



FROST & SULLIVAN

**Report
on level
of certified
palm oil
in Poland**
2020




POLSKA KOALICJA
DS. ZRÓWNOWAŻONEGO


oleju palmowego

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**Polska Koalicja na rzecz
Zrównoważonego Oleju Palmowego**

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Report on level of certified palm oil in Poland 2020

Introduction

In recent years palm oil has become one of the most used oils in food and feed, as well as a substrate in production of chemicals, cosmetics and biofuel production.

It is sourced from a palm oil tree, plantations of which can be found mostly in the equatorial and subtropical climate, from where it is then imported to Europe as a commodity. Only two Southeast Asia countries – Indonesia and Malaysia – provide over 80% of world's palm oil yield¹. Main recipients in Central Europe are Germany and the Netherlands, from where the resource is sold to the rest of European countries². Palm oil tree (*Elaeis guineensis*) is a source of two types of oils: crude palm oil sourced from fibrous mesocarp and palm kernel oil³. Although the characteristics of the two types are radically different⁴, the usage of both had dramatically increased in the recent years, causing changes in natural environment⁵. Bearing in mind rapidly growing population⁶, continuous climate change⁷ and depleting natural resources⁸, such a significant increase in production of only one resource draws attention to its influence on global ecology and economy.

The global debate on harmfulness of palm oil in areas of environment and human health, as well as discussion about ways of its substitution has been going on for decades. Advocates of using palm oil in food, cosmetics, chemicals, feed or biofuels underline a number

of advantages the palm oil offers, such as high productivity of palm oil tree yields, which amounts circa 3,7 tons per hectare per year, while e.g. rape seed produces 1,3 tons of oil per hectare per year⁹. Comparison of productivity of different types of crops is shown on **graph 1**. Due to its physiochemicals attributes, palm oil has a wide variety of usage and its substituting by producers is often impossible or highly problematic¹⁰. Additionally the scientific world cannot come to an agreement about the influence of palm oil consumption has on human health¹¹, especially compared to other types of oils¹². It should be noted, that as of today there is no institution banning or suggesting definite restrictions of palm oil consumption¹³.

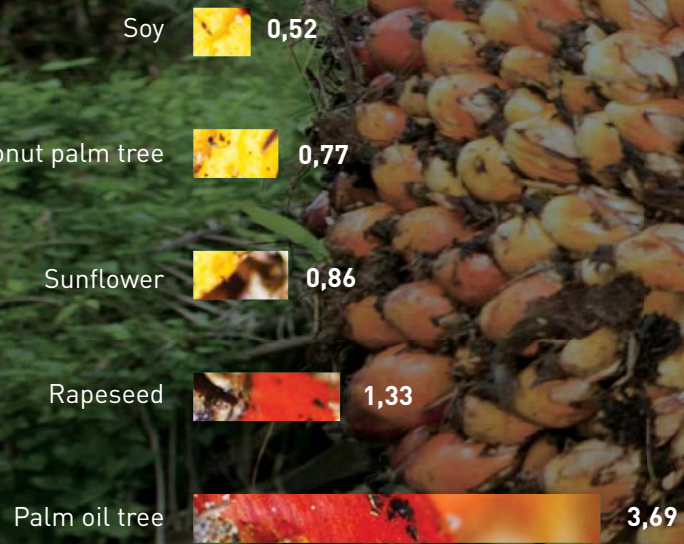
Palm oil has suffered criticism from some nongovernmental and ecologically focused organisations, as well as from many customers. Undeniable argument from opponents' side is the negative impact that palm oil sourcing has on natural environment¹⁴. For many years palm oil tree plantations have been kept in an unsustainable way, contributing to deforestation of tropical forests and destruction of natural habitats of many animals. Extensive palm oil production focused solely on profit maximisation led to a significant decrease in biodiversity in regions where palm oil tree plantations occupied large areas of land – mostly Indonesia and Malaysia¹⁵. The rest of concerns address aspects such as labour law on site, transparency of production process and waste management¹⁶. ➔



GRAPH 1.

**COMPARISON OF PRODUCTIVITY
OF SELECTED OIL PLANTS**

Yearly effectivity of oil production (tons/hectare)



- Debate about potential solutions has led to a partial palm oil boycott implemented by some producers and large numbers of consumers. Simultaneously work started on alternative ways of addressing the issue, while looking at the environmental and economic impact. As a result of those research a conclusion was drawn stating that substituting palm oil with other oils may have in fact negative consequences^{10,17,18,19}. **Due to palm oil's high yields per hectare, increase in production of sunflower, rape seed, coconut or soy oil would demand using additional land – in most cases jeopardizing regions with high biodiversity.** Additionally, versatility of palm oil and its physiochemical attributes often prohibits substituting it with aforementioned alternatives. Increased demand for new land areas would cause growth of CO₂ emissions and further changes in biodiversity. Furthermore, change in oils demand probably would not decrease the number of croplands in equatorial and subtropical climate, just changed their profile.

This statement was supported by some of world's most renowned ecological organizations like International Union for Conservation of Nature (IUCN)⁵ and World Wildlife Fund (WWF)²⁰. **These organizations clearly indicate the negative impact of substituting palm oil with other vegetable oil, supporting sustainable palm oil sourcing – minimizing the environmental impact of palm oil trees crops.** To do so, they endorse actions of the Roundtable on Sustainable Palm Oil (RSPO), organization that develops and implements norms and criteria, that companies must comply with to produce Certified Sustainable Palm Oil¹⁶. Among criteria one can find full production process transparency, high manufacturing standards, and obeying local and workers' laws. Additionally, certification puts an obligation on growers to maintain financial liquidity and constant improvements of processes (including sustainable development of the plantation), not forgetting about responsibility for environmental protection. RSPO was founded in 2004 and since then has gathered plethora of companies using palm oil in their products. Levels of certified palm oil usage (in global

scope) may be tracked with WWF Palm Oil Buyers Score Card tool, developed by WWF²¹.

Poland is one of the biggest economies in the region, therefore one of the biggest consumers of palm oil. The goal of this report is to update data regarding palm oil consumption in 2019 and assess the level of certified palm oil on our market. The report was prepared by Frost & Sullivan as part of Polish Coalition for Sustainable Palm Oil (PCSPO). It is a continuation of a report prepared by the same company in January 2019.¹⁷ ●

Methodology

In this report palm oil usage is considered in three categories: food; detergents and cosmetics; biofuel, feed and other utilization.

The most diverse category is food, which includes palm oil and its derivatives used in margarines, spreadable fats, bread and pastry, cookies, chocolate, ice cream as well as in chips, French fries and other salty snacks. Second category includes palm oil and its derivatives used in soap, bubble bath, shampoo and other domestic detergents, in addition to all other consumer products involving surfactants based on palm oil and its derivatives. Last category encompasses animal feed, biofuels, industrial and other usage not included in previous categories. It is worth mentioning, that a European plan of phasing out import of palm oil for biofuel was implemented in 2018²². Summary of main utilizations of palm oil is shown on [chart 2](#).

First goal of the study was to estimate the overall amount of palm oil used and/or consumed in Poland. Palm oil and its derivatives arrive to Poland in the form of a resource and in hidden form, as a part of imported pre-made products. Import of the resource was analyzed first. Similar to 2019 report, data on import, export and production of raw materials and goods were extracted from compilations of Polish Central Office of Statistics (GUS)²³. The data regarding import and export of palm oil and its derivatives (as local production equals zero)

are published monthly with possible adjustments at the end of the calendar year.

Usage of palm oil as a resource was counted as a difference between import and export. Calculations of amount imported in pre-made products are also based on Polish Central Office of Statistics (GUS) data in the matter. In some of subcategories aggregating of data series was necessary – to maintain continuity with 2017's data, the same set of records were analyzed. The in-depth description of each of subcategories can be found in the previous report.

In contrast, to assess amount of palm oil imported in pre-made products, for each of subcategories factors averaging percentage of palm oil in each product were used. Factors, described in the previous report¹⁷, market share of products with palm oil, average mass of palm oil in a unit of the product and other circumstances related to local characteristics of a product were taken into account. In comparison to 2017, withdrawal from market of some producers was considered, nonetheless impact of this adjustment was marginal. The volume of palm oil coming from import of raw material was added to the volume of palm oil imported as a component of product. Then, the volume of export, calculated in corresponding way, was subtracted from the sum. Products manufactured in the given year that was not sold, was not taken into account. ➔

CHART 2.

UTILITY OF PALM OIL DIVIDED IN CATEGORIES OF PRODUCTS¹⁷

Food	Detergents and cosmetics	Other usage
Margarine and spreadable fat	Soap	Animal feed
Bread and pastry	Bath foam	Biofuels (<i>with restrictions in EU countries</i>)
Cookies	Shampoo	Other industrial uses
Chocolate and chocolate products	Other cosmetics	Other use, e.g. in pharmaceutical industry
Ice cream	Surfactants used in domestic detergents	
Chips		
French fries and salty snacks		

- ➔ Second goal of the report was assessing the percentage of certified palm oil on Polish market. In the research, only palm oil with RSPO's (*the Roundtable on Sustainable Palm Oil*) is considered to be certified. RSPO's system of certification has different types and levels of certification, including segregated, *book&claim* and *mass balance* – their descriptions can be found on RSPO's website¹⁶. In the report, supply chains certified as segregated and mass balance were analyzed.

Detailed calculations were conducted separately for two of three main categories: food and detergents and cosmetics. Level of certificated palm oil in third category (biofuels, animal feed and other), due to lack of Polish data, was estimated based on numbers from other European countries. The food category is divided into subcategories, similar to division applied while calculating the total volume of palm oil in Poland. Market shares of biggest participants and their declared level of certification were analyzed in each of subcategories. Declarations come from surveys distributed among members of Polish Coalition on Sustainable Palm Oil, global data provided by WWF (mentioned *WWF Palm Oil Buyers Scorecard*²¹), individual declarations published by producers and direct interviews with market participants. Initial results for each sector were confronted with data from international trade and necessarily adjusted. Situations, where a producer was assigned to more than one category were also taken into consideration.

Data shown in the report are only estimations and may be marginally different from actual values. The reason for that is lack of palm oil consumption tracking on national level by some of considered corporations. Moreover, only for the biggest market participants the exact data were procured – for rest of the market values were averaged or estimated. Additionally, not all companies share information about level of certified palm oil in their products. All of data coming from declarations made by companies were confronted with certifications on global level and adjusted with information coming from other sources, including market participants from different positions on a supply chain. ●



Changes in palm oil consumption in Poland

Import of palm oil to Poland as a raw material is growing on an almost year-to-year basis – in 2019 imported were 280 thousand tons, while in 2018 this number was 266 thousand tons and year earlier – 253 thousand. As a result, the import of palm oil increased by 5,4% in years 2018/2019 and 5,2% in years 2017/2018.

Data regarding import of palm oil as raw material to Poland are shown on [chart 3](#).

In the recent years also the structure of import by country has slightly changed – Germany and the Netherlands remain the biggest exporters of palm oil to Poland. Both in 2017 and 2019 import from those countries accounted for over 89% of total imported palm oil. Interestingly, during last two years import from Germany has remained stable (noting only a marginal decrease from 156 thousand tons in 2017 to 153 thousand tons in 2019), whereas import from the Netherlands has significantly grown – 43% during two years (increase from 69 thousands of tones in 2017 to 98 thousands of tones in 2019). This is a re-

verse trend from one observed in years 2012-2017, where import from Germany was growing and one from the Netherlands was stagnant. It is worth noting, that in many cases palm oil arriving to Poland from Germany was earlier imported by Germany from the Netherlands. Among other exporting to Poland countries only slight changes were noted in comparison to 2017. Italy and Denmark are taking subsequent places in classification of countries exporting palm oil to Poland – their volume of export being 15 and 6 thousand of tones. Import of palm oil directly from producing countries, meaning Indonesia and Malaysia, is marginal in Poland. Data regarding import of palm oil to Poland are shown on [chart 4](#).

At the same time, growth of palm oil export in Poland was noted. While in 2017 Poland exported less than 3 thousand tons of palm oil as a commodity, in 2019 it was 5 thousand tons. As can be easily seen, those volumes are low compared to import. At the same time, it is worth noting that even though growth of palm oil import is significant it does not exceed total growth of rape seed, soy, and coconut oils in years 2004-2019. It may suggest general increase on demand on vegetable oils, rather than solely on palm oil. ➔

CHART 3.

**IMPORT OF PALM OIL AS A RAW MATERIAL,
2017-2019²³**

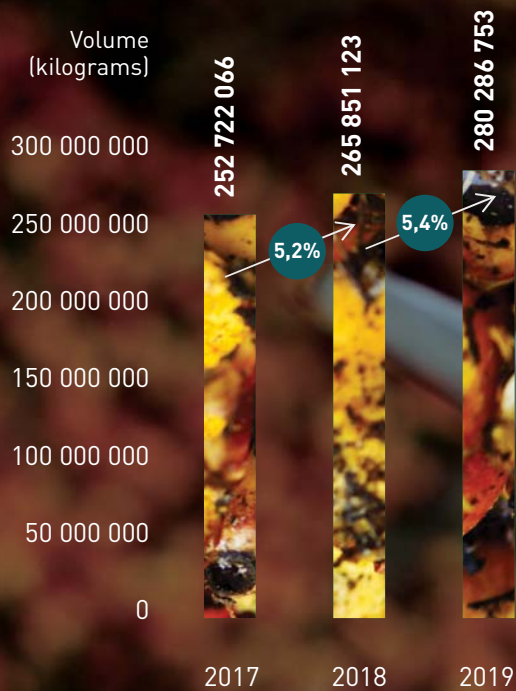


CHART 4.

**IMPORT OF PALM OIL TO POLAND DIVIDED BY COUNTRY,
2017-2019**

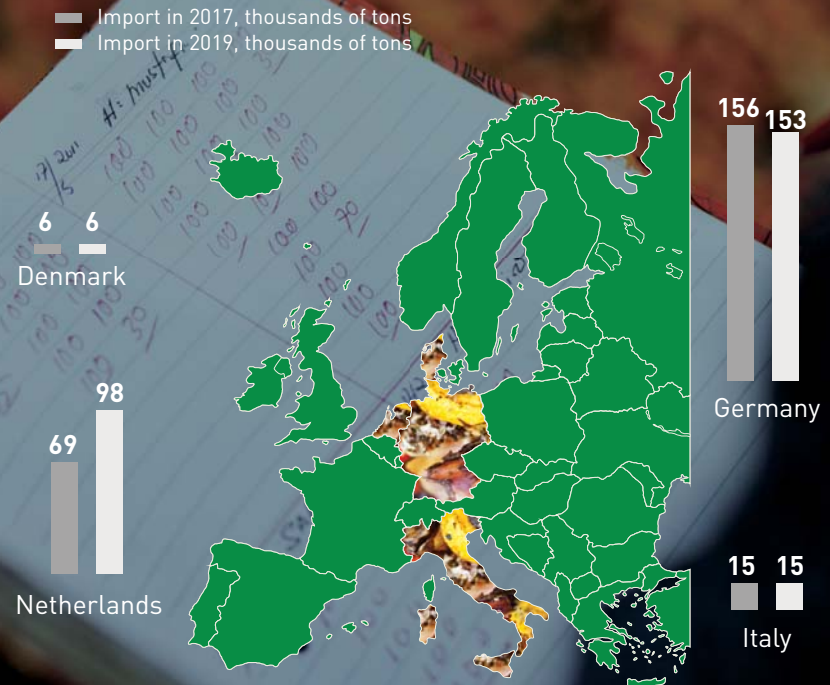
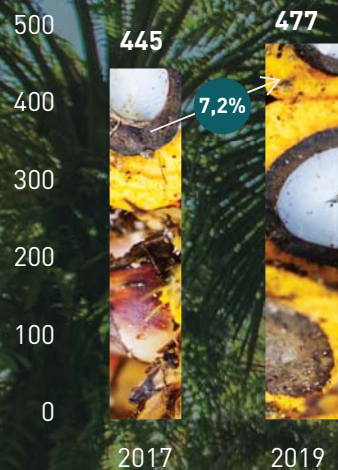


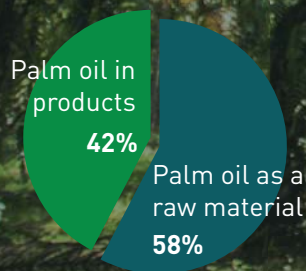
CHART 5.

PALM OIL IMPORT TO POLAND, 2017-2019

Total palm oil import (thousands tons)



Polish palm oil import, 2019



➔ An import increase in almost all categories of products containing palm oil is noted in comparison to 2017. The biggest growth can be seen in import of ice cream (32%) and French fries (30%), and the only category that noted a decline are shampoos (by 3%). The above means an increase of palm oil import also in a hidden form. It is estimated, that in 2019 almost 202 thousand tons were imported to Poland. In making this assessment stability of proportion of palm oil in each category was assumed, and possible decrease of usage (e.g. caused by resigning from palm oil by some companies) was neutralized by an increased demand by other producers. As a result, import of palm oil as a raw material is marginally higher than of palm oil in products – mass ratio being 58% to 42% accordingly. It is understandable, due to high levels of imported products in certain market sectors in Poland.

Not counting export, the total palm oil imported to our market in 2019 amounted to almost 477 thousand tons. In comparison, in 2017 445 thousand tons were imported, indicating growth by 7,2%. It is estimated, that in 2019 around 79 thousand tons of palm oil were exported from Poland in products. As a result, in 2019 **398 thousand tons of palm oil** were used, which is 25 thousand tons more than in 2017. This means, that with minor changes in population size, usage per capita grew. It should be noted, that use of palm oil and its derivatives is not limited to consumer products. Summary of data regarding import of palm oil to Poland are show on [chart 5](#). •

Level of certified palm oil in Poland

The goal of palm oil certification is improvement of conditions, in which it is made and, in consequence, minimizing its negative environmental impact. Due to the fact, that most of this resource arrives to Central and Eastern Europe through just a handful of seaports it is no surprise, that level of certification in Poland does not stand out in the region.

Calculations were conducted separately for each of main categories. Around 40% of palm oil used in Poland is used in food production, 32% in cosmetics and detergents, and remaining 28% in animal feed, biofuels (marginal share in total palm oil usage in Poland), industry usage and other.

The highest level of palm oil certification was noted for food category – it is estimated, that 78% of palm oil consumed in Poland has been certified. It is a share comparable to other EU countries, e.g. in 2017 in Germany as much as 85% of palm oil came from certified crops. Not only large corporations are contributors to such a large proportion

of certified palm oil on Polish market (among which many for years has been working on increasing the certification percentage in used palm oil), but also smaller producers. Among Polish entrepreneurs an increase in interest in certified palm oil can be noted. Moreover, some of the producers have already reached the 100% certification threshold in their palm oil supply chains. When it comes to detergents and cosmetics category, share of certified palm oil was 57%. It should be noted, that in this category palm oil has a long history of usage and, next to coconut oil, is one of the most common substrates used in surfactants productions, which are main active ingredients in cosmetics and domestic detergents.

Products from food and detergents and cosmetics categories end directly at individual customers. An individual customer is not a recipient of products from third category (feed, biofuels, industry usage and others), what can imply lower pressure on certification in those areas. Conclusion can be drawn from German market, where certification in this category amount for 26-27%⁹. In Poland, due to insufficient public data for palm oil certification for products in third category, level of 15-30% of certification can be assumed. It is a level ➔

- significantly lower than two other categories. Certified palm oil share can be seen on [chart 6](#).

Considering aforementioned aspects, **total level of palm oil certification in Poland is assessed for 55%**. Results counted for both total market and particular categories are similar to ones noted in rest of European Union countries. For example, in Netherlands it is 88%, Great Britain 75%, Denmark 65% and Spain 44%²⁴. However, each of those countries have different definitions of products included in research. It is estimated, that in 2019 86% of palm oil imported to European Union was cultivated in a sustainable way (including book&claim model, which was not included in this study)²⁵, of which 64% constituted palm oil certified on segregated and mass balance levels. Furthermore, historically higher percentage of certified palm oil in total import is noted in the Netherlands and Germany (countries being main exporters of palm oil to Poland), and lower for countries of Southern Europe, like Italy. Situation of European certified palm oil market is highly dynamic, what can be observed in year on year significant increase in certification levels. It is worth noting, that in Poland public's perception of certified palm oil share of the market is lower than its actual estimated level show by this analysis. During conference of Polish Coalition on Sustainable Palm Oil in June 2020 a survey was conducted among companies allied in the Coalition. As much as 44% of respondents pointed 20-50% as possible level of certified palm oil in Poland; 31% of surveyed believed it was below 20% and only 16% chose 50-60% range. •

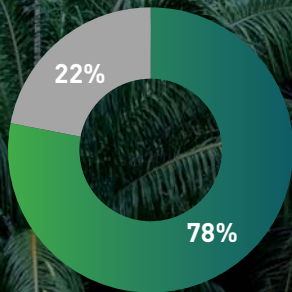


CHART 6.

SHARE OF CERTIFIED PALM OIL BY CATEGORY, 2019

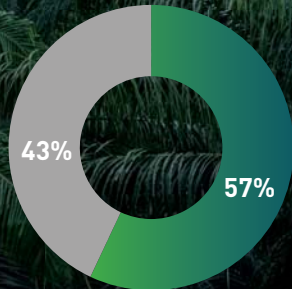
in food

40% of total market



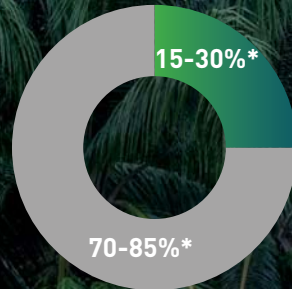
in detergents and cosmetics

32% of total market



in other uses

28% of total market



Non-certified
Certified

*Estimated data

~55% of certified palm oil on market in total

Summary

Similarly to previous years, import of palm oil in Poland is growing. Import of palm oil as a raw material is increasing by 5-6% per year. Import of palm oil in products is increasing in a similar way.

In 2019, 280 thousand tons of palm oil as a commodity and 202 thousand tons of palm oil in a hidden form arrived to Poland. After subtracting volume of export of palm oil as a material, total usage of palm oil in 2019 equaled 477 thousand tons, which is 7,2% more than in 2017. After taking into consideration estimated volume of palm oil exported in a hidden form, it was assessed that circa 398 thousand tons of palm oil was used on Polish market. Usage of palm oil per capita grew as well.

The highest share of certified palm oil is noted for food category – circa 78%. This segment is responsible for around 40% of total palm oil demand in Poland. For cosmetics and detergents category, level of certified palm oil amounts to 57% and this segment generates around 32% of demand on palm oil. In total, percentage of certified palm oil on Polish market is estimated to be 55%, however, it is an approximate value.

It is worth noting, that the closer to consumer a segment is, the higher its certification level. Individual buyers pay more attention to sustainability of product's manufacturing process in food segment. Less scrutiny is applied to cosmetics and detergents, partially because of surfactants based on palm oil have a long history on the market and because of strong brand loyalty in the segment. In products that are not purchased by individual customers level of certification of palm oil is estimated to be lower. To sum up, level of certified palm oil in Poland does not stand out in either way from Western European standards. In those countries level of certified palm oil in some utilizations is kept on a high level for couple of years.

Subject of palm oil and its harmful impact on environment causes strong feelings in public debate in Poland. Thanks to work of Polish Coalition on Sustainable Palm Oil, among others, idea of sustainable palm oil production was noted as a remedy for major environmental changes, and the discussion on this difficult matter takes more fact-based course. Poland is on a right path to achieve ambitious goals in increasing share of certified palm oil on the market. ●


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