argus
argusmedia.com

illuminating the markets®

August 2026

Spotlight on Hydrotreated Vegetable Oil (HVO)

Global pricing, risk management and market outlook



Contents page

Hydrotreated vegetable oil (HVO): Diesel goes green 4

Global suite of HVO/RD prices
tracking evolving market flows 6

Argus Open Markets® platform 7

Europe and Asia-Pacific HVO pricing 8

US RD: Incentives boosting production 10

A downstream perspective: German HVO100 prices 12

Risk management 14

Global renewable diesel demand 15

Argus Specialised Freight 16

Global HVO/Renewable diesel prices and PA codes 17

Biofuels and feedstocks at Argus 18

Hydrotreated vegetable oil (HVO): Diesel goes green

Hydrotreated vegetable oil (HVO), also known as renewable diesel (RD), is central to global decarbonisation ambitions. It is produced by hydrotreating renewable feedstocks such as vegetable oils, animal fats and used cooking oil (UCO). HVO is a drop-in fuel that can generally be blended with fossil diesel in higher percentages compared with conventional biodiesel, or can entirely replace its fossil counterpart in the form of HVO100 without the need for engine modifications.

Argus estimates that global HVO demand will grow to around 20.2mn t this year, up by 44pc from 2025, driven by Europe and the US.

Global HVO demand, tonnes



Europe demand is estimated at 23mn t by the end of the decade as EU member states work towards Renewable Energy Directive (RED III) implementation, which sets a target of 29pc share of renewable energy within the final consumption of energy in transport by 2030. While European mandates remain a key demand driver, voluntary consumption from end users and companies looking to reduce their emissions is on the rise.

In the US, the government has proposed record-breaking biofuel blending targets for the next two years. This could see renewable diesel consumption reach 12.3mn t in 2026, rising by 46pc on the year, according to Argus Media's analytics division.

Because HEFA plants can produce both HVO and sustainable aviation fuel (SAF), both markets have to be considered together. Global HVO and SAF demand are projected to outpace demand by 2029. An additional 29mn t of project announcements could materialise by 2030, but these are currently classified as "very provisional", either pending a final investment decision or lacking substantive detail beyond the initial announcement.

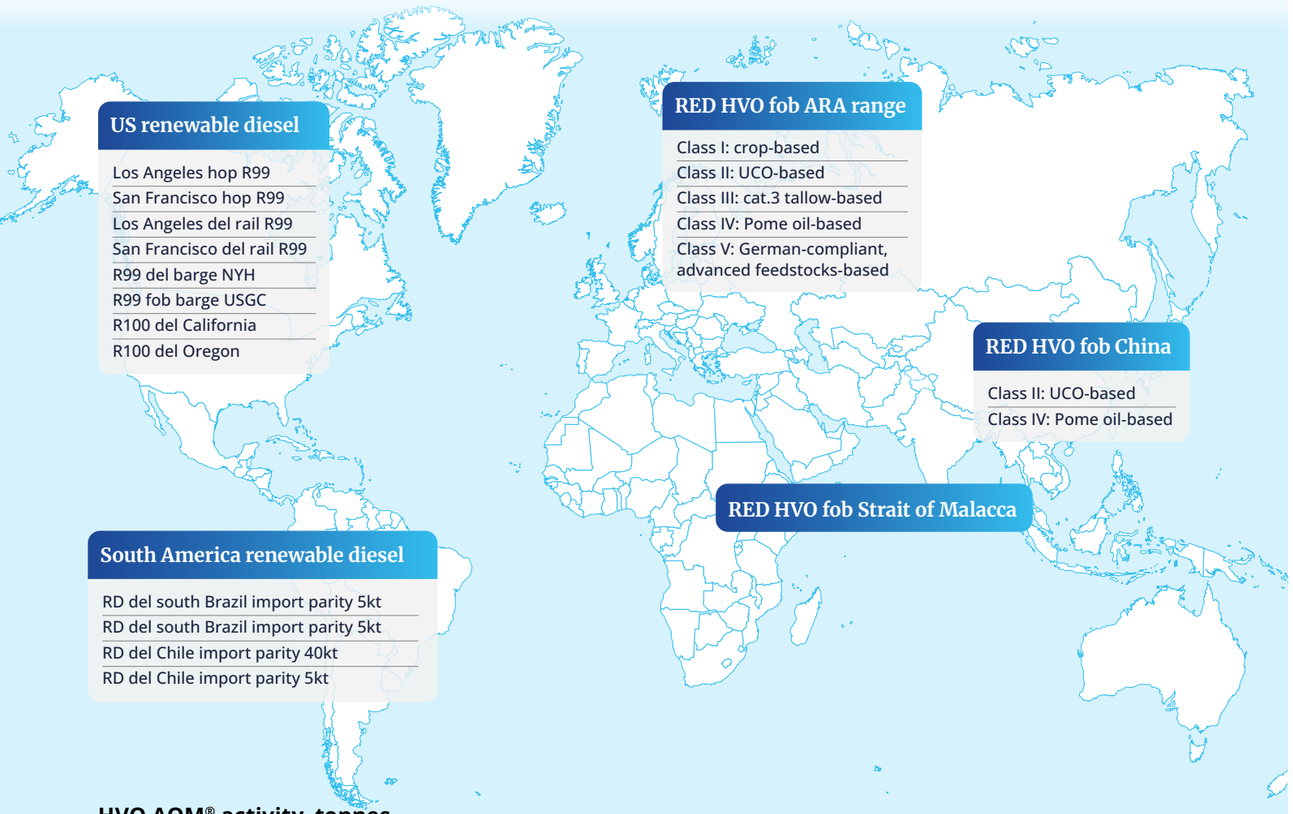
Argus' independent global HVO coverage helps the sector navigate the rapidly evolving biofuels space, offering reliable information across the entire value chain: from feedstocks to wholesale HVO prices, including a focus on the downstream market, price outlooks and supply and demand fundamentals analysis.

Why choose Argus HVO pricing?

- **Market-driven accuracy**
  Daily prices are based on actual physical HVO spot market activity—including bids, offers, trades, and indications—ensuring robust and reliable benchmarks.
- **Tailored to renewable fundamentals**
  Reflects the unique dynamics of renewable fuels, distinct from fossil diesel in terms of technology, feedstocks, production costs, and demand drivers.
- **Risk management for all market participants**
  Helps producers manage rising production costs, while enabling buyers to benefit from falling prices—reducing exposure to adverse market movements.
- **Transparent and real-time**
  Pricing is visible and easy to understand underpinned by live real-time HVO market activity on the Argus Open Market pricing platform.
- **Experts on hydrotreated renewable fuels**
  Argus fully understands the hydrotreated market, including HVO feedstocks and competing products like SAF.
- **Risk management through hedging**
  Argus HVO pricing settles futures contracts, helping market participant manage and trade around risks related to HVO.

Global suite of HVO/RD prices tracking evolving market flows

Argus HVO prices are underpinned by significant spot market activity, in the form of physical trades, bids and offers reported to Argus on a daily basis. To aid transparency, the Argus price discovery process for European HVO can be followed in real time on the Argus Open Markets® (AOM®) price platform platform, open every day between 4pm and 4:30pm GMT.



US renewable diesel

- Los Angeles hop R99
- San Francisco hop R99
- Los Angeles del rail R99
- San Francisco del rail R99
- R99 del barge NYH
- R99 fob barge USGC
- R100 del California
- R100 del Oregon

RED HVO fob ARA range

- Class I: crop-based
- Class II: UCO-based
- Class III: cat.3 tallow-based
- Class IV: Pome oil-based
- Class V: German-compliant, advanced feedstocks-based

RED HVO fob China

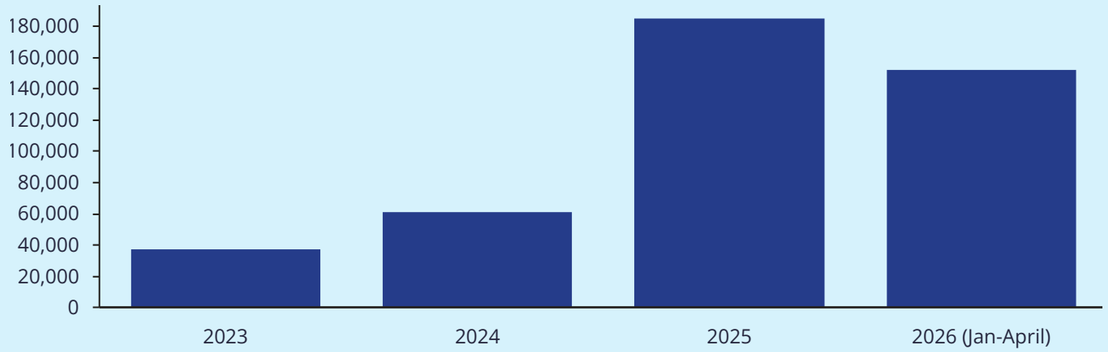
- Class II: UCO-based
- Class IV: Pome oil-based

RED HVO fob Strait of Malacca

South America renewable diesel

- RD del south Brazil import parity 5kt
- RD del south Brazil import parity 5kt
- RD del Chile import parity 40kt
- RD del Chile import parity 5kt

HVO AOM® activity, tonnes

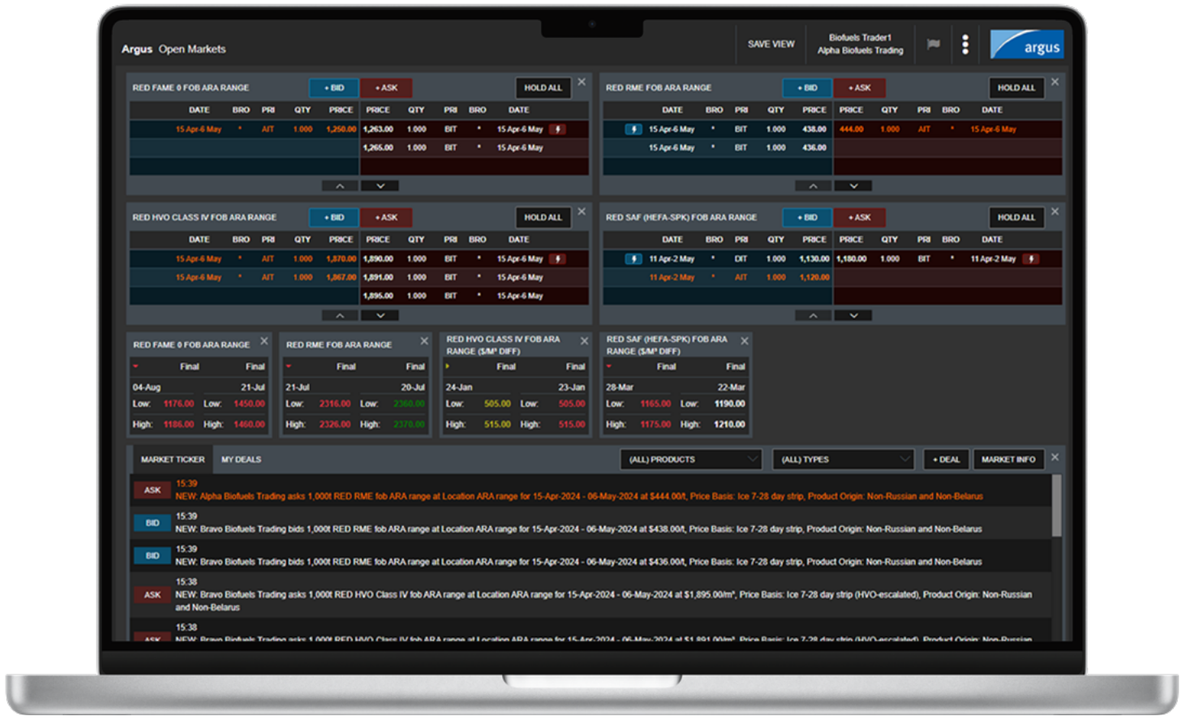


Source: Argus Media

Argus Open Markets® platform

AOM® is a web-based price discovery platform enabling market participants to post bids and offers and initiate trade for physical commodities in real time on the fob ARA range spot market.

- >2.5mn t of trade initiated on AOM® in 2025 across all biofuels
- AOM® HVO trades initiated tripled in 2025 vs 2024
- 26 companies active on AOM® HVO markets in 2025



Use a dedicated HVO benchmark that reflects actual market dynamics. Argus HVO prices are underpinned by physical trade bids and offers, and are published in **Argus Biofuels** and **Argus Americas Biofuels**.

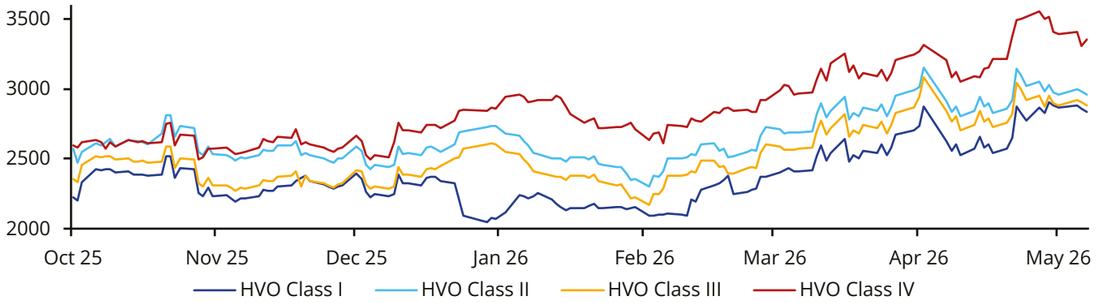
Europe and Asia-Pacific HVO pricing

Every Argus assessment is backed by a publicly available methodology built in consultation with the industry and updated as needed to ensure it remains reflective of evolving market practices.

With growth in HVO traded volumes, best practices are emerging for supply operations and compliance with renewable fuel regulations. One example is the so-called carbon-14 dating (C14) test, which is mandatory for HVO deliveries in the Dutch market to prove the fuel's biogenic content. C14 testing is also quickly gaining widespread industry acceptance across Europe.

To reflect this, Argus methodology includes a requirement for all HVO trades initiated on AOM® to be accompanied by C14 analysis.

RED HVO fob ARA range, $/t



Source: Argus Media

The different classes of HVO assessed on a fob ARA range basis represent the majority of the European market share, offering key references for crop-, waste-based and advanced renewable diesel pricing in Europe.

Class I
HVO produced from food and feed crops, excluding crude palm oil

Class II
HVO produced from UCO

Class III
HVO produced from category 3 tallow

Class IV
HVO produced from palm oil mill effluent (Pome) oil

Class V
HVO produced from RED-compliant Annex IX Part A feedstocks considered advanced in Germany

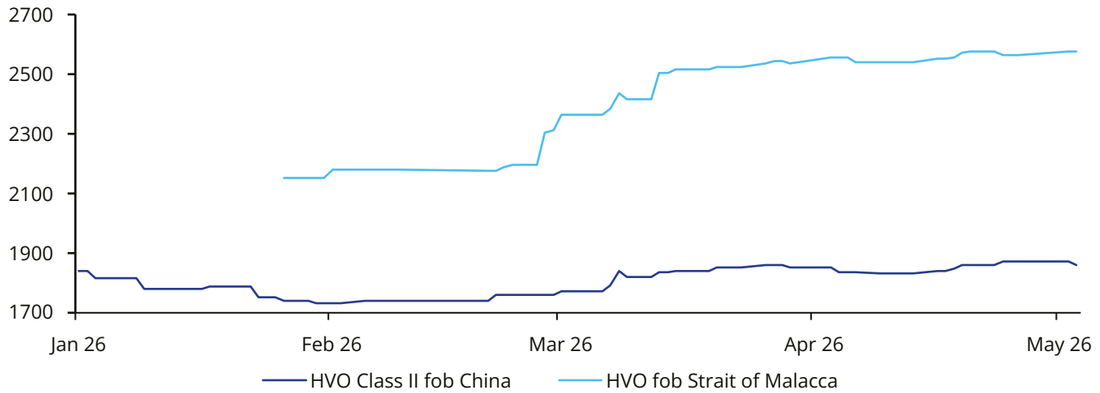
Southeast Asia is poised to become a key hydrotreated biofuels production and export location, with more than 3mn t/yr of maximum operational nameplate production capacity for HVO and HEFA SAF already in place across the region, with more set to come online. To bring transparency to the region and support the continued growth of the market, Argus launched its fob Strait of Malacca RED HVO price assessment in January 2026.

And to round up Asian HVO coverage, Argus also publishes two market-led HVO assessments on a fob China basis.

Class II HVO fob China: produced from UCO

Class IV HVO fob China: produced from Pome oil

HVO fob China, fob Strait of Malacca, $/t



Source: Argus Media

US RD: Incentives boosting production

US renewable diesel capacity has already expanded rapidly in recent years on the back of federal tax and Renewable Identification Number (RIN) compliance credit schemes coupled with various state-level Low-Carbon Fuel Standard (LCFS) programs that incentivise carbon intensity (CI) reduction in the transport pool.

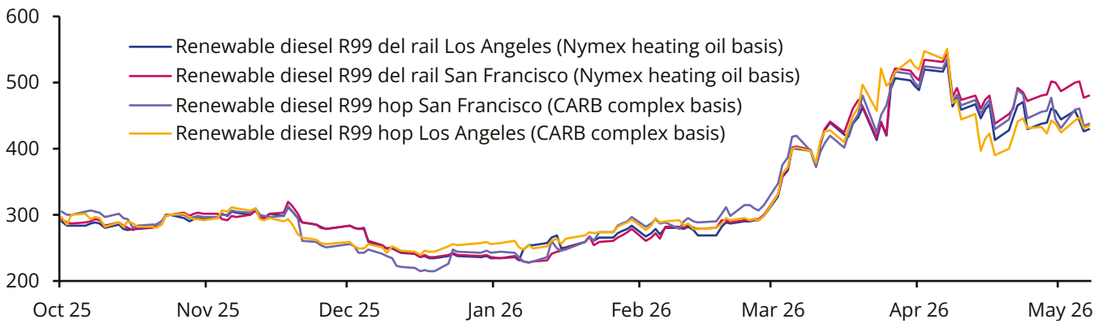
An onus on boosting domestic production and waste feedstock sourcing already ushered in the switch to a CI-based 45Z domestic production tax credit from a more open and fixed $1/USG blender's tax credit as of this year.

The One Big Beautiful Bill passed by the Trump administration in July 2025 furthered the homegrown agenda, stipulating that any transportation fuel produced after 31 December 2025 must exclusively be derived from feedstock produced in the US, Mexico or Canada to qualify for 45Z. Meanwhile emissions rates shall exclude indirect land use change effects to give crop-based suppliers a boost. It also slashed the credit applicable to SAF to bring it down in line with renewable diesel, which could upend many refiners' plans to convert more output to the former from the latter.

Environmental Protection Agency (EPA) proposals that would curtail RIN eligibility for foreign goods by half may impede the viability of imports even further. Under the same motion, the EPA is looking to set record-breaking biomass-based diesel blending targets of 5.61bn USG in 2026 and 5.86bn USG in 2027 to support the biofuel sector, though a final decision is still pending.

Argus has four fully assessed renewable diesel prices in the US, all located in the main California market where it receives the full suite of federal and state incentives. These include R99 head of pipe and rail, each in Los Angeles and San Francisco, covering the main delivery options for domestically produced product across the state.

R99 Los Angeles, San Francisco, USC/gallon



Source: Argus Media

R99 is a 99pc renewable diesel blend with 1pc diesel. As it is already blended, the value of credits such as RIN and 45Z are stripped out. Prices are published as differentials to California Air Resources Board (CARB) ultra-low sulphur diesel (ULSD) and its attributes, which includes the state's cap-and-trade and LCFS deficit costs for diesel and crude CI deficit cost for diesel, and to Nymex heating oil.

Argus also publishes a slate of calculated renewable diesel prices across different regions in the US, including R99 in the Gulf coast, which is emerging as a production hub, and New York Harbor, which the city of New York's Department of Citywide Administrative Services is using in purchase contracts for its transport fleets.

R100 credit stack calculations for California and Oregon, another LCFS market, are also produced for a variety of feedstocks and corresponding CI values, including soybean oil, tallow, UCO and corn oil. These are then used to produce indicative refinery margins for a US Gulf coast producer by subtracting prices for each corresponding feedstock, excluding fixed and variable costs, which can vary from plant to plant.

First Latin America renewable diesel prices

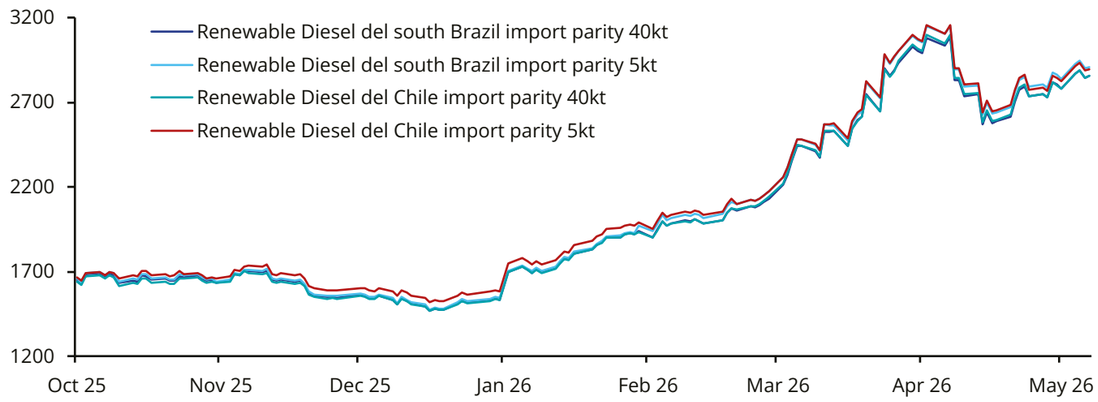
Latin American countries are also beginning a push in the direction of hydrotreated fuels, though supportive policy is in a more nascent stage than elsewhere in the world.

However Argus became the first PRA to launch pricing for Brazil and Chile in September 2025, helping governments, producers and consumers to develop policy, plan projects and compare costs to alternative fuels and decarbonization strategies. These import parity calculated values show prices for product brought in from the US Gulf Coast compared to the biggest and highest value alternative market for producers from that region, California.

The calculation takes into account the R99 LA hop assessment plus the California LCFS credit value for soybean oil feedstock, RINs and 45Z credit value, less the New Orleans to Los Angeles clean freight rate as published in Argus Tanker Freight.

Freight costs for both a full 40,000t cargo and partial 5,000t cargo, taken from our Argus Specialised Freight report, are added to this value to each location.

Latin America renewable diesel, $/t

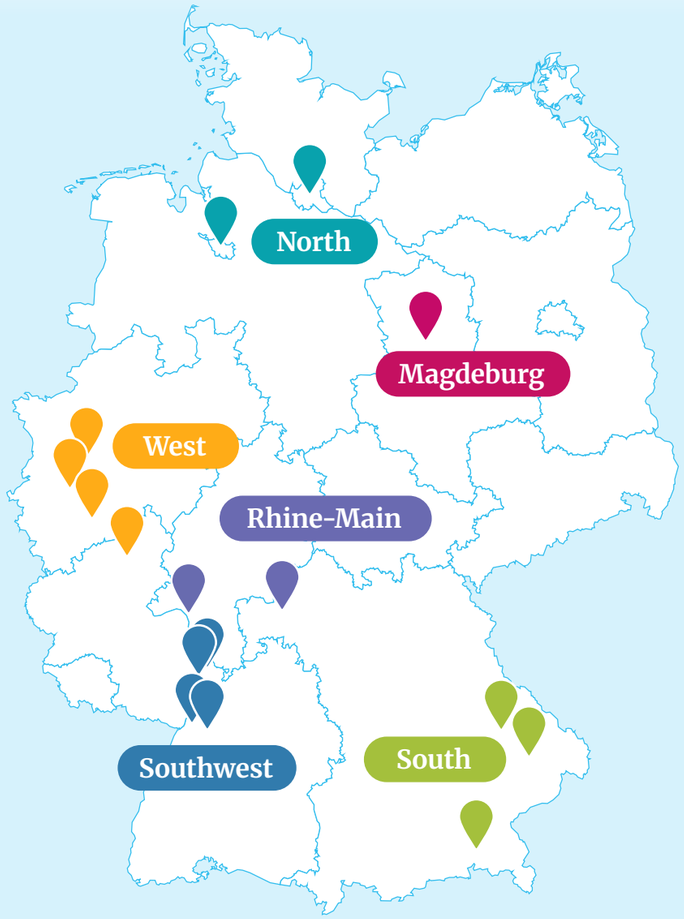


Source: Argus Media

A downstream perspective: German HVO100 prices

HVO is gaining ground as an essential compliance pathway to meet regulated mandates in several European countries, but voluntary demand is also on the rise. This is evident in the growing HVO liquidity in the German market, where consumption is driven by both mandated and voluntary demand. To support transparency and provide the market with reliable values of this emerging transport fuel, Argus launched German downstream HVO100 assessments, reflecting the cost of HVO truck sales at various domestic locations.

These offer a valuable reference for those looking to move their product into Germany, as well as for the entire downstream market, including end users, fuel distributors, and haulage and logistics companies. The value of German renewable fuels tickets is included in the assessed HVO100 prices.



6 pricing regions, 21 locations

North
Hamburg, Bremen

West
Duisburg, Cologne, Bendorf, Koblenz, Neuss, Essen

Rhine-Main
Frankfurt, Würzburg, Hanau, Mainz

Southwest
Karlsruhe, Mannheim, Ludwigshafen, Speyer, Stuttgart

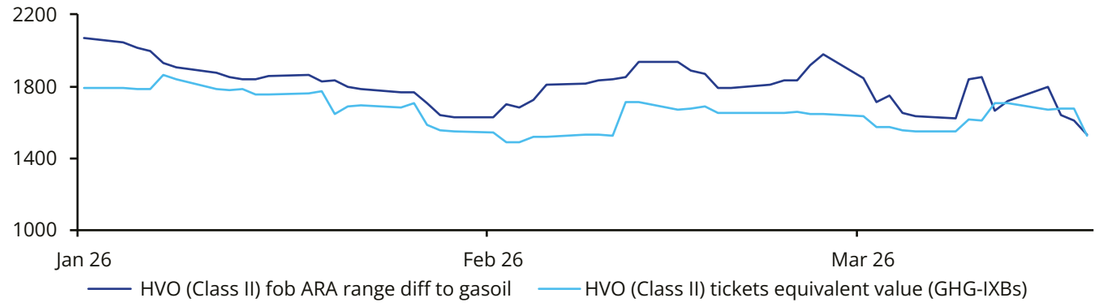
Magdeburg
Magdeburg

South
Krailling, Regensburg, Deggendorf

Source: Argus Media

Alongside the German rack pricing for HVO, Argus also publishes daily prices for German renewable fuels tickets. The German HVO pricing is tailored to reflect the local market. For example, Germany relies on imports of HVO moved into the country through key transport hubs, such as the river Rhine. Interruptions to supply via the river because of low water levels may cause shortages, pushing prices higher in certain locations.

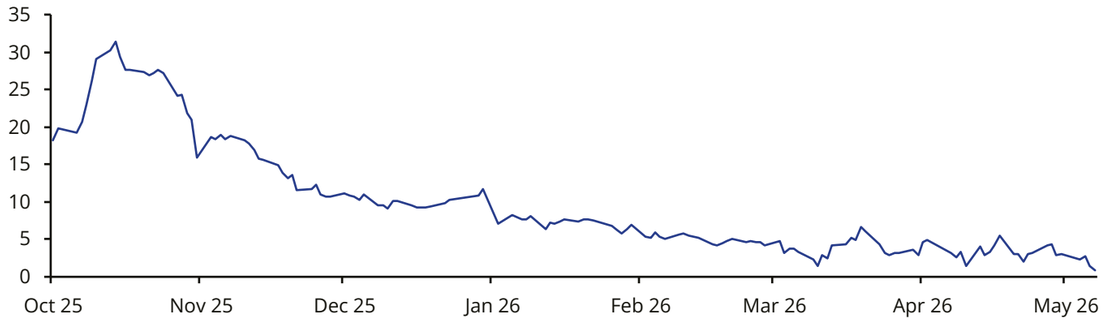
HVO Class II and German ticket equivalent value, $/t



Source: Argus Media

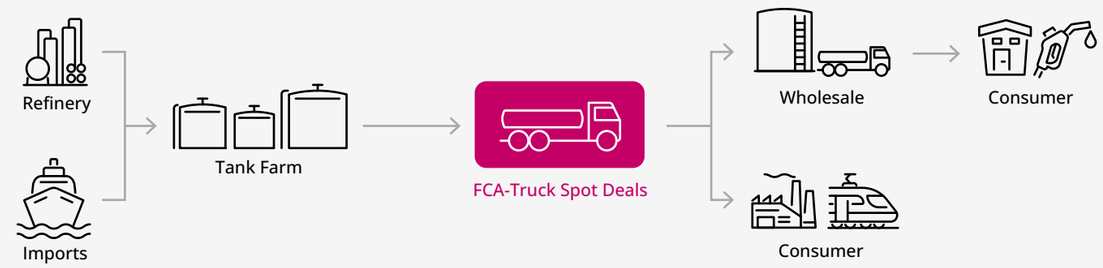
Similarly to benchmarking HVO wholesales to an index, settling fca truck sales on an index minimises the risk of being out of tune with the HVO market. As it also includes the additional storage and handling costs downstream as well as the German GHG tickets value, it truly reflects the HVO value in different parts of Germany.

HVO100 Germany fca truck national differential to gasoil EN 590 10ppm, €/100l



Source: Argus Media

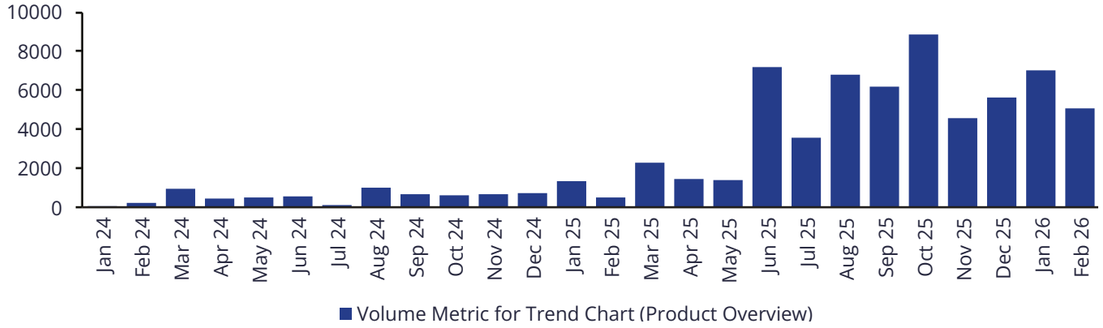
Truck spot deals in upstream to downstream



Risk management

Part of the growth of any rapidly maturing market includes the creation of new essential tools to manage risk, as price exposure increases in line with rising trading volumes. The first hedging instrument for RED HVO (Class II) was launched in 2022 and a total of 5mn futures traded on the Intercontinental Exchange (Ice)-listed RED HVO (Class II) cash settled future in 2025, up from around 680,000t in 2024.

HVO (Class II), lots traded, 1 lot=100t



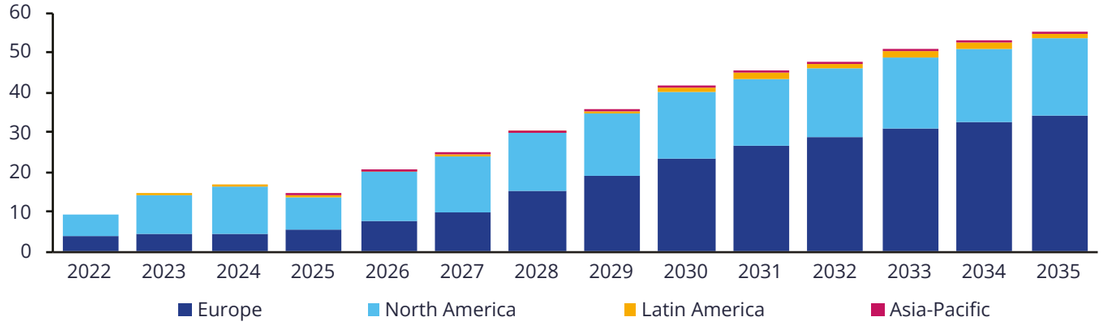
Source: ICE

Global renewable diesel demand

To support the industry at every turn of the way, Argus publishes short- and medium-term pricing and demand forecasts as part of the monthly Argus Biofuels Outlook and the quarterly Argus Biofuels Analytics.

Argus' robust market knowledge is backed with a rigorous analytical methodology that ensures the highest quality of insights to help the market understand the impact of economic and political events on future market and price developments.

Renewable diesel demand, mn t



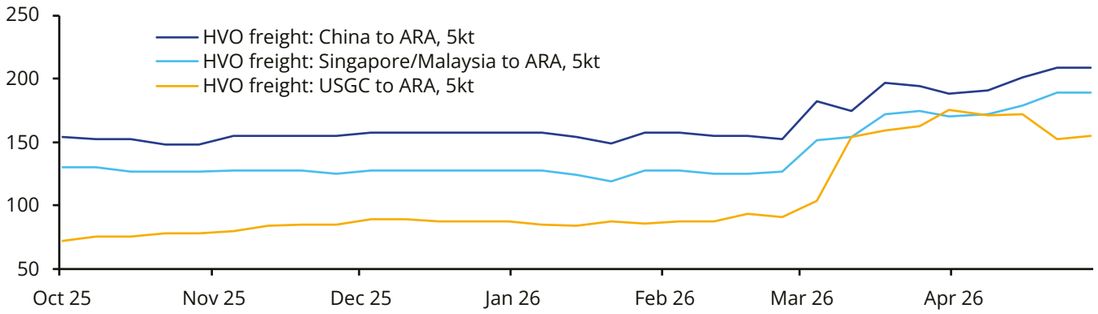
Source: Argus Media



Argus Specialised Freight

And to connect all the dots, the full suite of HVO freight is available in Argus Specialised Freight along with rates for other finished products and feedstocks. Global coverage for full and part-cargo loads on IMO2, IMO 3 and stainless steel tankers. Combined with Argus Biofuels data to track arbitrages, allows the industry to build custom netbacks and upgrade market analysis across all desks.

HVO freight to NW Europe: IMO 2 coated MRs, $/t



Source: Argus Media



Global HVO/Renewable diesel prices and PA codes

US	
PA0034488	Renewable diesel R100 (corn oil based) del California full composite value month 1
PA0034485	Renewable diesel R100 (soybean oil-based) del California full composite value month 1
PA0034486	Renewable diesel R100 (tallow-based) del California full composite value month 1
PA0034487	Renewable diesel R100 (used cooking oil-based) del California full composite value month 1
PA0034492	Renewable diesel R100 (corn oil-based) del Oregon full composite value month 1
PA0034489	Renewable diesel R100 (soybean oil-based) del Oregon full composite value month 1
PA0034490	Renewable diesel R100 (tallow based) del Oregon full composite value month 1
PA0034491	Renewable diesel R100 (used cooking oil-based) del Oregon full composite value month 1
PA0041579	Renewable diesel R99 del rail Los Angeles (Nymex heating oil basis) month 1
PA0041578	Renewable diesel R99 del rail Los Angeles (CARB complex basis) month 1 diff to CARB complex
PA0041581	Renewable diesel R99 del rail San Francisco (Nymex heating oil basis) month 1
PA0041580	Renewable diesel R99 del rail San Francisco (CARB complex basis) month 1 diff to CARB complex
PA0040779	Renewable diesel R99 hop San Francisco (CARB complex basis) month 1
PA0040780	Renewable diesel R99 hop San Francisco (Nymex heating oil basis) month 1 diff to Nymex Heating Oil
PA0040777	Renewable diesel R99 hop Los Angeles (CARB complex basis) month 1
PA0040778	Renewable diesel R99 hop Los Angeles (Nymex heating oil basis) month 1 diff to Nymex Heating Oil
PA0041768	Renewable diesel R99 del barge NYH (Nymex heating oil basis) month 1
PA0041767	Renewable diesel R99 fob barge USGC (Nymex heating oil basis) month 1
PA0034973	Renewable diesel margin (corn oil-based) US Gulf coast month
PA0034972	Renewable diesel margin (corn oil-based) US Gulf coast month
PA0034969	Renewable diesel margin (soybean oil-based) US Gulf coast month
PA0034970	Renewable diesel margin (tallow based) US Gulf coast month
PA0034971	Renewable diesel margin (used cooking oil-based) US Gulf coast month

South America	
PA0045985	Renewable Diesel del south Brazil import parity 40kt - Houston close
PA0045986	Renewable Diesel del south Brazil import parity 5kt - Houston close
PA0045987	Renewable Diesel del Chile import parity 40kt - Houston close
PA0045988	Renewable Diesel del Chile import parity 5kt - Houston close

Germany	
PA0041022	HVO100 north Germany fca truck, Euro/100l
PA0044883	HVO100 Magdeburg Germany fca truck, Euro/100l
PA0041023	HVO100 west Germany fca truck, Euro/100l
PA0042448	HVO100 Rhine-Main Germany fca truck, Euro/100l
PA0041024	HVO100 southwest Germany fca truck, Eu-ro/100l

Northwest Europe	
PA0030620	HVO (hydrotreated vegetable oil) fob ARA range (Class I) USD/t
PA0030623	HVO (hydrotreated vegetable oil) fob ARA range (Class II) USD/t
PA0030626	HVO (hydrotreated vegetable oil) fob ARA range (Class III) USD/t
PA0039451	HVO (hydrotreated vegetable oil) fob ARA range (Class IV) USD/t
PA0048209	HVO (hydrotreated vegetable oil) fob ARA range (Class V) USD/t

Asia	
PA0046628	RED HVO fob Strait of Malacca
PA0033032	HVO (hydrotreated vegetable oil) fob China (Class II)
PA0040398	HVO (hydrotreated vegetable oil) fob China (Class IV)

Biofuels and feedstocks at Argus

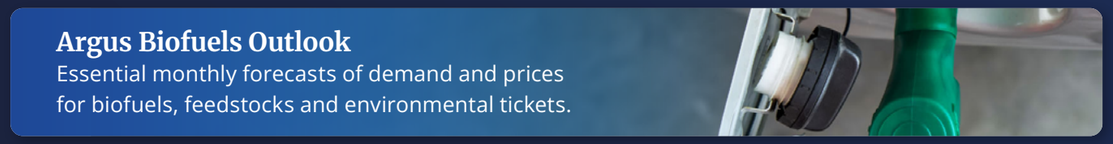
Learn more about our services at argusmedia.com/biofuels

Navigate the complex and dynamic biofuels market landscape with transparent and trusted pricing, news and analysis.

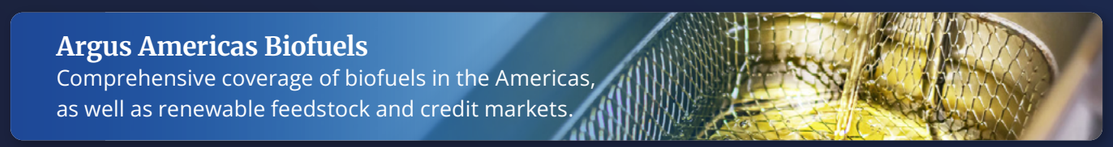
The Argus Biofuels Solution provides in-depth daily pricing and market analysis across the entire global renewable fuel supply chain, from original feedstock to finished fuel, with prices and key insights into regional biodiesel, ethanol and feedstock markets.



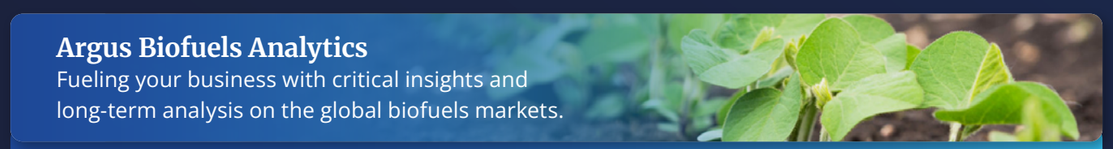
Argus Biofuels
Full supply chain biofuels market coverage with industry benchmark pricing and leading news and analysis.



Argus Biofuels Outlook
Essential monthly forecasts of demand and prices for biofuels, feedstocks and environmental tickets.



Argus Americas Biofuels
Comprehensive coverage of biofuels in the Americas, as well as renewable feedstock and credit markets.

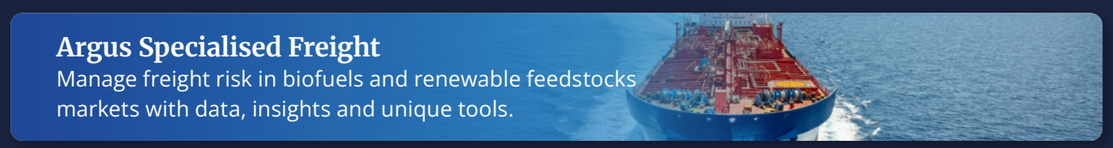


Argus Biofuels Analytics
Fueling your business with critical insights and long-term analysis on the global biofuels markets.

SAF Analytics supplement
The SAF Analytics supplement is an extract of the Argus Biofuels Analytics report, with relevant content curated by analysts to provide a more focussed outlook for demand, supply and pricing of SAF and feedstocks to 2035.



Argus International Biofuels Forward Curves
Independent market valuation tool to support investment and trading decisions in biofuels markets.



Argus Specialised Freight
Manage freight risk in biofuels and renewable feedstocks markets with data, insights and unique tools.



This document has been prepared by the Argus Media group (referred to herein as "Argus") for informational purposes only and has not been prepared for any particular purpose. The information or opinions contained in this document are provided on an "as is" basis and should not be construed as legal, tax, accounting or investment advice or the rendering of legal, consulting, or other professional services of any kind.

To the maximum extent permitted by law, neither Argus nor its directors, shareholders, personnel or advisers makes any representations or warranties as to the accuracy or completeness of this document. Argus offers no implied warranty, representation or confirmation of merchantability or fitness for any particular purpose and accepts no responsibility whatsoever for any damages arising from the use of or reliance on the information contained in or omitted from this document and any related materials (such as slides, handouts, other presentation documents and recordings and any other materials or information distributed at a presentation at which this document is displayed or in connection with this document) (whether arising by breach of contract, tort (including the tort of negligence), breach of statutory duty, or otherwise). No rights or remedies are conferred upon the recipients of this document or any other person.

Data and information contained in the document come from a variety of sources, some of which are third parties outside Argus' control and some of which may not have been verified. Any analysis and opinions, data, projections and forecasts provided may be based on assumptions that are not correct or which change, being dependent upon fundamentals and other factors and events subject to change and uncertainty; future results or values could be materially different from any forecast or estimates described in the document.

Copyright notice: Copyright © 2026 Argus Media group. All rights reserved. All intellectual property rights in this document and the information herein are the exclusive property of Argus and/or its licensors and may only be used under licence from Argus. Without limiting the foregoing, you will not copy or reproduce any part of its contents (including, but not limited to, single prices or any other individual items of data) in any form or for any purpose whatsoever without the prior written consent of Argus.

Trademark notice: ARGUS, the ARGUS logo, Argus publication titles, the tagline "illuminating the markets®", and Argus index names are trademarks of Argus Media Limited. For additional information, including details of our other trademarks, visit argusmedia.com/trademarks.

argusmedia.com

Spotlight on Hydrotreated Vegetable Oil (HVO)

August 2026