



Challenges ahead

Edible oils have been transported worldwide since the late 1970s from the same countries to the same destinations.

What has changed for the freight market has been the volumes transported, from small quantities loaded on general cargo ships to specialised chemical tankers now carrying up to 70,000-80,000 tonnes of palm or soyabean oils.

The main vegetable oil trade routes are from Asia to Europe, South America to Europe, and South America to China/India (see Figure 1, below).

Several dramatic changes have affected

Although the shipping of edible oils has remained relatively stable for decades, the onset of UCO exports, an ageing fleet, contraction of tonnage and regulations to cut emissions will all have an impact on the market going forward *Francesco Morici*

vegetable oil freight in the past three to four years.

Many companies, traders and producers have started to invest in the shipping of used cooking oil (UCO) and UCO methyl ester (UCOME) due to demand for these

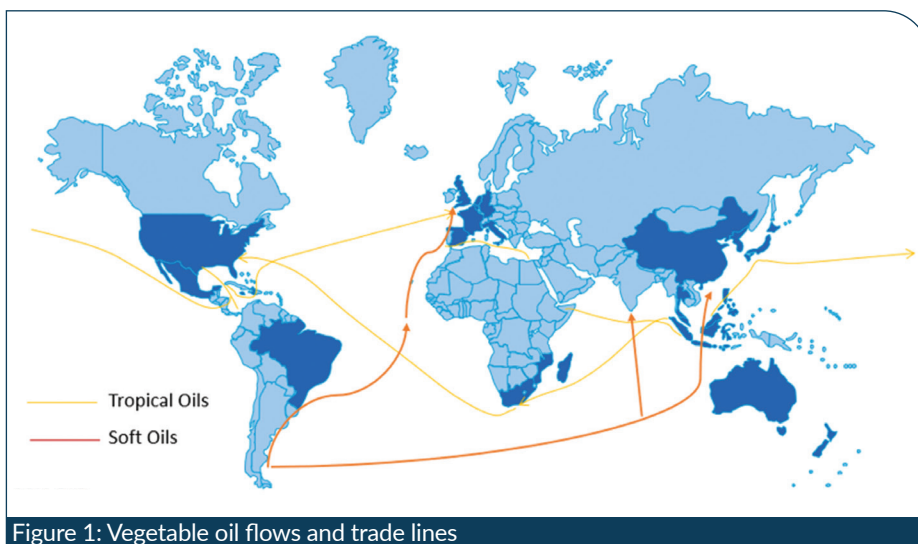
products as feedstocks for renewable diesel and sustainable aviation fuel (SAF). There has been a swing in tonnage, with vessels ships operating in the Clean Petroleum Products (CPP) and vegetable oil markets relocating their vessels to China, which has been a major shipper of UCO and UCOME to Europe.

This flow is now diminishing slightly due to new EU import taxes on Chinese biofuels announced in July. This may create a surplus of tonnage of vessels previously shipping these cargoes from China.

Vegetable oil freight rates have remained relatively stable since 2016/2017 even during the COVID-19 pandemic when other shipping markets – such as for containers – suffered big swings.

The first major shift in vegetable oil freight rates came when drought affected water levels at the Panama Canal at the end of 2023 (see Figure 2, following page).

From some 20 ships per day travelling northbound and southbound via the canal,



Source: Navquim

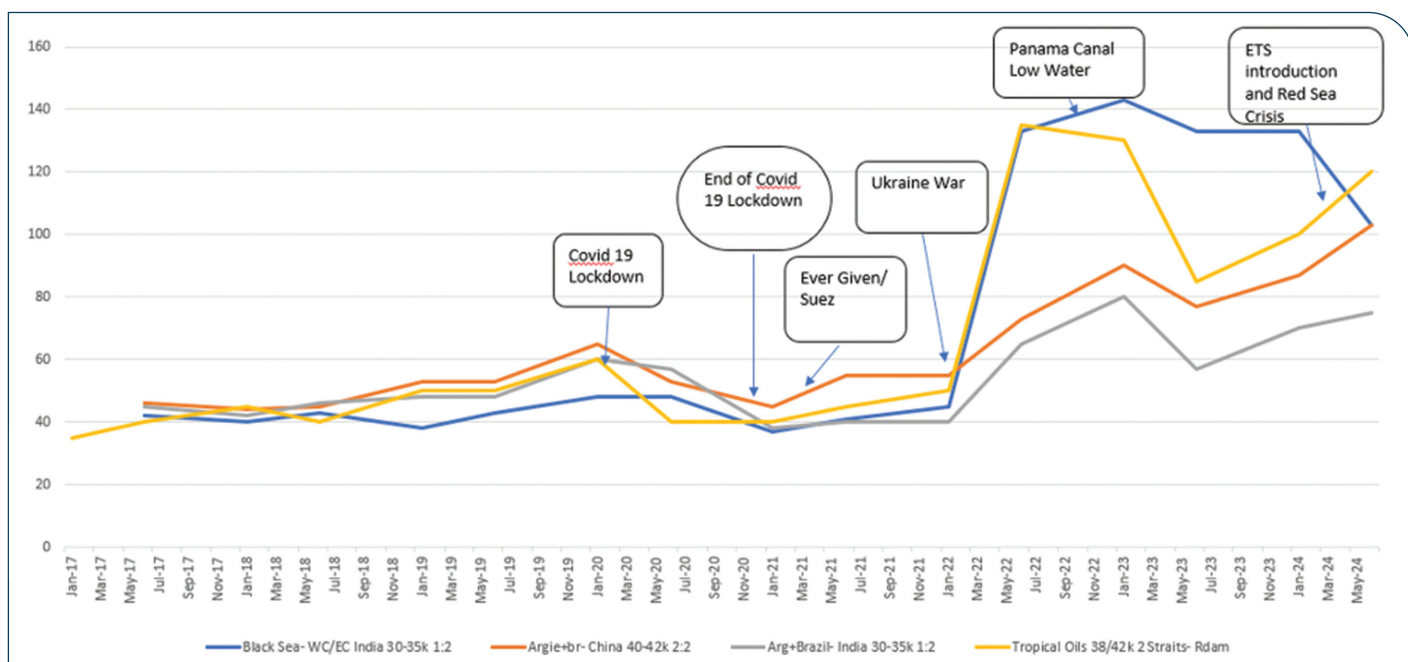


Figure 2: Freight history of palm and soft oils (US\$/metric tonne)

Source: Navquim

numbers fell to some four to five ships per day. This caused major delays on both sides of the canal, with bidding rates to secure passage on arrival rising from the normal US\$10,000–\$15,000 premium to US\$350,000–\$400,000 for container, cruise and LNG ships.

For producers shipping some 30,000–40,000 tonnes of palm or soyabean oils, the premium could have represented almost the entire cost of their freight.

Vegetable oil cargoes from Asia to the USA therefore re-routed via the Cape of Good Hope to avoid the Panama Canal, increasing their voyage time by about 15 days.

The other big spike in the vegetable oil freight market resulted from Houthi attacks on vessels in the Red Sea, affecting ships passing through the Suez Canal – the quickest sea route between Asia and Europe. Most ships bound from Asia to Europe re-routed around the Cape of Good Hope, increasing their transit time by about 12–15 days, as well as incurring additional costs such as for bunker fuel and emission credits.

Major vegetable oil routes

Black Sea to West Coast India

The classic sunflower oil route from the Black Sea to India was around US\$40/metric tonne, but tripled to some US\$120/metric tonne following Russia's invasion of Ukraine in February 2022. The price of insurance became very high and many ship owners avoided Ukraine due to high costs and risk.

Some traders and producers in Ukraine invested heavily in second hand tonnage

because the cost of freight and insurance was becoming so high that it was cheaper for them to buy a second hand vessel to ship their product locally or a short distance than to charter a ship. Two years on, there is a fair amount of this tonnage owned by non-ship owners impacting the Intra-Mediterranean freight market. Freight rates as of June 2024 for this route were around US\$100/metric tonne.

The **Argentina/Brazil route to China/India** has been more consistent, with geopolitical factors showing less of an influence and no need to pass through the Panama or Suez canals. Rates to move Argentine and Brazilian soyabean oil to China and India have increased due to tonnage moving to Asia to ship UCO and UCOME from China to Europe, and are currently around US\$60–80/metric tonne.

The **Palm Oil Straits to ARA (Antwerp/Rotterdam/Amsterdam)** route has hovered around the US\$40–60/metric tonne level since 2017 but rose four-fold following the drought problems at the Panama Canal and the Red Sea crisis. Most reputable large chemical and palm oil companies now avoid using the Red Sea.

The workhorse vessel used by most vegetable oil majors in the trade is the Japanese-built, 19,000 dwt, stainless steel J19 vessel, dating back to the early 2000s. The ship is flexible and used by the palm oil and chemical trades because of its flexibility and stainless steel tanks, allowing carriage of different kinds of products.

The hire rate for this benchmark ship

was around US\$14,000–15,000/day until the COVID-19 pandemic. Soon after from the summer of 2022, rates peaked at around US\$50,000/day, due to the Panama and Red Sea crises, for J19s trading UCO and UCOME to Europe. Rates have since fallen from those peaks.

The CPP market also has a direct influence on the chemical/vegetable oil market. CPP vessels of 50,000–60,000 tonnage like to enter the chemical/vegetable oil market when these markets are stagnant as they can offer a cheaper cost per tonne of cargo rate. When the CPP market picks up, these ships quickly disappear and the market returns to the traditional chemical owner.

Ageing fleet & tonnage shortage

The shipping industry reacts to any major events relatively slowly, with changes only appearing months after the event itself.

One of the biggest challenges currently facing the vegetable oil trade, and the chemical market in general, is an ageing fleet and contraction of tonnage, with very few new ships coming into market.

Most of the world's major shipyards – in Japan and China – are very busy renewing tonnage for container companies which, after many years of losses, have been enjoying astonishing results in the last two to three years. Danish shipping firm Mærsk A/S, for example, reported a profit of US\$15bn in just one quarter.

Container companies are now investing heavily in new and bigger ships and may typically order 10–15 ships, compared to just two to five new chemical ship orders. ▶



The FuelEU maritime regulation sets maximum greenhouse gas emissions limits for all large ships calling at European ports

► Most Chinese and Japanese shipyards are more interested in constructing container ships – which are easier to build and require less labour – than highly specialised stainless steel ships which need specialised shipyards, a larger workforce, as well as more stainless steel material.

Ship owners coming out of many years of losses since the 2007/2008 global financial crisis are therefore refraining from ordering new specialised vessels because the price of these ships is currently too high and because it is difficult to find the specialised shipyards to build them.

The current average age of vessels shipping vegetable oils is around 16 years old, with no new ships forecast to come on line until 2026/2027, and only amounting to a fraction of what the market needs.

UCO & UCOME

The European Commission's announcement on 19 July that it would impose provisional anti-dumping tariffs of up to 36.4% on biodiesel imports from China will have an impact on shipping from the country.

Clean fuel advocacy group Transport & Environment has said that the tariffs are a step in the right direction in limiting imports of potentially fraudulent UCO from China, which has flooded the European market in the past two years.

The EU import duties may lead to the USA taking in more UCO and UCOME for its renewable diesel/SAF sector.

The definition of what is UCO and UCOME is also having an impact on the shipping and labelling of these products.

All cargoes are classified by the International Convention for the Prevention of Pollution from Ships (MARPOL) according to their environmental risk.

MARPOL sets out guidelines for products such as UCO, UCOME, palm oil methyl ester (POME) and fatty acid methyl ester (FAME), such as how to dispose of their residual slop following tank cleaning.

FuelEU Maritime regulation

Adopted in July 2023 and coming into force on 1 January 2025, the FuelEU Maritime Regulation promotes the use of renewable, low-carbon fuels and clean energy technologies for ships to support decarbonisation in the sector.

FuelEU Maritime sets maximum limits for the yearly average greenhouse gas (GHG) intensity of the energy used by ships above 5,000 gross tonnage calling at European ports. Shipping companies need to reduce their GHG emissions by 2% next year, and gradually by 80% by 2050 by implementing the use of biofuels blending for their ships.

Currently, there are no fuels available on a large scale to help shipping companies comply with this mandate.

One tonne of marine fuel may require 3-5 tonnes of alternative fuel, meaning about 1.4-1.5M tonnes are needed in Europe to reduce GHG emissions by 2%.

There is currently not enough alternative fuels for marine consumption, and not enough available in every part of the world. In addition, the marine sector will need to compete with the similar EU ReFuelEU SAF mandate for the aviation sector coming into force in 2025.

The engines of the current 16-year-old worldwide fleet shipping vegetable oils are also not technologically equipped to change from traditional fuel to alternative fuel, such as methanol and ammonia, without substantial modification that, due to the ships' age, may not be justified and promptly recovered.

New builds the sector may see in 2026/27 may have dual capacity to use e-methanol or ammonia but the market still requires these fuels to be available on a large scale. These fuels are also new technologies very much in their infancy.

EU ETS

The EU Emissions Trading System (ETS) launched in 2005 requires polluters to pay for their greenhouse gas (GHG) emissions to help bring overall EU emissions down.

Since January 2024, the EU ETS has been extended to cover carbon dioxide (CO₂) emissions from all large ships (5,000 gross tonnage and above) entering EU ports. The system covers:

- 50% of emissions from voyages starting or ending outside of the EU (allowing the third country to decide on appropriate action for the remaining share of emissions);
- 100% of emissions that occur between two EU ports and when ships are within EU ports.

The ETS covers CO₂, methane and nitrous oxide emissions, but the latter two only from 2026.

In practice, shipping companies have to purchase and use EU ETS emission allowances for each tonne of reported CO₂ emissions in the scope of the EU ETS system. Shipping companies only have to surrender allowances for a portion of their emissions during an initial phase-in period:

- 2025: for 40% of their emissions reported in 2024
- 2026: for 70% of their emissions reported in 2025
- 2027 onwards: for 100% of their reported emissions

The first surrendering deadline is due in September 2025 in all EU member states, with respect to emissions reported as taking place from 1 January 2024 to 31 December 2024.

This will add an extra layer of cost that is not easily recoverable by charterers. ● *This article is based on a presentation made by Francesco Morici, chartering manager at Navquim, Spain, at OFI International 2024 on 9-11 September. Morici is also a member of the FOSFA Oils and Fats Technical Committee and an accredited FOSFA arbitrator*