Oleochemicals, deforestation and regulation: a deeper dive

The UK Sustainable Commodities Initiative (UK SCI) Oleochemicals Working Group is working to catalyse supply chain collaboration on sustainable sourcing of oleochemicals, stepping up action to find solutions to ensure oleochemicals are **traceable, deforestation-free and sustainable**.

This briefing takes a broad look at how new regulatory drivers in the EU and UK may impact the sector while providing some insight into oleochemical use and trade within these markets.

A changing regulatory landscape

The EU Deforestation Regulation (EUDR) will require companies to demonstrate that in-scope palm-derived oleochemicals are deforestation-free, including geolocation of origin. Having entered into force in June 2023, these rules will be applicable from 30 December 2024.

The palm-derived oleochemicals in scope of the regulation are primary oleochemicals, including **glycerol/glycerine**, **fatty acids**, and **fatty alcohols**. Secondary oleochemicals such as sodium lauryl sulphate are not in scope (as of January 2024), although there is a possibility that the scope of the regulation could be updated in the future.

Table 1 *Palm-derived oleochemicals within scope of the EUDR, as set out in the Official Journal of the EU.*

HS code	Product description
2905 45	Glycerol, with a purity of 95 % or more (calculated on the weight of the dry product)
2915 70	Palmitic acid, stearic acid, their salts and esters
2915 90	Saturated acyclic monocarboxylic acids, their anhydrides, halides, peroxides and peroxyacids; their halogenated, sulphonated, nitrated or nitrosated derivatives (excluding formic acid, acetic acid, mono-, di- or trichloroacetic acids, propionic acid, butanoic acids, pentanoic acids, palmitic acid, stearic acid, their salts and esters, and acetic anhydride)
3823 11	Stearic acid, industrial
3823 12	Oleic acid, industrial
3823 19	Industrial monocarboxylic fatty acids; acid oils from refining (excluding stearic acid, oleic acid and tall oil fatty acids)
3823 70	Industrial fatty alcohols

The UK Government is also introducing legislation, as part of the 2021 Environment Act, to tackle illegal deforestation in commodity supply chains. This regulation will require companies to undertake due diligence on their supply chains and differs from the EUDR in that it focuses on ensuring legality (rather than deforestation-free) and does not have a geolocation requirement. Palm oil (in addition to soy, cocoa and cattle products) is in scope of the UK regulation, which may therefore apply to palm-derived oleochemicals.

Trade data from the UN Comtrade database shows that, in 2022, the EU imported around three million tonnes of oleochemicals within scope of the EUDR (see figure 1 – note these could be derived from a range of possible feedstocks). 80% of this volume was imported from

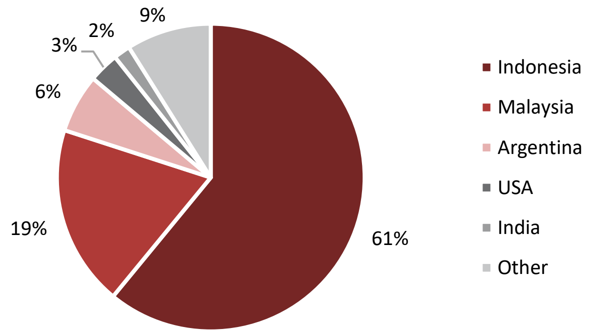

Figure 1 *Sources of EU imports of oleochemicals within scope of the EUDR, 2022 (source: UN Comtrade).*

Indonesia and Malaysia. With these countries being the world's largest producers of palm and palm kernel oil, much of this volume could be palm-derived and therefore subject to the EUDR. It should be noted that oleochemicals are also produced from feedstocks that are themselves imported into or produced in the EU, so those represented by figure 1 are only a proportion of the total volume used in the EU.

In comparison, UN Comtrade data shows that 440,000 tonnes of oleochemicals within scope of the EUDR were imported into the UK in 2022. But we can gain more insight into the UK market by looking at those oleochemicals found most commonly in products found on supermarket shelves.

Identifying common oleochemicals

Analysis of a sample of 72 UK retailer products provides an insight into common oleochemical ingredients. From this sample, glycerine can be identified as the commonest, found in 53% of all products sampled (see figure 2, which shows the nine most common identified in the sample). The oleochemicals shown in figure 2 can be derived from palm oil, and from other feedstocks.

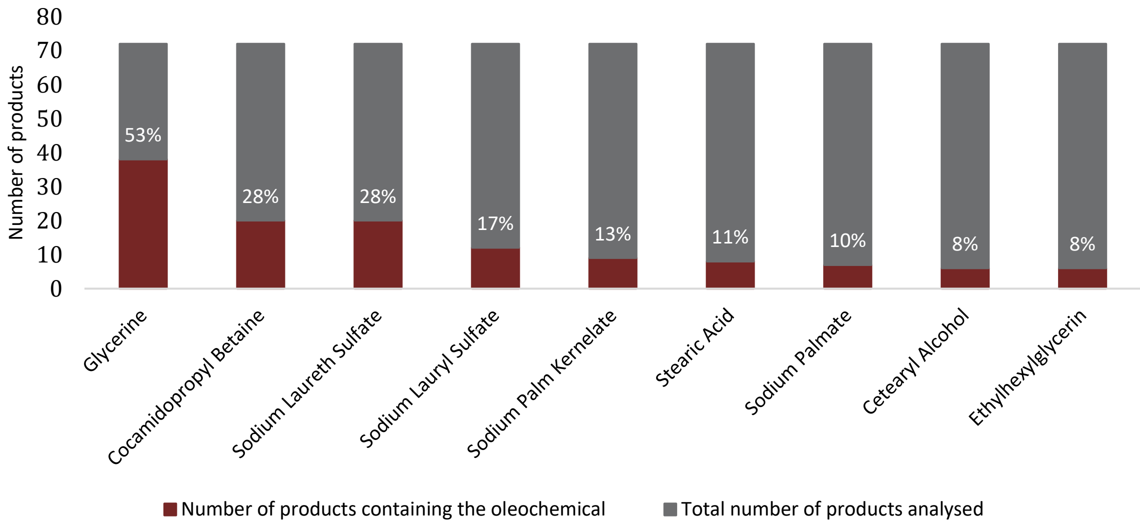

Figure 2 *Analysis of oleochemicals present in a sample of 72 retailer products.*

Glycerine is used in many home and personal care products and is also an example of an oleochemical within scope of the EUDR (and UK legislation), being the commercial name for glycerol.

In 2022, the UK imported 56,000 tonnes of glycerine (see figure 3). 69% of the total was imported from Germany and the Netherlands, neither of which are palm oil-producing countries. However, this demonstrates that UK supply chains of this major

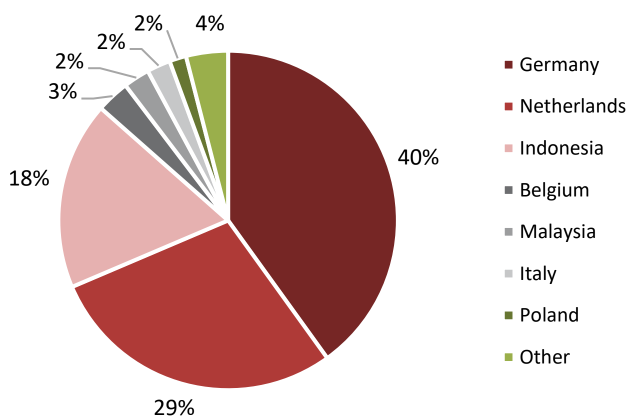

Figure 3 *Sources of UK imports of glycerine, 2022 (source: UN Comtrade).*

oleochemical are closely linked to European intermediaries, and their market requirements. In contrast, 20% of the UK's glycerine imports in 2022 were directly from Indonesia and Malaysia, the major palm oil-producing countries.

Diving deeper into glycerine

A major barrier in achieving traceability in glycerine, and other oleochemical, supply chains is a lack of clarity on feedstocks. Glycerine, like other oleochemicals, can be derived from a range of different feedstocks. It can be produced through laboratory-based processes, and as a by-product of the biodiesel industry, of which palm oil a major feedstock. Glycerine is therefore tied to market developments in the biofuel sector, including the commitment from the EU to phase out the use of palm oil in biofuels by 2030, which could therefore limit the availability of palm-derived glycerine from EU sources in future.[1]

A challenge for a company sourcing glycerine is obtaining information on which feedstock was used for their volumes. For companies aiming to develop sustainable, traceable supply chains of palm-derived oleochemicals, this presents a significant initial barrier.

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With regard to assurance of sustainability credentials, RSPO Mass Balance oleochemicals, including glycerine, are readily available – although this supply chain model can carry limitations for companies working to achieve fully traceable supply chains that are 100% assured of sustainable production practices. RSPO, however, is not the only assurance mechanism operating in the palm oil sector including oleochemicals.

For example, national certification standards have an opportunity to fill the gap left by the non-certified element of RSPO Mass Balance volumes, helping to raise the base level of production in the countries in which they operate. These include ISPO and MSPO, the national standards for Indonesia and Malaysia respectively, which are mandatory certification standards being implemented across their countries' production areas. Traceability tools and industry initiatives, such as the NDPE Implementation Reporting Framework, are also important parts of a wider toolbox for companies to utilise as they work towards fulfilling their commitments and complying with regulation.

Whilst continuing to build this understanding of oleochemical supply chains and the possible avenues for improving traceability and assurance in the sector, the Oleochemicals Working Group is moving from learning to action, exploring what best practice looks like in different areas of the supply chain and how it can be implemented. ***To find out more or get involved, reach out to the Efeca team at info@efeca.com.***

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[1] https://www.reuters.com/article/us-eu-climatechange-palmoil-idUSKBN1JA21F/