

Acknowledgements

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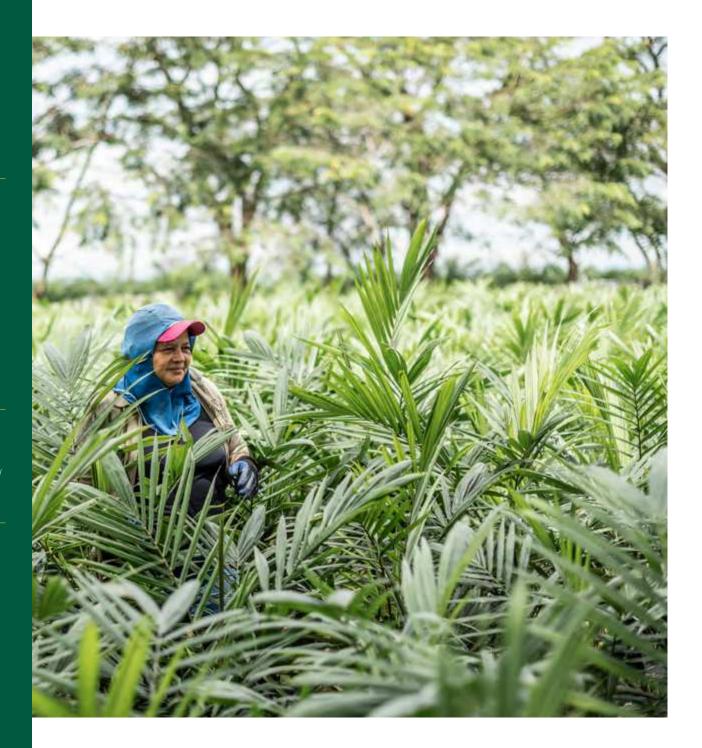
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1. EPOA members are Bunge Loders Croklaan, Cargill, Fedepalma, MVO, Olenex, Sime Darby Oils and Unigra.



Executive Summary



Europe's total use of palm oil in 2020 was 8.3 million MT. a 1% decrease compared to 2019. Palm kernel oil use totalled 706,000 MT, and palm kernel expeller to 1.9 million MT. In Europe in 2020, 31% of all palm oil use was for food, feed, and oleochemicals (FFO) and 56% was for biofuels, but EU palm oil use in biofuels has to meet the sustainability criteria of the Renewable Energy Directive (REDII) and it is expected to decline as a result of the revision of REDII. FFO is the focus of analysis in this report.

Analysis of RSPO data shows that 90% of European palm oil use in FFO was CSPO in 2020. This figure includes the use of physically certified volumes (segregated and mass balance), and purchases of RSPO Credits and RSPO Independent Smallholder Credits. While this figure represents an increase from the 86% CSPO uptake reported for 2019, it doesn't tell the whole story. The volume of CSPO being used in Europe has remained stagnant since 2016 due to a decline in total use of palm oil for FFO. Some companies and areas of industry are behind in their progress and are in need of support in advancing commitment to CSPO. In addition, some are avoiding the use of palm oil altogether due to its negative reputation and the attractiveness of palm oil free marketing.

These results don't capture the entire picture of European involvement in sustainable palm oil (SPO), which is now increasingly characterized by progress beyond just certification. Major upstream supply chain actors such as refiners and traders have developed online public dashboards with accessible information about their palm oil supply chains - many are now transparent and traceable to mill, and increasingly to plantation level. Advancements in satellite monitoring technology and earth observation tools (such as Starling and Global Forest Watch Pro) have played a key role in facilitating the availability of this information.

Growth in the use of dashboards, systems (such as the Implementation Reporting Framework), and other data has enabled companies to verify their NDPE commitments. In 2020, 100% of the palm oil volumes used by major European refiners were covered by NDPE policies. Analysis of NDPE reporting shows that commitments and data are not easily comparable (and are thus not included in this report) but does reveal the private sector has taken strides to increase the positive impact of their supply chains on the ground and make progress beyond individual supply chains.

1. Chain Reaction Research paper, May 2020: NDPE Policies Cover 83% of Palm Oil Refineries; Implementation at 78%





This report explores the impact of European demand for SPO in producer countries through the use of four examples that show the diversity of actions being taken on the ground. These are: the role of Fedepalma in building collaborative partnerships between Colombia and the Netherlands; Aidenvironment's work to enhance transparency and traceability through information provision; Wild Asia's initiative to engage and support smallholder producers; and the important progress being made by NI-SCOPS in providing large-scale support to smallholders in a climate-conscious context.

The future of sustainable palm oil will be characterized by ambitious individual actions set within a broader behavioral shift. There is growing recognition of the need to work beyond individual supply chains to develop transparency, traceability, and impact on the ground. This must be complemented by a collaborative cross-stakeholder approach that involves communities, local government, demand-side action, and efforts to balance the narrative around palm oil.

Robust certification schemes are broadly seen to have a strong role to play but should not be treated as a silver bullet. Support from bodies like the RSPO will continue to be crucial to pulling in new sectors and communicating the relevance of CSPO, but certification itself is now part of a wider toolbox available to companies. Further developing transparency and traceability in conjunction with NDPE policies will be central to ongoing monitoring of progress and supply chain impact.

Private sector joint action coalitions such as the European Palm Oil Alliance and industry-wide National Initiatives that bring together industry actors to share lessons, discuss strategic opportunities, and coordinate action in a pre-competitive space remain key levers for growing global impact and transforming the industry. They also have an important role to play exploring and communicating different themes of information and messaging around SPO.

Legislation such as the incoming EU due diligence regulation (which will aim to decouple risk of deforestation and violation of human rights from PO imports) and the EU Renewable Energy Directive (phasing palm oil out of biofuels) dramatically alter the landscape, but must be tied to support for producing countries. Engagement with supply bases in producer countries beyond individual supply chains, and medium-level consuming countries that make up 18% of global consumption are crucial targets for growing SPO. Unequivocally, strong EU advocacy for sustainable production and consumption is critical to the future of sustainable supply chains for palm oil.

The structure of the reporting is as follows:

Section 2

Section 2 seeks to answer the question of 'where are we now?'. It outlines the current 'state of play' of the palm oil market at different scales, presenting research carried out into the position of the global, EU and some national markets in terms of production and use of palm oil and CSPO.

Section 3

Section 3 subsequently looks beyond these statistics to evaluate what progress industry is making both within and beyond single supply chains. It reflects on the role of different trading systems in strengthening demand for CSPO, analyses progress made on traceability, transparency and NDPE policies.

Section 4

Building on the previous section's analysis of industry progress behind the statistics, section 4 showcases case studies of the impact of EU demand for CSPO in producer countries.

Section 5

Finally, section 5 brings together the key messages and findings from the analysis carried out in this report to synthesise an impression of the post-2020 direction of travel for sustainable palm oil.



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Sustainable Palm Oil for Europe in 2020

RSPO, ISPO & MSPO PRODUCTION AREAS



certification covered 42%

of Indonesia's total palm

oil production area

(13.3 Mha)



certification covered 18%

of the total global palm

oil production area

(23.5 Mha)





Colombia



Guatemala

certification covered 98%

of Malaysia's total palm

oil production area

(5.2 Mha)

Honduras

TRACEABILITY

to Mill by major European refiners



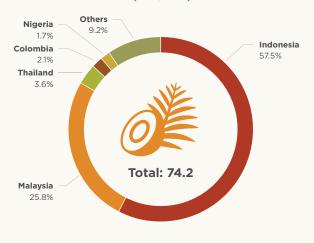


European level

Data source: Eurostat, Oil World, RSPO dashboards from main European refiners, ISPO, MSPO, Solidaridad Palm Oil Barometer 2020

GLOBAL PALM OIL PRODUCTION

(Million MT)



NDPE PROGRESS

of the volumes used by the major European refiners are covered by NDPE policies. All policies cover:



Free prior informed consent (FPIC) for indigenous and other local communities.

Preservation of High Conservation Value (HCV) areas, High Carbon Stock (HCS) areas and peatlands.



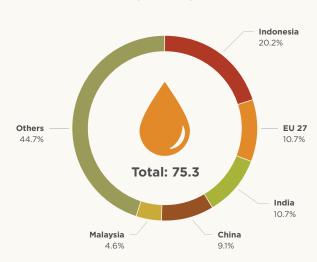


Prevention of poor working conditions.

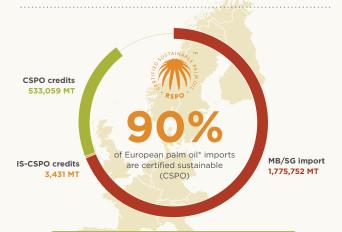
NDPE stands for No Deforestation, No Peat and No Exploitation

GLOBAL PALM OIL USAGE

(Million MT)



Besides the large individual users, there are 13 medium-using countries that used 18% of the total volume together.



to Europe has been stagnant since 2018

IS-CSPO refers to Independent Smallholder - Certified Sustainable Palm Oil

*This percentage only refers to palm oil used in food, feed and oleochemicals for EU27, United Kingdom, Norway & Switzerland. Palm oil used in biofuels has to meet the sustainability criteria of the European Renewable Energy Directive (RED) and is not included in this figure.



Preface

We are pleased to present the 2020 Palm Oil Monitoring report, the result of deep collaboration between the European Palm Oil Alliance (EPOA) and IDH- the Sustainable Trade Initiative. United in our dedication to providing reliable data on the progress and challenges to achieving 100% certified sustainable palm oil in Europe, we are proud to present a consistent, reliable, and transparent reporting method based on public sources, expert views, and the most recent and complete data available.

This annual report reconfirms the important position that Europe plays in the market for sustainably produced palm oil. Findings from the report show that 90% of Europe's palm oil imports for food, feed, and oleochemicals are RSPO certified. At the same time, our report shows that the use of palm oil in Europe has decreased, while demand and use in other regions (particularly Asia) is on the rise. Ensuring that the presence of the European market drives and supports the production and consumption of CSPO globally amidst these shifting markets remains vital.

While this report demonstrates progress, it is clear the work is not done. This report lays out the playing field for governments, industries, and civil society actors to collaboratively drive progress beyond 2020. Targeting large changes in complex supply systems will require partnership and cooperation from all actors in the supply chain. This message was echoed in our recently concluded Sustainable Palm Oil Dialogue 2021 where we called upon the entire sector to act in a collaborative approach. The rising climate emergency demands urgent action by European countries and other consumer countries in close cooperation with producer countries. Join us as we build a coalition to unleash sustainable practices at all levels of the palm oil supply chain.







Daan Wensing

Chief Executive Officer, Chair of the Executive Board, IDH





Chair of EPOA







In November 2008, a shipment of certified sustainable palm oil (CSPO) entered the harbor of Rotterdam. Upon arrival it was reported as a "world premiere" - for the first time, CSPO was a reality in Europe.2 What followed were a series of commitments, alliances, and initiatives driven by high profile NGO campaigns that sought to drive uptake of

This report details the global palm oil landscape and Europe's progress towards the goal of sourcing 100% sustainable palm oil in the landmark year of 2020. 2020 is a key year for many corporate commitments, National Initiatives (as part of the European Sustainable Palm Oil project), and government actions (through the Amsterdam Declarations Partnership), and this report examines progress towards these goals, gaps that need to be filled and what this means for the future of CSPO (for both demand-side and producer companies and countries).

Contextualizing Europe in a global industry that has nearly doubled in production volume in the past decade, this report lays out how usage patterns have evolved over the past decade, and extrapolates what this means for Europe's role in the global palm oil landscape.

To monitor the progress made in 2020 this report focuses on:

- The percentage of Roundtable on Sustainable Palm Oil (RSPO) CSPO that entered the European market in 2020 combined with analysis of RSPO Credits bought by European companies to cover their use of conventional palm oil to give an overall picture of the current state of play in Europe and implications for the future of palm.
- 2. Detailing the rise of 'traceable palm oil' back to mills and plantations and how this fits in with 'No Deforestation, No Peatland, and No Exploitation' (NDPE) commitments that have become increasingly relevant to how companies define and work on sustainable palm oil since they were first implemented in 2013.

RSPO - Roundtable on Sustainable Palm Oil, 8 Mar. 2012.

2020 is a landmark year in the collective push towards call for urgent collective action, 2020 was the target date for many private and public sector sustainability played a prominent role in this drive for change over the



^{2. &}quot;World's first sustainable palm oil to arrive in Europe."



The theory of change for strengthening impact on the ground has long focused on increasing CSPO uptake, but sustainable production of palm oil has progressed far beyond the purchase of certified material. Many procurers now work to generate positive impact beyond their own supply chains, and this report showcases a number of examples. Relevant to the future trajectory of the palm oil industry, this report examines how companies and governments can harness these diverse initiatives to strengthen the link between consumer demand and impact on the ground.

Europe might have received its first CSPO in 2008, but it has not yet reached the final destination of its sustainable palm oil journey - all stakeholders can do much to continue driving industry progress beyond 2020 aspirations.



Where are we now?

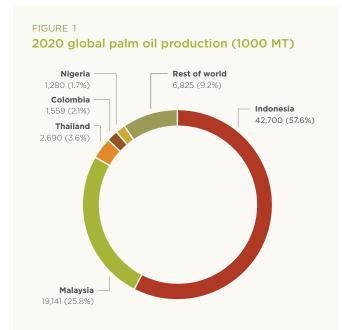


2.1 Position of the global market

The data presented here on the position of the global market describes 2020 global production and use of palm oil (PO), palm kernel oil (PKO), and palm kernel expeller (PKE). This information was sourced from the 2021 Oil World Annual. For this global-level data, 'use' is defined as 'total disappearance'. It includes all palm oil that is used domestically, be that from imports, stocks, or domestic production. This term is used instead of 'imports' as import data would fail to recognize countries that produce and use large volumes of palm oil domestically.

2.1.1 Global production and use of palm oil

Total global production of palm oil in 2020 amounted to 74.2 million MT, significant growth compared to the 45.8 million MT produced in 2010. 83% of global production in 2020 came from Indonesia (57.5%) and Malaysia (25.8%), demonstrating their continuing dominance of palm oil production (see Figure 1). Colombia was significant beyond the Southeast Asian hub of production, ranking as the 4th largest global producer (2.1% of global production) and the top South American producer. Honduras, Guatemala, and Brazil were the other significant 'medium-sized' South American producers. Nigeria was the top African producer (1.7% of global production).



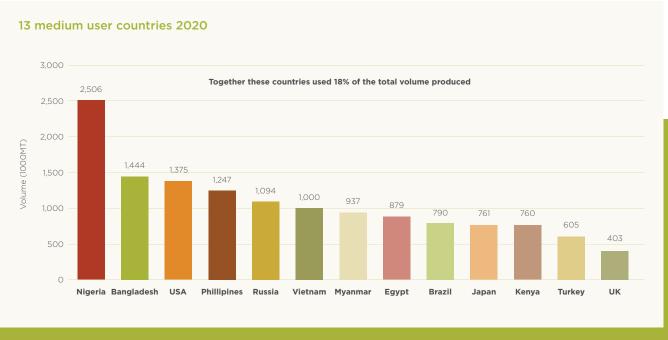


Total use of palm oil in 2020 reached a volume of 75.3 million MT, with use dominated by 7 countries that accounted for 63% of total usage (see Figure 2). In addition to being the world's leading producer of palm oil, Indonesia was also the biggest user in 2020, using 20% of the world's total volume. This indicates the importance of Indonesia's domestic market and its potential role in driving sustainability in the palm oil sector. The EU collectively was the third largest user in 2020, in step with India (both used 11% of the total global usage).

Beside these large individual users, Figure 2 illustrates that 13 medium-using countries together amounted to 18% of total global usage. This suggests that efforts to drive change in use of sustainable palm oil must have a collective global focus. Engaging with not only the major users and producers – Indonesia, Malaysia, India, Europe, and China – but also the Rest of the World (which uses a combined volume equivalent to that of Indonesia) is paramount. Markets are shifting, with regional markets in Asia/Southeast Asia, Africa, and South America growing, and the significance of the European market reducing (see Section 2.3).



FIGURE 2 Global palm oil usage 2020 40,000 33,709 35.000 30,000 25,000 20.000 44.7% 15,237 15,000 10,000 8,055 8,033 6,858 20.2% 5,000 3,437 9.1% 0 Indonesia India EU-27 China Malaysia Rest of world





2.1.3 Global production and use of palm kernel expeller

Palm kernel expeller (PKE) – the by-product of the palm kernel crushing process used primarily in animal feed manufacturing – follows a similar production pattern to that of palm oil and palm kernel oil (Figure 5). Total production in 2020 summed to 9.6 million MT, a 55% increase from 2010 (6.2 million MT). Again, Indonesia was the main producer, accounting for 57% of total production.

However, unlike PO and PKO, the major users of PKE are New Zealand (approximately 20%) and the EU (approximately 15%), possibly reflecting the prominence of the animal feed industry in these markets (Figure 6). South Korea and Saudi Arabia also break the pattern – both are considerable users of PKE but not of the other oil palm products.

Demand from the major users (New Zealand and the EU) dropped between 2015 and 2020. Some Asian markets grew during this time period, possibly reflecting the growth in meat consumption associated with economic development in these countries. The major producing countries of expeller are not major users, suggesting that it is primarily an export product.

2.1.4 Global certified production areas

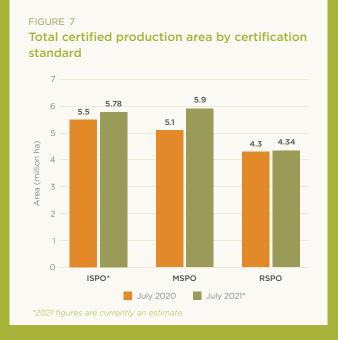
Data from the past year (July 2020 to July 2021) shows progress in the total area certified by a sustainability scheme. Figure 7 shows that this progress is more visible in the national standards – ISPO (Indonesian Sustainable Palm Oil) and MSPO (Malaysian Sustainable Palm Oil). Voluntary certification schemes such as the RSPO are often used in conjunction with national standards at the production site, thus this report does not present a total global certified area as a result of this overlap in standards.

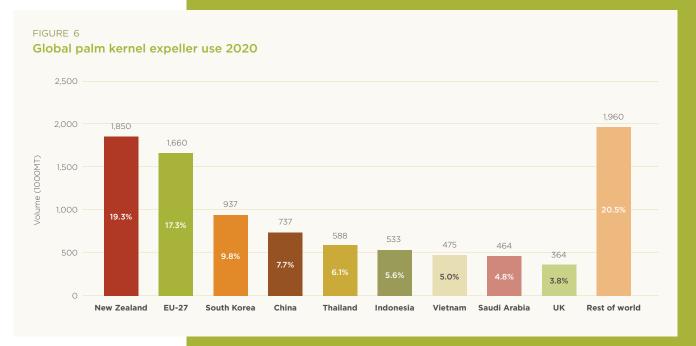
In 2020, ISPO certification covered 42% of Indonesia's 13.3 million ha palm oil production area, while MSPO certification covered 98% of Malaysia's 5.2 million ha palm oil production area.⁴ RSPO certification covered 18% of the 23.5 million ha global palm oil production area.

Global palm kernel expeller production 2020

Colombia
152 (1.6%)
Nigeria
169 (1.8%)
Thailand
327 (3.4%)

Malaysia
2,548 (26.7%)





^{4.} Total mature production area data (source: Oil World Annual 2021)

2.2 Position of the European market

This section describes the characteristics of European use of palm oil. The analysis presented is drawn from data from a number of sources (Oil World, Eurostat, and the RSPO). 'Europe-level' data analyzed encompasses the EU-27, the UK, Switzerland, and Norway. The latter three are included in the analysis due to their importance to the European market. Data on European use of palm oil includes crude and refined palm oil, as well as palm-based fatty acid distillate and distilled fatty acids.

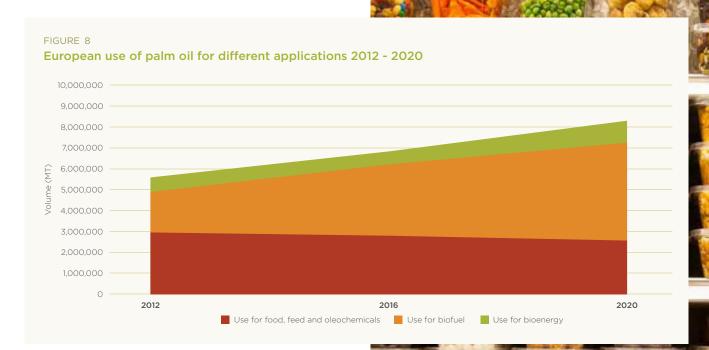
2.2.1 2020 European use of palm oil

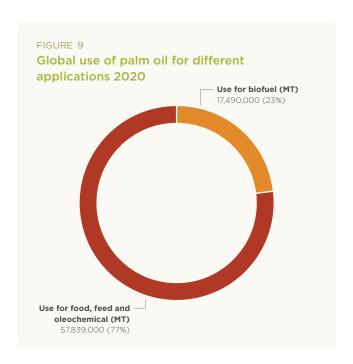
Europe's total use of palm oil in 2020 was 8.3 million MT, a 1% decrease from 2019. Usage follows the market trend of a shift away from crude to refined palm oil imports, as more refining now takes place in the countries of production. Total use of palm kernel oil was 706,000 MT, and use of palm kernel expeller was 1.9 million MT.

Figure 8 shows the long-term trend of European use of palm oil. Total European use increased from 5.6 million MT in 2012 to 8.3 million MT in 2020. During this period palm oil use in biofuels increased from 35% of total palm oil usage in 2012 to 56% in 2020. A total of 69% of palm oil usage was for biofuel and bioenergy in 2020. Conversely, use for food, feed, and oleochemicals (FFO) decreased from 53% to 31% of total usage in the same time period. However, the revision of the Renewable Energy Directive (REDII) will result in the phasing out of palm oil use in biofuels in Europe by 2030.5 This report focuses specifically on the FFO usage in calculating the percentage of European use that is certified sustainable (Section 2.2.2).

For this Europe-level data, 'use' refers to the difference between import and export volumes.

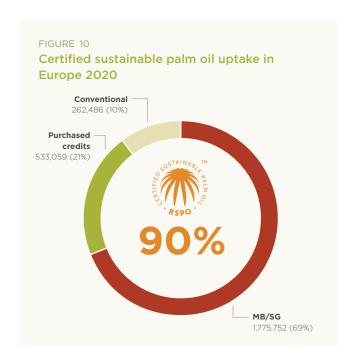
Figure 9 illustrates global palm oil use by application, and is presented here to demonstrate the different characteristics between European use and the global norm. European palm oil use in 2020 (31% of use for FFO, 56% for biofuels) deviates notably from global use in 2020 (77% of use for FFO, 23% for biofuels).

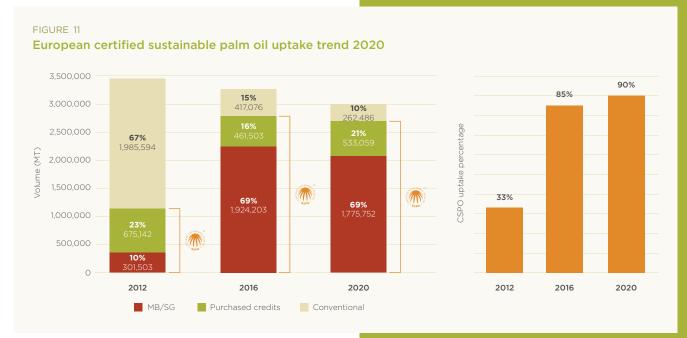






^{5. &}lt;u>"Renewable Energy Directive."</u> European Commission, 2021





2.2.2 2020 European use of CSPO

Data analysis carried out for this report concluded that 90% of European use of palm oil in FFO was CSPO in 2020. This figure includes the use of physically certified volumes (segregated and mass balance), and purchases of RSPO Credits and RSPO Independent Smallholder Credits (Figure 10).

While this figure represents an increase from the 86% CSPO uptake reported for 2019, it doesn't tell the whole story.⁶ The volume of CSPO being used in Europe has remained stagnant since 2016, and total use of palm oil for FFO has declined (Figure 8). This trend is illustrated in Figure 11.

Note that all data displayed in this section includes small numbers of purchased Independent Smallholder Credits. As numbers purchased in each figure represent less than 0.5% of the total volume, these numbers are not displayed in the figures.

SUSTAINABLE

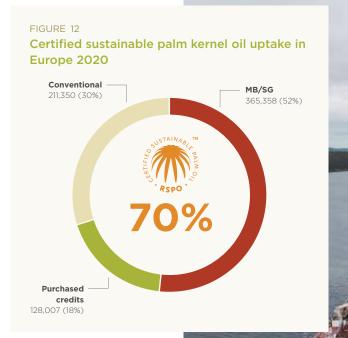
^{6. &}quot;Latest data shows 86% of palm oil imported to Europe sustainable." IDH - the sustainable trade initiative, 2 Sep. 2020

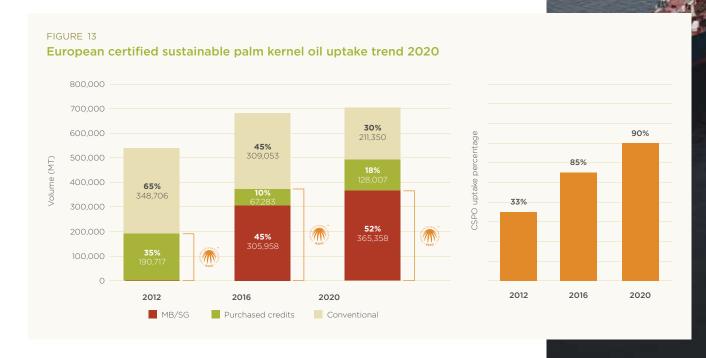
2.2.3 2020 European use of CSPKO

European uptake of certified sustainable palm kernel oil (CSPKO) shows a more progressive trend, however volumes of palm kernel oil used in Europe are considerably less than those of palm oil. Figure 12 shows that 70% of European use of PKO was CSPKO in 2020. Figure 13 demonstrates the trend in European uptake of CSPKO from 2012 to 2020.

2.2.4 2020 European use of CSPKE

In contrast to PO and PKO, physically RSPO-certified supply chains of In contrast to PO and PKO, physical certified supply chains of PKE have not yet been developed. Volumes used in Europe are conventional with some coverage by purchases of RSPO Credits. In 2020, just 3% of the 1.9 million MT of PKE used in Europe were covered by purchases of RSPO Credits and RSPO Independent Smallholder Credits, with no physical certified sustainable PKE used.





2.3 Implications of global and **European data**

Europe's total use of palm oil for food, feed, and oleochemicals decreased between 2012 and 2020 from 53% of total usage (3 million MT) to 31% (2.6 million MT). The reason for this reduction is not entirely clear - it may be driven by reduced demand for products that require palm oil, companies avoiding negative attention, or even the attractiveness of marketing products as 'palm oil free.' Though CSPO reached 90% of the total palm oil used in European FFO in 2020, the volume of CSPO imported has remained largely unchanged since 2016 (as demonstrated in Section 2.2.2).

While these trends suggests that the demand-side impact of Europe could be in decline, it is important that the global presence of leading brands based in Europe continues to drive the production and consumption of CSPO. The role of European governments, companies, and consumers will need to respond to these changing market dynamics beyond 2020. The importance of European industry efforts to engage with supply bases in producer countries beyond their own supply chains (as discussed in Section 4) is one way to realize change.

Use of palm oil for biofuel and bioenergy increased in 2020, representing 69% of all palm oil used in Europe. However, the REDII (Renewable Energy Directive II) is likely to result in the use of palm oil for biofuel and bioenergy significantly declining by 2030.



The production and use of PKE follow similar patterns as palm oil. While New Zealand and the EU remain significant users of PKE, the volumes used have declined over the last five years. Demand in Asia/ Southeast Asia and other markets (ROW) has increased as a result of changes in consumer markets and preferences. Generally seen as a by-product of PKO production, the demand for physical certification of this voluminous and relatively low-value product is low (in May 2020, the average price of crude palm oil was \$531/MT, compared to only \$165/MT for PKE).7 However, this could change if PKE is included in the scope of market due diligence obligations currently being developed across Europe (see Section 4.4).

As shown in Figure 2, the global markets are changing. While palm oil use for FFO in Europe is falling, overall demand in Asia, South America, and Africa is increasing. The analysis of global data presented in Section 2.1.1 shows that medium-level users of palm oil (13 medium-using countries use 18% of palm oil total usage together) play an important role in the global sustainability drive. Efforts should be made to encourage CSPO uptake in these markets, extending demand for SPO in Europe to other global markets and ensuring a consistent global market signal for SPO. Future actions and monitoring by European companies, governments, and other actors should consider these changing markets and identify appropriate ways to involve them in sustainability initiatives and long term monitoring/reporting of CSPO sourcing.



^{7.} Source: Oil World Annual 2021, May 2020 data. Price reported as lowest representative asking price for nearest forward shipment.

2.4 Sharing responsibility: the role of companies and National **Initiatives**

Although this report demonstrates high uptake of CSPO in European FFO, evidence from the WWF 2021 Palm Oil Buyers Scorecard suggests that a considerable number of companies are still behind in their use of CSPO.8 The Scorecard's analysis shows that only half of all respondent companies indicated that all palm oil purchases are 100% RSPO-certified. It also reported that the average RSPO CSPO uptake of respondent companies headquartered in Europe was 65%.

These statistics show that while CSPO is entering Europe, it is not necessarily being demanded or used further down the supply chain (or its usage is not reported), suggesting a possible lack of engagement or commitment from some companies in the downstream supply chain. Sharing responsibility throughout the supply chain is an important factor in helping SPO to become the norm. Greater shared responsibility could encourage consumer preference for SPO, increasing demand for SPO. It could also increase the broader influence of European companies beyond their supply chains, which is important for generating a tangible impact on the ground.

National Initiatives across Europe are playing a key role in engaging with industry, working to fill these CSPO uptake gaps in the market. Supported by the European Palm Oil Alliance (EPOA), National Initiatives operating across 12 countries in Europe provide a platform for market-wide action towards sourcing SPO.9 As well as working with industry to develop sustainable palm oil supply chains, they support and work on a complex mix of needs and challenges throughout the market. National initiatives help develop a balanced narrative around SPO in the context of the rising prevalence of the 'no palm oil' message. The negative image of palm oil and challenges with certification drive some companies to look for alternatives. National Initiatives provide a consistent source of information and guidance on these issues and can also help companies with issues such as a lack of CSPO demand or navigating tracking in complex supply chains (such as foodservice or oleochemical).



In addition, National Initiatives play an important role in reporting progress at a national level, be it covering the entire national market or the members of the initiative. The WWF Palm Oil Buvers Scorecard data suggests that this reporting could be complemented by a deeper look at the progress that companies across entire supply chains are making in sharing responsibility for sourcing SPO. With the average RSPO CSPO uptake of respondent companies headquartered in Europe standing at 65%, a similar company-focused approach could be used to support NI reporting and provide greater clarity on sectors or areas of supply chains in need of support.



^{8. &}quot;How are palm oil buyers performing?" WWF Palm Oil Buyers Scorecard, 2021

^{9. &}lt;u>"European initiatives for sustainable palm oil."</u> European Palm Oil Alliance, 2021



3

Behind the statistics: industry progress beyond individual supply chains

While the statistics presented in Section 2 illustrate both stagnation in usage of CSPO in Europe and shifting global consumption patterns with growth in markets outside of Europe, there have been significant changes in the behavior of leading European and European-based companies. While Europe's buying power is declining the influence of Europe-based companies remains and is more important than ever



As 2020 approached, the palm oil industry had already started to shift away from a sole focus on the 100% CSPO target, stepping up and diversifying efforts to drive positive change. This shift has manifested itself in different forms. Companies have looked to generate impact through involvement in producer country jurisdictional approaches and engagement with smallholders to cultivate inclusive sustainable supply chain. This has taken place alongside a drive for greater transparency to provide market assurance in response to civil society concerns and pending market requirements.

To generate a stronger demand side signal for sustainable production of palm oil beyond focusing solely on certification (recognizing that parts of their supply chain and supplier base were certified to RSPO), companies have increasingly been operating under specific NDPE policies, seeking to provide market reassurance that no deforestation, development on peatland, or exploitation occurs within their supply bases. Not only have such policies become increasingly common, their reliability and validity has strengthened with the support of tools like the Implementation Reporting Framework (IRF).¹⁰

Accompanying this behavioral change is increased pressure to improve the transparency and traceability of palm oil supply chains. Knowledge of a product's source brings greater assurance of the conditions of its production, and increased potential for accountability in instances of unsustainable practices. Major upstream supply chain actors such as refiners and traders have developed online public dashboards with accessible information about their palm oil supply chains including data on their progress in developing transparent and traceable supply chains. Advancements in satellite monitoring technology and earth observation tools (such as Starling and Global Forest Watch Pro) have played a key role in facilitating the availability of this information and in some cases are being used to provide a degree of validation or verification of the process and information.

Developments like these suggest that in addition to the CSPO percentage figure upon which so much emphasis is placed, the private sector has taken strides to increase the positive impact of their supply chains on the ground and make progress beyond individual supply chains.



This section aims to demonstrate this by evaluating:

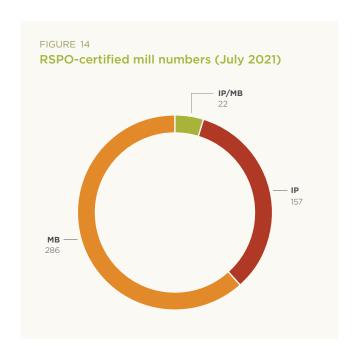
- The role of trading systems (Identity Preserved, Segregated, Mass Balance, and Credits) in strengthening and meeting demand for
- The progress made by industry with transparency, traceability, and implementation of NDPE commitments.
- · The impact of European demand for sustainable palm oil in producer countries through case study examples.

3.1 The role of trading systems in strengthening demand for CSPO

Within the palm oil supply chain, the mills that process fresh fruit bunches (FFB) can either be conventional or certified to one or multiple certification standards, most commonly RSPO, ISCC (International Sustainability and Carbon Certification), MSPO, or ISPO. RSPO and ISCC are both voluntary schemes and are common dual certifications as there are many similarities in the audit requirements. MSPO and ISPO are Government-led certification schemes in Malaysia and Indonesia respectively, and are commonly paired with RSPO certification. The use of ISPO and MSPO is growing in importance and relevance as complementary forms of assurance to the RSPO

The growth of transparency and traceability, along with accompanying dashboards, aims to report on NDPE policies. It gives due recognition to areas of production within the supply base that are covered by other standards and schemes, enabling companies to show progress and manage risk within a wide supplier base. The focus from these companies is no longer purely on RSPO, as further explored in Section 4.1.

Recognizing the relevance and prominence of RSPO in the European market and in reporting annual progress, the global and European market update in previous sections focuses on RSPO. This sub-section provides clarification on the three physical trading systems or supply chain models that operate under RSPO. These set out the differing requirements applying to the three supply chains: Identity Preserved (IP), Segregated (SG) and Mass Balance (MB). A fourth model, which does not represent a physical supply chain, is the purchase of RSPO Credits. For more detail on their characteristics, and an overview of the palm oil supply chain in general, see Annex 2.

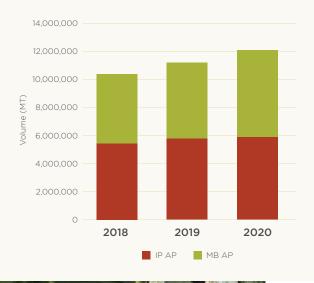


3.1.1 Comparing the role of each trading system

3.1.1.1 RSPO-certified mills

Information displayed on the RSPO website in July 2021 showed that 465 mills were certified to the RSPO Principles and Criteria standard (Figure 14), compared to an estimated 2,500 mills in total worldwide. In the past the split between IP and MB mills was roughly even, but in 2021 only 38% of the 465 RSPO certified mills were certified to IP, with the bulk of this oil likely to eventually be sold as SG. 62% of mills (286 mills) were MB certified, suggesting that MB mills will play a more significant role in the post-2020 supply chain if this trend continues.

FIGURE 15 RSPO-certified mill actual production (AP)



3.1.1.2 Production and sales volumes

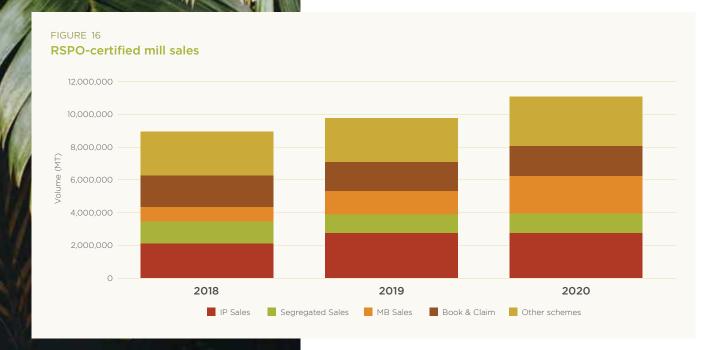
2020 continued a trend of increase in the Actual Production (AP) of RSPO-certified mills, which refers to the physical volume generated by a mill in the previous year, with an increase between 2019 and 2020 of 900,000 MT. In total, AP was around 12.1 million MT in 2020, compared to 11.2 million MT in 2019.11 Much of this increase was in AP of MB material, with this volume increasing by almost 800,000 MT in the same period. In contrast, supplies of IP material increased by just over 100,000 MT (Figure 15).

The MB AP volumes from mills shown in Figure 15 are reflected within the RSPO sales volumes from mills to refiners in Figure 16. Sales of MB material increased by 868,000 MT from 2019 to 2020, a significant proportion of the overall sales increase of almost 1 million MT (excluding sales under other schemes - see below), Including sales of credits, total sales of RSPO-certified volumes in 2020 amounted to over 8 million MT in 2020. The IP sales volume may be misleading as IP and SG material are mixed within the supply chain, leading to a higher proportion of SG. However, collectively SG and IP showed minimal growth between 2019 and 2020. Sales of RSPO credits also showed a relatively small increase of just 60.000.

Mills may be certified to more than one standard or scheme. RSPO therefore reports volumes sold through 'other schemes' by RSPO mills that are also certified to other sustainability standards. This data is included in Figure 16 below, and shows that volumes sold through other schemes by RSPO-certified mills increased by over 300,000 MT between 2019 and 2020 to a total volume of over 3 million MT in 2020. Including this data, total sales by RSPO-certified mills in 2020 amounted to over 11 million MT, compared to about 9.8 million MT in 2019. These figures show that approximately 25% of AP of CSPO is sold under other schemes.

Historically, the market assumption has been that MB-certified material was a stepping-stone to SG, ultimately leading to increased demand for and production of certified material. Figure 16 shows that over the past three years, sales of MB material have grown and IP and SG sales have remained stagnant. Figure 14 also demonstrates the aforementioned growth in the proportion of MB-certified mills. It remains to be seen whether the increase in MB translates into an increase in SG and IP. However, it is important to take into account the inclusion of smallholders in sustainable palm oil supply chains, and MB and IP credit models currently play an important role in facilitating this inclusiveness. The potential transition will be driven by market requirements and demand, but may be hampered by issues such as cost, supply chain complexity, or increased production by smallholders yet to be certified or operating under ISPO or MSPO.

Greater use of NDPE policies and development of verification mechanisms (such as reporting with the IRF) may provide stronger recognition of alternative means of providing assurance of legality, no deforestation, and potentially sustainability. Assurance may also be provided via certification through ISPO or MSPO, use of Earth observation tools, and independent verification of deforestation-free policies. This may then lead to greater use of MB certification at mill due to alternative options for assurance of products produced and sold. This prospect is explored further below.



^{11.} Information on volumes in section 3.1.1 was taken from the RSPO website in July 2021.



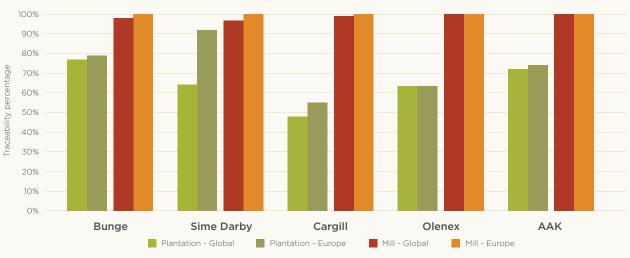
3.2 Progress with transparency, traceability and NDPE commitments

In recent years pressure from NGOs, other stakeholders, markets, and regulatory requirements has driven greater transparency and traceability of palm oil supply chains, in particular from refiners. The introduction of maximum levels of 3-MCPD and Glycidol (contaminants that can be formed in the refining process) has led to controlled and restricted raw material sourcing from specific suppliers and mills with tighter specifications for raw material and processing conditions. This has acted as another driver for refiners to improve traceability of their supply chains.

This push has manifested itself in the development of company dashboards that publicly detail mill- and plantation-level traceability data, as well as information on progress in implementing principles of NDPE policies into supply chains. Company dashboards are therefore a key source of information on industry progress besides the statistics on CSPO production.

This report analyzed data from dashboards to review the progress made with transparency, traceability, and NDPE commitments. Publicly available and easily accessible, the dashboards of all major palm oil refiners within Europe were reviewed, and supplementary interviews were held with a sample of refiners to sense-check findings.





3.2.1 Transparency and traceability

The requirement for stronger traceability led to the development of traceability to mill (TTM) data in 2018. Mill lists are requested annually or biannually by refiners and published on websites or dashboards. This allows for public scrutiny and is an important tool for beginning to verify the implementation of NDPE policies. Verification is crucial to SPO as having an NDPE policy alone does not guarantee it is carried out by mills and the supply base.

Traceability to plantation (TTP) is a different element of traceability. A 50km radius was seen as the limit of a mill's potential supply of FFB, but improved road systems now mean that FFB can come from traders further afield, up to 100km. The RSPO Principles & Criteria require all sources to be shown as part of the audit procedure, but if a mill is not RSPO-certified. TTP is crucial to provide verification of the FFB source at plantation level. Refiners report on TTM and TTP (Figure 17), and in some cases report no deforestation or verified deforestation-free figures using newly developed tools such as the Implementation Reporting Framework and satellite mapping (see Section 3.2.2).

The data presented in Figure 17 was collected from the refining companies' dashboards in July 2021, and demonstrates the level of traceability currently achieved by these companies in their supply chains (both globally and specifically to Europe). TTM percentages are significantly higher, as would be expected given the market norm of providing mill lists.

Note that while it is assumed that the refiners providing this data use consistent definitions for TTM and TTP, there could be some variation in the scope of the TTP percentage, for example on the size a planted area needs to be to be classified as a 'plantation' (smallholder farms could therefore be excluded).



3.2.2 NDPE commitments

NDPE policies include commitments to the following: no deforestation, NDPE policies include commitments to the following: no deforestation, the preservation of High Conservation Value (HCV) land and High Carbon Stock (HCS) areas of peatland, zero burning, free, prior, and informed consent (FPIC) for indigenous and other local communities, and the prevention of poor working conditions and other forms of exploitation.

Driven largely by pressure from NGOs and other stakeholders, the first NDPE policy was launched by Wilmar in 2013, with large refiners following suit in 2014. Other factors behind this included customer demand and major brands such as Nestle, Mars, Mondelez, and Ferrero requesting detailed supply chain information. Refiners have a unique position in the supply chain. They are able to influence their own or third-party plantations and mills, and given that a relatively small number of refiners source from a considerable proportion of the world's mills, are able to positively impact a broad section of the supply base.

NPDE policies have been a successful method of engagement with growers around sustainable production practices. Leverage is also created because when a supplier refuses to adhere to policies the supplier may be suspended. All major refiners and many brands operate consistent policies in terms of NDPE principles, improving consistency in the ask of producers or suppliers. In May 2020, 83% of the refining capacity in Indonesia and Malaysia was covered by NDPE policies.¹² Their broad use in conjunction with certification creates the potential to minimize the risk of negative impacts of palm oil production (such as deforestation) from occurring. In Europe, all refiners are operating under NDPE policies.

A key limiting factor in the strength and reliability of NDPE policies has been the ability to verify their implementation. In recent years tools have been developed to better enable companies to verify the progress of their NDPE policies. For example, the Implementation Reporting Framework (IRF), initially developed in 2018 by the Palm Oil Collaboration Group and supported by Proforest, is a stepwise reporting framework that allows companies to report on volumes consistently and systematically at different stages of progress towards NDPE compliance. Presently this framework covers no deforestation and no development on peatland with work on the no exploitation element ongoing at this stage (see Box 1 for more details).

Box 1: The Implementation Reporting Framework

^{12.} Chain Reaction Research paper, May 2020: NDPE Policies Cover 83% of Palm Oil Refineries; Implementation at 78%

^{13.} The Palm Oil Collaboration Group



The dashboard analysis carried out for this report revealed significant variation in the type of information reported on progress in implementing NDPE policies and how it is verified. Some information is self-reported, with others using satellite information or thirdparty verification. This means that the terminology used to describe progress also varies, with dashboards descriptions ranging from verified deforestation-free statistics to data on delivery against IRF metrics.

This lack of alignment in reporting on NDPE progress reflects the fact that it is still very much under development, and formal comparisons cannot be accurately drawn between data at this stage. The purpose of reporting at this stage is to be transparent and show progress, rather than formally report against agreed metrics. Data representing NDPE progress has not been included in this report as comparison of no deforestation percentage figures could be misleading. However, this is likely to change over the coming years, with this type of reporting set to increase in reliability amidst greater emphasis.

Even though data representing NDPE progress is not included in this report, our review shows that 100% of the palm oil used by the major European refiners assessed here is covered by NDPE policies. An analysis of the consistency of these policies shows that they are all similar in that they cover free, prior, and informed consent (FPIC) for indigenous and other local communities, prevention of poor working conditions, and preservation of High Conservation Value (HCV) areas, High Carbon Stock (HCS) areas, and peatlands. One area in which policies are not entirely consistent is commitment to zero burning - all except one of the analyzed policies explicitly included this.

The dashboard analysis discussed here reveals the spectrum of reporting mechanisms beyond certification available to companies looking to verify or provide assurance of sustainable sourcing of palm oil decoupled from deforestation, development on peatland, and exploitation. For example, companies are now able to report progress in meeting no-deforestation commitments in their supply chains by self-reporting through the IRF or using satellite monitoring technology, and in some cases going further by using third party auditors to determine verified deforestation-free percentages.

But how does this greater scope of demand for sustainably produced palm oil translate into positive impact on the ground in producer countries?

3.3 Linking European demand for sustainable palm oil with a global producer country impact

This section illustrates a shift in company behavior from a focus on a single supply chain and 100% certified sustainable to recognition of the need to engage and work with other companies operating within a broader supplier base. This shift is important to create the change on the ground needed to improve sustainable palm oil production practices, meet market requirements, and manage risk and reputation. Multi-sector cooperation and support from governments and civil society in tandem with industry efforts is fundamental to driving longterm impact.

Drawing on four examples, this change in behavior is demonstrated below and the link or relationship with the demand for CSPO in Furope explored.

The examples of focus are: Fedepalma (Colombia's National Federation of Oil Palm Growers), Aidenvironment (an implementing consultancy providing support with traceability), Wild Asia (a social enterprise working to provide ground-up support to smallholders), and NI-SCOPS (a public-private partnership initiative aiming to develop climate-smart production practices).

There are many more examples of private sector, civil society, and multilateral initiatives driven by European demand for CSPO that are aiming to positively impact producer countries. Where possible these have been included in this section and others



3.3.1 Building collaborative partnerships - Fedepalma

Multi-sector engagement can help to forge strong positive connections between the European demand-side market and the producer countries with which it interacts. Over the past few years, multi-sector cooperation between the Netherlands and Colombia has aimed to develop the production and trade of sustainable palm oil (SPO). Colombia is the fourth largest producer of palm oil in the world, producing over 1.5 million MT in 2020, and Europe is one of its prime export markets. The Netherlands, as the largest importer of palm oil in Europe, is the destination for around 30% of Colombia's palm oil exports. La European demand for SPO has the potential to have a significant positive impact on production practices in Colombia.

Collaboration has grown through a number of initiatives, a key example being a joint declaration on SPO signed in 2018. Aiming to strengthen bilateral cooperation towards increasing Colombian exports of SPO, this declaration followed the country's signing of the world's first national zero-deforestation agreement on palm oil in 2017. Signed and supported by Solidaridad and IDH (the Sustainable Trade Initiative), the declaration included a government-to-government agreement between the relevant Ministries of Agriculture, a business-to-business agreement between private sector federations (MVO and Fedepalma), and a knowledge-to-knowledge agreement between Wageningen University and Cenipalma (the research body of Fedepalma).

Building on this cooperative and collective initiative, Fedepalma and IDH signed a co-financing agreement for €1.2 million in August 2020 to confirm their commitment to strengthening the sustainable production of Colombian palm oil.¹6 This alliance aims to strengthen extension services in Colombia, including support for 1,642 producers (82% of them small producers), 11 extractors, specialists, suppliers, and other stakeholders in the palm oil value chain.

Box 2: Fedepalma - Colombia's National Federation of Oil Palm Growers

Fedepalma, the Colombian industry association for of palm growers, created the Colombia Sustainable Palm Of Program in response to increasing demand from international markets for sustainably and responsibly produced palm oil. This program aims to promote large-scale adoption of sustainable production practices throughout the Colombian palm oil industry. As the leading producer and exported of palm oil in South America, Colombian allocates almos 500,000 hectares of its soil to oil palm crops, which account for 7% of its agricultural GDP, 30% of Colombian palm oil exports go to the Netherlands and between 85% and 90% of these are certified sustainable, but certification currently covers only 28% of national production.

KEY LEARNING

Sending a strong and consistent market message supported by collaborative action between producer and demand-side markets with cross-sector engagement can create the right incentives for positive impact on the ground.

^{14. &}quot;Infographics: Sustainable palm oil; where Colombia and the Netherlands meet." Dutch Ministry of Landscape, Nature, and Food Quality

^{15. &}quot;The Netherlands Signs First Bilateral Agreement on Sustainable Palm Oil from Colombia." Solidaridad Network, 30 Nov. 2018

^{16. &}quot;Cenipalma & IDH sign €1.2 million agreement on sustainable palm oil." IDH - the sustainable trade initiative, 26 Aug. 2020

^{17. &}quot;About us." Fedepalma

^{18. &}quot;Infographics: Sustainable palm oil; where Colombia and the Netherlands meet." Dutch Ministry of Landscape, Nature, and Food Quality



3.3.2 Enhancing traceability and transparency, managing risk - Aidenvironment

This development comes as the UK, US, and EU consider tightening regulation on deforestation-linked supply chains through a due diligence obligation. By nature, due diligence legislation would increase demand from the global market for sustainable palm oil, but would also amplify the need for evidence of product source and legality - in other words, the need for transparency and traceability of supply chains.

Growing demand for this information from Europe and other markets means that producer countries and companies that operate within them require the tools and support to provide it. As discussed above, this has led to greater demand for transparency and traceability in supply chains and a move to a supplier-based approach.¹⁹ Aidenvironment is a not-for-profit implementing consultancy, which has developed an information database for this purpose. Other examples of tools and support include those provided by, the Accountability Framework Initiative (AFI) on policy implementation, the Carbon Disclosure Project (CDP) on monitoring and reporting, and Trase on supply chain mapping. Earth observation tools such as Starling and GFW Pro also support traceability by giving access to satellite monitoring resources.

Box 3: Aidenvironment

KEY LEARNING

Growing demand for transparency and traceability to meet corporate, civil society, and market requirements have led to the development of a range of tools and supporting technology. Transparency and traceability throughout the supply chain is becoming the market norm. Traceability technology and advanced verification tools are not only contributors to transparency - they could also be important compliance mechanisms for a due diligence regulation, and enable producers to provide assurance of their products.

3.3.3 Engaging smallholder producers - Wild Asia Group Scheme for Small Producers

A key challenge presented by the demand for certification and improved transparency and traceability is to ensure that smallholders are not marginalized by these standards. With millions of smallholders worldwide contributing 40% of global palm oil production, European (and other) demand for sustainable palm oil must incorporate, engage with, and ultimately benefit smallholders. Ground-up support is needed to ensure that best practice and compliance with sustainability requirements is strengthened among these producers. Wild Asia has pioneered a scheme to provide such support - the Wild Asia Group Scheme for Small Producers (WAGS).21

Box 4: Wild Asia Group Scheme (WAGS) for **Small Producers**

KEY LEARNING

European demand for sustainable palm oil can play a major role in supporting the livelihoods of smallholder farmers by providing a key market for sustainable production. Recognizing and acting on the risk that a drive for certification and transparency and traceability could marginalize smallholders and exclude them from accessing the market primarily due to cost and information barriers - is essential.

^{19.} Supplier-based approach refers to the movement from a 'clean supply chain' approach to a 'clean supplier' approach, a move to look beyond own supply chains.

^{20. &}quot;Projects Palm Oil." Aidenvironment

^{21. &}quot;Wild Asia Group Scheme (WAGS) for Smallholders." Palm Oil Initiative



3.3.4 Providing large-scale support in a climate-conscious context - NI-SCOPS

While initiatives like WAGS support smallholders with certification, voluntary certification may not be economical for all producers and landscapes. In response to these gaps, producer-consumer platforms have grown in number and scope in recent years. Examples include National Initiatives across Europe, Asia (including India and China), and Africa (currently being developed through the Africa Palm Oil Initiative), which signal movement towards a collaborative and global way of working and lesson sharing.

The IDH-, Solidaridad-, and Dutch Government-led National Initiatives for Sustainable and Climate-Smart Oil Palm Smallholders (NI-SCOPS) project aims to provide targeted support to smallholders in an effort to 'raise the floor', recognizing that voluntary and market-driven initiatives such as RSPO certification have 'raised the roof' for some.

The NI-SCOPS project has established multi-stakeholder national initiative platforms at the province or district level in producer countries – namely Indonesia, Malaysia, Nigeria, and Ghana. The national initiatives are public-private partnership programs co-owned by national and regional governments. They demonstrate the impact of European demand for sustainable palm oil in producer countries in a jurisdictional context.

A key defining feature of NI-SCOPS is its focus on climate-smart development. It focuses on socioeconomic improvement, increasing resilience to climate shocks, and reducing greenhouse gas emissions from farming and deforestation. As climate change gains relevance in industry decision-making, sustainable commodity sourcing is increasingly a target for reducing supply chain emissions (for both supply- and demand-side companies). NI-SCOPS' emphasis on this angle provides smallholders with the means to benefit from increased focus on climate-friendly production.

NI-SCOPS aims to demonstrate that the palm oil sector can contribute to the UN Sustainable Development Goals and the climate ambitions of the Paris Agreement while also improving the livelihoods of smallholder farmers and workers. Thus far, national-level climate-friendly KPIs have been set, and local governments have begun investments such as improving physical infrastructure.

Box 5: NI-SCOPS: how can industry get involved?

Companies can get involved: a) as a landscape partner to implement or support climate smart palm oil production in the target districts; b) as an innovation partner funding or co funding innovations such as smallholder carbon, biodiversity or livelihood assets; or c) as a supply chain partner through physical or certificate trade of sustainable palm oil o derivatives (Verified Sourcing Areas, Independent Smallholde Certificates, or certified sustainable palm oil).²² Engagemen from companies in this way helps to facilitate climate-smar development, improving livelihoods and income, increasing resilience to climate shocks, and reducing emissions from farming and deforestation.

KEY LEARNING

European demand for SPO can help smallholder farmers to develop sustainable and climate change-resilient practices by direct company involvement in initiatives like NI-SCOPS. National Initiative platforms are not only effective in demandside countries – they also provide useful collaborative platforms in producer countries.

^{22. &}quot;Palm Oil Case Study." IDH - the sustainable trade initiative



Moving forward - SPO in Europe beyond 2020

This section further explores the changing perspectives, commitments, and ways of working in the palm oil practices. It considers what this means for a strategic vision for the next five to ten years in the context of



4.1 Evolving private sector initiatives

As discussed above, demand for the private sector to step up its action and ambition in terms of verification, monitoring, and reporting through both individual and collective action continues to grow. Industry trends in tandem with policy developments (see below) point to the future trajectory of the palm oil sector.

Historically, there have been barriers to private sector advancement in this area that may have slowed or hindered the uptake or drive for CSPO in Europe. According to the 2020 Forest 500 assessment, almost half of the companies with forest commitments failed to verify their progress through an internal traceability mechanism, certification scheme, or third-party audit.²³ The complexity of palm oil supply chains is frequently cited as an obstacle to verification, with diverse entities at different stages of the chain from producer to end consumer making mapping back to source difficult. The development of more collaborative approaches, as discussed above, highlights the need to work together to gain visibility and leverage for change in productions processes.

"Increases in the number of companies with commitments to reduce or eliminate deforestation from their supply chains have stalled in the last three years. Of the companies with existing commitments, only eight percent have a zero-deforestation commitment that covers all of their supply chains and operations. Companies have been slow to implement commitments due to lack of agreement on priority actions, limited understanding of where risks are, and hesitation to invest in sustainable activities where the financial returns are unclear."

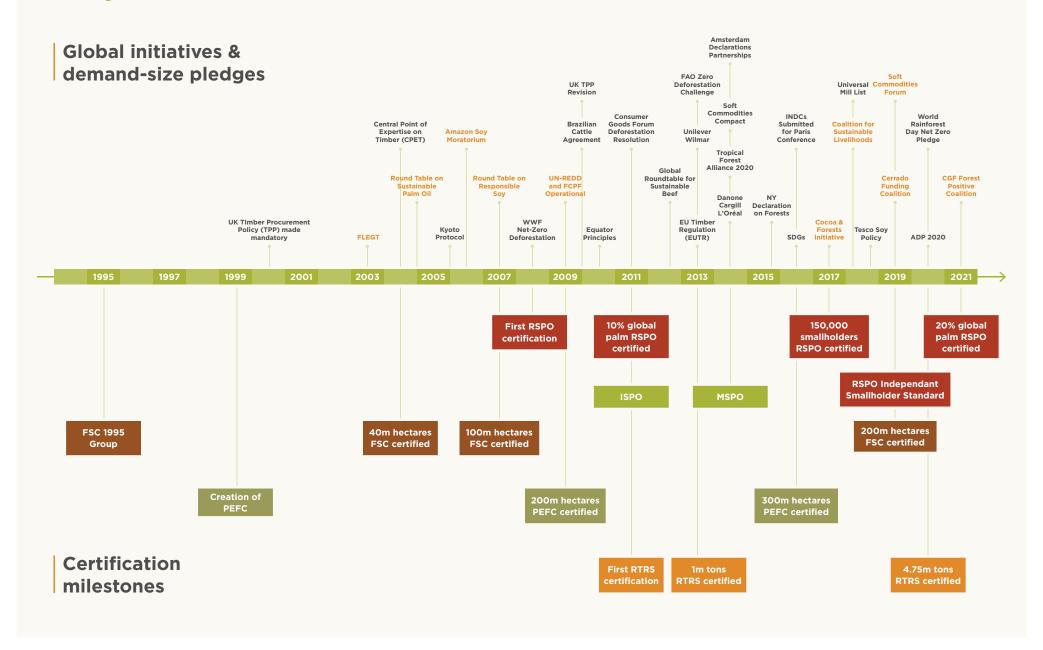
NYDF Assessment Partners (2019), New York Declaration on Forests

Goalposts have evolved given the scale of the challenge, and company actions, tools, and definitions around deforestation commitments have struggled to keep pace. Figure 18²⁴ demonstrates the evolution in 'ask' and expectation of businesses.

^{23.} Forest 500 - 2021 Report

^{24.} Efeca (2021) adapted from FAO (2016)

The evolving asks of businesses: Timeline of Demand Side Initiatives and Certification Milestones.





The 'ask' for industry has increased in ambition in recent years, as reflected in the evolving standards of certification schemes and the bold deforestation-free commitments of industry leaders. Monitoring and reporting developments, such as the development of transparency to mill data in 2018 (see section 3.2.1) has aided companies in executing these commitments. Increasingly companies are expected to go further - beyond certification and their own supply chains to multiple commodities. Given the complexity of commodity networks, efforts to drive change within single supply chains (as opposed to in broader supply bases) face increasing scrutiny from NGOs and leading operating companies. Arguing that meeting deforestation commitments will require "more transformational change in key commodity landscapes," the CGF Forest Positive Coalition of Action have identified "a limit to the progress that can be made by focusing only on individual supply chains."25

Box 6: The CGF Forest Positive Coalition Palm Oil Roadmap

The key area of consensus from the demand side appears to be that robust certification schemes have a role to play but should not be treated as a silver bullet. While certification schemes can support individual company action and signal the need for broader change, they do not deliver a mass-market approach that levels the playing field while still raising the standard. Furthermore, certification alone cannot address the complexities that producer governments need to manage, at times with less resources than demand side actors.

^{25.} CGF. (2020). CGF Forest Positive Coalition of Action. Sov Roadmap.

^{26. &}quot;Palm Oil Roadmap: Version 1.5." CGF Forest Positive Coalition of Action, Aug. 2021

4.2 Addressing the gaps in the **European market**

While leading companies in particular are accelerating private sector action and commitment, gaps remain in the European market where some companies are yet to match this rate of progress. These 'followers' include parts of the European palm oil sector that are not yet committed to or driving towards sourcing of CSPO for various reasons (for example lack of knowledge, awareness of the issue, or demand, and cost sensitivity), let alone going beyond their own supply chains in driving sustainability. These gaps are addressed through the actions and approaches described below.

4.2.1 Viewing sustainable palm oil through the climate lens

The climate crisis is generating momentum for change across all sectors powered by a growth in Race to Zero and other climaterelated commitments. This presents an opportunity for addressing sustainable sourcing of palm oil through a wider 'climate lens'. A change in the conversation around sustainable palm oil that addresses the link between sustainable sourcing of palm oil and the climate impact through supply chain emissions (also known as Scope 3 emissions reporting) can place the palm oil conversation within the realms of ongoing corporate sustainability efforts not yet focused specifically on SPO. Many leading companies already make this connection - aligning the efforts of leaders and followers to raise the base remains the challenge.

Box 7: The Race to Zero campaign

4.2.2 Legislation as a driving force

The global policy landscape is evolving. Legislation is set to be introduced in the EU to oblige companies to carry out due diligence on the forest-risk linked to commodities they source, which will likely include palm oil (see Section 4.4 below). Consequently, verification of where palm oil is sourced from is likely to become a necessity. CSPO could provide a simple means of complying with legislation for those companies not currently purchasing CSPO.

This legislation does carry the risk that companies move away from sourcing palm oil altogether - companies may favor alternatives not linked to deforestation. This risk could be combatted by including palm oil alternatives within the scope of any legislation introduced, which would even provide CSPO with a market advantage due to its assurance against a link to deforestation.

However, some companies may not be directly impacted by due diligence obligation at all due to their size or position in the supply chain. Public sector procurement policies or other domestic regulations could play a significant role in shifting the mass market, encouraging shifts in those actors not impacted by due-diligence legislation.





4.2.3 The role of certification

Certification bodies like the RSPO will continue to play an important role in addressing the gaps in the European market. Engaging those 'follower' companies that are not proactively sourcing sustainably could be driven by stronger application of the RSPO shared responsibility rules throughout the supply chain. However, enforcement of such rules by the RSPO would not be easy, especially due to the complexity of some fraction and derivative supply chains. The guestion therefore remains as to whether a stronger incentive could be introduced instead - whether a 'carrot' would be more effective than a 'stick'.

Some companies and even entire sectors are still at the beginning of the sustainable sourcing journey. Support from bodies like the RSPO and other sectors of industry is crucial to instigate sectorwide progression. Addressing common barriers such as the cost of certification could be an effective way of providing this support.

4.2.4 Balancing the narrative: consumer awareness and communication

sustainable palm oil. The adverse impacts of conventional palm oil production have been well documented by the media resulting in an overwhelmingly negative image, and a balanced narrative of the major issues associated with a blanket boycott and the availability of sustainably produced palm oil has been largely absent.

Stakeholders throughout the palm oil market have a role to play in addressing this lack of consumer understanding. Civil society organizations must continue to raise public awareness about the importance of sustainable palm oil. Supply chain actors such as retailers, manufacturers, and foodservice operators must leverage their position to provide strong messaging to their consumers about the products they use. Certification bodies like the RSPO can also play a key role in overcoming this barrier by combatting the 'no palm oil' message through the use of trademarks and by helping companies to communicate using on-pack claims and labeling.

4.3 Europe-wide platforms and **National Initiatives**

Private-sector joint action coalitions (including Europe-wide platforms and National Initiatives) bring together industry actors to share lessons, discuss strategic opportunities, and coordinate action in a pre-competitive space with the aim of deepening global impact and realizing systemic change. Industry-led national initiatives are designed to capture the 'mass market', and while each group is unique to its own market, membership typically includes diverse actors from first importers to consumer-facing companies. These groups act as effective 'touch points' for wider stakeholder experts such as academics, civil society, or innovative tool owners to communicate with industry more efficiently than reaching out to individual corporations. Crucially, these approaches are driven by industry - not civil society or government - ensuring a safe space for honest and open dialogue.

An important role that National Initiatives play is in outreach and engagement with other National Initiatives in both consumer and producer countries. Wider collaborative engagement and action allows for the sharing of information, tools, and approaches, all working towards a common goal of driving production and consumption of

The European Palm Oil Alliance (EPOA) is a business initiative of palm oil refiners and producers pushing for sustainable palm oil market transformation and supporting initiatives committed to sustainable palm oil across Europe. As well as engaging with NGOs and sustainability standards, EPOA works with National Initiatives from across Europe, convening a Europe-wide platform through which lessons can be shared and greater alignment reached, amplifying the market signal. Expanding this engagement to other consumer countries (for example China and India) and producer platforms in SE Asia and Africa (NI-SCOPS and others - see Section 3.3.4) will play an increasingly important role in creating market change in the context of growing markets in SE Asia, Africa, and South America.

4.4 Public sector policy initiatives

The modern geopolitical landscape means that sustainable sourcing of palm oil must be considered within a broader focus on climate change mitigation and the awareness that food production and land use are significant drivers of global warming.

The 2021 UN Framework Convention on Climate Change (COP26), seen by many as one of the last major chances to secure political cooperation in the fight against climate change, places food production and land use change at its core. The COP26 Forest and Agricultural Commodity Trade (FACT) Dialogue process brings together major governments with input from industry and civil society representatives to stimulate a sustainability push beyond COP26. This cross-sector ambition to change the way we use land and produce commodities must be matched with action beyond 2020.

The policy environment in the EU and Member States is also changing, shifting in recent years to a focus on only importing and consuming deforestation-free commodities (including palm oil). This is reflected in the ambition of the Amsterdam Declarations Partnership (ADP), of which several major European palm oil-using countries are signatories. The ADP's Statement of Ambition for 2025 has renewed the signatory countries' ambition to eliminate deforestation in relation to agricultural commodities (See Box 8). This reflects the increasing recognition from public and private sector actors alike that palm oil can no longer be looked at in isolation, but must be addressed collectively with other commodities.

Policies and regulations affecting market demand (and thus production) are developing across Europe, individual Member States, the UK, USA, and further afield. For example the EU, UK, and USA are all in the process of introducing due diligence obligations for companies sourcing forest risk commodities. While the approach in the UK and USA places emphasis on legality (assuring that no illegal deforestation has taken place in supply chains), the EU regulation will be based on the idea that there should be no more than a negligible risk of a link to deforestation or violation of human rights.



Box 8: Amsterdam Declarations Partnership Statement of Ambition for 2025²⁸

The introduction of demand-side legislation like this around the world suggests that the demand for verified sustainably sourced palm oil from these markets and the need for companies to mitigate their exposure to deforestation will increase. Producer countries must be supported in stepping up sustainable production practices to meet this demand, for example by strengthening and giving greater recognition to national standards. Greater emphasis on national standards would also aid importers, strengthening their ability to verify compliance with a due diligence regulation. Section 3.3 showcases other actions to support producer countries in meeting growing demand.

Other EU policy developments could restrict the trade bloc's ability to drive stronger sustainability practices in producer countries. As part of its extension of the Renewable Energy Directive, the EU is set to phase out the use of palm oil in biofuels by 2030. With biofuels accounting for 56% of Europe's use of palm oil in 2020, the ability of Europe's purchasing power to drive SPO uptake will be severely reduced by this legislation, and it is possible this production will be redirected to less discerning markets. Despite this, the influence of major global companies and brands that are based in Europe can still play a key role in working with other markets to create change.

Other major demand-side markets also have a role to play in driving positive change on the ground but do not currently send strong market signals for sustainably produced palm oil. European impact is even more important while other markets develop stronger sustainability standards.

Box 9: EU due diligence legislation





5.1 Where do we stand?

The last two decades have seen considerable growth in private and public sector commitments for legal and sustainably produced palm oil. However, targets of 100% CSPO set for 2015 and revised to 2020 have in many cases not been met. In Europe the volume of RSPO CSPO used has stagnated over the last 5 years, with the uptake percentage also remaining relatively static between 85% and 90% (see Section 2.2.2). This reflects stagnation in the volume of RSPO CSPO produced relative to conventional material, and demonstrates the limitation of a drive and focus purely on certification in stimulating demand and creating change in production areas.

As shown in Sections 1 and 2, supply chains are evolving and markets are changing, with domestic and regional markets in areas of production gaining in size and influence. The significance of the 'rest of the world' palm oil usage volume, and prominence of mediumusing countries (making up 18% of total usage - see Figure 2), shows that the sustainability of the global palm oil market is truly a global issue in need of a global solution. Supporting engagement with SPO by domestic and regional markets in Africa and Asia is particularly crucial to creating the mass-market global shift that is needed.

Conclusion:

navigating

landscape

5.2 Industry is changing, looking beyond own supply chains

Behind these statistics, company behavior and ambition has changed. Leading supply chain actors no longer solely focus on demanding CSPO through single supply chains, instead emphasizing work with broader supply bases, landscapes, and in particular, smallholder support. Transparency and traceability back to mill (and increasingly production area) is growing as a market norm. This means that '100% CSPO' may now be too narrow a target for our efforts to monitor and report on global and European progress in sourcing sustainable palm oil. It fails to capture the work, progress, and impact beyond certification.

Leading companies are stepping beyond the focus on sourcing of CSPO, using broader approaches to ensure sustainable supplies of palm oil. Implementation and verification of NDPE policies is becoming more advanced through self-reporting tools like the IRF and thirdparty verification innovations like satellite mapping. These monitoring developments enable companies to demonstrate progress to shareholders, NGOs, and other stakeholders, and increasingly to manage risk, exercise due diligence, and show compliance with market and policy regulation.

This is reflected in reporting that goes beyond just CSPO usage - some company commitments describe goals related to RSPO certification 'or equivalent,' indicating that alternative assurance mechanisms are reliable. NGO assessments of company progress are also placing more focus on transparency, traceability, and NDPE commitments, pointing to greater attention beyond CSPO.



As demonstrated earlier in the report, the assumption that mass balance certification would lead naturally to an increase in supplies of segregated material has not yet proven accurate. The progress of leaders in implementing NDPE policies that provide further assurance of mass balance volumes could re-shape the role of mass balance certification. NDPE verification provides assurance of non-RSPO volumes meaning that mass balance can act as an instrument to improve practices beyond RSPO certification and continue to push sustainability forward. Voluntary certification continues to be an important tool for leading companies as well - it has a key role to play in communication with consumers by strengthening on-pack messaging - but it is certainly part of a larger toolkit of assurance of legality and sustainability.

Despite the progress made by leading companies, further development in strength of verification and reporting around NDPE policies is needed to maintain momentum. Companies currently have different methods of reporting and interpreting progress on implementing NDPE commitments. Greater alignment in this area will ensure that transparency and traceability can retain and gain credibility.



This report has also outlined the fact that some parts of the downstream supply chain demonstrate a lack of progress in the demand and uptake of CSPO due to a variety of reasons including consumer awareness, demand, and cost, Examples include parts of the food service and animal feed sectors. Motivation for increased engagement and uptake by these 'followers' is required and could include clear market demand through procurement policies (both public and private sector), legislation, education, and technical support.



5.3 The policy landscape is changing

From the legislative angle, the EU due diligence obligation is likely to impact larger companies, and therefore may be less likely to directly impact those sectors that have made less progress and consist of smaller businesses which may fall out of the direct scope of such policies. The role of domestic market policies coupled with changing consumer awareness and pressure for evidence and assurance of the sustainability of product purchases may be a greater change driver.

Europe's evolving role in the global market is an important issue for policy makers and companies alike. The EU's aim to phase out the use of palm oil in biofuels by 2030 runs counter to the growing use of palm oil in biofuels, and understanding the impacts on EU influence will be crucial to ensuring this policy ultimately helps to drive sustainable practices. Demand for sustainably produced palm oil must be maintained and amplified globally. Aside from palm oil, the EU is also one of the largest users of palm kernel expeller – with a physical certification model yet to be developed for this by-product, leading EU companies could play a key role in this, particularly given that it could be included within the scope of pending due diligence legislation.

Carbon emissions, the ultimate link between human activity and global warming, are now central to the political and industrial agenda. Commitments to 'net zero' emissions are increasingly ambitious, and accelerating with the support of initiatives such as the Race to Zero campaign. It is therefore important that sustainable sourcing of palm oil is viewed within the broader context of forest-risk commodities and the impact of agriculture and land use change on global warming.

5.4 Harnessing European action to drive SPO uptake

European companies and brands have an important leadership role to play in influencing behavioral changes and creating positive change on the ground across global supply chains as global market dynamics change. With Europe's use of palm oil in FFO declining. and already a small proportion of overall global usage, its impact as a demand-side market is limited (see Sections 2.1.1 and 2.2.1). However, the major companies and brands based in Europe with a global presence have a key role to play in driving CSPO demand outside of Europe, thereby maintaining Europe's ability to influence positive change on the ground.

Collaboration and partnership between governments, companies and producers, in particular smallholders, is increasingly important. Producer countries must be supported in stepping up sustainable production practices to meet demand. Strengthening and giving greater recognition to national standards, which could also play a greater role in verifying compliance with due diligence regulations, is one way to support producers.

Transparency and traceability and the use of tools to show progress or give assurance (such as Earth observation and dashboards) will continue to gain importance. The strengthening of verification mechanisms and reporting tools enables tracking and demonstration of progress against commitments and compliance with regulations. Certification has played, and continues to play, a key role in developing sustainable practices in the global palm oil industry, but it is now just one part of an assurance toolkit.

Although verification methods have been strengthened, greater alignment of reporting will enable easier understanding of progress. Progress in transparency and traceability can be furthered by using consistent definitions for traceability at each level, and aligning verification methods used to track progress in NDPE implementation.



While leading companies continue to make progress, followers must not be left behind - some sectors of industry are in need of support.

Non-food associations and companies, such as those in the animal feed and oleochemical industries, should be given more inclusion and attention in the drive to increase sourcing of sustainable palm oil. Food and food service companies that are behind in their SPO progress must be engaged to identify root causes so that they can be better assisted. Market and regulatory incentives could help to fill these gaps. In parallel, efforts can be made to gain more information on the use of palm oil by companies, the gaps in progress, and how shared responsibility can be enacted throughout the supply chain.

Communication with consumers must be strengthened and balanced - and all stakeholders have a role to play. Stakeholders should consider their role in making sustainable palm oil attractive and recognizable to consumers, helping to balance the 'no palm oil' message and decrease the pressure that may cause companies to avoid using palm oil. Strong and consistent market messaging and demand is required throughout the supply chain. For producers the need for a consistent market ask and requirements to meet or verify that ask are essential. For downstream companies, a clear and consistent message for end users and customers will help to create that demand. Alignment of policies, market demand, and verification requirements could help to drive that consistency.



As global markets shift amidst pending market regulations and requirements, the use of palm oil in Europe is likely to change,

Policy and corporate commitments should account for changes in use of palm oil in Europe. The implications of phasing out palm oil as a biofuel feedstock including any knock-on impact on the oleochemical industry and global supply chains, and the possible diversion of volumes to other less discerning markets must be included in policy considerations. Pending market requirements for greater due diligence and thus transparency and traceability in palm oil supply chains can lead to greater uptake of CSPO as a means of compliance. Generating awareness and training in compliance will be crucial for those parts of the supply chain currently less engaged with sustainable palm oil.

Monitoring of sustainable production can be strengthened and improved to enable more accurate assessment of progress and guide future action. Efforts can be made to gain more information on the palm oil use of companies and ensure that shared responsibility is being enacted throughout the supply chain. Monitoring of company progress could be broadened by assessing companies based in different countries. Future monitoring and reporting of progress must adapt to recognize the growth in alternative assurance mechanisms.

Beyond 2020, the palm oil industry is set to be characterized by ambitious individual actions within a broader behavioral shift. With 2020 in the past, Europe's position as a strong advocate of sustainable production and supporter of producer countries will remain critical to the future success of the global push for sustainable supply chains of palm oil.

A.1 Monitoring sustainable palm oil - explaining our methodology

To answer the question 'how much palm oil is sustainable?' is not as straightforward as it seems. Where you monitor (import, processing or consumption), whom you monitor (only members of a sustainable palm oil alliance or the complete food industry), and how you monitor (self reporting, interviews, estimates) have an impact on the figures and progress reported. How you define sustainable palm oil (RSPO certified or NDPE compliant) is also central to this analysis.

This report aims to give insight on the use of sustainable palm oil in Europe. To do so we monitor progress in two ways. We present the overall share of CSPO entering Europe based on import data, and use dashboard information from the 8 major European palm oil refiners and importers to present the share of palm oil traceable back to mill and plantation origin.

This annex explains the background and sources used for each of these two methodologies. Per methodology it describes **who** is monitored, **where** is monitored and **how** is monitored. In addition we also elaborate **why** we believe the chosen methodology is best to use at this moment while also acknowledging the biases and limitations of the results they produce.

We welcome constructive feedback on the methodologies used in this report, and we're committed to improving the monitoring of sustainable palm oil in the future.



A.2 Overall CSPO uptake in Europe (sections 2.2.1 and 2.2.2 of report)

Who

The first methodology analyses European imports of CSPO for food, feed, and oleochemical (FFO). We define Europe as the European Union member states (EU-27) plus the United Kingdom, Norway and Switzerland. These three countries are included because they have national initiatives on sustainable palm oil that have signed the ESPO commitment, their governments have joined the Amsterdam Declaration Partnership (UK and Norway), and their palm oil trade is closely linked to the EU-27.

The uptake figure only represents the use of CSPO for FFO purposes. The majority of palm oil entering Europe is used for biofuel and bioenergy, however these volumes are not part of the ESPO and ADP commitments, nor are fuel companies active members of the national initiatives. Because sustainability criteria to use palm oil and other vegetable oils for fuel are regulated via the EU Renewable Energy Directives, they are excluded from this monitoring figure.

Where

The uptake figure produced only represents the share of CSPO that is entering Europe upon first arrival. It is these so called 'into refinery' volumes that are being shipped directly from producing countries or via intercontinental traders. The assumption that volumes supplied to Europe are aligned with supply and demand in the market is not necessarily true - not all of this volume is being bought and claimed as CSPO further down the value chain. For example a margarine producer may buy the CSPO from the trader because of CSPO commitment while a bakery client is not interested or willing to pay for CSPO. The volume that entered Europe as sustainable is currently no longer claimed and audited beyond the refinery. It is therefore not possible to say that this figure is the same as the palm oil used under certification by European companies or consumed by its citizens.

How

The calculations behind the figure are based on three different data sets, CSPO import data comes from the RSPO secretariat, EU-27 total import data comes from Eurostat (MVO Trade Statistics) and data for UK. Norway, and Switzerland as well as the biofuel data are from the Oil World Annual 2021. The bioenergy number is based on Oil World data after analysis from industry experts at Fediol. The calculation itself is described in the table below.

2020 data	Volume (MT)	Source
1.1.1 Total European imports of PO – includes the following PO products (HS codes shown in brackets):	1.1.2 A	1.1.3 Eurostat
Crude palm oil (1511.10xx)		
Refined and fractionated palm oil (1511.90xx)		
FAD (3813.1930) (only if imported from Indonesia, Malaysia, Thailand, Papua New Guinea, Honduras and Ivory Coast)		
DFA (3823.1910) (only from Malaysia and Indonesia)		
1.1.4 Total European exports of PO ²⁹	1.1.5 B	1.1.6 Eurostat
Total European use of PO	A - B	Calculation
1.1.7 Total European use of PO for biofuel/bioenergy	1.1.8 C	1.1.9 Oil World
Total European use of PO for FFO	(A - B) - C	Calculation
1.1.10 Imports of RSPO certified SG/ MB volumes	1.1.11 D	RSPO
1.1.12 RSPO credits purchased	1.1.13 E	1.1.14 RSPO
Volume of European CSPO imports for FFO	D + E	Calculation
% CSPO uptake in Europe for FFO	(D + E) / ((A - B) - C) * 100	Calculation



Whv

Monitoring at the moment palm oil enters is most feasible. It does not require the reporting of every company, and data is publicly available via Eurostat and Oil World. It is also able to produce one key figure that catches the majority of palm oil products entering Europe into one message that can be easily understood and communicated.

Advantages:

· Key overall figure on total European palm oil use for FFO

Bias and limitations:

- Biased to CSPO share entering EU market only. No view of demand further down supply chain
- No view on non-EU-27 members integrated into Europe's palm oil trade (e.g. Ukraine, Russia, and Turkey).

^{29.} Note - To ensure consistency in the data, data on European exports of FAD and DFA must only include FAD and DFA that originated in the countries of origin specific in the import data. This information was calculated by using a ratio of the proportion of European imports of FAD and DFA that came from these countries, which was then applied to the total export figure.



Annex B: The role of trading systems in strengthening demand for **CSPO**





Within the palm oil supply chain (as described below) the mills that process fresh fruit bunches can either be conventional or certified to one or multiple certification standards, most commonly RSPO (Roundtable on Sustainable Palm Oil), ISCC (International Sustainability and Carbon Certification), MSPO (Malaysian Sustainable Palm Oil), or ISPO (Indonesian Sustainable Palm Oil). RSPO and ISCC are both voluntary schemes and are common dual certifications as there are many similarities in the audit requirements. MSPO and ISPO are Government-driven certification schemes in Malaysian and Indonesia so again it would be common to see them alongside RSPO certification. For the purpose of this report, the focus is on RSPO certification due to its relevance and prominence in the European

The RSPO has three physical trading systems, or supply chain models, that set out the differing requirements applying to the supply chain: Identity Preserved, Segregated, and Mass Balance. A fourth model, which does not represent a physical supply chain, is the purchase of RSPO Credits. These supply chain models are explained in this Annex.



B.1 Context: the palm oil supply chain

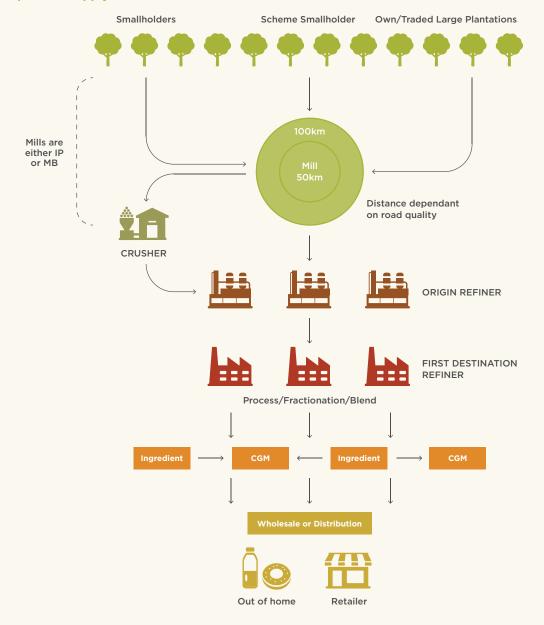
The palm oil supply chain is characterized in Figure 19. Fresh fruit bunches produced by smallholder farmers (independently or as part of a cooperative scheme) or by larger plantations are processed at a mill. Mills can either be conventional or certified to a sustainability standard (such as the RSPO) as either Identity Preserved (meaning that they are only processing certified material) or Mass Balance (meaning that they are processing both certified and conventional material). At the mill, two outputs are produced: crude palm oil from the fleshy fruit, and palm kernels.

Crude palm oil is then refined or fractionated at refiners in the origin or first destination countries in the supply chain. Similarly, palm kernels are processed at a crusher to produce palm kernel expeller and palm kernel oil, with the latter then entering the refining process.

The Mass Balance 'I tonne for I tonne' process describes how refiners that have purchased Segregated certified material (see below) may sell it as conventional to enable an equivalent volume of conventional material to be sold as Mass Balance certified. Following the refining process, the material is processed by consumer goods manufacturers into products for distribution to consumer-facing business.

FIGURE 19

The palm oil supply chain



THE IP supply chain model Identity Preserved Supply Chain Model RSPO CONTROL FIRST ON THE PROPERTY AND CONTROL OF THE PROPERTY OF THE PROPE

B.1.1 The Identity Preserved (IP) supply chain model

In an IP supply chain model, certified material from single identifiable certified source is kept separate from ordinary or conventional (uncertified) palm oil throughout the supply chain, as shown in Figure 20.30 The supply chain is uniquely traceable to a single mill that has been certified to the RSPO Principles and Criteria (P&C).

The key benefit of this system is that material traced back to one mill out of around 2500 mills worldwide provides certainty over the source and production of the palm oil, and assurance that legal and sustainability criteria are met. On the other hand, the fact that the material must be kept separate throughout the supply chain to the end product adds complexity and cost, which limits use.

FIGURE 21 The SG supply chain model

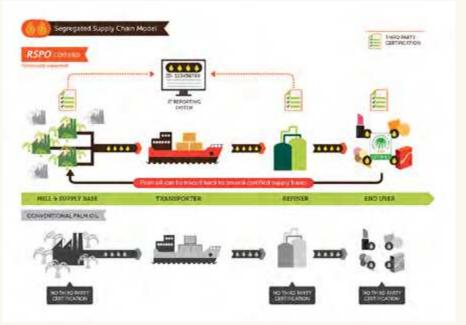


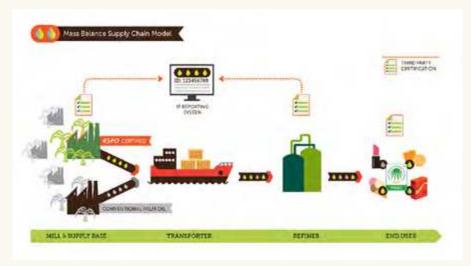
Image source: RSPO website

B.1.2 The Segregated (SG) supply chain model

SG supply chain models see RSPO certified material, mixed with certified material from other sources at a certified mill.

^{30.} Figures 20-23 are graphics from the RSPO website.

FIGURE 22 The MB supply chain model



B.1.3 The Mass Balance (MB) supply chain model

The MB system allows for mixing of RSPO and non-RSPO certified sustainable palm oil products at any stage in the supply chain provided that overall site quantities are controlled. Certified sustainable palm oil products delivered to the end user under the Mass Balance supply chain model will be traceable to a list of RSPO certified mills.

The Mass Balance (MB) supply chain model monitors the trade of RSPO certified sustainable palm oil products throughout the entire supply chain, as a driver for mainstream trade in RSPO certified sustainable palm oil products. It strengthens demand for CSPO by allowing each participant within the supply chain to demonstrate their commitment to the production and trading of certified oil palm products.

FIGURE 23 The MB supply chain model look 6 Claim Supply Chain mode RSPO CREDITS RSHO IT Syrise MILLS SUPPLY BASE END USES

B.1.4 The RSPO credit (Book and Claim) supply chain model

Book and Claim is not a physical supply chain model; the supply chain is not monitored for the presence of certified sustainable palm oil. Palm oil products which have been produced and certified to the RSPO P&C are represented on the RSPO IT platform PalmTrace as a credit, with one credit representing one tonne of certified material produced.

Manufacturers and retailers can support the production of CSPO by buying Credits from RSPO-certified growers, crushers and independent smallholders. When purchased, the buyer can use these Credits to make RSPO claims against specific volumes or products.

Book and Claim has an off-market trading section, which is widely used by businesses wishing to make a direct connection with a certain mill or independent smallholders or region. There continues to be growth within this facility.

