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Annual Progress Report

UK Roundtable on Sourcing Sustainable Palm Oil

Final Report – Project P116

Prepared for Partnerships for Forests

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Executive summary

This report measures the progress towards meeting the 2020 Amsterdam Commitment to source 100% sustainable palm oil (SPO) within Europe. It presents the overall figure for the amount of Certified Sustainable Palm Oil (CSPO) imported into the UK via the four UK refineries, as well as the remaining volume that is uncertified entering the UK. The objective of this publication is to report on progress to date, whilst also identifying where the remaining volumes of uncertified palm oil are sourced from, in order to help achieve the goal of 100% CSPO usage within the UK by 2020. It covers previous data points reported on in the 2012-2016 commitment period and will continue to be published annually until 2020. It also explores the wider consumption of palm oil in the UK.

The UK Roundtable on Sourcing Sustainable Palm Oil (RSSPO) is part of the UK Sustainable Palm Oil Initiative (SPOI), working collectively to reduce the UK palm oil deforestation footprint, while supporting and aligning with existing global initiatives working on sustainable palm oil, to create a mass market change.

As a result of agricultural production, land conversion is the single biggest contributor to deforestation globally, with approximately 70% attributed to agricultural expansion, specifically related to livestock for meat production, soya, palm oil and pulp and paper production. Although the UK on average accounts for <3% of total global production of these commodities, more than 40% of the UK's annual, imported, overseas commodity-driven land footprint (nearly 6 million ha) is concentrated in a relatively small number of countries at high or very high risk of deforestation, weak governance and poor labour standards.

Palm oil production faces significant challenges because it can be linked to deforestation, land conflicts and human rights violations. On the other hand, palm oil provides several benefits: it is extremely versatile, has good nutrition properties, and can be the most efficient oil seed crop to grow, due to its high yields. As a result, it can provide significant social and economic benefits such as increased food security, and increased rural income and development. When grown sustainably through a certification scheme, other beneficial impacts of sustainable production and certification include aiding smallholders to increase yields and the enforcement of labour rights. Environmentally, sustainable production can reduce the risks of land conversion, especially on peatland, reduce greenhouse gas emissions and protect biodiversity. Furthermore, sustainable palm oil certification increases traceability and transparency throughout the supply chain, which increases consumer awareness.

Section 2 Part A of this report highlights the headline figure of 77% CSPO purchased in the UK in 2018. This is based on Eurostat data, which tracks crude oil, refined oil, and fractions of both palm oil and palm kernel oil. The percentage of sustainable palm oil in the UK is based on the UK refiner sales data for RSPO CSPO. This does not cover palm oil imported into the UK in ingredients or finished goods. This oil is currently not monitored nor tracked, and thus is difficult to quantify accurately, though it does possibly represent a large amount of additional usage. The report also analyses certification credits claimed within the UK, providing a broader perspective on what different sectors are purchasing, including bakery fats, retail, home and personal care, animal feed, CGM and others. The remaining 23% gap can be attributed to the UK refiners 'unsustainable material' (this may be certified sustainable material sold as unsustainable) sold (8%) as well as 15% that is not imported via the UK refiners and is not tracked but may also be covered by an NDPE policy or RSPO certification.

Section 2 Part B explores the use of palm oil in the UK coming via refiners in Europe or internationally (everything not covered by Part A). This is then used by ingredients manufacturers and consumer goods manufacturers either as oil, or in a wide range of products (both food and non-food) as fractions and derivatives, or as finished goods by retailers. This is achieved by a closer inspection into the Consumer Goods Manufacture (CGM) and retail sectors, evaluating what information we have on volumes and the market, and assessing what information is missing.

In Section 2 Part C we look at three sectors in more detail, to understand the challenges of data collection, monitoring, and sustainable sourcing – Oleochemicals, Food Service, and Animal Feed.

Section 3 'Ensuring a sustainable impact: global progress' provides an update on actions taken globally through national initiatives, changes to certification schemes, wider policies and communications to change both the narrative surrounding palm oil and work to create positive change on the ground, reducing deforestation. The UK SSPOI is actively engaged in the ongoing discussions, communications initiatives, and is working closely with other national initiatives to create alignment in activities, but importantly in the messaging for sustainable palm oil. As a relatively small player in the global market, by working collectively on a global basis we can create systemic change for sustainably produced and consumed palm oil.

Sections 4 'Conclusions' synthesises the headline figures of the report, identifying areas which need to be strengthened within the industry and actions that the Sustainable Palm Oil Initiative (SPOI) will take over the course of the next year to meet the RT commitment of 100% CSPO in the UK by 2020

The Annexes include an overview of the methodology development, qualitative updates from roundtable members, and stakeholder questionnaire and survey results. Additional information into palm oil usage in UK biofuels and a detailed understanding of the data sets used (Fediol and Oil World) is also provided. Stakeholder surveys are used to triangulate the headline figures with industry information from RT members to ensure the data is accurate, reliable and not misleading.

With demand for this extremely versatile vegetable oil forecasted to grow rapidly and the 2020 goal of 100% Certified Sustainable Palm Oil (CSPO) fast approaching, it is increasingly important that those involved in the palm oil industry and supply chains take action to make sustainable choices and tackle global deforestation.

1. Introduction

This report measures the progress of the UK in meeting the 2020 Amsterdam Commitment to source 100% sustainable palm oil within Europe. It presents the overall figure for the amount of Certified Sustainable Palm Oil (CSPO) imported into the UK via the four UK refineries, as well as the remaining volume that is uncertified entering the UK. The objective of this publication is to report on progress to date, whilst also identifying where the remaining volumes of uncertified palm oil are sourced from, in order to help achieve the goal of 100% CSPO usage within the UK. It covers previous data points reported on in the 2012-2016 commitment period and will continue to be published annually until 2020.[1] It also explores the wider consumption of palm oil in the UK.

It is increasingly important to move towards sustainable sourcing of commodities due to the devastating effects of commodity driven deforestation. Forests provide essential ecosystem services that are vital to human health and livelihoods; approximately 1.6 billion people are dependent on these services. Forests also support 80% biodiversity worldwide and represent major carbon sinks. Despite this, over the last 60 years, more than half of tropical forest worldwide have been destroyed.[2] As a result of agricultural production, land conversion is the single biggest contributor to deforestation globally, with approximately 70% attributed to agricultural expansion (specifically for livestock, soya, palm oil and pulp and paper production), whilst mining, urbanisation and infrastructure are responsible for <10% each.[3]

The UK on average accounts for <3% of total global production of these commodities. However, more than 40% of the UK's annual, imported, overseas commodity-driven land footprint (nearly 6 million ha) is concentrated in a relatively small number of countries at high or very high risk of deforestation, with weak governance and poor labour standards. WWF identified that the UK's footprint is largely a result of consumption of 7 key commodities (soya, palm oil, timber, pulp & paper, beef & leather, rubber, and cocoa) and is equivalent in size to a land area over half the size of the UK.[4] Reflecting this impact on to other countries would have much more severe consequences when focusing on population size alone, production and imports. India's 2018/2019 palm oil imports are estimated to be 9.6 million tonnes, equating to 800,000 tonnes per month, or double the imports of palm oil to the UK over the course of a year. This highlights that palm oil within the UK is only part of the problem and consequently, a holistic approach is required to address this global issue.

Greenhouse gas emissions from deforestation and forest degradation account for around 10% of global emissions. Protected and restored, forests could provide up to 37% of the greenhouse gas mitigation required to ensure a good (66%) chance of stabilising warming to below 2˚C between now and 2030.[5] These 'natural' climate solutions receive only around 2.5% of the funding allocated for climate mitigation.[6] With demand for palm oil forecasted to grow rapidly and the 2020 goal of 100% Certified Sustainable Palm Oil (CSPO) fast approaching, it is

[1] For a detailed account of the methodology agreed with the Roundtable in 2016, see Annex 4.
[2] http://ec.europa.eu/environment/forests/pdf/KH0418199ENN2.pdf
[3] http://www.fao.org/americas/noticias/ver/en/c/425600/
[4] Risky Business Report, October 2017, WWF-UK.
[5] 5 https://www.pnas.org/content/114/44/11645
[6] https://climatepolicyinitiative.org/publication/global-landscape-of-climate-finance-2015/

increasingly important that those involved in the palm oil industry and supply chains take action to make sustainable choices.

1.1. Background on palm oil production

Palm oil is the most widely grown vegetable oil, used in both food and non-food. Oil palm, (Elaeis guineensis), is an African tree native to West and Central Africa, and is now extensively grown in South East Asia. Harvested in large bunches, the fruit produces an edible oil pressed from both the orange pulp and also the palm kernel. The residue that is left after extracting the oil from the kernel is palm kernel meal, which can be used for animal feed.

Palm oil has seen a significant increase in global production due to the diversity in its uses; for example, it can be used in biscuits, pastry, powder, cake, baby formula, toothpaste, ink, toilet roll and many more products (see Section 2). World production of oil palm fruits in 2017 was 317,571,419 metric tonnes. South East Asia is the largest producer, with Indonesia, Thailand and Malaysia the top producers in 2017. *Figure 1* displays that 10 countries make up 95% of the production: Indonesia (49.9%), Malaysia (32%), Thailand (4.6%), Nigeria (2.4%), Colombia (1.8%), Ecuador (1%), Cameroon (1%), Ghana (0.8%), Papua New Guinea (0.8%) and Honduras (0.8%).

Figure 1. Global share of palm oil producing countries (Source: FAOSTAT 2017[7])

[7] FAOSTAT – Production of Palm oil fruits, area harvested and yield. Countries contributing <0.1% to total production include Togo, Congo, Paraguay, Senegal, Burundi, Guinea-Bissau, United Republic of Tanzania, Nicaragua, Panama, Equatorial Guinea, Gambia, Madagascar, Sao Tome and Principe, Gabon, Central African Republic, and Suriname.

The main exporters (*see Figure 2*) of palm oil (and its fractions[8]) in 2018 were Indonesia (55%) and Malaysia (29%). Other countries exporting palm oil were Guatemala (1%) and Colombia (2%), Cote D'Ivoire (1%), Ecuador (1%), Papua New Guinea (1%), Thailand (1%) Germany (1%) and Italy (1%).

Figure 2. Global share of palm oil exporting countries (Source: ITC Trade Map 2018[9])

The main importers (*see Figure 3*) of palm oil (and its fractions[10]) in 2018 were India (17.6%) and China (10.9%), whilst the EU, Netherlands, Spain, Italy, Germany and Belgium, contributed 16.5% collectively.

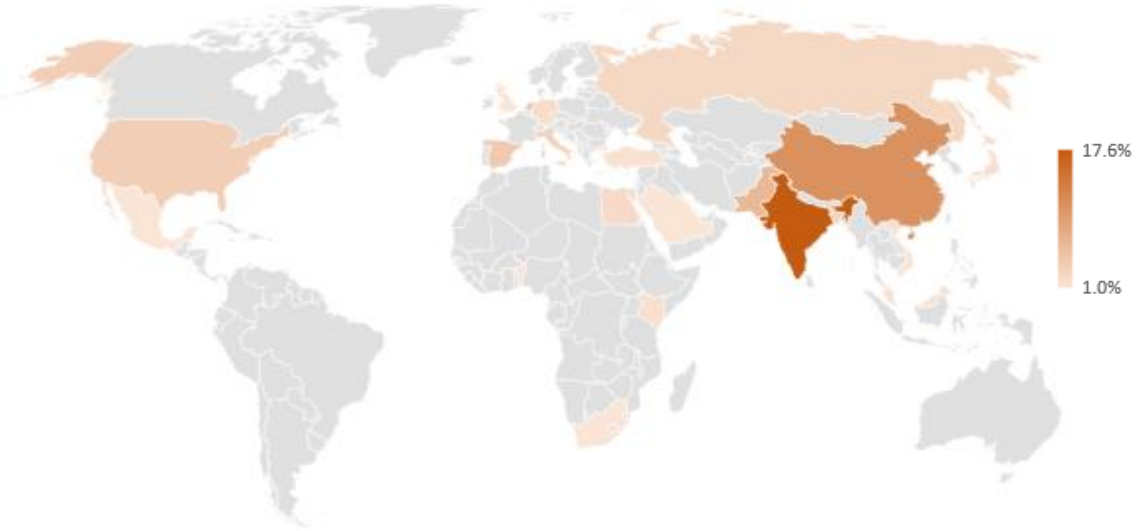

Figure 3. Global share of palm oil importing countries (Source: ITC Trade Map 2018[11])

[8] Displays Palm oil and its fractions, refined and unrefined (excluding chemically modified)
[9] https://www.trademap.org/Country_SelProduct_Map.aspx?nvpm=1%7c%7c%7c%7c%7c1511%7c%7c%7c4%7c1%7c1%7c2%7c1%7c1%7c2%7c1%7c1
[10] Displays Palm oil and its fractions, whether or not refined (excluding chemically modified)
[11] https://www.trademap.org/Country_SelProduct.aspx?nvpm=1%7c%7c%7c%7c%7c1511%7c%7c%7c4%7c1%7c1%7c1%7c1%7c1%7c2%7c1%7c1

1.2. Why is palm oil the most widely used vegetable oil?

Palm oil production faces significant challenges because it can be linked to deforestation, land conflicts and human rights violations. On the other hand, palm oil is an extremely versatile and high-yielding oil, which can have significant economic, social and environmental benefits.[12]

1.2.1. Global food security

Palm oil volumes are anticipated to reach 77 million tonnes in 2019; soya, rapeseed and sunflower are expected to reach 56, 26.3 and 19.4 million tonnes respectively in 2019. Therefore, palm oil will contribute 40% of global vegetable oils, while soya, rape seed and sunflower will together contribute 52% and other oils contribute 8%.[13] Palm oil is the most efficient and productive oil seed crop. In 2018, total hectares of palm oil in comparison to rapeseed, cottonseed, sunflower oil, soya and other oilseeds represented only 7.4% of land used to grow oil seeds, and resulted in 41.1% of global production.[14] With global demand anticipated to reach 240 million tonnes by 2050, [15] fueled by large population growth in Asia and Africa, [16] palm oil is essential for global food security as well as oleochemical needs.

1.2.2. Alternatives to palm oil

Palm oil has become a ubiquitous and versatile ingredient because of the many practical characteristics useful to the food and oleochemical industries. As a result of the versatility of palm oil, there are only few suitable alternatives to both palm oil and palm kernel oil that have similar chemical compositions, functionalities and applications. Certain substitutes do closely resemble palm oil's fat profile, including coconut, shea butter and sal. This allows them to be substituted for palm oil in products such as food (especially confectionary), and oleochemical products (soaps, moisturisers etc.), though they are not grown at scale. For oil users less concerned about oil properties (e.g. for cooking oil, biofuel), widely available substitutes such as soya, rapeseed and sunflower sometimes present a more practical and potentially cheaper alternative.

The supply chains for soya, rapeseed and sunflower are well developed, though they also have their own sustainability issues. Soya is considered to be a large contributor to deforestation, more so than palm oil,[17] having far reaching effects on the Amazon and Cerrado landscapes where it is primarily grown, due to land use and productivity issues. It is also associated with social issues such as land use conflicts and heavy pesticide use. In comparison, rapeseed and/or sunflower are largely produced in Europe and although the land use impact can be considered less, environmental impacts remain. For example, the industries for these crops do not have stringent sustainability guidelines to follow, and there are concerns over fertilisers and pesticides affecting bee populations.[18]

[12] www.idhsustainabletrade.com/uploaded/2019/01/EPSO_Vormgeving2019_DEF_31012019.pdf
[13] Source: AAK
[14] Oilworld, 2018
[15] https://portals.iucn.org/library/node/47753
[16] https://ourworldindata.org/world-population-growth
[17] https://www.wwf.org.uk/sites/default/files/2017-10/WWF%20and%20RSPB%20-%20Risky%20Business%20Report%20-%20October%202017.pdf
[18] https://www.theguardian.com/environment/2017/jun/29/pesticides-damage-survival-of-bee-colonies-landmark-study-shows

There has been increasing interest in shea butter, coconut oil and other lesser known oil/seeds such as sal,[19] kokum or mango seed due to their similar fat content profiles to palm kernel oil. These oils are predominantly cultivated in India and Africa, are much less available and not regulated in terms of sustainability. Coconut can be grown on plantations, but illipe, kokum, sal and shea are wild crops subject to natural fluctuations in productivity. Their consumption and price are primarily driven by the food sector, as they can be substituted for cocoa butter, and can also fluctuate considerably. While they provide income for many people, the crops can present social issues such as insufficient recompense for farmers or women, who are not well-represented in the supply chain. [20]

1.2.3. Versatile properties

Palm oil modified by fractionation, blending, interesterification and hydrogenation. Palm kernel and palm oil having different properties and chemistry compositions and therefore can be used in different products. Fractionation allows palm oil and palm kernel oil to be broken down into a liquid (olein) and a solid (stearin) with different melting points (*see Figure 4.*).

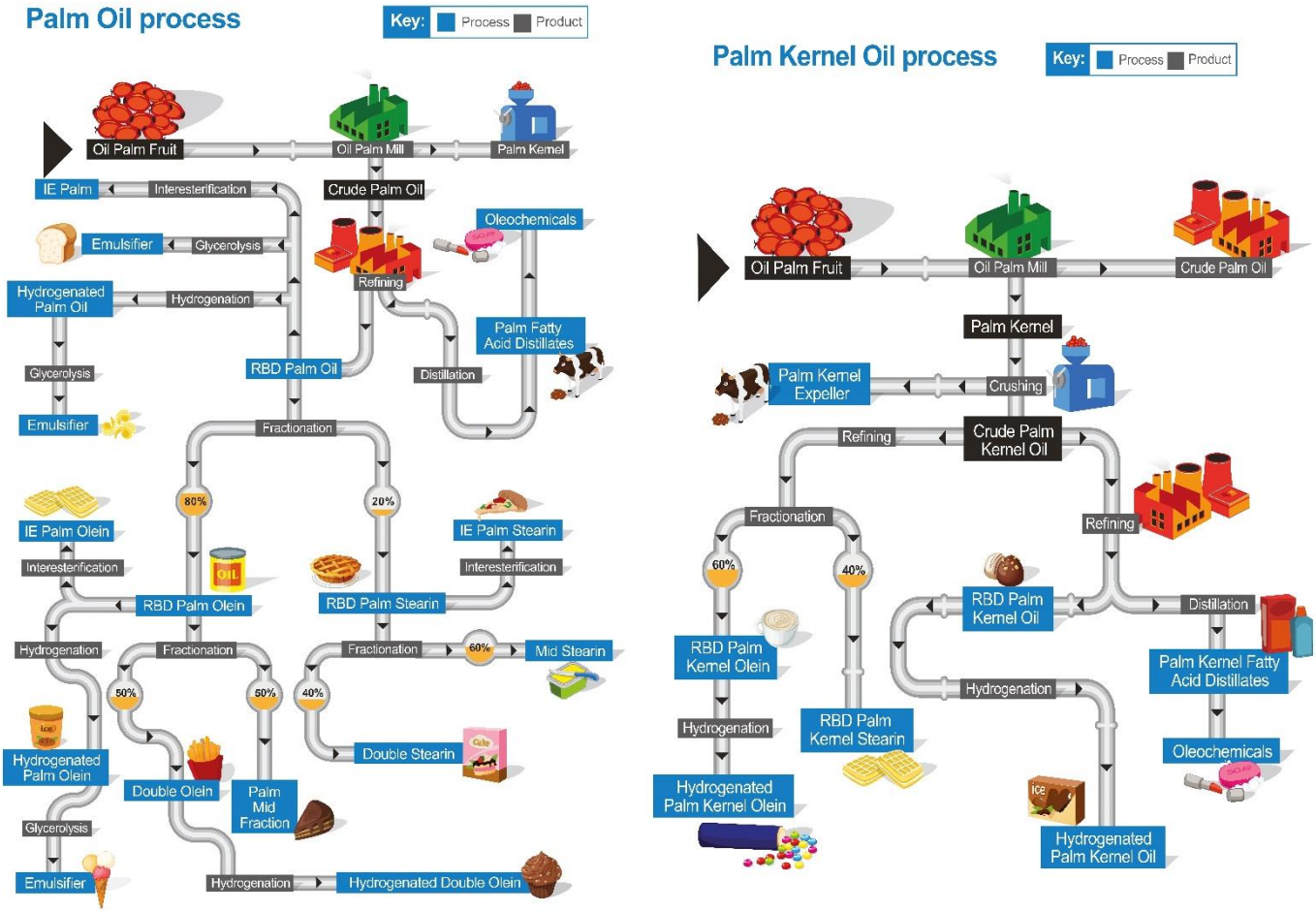

Figure 4. Oil Palm Fractions and Derivatives (Source: AAK)

[19] The sustainability issues and development of the industry for other wild seeds such as illipe, kokum and mango kernels, are fairly similar to that of sal seed.
[20] http://files.constantcontact.com/f92da02a001/aa8cb0eb-87bc-43f6-99e7-ddf28abee6bc.pdf

1.2.4. Rural income and development

Both economically and socially, palm oil is central to the economies of many emerging and developing nations, and its production contributes to the livelihoods of millions of people. More than 3 million smallholder farmers (defined as <50ha) account for 40% of production globally,[21] whilst 2.5 billion smallholders are sustained from agriculture alone. In Africa and Asia 80% of the food supply is predominantly sourced from agricultural crops.[22] In the main producing countries, Indonesia and Malaysia, around 60% of the area planted with palm oil trees is operated as large scale plantations. Palm oil is a primary source of income, providing $2500 per ha, as opposed to only $250 for rice plantations per ha.[23]

When grown sustainably through a certification scheme, other beneficial impacts of sustainable production include aiding smallholders to increase yields and therefore incomes, and the enforcement of labour rights. Environmentally, sustainable growth can reduce the risks of land conversion, especially on peatland, reduce greenhouse gas emissions and protect biodiversity. Furthermore, sustainable palm oil certification increases traceability and transparency throughout the supply chain, which increases consumer awareness.

1.3. The UK Sustainable Palm Oil Initiative

The UK Sustainable Palm Oil Initiative (SPOI) performs a wide range of activities to engage the private sector with sustainable palm oil, including webinars on key topics such as alternatives to palm oil, and workshops with the foodservice and oleochemical industries to help stakeholders understand how to source CSPO better. Additionally, a series of working groups are facilitated, one of which is focused predominantly on improving the messaging and narrative surrounding palm oil in order to create educational resources and drive awareness across the UK supply chain from refiners to end consumers.

A core part of the SPOI, is the UK Roundtable on Sourcing Sustainable Palm Oil (RSSPO), an industry alliance that aims to promote the uptake of sustainable palm oil in the UK across the supply chain, offering a space for information sharing between members and support on progress, monitoring and reporting. The Roundtable was originally formed when Defra published the UK statement on sustainable palm oil in 2012,[24] which brought together trade associations for palm oil-using sectors, the UK government and the World Wildlife Fund to agree to work towards 100% sourcing of credibly certified sustainable palm oil by 2015.[25.]

Membership has now expanded to a wider range of organisations including retailers, public sector, small palm oil growers, wholesalers, finance, the food service sector and manufacturers. Following the end of the 2015 commitment period, the RSSPO members agreed to align with the commitment to working towards achieving to the 2020 Amsterdam Commitment, a private sector-driven commitment to 100% sustainable sourcing and increased traceability of palm oil

[21] https://www.rspo.org/smallholders/rspo-smallholders-definition
[22] http://www.fao.org/nr/sustainability/smallholders-ecology/en/
[23] https://www.spott.org/palm-oil-resource-archive/impacts/economic/
[24] https://www.gov.uk/government/publications/sustainable-production-of-palm-oil-uk-statement
[25] The 100% by 2015 commitment covered the use of both sustainable palm oil and palm kernel oil. Relevant sectors also worked to encourage sustainable sourcing of palm oil fractions and derivatives.

by 2020 in Europe as well as other agricultural commodities associated with deforestation, such as soya and cocoa (*See Figure 5*).[26]

Figure 5. Amsterdam Palm Oil Declaration Commitment

The Commitment to Support was originally initiated by IDH, the Sustainable Trade Initiative and MVO, the Netherlands Oils and Fats Industry, who established the European Sustainable Palm Oil project in December 2015. In response, a number of other European national initiatives (NI's) on sustainable palm oil also supported this commitment (*see Section 3*).

The Commitment to Support is not a zero-deforestation commitment. It also does not commit signatories to source 100% physical CSPO. To avoid the risk of double counting, this report tracks progress towards the Amsterdam Commitment of palm and palm kernel oil via the UK refineries in order to show where the UK stands. RT members individual progress towards this ambition can be reflected in Annex 1.

[26] http://www.euandgvc.nl/documents/publications/2015/december/7/declarations-palm-oil

2. Overview of palm oil usage in the UK

The headline figures of this report are based on Eurostat data, which tracks crude oil, refined oil, and fractions of both palm oil and palm kernel oil. The percentage of sustainable palm oil in the UK is based on the UK refiner sales data for RSPO CSPO. Stakeholder surveys are then used to triangulate the headline figures with industry information from RT members to ensure the data is accurate, reliable and not misleading (*See Annex 2 and 3*).

The diagram below illustrates the flow of palm oil and palm kernel oil into the global market via several sources (*Figure 6*). Tier 2 illustrates that palm oil is traded and refined/processed via 3 key supply chains: globally (1), via Europe (2) or directly in the UK (3). Supply chain 3 portrays the imports of palm oil into the UK directly from growers and mills in producer countries, which is then refined, transported to manufacturers, CGM and/or wholesalers, before entering the food service and/or retail sector. This is the information used to measure the headline figure of the report.

The UK market also uses palm oil and palm kernel oil that is within ingredients and finished goods. This oil may too be purchased from the UK refiners, but the bulk of this is palm oil entering the UK embedded in products[27] bought by smaller traders and ingredients manufacturers directly from refiners outside of the UK (supply chains (1) and (2) highlighted). Again, this is not measured in the headline figure. Functional ingredients such as emulsifiers or bakery fats are delivered to consumer goods manufacturers (CGM), while finished goods will tend to enter lower down the supply chain. For example, the oleochemical and animal feed markets play a role as processors, often buying fractions and derivatives of palm oil and palm kernel oil from origin.

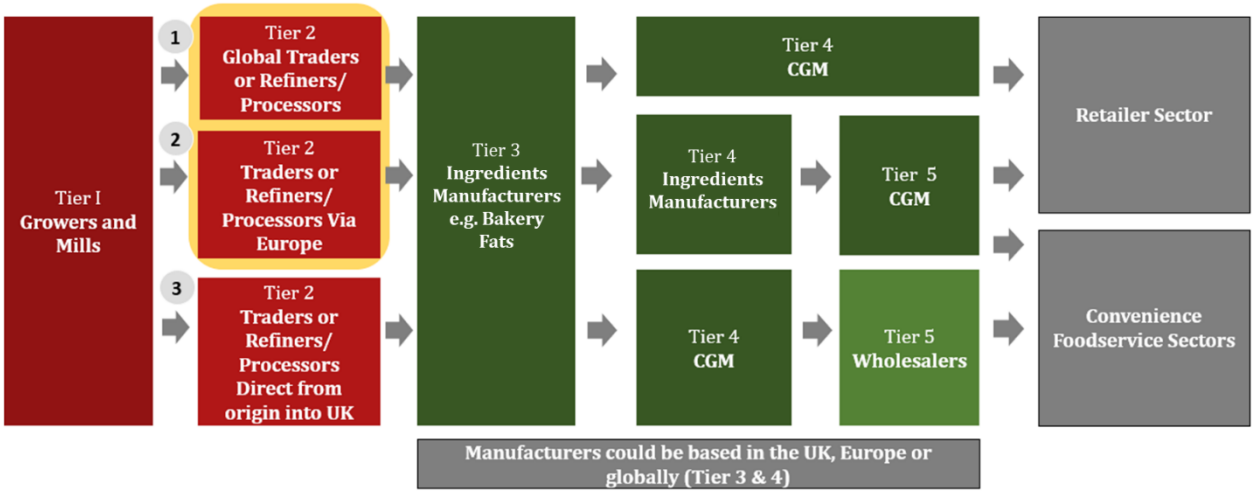

Figure 6. Palm Oil Supply Chain (Source: Efeca 2019)

[27] https://www.wwf.org.uk/sites/default/files/2017-10/WWF%20and%20RSPB%20-%20Risky%20Business%20Report%20-%20October%202017.pdf

A. Palm oil usage in the UK

This section discusses the imports of palm oil and percentage of CSPO (Identity Preserved, Segregated and Mass balance) via the main four UK refiners. The figures used for this report encompass all crude and refined palm and palm kernel oil, as well as fractions via the refiners.

Imports of physical certified sustainable palm oil

Total volumes of palm oil imports,[28] as well as CSPO, can be interpreted from *Figure 7*, which illustrates that the volume of UK palm oil purchases supported by the RSPO certification models of Mass Balance, Segregated, and Identity Preserved totals 323,688 mt (excluding RSPO credits, derivatives and finished goods), or 77% of total palm oil imports to the UK. This represents an increase of 2% from 2017. Total imports of palm oil have dropped by 16,000 mt to 421,000 mt in 2018 and from 437,000 mt in 2017 (Eurostat Fediol, 2019; *see Table 1*)[29] as depicted in *Figure 7.*

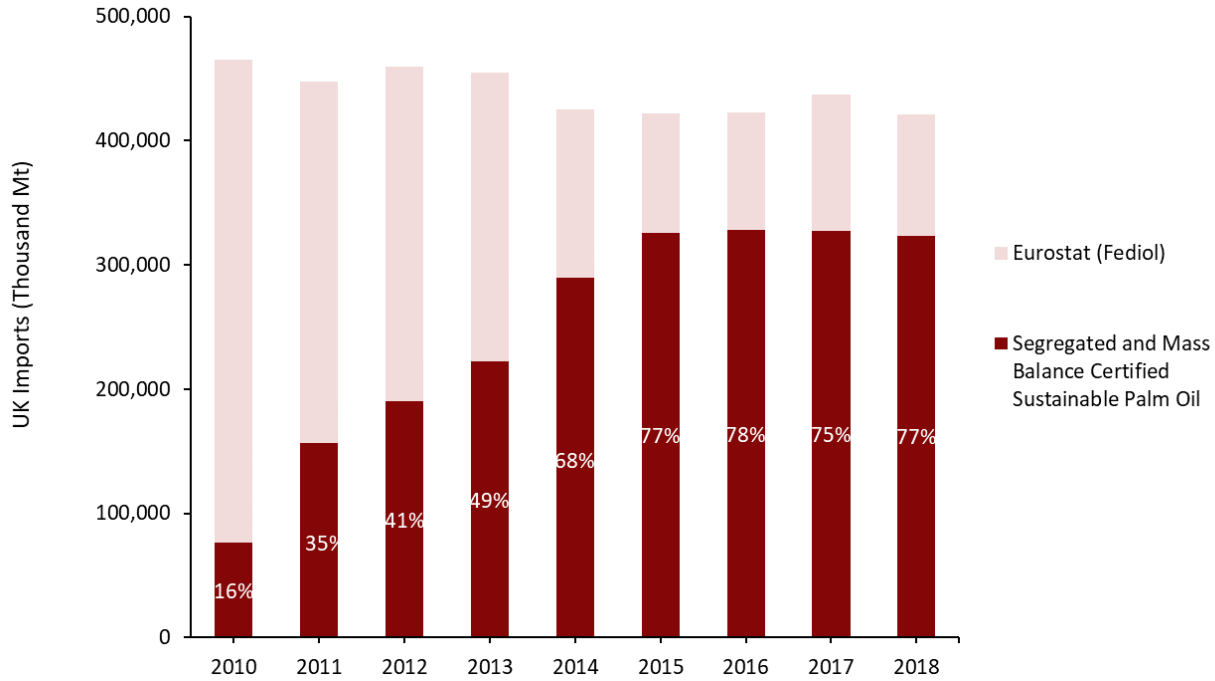

Figure 7. Certified Sustainable Palm Oil purchases in the UK supported by RSPO supply chain models in metric tonnes (Source: Efeca analysis of UK refinery data, Eurostat published by Fediol)

In 2018 total UK purchases of palm oil supported by Mass Balance, Segregated, and Identity Preserved RSPO certification (not including RSPO credits) decreased by 1.22% since 2017. The rate of change has essentially plateaued from 2015 to 2016, 2016 to 2017 and 2017 to 2018 in terms of total volumes of CSPO, fluctuating by only 4,880, 36 and 7,371 mt respectively.[30] However, total imports have changed considerably from 2016 to 2018, reflected by the percentage of CSPO in the UK. Overall, 2018 UK purchases of palm oil supported by Mass

[28] Eurostat data – published FEDIOL

[29] In 2018, 2015, 2016 and 2017 total refinery figures were slightly different due to inaccurate reporting by one refiner on total usage and total CSPO usage. Correct figures have now been submitted by the refiner but are not incorporated here for the purpose of comparison with previous years' analysis.

[30] As per revised refiner figures.

Balance, Segregated, and Identity Preserved RSPO certification (not including RSPO credits) have increased by 83% (268,668 mt) since 2009, when total purchases represented 55,000 mt.

Table 1. Differences in imports and CSPO from 2009 - 2018

	2009-2010	2010-2011	2011-2012	2012-2013	2013-2014	2014-2015	2015-2016	2016-2017	2017-2018
Differences in Imports	-9.68%	-3.79%	2.61%	-1.10%	-7.06%	-0.71%	0.24%	3.20%	-3.80%
Differences in CSPO	28.27%	51.08%	17.65%	14.34%	23.37%	11.06%	0.64%	-0.15%	-1.22%

NDPE policies

NDPE (No deforestation, no planting on peatland no exploitation policies) ensure no deforestation takes place within the supply chain, whilst also ensuring suppliers refrain from developing peatlands and forested land into new oil palm plantations. Violations of such policies can lead to suspension or termination of sourcing relations.[31] Non-compliant growers also face real risk that supply chain exclusion could put their revenue at risk.

NDPE policies first emerged in 2011, when Golden Agri Resources (GAR) adopted its Forest Conservation Policy. This policy applied an ambitious definition of High Carbon Stock forests, but the scope of this policy was limited to GAR's own landbank. Two years later, Wilmar launched its NDPE policy, setting requirements to the group's full supply chain and not just Willmar's operations. In subsequent years, several other large traders/refiners followed suit.

Most large international palm oil traders/refiners now have NDPE sourcing policies, including the four UK refiners. Eighty four percent of palm oil imported into Europe in 2017 was sourced under NDPE policies.[32] Zero deforestation has therefore become a criterion for market access to these large traders/refiners.

The palm oil produced under an NDPE policy would be described as sustainable but is not certified. Many major brands only partially use RSPO CSPO and have bespoke responsible sourcing initiatives based on traceability to mill data or have an NDPE policy. Brands use a third party to verify their policies via ground audits but are also heavily reliant on understanding the mills within the supply chain and geospatial data.

Purchases of RSPO credit certificates

The RSPO credit system, which is now fully controlled by the RSPO, continues to help companies cover difficult fractions and derivatives including palm kernel as they work towards 2020 targets and commitments. The RSPO offers credits for palm oil, palm kernel, palm kernel expeller as well as Independent Smallholder Credits for each component too. The current purchasing split is 95% normal credits versus 5% smallholder credits. 85% of these are palm oil, 14.4% palm kernel and the remaining 0.6% expeller.

[31]https://chainreactionresearch.com/report/unsustainable-palm-oil-faces-increasing-market-access-risks-ndpe-sourcing-policies-cover-74-percent-of-southeast-asias-refining-capacity/

[32] www.idhsustainabletrade.com/uploaded/2019/01/EPSO_Vormgeving2019_DEF_31012019.pdf

In 2018, UK companies purchased 127,884 mt of RSPO credits certificates (previously called GreenPalm certificates), compared to 41,903 mt of palm oil supported by purchases by UK companies in 2017 and 84,949 mt in 2016 (*see Figure 8*). The significant increase in RSPO credits from 2017 to 2018 (*see Table 2*) is due to two key factors. First, the number of companies purchasing credits has increased from 28 in 2017 to 42 in 2018. Second, two sectors have seen a significant increase in credit buying: animal feed and bakery (*see Figure 9*).

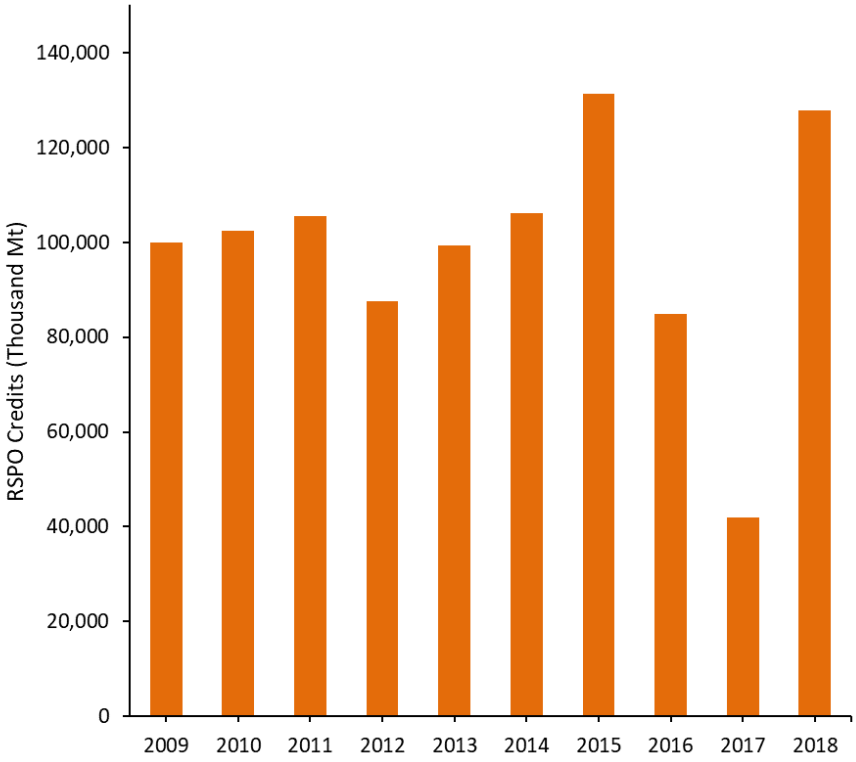

Figure 8. Proportion of palm oil and palm kernel oil in the UK purchased through RSPO credit certificates from 2009 to 2018 measured in metric tonnes (Source: RSPO)

Table 2. Differences in RSPO Credits from 2009 to 2018

	2009-2010	**2010-2011**	**2011-2012**	**2012-2013**	**2013-2014**	**2014-2015**	**2015-2016**	**2016-2017**	**2017-2018**
Differences in Credits	2.38%	2.87%	-20.37%	11.86%	6.34%	19.13%	-54.52%	-102.73%	67.23%

The animal feed sector purchased 47,410 mt of credits. Only two companies bought in this sector with nearly all credits being redeemed for the UK market and 252 credits for China. The Agricultural Industries Confederation is likely to take a lead role next year as they have announced they will buy on behalf of smaller members as they did for the GreenPalm scheme.

The bakery sector purchased 44,583 mt of credits. In contrast to the animal feed sector, there were numerous buyers, but the key differential factor was that the credits were purchased for claims for the global market (South America, Europe and South East Asia) with less than 1/3 for the UK market.

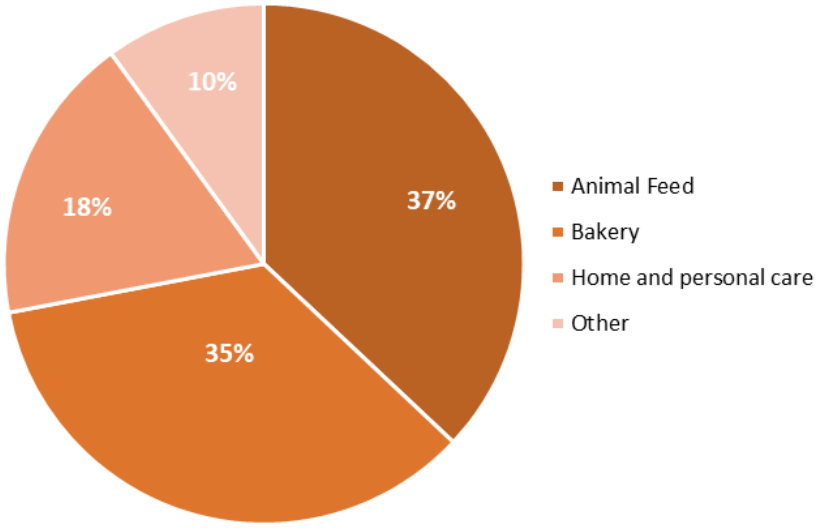

Figure 9. Proportion of credits purchased by UK sectors[33] (Source: RSPO)

In terms of other sectors, the home and personal care purchased 12,761 mt of credits. Similarly, to the bakery sector, companies brought credits to cover global sites, with 1/2 attributed to the UK market. A large pharmaceutical company entered the market this year, purchasing over 74% of the credits in this sector. Retailers accounted for 10,491 mt of credits, with at least half of these credits being purchased to cover claims within Europe. Other credits purchased covered margarine (2,185mt), CGM (285mt) and the confectionery market.

Due to clear evidence that the credits can be purchased for the UK but also for palm claims throughout the global food, home and personal care markets, credits need to be reported in isolation to any physical palm oil or PKO imported into the UK.

If the total percentage of CSPO headline figure for this report included RSPO credits, the UK would have achieved 107% CSPO sourcing in 2018, compared to 85%, 98% and 108% in 2017, 2016 and 2015 respectively. However, in 2016, the Roundtable agreed to remove RSPO credit purchases from the headline figure of UK consumption due to the risk of double counting down the supply chain (*see Annexes 4 and 5 for further explanation*). Many of the companies headquartered in the UK have international operations and buy RSPO credit certificates to cover the palm oil used by their international operations. Because percent by country is not disclosed, and countries are listed where claims are made, it is not possible to isolate credits claimed and used only within the UK. Additionally, credits are purchased for ingredients but mainly for finished goods.

Remaining gap

The challenge for the UK moving forward continues to be to reach 100% CSPO usage (*See Figure 10*). In order to do so, it is necessary to understand the dynamics of uncertified and/or untracked PO usage, and influence demand at key points in the supply chain.

[33] Other sectors include retail, margarine, CGM or confectionary

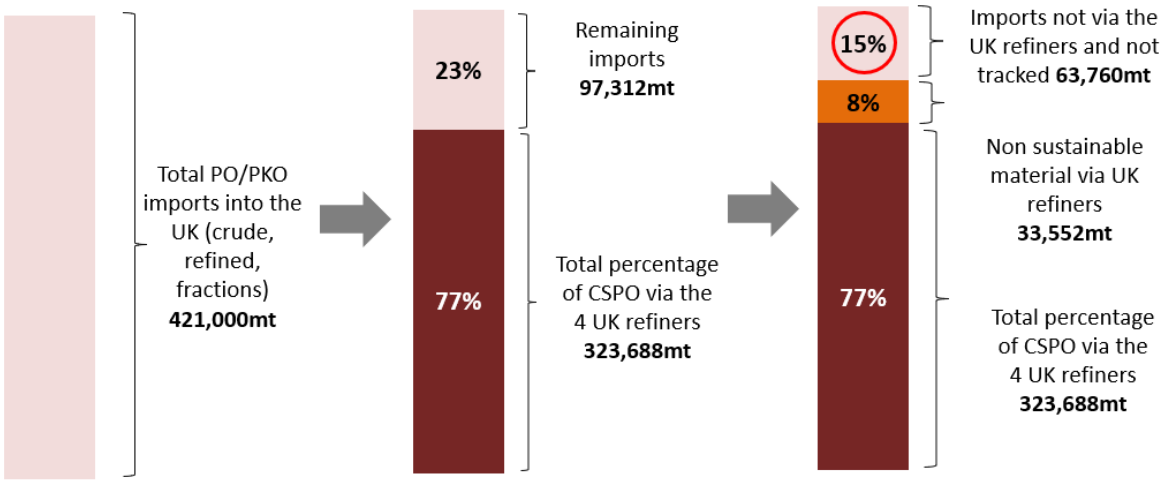

Figure 10. Remaining Gap

The remaining gap of non-certified palm oil within the UK, which is 23% of total usage equating to 97,312 mt, can be attributed to a number of things. 8% of this 97,312 mt, 33,552 mt, can be accounted for by the UK refiners as 'unsustainable material'.[34] Two refiners are reportedly selling 12.8% and 19% as non CSPO (note that although this is not covered by RSPO certification, it is still covered by an NDPE policy.).

Therefore, a 15% gap remains (63,760mt) that is not imported via the UK refiners, which unfortunately is not tracked but may also be covered by an NDPE policy or RSPO certification. These imports not via UK refiners may be coming via European refiners directly into manufacturers (*Figure 5*). Because this data is not publicly available, it is difficult to attribute to certain sectors or manufacturers, and therefore difficult to influence. In the sections below we discuss obstacles in certain sectors and issues with demand in the UK that may be contributing to this gap.

B. Palm oil usage in the UK via non-UK refiners

The headline figure for this report of 77% CSPO purchased in the UK does not cover ingredients or finished goods entering the UK via manufacturers.[35] This oil is currently not monitored nor tracked, and thus is difficult to quantify accurately, though it does possibly represent a large amount of additional usage. This section explores the use of this palm oil in the UK coming via refiners in Europe or internationally, which is then used by ingredients manufacturers and consumer goods manufacturers either as oil, or in a wide range of products (both food and non-food) as fractions and derivatives, or as finished goods by retailers.

Analysis of the use of CSPO/PK in the UK among CGM's and retailers

In order to complement what is known to be imported by the major refiners, we have looked more closely at major palm oil using sectors and where possible reported information on CSPO usage reported to the RSPO through the Annual Communication of Progress (ACOP). This includes the purchase of Segregated, Identity Preserved and Mass Balance CSPO products.

[34] material that could be sustainable but is sold as conventional palm oil due to demand
[35] i.e. goods that have completed the manufacturing process but have not yet been sold.

The RSPO ACOP is mandatory for ordinary members that use over 500 tonnes per year but not for supply chain associates that use less than 500 tonnes per year. Therefore, the picture is incomplete. Currently total membership stands at 440, of which 303 are supply chain associates who do not report on their progress and 127 ordinary members who do. The remaining 10 are affiliate members. Furthermore, the UK ACOP data encompasses the international operations of companies headquartered in the UK. Therefore, in some instances, palm oil usage reported by a UK company is larger than what is actually used in the UK.

Consumer Goods Manufacturers

Those UK consumer goods manufacturers who report through the RSPO ACOP indicate some progress, with 45% CSPO claimed as physical compared with last year's figure of 33%. This could be for manufacturing sites outside of the UK with poor access to RSPO CSPO, which is why the figure is not higher nor aligned to a 77% intake figure. Out of the 73 CGM, 50 declared they produce for the UK market only. The remaining 23 are global producers and include major brands.

Sustainability Claims not reported within the RSPO ACOP process

Many of the 303 Supply Chain Associates who do not report via the ACOP system are making RSPO public claims. This will mean, as with those who submit ACOP reports, that they need to be RSPO supply chain certified under the RSPO Supply Chain Certification Standard. With an annual audit, this ensures that what is being claimed as RSPO CSPO is being delivered. These audits are not public, but a Supply Chain Certification Standard certificate is issued for those business who achieve the standard. 322 production sites in the UK are RSPO Supply Chain Certified.

Retail

Forty six percent of all products sold in the UK are private label/own label (*see figure 11*). This means they are subject to retailer policies on CSPO. Most policies request the use of RSPO CSPO (Segregated, Identity Preserved and Mass Balance), with an increasing trend to move to Segregated.

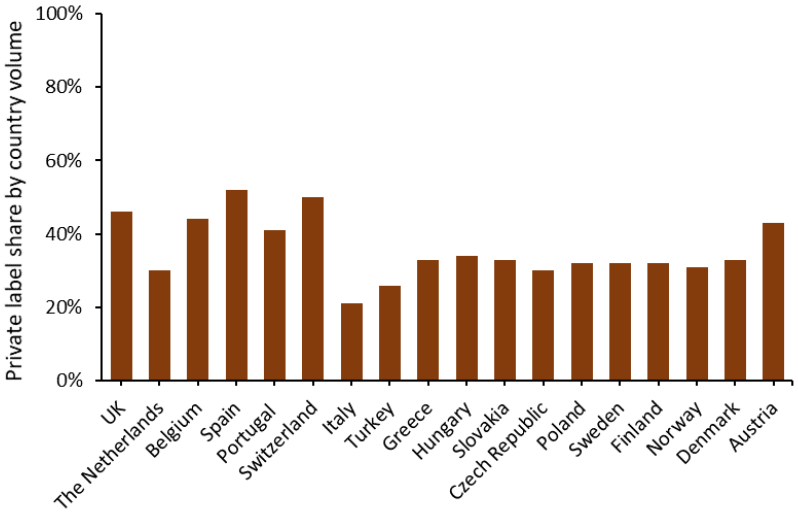

*Figure 11. Private label share in Europe (*Source: Kantar*)*

The ACOP data highlights that the main retailers in the UK are selling 92% of all own label products which contain palm oil and PKO as RSPO CSPO. However, the ACOP data does not give the full UK market picture as it does not capture retailers with Headquarters outside of the UK, for example, ASDA is owned by Walmart a US multinational retail corporation, whilst Lidl and Aldi are German owned supermarket chains, representing market shares of 15%, 5.7% and 7.9% respectively (*Figure 12).* Although these retailers do report via the ACOP, the breakdown of their UK volumes is not available (as for UK retailers with global interests such as Tesco and M&S).

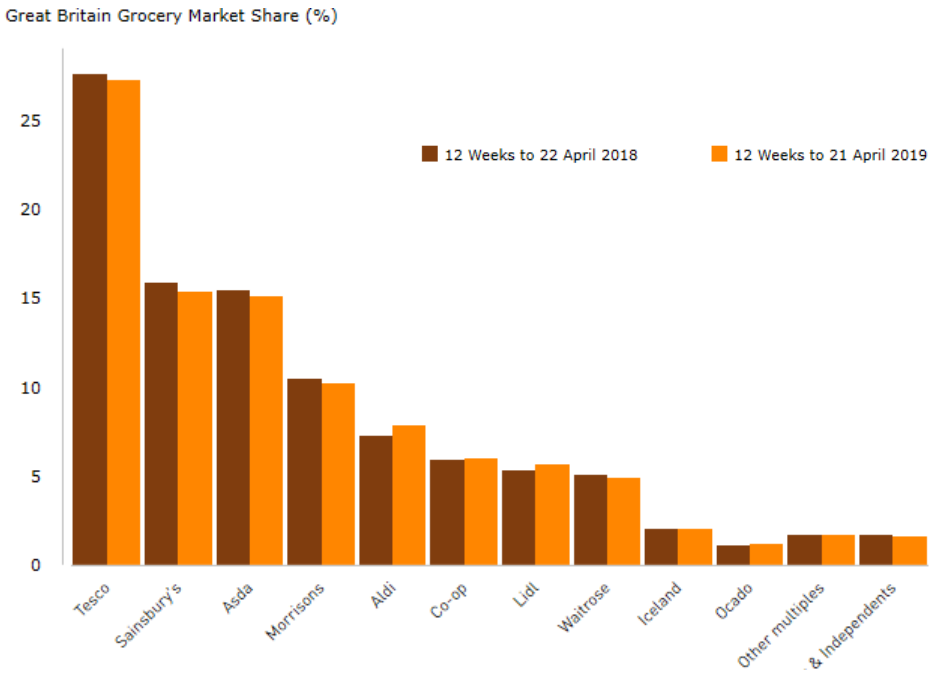

Figure 12. GB Grocery market share[36]

Other Retail initiatives to promote sustainable palm oil include the Retail Palm Oil Group (RPOG), a non-competitive coalition of Retail Companies with a common aim of promoting the adoption of sustainable palm oil. Currently the Group's members trade in every continent, although there is a predominance of companies with head offices based in Europe. This group is represented on the RSPO board. Also, the Palm Oil Transparency Coalition (POTC) is formed of businesses working together in a pre-competitive coalition to remove deforestation and exploitation from the palm oil production sector. The group now produces an annual report to track their supply chains progress towards their objectives.[37]

C. Sector updates

This section focuses on three broad sectors that have faced challenges in sourcing CSPO: Oleochemicals, Animal Feed and Food Service.

[36] https://uk.kantar.com/consumer/shoppers/2019/late-easter-sunshine-heats-up-grocery-market/
[37] https://www.palmoiltransparency.org/wp-content/uploads/2019/06/2018-POTC-Scorecard-Report_public.pdf

Oleochemical manufacturers

In contrast to the food industry, where the oil is basically kept intact, the oleochemical industry splits the oils using chemical processes, cutting it into different C-chain lengths and adding different functional groups, until the final function, whether a surfactant or an emollient, is obtained. This derivatisation can easily include five to ten individual steps before the final ingredient is obtained. Virtually every palm oil fraction, or PO/PKO derived fatty acids and alcohols enters the UK in bulk (ship or road tanker) and the supply chain is extremely complex (*Figure 13*).

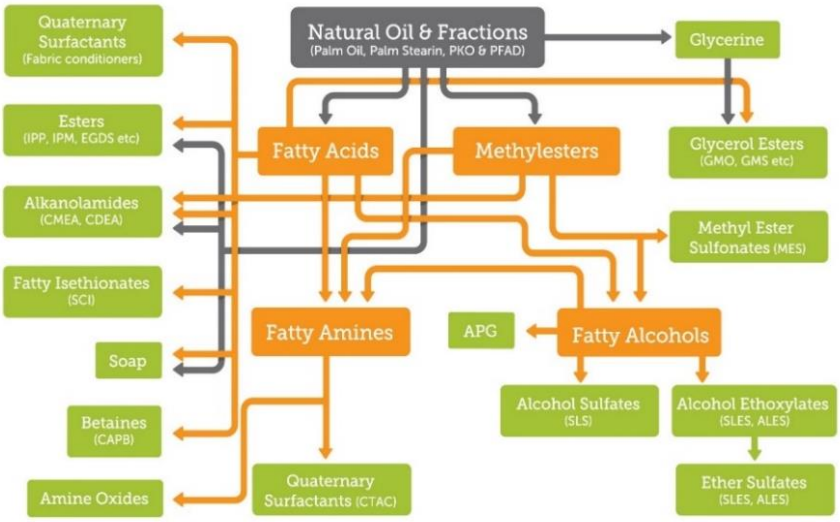

Figure 13. Oleochemicals supply chain (Source: RSPO)

The naming of cosmetic ingredients (the listing, in descending order of volume, seen on the back of personal care products), is defined in the INCI Dictionary (International Nomenclature for Cosmetic Ingredients).[38] There are around 21,000 monographs for cosmetic ingredients in the dictionary, and 60,000 trade names and technical names from 3,000 suppliers in 100 countries. Out of all of these, it has been calculated that around 1,000 ingredients are palm derived (5%). Some names are difficult to identify as palm-based ingredients as only some have palm within the name. Even though palm derived ingredients represent only around 5% of all the cosmetic ingredients listed in the INCI Dictionary, based on industry statistics, approximately 70% of cosmetics contain palm oil[39] and the cosmetic industry consumption is around 2% of global production.[40] Oleochemicals are used not only in cosmetics but home and personal care, health care, crop care, lubricants and coatings and polymers.

There is a move in certain industries to increase biobased feedstocks in place of fossil-based petrochemical sources. This is certainly true in H&PC but also in other industries too, either market driven or where customers have corporate targets for increasing their renewable raw materials. For the wider oleochemical industry, alternatives are much narrower: PO/PKO,

[39]https://www.bbc.co.uk/news/topics/c8gm48dd8pjt/cosmetics
[40] Interview with Chris Sayner, Vice President Customer Alliances, Corporate Sustainability Croda International Plc

coconut, rapeseed, sunflower and soya. Despite the alternatives, PO and PKO are favoured for many reasons, particularly the wide range of fractions they offer (*Figure 14*).

Figure 14. Certified Palm Kernel Supply Chain, Source RSPO

Significant market players such as large brands may produce finished products containing palm derivatives outside of the UK for sale in the UK market. As a result of this, there should be a focus on international companies with corporate commitments to support sustainable palm not just those based in the UK.

"The derivatives we manufacture in the UK are sold in the UK but also a significant proportion are sold throughout Europe and beyond. Our plants in the UK, Spain, Netherlands, US, Singapore are specialised in making certain products and there is a free flow of our finished products to and from the markets throughout Europe and beyond."[41]

The barriers to sourcing RSPO CSPO have largely been removed. The RSPO Mass Balance supply chain option lends itself well to oleochemical production, though it does require commitment to the certification of production plants, significant supplier engagement and costs associated to sourcing certified derivatives.

Animal feed

The AIC represents companies that, combined, produce over 95% of the compound animal feed marketed in the UK. Palm oil is used across the feed sector as a vegetable source of fat, fatty acids and triglycerides, providing essential fatty acids that cannot be synthesised by the animal itself, in order to aid in absorption of fat-soluble vitamins and to provide specific bio-active fatty acids. The UK animal feed industry (*Figure 15*) is estimated to use 40-50,000 tonnes of palm oil annually. Palm oil may be included in blended fats for ruminant feeds along with palm fatty acid distillate (PFAD) and mixed soft acids and PFAD usage is estimated at 16-20,000 tonnes annually (For more information on PFAD in the UK, see *Annex 6*).[42] The animal feed sector is

[41] Interview with Chris Sayner, Vice President Customer Alliances, Corporate Sustainability Croda International Plc

[42] AIC, 2019 https://www.feednavigator.com/Article/2019/08/07/AIC-launches-new-palm-oil-credit-purchase-scheme

also a large user of palm kernel meal, which is not included in the headline figures in this report on palm oil and palm kernel oil usage[43]. Imports of palm kernel meal in the UK accounted for 410,000 mt in 2018, a 28,000 mt decrease from 2017.

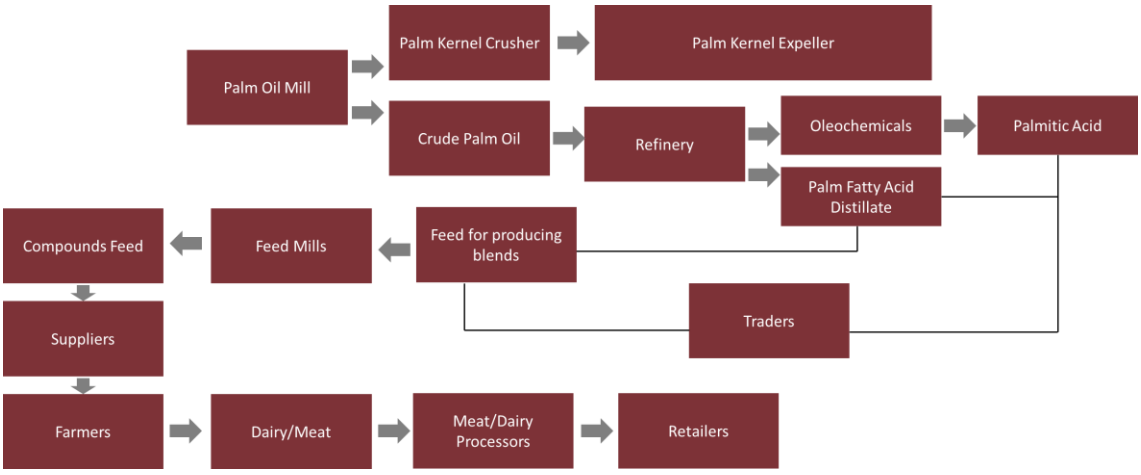

Figure 15. Palm oil animal feed supply chain (Source: Efeca)

This year the AIC has been granted permission to buy RSPO credits on behalf of all members via the AIC Palm Oil Credit Scheme (APOCS)[44], so that members avoid having to individually join RSPO with the associated fees and audit requirements. APOCS confirms a RSPO Credit purchase price for a defined quantity, carries out the transaction and provides the member with a traceability certificate for the quantity of palm oil purchased. A small fee is charged for this service. The system went live on the 5th of August 2019. Therefore, even for small quantities of palm oil within animal feed, companies must have a system in place in order to trace all purchases of palm oil, submit annual progress statements and complete audits. Additionally, feed manufacturers purchase a blended oil, which reduces the visibility of the palm oil itself. The current challenges with palm oil in the animal feed sector are to do with resources, cost and availability.

Food service industry

The food service sector faces multiple problems as companies endeavour to move towards 100% sourcing of sustainable palm oil. CGM and ingredient manufacturers tend to be RSPO certified; however, further down the supply chain, wholesalers and some manufacturers have limited RSPO membership and/or certification when supplying the foodservice sector. Most suppliers will also be aware of the products they sell and/or manufacture which contain PO or PKO, fractions and/or derivatives, and will have a system in place to record product information such as product specifications, internal monitoring systems or external systems.

The foodservice sector lags behind retail in the UK in terms of CSPO uptake. This may be due to the complexity of supply chains and, therefore, the traceability of ingredients, particularly when they are made from derivatives and are a component part of products. There is also less consumer pressure on the food service sector as opposed to retailers, and therefore a lack of

[43] From discussions with industry, the usage of animal feed is higher than this.
[44] Several larger members already buy RSPO credits directly

demand driving food labelling and sustainably sourced ingredients. As a result, product developers and technical buyers from manufacturers and retailers are usually unaware of CSPO requirements. Better enforcement of the Government Buying Standard (GBS) may help the industry to develop with regards to CSPO sourcing.

3. Ensuring a sustainable impact: global progress

This section provides an update on actions taken globally through national initiatives, changes to certification schemes, wider policies and communications to change both the narrative surrounding palm oil and work to create positive change on the ground, reducing deforestation. The UK SSPOI is actively engaged in the ongoing discussions, communications initiatives, and is working closely with other national initiatives to create alignment in activities but importantly in the messaging for sustainable palm oil. As a relatively small player in the global market, by working collectively on a global basis we can create systemic change for sustainably produced and consumed palm oil.

3.1. Updates from National Initiatives

The UK SPOI is an active partner in the European Sustainable Palm Oil Alliance (ESPO) and European Palm Oil Alliance (EPOA). Through this convening of national initiatives, the UK SPOI is able to share lessons on monitoring and reporting, aligning messaging where possible in our communications and working collectively to get the industry, the whole supply chain, to move forward to CSPO.

Those national initiatives committed to the Amsterdam Declaration have published targets to 2020 and progress on these can be found via the ESPO Project's report.[45] The most recent figures from 2018 published by MVO indicate that overall, 74% of the PO imported to the EU was CSPO (excluding palm oil use in biofuel). Additionally, 99% of palm oil imported into Europe is traceable to the oil mill. Over 84% of all palm oil is covered by company sustainability policies that focus on NDPE. However, inconsistencies existing in the reporting, and work continues to refine the accuracy of these figures.[46] The UK will continue to share lessons and approaches with EU Member States reporting under the Amsterdam Commitments, to improve data gathering and reporting, aiming to fill the gaps in the reporting of UK usage.

It is important to note that the monitoring across European countries is not aligned, with some countries such as the Netherlands and UK reporting on total imports and refinery figures to encompass the total CSPO figure, as opposed to other countries reporting on their national initiative members' data or specific sector progress. It was decided at the Amsterdam Group meeting in February 2018 that the various countries would continue to report as they have been doing according to their own scopes and methodologies, instead of attempting to align reporting along one methodology.

Individually and as a collective (via EPOA), the national initiatives, including the UK, are collaborating with new national initiatives being developed in China (via WWF with DFID FGMC Funding) and the Indian Sustainable Palm Oil Initiative India (with NGO, industry and government participation). As the two most important markets for palm oil, it is essential that the demand for SPO and CSPO is actively supported, and where possible is consistent with the 'market ask' from Europe.

[45] ESPO was established by IDH and MVO to drive uptake of CSPO in Europe in line with the Amsterdam Commitment. Their annual monitoring report can be found here:
https://issuu.com/epoa/docs/espo_progress_report_def_20190204?e=25838315/67555062
[46] https://issuu.com/epoa/docs/espo_progress_report_def_20190204?e=25838315/67555062

Conversely, a number of national platforms and initiatives in producer countries have been or are in the process of being established. For example, the Africa Palm Oil Initiative (Tropical Forest Alliance and P4F funded), and UNDP producer platforms in Indonesia and Papua New Guinea. These platforms bring together industry, government and civil society, to work towards a common goal of SPO, through technical support to producers (especially smallholders), national criteria and indicator guidelines for SPO production and in some cases national certification schemes (e.g. ISPO).

The UK SPOI is working to strengthen the links between consumer and producer platforms ensuring that a market for SPO is available, to encourage and support change on the ground.

3.2. Updates to certification standards

It is important for the UK SPOI to be engaged in, and kept abreast of, the developments, updates and progress, for all major certification schemes relevant to the UK palm oil industry and the members of the UK RSSPO. We are actively participating in all RSPO consultations (including recent changes to the standard) and dialogue processes (for example, RSPO RT in Thailand, November 2019), reporting back to the UK RSSPO, and engaging in dialogue with other national schemes (for example, in December 2018 we hosted a meeting with RSSPO members and Indonesian government and industry to discuss developments in the Indonesian standard, ISPO).

The two dominant global certification schemes that exist for palm oil production are the Roundtable on Sustainable Palm Oil (RSPO) and the International Standard for Carbon Certification (ISCC). The RSPO is a global, multi-stakeholder initiative on sustainable palm oil, compromising members from plantation companies, processors and traders, consumer goods manufacturers and retailers, financial institutions and NGO's globally. In October 2019, 4.02 million ha and 4.66 million tonnes were certified, representing 19% of global palm oil production.

During 2018, the RSPOs Principles & Criteria (P&C) were reviewed and subsequently improved (*see figure 16*). The certification standard now ensures members are addressing deforestation, peatland protection and conservation, human rights, labour rights and exploitation. Additionally, there is now an inclusive smallholder standard.

Figure 16. RSPOs Principles and Criteria

ISCC certifies the biomass and bioenergy industries, oriented towards the reduction of greenhouse gas emissions, and the promotion of sustainable land use, protection of the natural biosphere and social sustainability. ISCC distinguishes between two different chain of custody models (Mass Balance and Segregation) and in doing so fulfils the traceability requirements of the EU Renewable Energy Directive (RED) and the Fuel Quality Directive (FQD). The conversion of land with high biodiversity value or high carbon stock for the production of biomass is not allowed, and ISCC requires minimum GHG savings to be achieved. Currently, more than 3,300 companies in 100 countries are ISCC certified. Approximately 50% of users are active in the waste and residue processing areas, and the largest certified cultivation areas for agricultural and forestry raw materials in 2017 refer to rapeseed/canola, oil palm fresh fruit bunches (FFB) and corn/maize.

In addition, country specific supply chain certification standards include the Indonesian Sustainable Palm Oil (ISPO) certification system and the Malaysian Sustainable Palm Oil (MSPO) certification scheme. Both of these certifications are undergoing revisions and are being implemented at larger scales than in previous years. ISPO was launched by the Ministry of Agriculture in 2011 and was further updated in March 2015 to ensure the implementation of sustainability practices in the Indonesian palm oil plantation industry. A third version is expected to be brought into regulation soon by the Indonesian Government, focused on ensuring more smallholder engagement, clearer complaint mechanisms, and independent monitoring. From 2011 to 2017, only 16.6% of the total plantation area in Indonesia was ISPO certified (1.9 million hectares). There has been a recent push to certify more plantation area: the ISPO Commission has now certified 502 plantations, covering 4.11 million hectares of area, or nearly 30% of Indonesia's estimated 14 million hectares of palm plantation, according to the head of the ISPO Commission Secretariat.[47] The Commission Secretariat projects that the area covered by ISPO certified plantations will reach 5.5 million hectares by the end of 2019.[48]

The MSPO was initiated by the Malaysian government and formally implemented on a voluntary basis for Malaysian companies in 2015. The MSPO certification will be mandatory from January 1, 2020 and those companies that fail to obtain the MSPO certification by that date will face penalty. According to the Primary Industries Minister of Malaysia, about 55% or 3.19 million hectares (ha) of oil palm plantations in Malaysia have received the MSPO certification as of September 2019 (The original target was for all palm oil planters to be certified by the end of 2019.).[49] The government has allocated an MSPO incentive fund to lessen the burden borne by the palm oil industry players in meeting the requirements of the MSPO certification, but only those who have been certified or have applied for certification before January 1, 2020, are eligible for the incentives.[50] In addition, the MSPO certification is free for smallholders. All costs to train and guide smallholders until they are audit-ready are currently paid for by the MPOB.[51]

[47] https://www.reuters.com/article/us-indonesia-ispo/indonesia-certifies-a-record-amount-of-palm-plantations-as-sustainable-idUSKCN1R80GJ
[48] https://uk.reuters.com/article/indonesia-palm/indonesia-ispo-certified-palm-oil-plantations-seen-at-55-mln-hectares-by-2019-idUKL3N2631I9
[49] https://www.malaymail.com/news/malaysia/2019/11/11/minister-55pc-of-nations-oil-palm-plantation-mspo-certified/1808990
[50] https://www.freemalaysiatoday.com/category/nation/2019/10/04/oil-palm-estates-bigger-than-40ha-risk-fine-if-not-mspo-certified/
[51] https://mpi.gov.my/index.php/en/media-2/mpic-in-the-news/245-palm-oil-2019/6881-palm-oil-60-pct-of-oil-palm-plantations-have-mspo-certification

3.3. NDPE policies

Well-known companies are increasingly making public commitments to zero deforestation, no production on peatland, reduction of greenhouse gas emissions and the protection of human rights. These are referred to as NDPE (No Deforestation, No Peat, No Exploitation) policies. Most large international palm oil traders/refiners now have NDPE sourcing policies, including the four major UK refiners. In fact, 84% of palm oil imported into Europe in 2017 was sourced under NDPE policies.[52]

The palm oil produced under an NDPE policy can be described as sustainable, and in many cases is meant to go beyond legal or certification requirements, but it is not certified. While there is still no standardisation among NDPE policy drafting or monitoring, several NGO's believe that the policies have already had positive impacts upon deforestation rates in South East Asia, for example.[53] In a recent study, EIA noted that the NDPE policies have, roughly, halved the extent of deforestation for oil palm in Papua and West Papua as anticipated under a business-as-usual scenario and that a significant number of palm oil growers have halted forest clearance in order to comply with NDPE.[54]

To date, it has been difficult to police compliance to NDPE policies, and several growers have been shown to be in violation of their own commitments. For example, several major global palm oil buyers, including AAK, Bunge Loders Croklaan, IOI, Louis Dreyfus, and Wilmar, have recently had to suspend trading with BLD Plantation Bhd, a major palm oil producer and refiner operating in Sarawak, Malaysia, as the company was shown to be continuously clearing land in violation of their own NDPE commitment.[55,56]

In terms of reporting advances, the NDPE Implementation Reporting Framework (IRF) has been established by Proforest. It is a monitoring and reporting tool designed to allow palm oil companies all along the supply chain to report on progress in delivering NDPE commitments for the volumes they produce and purchase.[57] Still in development, currently more than 30 companies at all stages of the supply chain are involved, and it remains to be seen if this tool will be adopted widely to standardise reporting.

3.4. Jurisdictional and landscape approaches

Both jurisdictional and landscape approaches involving palm oil are increasingly being developed in grower countries. Companies are increasingly looking at jurisdictional approaches, recognizing the need to work beyond their own supply chain. As an important market development, we are thus engaging in dialogues (e.g. the TFA jurisdictional working

[52] www.idhsustainabletrade.com/uploaded/2019/01/EPSO_Vormgeving2019_DEF_31012019.pdf
[53] Chain Reaction Research (CRR), which has seen a decline between 2017 to 2018 of over 50% in deforestation attributed to the top 10 palm oil growing companies in Malaysia, Indonesia (Kalimantan, Sumatra, Sulawesi and West Papua) and Papua New Guinea, posits that continued uptake of NDPE policies by growers, traders and downstream companies, and renewed NGO focus on growers that violate NDPE policies, may have had an impact on dropping deforestation rates. This is in addition to the continued moratorium on new palm oil licenses in Indonesia, as well as declining palm oil prices making plantation development less viable.
[54] https://eia-international.org/wp-content/uploads/EIA-report-Promises-in-practice-spreads.pdf
[55] http://www.mightyearth.org/major-rogue-player-in-southeast-asias-palm-oil-industry-announces-zero-deforestation-policy/
[56] https://news.mongabay.com/2018/12/palm-oil-giant-wilmar-promises-to-take-a-harder-line-with-errant-suppliers/
[57] For more information see the website (www.ndpe-irf.net).

group), to ensure that acceptability by the market remains a key focus and sharing lessons back to the UK RSSPO.

Jurisdictional approaches are initiatives or programmes aimed at meeting sustainability goals across an entire administrative region, such as a state or county. Recognising that to address sustainability of production and meet voluntary corporate commitments for deforestation-free policies, companies may need to go beyond their own supply chain and consider the wider production landscape. While these new approaches may align with or incorporate other landscape-scale initiatives, such as watershed management, their defining features are a shared vision for sustainable action across a production or jurisdictional area, strong political leadership, and a robust monitoring framework. Landscape approaches on the other hand may focus on ecological units or watersheds rather than administrative units. Leadership may rest with NGOs or donor-led livelihood programmes rather than with the regional authority (as with jurisdictional approaches.)

For example, in 2015 the Malaysian state of Sabah launched a 10-year plan to ensure that all palm oil produced and processed in the state meets RSPO certification standards. This jurisdictional initiative seeks to give palm oil producers access to premium global markets without the cost burden of certifying farms or refineries individually. It also aims to focus on zero deforestation, zero conflict in palm production landscapes and strengthening livelihoods for smallholders. Currently 21% of the state's land area is planted in palm, totaling 1.54 million hectares and nearly a third of the planted palm has been RSPO certified. Many organisations are currently piloting projects at landscape level in palm oil producing countries. Among these, the Sustainable Trade Initiative (IDH, one of the initiators of ESPO) is implementing a landscape approach in different provinces in Indonesia.

3.5. Traceability

Transparency and traceability are essential to halt deforestation, not just for palm oil but also for other commodity supply chains such as beef and soya. Due to lobbying by Greenpeace, consumer brands such as Unilever, Ferrero and Mondelez have begun to disclose their mill lists to demonstrate they are not sourcing from areas of deforestation in their palm oil supply chains. Every company that has opened its supply chain to public scrutiny has been revealed to be sourcing from producers that are known to be clearing rainforests, exploiting their workers and/or embroiled in land conflicts with local communities, hopefully resulting in better enforcement in future.[58] Wilmar International very recently announced that the company will be supporting efforts by Aidenvironment to develop a comprehensive oil palm supplier group mapping database under the latter's Supplier Group Compliance Programme, which will enable land development activities of Wilmar's suppliers to be better monitored.[59] Cargill, Golden Agri-Resources, Louis Dreyfus Company, Mondelēz, Olam, Procter & Gamble and Unilever are among 80+ groups using GFW Pro, a new tool to see and prevent deforestation in their supply chains.[60]

[58] https://cdn.greenpeace.fr/site/uploads/2018/09/Final_Countdown_Pages_19092018lite-version-1.pdf
[59] https://www.wilmar-international.com/docs/default-source/default-document-library/highlights/sustainability/latest-updates/news-release-10-dec-18-wilmar-leads-palm-oil-industry-to-be-deforestation-free.pdf?sfvrsn=cdd4b269_0
[60] https://www.wri.org/news/2019/06/release-companies-can-now-quickly-and-accurately-monitor-deforestation-around-world

Commitment to palm oil concession mapping is a vital next step in ensuring mills are sourcing from certified and sustainable plantations, though progress to date has been slow. Wilmar are supporting the mapping of independent oil palm smallholder plantations in Indonesia and Malaysia using high-resolution satellite imagery, many of which are linked to independent mills in their supply chain.

3.6. Improving the image of palm oil

The need for balanced narrative and communications around sustainable palm oil, with clear and consistent messaging has been a point of discussion in the UK RSSPO in recent years. Following the Iceland's Christmas 2018 TV advert and the associated media coverage after the advert was banned by the ASA for breaching the rules on political advertising, there was a surge in coverage in mainstream and social media, and in parliamentary questions (in 6 months receiving more than in the previous two years), both in the UK and across Europe. In response, in mid-2018, the UK RSSPO established a communications working group.

This group has met four times to share lessons, information and importantly plan for more consistent messaging in 2020. Efeca conducted a review into the perception of SPO on a range of sources from NGOS, different consumer, social and environmental articles. This highlighted that on closer inspection, while there are reliable and trustworthy sources of information providing a more balanced message of SPO, there remains a number of more consumer facing platforms, including social media, with more negative messaging, A social media analysis by Efeca showed that google searches for 'palm oil' in the UK spiked in late 2018, with minor spikes in February and April 2019, and highlighted the differences between media sources in their messaging. For example, Instagram is more immediate and often negative; Facebook and Twitter are more balanced, although the Iceland advert gained rapid traction on Facebook, Whilst LinkedIn is the most balanced and positive towards both conventional and sustainable palm oil.

While there are signs of more balance in the narrative on recent radio channels and BBC and Netflix documentaries eluding to the significant volumes of palm oil used across consumer products and the benefits of palm oils productivity, there is still work to be done. As a result of media broadcast, there is now a heightened awareness amongst consumers on agricultural commodities driving global deforestation including palm oil, with 77% of consumers aware of what palm oil is and a further 41% perceiving it as environmentally unfriendly (more than double the level of any other vegetable oil examined[61]).

Following campaigns, consumer interest now appears to be slowing down, however media search activity in June 2019 still remained ahead of 2018.[62] Over the coming year the communications working group will be focusing on collating and sharing information, tools, guidelines etc. via the Efeca website; working closely with WWF and Chester Zoo; hosting webinars (over a 100 participants at our last one), seminars and other events, to continue to raise the awareness of SPO and the implications and practicalities of switching to alternatives. Through EPOA, we are continuing to collaborate on the Sustainable Palm Oil Choice (SPOC), a communications project, aimed at doing similar work to that of the UK.

[61] Peeling back the label—exploring sustainable palm oil ecolabelling and consumption in the United Kingdom
[62] Google trends

4. Conclusions

Overall, 2018 UK purchases of palm oil supported by Mass Balance, Segregated, and Identity Preserved RSPO certification (not including RSPO credits) have increased by 83% (268, 668 mt) since 2009, when total purchases represented 55,000 mt. According to FEDIOL figures, the volume accounted for by imports of Identity Preserved, Segregated and Mass Balance CSPO totals 323,688 mt (excluding PalmTrace and derivatives and finished goods), or 77% of total palm oil imports to the UK. RSPO credit purchases increased by 67% from last year.

While this headline figure demonstrates a significant improvement on the 2009 baseline and a 2% increase from last year, it also demonstrates that work remains to be done on reaching 100% sourcing. The remaining 23% of conventional palm oil (8% of this gap can be attributed to unsustainable volumes via the UK refineries) indicates that some sectors are lagging behind on sourcing CSPO or possibly not reporting on what they are buying. In addition, ingredients manufacturers, consumer goods manufacturers and retailers may be purchasing uncertified oil in a wide range of products (both food and non-food) as fractions and derivatives or finished goods directly from refiners in Europe or internationally.

The oleochemical, animal feed and food service sectors are all important users of ingredients and finished goods. Some palm oil fractions and derivatives come to oleochemical manufacturers directly from non-UK refiners and some palm kernel meal goes directly to animal feed manufacturers. But it is difficult to track palm oil imported into the UK in the form of finished goods or imported directly as ingredients to manufacturers.

There remain some obstacles to reaching 100% CSPO usage. In the food service sector, despite consumer pressure and negative media attention, and for ingredients and consumer goods manufacturers, there remain challenges to source physical certified fractions and derivatives. Additionally, there may be insufficient demand for physical CSPO from certain UK sectors unwilling to pay the premium for CSPO or unaware of the reasons to do so.

Efeca, through facilitation of the UK SPOI and RSSPO, is working across the UK industry, in particular with, foodservice sectors to increase awareness and drive sustainable sourcing throughout the supply chain, providing training, webinars and information to a range of actors including: TUCO, individual food service companies supplying both private and public sector consumers. This work will continue in 2020 with a focus on supporting the public sector and their service providers, through a public sector working group.

Furthermore, work on transparency is leading to progress in supply chain monitoring and enforcement of NDPE policies for many growers and traders, and 100% of the palm oil imported by the four major UK refiners is covered by an NDPE policy. In time, monitoring should improve, meaning that NDPE policies can be shown to be reducing deforestation further, ideally in line with certification requirements.

As the UK SPOI we can work with other EU and consumer platforms to share lessons on communications, monitoring and reporting, and driving a consistent market message. We will continue to link to producer platforms where necessary to bring producers along with us, make

sure we understand the issues, and are supportive of ISPO, MSPO and other national initiatives such as WWF China and the Indian Sustainable Palm Oil Initiative.

The need for balanced narrative and communications around sustainable palm oil, with clear and consistent messaging has been a point of discussion in the UK RSSPO in recent years. Following the Iceland's Christmas 2018 TV advert and the associated media coverage, an increase in parliamentary questions and social media messaging, the UK RSSPO established a communications working group. Over the coming year the communications working group will to raise the awareness of SPO and the implications and practicalities of switching to alternatives.

The UK RT SSPO can make an important contribution to the efforts of the private sector across Europe and further afield to remove deforestation from their supply chains, and to ensure fully sustainable palm oil supply chains by 2020. It will continue to report annually on progress in the UK.

As a relatively small player in the global market, by working collectively on a global basis we can create systemic change for sustainably produced and consumed palm oil.

Annex 1. Qualitative Updates from Roundtable Members

British and Irish Association of Zoos and Aquariums (BIAZA)
BIAZA is a conservation, education and wildlife charity representing over 100-member organisations including all the significant zoos and aquariums in Britain and Ireland. BIAZA's Environmental Impact and Sustainability Working Group aims to support members in helping to meet both local and global sustainability challenges. The group has a Sustainable Agriculture and Forestry (SAF) representative from a member organization, Chester Zoo, on this panel who reports to this group.

BIAZA and the SAF representative have in 2018 and 2019 continued to encourage their members to use sustainable palm oil, reflecting our palm oil statement and guidance. A wider palm oil communication group continues to share information across our members regarding sustainable palm oil updates and news from members.

We have provided updates from three of our members below:

Chester Zoo

- Following the successful Westminster Parliamentary Lunch Reception held in 2018, Chester Zoo hosted a second event alongside EFECA and WWF in Autumn 2019. The event was themed around navigating public opinion on sustainable palm oil and brought together marketing and communication professionals on the food service, retail and manufacturing sectors.
- In March 2019, the City of Chester became the first sustainable palm oil city in the World following a campaign led by the zoo and key partners. Edsential, the main provider of primary school meals in Cheshire, became the worlds' first provider of sustainable palm oil school meals. Over 50 organisations signed up to the campaign and changed their supply chain to ensure businesses in Chester were providing only sustainable oil products to customers. The campaign has further been rolled out and officially launched in Oxford, partnering up with Sumatran Orangutan Society (SOS), and we have a number of other cities starting their journey. These cities will continue to work with Chester Zoo so that data can be shared for further research.
- We have embarked on new partnerships with organisations in the food service business to promote sustainable palm oil use in the UK and also to further our work in the field in Sabah, Malaysia. This includes working on number of reforestation projects in oil palm plantations, and new research is beginning through an MSc this year to begin the monitoring of some of these plots.

BIAZA's SAF representative (Cat Barton) continues to engage with the European and worldwide zoo and aquarium community. Cat now chairs the Sustainable Agriculture and Forestry working group of the European Association of Zoos and Aquaria (EAZA), with now includes a palm oil and a soy subgroup. Cat is also a member of The World Association of Zoos and Aquariums (WAZA) palm oil group who are working on a number of initiatives to increase sustainable palm oil usage worldwide. One of these includes a sustainable palm oil app which, once launched, can be used in the UK and in other WAZA zoo countries.

Our media role on sustainable palm oil has increased, with Cat giving two interviews on BBC Breakfast and interviews alongside EFECA on BBC Look North's documentary. Cat has given a number of talks at conferences including TUCO, Sheffield University's 'Sustainable Palm Oil or Utopia' event and Royal Mail's 2019 The Forum: Climate change conference. Jenny Tegg (Head of Marketing) delivered a behavior change workshop focusing on sustainable palm oil at the 2019 Conservation Optimism conference, alongside BZS and SOS.

Bristol Zoological Society (BZS)

This year Bristol Zoological Society have been strengthening their external collaboration and public awareness of sustainable palm oil. Below are some of the highlights so far:

- Katie joined the Soil Association's newly established Deforestation and Palm Oil Task and Finish Group, which is responsible for developing the Soil Association's palm oil position and recommended standards to members.
- Working with Bristol City Council to integrate sustainable palm oil standards into existing city schemes. Achievements include changing the Bristol Better Eating scheme's palm oil standard to supporting CSPO, and efforts are being made to include CSPO standards in the City's Going for Gold project.
- BZS have been collaborating with NBPOL and visited their plantations in West New Britain, Papua New Guinea. The BZS team conducted rapid biodiversity assessments of the plantations and HCVA and carried out interviews with local villages. A report is currently being written.
- Katie has given numerous public talks on sustainable palm oil (including at Shamabala, Bristol Food Connections Festival and at the BBC) as well as three radio interviews on sustainable palm oil (including Radio 4's The Food Programme)
- BZS recently updated their palm oil position statement.

Wild Planet Trust

- Wild Planet Trust has been working hard on its sustainable palm oil initiatives over the last year, which have been driven by a new internal Palm Oil Working Group. This includes publishing a revised organisation palm oil policy (available here:https://www.wildplanettrust.org.uk/wild-conservation/sustainable-palm-oil/), ensuring that all foods sold to visitors on site only contain palm oil from sustainable sources, and integrating sustainable palm oil awareness into our education and outreach activities.
- In addition, through our Newquay Zoo site, we have recently partnered with the Newquay Supports Sustainable Palm Oil (NSSPO) initiative, with whom we are collaborating to raise awareness and promote behaviour change through use of the Giki Badges app. This culminated in a joint event with NSSPO and Giki at Newquay Zoo, which led to high downloads of the app and was well attended by local town councils (see here:https://www.newquayzoo.org.uk/explore/news/detail/zoo-keeps-it-sustainable-with-palm-oil-event).
- Research is also underway to understand public awareness of palm oil around Newquay. We are currently developing plans to expand this work in 2020.

British Retail Consortium (BRC)

BRC members are continuing to work collaboratively across the retail industry to strengthen sustainable palm oil standards and build transparency of the supply chain. Retailers are the

consumer-facing organisations at the end of complex palm supply chains and despite having little direct influence over the primary production practices of suppliers, retailers acknowledge that they can commit and engage across the supply chain in response to consumer's responsible sourcing preferences.

This involves committing to RSPO certified products, engaging with suppliers, and acting as members of the UK Roundtable on Sustainable Palm Oil, the Palm Oil Transparency Coalition (POTC), and/or the Retail Palm Oil Group. These groups – comprised of retailers, processors, and suppliers – are working together to remove deforestation and exploitation from their supply chains. The aim of which is to develop a harmonised process for assessing the performance of the importation of palm products into the UK and Europe. Certified palm oil remains the most effective way to limit the risk of deforestation within retail supply chains.

As a part of BRC's *Better Retail Better World* campaign, supermarkets, food service and non-food retailers are coming together to learn about the challenges of certifying sustainable palm oil as it relates to different products. In August 2019, a group of retailers attended a workshop run by Efeca and BRC to better understand how to eliminate deforestation across retail commodity supply chains.

Sustainable Restaurant Association (SRA)

The Sustainable Restaurant Association (SRA) is a not-for profit organisation whose membership represents a broad spectrum of the hospitality industry, all united in their commitment to sustainability and making positive changes towards a better food system. The SRA framework pillars of Sourcing, Society and Environment take a broad and holistic view of sustainability.

The SRA encourages and supports its members to produce sustainable palm oil sourcing policies and to share their intentions and actions for sustainable palm oil sourcing to their customers, suppliers and fellow food service businesses.

The SRA has been working closely with Efeca on informing its members about recent developments in the palm oil sector. In 2018 and 2019 the SRA and Efeca have hosted workshops and a webinars for SRA members, which have been well received. As a result Efeca has produced additional support material for SRA members to be better equipped to communicate with suppliers about their palm oil standards.

SRA's Food Made Good online community hub is a platform for members to discuss current sustainability topics, including sustainable palm oil. Food service businesses from different sectors are encouraged to share knowledge and best practice, discuss challenges and find common solutions. The topic of sourcing sustainable palm oil has been of particular interest to the contract caterer and university sectors.

Whilst there are still a number of challenges for being able to report on progress in sourcing sustainable palm oil in any detail, this year has seen an increased interest in the topic. The SRA will continue to work closely with Efeca on supporting its members in this area.

Zoological Society of London (ZSL)

As an international wildlife conservation charity, ZSL (Zoological Society of London) works to influence both the public and private sectors on sustainability issues. The Business & Biodiversity team at ZSL leads on the delivery of the SPOTT initiative, a free online platform assessing commodity producers, processors and traders on the public disclosure of their policies, operations and commitments related to environmental, social and governance issues. SPOTT scores tropical forestry, palm oil and natural rubber companies annually against over 100 sector-specific indicators to benchmark their progress over time.

ZSL published two reports this year aimed at improving transparency and sustainability in the palm oil sector. The first report, *Smallholders: key to building sustainable palm oil supply chains*, finds that there is a lack of disclosure by palm oil producers and traders on both the extent and locations of smallholders within their supply chains, and that the scope and breadth of support provided by companies to smallholders varies widely. The report also provides recommendations to companies to increase their transparency and build more smallholder inclusive supply chains. The second report, *Committed to sustainable palm oil?*, finds that several RSPO member companies have made pledges to source deforestation- and exploitation-free palm oil by 2020 – including to become 100% RSPO certified - yet most of them are far from reaching their targets. Many other RSPO members have set far less ambitious targets.

Thirty new palm oil companies were selected for inclusion on SPOTT this year, with an emphasis on increasing company coverage in frontier areas for palm oil development (Latin America and Africa) and palm oil refineries and crushers. Following feedback from over 30 organisations, the SPOTT indicator framework was also updated to more systematically capture practices undertaken by companies to implement their commitments as well as to allow users to recognise three broad types of information captured during the SPOTT assessments: organisational information (e.g. landbank), policies and processes, and practices taken by companies to implement their policies and commitments (self-reported, externally verified, and audited through certification systems). Users will also be given the ability to apply weightings to these categories of information following developments planned on the SPOTT website later this year. These changes will allow users to better see whether companies are in fact taking action to deliver their commitments and will also make SPOTT a more interactive model, where users can easily modify the way in which companies are scored to reflect their specific requirements. The SPOTT team also launched pilot assessments for six refineries in April – a new supply chain segment added to SPOTT this year, and key bottleneck in the supply chain – and has increased its engagement with downstream buyers to ensure the relevance of SPOTT to support corporate buying practices.

The latest SPOTT assessments of 70 palm oil producers, processors and traders were launched in November 2018. The assessments found that although 49 companies have committed to some sort of zero-deforestation pledge, many of their targets lack scope and on-the-ground verification – limiting their effectiveness in addressing deforestation and leaving significant areas of tropical forests at risk of destruction to produce palm oil. The next palm oil assessments are scheduled to launch in late October.

ZSL also published SPOTT assessments of 97 timber and pulp producers and traders in July 2019. The assessments found that only 6% of the world's most significant timber and pulp

producers and traders with operations in the tropics are taking steps to assess the impacts of climate change – posing a risk to the forestry industry and all its investors. After the successful application of the SPOTT model in the palm oil and the timber and pulp sectors, ZSL plans to expand SPOTT to cover natural rubber production. The initial focus will be private sector companies with large-scale rubber plantations – i.e. those associated with the largest potential environmental and social impacts and with the largest capacity to bring about the required transition into more sustainable rubber production. *Fifteen natural rubber companies* will be assessed this year, with assessments scheduled to launch by the end of the year.

ZSL also continues to be an active member of the Roundtable on Sustainable Palm Oil (RSPO), serving as an alternate member on its Board of Governors and substantive member of the Biodiversity and High Conservation Value (HCV) Working Group, Smallholder Interim Group (SHIG), and No Deforestation Task Force (NDTF). ZSL attended the Tropical Forest Alliance Annual Meeting in Colombia in May and Sustainable Palm Oil Dialogue in the Netherlands in June. Additionally, ZSL is a New York Declaration of Forests (NYDF) Assessment Partner and contributed to the annual NYDF Goal 2 progress update to be published in September 2019.

Together with the British and Irish Association of Zoos and Aquariums (BIAZA), ZSL continued to promote sustainable behaviour change among visitors and best practice in zoological management. Although good progress has been made in the sector, one of the main barriers preventing zoos from reaching 100 per cent sourcing of CSPO is the current lack of traceability, levels of RSPO membership and uptake of RSPO certification in animal feed supply chains. ZSL published an updated Palm Oil Position Statement outlining its 2020 commitments to source 100% sustainable palm oil and to transform the palm oil sector through our SPOTT initiative and on-the-ground conservation programmes. SPOTT was also awarded a BIAZA Gold Award for Sustainability in June 2019.

The Food and Drink Federation (FDF)

The Food and Drink Federation (FDF) is the voice of the UK food and drink manufacturing industry. Food and drink is the largest manufacturing sector in the UK (accounting for 19% of the total manufacturing sector) turning over £104bn per annum; creating GVA of £31.1bn and employing over 450,000 people. FDF represents over 250 food and drink manufacturers, ranging from large corporation to SME's, many of which have their own individual positions and, in some cases, targets on achieving sustainable palm oil.

FDF's Ambition 2025, our environmental ambition launched in 2016, includes the commitment to promote the recognition and uptake of sustainability standards and initiatives in the food and drink sector which, in our mind, includes the increased uptake of sustainable palm oil.

The Ambition 2025 Annual Progress Report 2018 includes an update on the Sustainability Resource Hub which contains information on voluntary certifications, collaborative platforms and practical tools available to businesses looking to further their sustainability agenda. The Hub was launched to FDF members in July 2017 and to the public in January 2018. It includes information related to RSPO and RSPO NEXT, Palm Oil Innovation Group and Tropical Forest Alliance 2020 and IDH Sustainable Trade Initiative.

FDF has a number of resources available on its website to help businesses transition to sustainable palm oil, including a palm oil Q&A and publication 'Sustainable Palm Oil – Five steps to ensure responsible sourcing.'

Through the UK Roundtable on Sourcing Sustainable Palm Oil, FDF backs the commitment to Support 100% Sustainable Palm Oil in Europe by 2020. A number of challenges remain in the transition to 100% sustainable palm oil, a target that FDF is committed to contributing to through collaborative action with all stakeholders across the supply chain.

Annex 2. Stakeholder questionnaire

A stakeholder survey is sent to RT members in order to triangulate the headline figures of CSPO in the UK and ensure that the industry are in agreement with the percentages and volumes published, and if not, we can recheck data and ask further questions to those that provided it. This allows us to ascertain the figures published are accurate and in line with market data and information, not publicly disclosed.

	Background The Roundtable on Sourcing Sustainable Palm Oil has signed the Amsterdam Declaration to work towards 100% sustainable palm oil supply chains in Europe by 2020 and has agreed to continue reporting on sustainable palm oil consumption in the UK. Efeca has produced a draft Annual Progress Report (APR) focusing on the import of palm oil in the UK as the core indicator of sustainable consumption of palm oil for the UK. The results of the APR are addressed in this questionnaire. **About this survey** Your input into this APR is essential to our analysis. The survey consists of **15 questions** and should take approximately **15 minutes** to complete. Please complete the survey by **November 14th** at the latest. In the following, we would like to ask for your views on our initial preliminary findings. Please note that the findings have not yet been approved for publication and may change. If you would like to share our preliminary findings externally, please contact us. We would also like to gather your input on obstacles to sourcing 100% and ideas on where further support would be helpful. **How to complete this survey** Please select the answer(s) that best reflect your view and make as many comments as you would like. It would be very helpful if you can provide examples that support your views. Note that some questions have an option to select more than one answer and you can always insert comments. If you would like more information or need help completing this questionnaire, please email us at info@efeca.com.
	Methodology for 2018 analysis
	As an indicator for the consumption of sustainable palm oil in the UK this analysis has focused on total imports to the UK and the total proportion from the UK refineries that is RSPO CSPO via the supply chain models of identity preserved, segregated and mass balance (excluding derivatives, ingredients and finished goods). Total volumes of UK imports of palm and palm kernel oil have been gathered from one data source: FEDIOL (representing the EU vegetable oil and protein meal industry). Purchases of RSPO Credits by UK headquartered companies are excluded from the headline figure due to the risk of double counting. For additional commentary on progress on the

	sustainable consumption of palm oil in the UK among Retailers and Consumer Goods Manufacturers, RSPO ACOP data has been used.
1	Do you have any comments on the methodology used?
2	Do you have any comment on the use of FEDIOL as the main data source?
3	Do you have any comment on potential non-refinery imports we should include in our analysis?
4	Do you have any comment on other trade data sources that should be considered during the analysis?
	Summary findings - your views
5	Do you agree or disagree with the estimate that in 2018 approximately 323,688 metric tonnes of UK imports of palm and palm kernel oil were sustainable through mass balance, segregated or identity preserved Certified Sustainable Palm Oil?
6	Do you agree or disagree with the estimate that 127,884 metric tonnes were sustainable as accounted for by RSPO Credits?
7	The preliminary findings indicate that volumes of mass balance and segregated Certified Sustainable Palm Oil showed a decrease, while the number of RSPO Credits purchased in the UK increased greatly since 2017. Please comment based on your experience on what you think may be driving these trends.
8	Do you agree or disagree that the 323,688 metric tonnes of UK imports of palm and palm kernel oil represent 77% of UK palm oil consumption, or do you feel some import data is missing from this analysis?
9	Do you agree or disagree that 33,552 metric tonnes of UK imports (8%) of palm and palm kernel oil imports is sold as 'non sustainable' palm oil via the refiners?
10	Therefore, do you agree or disagree that there is a remaining gap of untracked material equating to 63,760 metric tonnes (or 15%) of UK imports of palm and palm kernel oil?
	Meeting the 2020 Amsterdam Commitment
11	Did your sector or trade association members source 100% CSPO by the end of 2018?
12	If not, what were the main obstacles to sourcing 100% CSPO?
13	Has your sector or trade association set a new target moving forward?
14	How will you communicate the Amsterdam Commitment to your stakeholders?
15	What actions can the private sector, NGO's, and the government take to support progress towards sourcing 100% credibly certified sustainable palm oil?
	Please feel free to make any additional comments you would like.

Annex 3. Summary of Stakeholder Survey results

The Stakeholder Survey was sent to 153 stakeholders, including all major trade associations. Out of the 153 stakeholders contacted, 9 responded. Many respondents skipped several questions.

1. Do you have any comments on the methodology used?
• Top-Down analysis is the most realistic approach to take. But given unlimited resources, you would want to do both top-down and bottom-up approaches and see how closely they can be reconciled. Or at least try and do this for things such as palm oil embedded in imported products. • We are looking at trying to reach 100% sustainable PO & are including MB/SG/IP in this, however there are a large number of conventional mill supplies associated with MB that are not verified as sustainable. The RSPO states that MB can only claim to contribute towards sustainable production. • N/A as we are a trade organisation for retailers - they will comment on what works best from their perspective

2. Do you have any comment on the use of FEDIOL as the main data source?
• N/A as we are a trade organisation for retailers - they will comment on what works best from their perspective • Not clear on what other sources are available.

3. Do you have any comment on potential non-refinery imports we should include in our analysis?
• Essentially any product potentially containing palm oil that's not manufactured in the UK • What about other palm oil fractions or derivatives such as PFAD, Palm stearin, palm acid oil, olein, PKE meal & POME? • N/A as we are a trade organisation for retailers - they will comment on what works best from their perspective

4. Do you have any comment on other trade data sources that should be considered during the analysis?
• N/A as we are a trade organisation for retailers - they will comment on what works best from their perspective

Summary findings - your views

5. Do you agree or disagree with the estimate that in 2018 approximately 323,688 metric tonnes of UK imports of palm and palm kernel oil were sustainable through mass balance, segregated or identity preserved Certified Sustainable Palm Oil?	
Agree	**Disagree (please comment below)**
5 (71.43%)	0 (0%) (2 out of 7 did not answer)

- Don't really have a basis to evaluate this independently and to disagree. I agree this is the best number we have available.
- But previous comments re: MB I think should be considered.
- I cannot comment on this

6. Do you agree or disagree with the estimate that 127,884 metric tonnes were sustainable as accounted for by RSPO Credits?	
Agree	**Disagree (please comment below)**
4 (66.67%)	1 (16.67%)

- Don't really have a basis to evaluate this independently and to disagree. I agree this is the best number we have available.
- Unable to comment – data not readily accessible
- Same as previous - credits do not necessarily equate to sustainably produced
- It is possibly true but what about other sustainable methods of PO? These are not included.

7. The preliminary findings indicate that volumes of mass balance and segregated Certified Sustainable Palm Oil showed a decrease, while the number of RSPO Credits purchased in the UK increased greatly since 2017. Please comment based on your experience on what you think may be driving these trends.	
Companies switching from GreenPalm to mass balance or segregated	Reformulation of products to reduce palm oil content
3 (50%)	3 (50%)

- I don't have data to support an evaluation of this trend. My theory would that there isn't a direct connection between the two trends. Credits grew as more businesses started to implement palm oil policies. Declines in mass-balance and segregated could well be, in part, caused by reformulation of products. Also, by wider market trends
- N/A as we are a trade organisation for retailers - they will comment on what works best from their perspective
- Both of the above. Some companies do not see the benefit of MB, for the reasons given & so pay less of a premium for credits while in the process of changing to verified SG sourcing. We have also heard of formulations being changed and some moving out of palm wherever possible.
- In the drive to make palm oil more sustainable some manufacturers have removed PO from the recipe - this will account for some of the decrease in MB.

8. Do you agree or disagree that the 323,688 metric tonnes of UK imports of palm and palm kernel oil represent 77% of UK palm oil consumption, or do you feel some import data is missing from this analysis?	
Agree	**Disagree (please comment below)**
4 (66.67%)	1 (16.67%)

- Don't really have a basis to evaluate this independently and to disagree. I agree this is the best number we have available.
- Unable to comment – difficult to determine from data available

• Certainly missing some data - as a food service company we use a lot of CSPO but because we are not RSPO members we cannot declare this.

9. Do you agree or disagree that 33,552 metric tonnes of UK imports (8%) of palm and palm kernel oil imports is sold as 'non sustainable' palm oil via the refiners?	
Agree	**Disagree (please comment below)**
4 (66.67%)	0 (0%)
• I cannot comment on this. • Don't really have a basis to evaluate this independently and to disagree. I agree this is the best number we have available.	

10. Therefore, do you agree or disagree that there is a remaining gap of untracked material equating to 63,760 metric tonnes (or 15%) of UK imports of palm and palm kernel oil?	
Agree	**Disagree (please comment below)**
4 (66.67%)	0 (0%)
• As above - unable to comment • Don't really have a basis to evaluate this independently and to disagree. I agree this is the best number we have available. • N/A as we are a trade organisation for retailers - they will comment on what works best from their perspective	

Meeting the 2020 Amsterdam Commitment

11. Did your sector or trade association members source 100% CSPO by the end of 2018?
• Don't know exactly. Most UK retailers are at or near 100% CSPO currently. • No • No • No • No • Yes

12. If not, what were the main obstacles to sourcing 100% CSPO?
• None. At a minimum buying RSPO credits is easy for any business. It is just a question of resource. For other supply chain types, it's a mixture of supplier engagement and management + the availability of certified ingredients for various types. • Move from GreenPalm to RSPO Credits; relatively small quantities used; No direct market signals from further up the supply chain to do so • Demand has been the issue • Gaps on knowledge and the ability to audit our supply chain

13. Has your sector or trade association set a new target moving forward?
• To meet Amsterdam commitment of fully sustainable sourcing by end of 2020 • Yes, a broader scope of deforestation in line with Sustainable Development Goal 15: By 2020, promote the implementation of sustainable management of all types of forests,

halt deforestation, restore degraded forests and substantially increase afforestation and reforestation globally. • No • Yes • Yes. We want to ensure 100% CSPO by Dec 2020.

14. How are you communicating the Amsterdam Commitment to your stakeholders?
• AIC is providing a means for its feed sector members and feed assurance scheme participants to purchase RSPO Credits as an alternative to each business joining RSPO directly. Communication is via member business channels and briefings. • We are continuing to promote RSPO SG verified sustainable sourcing as a way of ensuring compliance to company policies & meeting the 2020 Amsterdam Declaration commitments • Via Company policies shared in Supplier Manuals/Code of Conduct and website.

15. What actions can the private sector, NGO's, and the government take to support progress towards sourcing 100% credibly certified sustainable palm oil?
• Need to be more resources to explain how certified palm oil fits into a theory of change that helps to save tropical deforestation. Education of the public and key communicators and influencers. NGO such as Greenpeace play a valuable role as critics, but also if they destroy demand for sustainable oil, they are also destroying the ability to drive reform in the RSPO and for companies to project influence down the supply chain. The government can help by driving transparency and supporting minimum sourcing standards. • Provision of up to date & credible data; encouragement for businesses to join RSPO or use the RSPO Credits scheme. Most push comes from environmental campaigns at the moment – relies on purchaser's ethical views or marketing potential; no commercial incentive to source sustainably. • Transparency of all actors in the supply chain and their targets / commitments so we can all progress forward. • The government could follow the principles of the RSPO models & only accept verified sustainable imports SG/IP or MB only if SG is not available • More and better communication tools

Please feel free to make any additional comments you would like.
• RSPO needs to do more to promote its new Principles and Criteria 2018 standard to all stakeholders. There remains a perception in UK media that RSPO certification is not sufficiently robust to protect against deforestation. • The RSPO as a standard loses some credibility if the principles are not stuck to. From the outset it was said that MB is only a stepping stone to SG & should only be used where SG is not available. If we keep referring to credits & MB as sustainable then organisations will buy them as they can, & make out they are procuring sustainable material when in reality without independent verification we all know the likelihood is that this is not the case • Make it easier to become a RSPO member, at local level not parent company level.

Annex 4. Methodology 2016-2018

This Annex describes in detail how the total of UK sustainable palm and palm kernel oil, as a percentage total of total UK consumption was calculated. This analysis builds on the methodology used to obtain estimates of UK sustainable palm oil consumption in the Defra research report (2011) 'Mapping and Understanding the UK Palm Oil Supply Chain (EV0459)', undertaken by Proforest, and the methodology of previous Annual Consumption Reports (ACR's) prepared by CPET from 2012 – 2015.

The initial 2011 Defra report estimated 643,400 mt of palm oil imported in 2009 including PO and PKO, including direct fractions, olein and stearin and palm fatty acid distillate. These 2009 import figures were developed using trade data. Imports of finished products, derivatives, oleochemicals and PKM were excluded from the 2009 estimate. The 2012 – 2015 ACR's used the same methodology.

Consequently, to ensure that the 2009 estimate can be used as a baseline, and a comparison can be made with the 2012 – 2015 figures, this study also excluded imports of finished products, oleochemicals and derivatives from the import figures. We have included additional information on imported finished products, derivatives and fractions, and various palm oil using sectors under section 2.

Estimating UK consumption of sustainable palm oil and palm kernel oil

The highly complex nature of palm oil (PO) and palm kernel oil (PKO) supply chains means that it is not currently possible to develop a reliable indicator of total palm oil use in the UK, including PO and PKO found in finished goods.

However, volumes of PO and PKO imported into the UK were used in the Defra research report (2011) and the subsequent Annual Consumption Reports (2012-2015) as a reliable indicator of consumption in the UK market and consequently have also been used for this Annual Progress Report (APR).

Previously, CPET included UK palm oil purchases supported by RSPO certification including Identity Preserved, Segregated and Mass Balance Certified Sustainable Palm Oil products as well as GreenPalm's Book and Claim system in the calculations for the ACR's from 2012-2015 (based on the 2011 Defra research report). As agreed in 2016 by the Roundtable on Sourcing Sustainable Palm Oil, a stakeholder group of industry associations and NGO's, the APR now reports RSPO credit usage as separate from the headline figure.

Imports of sustainable PO and PKO

Total volumes of UK imports and sales of PO and PKO have been gathered from two data sources, FEDIOL and Oil World, for the years 2009, 2010, 2011, 2012, 2013, 2014, 2015, 2016, 2017 and 2018. Both FEDIOL and Oil World use trade data from EUROSTAT, taking into account the same tariff lines for palm oil and palm kernel oil. EUROSTAT relies upon submissions of trade data from individual countries.

FEDIOL uses EUROSTAT data, without any further revision, although it collects the EUROSTAT data later in the year once it has been refined. Oil World on the other hand uses trade

intelligence to refine their estimates of PO and PKO data including imports into the UK and includes PFAD in their total palm oil imports.

As agreed by the Roundtable on Sourcing Sustainable Palm Oil, a stakeholder group of industry associations and NGO's, this APR will report one headline figure based on the FEDIOL baseline data. This was decided because stakeholders wanted to align with Eurostat data as much as possible, in order to mirror what other European countries are measuring.

The volume of palm oil supported by RSPO supply chain models was estimated by collating the submissions of data generously provided from UK refineries with the help of the Seed Crushers and Oil Processors Association (SCOPA). This was used to estimate the proportion of PO and PKO imports accounted for by Mass Balance, Segregated and Identity Preserved CSPO.

Consumption of Palm Kernel Meal

Total volumes of UK imports of PKM have been gathered from two data sources, FEDIOL and Oil World, for the years 2009 - 2018. FEDIOL figures have been listed in the main body of the report.

Consumption of sustainable PO and PKO by Consumer Goods Manufacturers and Retailers

Volumes of PO and PKO reported in the RSPO ACOP 2017-18 were used to analyse UK RSPO Retail and Consumer Goods Manufacturers Members sustainable palm oil consumption in the Sector sections listed under Section 2. [63]

Stakeholder consultation

An online questionnaire (found in Annex 2) was sent to key stakeholders. Questions were designed to triangulate the trade, refinery and RSPO ACOP data with stakeholder views, by asking stakeholders to select their relevant sector and choose which set of import figures best reflect their experience.

This approach aimed to enhance the levels of stakeholder feedback from the previous study, whilst maintaining commercial confidentiality. The questionnaires also allowed the opportunity for stakeholders to comment and provide their own estimates and data where they wished.

Final analysis

Once stakeholder feedback on the initial estimates had been gathered, figures were refined.

Assumptions and Limitations

Due to the complex nature of palm oil supply chains and the availability of data it has been inevitable that a number of assumptions have been made at each stage of the analysis. Where possible these have been in line with the previous research and/or informed by stakeholder engagement. This section explains what assumptions have been made during the analysis.

Calculating the total consumption of UK palm and palm kernel oil:

- Total UK consumption has been defined as the total imports in volume for a given year (metric tonnes). UK imports are based upon solely EUROSTAT data provided by FEDIOL.
- Derivatives/fractions and finished goods have not been included in the import figures. This means that the import figures are likely to be an underestimate.

[63] http://www.rspo.org/en/annual_communications_of_progress

Calculating the volumes of sustainable palm and palm kernel oil:

- This analysis defines CSPO differently from previous reports, which included RSPO supply chain models Mass Balance, Segregated and Identity Preserved Certified Sustainable Palm Oil and RSPO credit certificates. This report does not include RSPO credit certificates in the headline figures.
- The 2011 Defra research report identified a range of companies that imported palm oil into the UK. As the major importers of palm oil into the UK (as substantiated by stakeholder engagement) this analysis refined the original approach taken in 2011 and focused solely on the refinery data, as the most robust means to capture the upstream supply sustainable palm oil in the UK. Refiners provided sales data, as opposed to import data. Sales and import figures are assumed to be essentially the same, though a very minor amount of palm oil and palm kernel oil may be lost in the refining process.
- It should be noted that the estimate of imports of Segregated, Mass Balance and Identity Preserved Certified Sustainable Palm Oil (CSPO) is likely to be an underestimate as it is based upon import data from UK refiners only and excludes imports by other companies.
- The RSPO Annual Communication of Progress data was used to assess the downstream consumption of sustainable palm oil for the UK (the 'consumer goods producers' and 'retailer' classifications), although this is likely to be an underestimate as it excludes purchases made by non-RSPO members. All UK registered companies were included in the analysis. This consumption data was not included in overall figures showing sustainable palm oil consumption in the UK.
- In addition this study also includes information about palm oil consumption for biofuels under the International Sustainability & Carbon Certification as sustainable for biofuels reported under the Renewable Transport Fuel Obligation (RTFO) and Renewables Obligation (RO) as listed in Annex 5.

Annex 5. Biofuels

Sustainable consumption of palm oil within the biofuels sector is controlled by the Renewable Fuels Transport Obligation (RFTO) and the Renewable Obligation (RO). The statistics of the RFTO are in their eleventh year of reporting with the most recent running from the 15th April 2018 to the 31st December 2018. Volumes of total as well as sustainable palm oil used in biofuels were gathered from the RFTO statistics for the last 11-year periods and were used to produce the below figure. It should be noted that this RFTO reporting calendar does not directly correspond to the reporting calendar used by RSPO's Annual Communication of Progress. Biodiesel made from palm has been supplied to the UK in previous years, most recently in 2014/15. Table 3 shows that palm oil was used as a feedstock in both the biofuels: biodiesel and biopropane between April and December 2018, sourced from Malaysia and Indonesia.

Table 3 data based on provisional data from DfT renewable fuels, data from 15th April to 31st December 201864

Fuel type	Feedstock	Country of origin	Volume (million litres)	Total volume of fuel type (million litres)	% of total fuel type	% of total UK biofuel
Biodiesel	Palm	Honduras	5.5	886.7	3.1	0.4
		Indonesia	21.7			1.4
	Empty palm fruit bunches	Indonesia	7.2		0.8	0.5
	Palm oil mill effluent	Indonesia	6		1	0.4
		Malaysia	2.5			0.2
Biopropane	Palm	Indonesia	7.3	20.3	61	0.5
		Malaysia	5.1			0.3
	Palm Fatty Acid Distillates	Malaysia	2		10	0.1
Off road biodiesel	Palm oil mill effluent	Indonesia	0.3	11.5	2	0

Palm oil was used in 3.1% of biodiesel, 27.2 million litres, whilst palm oil usage in biopropane was the main source, 61%, contributing 12.4 million litres. Overall biofuel usage in 2018 was 1505 million litres, palm oil in Biopropane and biodiesel contributed 2.6%. Palm Fatty Acid Distillate (PFAD), palm oil mill effluent and empty bunches have also been used but are not included in this total figure because they are bioproducts.

The Renewables Obligation (RO) provides incentives for large-scale renewable electricity generation by requiring UK suppliers to source a proportion of their electricity from eligible renewable sources, including palm oil plantations.

[64] https://www.gov.uk/government/statistics/renewable-fuel-statistics-2018-april-to-december-fourth-provisional-report

Palm Kernel Expeller (PKE, also known as palm kernel meal) and Palm Fatty Acid Distillate (PFAD) are the main palm products consumed by the electricity generators in the UK claiming support under the Renewables Obligation Scheme. According to the Annual Sustainability Report 2017-2018 (Ofgem, 2019), there was no PKE or PFAD consumed, compared to the consumption of a mixture of PKE and PFAD in some previous years - 48,012 mt in 2011-12, 17,735 mt in 2010-11 and 113,090 mt in 2009-10. This fluctuation is likely to be driven by a number of factors, which could include availability of PKE and PFAD.

Annex 6. Fediol vs. Oilworld Reporting

Fediol and Oilworld show a large difference in reported palm oil and palm kernel imports into the UK. In 2018, Fediol data revealed total imports of 421,000 mt [65] whilst Oil World revealed total imports of 470,200 mt.[66] This displays a difference of 49,200 mt, most of which is represented by PO imports as opposed to palm kernel oil.

Both Fediol and Oilworld report on 6 HS codes (1511) which comprise both crude and processed oils and also fractions (stearin and olein). The differences in the data sets can now be attributed to Palm Fatty Acid Distillates (PFAD). Fediol does not include PFAD in total imports, whilst Oilworld does.[67] Therefore, Fediol is reporting on food only within the UK.

A key assumption is that the UK refiners are buying more refined and therefore produce less PFAD, so more is purchased from origin (Indonesia and Malaysia). PFAD is being used in biofuels under ISCC certification in very small quantities and in animal feed (estimated according to AIC between 16-20,000 mt). Therefore, there remains over 20,000 mt that is presumed to be used by the oleochemical industry or other industries.

[65] PO - 399,000mt and PK – 22,000mt
[66] PO - 443,700 and PK – 25,500
[67] Oil world stated that *"PO imports includes PFAD of 33,323 tonnes from Indonesia and 14848 Tonnes from Malaysia."*