

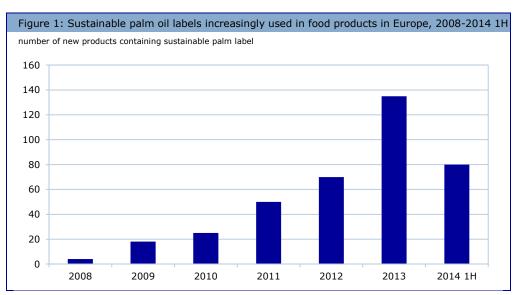
Increasing Demand for

Sustainable Palm Oil

The growing demand for sustainable palm oil is bringing ongoing opportunities and challenges to the industry. Palm oil suppliers are sourcing and handling increasing volumes of sustainable palm oil to comply with growing demand from food and consumer goods manufacturers. However, sourcing criteria often vary across branded manufacturers, and suppliers must meet these requirements in addition to conventional purchasing requirements, adding to what is already a complex sourcing environment. Traders and growers of palm oil are already responding and adopting sustainable sourcing requirements. As sustainability and transparency requirements expand, new market opportunities emerge. Vertically integrated palm oil suppliers and niche players are best positioned to benefit from this trend. Other palm oil suppliers will need to review their growers and buyers to assess where they can spend purchasing resources most efficiently. The developments in palm oil should be watched by other commodity markets, such as soybeans and sugar, where food manufacturers are also shifting to more sustainable purchasing requirements.

Demand for sustainable palm oil will grow materially

Today's food manufacturers are launching more and more products that advertise the presence of sustainable palm oil. In Europe, the number of food products containing a sustainable palm oil label is growing fast (see Figure 1). However, interest in sustainable palm oil is much greater than can be seen in supermarkets, as only a small fraction of companies sourcing sustainable palm oil actually mention this on their packaging.



Source: FAT & Associés, 2014

Many buyers of palm oil have adopted the sourcing criteria developed by the Roundtable on Sustainable Palm Oil (RSPO). Among other ambitions, the RSPO's criteria aim to guarantee conservation of natural resources and biodiversity, and to support local communities. The RSPO is the most used certification programme in the palm oil industry, having certified approximately 12 million tonnes or 20 percent of global palm oil production between 2008 and 2014.

Demand for RSPO-certified palm oil was about 5.3 million tonnes in 2014. While there is some additional sustainable palm oil demand for the production of biodiesel-mainly certified by another certification scheme, International Sustainability and Carbon

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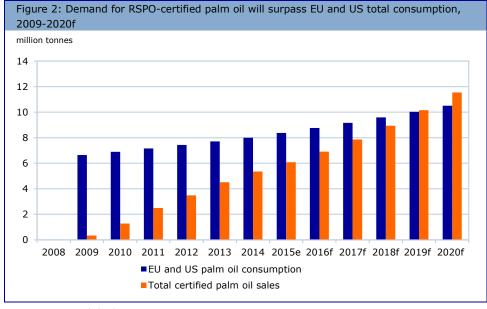
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Certification (ISCC)—in total, offtake for certified sustainable palm oil is only half of global supply. This is a key issue for the industry; as more buyers can source sustainable palm oil, there is no shortage.



Source: RSPO, Rabobank, 2015

However, demand is showing strong growth. Based on current published company commitments, Rabobank forecasts demand for RSPO-certified palm oil to grow to over 11 million tonnes by 2020, or 15-16 percent of expected global palm oil demand (see Figure 2). This is without taking into account possible future company commitments. By 2020, almost all palm oil traders and suppliers active in Europe and the US will inevitably be selling certified palm oil.

Today, about 40 percent of the roughly 8 million tonnes of palm oil sourced by EU and US manufacturers is certified. These manufacturers are expected to consume the largest share of additional global certified palm oil sales, as these regions currently account for between 80 percent and 90 percent of certified palm oil use. With companies anticipating offtake to rise to 11 million tonnes, sourcing certified palm oil will clearly be key for suppliers in EU and US markets.

Interest in sustainable palm oil is also mounting in Asia and other regions. Based on current company commitments, the demand for RSPO-certified palm oil in Asia will reach 2 million to 3 million tonnes by 2020. This is still small compared to expected global palm oil supplies of between 70 million and 75 million tonnes and expected certified supply in 2020. However, demand for RSPO-certified palm oil will likely be greater, as more companies outside of the EU and the US can be expected to publish commitments in the coming five years.

Sustainability interests drive diversification of sourcing requirements

Food manufacturers and traders are becoming more ambitious in growing their use of sustainable palm oil. However, they have different levels of ambition and different interpretations of what sustainable sourcing entails, which is adding considerable new complexity to the market. Furthermore, the market can expect even more diversity in sourcing criteria in the coming years, as the public debate regarding minimal requirements for sustainable palm oil is not over. As long as discussions continue, companies will need to adjust their sourcing criteria to the emerging requirements. In fact, the past one-and-a-half years have seen a wave of companies sharpening their sourcing criteria with regard to both sustainability and transparency of their purchases. Criteria for sourcing palm oil are expected to continue to evolve to tighter levels. Therefore, we expect to see wider diversity in the sourcing criteria.

RSPO provides market with various sourcing criteria

Palm oil suppliers selling to food manufacturers that have adopted the RSPO criteria still need to consider their customers' diverse sourcing criteria. The RSPO gives manufacturers

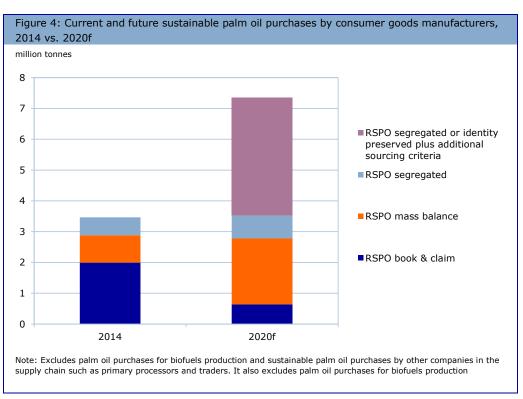
the opportunity to buy certified palm oil (CPO) via four different sourcing models, depending on the level of transparency and traceability required (see Figure 3). These diverse purchasing models are also found in other commodity programmes.

Figure 3: RSPO offers multiple palm oil purchasing models		
Sourcing model	Description	Level of transparency/traceability
Identity preserved	CPO is bought from one particular certified palm mill and kept separate in the supply chain	High
Segregated	CPO is bought from multiple certified palm mills and kept separate in the supply chain	Medium
Mass balance	CPO is mixed with conventional (i.e. not certified) palm oil, but only as much sustainable oil can be taken out as is brought in	Low
Book & claim	CPO certificates are bought without actual palm oil purchases	Low
Source: Rabobank, 2015		

Currently, the book & claim (B&C) and mass balance (MB) sourcing options are used most often. But as a consequence of the growing demand for transparency and more CPO entering the market, the market is progressing towards the Segregated (SG) and Identity Preserved (IP) models. In fact, many manufacturers regard SG and IP CPO as 'higher level' certificates and want to reduce sourcing through B&C. However, SG and IP palm oil require suppliers to keep palm oil volumes separated during transport, storage and processing, making these products relatively costly to suppliers as they cannot consolidate volumes and benefit from economies of scale. The question is how desirable it is to strive for SG and IP CPO, as the additional costs add little in the transformation to sustainability. Sustainability can be equally achieved through the uptake of B&C and MB, as area for these products also needs to be certified. The main take-away for palm oil suppliers is that although the RSPO is one system with one standard for sustainable palm oil production, sourcing criteria will differ among manufacturers, and the appetite for the different criteria is subject to change.

Adding to diversity: Branded manufacturers are setting stricter palm oil sourcing criteria

In August 2015, Consumer Goods Forum announced guidelines for retailers and consumer goods manufacturers to achieve zero deforestation by 2020, assisting them in designing their own policies for sourcing more sustainably. Beyond the RSPO criteria, last year, several larger branded food manufacturers, retailers and consumer goods companies voluntarily adopted more stringent sourcing criteria for palm oil. Often these criteria come on top of RSPO criteria. For instance, Mondeléz announced it would source palm oil that meets the RSPO criteria as well as additional criteria specifically on the protection of peat land and high conservation value area. Danone announced similar sourcing criteria, but also requires palm oil to be traceable to the plantation level. Other leading brands have added criteria such as demonstrated efforts in greenhouse gas emission reduction or community support. With branded manufacturers announcing their own standards, Rabobank expects demand for sustainable palm oil to grow further in terms of both volume and diversity (see Figure 4). Suppliers can already expect buyers to push for meeting the additional criteria.



Source: RSPO Annual Communications of Progress (ACOP), Rabobank, 2015.

By 2020, half of all palm oil used by manufacturers who purchase RSPO-certified palm oil is expected to be sourced with criteria additional to the current RSPO criteria. This growing demand for more stringent criteria could potentially undermine the relevance of RSPO-certified palm oil to buyers, negatively affecting demand. Therefore, it is crucial for RSPO-certified suppliers to keep criteria attractive to branded manufacturers, for instance by expanding the criteria. This is already being worked on through the development of RSPO Next.

Suppliers act on sustainability yet also use their own criteria

Without a doubt, growers produce sufficient RSPO-certified palm oil to match forecast demand, and this will continue towards 2020. RSPO-certified production capacity has grown phenomenally since 2008, from 619,000 tonnes to 11.9 million tonnes in 2014, at a CAGR of 64 percent. On average, CPO production has seen annual growth of 2 million tonnes since 2009, driven by the growth in certified palm area, which increased at 570,000 hectares per annum since 2009, to reach 3.1 million hectares in 2014. Even if certification of new area slows down, Rabobank expects production capacity of CPO to double, reaching 20 million to 24 million tonnes by 2020—twice the expected demand based on current commitments.

Segregated and Identity Preserved CPO are likely to command premiums

The question remains as to how much of the increase in production can be delivered with high traceability levels (e.g. up to mill level or up to plantation level) or through segregated supply chains. To a large extent, this depends on the capabilities and ambitions of the traders, who need to manage inventories, invest in segregated logistics and share sourcing information, which will take some time. Traders are currently taking a three-step approach: 1) mapping the mills they have in their supply base, 2) prioritising mills where action is needed and visiting them and 3) initiating projects to make mills compliant with the trader's new standards.

Rabobank believes that availability of MB-certified palm oil will not be an issue and would therefore command little premium. However, availability of IP or SG-certified palm oil could remain constrained, despite many industry players' committing to traceable palm oil. We expect that the industry will assess the demand for IP/SG and work to align its supply chain. If the gap between demand and supply grows, premiums for IP and SG may rise, provided buyers are willing to pay extra to comply with their own sourcing requirements. This could provide stimulus for additional certified IP and SG production capacity. As the supply of IP and SG presents a considerable inventory challenge, Rabobank expects the demand will result in vertical integration and investment in segregated logistics. The

question is whether buyers will compensate the suppliers for this and still find sourcing IP and SG the best fit with their sustainability ambitions.

Key palm traders take action outside of RSPO

Although traders may not be able to supply the market with sufficient palm oil that is both RSPO certified and traceable, they have made announcements to substantially improve the sustainability and traceability of their supplies. Last year, leading traders such as Cargill, Wilmar and IOI pledged to have all of their palm oil traceable to the mill level by the end of 2015, and they have set their own criteria in addition to the current RSPO criteria, similar to the companies on the demand side (e.g. food manufacturers, consumer goods companies and retailers). They have set commitments and will guarantee no deforestation, no development on peat and no exploitation of people. They were joined by several other large traders and because of their large share in global trade, these trader initiatives have great potential to improve the sustainability and traceability of the palm oil industry.

The key challenge that remains for traders is complying with their customers' criteria for sustainability. They have to convince buyers that their standards match the criteria on the demand side, are transparently audited by independent parties and that RSPO certification should not be the most important criterion. These parallel developments at traders, outside of an industry-wide programme such as the RSPO, can create uncertainty in the market, as more options increase complexity. Some companies will stick to the current RSPO criteria and some will adjust to the additional sourcing criteria traders are able to offer. In the meantime, opportunities and challenges emerge for companies that know exactly what buyers of palm oil want.

Multiple palm oil criteria create opportunities and challenges for suppliers

From a supplier's perspective, the diversity in customers' sourcing criteria leaves them with an inventory challenge. Suppliers (e.g. growers, traders, refiners and distributors) need to match the demands of their customers with palm oil of the right sustainability standard and level of traceability. In practice this could mean some palm oil needs to come with specific information on origin (e.g. mills or plantation), some needs to be shipped and stored in separated tanks (i.e. SG palm oil) and some needs to be certified by specific certification programmes. In addition, customers may require this only for the mainstream palm oil products they source (e.g. palm olein, palm stearin), or for all palm oil derivatives they purchase, including very specific palm fractions such as hydrogenated palm fats, palm kernel oil derivatives or palm stearin with a certain solid fat content. Niche or small volume fractions will pose bigger challenges to suppliers on the inventory front and offtakers might find scarcity of these in the market. Beyond this, customers may have different palm oil criteria for products produced under their own brands and through private label, which would pose additional challenges to the suppliers.

Opportunities arise for dedicated suppliers

Suppliers who have built their supply chains around palm oil of the highest standards with respect to sustainability and transparency will undoubtedly see demand for their products increase. These are often suppliers that have built integrated supply chains or have a captive supplier's model, where farmers deliver high-standard palm oil. They are best positioned to comply with high and diverse purchasing standards or make adjustments to palm oil cultivation practices if offtakers so wish. However, their limited size can be an issue for larger offtakers that wish to source from a limited number of suppliers at a constant quality. Scaling up will be necessary and as a result these niche players are expected to be looking to expand. For larger suppliers or buyers of palm oil, these companies can be interesting investment opportunities to expand their own palm oil capabilities.

Economies of scale become more difficult to play out

Larger scale traders and suppliers who have multiple customers may be challenged by the diversity in their sourcing requirements. Currently, they benefit from aggregating demand from different customers to standardise procedures and combine logistical efforts. However, customers with high traceability requirements will require different procedures, different suppliers and segregation of palm oil flows and logistics. This brings additional costs, which can only be recovered from customers with this requirement (see Box 1).

Box 1: Complexity of sustainability in the palm oil supply chain creates significant price premiums

A key challenge for current palm oil refiners and processors arises when customers demand a specific refined palm oil fraction that meets certain high sustainability and traceability standards and the supplier is compelled to source crude palm oil with the right specifications. In many cases, the supplier does not have other customers that have the same requirements and are willing to pay extra for the other refined palm oil fractions produced from the crude oil. Having surplus volumes of palm oil products with certain specifications is a cost to inventory management, so the supplier will try to recover all additional costs from just one or a limited number of palm oil fractions. This increases the price of these products significantly. The mismatch creates premiums in the market, or means that some palm oil fractions of certain sustainability and traceability levels are simply not available in the market. As there are many different palm oil derivatives in the market, this issue is set to last. This issue is a result of the need for a high level of traceability, and would not occur when the market would choose B&C or MB to transform the market.

Buyers deepen their interest in suppliers

Food manufacturers will be reviewing their suppliers to better understand what volumes and palm oil products are available and whether there are associated price premiums. Which of their suppliers is capable of supplying what certificates or evidence and what level of traceability? If palm products are not available, single-source purchasing strategies may not be sufficient anymore. However, adding or switching suppliers can be costly as it takes time to develop the right specifications and negotiate prices. Manufacturers can potentially reduce sourcing costs by partnering with other offtakers to build sufficient volume for their supplier to change its sourcing strategy.

Sustainable palm will drive specialisation and efficiency efforts

The sustainability discussion is clearly increasing complexity in the palm oil industry, and Rabobank expects this trend to continue, as new sourcing requirements will keep being developed. However, if suppliers and buyers of palm oil could find each other through the adoption of a programme such as RSPO Next, this could potentially reduce complexity again. Meanwhile, as new supply and demand balances emerge, changes to prices and premiums can be expected. Premiums can have a positive effect on sustainability, as they stimulate suppliers to get their palm oil from certified area. For instance, demand for SG RSPO-certified palm oil will push suppliers and ultimately growers to also get the more challenging palm acreage in their supply base certified (i.e. smallholder producers). Therefore, besides the additional costs, the interest in SG palm oil can be a positive development for the RSPO.

Suppliers who specialise in highly sustainable or traceable palm oil can attract new clients, potentially by entering into derivatives to expand their product portfolio and thus customer base. They have to seize the opportunity before larger scale suppliers become capable of improving their supplier base in terms of sustainability and traceability.

For many suppliers, creating, maintaining and controlling different certified and traceable supply chains remains an inventory challenge, and the focus will therefore be on efficiency: making sure all purchased palm oil matches client interests. Suppliers will benefit from mapping the sustainable palm oil criteria of their customers and understanding for which of them palm oil is a key ingredient and premiums can likely be collected. They can then determine which clients are worth additional procurement resources.

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