

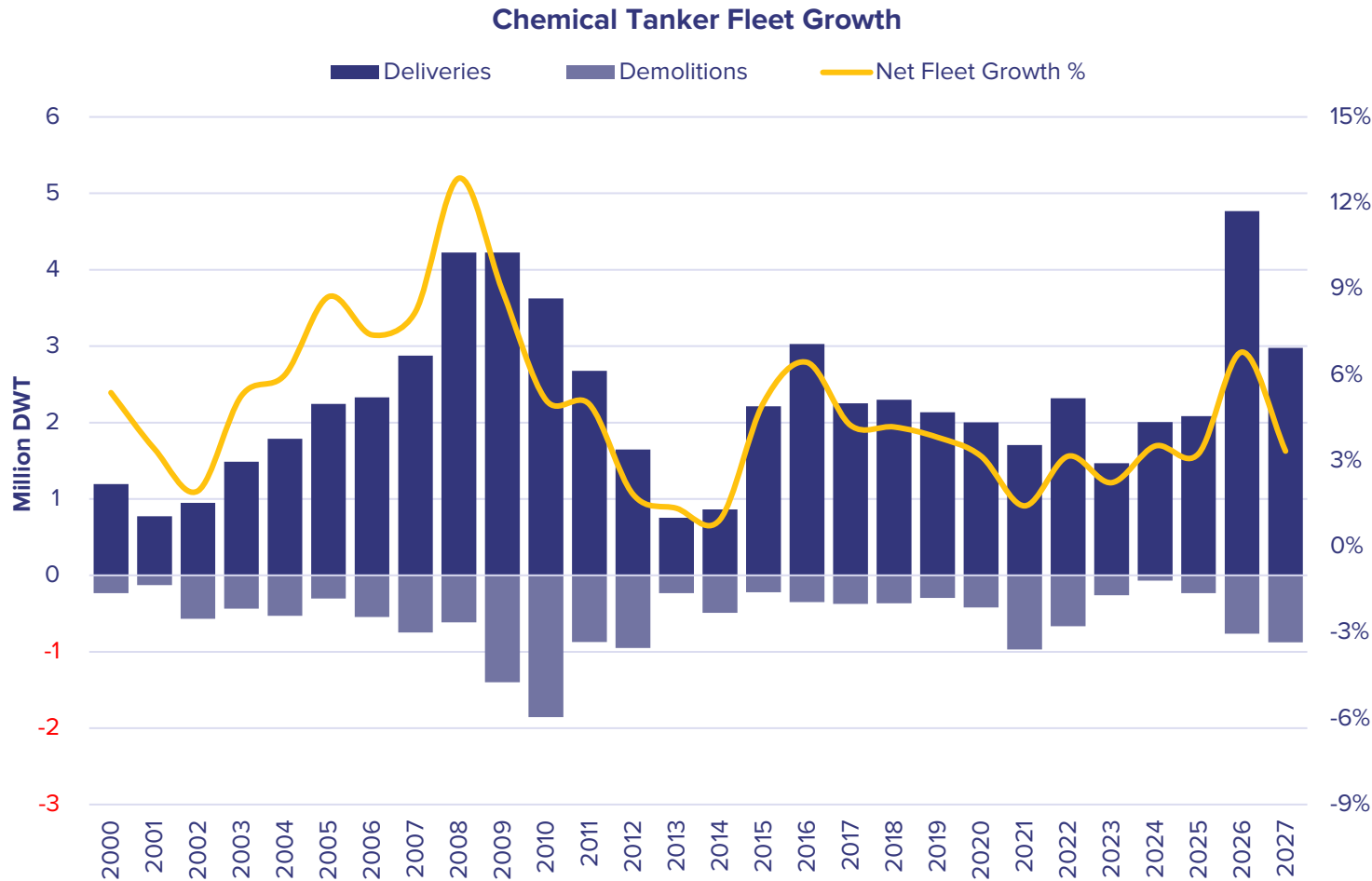


**IFCHOR
GALBRAITHS**

Biofuels Freight Outlook

May 2026



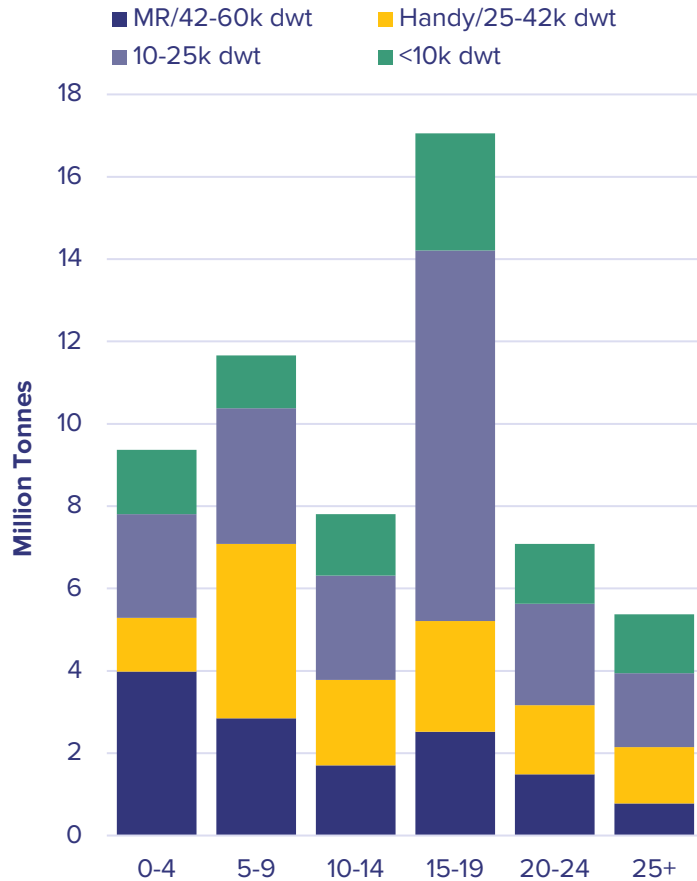


- After a few years of relatively lackluster fleet growth between 2022 and 2025, when the growth oscillated between 2-3%, this year the chemical fleet is set for the strongest % growth since 2016. **The chemical tankers fleet is set to expand by 6-7% in 2026.** Last year the fleet expanded by around 3%, and like in a couple of prior years the fleet growth was mainly supported by rather subdued fleet demolitions.
- The **majority of the fleet expansion is expected to be coming from stainless steel fleets that were mainly ordered in the Handy Tankers** segment. More support especially from the perspective of the coated tonnages is expected to be coming from the coated MR tankers and Intermediate fleets (10-25k dwt fleet).
- Next year growth is expected to be driven mainly by the aforementioned vessel segments, and if we see more bullish demolition activity replicating the levels seen in 2021, the net fleet growth is expected to revert back to between 2-3%.

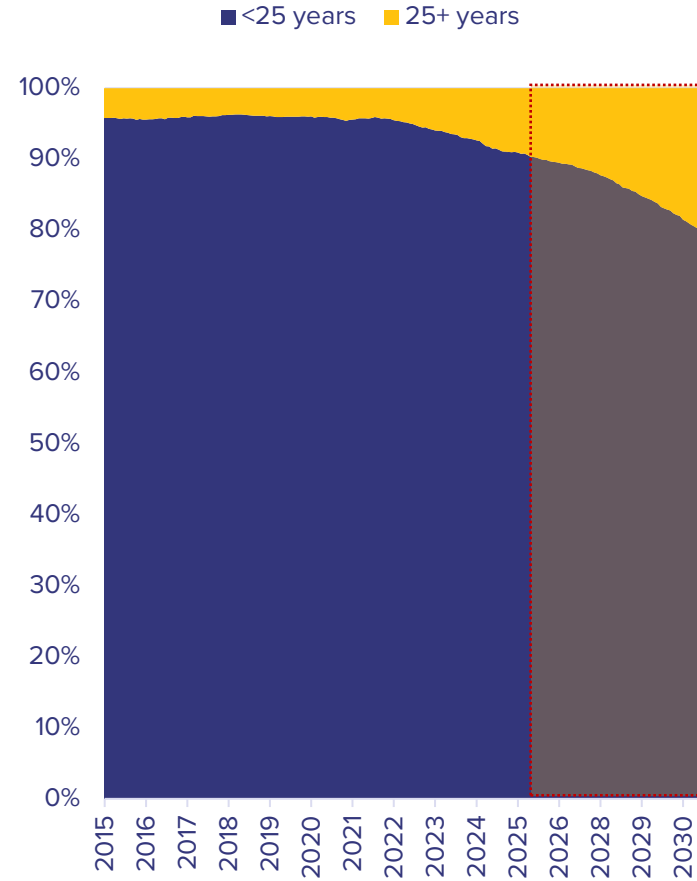
Chemical Tanker Fleet

25+ years Chemical Tankers Fleet Capacity is Expected to Grow Significantly

Chemical Tankers Fleet - Age Profile

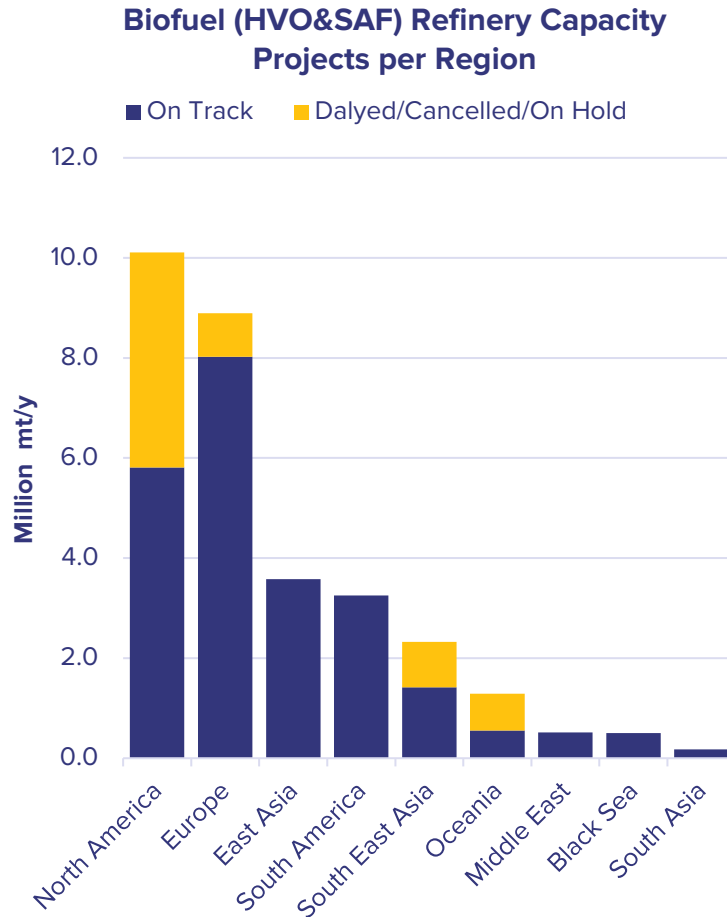


Fleet Capacity Age Profile - % of Total



Note: Tanker Capacity assumes no removals, and current orderbook only. <60k dwt Chemical Tankers Fleet

- In terms of age profile, the chemical tanker fleet does not differ much from the majority of their tanker peers in the product and crude oil tanker fleets. **The total fleet capacity is split almost exactly in half between sub 15 years old and the fleet that is 15+ years of age.** There are some notable differences between the vessels size brackets, as larger vessels in particular MR's and to some extent Handy have younger fleet profiles, with 64% and 57% of the current fleet capacity being younger than 15 years of age respectively. Smaller fleets (<25k dwt) currently have around 60% of the fleet capacity older than 15 years of age.
- Currently 12% of the chemical tanker fleet capacity is sitting in the 20-24 years age bracket, while further 9.2% is older than 25 years of age. Although the total capacity of the 20+ years old fleet is not massive, around 21%, there has been a noticeable trend of the fleet increasingly getting older since 2022. Even if currently scheduled units are taken into account **the capacity of the fleet older than 25 years of age is expected to be above 20% of the chemical tankers fleet by the end of the decade.** Despite the fact that some of the fleet classes, particularly stainless steel can trade for longer, the pool of demolition candidates is significantly widening, which can be used as a pressure valve at the time of stronger deliveries and slower trade growth.

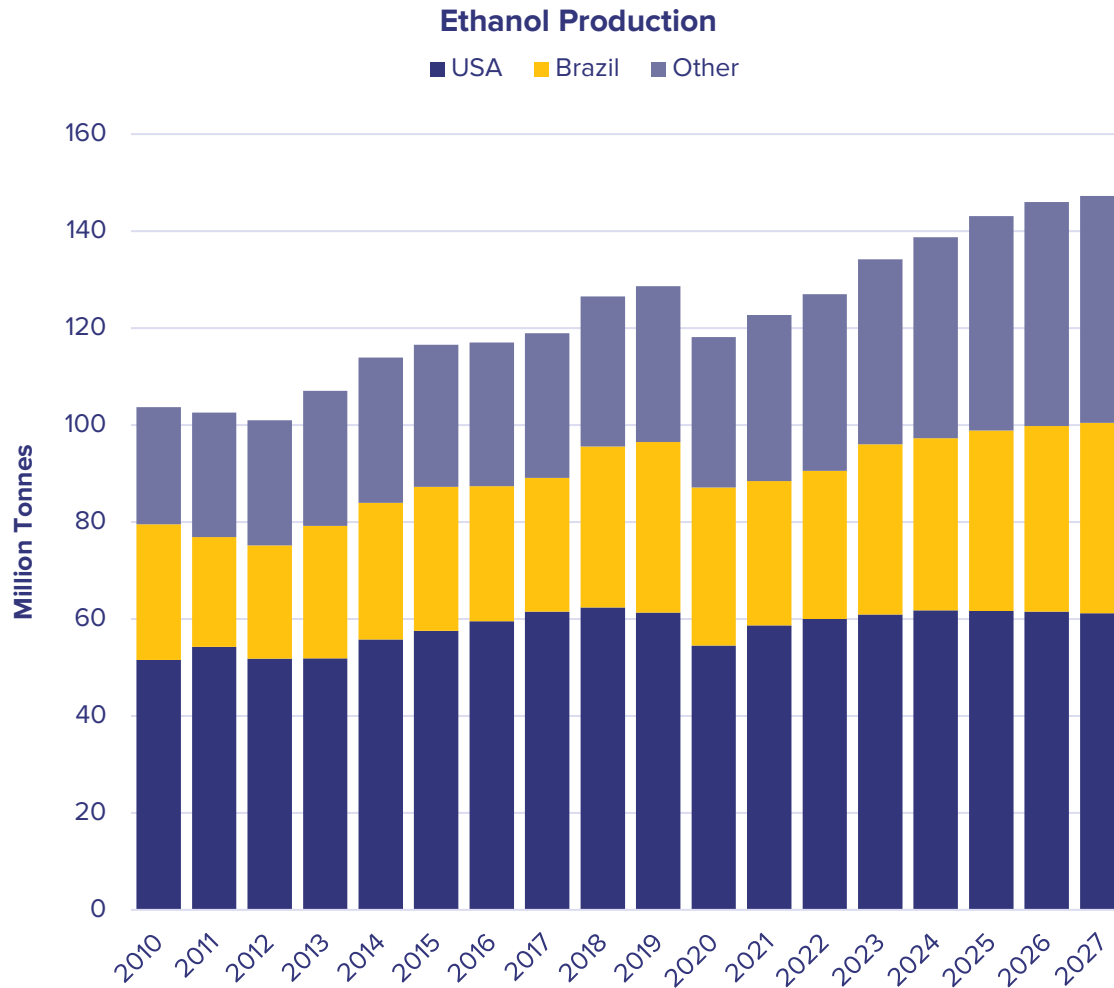


Note: Projected capacity expected from 2026- 2027

- More recently the focus of the biofuel sector moved towards renewable biofuels, and as a result there have been a number of capacity addition announcements. However, **the post Covid recovery period brought more focus on energy security due to the geopolitical instabilities and conflicts**, with further questions arising about feedstock availability and regulatory framework. **A number of companies have announced project cancellations and refocused on conventional refinery business between 2024-26. Despite the cancellations, the capacity that is currently scheduled to come online is still significant.** Although it is worth keeping in mind that some projects might be subject to further delays and cancellations. With the recent events in the Middle East and increased cost of energy, the focus is expected to shift back to energy security which is in turn expected to have a positive impact on biofuel production and demand.
- The shift in production trend over the last years, of increasing production capacities in countries with abundance of biomass (vegetable oils) feedstock is expected to continue. Indonesia introduced the B40 mandate in 2025 and is expected to move even further to the B50 mandate in the second half of 2026, which would represent an additional step towards achieving energy independence. Brazil also introduced the B15 mandate in August of 2025, with an aim to reach the B20 mandate by the end of the decade.
- **Although Europe is expected to remain the largest biofuel market, the demand for biomass produced biodiesel is expected to contract towards the end of the decade**, which is expected mainly to be influenced by a drop in the overall fuel consumption. As per Renewable Energy Directive RED III Europe is expected to start shifting away from the first-generation biofuels to advanced biofuels, with the target for advanced biofuels in total energy mix moving from 3.5% to 5% by 2030. On another hand, the **US is expected to contribute to further supply and demand of biofuels, however recently proposed policy changes are expected to favour biodiesel production from biomass (vegetable oil) feedstock.** Although globally advanced biofuels production is expected to gain momentum, due to limited feedstock the first generation of biofuels are expected to remain a major part of the overall supply.

Ethanol Production

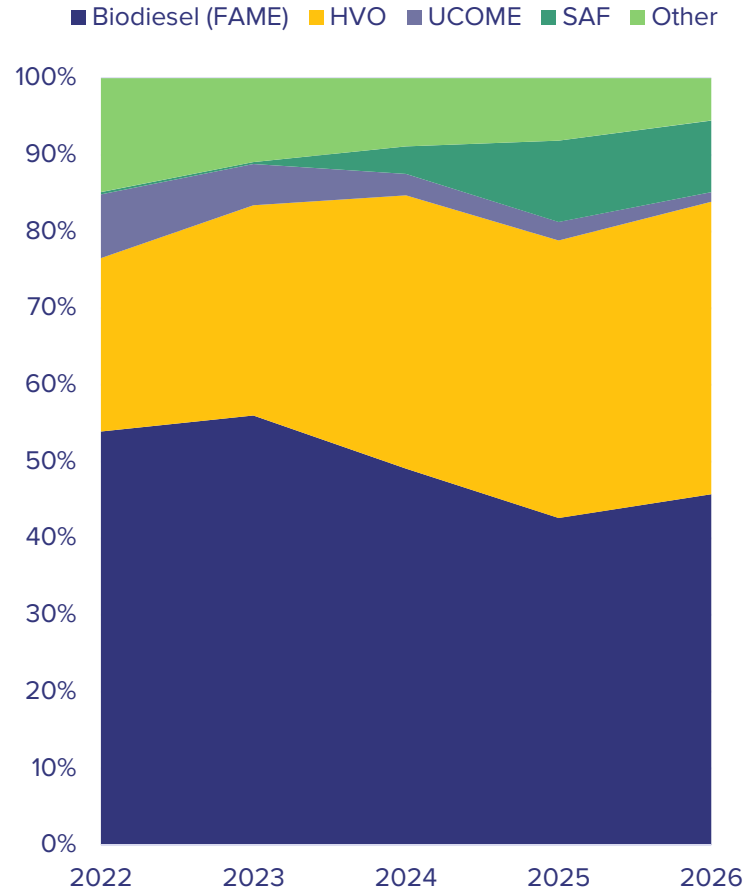
Rate of Growth is Slowing and Expected to Be Concentrated Around the Feedstock Producers



- After the total production contraction in 2020, when the supply dropped by 8% compared to a year prior, the volumes started recovering in the following years, and finally passed the 2019 levels of production in 2023. The following years brought more growth, however the rate of growth is expected to slow down in 2025 and 2026, with supply forecast to be 3.2% and 2% respectively. Although the USA and Brazil remain major producing nations, the percentage of total production coming from the two countries has been decreasing over the last decade, and dropped from 77% in 2010 to 69% in 2025, indicating that the incremental supply growth was mainly coming from other producing nations. **Brazil and the USA are expected to remain the world's leading producers and exporters.** As with biodiesel, growth in ethanol production and consumption depends heavily on feedstock availability.
- In August 2025 Brazil moved the ethanol blending mandate from E27 to E30, with possibility to move the mandate even further to E35. Ethanol supply is supported by availability of sugarcane and corn feedstock, and demand by flex fuel vehicles that can run on E100 hydrous ethanol or a E30 blend. While India's ethanol demand is growing rapidly and remains largely supported by domestic output, import volumes are up over the last two years. In 2025 India moved its ethanol mandate to E20, with further plans to move to E30 mandate in the future. India and Brazil are also co-operating through Global Biofuel Alliance which is aiming at sharing the technology, knowledge best practices and the adoption of flex fuel vehicles. **In response to recent energy price rises caused by the Iran war, a number of countries started to accelerate and expand the ethanol blend requirements, which is expected to further boost demand for the grade.**
- Long term, ethanol demand in Europe and USA is expected to drop despite expectations of slightly higher mandates, as fuel demand overall is expected to be shrinking. The USA is expected to remain a major producer of ethanol, with domestic demand potentially buoyed by more SAF production using ATJ (Alcohol to Jet Technology).

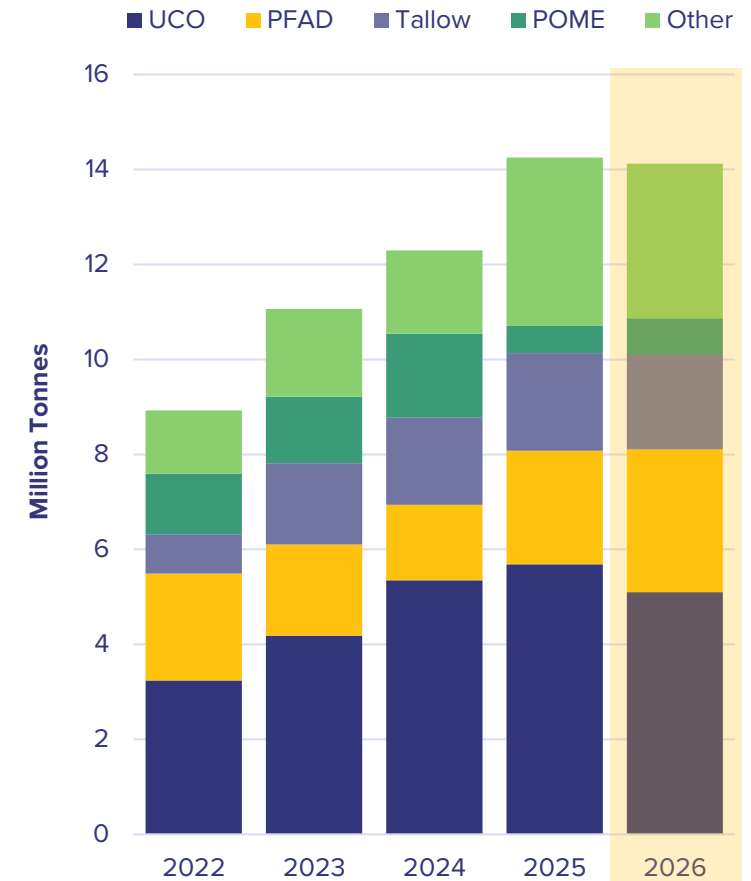
- Total seaborne biofuel trade levels remained strong over the last few years, fluctuating between 15 and 16 million tonnes on yearly levels according to Kpler. However, there have been some changes in the structure of the grades traded. While the total trade volumes were supported by Biodiesel (FAME) grade during 2022-23, **the last 2-3 years saw more HVO seaborne volumes being moved.** Since 2022 HVO seaborne trade volumes have been expanding annually at the rate of 20-25%. Most recently SAF volumes started growing, with more than 1.5 million tonnes moved in 2025 according to Kpler. This growth in renewable bio grades trade volumes compensated for Biodiesel (FAME) drop in volumes over the last few years.
- As the production and trade of the renewable biofuels started growing, **the biofuel feedstock seaborne trade saw an exponential growth in volumes traded. The volumes almost doubled between 2022 and 2025, driven by UCO (used cooking oil) and tallow** which saw strong trade growth. PFAD (Palm Oil Fatty Acids) volumes also saw strong trading volumes in 2025, continuing during Q1 this year.

Biofuels Seaborne Exports by Grade



Note: Not Including Intra Country Trade Flows; 2026 levels annualised

Biofuel Feedstock Seaborne Exports by Grade

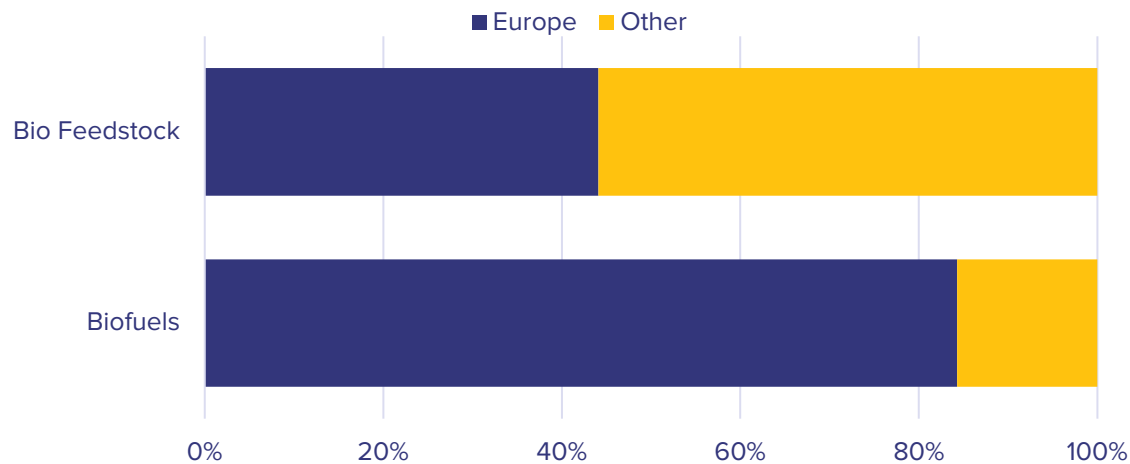


Note: Not Including Intra Country Trade Flows; 2026 levels annualised

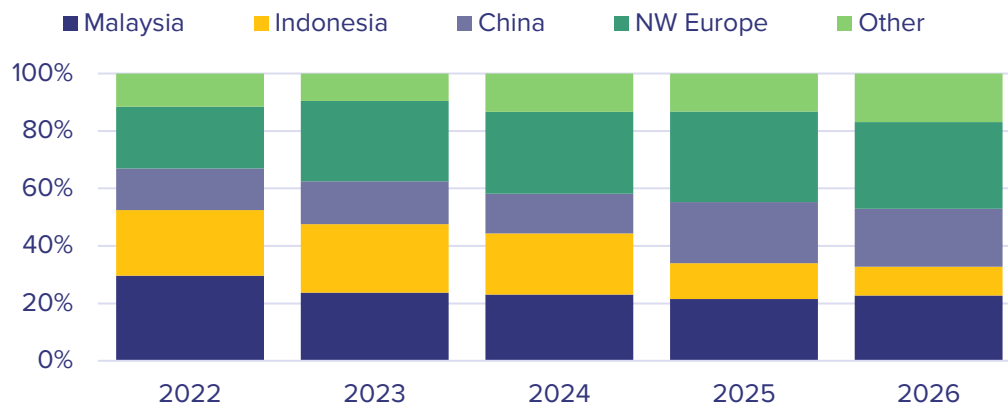
Biofuels Trade – Focus on Europe

Europe Remains the Largest Biofuel and Bio Feedstock Market Driving Utilisation Levels

Biofuel and Bio Feedstock Imports



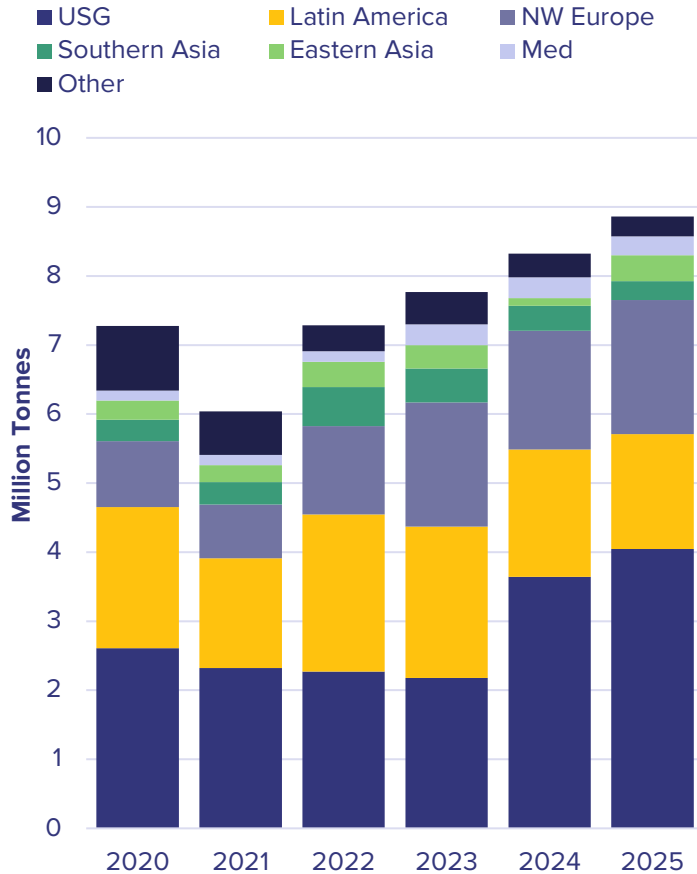
Europe Bio Feedstock Imports by Country of Origin % of total



Note: Not Including Intra Country Trade Flows

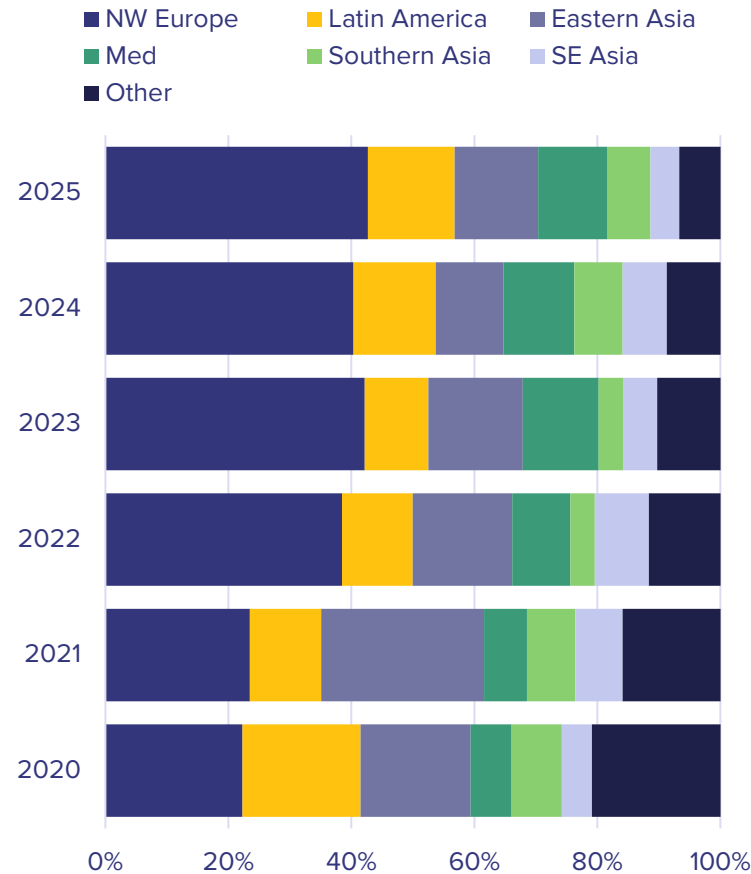
- **Europe remains the largest import market for biofuels and bio feedstocks, accounting for almost 60% of seaborne imports in 2025.** Notably more than 80% of the total biofuels seaborne trade is destined for Europe. Seaborne biofuel imports into Europe were on a downward trend from its peak in 2022 until recently, as the volumes reverted to growth in 2025. Despite the EU’s anti dumping measures in place since mid 2025, particularly for biofuels of Chinese origin, the imports grew significantly last year, with utilisation particularly supported by Singapore exports into the EU. Although monthly biofuel import volumes into Europe softened during Q1 this year as compared to the monthly levels seen during the second half last year, year on year the imports grew 13%, heralding another healthy year.
- Last year Europe registered growth of imports from the majority of bio feedstock export sources, with exports from Malaysia and China growing particularly strongly in 2025. At the same time Indonesia exports of POME dropped significantly in 2025 as the country significantly curbed exports and added export allocation requirements, in response to the concerns of alleged mislabelling of palm oil as POME and UCO. From October 2025 the Indonesian government added export duties to POME to match those of palm oil, as the country is pivoting more towards domestic biofuel production and utilisation with an expectation of extending the bio diesel mandate. **Reduced exports from Indonesia continued during Q1 this year as anticipated. Imports from other South Asian countries saw an increase during Q1 which pushed year on year bio feedstock imports into Europe upwards by 10%.** Having in mind the series of geopolitical shocks and recent events in the Middle East, energy security is becoming top priority for many countries, which might adversely influence the bio feedstock availability.

Ethanol Seaborne Exports by Origin Region



Note: Not Including Intra Country Trade Flows

Ethanol Seaborne Exports by Destination Region



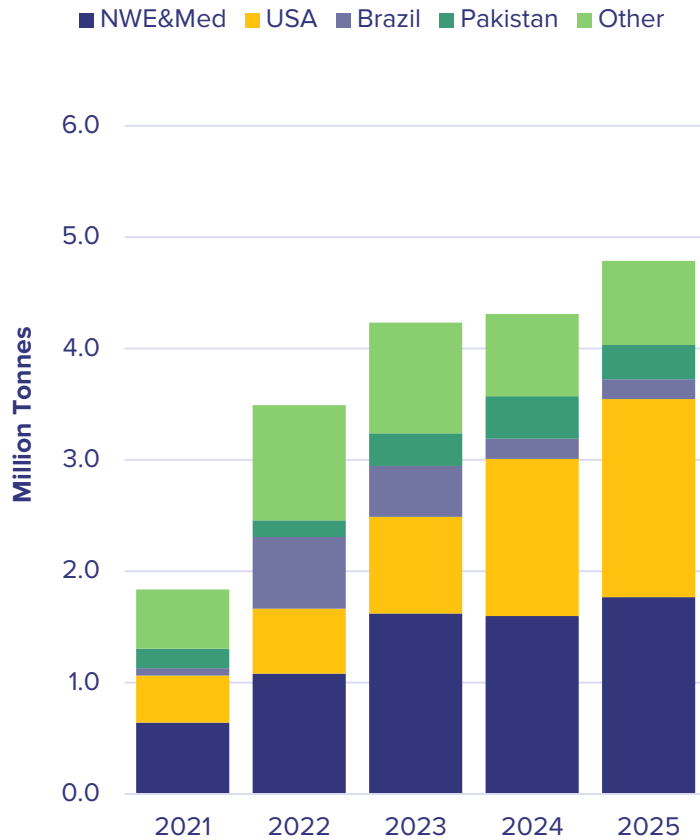
Note: Not Including Intra Country Trade Flows

- After bottoming in 2021 ethanol trade volumes have been recovering and in 2023 the volumes finally exceeded 2020 levels. The export volumes continued growing both in 2024 and 2025, as those grew by 10% and 7% respectively. **Although the trade volumes grew continuously through the period since 2021, there have been significant changes in exporting volumes coming from two biggest producers, USA and Brazil.** Latin America exports dropped significantly during 2024 and 2025, mainly pulled by the drop in exports coming from Brazil, as Brazil switched more volumes for the domestic consumption, as blending mandates increased. On the other hand the % of the total volumes exported from USA grew significantly in 2024 and 2025, spurred by cheap feedstock (corn) prices and cheap(er) energy prices (LNG) in the US, as production continued to grow during the period. **Year-on-Year the ethanol export from US grew by 7% during Q1 this year, continuing on strong growth.**
- **Europe became the largest importer of ethanol, with European seaborne import volumes mainly coming from USA,** as the war in Ukraine and high energy prices in Europe made local production more expensive, and imports more price competitive.

Ethanol Trade – Focus on Europe

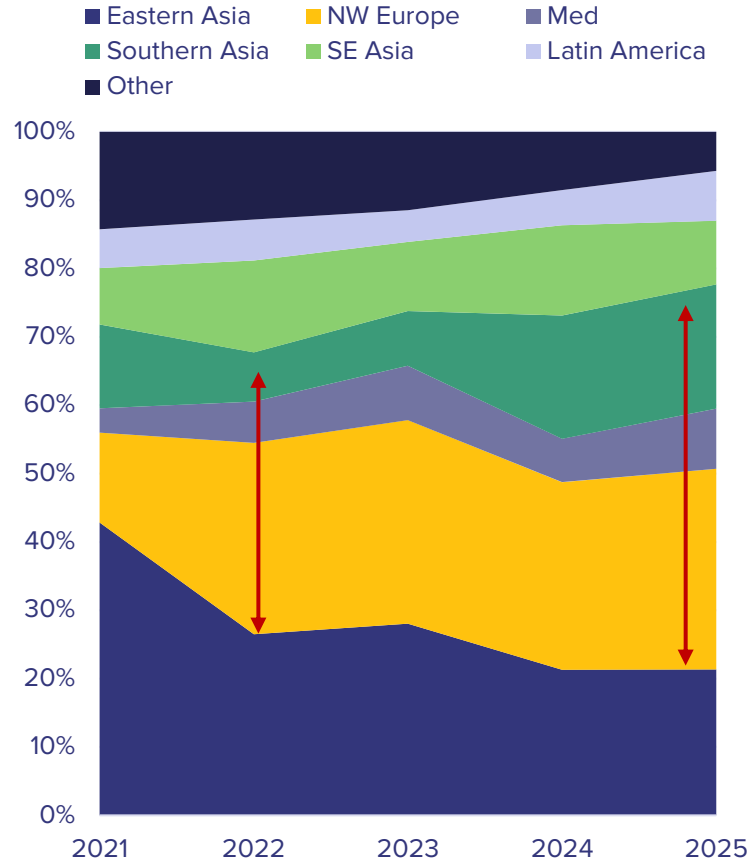
Europe Became the Most Important Ethanol Importing Market

European Ethanol Seaborne Imports by Origin



Note: Not Including Intra Country Trade Flows

Ethanol Tonne Mile Utilisation per Destination Region - % of Total



Note: Not Including Intra Country Trade Flows

- Since the start of the war in Ukraine which caused high energy prices in Europe, making European chemical production including ethanol production more expensive, the imports surged as those became more price competitive. At the same time there has been a surge of US exports particularly during 2024 and 2025, which mainly targeted European importing countries. **Percentage of the US stake in total European ethanol imports grew from 17% in 2022 to 40% in early 2026.** At the same time European imports from other countries such as Brazil softened, as Brazil focused on domestic consumption due to ethanol blending mandate changes.
- In June 2025 EU removed the tariff preferences on ethanol imports from Pakistan, after complaints from member states about the pricing. It is worth mentioning that the majority of the Pakistan exports are for industrial (not fuel) ethanol, which is expected to influence more stainless steel fleet demand. After its peak in 2022 Pakistan exports have been on a retreat which also continued in 2025 and early 2026. However, **NW Europe and Med, coupled with India represent the main regions that will drive the incremental ethanol tonne mile demand for shipping.**

Bull Factors

Supply:

- Contracting slowed down significantly in 2025 and remains pressured by slot availability, pricing and propulsion choices
- Fleet age is rapidly increasing; renewal requirements will be significant with 25+ years old vessels fleet capacity doubling by the end of the decade despite currently strong orderbook

Demand:

- Biofuel and Ethanol trade volumes remain healthy, despite the challenges
- Further fleet demand growth is expected to be coming from bio feedstock and biofuel exports into Europe
- Increased geopolitical and energy instability is expected to provide renewed focus on the bio sector.
- A number of countries started to accelerate and expand the ethanol blend requirements in response to (another) energy crisis



Bear Factors

Supply:

- Delivery schedule across the chemical fleet is very strong this year
- Although 2027 deliveries are expected to soften, those will remain healthy, particularly among larger fleets
- Removals remain limited

Demand:

- The geopolitical situation remains volatile with Middle East situation having potential to hurt global economic growth
- Increased focus on energy safety may incentivise domestic biofuel production, hurting bio feedstock exports



IFCHOR GALBRAITHS

www.IfchorGalbraiths.com

Research@IfchorGalbraiths.com



LAUSANNE
+4121 310 31 31



LONDON
+44 20 7378 6363



DUBAI
+971 4 770 6939



SINGAPORE
+65 6908 1856



ATHENS
+30 210 6859799



BEIJING
+86 10 6448 2478



BERGEN
+47 56 99 50 00



COPENHAGEN
+45 69 15 31 95



GENEVA
+41 58 411 31 44



GENOA
+39 010 5959 201



HAUGESUND
+47 21 41 46 90



HOUSTON
+1 713-554-0240



MELBOURNE
+61 410 668 506



MONACO
+377 9798 0790



MUMBAI
+91 75969 14999



NEW DELHI
+91 11 2808 1980



NEW YORK
+1 631-923-1099



SEATTLE
+1 206-538-0187



SEOUL *
+82 10 9039 1542



SHANGHAI
+86 21 6888 0845



TOKYO
+81 90 6523 8724



VANCOUVER
+1 778-960-4159



ZUG
+41 58 411 31 57

* Seoul operates as representative office



**IFCHOR
GALBRAITHS**

www.IfchorGalbraiths.com

Research@IfchorGalbraiths.com

Disclaimer

This report has been prepared by the research desk of IFCHOR GALBRAITHS and addressed to IFCHOR GALBRAITHS clients for informational purposes only and their sole discretionary use.

Any information and data contained in this report has been gathered from multiple public and private sources, including proprietary data. While every care has been taken to ensure that the information and data in this report is accurate and up-to-date, IFCHOR GALBRAITHS can accept no responsibility whatsoever for any errors or omissions or revisions or any consequences arising therefrom. Any views expressed, forward-looking or other, are those of the IFCHOR GALBRAITHS research desk and do not necessarily reflect the views of any other IFCHOR GALBRAITHS desks or associated companies. This report should not be construed as an offer or solicitation to trade or make any investment and necessarily involves known and unknown variables and risks. IFCHOR GALBRAITHS assumes no responsibility nor liability for any loss incurred in any way whatsoever by any person or company who make seek to rely on the information contained herein. This report may not be reproduced or redistributed, in whole or part, without the prior written permission of IFCHOR GALBRAITHS. Any proprietary data contained herein is the intellectual property of IFCHOR GALBRAITHS and the IFCHOR GALBRAITHS logo are trademarks of IFCHOR GALBRAITHS.

©IFCHOR GALBRAITHS. All rights reserved.