	144	79	94
POMEME	38	50	49	36	40	29	105	78	82	100	55
Advanced FAME	110	130	125	85	93	79	258	211	235	253	219
Other	32	34	32	31	33	30	93	131	129	97	108
Total	**1,118**	**1,104**	**1,073**	**1,047**	**1,147**	**1,120**	**3,314**	**3,311**	**3,539**	**3,472**	**3,392**
HVO											
HVO Class I	33	34	33	50	53	53	156	156	163	164	177
HVO Class II	122	124	116	130	141	140	411	414	418	427	674
HVO Class III	91	89	84	85	91	87	263	272	275	284	241
HVO Class IV	132	132	126	152	167	168	488	484	497	497	502
HVO Advanced	150	154	143	249	270	269	788	769	803	789	1,253
Other	36	36	34	39	40	39	117	113	122	126	125
Total	**564**	**569**	**536**	**705**	**762**	**756**	**2,223**	**2,208**	**2,277**	**2,287**	**2,972**
SAF											
SAF	132	116	117	131	135	138	404	455	505	436	463
Ethanol											
Ethanol 1G	616	614	639	547	605	591	1,742	1,914	1,951	1,826	1,706
Advanced ethanol	132	132	131	145	155	153	453	496	496	467	492
Total	**749**	**746**	**770**	**691**	**760**	**744**	**2,195**	**2,410**	**2,447**	**2,292**	**2,198**
Grand Total	**2,431**	**2,419**	**2,379**	**2,444**	**2,668**	**2,620**	**7,732**	**7,929**	**8,264**	**8,051**	**8,561**

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European HVO demand *mn litres*



III document increased the 2027 target from 15pc to 16pc, while our 2024 carryover estimate of 8mn t of CO2 equivalent (CO2e) was corrected to 6.3mn t CO2e after the release of new data. As a result, our German HVO demand forecast for 2027 is now more in line with demand expected in 2026.

UK-US investigation concludes with potential duties

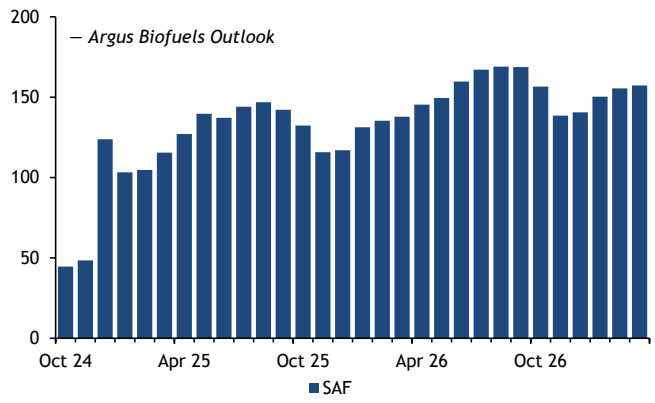
Following the conclusion of the UK's investigation by the TRA, it has recommended that countervailing duties against US-origin HVO be placed on shipments from March next year. Our expectation for UK HVO demand in 2025 is already lower than 2024 levels, and consumption eased with the start of the investigation and threat of retroactive penalties. The new duties could further weigh on HVO demand going forward.

SAF

Demand continues to taper towards year end

SAF demand continues to slow as market participants have acquired all the fuel needed before the end of the year, focussing now on securing supplies for the first quarter of 2026. Conversely, the start of 2026 should see a marked increase in demand, owing to the UK SAF mandate.

European SAF demand *mn litres*



European demand is set to ramp up over the coming years, almost entirely due to the UK SAF mandate increasing from 2pc in 2025 to 3.6pc in 2026, and then to 4.65pc in 2027. As a result, demand increases from 1.5bn l in 2025 to 1.8bn l in 2026 and then 2.0bn l by 2027. The current mandate includes a cap on SAF produced by hydrotreatment (HEFA-SPK). This cap is currently at 100pc but will start limiting the contribution of HEFA from 2027 onwards, reducing to 71pc by 2030 and 35pc by 2040. This will support demand for SAF from more emergent technologies such as alcohol-to-jet (ATJ-SPK) and Fischer-Tropsch synthesis (FT-SPK).

Ethanol

Ethanol winter slowdown starts in full

As country level data for ethanol demand in the third quarter is slowly being released, we see it track falling gasoline demand as we move into winter. The majority of EU countries have reported data for August, showing that demand fell 2pc from the year high of 810mn l in July. September is expected to have fallen by a further 1pc to 789mn l. This will end the third quarter with expected total demand of 2.39bn l, falling by 5pc to 2.28bn l in the fourth quarter.

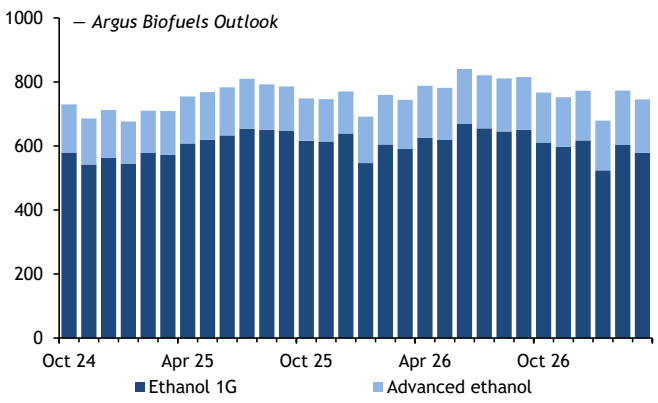
The lowest demand is projected to have reached is 681mn l in January, only 1pc higher than the trough of the previous year. In total, 2025 demand is projected to outstrip the previous year by 6pc. This overarching trend of demand growth is slowing with declining gasoline use, as 2026 is projected to rise 3pc, and 2027 less than 1pc, reaching a total of 9.4bn l.

Feedstocks

German draft retains crop cap, allows soy

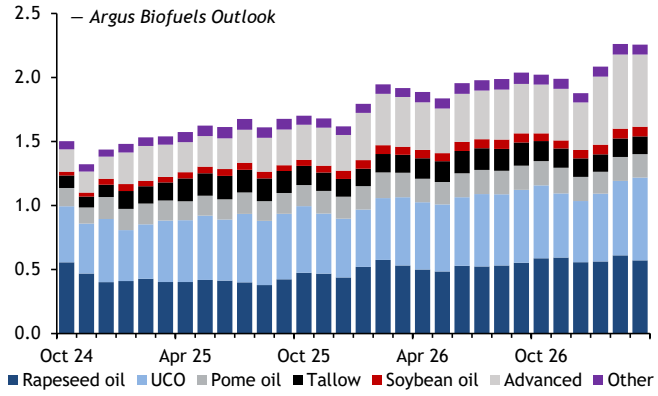
The German RED III draft approved by the cabinet removed a paragraph aiming to lower the crop cap from 4.4pc currently

European ethanol demand *mn litres*

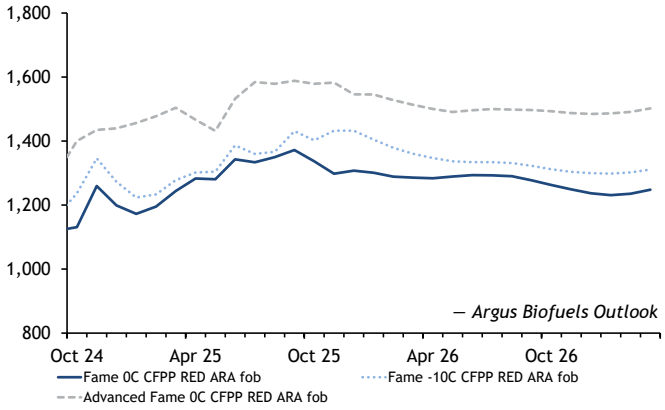


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Biodiesel, HVO and SAF feedstock demand *mn t*



European FAME prices *$/t*



to 3.5pc in 2028 and 3pc in 2030. Although this will have an impact beyond the forecast period, this will provide continued support for RME and therefore rapeseed oil (RSO) demand in Germany beyond 2027.

The new document no longer excludes soy-based biofuels from contributing to the targets, which could mean soybean oil methyl ester (SME) returns to Germany and therefore sees a boost in soybean oil use for biofuels in Europe.

Tallow cat 3 viability diminishing

Over 2025, tallow-based biofuels will have made up 4pc and 17pc of European demand for biodiesel and HVO, respectively. The largest markets for these grades are France and Sweden for HVO class III and Italy for tallow methyl ester (TME). But demand growth in the Netherlands and France could be hampered by upcoming legislation.

Category I and II animal fats are derived from high-risk and medium-risk animal parts for human health and are therefore categorised as waste under Annex 9B and eligible for double counting. Conversely, category 3 tallow comes from parts of animals considered suitable for human consumption, and is therefore considered to compete with food use and not designated as waste. But as caps on crops and Part B limit those feedstock pools, biofuels from animal fats (category 3) have generated more interest as an uncapped option.

Legislators have caught onto the potential role of these biofuels as a more competitive uncapped option than advanced biofuels and have put in place some restrictions. The Dutch RED III transposition contains a proposal to apply a 0.5x multiplier on cat 3 contributions, while France is proposing to apply a 0.6pc cap on cat 3 tallow in its RED III transposition from 2027. Germany already has a ban on cat 3 animal fats due to their competing use in other sectors.

Prices

Biodiesel

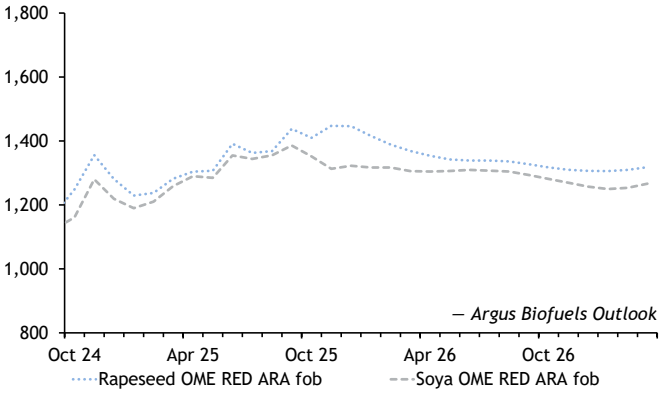
RME stabilises as diesel-led rally fades

European biodiesel prices posted mixed moves through November, with most grades posting gains. RME averaged $1,447/t, up $37/t from October, supported by early-month gains before US-led Ukraine peace talks triggered a reversal. Fame 0 extended losses, widening the RME-Fame 0 spread to $149/t, the broadest since October 2023, underscored by a seasonal pivot toward cold-filter grades.

Feedstock signals point to muted momentum into December. Rapeseed oil values have shown little change, pressured by weaker gasoil and US soybean futures. Larger-than-expected Canadian canola harvests and reduced Chinese buying have shifted flows toward Europe, adding downside risk. Spain's swine fever outbreak has weighed on rapemeal demand, compounding oversupply concerns.

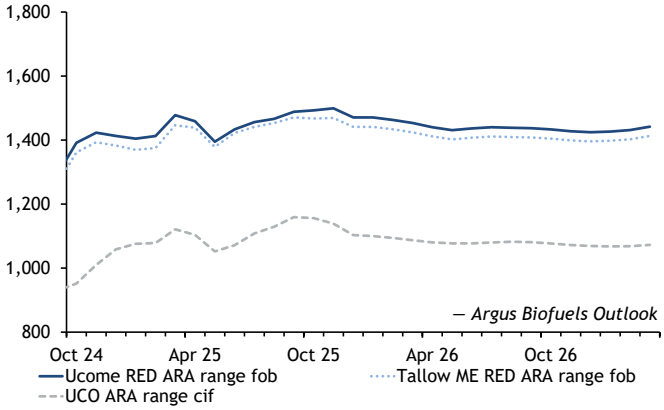
RME is projected to average $1,446/t in December before sliding through 2026, bottoming near $1,306/t. A seasonal

European crop-based biodiesel prices *$/t*

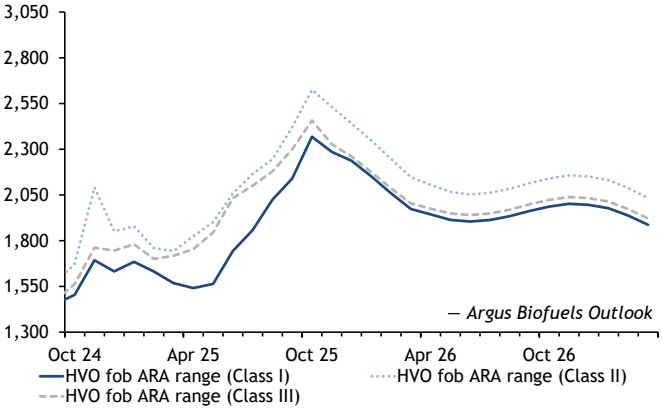


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European waste-based biodiesel prices *$/t*



European HVO prices *$/t*



recovery is anticipated into 2027, with seasonal winter-grade demand supporting prices to $1,318/t in March.

Waste grades brace for feedstock-led correction

Firm RME demand narrowed the spread to Ucome to $52/t, with RME briefly trading at a premium to tallow methyl ester (TME) for the first time since early 2023. Ucome and TME posted sharp declines late in November, although monthly averages edged up by $6/t and $2/t, respectively. Despite an easing in UCO prices, Ucome values were supported by strong German buying ahead of RED III legislative changes.

Underlying feedstock weakness is set to deepen. UCO cif ARA fell by $17/t from October to November and is forecast to drop a further $36/t to $1,103/t in December. Waste biodiesel prices are expected to realign with feedstock weakness by the end of the year, with Ucome at $1,471/t and TME at $1,441/t.

Looking ahead, waste and advanced grades are set to follow a broader softening trend into 2026. Ucome is projected to fall to $1,436/t by mid-year and $1,425/t by December, while a steeper decline in RME will widen the Ucome-RME spread to $118/t by year end. Advanced Fame 0 is likely to see a more gradual decline, starting the year at $1,546/t and reaching $1,485/t in December. The outlook for advanced grades is uncertain, but the removal of double counting in major markets is expected to compress their spreads to other grades.

HVO

Imports cap price rally

HVO prices extended their rally into late October, driven by planned maintenance-related shortages and year-end compliance demand. Class II reached a high of $2,812/t on 22 October, while Classes I and III firmed to $2,519/t and $2,588/t. November marked a turning point as open arbitrage windows allowed record imports of 289,000t from the US and Asia. Increased supply pressured values, pulling Class II down by $94/t to $2,531/t, while Class I eased to 2,286/t and Class III to 2,328/t.

The downward trend persisted into early December, compounded by uncertainty in Germany — the market expected to see the sharpest demand growth next year. A rally on 3 December faded after another delay in RED III cabinet discussions, dampening sentiment around timely implementation.

Backwardation has prompted sellers to offload volumes, but most buyers have completed year-end stocking, leaving tanks full at the ARA hub. With additional shipments expected from China before year-end, oversupply risks loom. Combined with the return of maintenance capacity in early 2026 and softer diesel and UCO prices, HVO values are expected to retreat toward mid-2025 levels, although still above 2024 averages.

Class II is projected to average $2,075/t in the second quarter of 2026, down $457/t from the fourth quarter of 2025 but up $147/t from the previous year's levels. Classes I and III are forecast to track similar declines, easing to $1,921/t and $1,955/t, respectively.

The 10 December German cabinet approval of RED III spurred a rally in HVO values. But underlying fundamentals are unchanged, with the bill matching our expectations for the German transposition. A reaction is expected to be short-lived but may cause short-term dislocations.

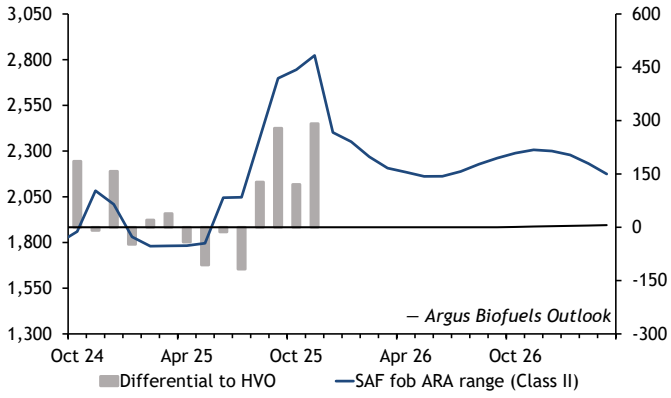
SAF

Premium collapses as demand evaporates

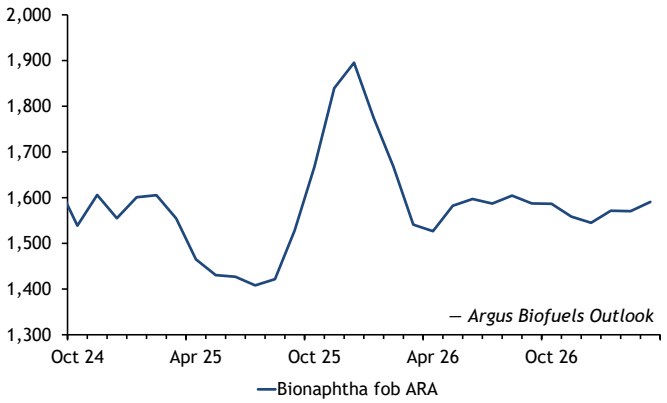
SAF extended its rally into early November as HVO values

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European SAF prices $/t



European bionaphtha prices $/t



softened, widening the SAF-HVO Class II premium to 415/t on 7 November and lifting SAF to a two-year high of $2,977/t on 18 November. Tight supply, driven by a production focus on HVO and limited imports, underpinned the gains through the second half of the year.

But the trend reversed sharply heading into December. SAF fell by $236/t to $2,741/t on 19 November, followed by a steep $404/t drop to $2,248/t over 1-3 December. This correction pushed SAF below all three HVO grades, marking its first-ever discount to HVO Class I.

The collapse was driven by a near-complete absence of demand across the EU as buyers had secured compliance-period volumes and shifted attention to first-quarter 2026 trades. Market activity only resumed once prices fell to multi-month lows.

Looking ahead, SAF values are expected to ease further as maintenance concludes, before recovering on renewed compliance-driven demand in early 2026. SAF is projected to regain its premium over HVO Class II in January, with an average spread of $3/t. The structural cost premia tied to the processing intensity of SAF over HVO is expected to reassert through 2026, with spreads widening toward $150/t by August as SAF rises to $2,228/t. Despite this underlying trend, 2025 has shown that volatility will remain sensitive to import flows and plant output variability.

Bionaphtha

Bionaphtha premiums make final gains before 2026

Bionaphtha premiums extended gains in November, even as conventional naphtha remained subdued. Outright bionaphtha prices ended November at $1,920/t, up $125/t from October, widening the November spread to conventional to $1,314/t. The move reflects a production tilt toward HVO over SAF, a process yielding lower bionaphtha output, alongside firming HVO and SAF prices ahead of compliance deadlines. Fourth-quarter bionaphtha values are projected up 15pc year-on-year, contrasting with an average 13pc decline across the first three quarters of 2025.

Conversely, the conventional naphtha price in November averaged $526/t, only up $2/t from last month, which had dropped $35/t from September.

With the SAF-HVO complex beginning to show easing, bionaphtha premiums are forecast to hold until the end of the year, before beginning to decline over the first quarter of 2026, hitting a low of $1,527/t in April, where recovering naphtha prices will compress the spread to $946/t.

Ethanol and ETBE

Ethanol volatility subsides

Ethanol prices swung sharply through October and November, surging on stock shortages and curtailed supply before retreating. The regular-grade ethanol price peaked at $1,268/t, with premium hitting $1,305/t, before values settled near $914/t for regular in early December amid muted market activity.

Heading into 2026, values are forecast to track weaker feedstock and gasoline benchmarks, falling to lows of $823/t for regular and $874/t for premium. Upside risk persists in the near term as US volumes divert almost entirely to the UK, leaving EU supply gaps unresolved.

The full price impact remains uncertain, but seasonal gasoline strength is expected to lift ethanol modestly by mid-year, with regular grade projected at $986/t in June.

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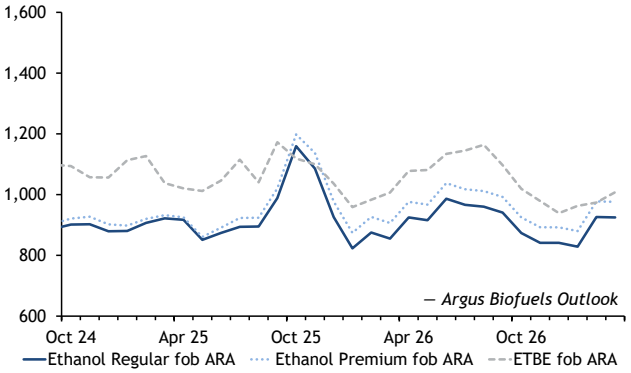
ETBE premium maintained despite outright losses

ETBE prices have softened since early September highs of $1,227/t, falling from $1,150/t to $1,039/t through November as domestic units switched from MTBE to ETBE, boosting supply. Despite outright losses, premiums over MTBE remain elevated.

Blending economics have been unseasonably strong, outpacing compliance ticket costs and supporting ETBE demand. Italy has led consumption growth in 2025 following RED III legislation lifting the biofuel share in gasoline to 3pc from 0.5pc.

ETBE values are expected to continue easing into January, reaching $959/t, before recovering to $1,164/t by the third quarter as seasonal gasoline demand and blending mandates reinforce support.

European ethanol and ETBE prices *$/t*



European price outlook *$/t*

Product	Oct 25	Nov 25	Dec 25	Jan 26	Feb 26	Mar 26	1Q26	2Q26	3Q26	4Q26	1Q27
Biodiesel											
FAME 0 fob ARA	1,337	1,298	1,307	1,301	1,289	1,286	1,292	1,289	1,287	1,249	1,238
FAME -10 fob ARA	1,402	1,432	1,432	1,405	1,379	1,360	1,381	1,339	1,329	1,305	1,304
Advanced FAME 0 fob ARA	1,579	1,582	1,546	1,546	1,528	1,588	1,529	1,496	1,499	1,488	1,493
Crop-based biodiesel											
RME fob ARA	1,410	1,447	1,446	1,416	1,389	1,369	1,391	1,345	1,334	1,311	1,311
SME fob ARA	1,352	1,313	1,323	1,317	1,317	1,306	1,313	1,307	1,302	1,269	1,256
Waste-based biodiesel											
UCOME fob ARA	1,493	1,499	1,471	1,471	1,463	1,453	1,462	1,436	1,439	1,428	1,433
TME fob ARA	1,467	1,469	1,441	1,441	1,434	1,424	1,433	1,407	1,410	1,400	1,405
UCO cif ARA	1,156	1,139	1,103	1,100	1,094	1,087	1,094	1,078	1,081	1,073	1,069
HVO											
HVO Class I fob ARA	2,369	2,286	2,237	2,152	2,059	1,973	2,061	1,921	1,937	1,995	1,934
HVO Class II fob ARA	2,625	2,531	2,441	2,348	2,247	2,148	2,248	2,075	2,087	2,150	2,084
HVO Class III fob ARA	2,458	2,328	2,261	2,175	2,086	2,005	2,089	1,955	1,972	2,032	1,969
SAF											
SAF fob ARA	2,745	2,823	2,402	2,351	2,269	2,207	2,276	2,170	2,226	2,299	2,228
Bionaphtha											
Bionaphtha fob ARA	1,668	1,840	1,895	1,774	1,667	1,541	1,661	1,569	1,593	1,563	1,578
Ethanol											
Ethanol Regular fob ARA	1,159	1,086	926	823	875	855	851	942	956	852	893
Ethanol Premium fob ARA	1,198	1,137	977	874	927	907	903	994	1,007	903	945
ETBE fob Rotterdam	1,119	1,100	1,036	959	983	1,007	983	1,098	1,135	979	982

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Fundamentals

Agricultural prices

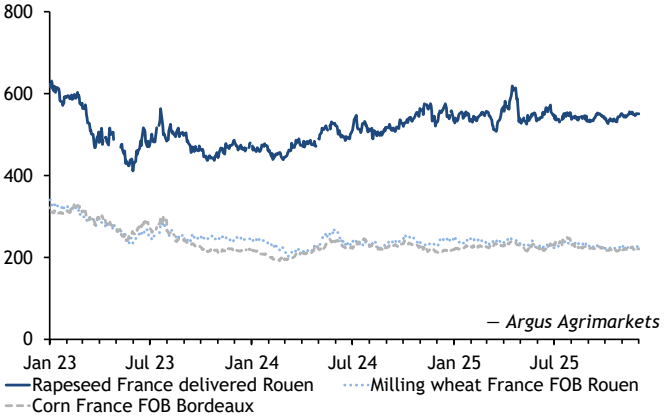
Oilseeds set for heavier imports

European benchmarks remain tethered to euro–dollar swings, but fundamentals are doing more of the heavy lifting. Strong feed demand continues to underpin barley and corn, with limited import flows encouraging greater use of domestic supply, particularly in France. Against that backdrop, we are forecasting Euronext wheat above $220/t across the next three months, before global oversupply reasserts itself ahead of the next harvest. We still see a seasonal low in summer 2026, with wheat near $197/t and corn around $193/t.

Oilseeds are the more finely balanced leg. Uncertainty around rapeseed is elevated, but weaker short-term rapeseed export flows from Ukraine are sufficient to sustain nearby Euronext prices — we maintain a forecast above $540/t by February 2026. Beyond that point, record canola output in Canada and Australia is set to weigh on European pricing. Elevated domestic prices are already enabling crushers to pull in larger canola volumes, both seed and oil, from overseas. Between February and September 2026, we expect substantial inflows that should pressure values towards $500/t by August 2026.

Looking into winter 2026-27, the curve signals a cooler market — December 2026 around $510/t, versus $550/t for December 2025, reflecting today's attractive forward levels that are likely to stimulate global canola plantings and production in the months ahead.

Biofuel agricultural feedstock prices *$/t*



Fossil fuel demand and prices

Supply tightness pushes cracks to unseasonal high

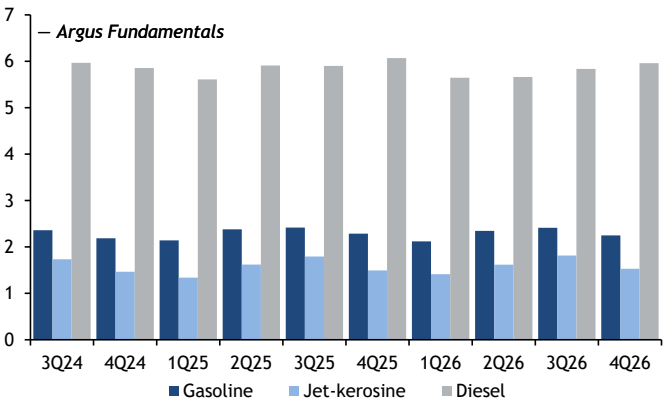
Gasoline cracks in northwest Europe rose by $3.97/bl in November, more than doubling those in the same month last year. The slow return of crude distillation unit (CDU) capacity after autumn maintenance has kept supplies tight, with further strain applied by barge loading delays in the Amsterdam-Rotterdam-Antwerp (ARA) hub and strong demand from west Africa. Expectations that Nigeria would impose a 15pc import tariff on road fuels pushed cracks up to a 26-month high of $28.90/bl, as extra loadings were sent from Europe to Nigeria. This price fell back $10/bl after the plans were scrapped.

Strong gasoline prices and firm blending have lifted naphtha cracks by $1.20/bl, landing at a discount to crude of $4.55/bl in November. The return of more maintenance capacity and seasonal gasoline easing will reduce blending demand, pressuring naphtha cracks down over the end of the year. European flows have been boosted recently as Asian buyers have rejected Russian naphtha following the sanctions from the US.

Diesel cracks volatile, but supply tightness to ease

Northwest European diesel cracks rose to over $44/bl on 18 November, more than a two-year high, before dropping below $30/bl by the end of the month. This volatility was amplified by the recent sanction headlines between Russia and the US, as well as Ukrainian peace talks. Looking ahead, global refinery outages falling from 7mn b/d to under 3mn b/d in December signals easing supply tightness and softened margins. This looks to compound with structurally weak

European fuel demand *mn b/d*

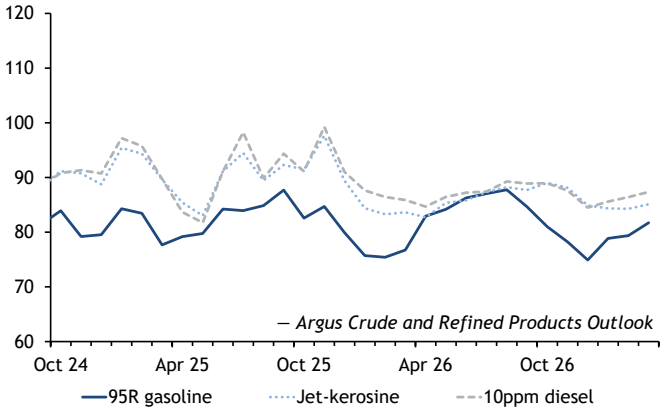


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European demand and new hydrocracking capacity coming on line in 2026 to pull cracks below $20/bl in the new year.

Strong gains in the diesel market have driven an increase in jet fuel cracks up to $32.50/bl in November. Supply constraints in Europe remain, as the 615,000 b/d al-Zour plant in Kuwait remains offline. While operation is expected to return this month, exports are unlikely to resume until 2026. This tightness should be lessened by the upcoming end of turnaround periods for European refineries.

European fuel prices ***$/bl***



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NORTH AMERICA

Summary

This month

Sustainable aviation fuel (SAF) production climbed 19pc to a record 26.6mn USG, halting SAF imports for the month. Domestic renewable diesel (RD) production fell 4pc in October as producers sought to maximise use of qualifying feedstocks such as imported tallow before losing 45Z credit eligibility in 2026. RD export demand rebounded in October on sustained demand from Canada and heavier purchases from European buyers.

Next month

Near-term procurement strategies remain centred on low-carbon intensity (CI) feedstocks, seeking to deplete imported tallow supplies, while soybean oil purchases are largely allocated for 2026 production. RD margins rose by 6pc in November but faced downward pressure in December as values for the renewable identification number (RIN) credit failed to offset diesel declines and rising feedstock costs. The market is actively positioning to maximise the benefits of the 45Z credit ahead of 2026 production, with the soybean oil credit projected to double to $0.60/USG.

3-6 months ahead

The 2026 biofuel outlook remains contingent on two unresolved factors — the reallocation of waived small refinery exemption (SRE) volumes and the Environmental Protection Agency's (EPA's) proposed foreign RIN provision. Over 2.69bn active RINs from 2023-25 could significantly erode mandates if the EPA fails to reallocate waived volumes. The market is increasingly pricing in 50pc reallocation amid uncertainty over the EPA's approach. Expectations are mounting that it will abandon the foreign RIN provision for 2026 as retroactive enforcement would be complex and litigious. Removing this provision would expand feedstock availability, exerting downward pressure on feedstock prices and RIN values.

6-12 months ahead

Finalisation of the 2026-27 mandate is expected to drive a material rebound in US biofuel production, supported by ambitious regulatory targets and new 45Z provisions promoting increased utilisation of domestic feedstocks. Although definitive guidance on the 45Z credit is not anticipated before May 2026, the current framework has already created a robust platform for a scalable and resilient advanced biofuels industry.

Regulation

Court orders EPA update on biofuel mandates

A US federal court on 8 December ordered the US administration to provide an update within seven days on progress toward finalising the 2026 Renewable Fuel Standard (RFS). The EPA must outline its steps and, if possible, give an estimated timeline for issuing the mandates, according to the DC Circuit Court of Appeals. The date will determine when credits from 2024 expire, driving urgency.

The administration is months behind schedule after proposing significant changes to how the programme treats biofuel imports and grants exemptions to small refiners. These decisions are critical for biofuel production margins, crop demand and retail fuel prices.

In September, the administration told another DC court it expected to finalise quotas "this winter 2025-2026", but a partial government shutdown delayed progress. The EPA was due to provide an update in November, but extensions were granted because of the funding lapse.

Canada eyes domestic content rules for CFR

Canadian regulators are considering amendments to the Clean Fuel Regulations (CFR) to boost domestic low-carbon fuel production. Environment and Climate Change Canada (ECCC) has launched a public consultation on options such as setting a minimum domestic content requirement or introducing a credit multiplier for Canadian-made fuels. Other suggestions are sought.

The prime minister announced plans in September for targeted CFR amendments and a C$370mn ($267mn) incentive to help producers restructure supply chains. Imported fuels, mainly from the US, accounted for 73pc of credits generated last year, highlighting Canada's reliance on foreign supply.

A domestic content rule would require a minimum share of Canadian-produced low-carbon fuels, while a credit multiplier would award extra credits for domestic output, providing financial incentives but potentially lowering credit prices. The CFR currently mandates blends of 5pc in gasoline and 2pc in diesel, which can be met with imports.

The ECCC is seeking feedback on thresholds, eligible fuels and design details until 15 January.

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US lawmakers push to restore SAF incentive to 2033

A bipartisan bill introduced on 9 December in the US House seeks to restore a larger tax credit for SAF that was removed under budget legislation earlier this year. The 45Z clean fuel production credit, launched in 2025, offers subsidies based on GHG emissions, with SAF initially eligible for higher incentives than road fuels. Legislation signed this summer extended the credit to 2029 but eliminated the SAF bonus from 2026, frustrating producers and airlines seeking stronger support for the nascent market.

The new bill would reinstate the SAF multiplier and extend the credit to 2033. Although passage remains unlikely in the near term, the proposal signals continued momentum for SAF advocacy. Current 45Z incentives allow road fuel producers to claim up to $1.06/USG and SAF producers up to $1.86/USG, factoring in inflation bonuses. Domestic SAF output has reached record highs this year. No Senate companion bill exists yet, although discussions are under way.

New Mexico targets April start for LCFS

New Mexico plans to launch its Clean Transportation Fuel Standard on 1 April 2026, introducing credits and deficits for lower-carbon fuels, with the first compliance deadline set for 30 April 2028. Final approval is expected early next year. The proposed low-carbon fuel standard (LCFS) aims to cut road fuel CI by 1.8pc during its initial three quarters of operation in 2026, accelerating to 20pc by 2030 and 30pc by 2040. The programme offers incentives for electric vehicle charging, biofuels and other gasoline and diesel alternatives, modelled on similar schemes in California, Oregon, Washington and Canada. Recent revisions dropped book-and-claim crediting for renewable diesel and removed targets for conventional jet fuel, but preserved incentives for SAF.

Oregon targets 50pc carbon cut by 2040

Oregon plans to cut the CI of road fuels by 50pc from 2016 levels by 2040 under a new executive order. The directive instructs the Department of Environmental Quality to begin planning by February for a rulemaking process to strengthen the state's Clean Fuels Program, which currently targets a 37pc reduction by 2035.

Oregon extended its programme in 2022 from a 10pc target for 2025 to 37pc for 2035. Formal rulemaking is expected to start in 2026. The move follows tougher LCFS targets in California and Washington and comes amid rising programme costs. Oregon credit prices doubled over the summer as shrinking renewable diesel consumption created more deficits than credits for three consecutive quarters.

Vertex and Placid seek biofuel quota relief

Two US refiners have recently sought exemptions from annual biofuel blending mandates under the RFS. Vertex Energy applied for relief from last year's quotas for its 88,000 b/d Alabama refinery, marking its first request in at least three years. Placid Refining, which previously secured full waivers for 2021-22 and partial relief for 2023-24, has asked the EPA to waive this year's requirements for its 75,000 b/d Louisiana facility.

The EPA currently limits eligibility to refineries processing no more than 75,000 b/d and that qualified when the programme began. Vertex's Alabama plant, which recently abandoned renewable diesel production and reverted to crude processing, reported 66,000 b/d throughput earlier this year but could exceed the cap at full capacity. There are now 17 pending petitions, mostly for 2025 mandates, following the EPA's decision on 16 earlier requests this month.

US court speeds biofuel waiver eligibility cases

A US federal court has agreed to fast-track two cases challenging the EPA decision to deny SREs under the RFS. The DC Circuit will expedite claims from Delek and HF Sinclair, whose refineries were ruled ineligible for waivers after exceeding the 75,000 b/d crude processing threshold in 2023. The refiners argue that throughput in one year should not determine eligibility for the next and warn that delays could render any returned compliance credits worthless. EPA policy allows credits to be reinstated retroactively, but they expire if unused within two years.

API proposes stricter biofuel waiver rules

The American Petroleum Institute (API) is calling for tighter SRE rules, requiring refiners to prove that economic hardship stems directly from biofuel mandates and restrict waivers to firms with limited refining capacity. API also seeks to prevent increased blending obligations for other refiners to offset exemptions. The US administration is expected to set 2026 biofuel quotas soon, intensifying lobbying over volumes, exemptions, and credit adjustments.

API and RFA explore E15 compromise

The Renewable Fuels Association (RFA) signalled openness to revising a proposal that would permit nationwide year-round sales of 15pc ethanol gasoline (E15). The move follows discussions with the American Petroleum Institute, which recently withdrew support for the bill. Both sides aim to maintain a coalition to advance E15 legislation, which nearly passed Congress last year. Legislative action appears necessary as courts have blocked previous attempts to expand E15.

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In a joint letter on 4 December, a coalition including API, ethanol groups and fuel retailers said clear legislation would reduce market volatility and strengthen policy certainty. Current restrictions on E15 and broad exemption eligibility have hindered investment and distorted the marketplace. The proposed framework would raise hardship standards for exemptions and limit eligibility to refiners with genuinely small capacity. Courts have previously blocked similar regulatory attempts, making legislative action critical.

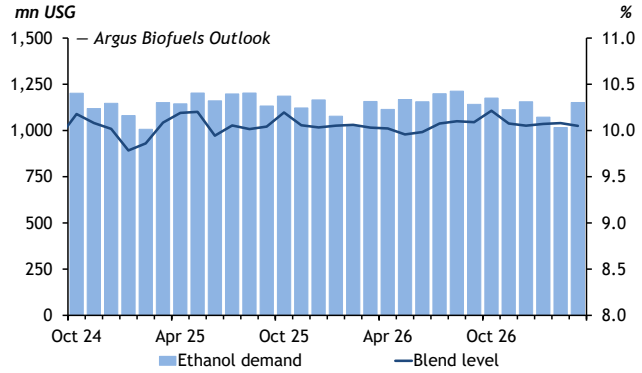
Demand

Ethanol

Outlook shows modest gains for 2026

US ethanol demand in 2026 is projected to average 893,000 b/d, reflecting a modest rise in the blend rate to 10.06pc from 10.03pc, while gasoline demand is forecast to remain steady at 8.88mn b/d. Ethanol consumption is expected to reach 13.69bn USG, down from 13.75bn USG in 2025 and about 8.7pc below the 15bn USG mandate.

US ethanol demand and blend level



The production outlook for 2026 remains favourable, supported by low corn and natural gas costs and the first year of eligibility for the 45Z Clean Fuel Production Credit. Corn-based ethanol producers are estimated to receive an average credit of $0.16/USG, while others leverage carbon capture technology to reduce CI scores for more material credit value. These incentives should strengthen margins and may be partially applied as spot discounts to improve blend economics and expand ethanol's share in the gasoline pool.

Despite incremental gains, higher ethanol blends face infrastructure and consumer adoption barriers. California's recent E15 approval is unlikely to deliver immediate growth, given refiners' need for compatible sub-octane blendstocks and retailers' compliance upgrades including underground storage tanks and vapor recovery systems. With domestic demand largely saturated, producers will continue to rely on export markets to absorb structural surpluses.

Record export demand absorbs US surplus

US ethanol exports climbed to a six-month high in September at 150,000 b/d, driven by record Canadian demand of 57,000 b/d and a surge in shipments to ARA, which hit a record 38,000 b/d — nearly triple year-ago levels. Indian purchases edged up to 11,000 b/d, while UK volumes held steady at 8,000 b/d. Preliminary shipping data indicates October exports will ease by 6pc to 141,000 b/d as ARA demand softens, before rebounding to 159,000 b/d in November on resurgent EU buying and increased flows to Colombia and South Korea.

For the first nine months of 2025, exports accounted for 13pc of US ethanol output, up from 12pc a year earlier. Inventories continued to tighten into November as export demand outpaced robust production. Output reached a record 1.12mn b/d in the final week of October. November output is in line

US biofuel demand outlook

Product	Oct 25	Nov 25	Dec 25	Jan 26	Feb 26	Mar 26	1Q26	2Q26	3Q26	4Q26	1Q27
Biofuel											*mn USG*
Ethanol	1,186	1,122	1,165	1,078	1,021	1,157	3,256	3,437	3,553	3,444	3,240
Biodiesel	107	112	110	142	152	153	447	433	415	413	450
Renewable diesel	306	348	344	340	343	343	1,027	985	992	1,056	1,091
Total	**1,599**	**1,581**	**1,620**	**1,560**	**1,517**	**1,653**	**4,730**	**4,856**	**4,960**	**4,913**	**4,781**
Feedstocks											*mn lbs*
Canola oil	314	347	348	402	438	482	1,322	1,141	1,425	1,703	1,506
Corn oil	390	431	448	466	501	509	1,476	1,224	1,153	1,280	1,515
Soybean oil	1,246	1,464	1,499	1,463	1,412	1,473	4,349	4,719	4,686	4,844	4,451
Tallow	766	788	855	698	719	609	2,026	1,865	1,866	1,545	2,172
Yellow grease	446	473	336	584	593	643	1,820	1,682	1,502	1,727	1,997
Other	109	137	120	203	258	207	668	584	496	534	555
Total	**3,271**	**3,640**	**3,607**	**3,816**	**3,921**	**3,924**	**11,661**	**11,216**	**11,129**	**11,632**	**12,196**

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with October averages, reaching a fresh record of 1.13mn b/d in the final week of the month. Stockpiles stand at 21.97mn bl, 2.5pc above the five-year average, covering 24.5 days of domestic demand. Output remains 9.8pc above the five-year average but is down 1.4pc year on year.

Renewable diesel

Production shifts to SAF as RD imports surge

US RD output fell by 4pc in October despite stronger margins, as rising imports discouraged domestic production and some producers shifted to higher-margin SAF. RD utilisation dropped to 66pc of capacity from more than 67pc in September, when output surged 14pc across most regions except the west coast, which declined 5pc. Gulf coast production jumped 40pc in September as margins doubled.

RD imports nearly doubled to 25mn USG in October, the highest level of 2025, lifting total RD supply to a record 273mn USG. Margins climbed 30pc in October, supported by persistently low feedstock costs and seasonal diesel strength.

SAF output climbed 19pc in October to a record 26.6mn USG, halting imports after nearly 6mn USG was imported in September. SAF accounted for 9.7pc of combined RD/SAF output, up from 8pc in September and 1.5pc for all of 2024, as producers sought to capture the remaining months of the $1.75/USG SAF 45Z multiplier.

RD exports rise as SAF shipments taper

US RD exports rose 5pc in September to 45,000 b/d, driven by a 3pc increase in Canadian demand, which accounted for 73pc of foreign sales, slightly below August's record 74pc. ARA purchases held steady at 8,000 b/d, while Norway and the UK remained stable at 2,000 b/d and 1,000 b/d, respectively. September exports represented 22pc of domestic output, down from 25pc in August but above the 19pc average for the first nine months of the year.

Preliminary October data indicate exports climbed 6pc month on month on stronger European demand, with a further 2pc rise forecast for November as UK buyers accelerated purchases ahead of proposed countervailing duties on US RD imports.

SAF exports fell to 152,000 bl in October as UK demand dropped sharply from record highs. ARA accounted for 73pc of SAF exports, with the UK taking 27pc. Exports represented 24pc of US SAF output, down from 51pc the previous month.

RD/SAF imports have plunged 74pc year on year as foreign volumes no longer qualify for federal tax credits. RD imports fell 81pc, covering just 3pc of demand versus 17pc in 2024, while SAF imports dropped 35pc.

Stronger margins lift year-end 2025 demand outlook

US RD demand for the fourth quarter of 2025 has been revised 5pc higher to 998mn USG, as producers respond to stronger margins and compensate for earlier output cuts that tightened RIN balances. Blend rates are projected to average 6.15pc in the fourth quarter, up from 4.44pc in the third quarter. Total 2025 demand is now estimated at 2.87bn USG, 4pc above last month's forecast but still 22pc below 2024's record production levels.

The first-half 2026 outlook has been raised to 2.01bn USG, a 4pc increase on prior estimates, supported by new 45Z guidelines that incentivise higher production from domestic feedstocks. Finalisation of 2026-2027 mandates and resolution of reallocation and foreign RIN provisions are expected in the first quarter, providing greater regulatory clarity.

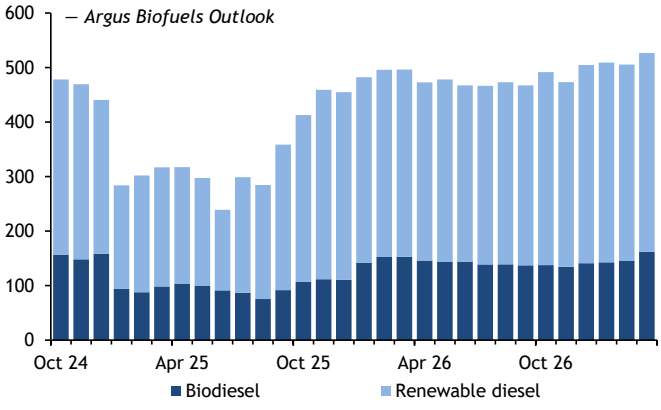
Tightened 2025 RIN balances mean both 50pc and 100pc reallocation scenarios support growth in biomass-based diesel demand, though less than 50pc reallocation would begin to erode robust biofuel targets. For 2026 the demand outlook remains firm at 4.06bn USG, underpinned by strong compliance mandates and improved policy certainty, aligning with a 5.61bn USG biomass-based diesel target.

Biodiesel

Output falls as margins deteriorate

US biodiesel production fell 3pc in October to 99mn USG as margins weakened, reducing utilisation to 60pc from 62pc in September. Year-to-date output stands at 938mn USG for the

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



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first 10 months, down 31pc from 2024, with producers averaging 57pc of capacity compared with 82pc in the same period last year.

The BOHO spread rose 3pc month-on-month to $1.48/USG, while D4 RIN premiums slipped to $0.07/RIN from $0.08/RIN, signalling margin pressure. Early November saw the BOHO spread tumbled 13pc to $1.29/USG, reaching an eight-month low. BD margins rebounded sharply as D4 RIN premiums climbed to $0.23/USG on average.

Spot B99 premiums to conventional diesel narrowed in November amid margin recovery. Biodiesel typically trades at a discount to diesel when stripped of environmental attributes, but the loss of the BTC has curtailed production and reduced imports. Producers have raised spot premiums to sustain margins as a result of tightening supply.

Exports stabilise amid tight supply and rising imports

US biodiesel exports held steady at 253,000 bl in September after five consecutive months of growth, as limited product availability constrained foreign sales. Canadian and Peruvian demand has underpinned exports throughout the year, with Canada accounting for 84pc of September shipments and averaging 77pc year to date. Cumulative exports for the first nine months reached 1.8mn bl, equal to 9pc of domestic output — the lowest share since 2019.

October exports are expected to surpass September levels on stronger European buying, although preliminary November data indicate softening demand from Europe and Peru. Conversely, US biodiesel imports surged to 6.7mn USG in October, the highest level this year, even as year-to-date imports remain down 93pc from 2024. Imports are on track to hit lows last seen 13 years ago.

Despite a 35pc industry rationalisation following the introduction of the 45Z credit — which provides significantly lower incentives for crop-based feedstocks — the biodiesel sector has demonstrated resilience. Producers have capitalised on elevated spot premiums, stronger by-product valuations, and rising heating oil mandates in New York, Connecticut, and Rhode Island, driving supply shifts from the Midwest via rail to offset reduced import flows. In addition, some idled facilities are beginning to restart operations to capture anticipated benefits from stronger 2026 incentives under updated 45Z guidelines.

Regulatory delays temper near-term biodiesel growth

The biodiesel demand outlook for 2025 remains largely unchanged at 1.16bn USG as volatile margins and significant industry rationalisation have limited US producers to delivering little more than 100mn USG/month.

The average blend rate held steady at 1.90pc, with fourth-quarter blending revised down to 2.11pc from 2.17pc in the previous forecast. Blending in the first three quarters averaged 1.83pc, supported by seasonal harvest activity and heating oil demand, which should sustain stronger year-end rates.

For 2026, first-quarter demand was trimmed 3pc to 447mn USG, reflecting expectations that regulatory delays may temper the sector's response to a more favourable production environment. The 45Z credit for soybean oil (SBO) based biodiesel is set to double to $0.60/USG from January, providing a clear incentive for recovery. At least one idled facility is expected to restart in the fourth quarter of 2025 ahead of improved 2026 margins, with roughly 40pc of sidelined capacity positioned to capitalise on enhanced incentives.

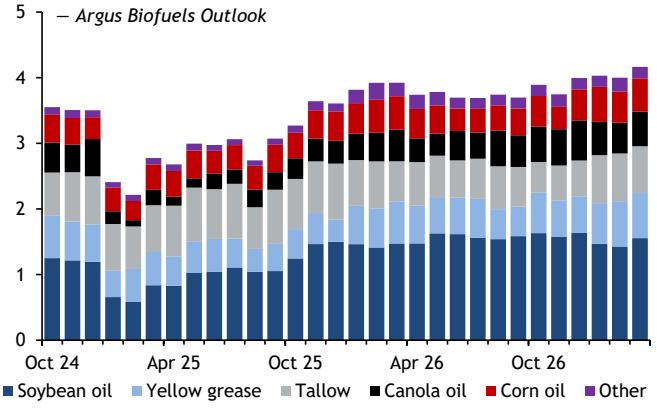
The full-year 2026 forecast was raised 5pc to 1.71bn USG, underpinned by compliance with an expected 5.61bn USG biomass-based diesel (BBD) mandate. Our outlook remains conservative at 11pc below 2023-24 levels, factoring in potential impacts from a 50pc reallocation scenario. The annual blend rate was lifted to 2.78pc from 2.75pc, still well below the 2024 average of 3.21pc.

Feedstocks

Feedstock demand surges on margin recovery

US feedstock demand strengthened in October, rising 6.5pc month on month to 3.27bn lbs as RD and SAF producers responded to a sharp improvement in operating margins and sought to exhaust remaining qualifying imported feedstocks before year end. The full-year 2025 outlook remains broadly

US biodiesel and RD feedstocks demand *mn lbs*



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unchanged at 35.44bn lbs, supported by robust fourth-quarter RD consumption and stable biodiesel demand.

Market activity in late 2025 has been shaped by strategic purchasing patterns. Producers are prioritising SBO allocations for first-quarter 2026 production, while prompt demand is dominated by UCO and distillers corn oil (DCO) for the final weeks of the year. SBO procurement has improved following California's decision to delay implementation of stricter LCFS traceability standards to the 2025-26 crop, easing supply chain concerns.

November feedstock demand is projected to climb 11pc to 3.64bn lbs as margins rose 6pc during the period, before softening to 3.61bn lbs in December amid weaker economics. September marked a year-to-date peak in consumption at 3.11bn lbs, driven by a 32pc surge in tallow demand — the second-highest level on record — alongside UCO up 33pc and DCO up 15pc, respectively, as producers sought lower-CI feedstocks to maximise returns. SBO demand rose 1pc, reflecting stronger RD uptake offset by weaker biodiesel consumption.

Looking ahead, the 2026 feedstock outlook has been revised 1pc higher to 45.64bn lbs, underpinned by anticipated growth in biodiesel demand supported by enhanced crop-based incentives under the 45Z credit. This volume would conservatively meet BBD requirements of 5.61bn USG under EPA mandates while accommodating feedstock needs for modest export volumes. Upside risk remains as tight year-end 2025 RIN balances, the need to offset material D6 shortfalls, and potential 100pc reallocation scenarios could drive additional feedstock pull beyond current projections.

Producers pivot to SBO on robust policy drivers

SBO demand rose 1pc in September to 1.05bn lbs. SBO accounted for 34pc of the feedstock slate, down from a two-year high of 38pc in August as producers shifted towards alternative low-CI feedstocks. Biodiesel producers represented 56pc of SBO usage, with RD accounting for 44pc, compared with a 57-43pc split the previous month.

Our full-year 2025 SBO demand forecast remains unchanged at 12.39bn lbs, supported by stronger fourth-quarter purchasing activity. SBO is expected to comprise nearly 40pc of the feedstock slate during the fourth quarter, up from 33pc across the first three quarters of the year, as producers position for compliance and margin optimisation.

Looking ahead, the 2026 SBO demand outlook remains at a record 18.59bn lbs, underpinned by a record BBD mandate and significantly enhanced incentives under the 45Z credit. Producers are expected to redirect SBO away from export and food channels, leveraging up to 7.5¢/lb in additional bargaining power. We estimate that reduced exports and adjustments in food sector usage could free up as much as 3bn lbs for biofuel production next year, providing a critical buffer for meeting compliance targets.

The 2026 canola oil demand outlook was revised higher to 5.59bn lbs, reflecting improved economics and growing expectations that the EPA will drop the foreign RIN provision from its final ruling for 2026. But downside risk persists as canola's share of the feedstock mix may be constrained if food sector shifts prioritise SBO, which carries nearly double the 45Z value. Should the EPA defer implementation of the foreign RIN provision to 2027, canola demand could remain elevated in the near term, but its longer-term role will hinge on regulatory clarity and competitive positioning against SBO.

Tallow demand surges ahead of 45Z expiry

Full-year 2025 tallow demand has been revised 8.5pc higher to 9.12bn lbs as producers are expected to maximise the use of qualifying imported tallow before 45Z eligibility expires in 2026. Imports continued to recover from August lows, with the US increasing purchases from Australia, Canada and New Zealand following the imposition of 50pc tariffs on Brazilian tallow. October tallow imports rose by 21pc from September to 276mn lbs. But imports are projected to decline by 25pc in November, even as the US diversifies its supplier base to offset the loss of Brazilian volumes, adding Argentina, Uruguay, the Netherlands, Malaysia and South Korea. December imports are forecast to fall sharply, with purchases limited to Australian and New Zealand supply ahead of the new year.

The 2026 outlook has been revised down to 7.3bn lbs from the previous forecast of 8.9bn lbs, reflecting increased utilisation of canola oil and other low-CI waste feedstocks such as poultry fat and choice white grease, as the US significantly reduces its reliance on imported tallow. Achieving this target will necessitate imports covering at least 17pc of total tallow demand in 2026, notwithstanding the lapse of 45Z credit eligibility for origins outside the US-Mexico-Canada Agrement. Incremental Canadian volumes — historically the US' third-largest tallow source — are expected to mitigate the shortfall as Canadian supply will remain fully eligible for 45Z credits.

DCO and UCO demand accelerates on margin recovery

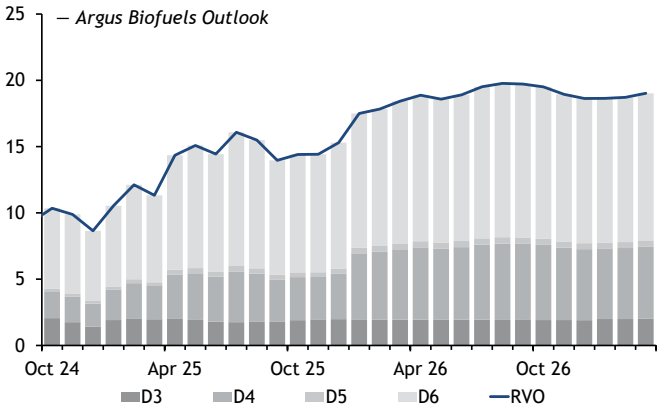
US distillers corn oil demand rebounded sharply in September, rising 15pc to 419mn lbs and accounting for 14pc of the feedstock slate — exceeding the 2024 average of 11pc.

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The 2025 DCO forecast has been adjusted down 4pc to 4.62bn lbs, although this still represents a 4pc rise on the year. The revision reflects a recovery in RD margins during the early fourth quarter, tempered by mounting headwinds from elevated feedstock costs and persistently weak RIN values. The 2026 outlook has been revised 9.6pc lower to 5.13bn lbs, driven by record SBO demand and greater adoption of alternative low-carbon feedstocks, including poultry fat and choice white grease. DCO is expected to comprise just over 11pc of a record 45bn lb feedstock slate, down from the previously projected 13pc share. Achieving DCO consumption beyond 5.2bn lbs will require a combination of higher domestic ethanol production and improved corn oil extraction yields. The US may also seek incremental volumes from Canada, which could supply up to 360mn lbs from its smaller ethanol sector, assuming facilities operate at full capacity.

UCO demand surged 33pc in September to 416mn lbs, rebounding from a 3.5-year low in August. Imports are set to reach 2.52bn lbs this year — down 39pc from year-ago levels and marking the lowest volumes since 2023. Full-year 2025 UCO demand is forecast at 5.3bn lbs, with imports expected to cover 48pc of total consumption. Recent spot market activity suggests producers are intent on maximising the remaining weeks of the full $1.75/USG credit for imported UCO-based SAF production. For 2026, the UCO outlook has been revised down 12pc to 6.73bn lbs, reflecting a structural pivot away from imported feedstocks as producers accelerate the transition towards record SBO utilisation within the biofuel sector.

Argus RVO breakdown by RIN category *¢/USG*



Credits

RINs/RVO

D4 generation firm on margin resilience

D4 RIN generation in October rose marginally, less than 1pc, to just under 665mn credits, as record RD imports and accelerating SAF output offset a 4pc contraction in domestic RD production. SAF output surged 19pc, delivering a record 42.6mn credits. Biodiesel generation advanced 1.6pc month on month, supported by a sharp increase in imports that counterbalanced a 3pc decline in domestic volumes. Year-to-date D4 output remains 22pc below 2024 levels, a modest improvement from the 23pc deficit in September. Non-cellulosic advanced RIN supply stands 10pc below compliance thresholds, narrowing slightly from 11.5pc the prior month.

D4 generation is projected to strengthen in November, underpinned by RD margins that are forecast to improve 6-12pc. But elevated feedstock costs and persistent RIN weakness are expected to compress margins through December, likely curbing generation from November highs. Biodiesel output should provide incremental support in November, with margins forecast to rebound to $0.32/USG, buoyed by seasonal diesel gains. But December margins are projected to collapse to $0.09/USG as feedstock costs escalate.

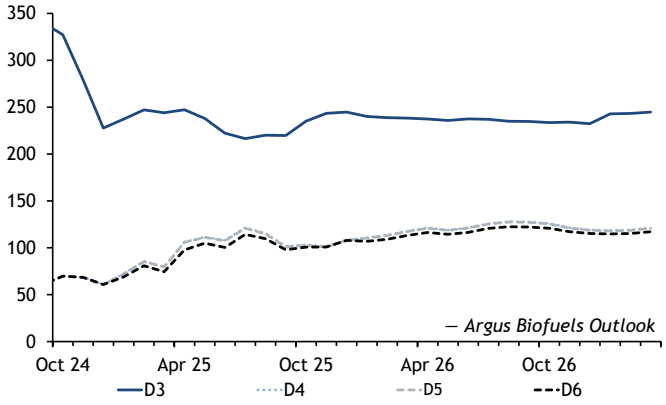
D6 generation climbed 4pc in October to a year-to-date peak of 1.28bn credits, driven by robust ethanol output. Net D6 generation is forecast at 13.75bn credits for 2025, falling 8pc short of the 15bn mandate for conventional ethanol. This shortfall will necessitate increased reliance on D4 credits for compliance, tightening year-end credit availability.

US RIN & LCFS price outlook

Credit	Oct 25	Nov 25	Dec 25	Jan 26	Feb 26	Mar 26	1Q26	2Q26	3Q26	4Q26	1Q27
RIN											*¢/RIN*
D3	235	243	245	240	239	238	239	237	236	233	244
D4	103	101	108	111	114	118	114	121	127	122	120
D5	103	101	108	110	113	117	114	120	127	122	119
D6	101	101	108	107	109	113	110	116	122	118	116
RVO ¢/USG	14	14	15	18	18	18	18	19	20	19	19
LCFS											*$/t*
California LCFS	55	52	51	53	62	67	61	75	87	97	105

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RIN prices ¢/RIN



Compliance deadlines and BOHO volatility spur trade

D4 RIN prices fell 1.5pc in November as the BOHO spread contracted 13pc to average $1.29/USG, with diesel strength outpacing gains in SBO. Early December sessions saw the BOHO spread widen sharply to $1.57/USG, and the spread is projected to expand by 21pc through the month as diesel weakness deepens alongside modest SBO appreciation. A wider BOHO spread typically strengthens D4 RIN values.

The market for 2025 vintage RINs strengthened as traders responded to BOHO volatility, following a subdued October marked by uncertainty over the US EPA's decisions on SREs, reallocation, and the foreign RIN provision. The passage of the 1 December 2024 compliance deadline and the looming 2025 deadline — potentially as early as 31 March 2026 — triggered renewed buying interest, driving the D4-D6 spread to converge on parity amid heavy demand.

Reallocation remains a critical variable with significant implications for compliance strategies. Approximately 2.69bn "unexpired" RINs from 2023-25 vintages are set to re-enter the market, with the EPA proposing either a 50pc or full 100pc reallocation. A 50pc reallocation would lift 2026-27 demand by more than 2.4pc, while full reallocation could increase demand by over 4.5pc, based on our estimates.

Current market pricing reflects expectations of a 50pc reallocation, which would result in a larger credit balance by year end, even as generation remains 10pc below compliance thresholds. Although additional supply may exert downward pressure on prices under a partial reallocation scenario, the 2026 outlook remains constructive, supported by feedstock prices forecast to outpace diesel, driving RIN values higher. For 2026, premiums for D4 credits widened to nearly 6.5¢/RIN in November and surged to 8.25¢/RIN in early December, reflecting expectations of robust BBD demand.

The D4-D6 spread averaged 0.6¢/RIN in November, down from 2.5¢/RIN in October, and reached parity in early December as compliance deadlines spurred demand and narrowed spreads, underscoring the shortfall in available D6 credits. This convergence also signals that the market is increasingly pricing in reallocation. Under reallocation, demand will initially favour lower-cost D6 credits before shifting to more expensive D4s. Conversely, a surplus of eligible D6 credits would result in the absence of reallocation of demand for waived volumes.

D4 outlook up on feedstock strength, diesel weakness

Our December D4 RIN forecast has been revised 7pc higher to $1.08/RIN, supported by firming feedstock prices and a 9pc month-on-month decline in diesel values. The approaching compliance deadline is driving renewed demand for 2025 vintage D4s, while 2026 credits remain more exposed to regulatory uncertainty surrounding SREs and reallocation.

The EPA continues to receive SRE petitions for 2023-25, while court proceedings on biofuel waiver eligibility have been expedited as the agency seeks to clear the backlog ahead of final rulemaking. Market sentiment has cautiously adopted a 50pc reallocation assumption, even as expectations grow that the EPA will abandon the foreign RIN provision for 2026 given likely delays in finalising the 2026-27 proposal. Removing the foreign RIN provision would increase feedstock availability, exerting downward pressure on D4 values, all else equal. Nevertheless, sentiment remains constructive as stakeholders anticipate the EPA will maintain the 5.61bn USG mandate while resolving outstanding compliance issues.

The full-year 2026 forecast has been trimmed 1.6pc to $1.21/RIN, reflecting a moderated feedstock outlook, but remains above the projected 2025 average of $1.01/RIN. A record blend mandate is expected to underpin feedstock pricing and support sustained credit appreciation.

D3 prices gain on waiver challenge momentum

D3 RIN prices rose 3pc in November to $2.43/RIN, buoyed by positive market sentiment surrounding a legal challenge to the EPA's 2024 partial cellulosic waiver and to the issuance of cellulosic waiver credits (CWCs). Sentiment was further supported by expectations that reallocation could stimulate additional cellulosic demand.

Robust 2025 D3 generation continues to embolden further legal challenges to the EPA's proposed reduction in the 2025 cellulosic waiver to 1.19bn USG, with combined D3 and D7

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output running on pace to be just 6pc short of the original 1.38bn USG target.

Our December D3 forecast was lifted to $2.45/RIN from $2.44/RIN, taking the full-year 2025 average to $2.35/RIN, down 24pc from $3.11/RIN in 2024 when the EPA said it would no longer make CWCs available.

The 2026 forecast was firm at $2.36/RIN, reflecting heightened confidence in successful legal challenges to the EPA's partial waivers and issuance of CWCs. The alternative price of compliance (APC) or the combined cost of a CWC and D4/D5 credit is expected to average $3.44/RIN next year, with 2026 D3s trading at an average discount of 31pc to the APC, up from 33pc in last month's forecast. Narrower discounts to the APC market ceiling are indicative of a more robust pricing environment.

LCFS

Persistent oversupply weighs on 2026 outlook

California LCFS credit prices fell 5pc to $52/t in November as record-scale utility auctions injected substantial liquidity into an already saturated spot market. Despite the aggressive 9pc carbon intensity reduction implemented in the third quarter, the programme remains structurally oversupplied, with the cumulative credit bank reaching an unprecedented 43.4mn t — equivalent to nearly seven years of banked credits and almost double the total deficits generated in 2024.

Second-quarter growth in the credit bank was predominantly driven by renewable diesel and renewable natural gas (RNG), contributing 36pc and 21pc of new credits, respectively. Reporting from Washington and Oregon underscores California's continued dominance in attracting US RD production, even as Oregon LCFS prices trade at nearly three times those in California.

Our December 2025 forecast has been revised down by 7pc to $51/t from $55/t, underscoring a lack of immediate drivers for demand growth. The market will gain its first meaningful insight into the impact of the step-down on 31 January 2026, when third-quarter data is published. We anticipate a drawdown of more than 2mn credits, reducing the bank to 41.3mn t — marking the first contraction in over four years. Prices are expected to firm modestly ahead of the release, with further buying likely once confirmation of the drawdown emerges.

Our full-year 2026 forecast remains unchanged at $80/t, signalling expectations of a delayed market response to quarterly data and subdued speculative activity in spot credits. A projected credit bank of approximately 34mn t is expected to exert continued downward pressure on sentiment. Electric vehicle penetration rates have been revised lower across the forecast horizon, while a higher average CI score for RD has delivered only a muted upward influence on pricing. Meanwhile, the recent approval of E15 for sale in California is anticipated to encounter logistical, infrastructure and consumer adoption challenges, limiting its contribution to credit generation in 2026.

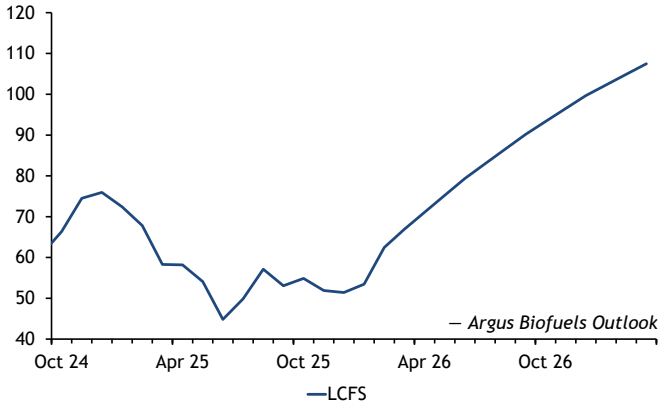
Prices

Ethanol

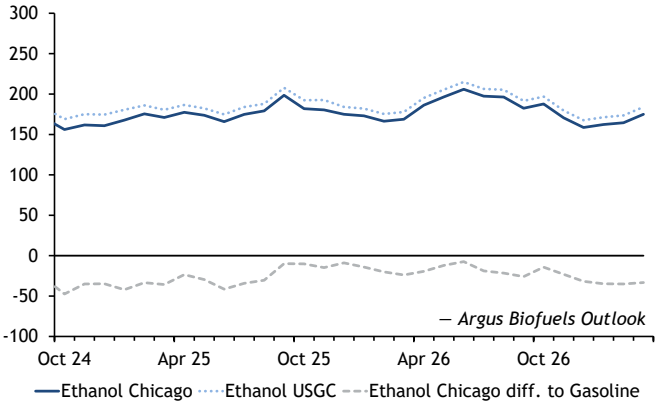
Robust exports, corn prices underpin 2026 outlook

Ethanol prices at Chicago's Argo hub are forecast to ease by 3pc to $1.75/USG in December as elevated production unwinds year-end backwardation, while a 6pc decline in gasoline prices to $1.84/USG further weighs on valuations. US ethanol output surged to an all-time high of 1.13mn b/d in the final week of November, running nearly 10pc above the five-year average, while resilient export demand continues to absorb surplus volumes.

California LCFS prices *$/t*



US ethanol prices *¢/USG*



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Our 2026 forecast remains unchanged at $1.83/USG, supported by ethanol-to-gasoline discounts holding at $0.19/USG as sustained export strength complements a modest uptick in domestic consumption. US Gulf coast prices are expected to average $1.92/USG over the forecast period, up from a 2025 average of $1.87/USG. Full-year 2026 gasoline prices are projected to hold steady at $2.02/USG, broadly unchanged from 2025, while corn prices are expected at $4.49/bushel, up from $4.39/bu in 2025.

US ethanol production capacity stands at a record 18.33bn USG/yr, with further expansions anticipated as market participants position to capitalise on first-time eligibility for the 45Z credit commencing in 2026 and as federal authorities weigh adoption of nationwide E15.

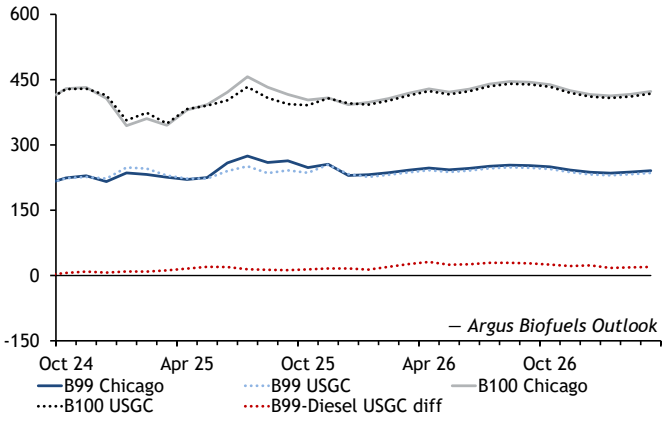
Biodiesel

B99 outlook trimmed on thinner premiums

B99 prices at the US Gulf coast are forecast to fall by 9pc to $2.33/USG in December, driven by a 9pc decline in conventional diesel prices to $2.17/USG, offsetting a modest 2pc increase in soybean oil costs. This downward adjustment underscores the fragility of biodiesel economics as margins are projected to contract sharply to just $0.09/USG — down from $0.32/USG in November, the second-highest return year to date. The erosion reflects a confluence of factors — persistent diesel weakness, escalating feedstock costs, and insufficient RIN strength to offset structural pressures.

Production at year end is expected to remain constrained as market participants strategically stockpile eligible feedstocks ahead of anticipated policy-driven incentives. The forthcoming material increases in 45Z credit values for crop-based inputs — most notably SBO, which will see its credit value double from 2026 — has prompted producers to position aggressively, reinforcing short-term supply tightness even as margins deteriorate.

US biodiesel prices ¢/USG



Our full-year 2026 B99 forecast has been revised down by 2pc to $2.39/USG, reflecting a narrowing in premiums for B99 to conventional diesel to $0.25/USG from $0.27/USG in the previous report, but still well above the $0.18/USG average in 2025. This resilience in premiums highlights the interplay between relatively weak diesel benchmarks and the need to sustain profitability in an environment of tightening compliance and evolving credit incentives. Conventional US Gulf coast diesel is expected to average $2.15/USG across the forecast period, unchanged from the previous month.

B100 outlook holds firm amid near-term pressure

B100 prices at the US Gulf coast are forecast to decline by 3pc to $3.96/USG as a sharp fall in diesel prices is only partially offset by firmer RIN and feedstock values. Our full-year 2026 forecast was trimmed less than 1pc to $4.21/USG, reflecting a modest reduction in RIN valuations over the forecast period alongside a stable conventional diesel outlook.

Recent feedstock purchasing trends indicate US producers are positioning to ramp up SBO-based biodiesel output in response to record 2026 mandates. RIN markets remain supportive, with even 50pc reallocation assumptions expected to incentivise higher run rates and the restart of idled capacity. Approximately 40pc of US biodiesel capacity is currently idled, underscoring operational challenges presented by a lack of sufficient crediting under the 45Z for SBO and as regulatory uncertainty plagues RIN markets and obfuscates production decisions.

Renewable diesel

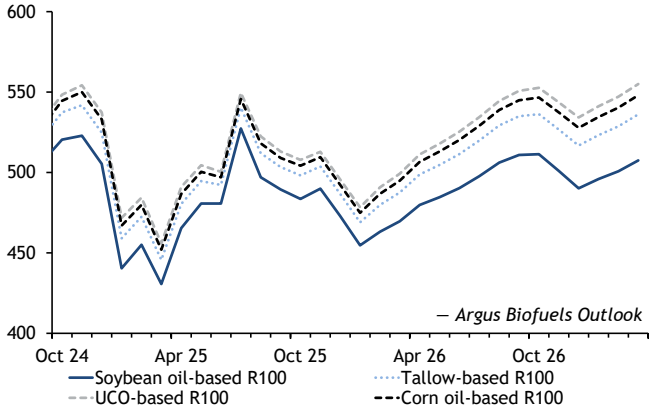
R100 forecast softens on diesel, feedstock headwinds

R100 prices are forecast to decline by 2pc to $4.92/USG in November as a 7pc drop in the California diesel basis to $2.39/USG, coupled with modest declines in LCFS and CCA credit prices, offsets a 6pc increase in RIN values.

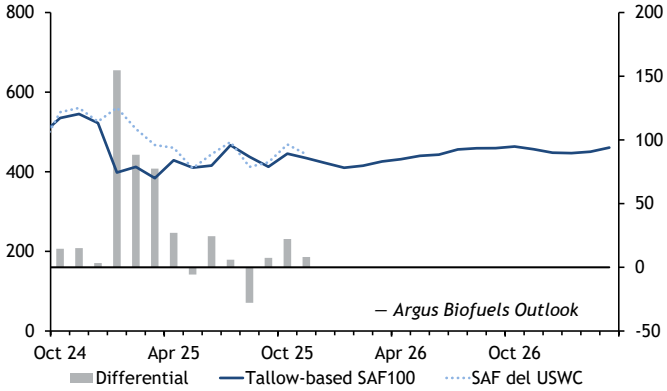
RD margins rose by an average of 6pc in November — or 13pc when measured against the prevailing September feedstock slate. Margins are expected to tumble by 24pc in December as acute diesel weakness and higher feedstock costs collide with insufficient RIN strength. Producers may opt to increase output despite deteriorating margins to compensate for shortfalls in 2025 D4 RIN generation. But uncertainty surrounding the EPA's reallocation approach and final rulemaking could prompt producers to trim output, entering

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US renewable diesel prices ¢/USG



US SAF prices ¢/USG



2026 with tighter RIN balances. Operators with flexible capacity are likely to pivot towards SAF production, where margins currently run 6pc higher.

The downward correction in feedstock prices that supported margin recovery from September through November stalled at month-end, lifting utilisation rates to 67pc from the August low of 56pc when margins hit a post-first-quarter nadir. Under current diesel and feedstock conditions, D4 prices would need to consistently exceed $1.30/RIN to drive a material rebound in RD production.

Our full-year 2026 outlook has been trimmed by 4pc to $5.14/USG, as softer diesel prices and weaker RIN values are compounded by rising feedstock costs. California conventional diesel is forecast to average $2.22/USG in 2026, down 3pc from the prior forecast of $2.28/USG. Looking ahead, our first-quarter 2027 R100 forecast stands at $5.28/USG, up 8pc on the same period in 2026, reflecting anticipated strength in RIN, LCFS and CCA credit prices, though higher feedstock costs will remain a headwind.

SAF

Softer jet prices weighs on US SAF outlook

SAF prices are forecast to decline 2pc to $4.25/USG in December as California conventional jet is projected to fall 9pc to $2.25/USG, with stronger RIN values preventing deeper losses. Regional jet supply is constrained as Chevron's El Segundo refinery has yet to fully restart following an early-October fire. The 290,000 b/d facility accounts for 40pc of southern California's jet fuel output, prompting increased reliance on Asian imports in November to bridge the supply gap.

Our full-year 2026 SAF100 forecast has been trimmed by 4pc to $4.45/USG from $4.64/USG the previous month, reflecting weaker conventional jet and RIN valuations, while growing LCFS strength continues to underpin pricing over the year. California conventional jet is projected to average $2.12/USG in 2026, down 6pc from $2.26/USG in the previous forecast. SAF RIN returns, based on an equivalence value of 1.6, are expected to average $1.94/USG in 2026, up 20pc from $1.61/USG in 2025.

SAF margins peak ahead of looming credit cuts

Domestic SAF production climbed 19pc in October to a record 26.6mn USG as stronger jet prices and softer feedstock costs propelled margins to $1.57/USG — the highest level year to date and nearly triple returns in the previous month. Margins are expected to ease by 3pc to $1.52/USG on RIN weakness before conventional jet softness drives a further decline to $1.34/USG in December. Even so, December SAF margins are forecast to outpace RD margins by at least $0.08/USG, supported by SAF's additional $0.47/USG in 45Z credit value, which offsets the stronger diesel basis relative to jet fuel. On average, SAF earns an extra $0.46/USG in 45Z credit value across waste-derived feedstocks — 82pc higher than RD.

However, SAF's preferential position under 45Z is set to erode, with the maximum credit scheduled to fall from $1.75/USG to $1.00/USG starting in 2026. Given SAF's higher production costs and the segmented and decentralised nature of the voluntary domestic market, additional policy support will be critical to sustain long-term investment and output growth.

Feedstock

UCO prices firm ahead of US policy transition

US feedstock prices rose by 1pc on average in November as producers pivoted to tallow, UCO and DCO for immediate

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year-end consumption to optimise margins and maximise throughput of imported feedstocks before policy changes threaten credit eligibility.

UCO prices led the month-on-month recovery, climbing 2pc to 57¢/lb as producers sought to capture the remaining weeks of the full $1.75/USG credit for UCO-based SAF production and leverage duty drawback benefits in foreign trade zones, while imported volumes contracted, tightening available supply. As imports recede, UCO pricing is expected to increasingly reflect domestic market fundamentals. November UCO prices held at parity with DCO, underscoring this transition.

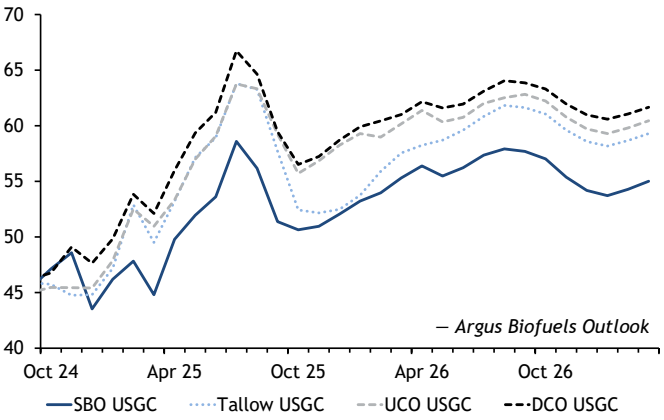
The full-year 2026 UCO forecast is maintained at 61¢/lb. UCO premiums are anticipated to average over 5¢/lb above SBO throughout the forecast period — a reversal from 2024, when UCO traded at discounts of up to 10¢/lb amid an influx of low-cost imports.

Tallow prices steady

Tallow prices remained stable at 52¢/lb in November and are forecast to maintain this level into December, supported by more aggressive selling of imported volumes that will lose 45Z eligibility at the start of the new year. Prices are expected to remain under pressure even as supply tightens, with imports set to fall sharply in December as producers avoid purchasing feedstock they cannot process before year end, risking forfeiture of $0.64/USG in tax credit.

Our full-year 2026 tallow forecast remains firm at 60¢/lb, following a sharp upward revision in last month's outlook. Tallow premiums to SBO are expected to average just 1.5¢/lb during the first quarter as residual imported volumes are worked out of the market, with premiums recovering to over 4¢/lb by August 2026. We anticipate tallow will represent

US biofuel feedstock prices ¢/lb



US biofuel price outlook

Product	Oct 25	Nov 25	Dec 25	Jan 26	Feb 26	Mar 26	1Q26	2Q26	3Q26	4Q26	1Q27
Ethanol											¢/USG
Ethanol Chicago	182	180	175	173	166	169	169	196	192	172	167
Ethanol USGC	192	193	184	182	175	178	178	205	201	181	176
Biodiesel											¢/USG
B99 Chicago	248	256	230	232	236	242	237	245	252	243	238
B99 USGC	236	255	233	227	231	237	232	240	247	238	233
B100 Chicago	403	408	393	398	407	419	408	426	443	426	417
B100 USGC	391	407	396	393	402	414	403	421	438	421	412
Renewable diesel (del California)											¢/USG
R100 (SBO)	484	490	473	455	463	470	463	485	505	501	501
R100 (tallow)	498	504	487	469	480	488	479	505	528	527	529
R100 (UCO)	508	513	496	478	491	499	489	518	543	543	548
R100 (DCO)	504	510	492	475	487	495	486	513	538	537	541
SAF (del California)											¢/USG
SAF100 (tallow)	445	434	422	410	415	426	417	438	458	456	453
Feedstocks (US Gulf coast del rail)											¢/lb
SBO crude degummed	51	51	52	53	54	55	54	56	58	56	54
Tallow bleached fancy	52	52	52	54	56	58	56	59	61	60	59
UCO	56	57	58	59	59	60	59	61	62	61	60
Distillers corn oil	57	57	59	60	60	61	60	62	64	62	61

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16pc of the feedstock slate in 2026, requiring imports to cover approximately 26pc of total US consumption.

SBO prices stable as record crush drives supply

SBO prices stabilised at 51¢/lb in November, supported by steady fourth-quarter purchasing activity and growing stockpiles, leaving oil prices largely insulated from volatility in the underlying soybean market following a trade agreement with China. The doubling of the 45Z credit for domestically sourced SBO-derived fuels is creating a strong backdrop for production growth, with crushers responding to improving economic signals.

Our full-year 2026 SBO forecast remains steady at 56¢/lb, reflecting record demand of 18.59bn lbs — accounting for 41pc of an all-time-high 45.6bn lb feedstock slate. But the potential for the EPA to abandon its foreign feedstock provision introduces downside risk to this forecast.

Near-term prices strengthen on rising margins

Corn oil prices advanced 1.3pc in November, while DCO margins strengthened by 8pc month on month, buoyed by robust diesel performance for most of the period. Our December forecast has been revised upward by 7pc to 55¢/lb, reflecting anticipated growth in demand for the highest-returning domestic feedstock available to US producers as margins face renewed pressure this month.

DCO premiums over SBO are expected to widen to 7¢/lb in December, compared with 6¢/lb in the previous month. Our full-year 2026 outlook remains unchanged at 62¢/lb, underpinned by expectations of record demand for corn oil — the lowest-carbon intensity feedstock available at scale to HEFA producers already optimised for DCO. Over the forecast horizon, DCO premiums to SBO are projected to average at least 6.2¢/lb.

Fundamentals

Agricultural prices

Trade steadies as acreage battle emerges

US futures have stabilised following the announcement of a US-China trade agreement. Although volatility briefly resurfaced, price action is rotating back to fundamentals into 2026.

For wheat, rumoured Chinese buying failed to materialise, prompting a trim to our outlook to 530-540¢/bu by March 2026. Exporter stocks are still building and early crop signals across the northern hemisphere are constructive. Any rally is likely to meet heavy resistance from these fundamentals.

Corn and soybeans are increasingly pricing in the same fundamentals while the market awaits confirmation of Chinese purchases of US soybeans, estimated at 12mn t by the end of February 2026. Near term, both complexes should remain firm, supported by competitiveness and steady export flows, with projected ending stocks still low, enough to offset broad fund-driven bearish pressure. The next decisive driver is the spring 2026 acreage contest — corn's relative price weakness versus soy may cap corn planting areas, supporting corn above 460¢/bu by late 2026. Conversely, robust farm profitability is likely to encourage higher soybean planting, which could weigh on prices by next summer as supply prospects expand.

Fossil fuel demand and prices

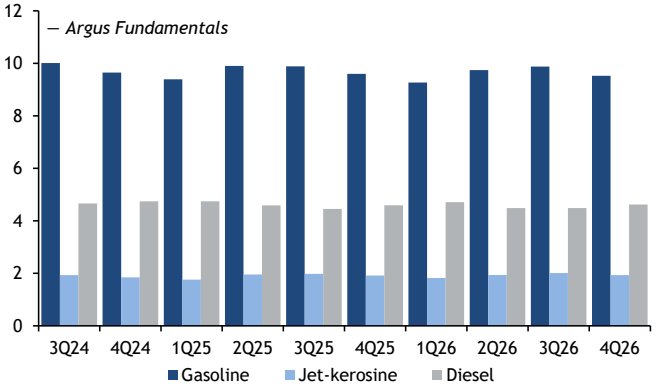
Weak year for US gasoline demand

US gasoline cracks rose $2.08/bl in November, although overall gasoline demand in the US has been weak in 2025. Released demand data so far this year totals 50,000 b/d lower than the same period in 2024. Recent data from the US Energy Information Administration (EIA) in October shows a decrease year on year of 4pc to 8.7mn b/d, a steeper decrease not seen since July 2022. *Argus* expects demand to be supported going into the new year, driven by seasonal holiday travel picking up.

Trucking decline weakens diesel demand in 3Q

Diesel demand in October also fell on the year, reported down 530,000 b/d to 3.91mn b/d, although this is up 5pc from September. A decline in trucking activity across the US on the back of new tariff policies could explain this weakness in the third quarter, with the Dow Jones Trucking index at a two-year low, down 25pc from the start of the year. The end

North America fuel demand ***mn b/d***

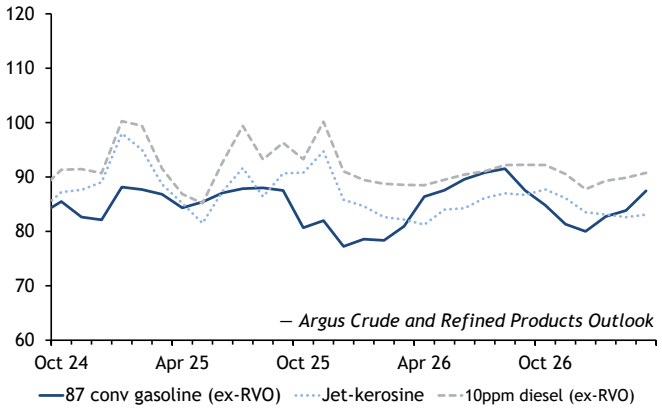


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of the harvest season and the start of heating season is projected to boost demand by the end of the year, with fourth-quarter demand rising 130,000 b/d to 4.59mn b/d.

US jet-kerosene demand rose 2.4pc year on year to 1.75mn b/d in October as the Columbus Day holiday period spurred increased air traffic early in the month. Demand softened later in the month after the government shutdown caused flight restrictions, decreasing air traffic by 4pc year on year and reducing jet fuel by an estimate of 17,000 b/d. This, alongside seasonal travel declines, is expected to result in jet demand in the fourth quarter of 1.92mn b/d, down from the last quarter by 60,000 b/d.

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



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SOUTH AMERICA

Regulation

Brazil 2026 Renovabio target raises oversupply risk

Brazil's proposed 2026 target of generating 48.09mn Cbio credits under the Renovabio programme could leave the market oversupplied and pressuring prices, unless policy makers raise the goal before final approval. Industry groups have called for a higher target of 51mn-52mn credits to help reduce the expected surplus generated by higher renewable fuel supply, citing new production capacity and the planned biodiesel mandate increase to B16, although that may face delays.

Public consultation on the target closed in October, and the mines and energy ministry (MME) will submit recommendations to the national energy policy council (CNPE) by the end of the year. Existing inventories already exceed government assumptions, with 15.8mn credits in issuers' accounts and total retired credits pushing supply 28pc above the 2025 target.

Cbio prices have fallen to 35.03 reals ($6.44), their lowest since 2021, as oversupply combines with renewed demand from distributors previously exempted by injunctions. Regulators have tightened penalties and pursued court action to curb defaults, aiming to restore programme credibility. Some market participants see the lower target as a way to reintegrate defaulting distributors without triggering price spikes. But unless CNPE increases the target, Brazil risks prolonged oversupply and depressed prices, undermining incentives for biofuel investment and Renovabio's long-term goals.

Supreme Court moves to uphold Renovabio

Brazil's supreme court has advanced deliberations on the constitutionality of Renovabio. The ruling dismissed claims that mandatory carbon-reduction targets for fossil fuel distributors were discriminatory or disproportionate, affirming that the policy aligns with constitutional principles and Brazil's climate commitments under the Paris Agreement.

The court will now deliberate on the merits of both parties' claims. A majority ruling is required to confirm or overturn the programme's constitutionality, a decision that could shape Brazil's energy transition and investor confidence in its biofuels sector.

Brazil moves to regulate SAF under ProBioQAV

Brazil has launched a regulatory framework for SAF through its new ProBioQAV national programme, aligning domestic standards with the UN's ICAO Corsia emissions-reduction scheme. The signed decree establishes eligibility criteria, trackable targets and public incentives for SAF production and use.

MME opened a public consultation on 29 November to define guidelines for output, sales and certification under ProBioQAV, with comments accepted until 28 December. The programme sets progressive emissions reduction targets for domestic flights, starting with a 1pc cut in 2027 compared with 2026 emissions and rising to 10pc by 2037. The decree assigns oil regulator ANP responsibility for calculating lifecycle emissions for each production route and introduces a book-and-claim system based on CS-SAF certification. SAF will not generate Cbio credits to avoid duplication, but alternative compliance options will be permitted for up to 5pc of annual targets, including lower-carbon aviation fuels and foreign credits under approved systems.

Brazil's SAF regulation is expected to be finalised by June 2026, following input from ANP and from civil aviation agency Anac.

B16 at risk owing to technical review

Brazil's planned increase in its biodiesel blending mandate to B16 in March faces growing uncertainty. The Fuel of the Future law sets annual 1 percentage point increases up to B20 in 2030, but makes changes conditional on technical feasibility and is subject to CNPE approval.

MME on 19 November released a two-phase testing schedule for higher biofuel blends. Trials for B20 will run until January 2027, followed by tests for B25 until December 2027. Market scepticism increased in October after MME officials signalled that technical checks may delay the March deadline for B16, echoing the postponement from March to August of introducing B15 earlier this year.

Argentina adjusts biofuel prices and mandates

Argentina has raised biofuel prices while temporarily lowering its biodiesel blending mandate to manage cost pressures. The energy secretary increased corn and sugarcane ethanol prices by 3pc and soybean-based biodiesel by 6.1pc, lifting ethanol to 841 pesos/litre (59¢/litre) for corn and by Ps918/litre for sugarcane, and biodiesel to Ps1.69mn/t.

Alongside price hikes, the government cut the biodiesel blending mandate from 7.5pc to 7.0pc, citing surging SBO

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prices, and the reduction stays in place until markets stabilise, balancing affordability with supply security. Ethanol blending stays at 12pc, split evenly between corn and sugarcane. These changes fall under Law 27640, which governs biofuel blending until 2030, and underscore Argentina's challenge of supporting renewable fuel production while managing feedstock inflation.

Demand

Ethanol

Harvest winds down as ethanol gains edge over sugar

Brazil's sugarcane harvest entered its closing phase in November, with crushing volumes tapering after a strong October. Mills in the centre-south processed 31mn t of cane in the second half of October, up by 14pc on the year, bringing cumulative output to 556mn t since April, or around 94pc of our full-season forecast of 590mn t. This pace remains slightly ahead of the five-year average, reflecting a catch-up from earlier weather delays.

Crop quality weakened late in the season, with TRS averaging 147 kg/t in November, down from October's highs of 158 kg/t. Sucrose accumulation improved under favourable conditions, but the quality dip underscored the lingering impact of early-year drought.

Ethanol production held firm, despite the seasonal slowdown. Mills continued to prioritise ethanol as sugar prices slumped to multi-year lows, narrowing the premium that historically favoured sugar output. The March 2026 Ice sugar contract has fallen by nearly 25pc over the past year, while anhydrous ethanol prices in Sao Paulo climbed by 13pc year on year, reinforcing ethanol's profitability advantage.

Ethanol's share of the sugarcane production mix rose to 51pc in late October, from 49pc earlier in the month, pushing sugarcane ethanol output in October to 3bn litres, up by 5pc on the year. Full-month ethanol production reached 4bn litres, with corn contributing 790mn litres, a 20pc share.

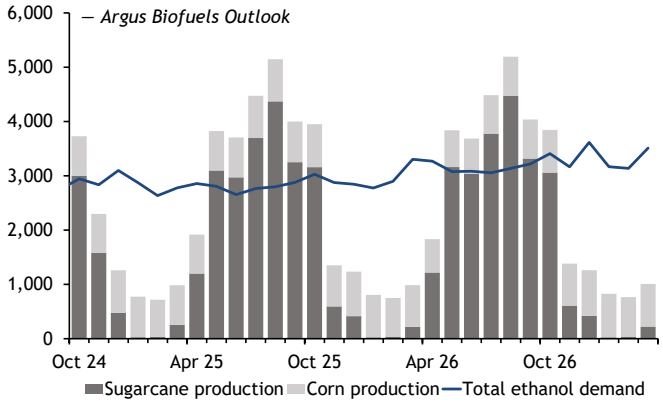
Corn-based ethanol continues to expand its footprint, cushioning volatility in sugarcane supply and underpinning long-term growth. October's 790mn l was an all-time high, up 5pc on the month and 8pc on the year. Calendar-year corn ethanol output is expected to reach 9bn litres, accounting for 28.1pc of total production. We expect corn ethanol use to remain firm in the 2025-26 marketing year, as new projects continue to come on line. This growth is also set to reshape Brazil's wider grain balance, with corn exports projected to decline gradually as domestic ethanol demand absorbs more volumes.

Looking ahead, the profitability pivot is set to endure into the early months of the 2026-27 crop. Mills anticipate ethanol-focused strategies as global sugar markets brace for surplus-driven price weakness. Producers have signalled that if current price relationships persist, next season will start with a mix heavily skewed towards ethanol. We expect ethanol production to close the 2025 calendar year at almost 32.1bn litres. Based on current trends, first-quarter output may be revised up, but for now we forecast production at around 2.5bn litres, with the full year likely to mirror 2025 levels.

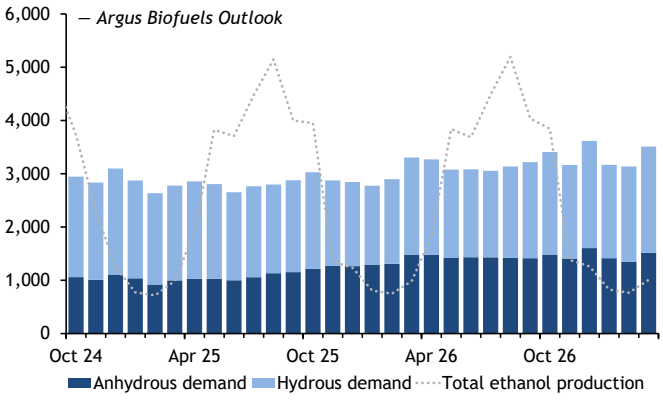
Ethanol demand holds firm, mandate lifts anhydrous

Domestic ethanol sales in October totalled nearly 3bn litres, up by 5pc on the year, driven by gains in both hydrous and anhydrous ethanol. Hydrous ethanol sales rose to 1.8bn litres, although they were pressured by parity levels of near 66pc of gasoline in Sao Paulo, while anhydrous sales climbed by 15pc on the year to 1.2bn litres, supported by the higher blending mandate introduced in August.

Brazilian ethanol production *mn litres*



Brazilian ethanol demand *mn litres*



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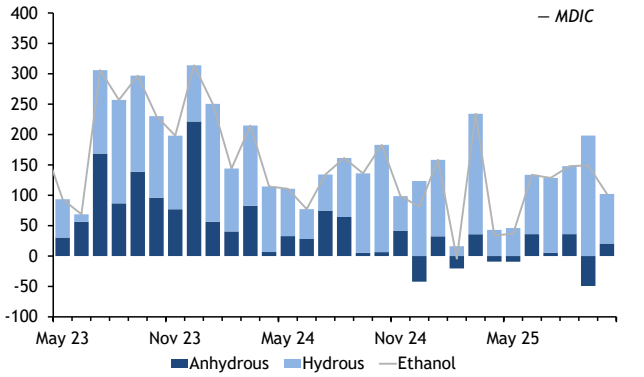
Unless retail parity improves, hydrous demand is likely to remain subdued until the end of the year, while anhydrous will continue to benefit from blending requirements and potential tax incentives. Ethanol demand is forecast at 2.9bn litres in November, reaching an annual total of 33.5bn litres. Beyond that, a projected rise in the growth of Brazil's vehicle fleet and the overall gasoline pool is expected to heavily support ethanol demand in 2026. Whether this materialises into hydrous or anhydrous will depend on how volatile parities evolve.

Ethanol exports slump in October

Brazilian net ethanol exports fell sharply in October, dropping to 102mn litres from 149mn litres in September. The reduction was primarily attributed to weaker sugarcane crop quality, which tightened feedstock supply. October exports were down by 51pc compared with a year earlier. US buyers continued to abstain from importing Brazilian ethanol, a trend that has persisted since September after the US raised tariffs on Brazilian ethanol to 52.5pc on 6 August.

South Korea remained the top destination for Brazilian ethanol, with a 47pc market share, followed by the Netherlands at 27pc. Imports to Brazil fell to just 21,000 litres in October, from 25.4mn litres a year earlier. The US accounted for 93.9pc of shipments during the month, with Germany supplying 5.8pc.

Brazilian net ethanol exports *mn litres*



Biodiesel

Blend hike uncertainty clouds demand outlook

Brazil's biodiesel market is closing the year with mounting uncertainty over the timeline for higher blending mandates. Producers had anticipated a rise to B16 in March 2026 under the Fuel of the Future law, but recent signals from policy makers suggest delays are likely. The mines and energy ministry outlined a two-phase testing schedule for blends above 15pc, with trials for B20 running through to January 2027 and for B25 to the end of that year. This has amplified scepticism over whether the planned March increase will materialise.

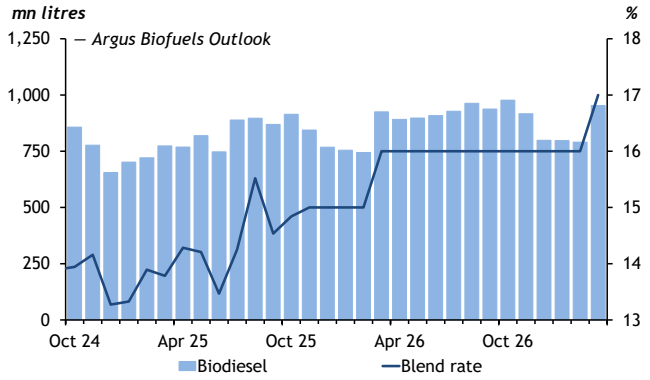
Brazilian biofuel demand outlook

Product	Oct 25	Nov 25	Dec 25	Jan 26	Feb 26	Mar 26	1Q26	2Q26	3Q26	4Q26	1Q27
Ethanol demand											*mn litres*
Anhydrous ethanol	1,215	1,269	1,267	1,295	1,309	1,476	4,081	4,331	4,267	4,498	4,277
Hydrous demand	1,815	1,607	1,578	1,480	1,589	1,827	4,897	5,100	5,143	5,692	5,536
Ethanol demand	3,030	2,876	2,845	2,775	2,899	3,304	8,978	9,431	9,410	10,190	9,813
Ethanol production											*mn litres*
Sugarcane ethanol	3,160	596	415	25	32	219	276	7,414	11,568	4,090	280
Corn ethanol	791	755	820	782	717	767	2,267	1,944	2,149	2,400	2,324
Ethanol production	3,951	1,351	1,235	807	749	987	2,543	9,358	13,717	6,489	2,604
Biodiesel demand											*mn litres*
Biodiesel	914	844	768	755	744	925	2,424	2,698	2,829	2,693	2,540
Feedstock demand											*'000t*
Soybean oil	558	570	510	477	486	627	1,590	1,892	1,938	1,766	1,718
Tallow	77	55	50	61	55	49	165	144	168	170	172
Palm oil	2	5	7	12	9	12	32	20	17	36	37
UCO	8	15	15	14	14	17	45	41	40	40	45
Other vegetable oils	27	21	20	13	12	10	35	21	38	54	37
Other animal fats	13	14	13	18	17	18	53	58	46	47	48
Other	123	106	101	93	83	112	288	288	338	345	311
Total	**808**	**787**	**716**	**686**	**677**	**845**	**2,208**	**2,463**	**2,585**	**2,459**	**2,368**

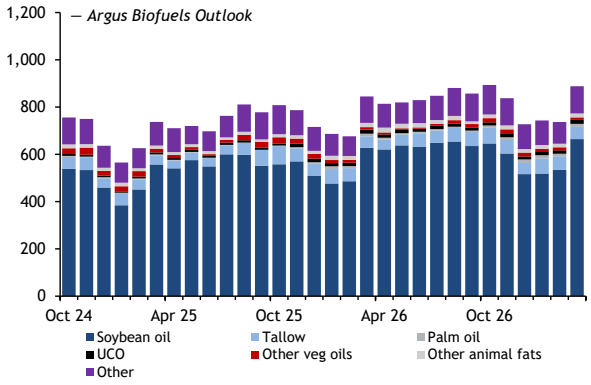
Anhydrous ethanol: free of water and at least 99pc pure, and used in gasoline blends, currently set at 27pc. Anhydrous fuel meets all the requirements of the ASTM D4806.
Hydrous ethanol: contains water and has a purity of 96pc. Can be used in Brazil as a 100pc gasoline substitute in flex-fuel vehicles.

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Brazilian biodiesel demand



Brazilian biodiesel feedstock demand *'000t*



If the mandate holds at B15 through 2026, biodiesel demand could fall to 10.1bn litres next year, from the current forecast of 10.6bn litres. Market sentiment turned more cautious in November after official blending statistics showed a 14.8pc blend to diesel, up from 14.5pc in September but still below the 15pc requirement. With technical feasibility checks likely to take longer than expected, the risk of a repeat of this year's B15 implementation delay looms large.

Capacity is not a constraint. The sector can produce up to 15.5bn litres/yr at full utilisation, with expansions and new projects to add around 3.3bn litres/yr by 2028. Successful tests using blends of above 20pc have reinforced long-term optimism, even as short-term implementation lags. Biodiesel demand is forecast to average 842mn litres across the fourth quarter, with December seeing a seasonal dip. Beyond this, we continue to assume B16 implementation in March, which would boost demand by 24pc compared with forecast February levels, driven by a combination of higher on-road diesel demand and the increased blending mandate, but revisions remain likely if delays to implementation persist into the second quarter.

Feedstocks

Biodiesel outlook could constrain soybean oil

Soybean oil remains the dominant feedstock for biodiesel, accounting for 72pc of output in 2024. But tallow's share climbed to 9.5pc in October, the highest since March 2023, with a record 77,000t consumed. The shift reflects the collapse of Brazil's tallow export market after the US imposed a 50pc tariff on 6 August, as well as concerns over the US 45Z producer credit, which could erode the value of foreign feedstocks such as Brazilian tallow.

As a result, soybean oil's share of the biodiesel feedstock slate fell below 70pc in October for the first time since January. Tallow's role is expected to increase as blending mandates rise, but soybean oil supply growth is unlikely to keep pace. National supply company Conab projects output at 11.9mn t for the 2025-26 crop, up by just 1.6pc compared with a year earlier, despite a record soybean harvest of 177.6mn t.

Structural constraints on crushing capacity and limited demand for soybean meal, which accounts for 77pc of the bean's yield, pose challenges to expanding soybean oil production in Brazil. Chinese demand for Brazilian soybeans, expected to maintain a 70pc share of exports, will further restrict domestic availability. Soybean oil exports have already fallen sharply from a peak of 2.4mn t in 2022 to 1.2mn t last year, and are likely to decline further as biodiesel absorbs more volumes.

We expect tallow's share of the biodiesel feedstock pool to rise to an average of 6.5pc in 2026, compared with 6.3pc in 2025. Beyond this, producers are also turning to other vegetable oils to help meet future mandates. Agribusiness firm 3Tentos has announced plans to crush 90,000t of canola this cycle, using all the resulting oil for biodiesel production. Canola offers higher oil yields, around 400 kg/t compared with 200 kg/t for soybeans, and does not compete directly with soybean planting, providing a potential buffer against feedstock tightness.

Prices

Ethanol

Brazil prices hold firm in November

Brazilian ethanol prices held firm through November, consolidating gains made earlier in the quarter as supply tightened and domestic demand surged. Anhydrous ethanol fob Santos

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averaged $716/t for the month, only $5/t above October but still 17pc higher on the year. The stability followed a sharp correction in October from September's year-to-date peak of $751/t as export economics weakened under the weight of US tariffs.

The bullish tone has been reinforced by supply constraints. Stocks remain well below last year, with anhydrous and hydrous inventories down by 16pc and 23pc, respectively, by the end of October. Lower cane quality and adverse weather cut center-south ethanol output by nearly 7pc from April to November, while sugarcane processing fell by 2pc. Most mills wrapped up crushing in early November, curbing fresh supply. An increase in the anhydrous blend mandate to 30pc from 27pc since August has further restricted stock build-up.

External factors continue to weigh on sentiment. The US tariff hike to 52.5pc in August undermined export economics, with US buyers virtually ceasing purchases from September onward. The US EPA proposal to halve RIN credits for imported biofuels in 2026 also threatens to depress export demand.

Looking ahead, we expect Brazilian ethanol prices to average $696/t in December. Tight inventories and strong domestic consumption should lend support, but bearishness in gasoline and the North American ethanol complex is likely to reduce interest for Brazilian product. We are also factoring in external trade pressures, which are set to continue capping prices in the near term. But by mid-2026, we see prices recovering toward current levels, reaching $737/t in June and $734/t in July.

Biodiesel

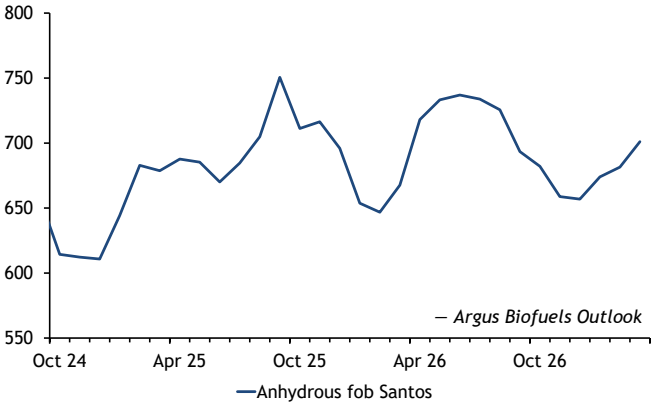
Argentinian SME exports hit 65,000t in October

Argentinian soybean oil methyl ester fob upriver prices fell to $1,229/t in November, shaving $4/t off October. Flows of Argentinian biodiesel to Europe have held steady at around 50,000t in recent months, with October peaking for the year at 65,000t, split between the Netherlands and Belgium.

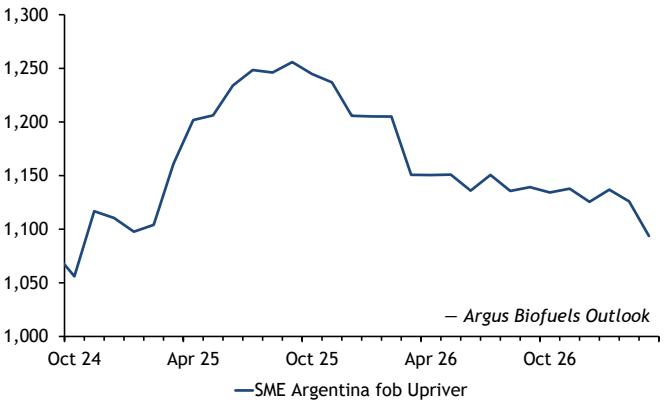
Europe remains the dominant outlet for Argentinian biodiesel exports, but volumes are capped by a price undertaking agreement that allows up to 1.2mn t of biodiesel to enter the EU annually without anti-dumping duties, provided sales meet the legislated minimum import price (MIP).

We anticipate the MIP will be revised in December, with prices expected to fall to around $1,206/t and then hold steady, remaining closely aligned with European SME benchmarks. Into the new year, a weaker diesel complex is expected to weigh on biodiesel values, with Argentinian SME prices forecast to average $1,166/t in the first half of the year.

Brazilian ethanol prices *$/t*



Argentinian biodiesel prices *$/t*



South American biofuel price outlook

Product	Oct 25	Nov 25	Dec 25	Jan 26	Feb 26	Mar 26	1Q26	2Q26	3Q26	4Q26	1Q27
Brazilian ethanol											*$/t*
Anhydrous fob Santos	711	716	696	654	647	668	656	729	718	666	685
Argentinian biodiesel											*$/t*
SME Argentina fob Upriver	1,245	1,237	1,206	1,205	1,205	1,151	1,187	1,146	1,142	1,132	1,119

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ASIA-PACIFIC

Regulation

Vietnam mandates E10 gasoline from June 2026

Vietnam will implement a nationwide E10 blending mandate from June next year. All commercially available unleaded gasoline will require 10pc ethanol to be blended in starting from 1 June 2026. This applies to all parties across the supply chain including petroleum trading firms, distributors, blenders, importers, refineries and fuel retailers. The blending and sale of E5 Ron 92 gasoline will continue to be permitted until 31 December 2030, to ease the transition.

Vietnam's Agency for Innovation, Green Transition and Industry Promotion and the General Department for Market Surveillance will be the lead implementing agencies for the country's biofuel roadmap. The agencies will work with industry partners such as USGBC and the Singapore-based think-tank Global Centre for Green Fuels for its transition.

Indonesia eyes B50 biodiesel start in 2H26

Indonesia plans to implement a B50 blending mandate by the second half of 2026. The energy and mineral resources ministry will begin road tests for vehicles using B50 fuel this month, with the results expected in six months.

The ministry is currently studying factors such as oil palm productivity, the ability to fund the palm oil-gasoil price gap and logistical bottlenecks for distributing fuel to eastern parts of Indonesia, and is considering alternative waste feedstocks such as UCO for the biodiesel programme. It is also considering a levy policy that adjusts to price changes to ensure sufficient funds, and a blending ratio pegged to biodiesel price movements.

Indonesia reshuffles 2025 biodiesel allocations

Indonesia has revised its domestic biodiesel allocations for 2025 to meet its B40 mandate. The latest decree from the energy and mineral resources ministry, issued on 3 December, allocates 7.12bn litres of palm oil-based biodiesel to producers and fuel retailers under the public service obligation (PSO) scheme, down from 7.6bn litres previously announced. Non-PSO firms will blend 8.49bn litres, up from 8bn litres previously. The total allocation remains unchanged at 15.6bn litres.

Fuel suppliers under the PSO receive subsidies from oil plantation fund management agency BPDPKS to cover the price gap between biodiesel and diesel, while non-PSO suppliers do not. Indonesia had supplied over 70pc of its 2025 PSO target by mid-November.

Singapore to implement SAF levy from April 2026

Singapore will introduce an SAF levy on all passenger, cargo, general and business aviation flights departing the country from 1 October 2026, applicable for tickets or services sold from 1 April 2026. Civil aviation authority CAAS has announced new levy rates applied across four geographical bands. These rates will remain fixed with Singapore's current target of 1pc SAF usage, for all flights departing the country starting in 2026, and will only be revised if the target rises to 3-5pc in 2030, subject to global developments and wider SAF availability and adoption.

Passengers flying on economy and premium economy flights to southeast Asian countries in geographical Band I will have to pay a S$1 (77¢) levy, and up to S$10.40 for those flying to the Americas, in Band IV. For flights with multiple stops, the levy will be applied on the immediate destination after departing Singapore. Passengers flying business and first class will have to pay four times the levy applied to economy and premium economy passengers, ranging at S$4-41.60.

Malaysia's CPO export duty to remain at 10pc

Malaysia's crude palm oil (CPO) reference price used for setting the country's export duty rate dropped by 1.3pc to 4,206.38 ringgit/t ($1,019/t) in December. Malaysia will continue to maintain an export duty rate of 10pc this month, despite the marginal drop in reference price.

Prices

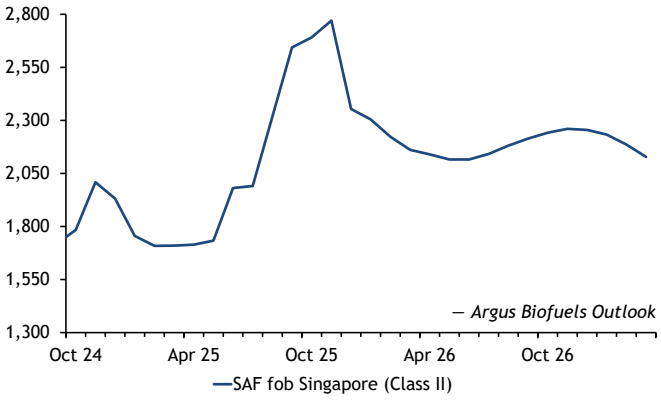
HVO and SAF

Singapore SAF prices retreat from multi-year highs

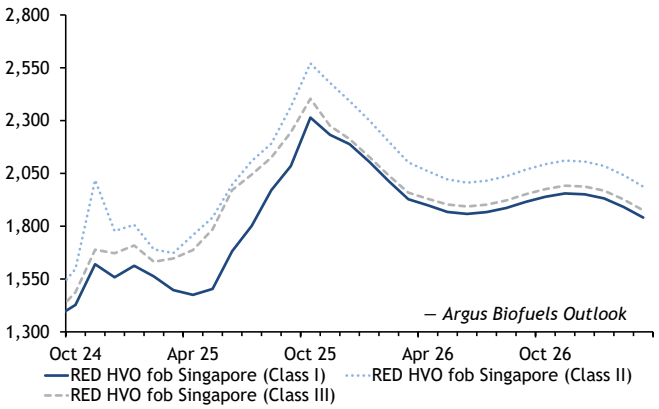
SAF fob Singapore values fell sharply from mid-November, reversing multi-year highs as subdued demand and rising supply weighed on sentiment. Reports that most European buyers had met year-end blending obligations curbed spot appetite, while steep backwardation in SAF premiums incentivised sellers to clear prompt volumes ahead of expected first-quarter imports. A backwardation of around $10/t in gasoil added further impetus to offload stocks and capture higher underlying prices.

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Asia-Pacific SAF prices *$/t*



Asia-Pacific HVO prices *$/t*



The November surge, driven by fourth-quarter maintenance curtailing supply, proved short-lived. Market sentiment amplified the incline, but we view the correction too bearish to be sustained based on the underlying fundamentals. SAF was assessed at $2,252/t on 10 December, but we expect prices to recover to average $2,354/t for the month as sentiment stabilises and residual supply constraints lend support. Market reports of planned maintenance at a Singapore unit from next week through February are expected to reinforce this uplift into January, limiting further downside. A discount to HVO may persist in the near term, but price drivers point to uplift from current assessments. Into the new year, SAF values are forecast to ease to $2,230/t in the first quarter of 2026, reflecting bearish trends in conventional jet and diesel markets.

HVO prices soften, arbitrage narrows

HVO Class II fob Singapore averaged $2,479/t in November, down from October's $2,571/t as arbitrage opportunities narrowed late in the month. Duty windows remained open for most rates except 35.6pc, but tightening spreads have since reduced export incentives. We expect HVO Class II prices to average $2,392/t in December, before drifting lower to $2,102/t in the first quarter of 2026. The cabinet approval of Germany's RED III draft may send a short-term shock to prices in the very near term, opening duty windows, although we expect much like the recent change in SAF prices, for this to level out and remain on our projected trajectory. Beyond this, values are likely to remain above 2025 levels despite a gradual easing trend.

Biodiesel

Biodiesel prices drift lower amid muted demand

Chinese Ucome prices softened through late November and early December, reflecting weak demand and declining feedstock costs. Values fell from $1,190/t fob on 1 November to $1,148/t by 5 December, as buying interest from the bio-bunker market remained thin and indicative selling levels edged lower.

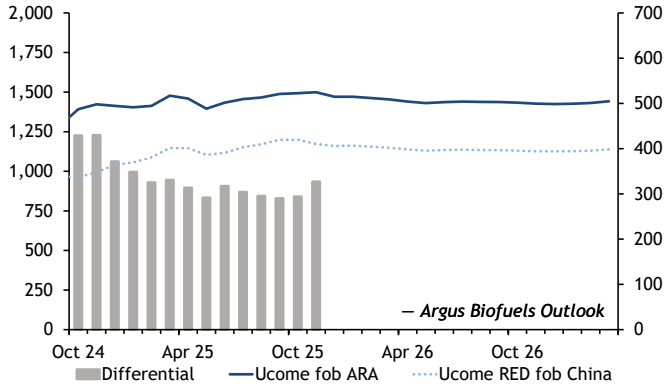
The market's subdued tone was reinforced by broader bearish sentiment across the biofuels complex, with participants citing uncertainty over European compliance demand and

Asia-Pacific biofuel price outlook *$/t*

Product	Oct 25	Nov 25	Dec 25	Jan 26	Feb 26	Mar 26	1Q26	2Q26	3Q26	4Q26	1Q27
Biodiesel											
RED Ucome fob China	1,199	1,172	1,160	1,162	1,156	1,149	1,155	1,134	1,135	1,127	1,132
HVO											
HVO Class I fob Singapore	2,314	2,233	2,188	2,105	2,013	1,928	2,015	1,875	1,890	1,949	1,888
HVO Class II fob Singapore	2,571	2,479	2,392	2,302	2,201	2,102	2,201	2,029	2,040	2,103	2,038
HVO Class III fob Singapore	2,403	2,275	2,212	2,129	2,040	1,959	2,043	1,909	1,925	1,985	1,923
SAF											
SAF Class II fob Singapore	2,691	2,770	2,354	2,305	2,223	2,161	2,230	2,124	2,179	2,252	2,182
Feedstock											
UCO fob China	1,098	1,075	1,039	1,043	1,036	1,029	1,036	1,020	1,022	1,014	1,011

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Ucome prices $/t



policy signals. Although Ucome prices held steady for several sessions, the gradual erosion of feedstock values ultimately pulled assessments lower, averaging $1,172/t over November. Competition for UCO from HVO and SAF producers continues to pressure biodiesel margins, with the potential effect of elevated outright prices due to higher feedstock costs. In the following months, we expect prices to drift slightly lower, but remaining comfortably above year-ago levels. Prices are forecast to average $1,155/t in the first quarter of next year and $1,145/t over the first half of the year.

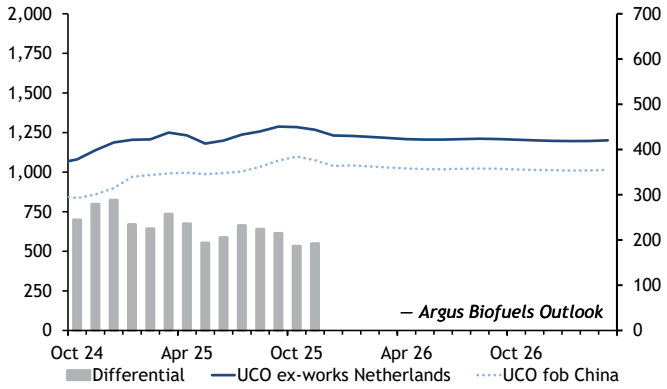
Feedstock

Bearish outlook weighs on Chinese UCO

Chinese UCO prices extended their decline from late November into December, reversing multi-year highs reached earlier in the quarter. Prices fell to an average of $1,172/t in November from $1,199/t in October as domestic collection costs weakened and export interest remained muted.

Uncertainty surrounding Germany's RED III implementation likely capped UCO fob China prices in the near term, but the cabinet approval on 10 December is expected to lend support, with December values projected to average $1,160/t. Prices are then expected to trend lower towards the end of the first quarter, averaging $1,149/t in March and $1,155/t across the whole quarter.

UCO prices $/t



Trade

Biodiesel

Exports surge on east Asian and Dutch demand

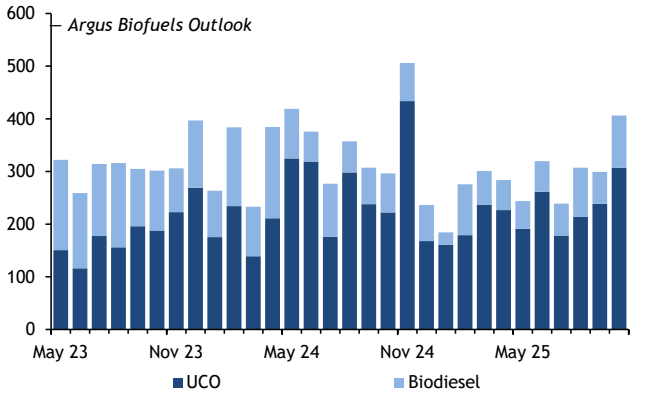
Chinese biodiesel exports accelerated for a third consecutive month in October, rising by 54pc from September to a high so far this year of 113,000t. Shipments were 51pc higher on the year, taking January-October volumes to 748,000t, although this was 23pc lower than the 968,000t shipped over the same period in 2024.

Shipments to Hong Kong rose by 41pc to 18,086t, while flows to South Korea jumped by 610pc to 16,654t, making them the second and third-largest buyers behind the Netherlands. This growth was driven by a surge in the premium of Ucome fob strait of Malacca to fob China, which reached $115/t by the end of the month, and continued to widen in November. Dutch imports rebounded sharply to 42,083t from just 215t in September, although year-to-date receipts are 70pc below 2024 levels.

Destinations are diversifying

Trade flows from China have re-routed to Asia's bunkering hubs and regional demand centres since the EU implemented anti-dumping duties. The Netherlands took 67pc of Chinese biodiesel exports in January-October 2024, but the range of outlets has been more diverse over the same period this year, with Malaysia accounting for 29pc, the Netherlands 26pc, Singapore 22pc, Hong Kong 11pc and South Korea 7pc.

China biofuels and feedstock net exports '000t



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UCO

Chinese exports surge on US demand

China's UCO exports rose by 29pc on the month to 308,000t in October, from 240,000t in September. Volumes were 38pc higher year on year, but cumulative January-October shipments fell by 6pc to 2.2mn t from 2.35mn t in 2024, as more domestic biofuels producers opted to use the feedstock.

US demand re-emerged as buyers front-loaded deliveries ahead of regulatory tightening. Shipments to the US jumped by 76pc to 56,000t, still 54pc lower than a year earlier, as buyers maximised RIN generation before regulatory changes undermine foreign feedstock economics from 2026.

Flows to Europe dominate

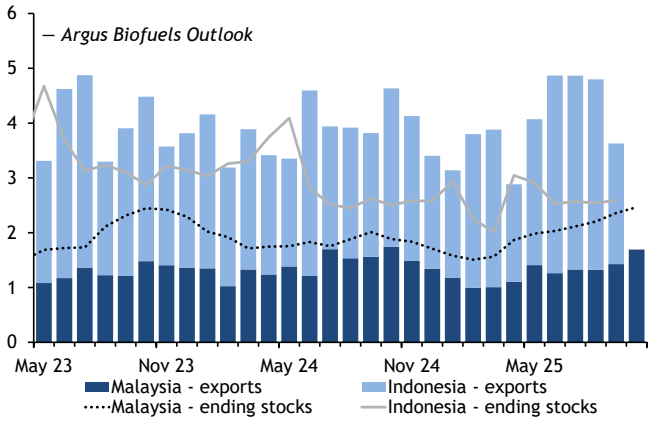
The Netherlands retained its position as the top destination, taking 88,000t in October, up by 5pc from September and 81pc higher than last year. The country accounted for 478,316t in January-October, 10pc higher than in the same period in 2024. Singapore ranked third at 55,921t, down by 12pc month on month but more than doubling year on year.

Palm oil

Indonesian exports drop under duty pressure

Indonesian palm oil inventories have held steady since June, averaging 2.57mn t after dropping from a peak so far this year in April. September data showed a slight increase of 1.9pc on the month to 2.59mn t, while exports declined by 37pc from

Asia-Pacific palm oil trade *mn t*



August to 2.2mn t. The decline reflects a higher CPO reference price, which lifted export duties, and the Palm Oil Fund Levy, pushing the effective export tax to $219.47/t, up by 33pc from August. The reference price stayed elevated though October and November, and has only recently eased to $926.14/t in December, weighing on export values in the fourth quarter.

Malaysian stocks continued to rise for the seventh consecutive month, reaching a record high of 2.46mn t in October, despite exports also increasing, by 18.6pc to 1.69mn t. This coincides with a surge in CPO production of 6.6pc in September compared with August, with a year-on-year increase of 15.3pc. These gains are expected to reverse as the monsoon season, which began in mid-November, weighs on harvesting and transport.

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GLOBAL SUPPLY

Europe

PKN Orlen has started operations at its 300,000 t/yr HVO plant in Plock, Poland, after facing constraints that delayed start-up by a year.

The German transport ministry has granted €157mn to German aerospace centre DLR to commercialise product from its 2,500 t/yr RD and SAF demonstration plant. The funding will support development of the demonstration plant until 2035, covering research and testing to optimise power-to-liquids technologies for commercial production.

North America

Lanzajet has started operations at its 29,000 t/yr AtJ SAF plant in Soperton, Georgia, US. The plant is operating at 75pc of capacity, and is expected to ramp up to 100pc in the coming months.

Par Pacific's plans to complete construction of its 176,412 t/yr RD and SAF project at the Kapolei refinery in Hawaii by the end of this year, and will begin operations shortly thereafter.

US firm NXTClean Fuels will take a final investment decision in 2026 for its 2.3mn t/yr RD and SAF plant in Oregon, but has delayed commissioning the facility until 2029 after it was initially planned for 2024. The plant will target a 65pc SAF and 35pc RD production split, with flexibility to adjust output depending on market conditions. NXTClean Fuels is also seeking to start building a 91,000 t/yr RD plant in Lakeview, Texas, early next year.

Calumet Specialty Products Partners will complete expansion of its 15,000 b/d biorefinery in Great Falls, Montana, to increase SAF output in the second quarter of 2026. The initial expansion will increase SAF capacity by 8,000-10,000 b/d and will gradually rise to 20,000 b/d SAF and 2,000 b/d RD by 2028.

FedEx began supplying SAF to its air fleet at Chicago's O'Hare International Airport and Miami International Airport in October. The company will deliver 1mn USG of SAF to Chicago from Air BP and 3mn USG to Miami from AEG Fuels.

Phillips 66 has agreed to supply 83mn USG of SAF to logistics firm DHL for the next three years. The SAF will be produced at Phillips' 800mn USG/yr Rodeo plant and will be delivered to the Los Angeles International Airport, with smaller volumes going to DHL's other points of supply in California.

South America

Brazilian ethanol producer Pagrisa has secured approval to start operations at its 700,000 litre/d (4,410 b/d) flex ethanol plant at Ulianopolis in Para, Brazil.

Brazilian sugarcane producer Cocal and German firms Siemens and GIZ will jointly conduct a feasibility study to produce e-SAF and e-methanol through a methanol-to-jet pathway using CO_2 from sugarcane and green hydrogen.

Brazilian development bank BNDES and the Japan Bank for International Cooperation have signed a deal to raise up to 1.06bn reals ($200mn) to invest in biofuels and forest protection projects in Brazil. The agreement includes initiatives to produce SAF and ethanol, protect forest lands and mitigate climate change.

Brazilian biodiesel firm Be8 has signed an agreement with Japanese company Sumitomo to jointly supply SAF to northern Europe from ECB Group's 905,272 t/yr RD and SAF plant in Paraguay, which will start operations in 2029.

Gol Airline and Sumitomo will partner to develop SAF projects in Brazil and will work jointly with the Brazilian and Japanese governments to enable Japan to finance SAF projects in Brazil in exchange for a share of issued carbon credits.

Petrobras began operations of its 3,000 m^3/d SAF co-processing unit at Duque de Caxias in Rio de Janeiro, Brazil, and has delivered 3,000m^3 of co-processed SAF at Tom Jobim International Airport in Rio de Janeiro.

Asia-Pacific

Fuji Kosan has finished building its 12mn litre/yr (75,000 b/d) biodiesel blending plant at Himeji, Hyogo prefecture, in Japan. Operations are due to begin by the end of 2025 and supplies wil start in early 2026.

Malaysian state-owned oil firm Petronas, Japanese alternative fuels producer Euglena and Italian oil and gas firm Eni have started building a biorefinery in Johor, Malaysia, which will produce 12,500 b/d of RD, SAF and bionaphtha, with operations to start in the second half 2028.

Green fuels producer Aether Fuels will develop a 2,000 t/yr SAF plant at Aster's refining and petrochemical complex in Pulau Bukom, Singapore. Construction is scheduled to start

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next year and operations in 2028. The plant will use Aether's Aurora™ technology to convert industrial waste gas and bio-methane into 1,600 t/yr of SAF and 400 t/yr of bionaphtha. The firm also plans to build a 1,000 b/d SAF plant in 2030. Further details will be disclosed in the second half of 2026.

Bioenergy developer Jet Zero and the Port of Townsville have signed an initial agreement to conduct a feasibility study for a new biofuel storage and blending facility in Queensland, Australia. The facility will source SAF from Jet Zero's 88,140 t/yr RD and SAF facility at Townsville, Australia.

Japan's trade and industry ministry has selected Okinawa prefecture as the location for the country's ethanol blending initiatives planned for 2028-29. Ethanol will initially be blended with gasoline at 10pc, gradually increasing to 20pc by 2040-41.



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