

Palm Progress Report 2020 Our Journey Toward Sustainable Palm

Letter to our Stakeholders

The demand for palm oil is steadily increasing. Two of our most important renewable raw materials are palm oil and palm kernel oil, which we use mainly to produce ingredients for household and personal care products. At the same time, the expansion of palm oil plantations in tropical regions continues to lead to deforestation and human rights abuses. Finding a solution to this is not easy.

Some call for a boycott of products containing palm oil - with good intentions. But this ignores two key facts. First, oil palms are by far the most efficient oil crops. They provide 35 % of the world's vegetable oil on less than 10% of the total area under oil crops. This means that if palm oil were replaced by another oil crop, more land would be needed to produce the same amount. The result would be further deforestation and loss of biodiversity. On the other hand, the palm oil industry is the livelihood for millions of people in Indonesia and Malaysia. They depend on the income.

Our response to the challenges is: We must continue to work consistently on a sustainable supply chain, closely involving our suppliers in the process. Our commitment to No-deforestation, No-peat and No-exploitation (NDPE) plays a key role in this.

In 2020, we reached an important milestone and fully met the first part of our Palm Commitment. We procured 100 percent of our palm and palm kernel oil requirements of 227,213 metric tons from RSPO-certified sustainable sources. Our traceability down to oil mill level reached nearly 95 percent of our global palm oil demand – a great achievement.

We are now working at full speed to expand our commitment: By 2025, we aim to source oleochemical intermediates based on palm and palm kernel oil from RSPO-certified sources as well – in line with BASF's promise *We create chemistry for a sustainable future*.

President Care Chemicals, BASF SE

Core Elements of our Palm Commitment



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Key Figures BASF Palm Footprint 2020





We will step up our efforts to improve transparency and **traceability** in the supply chain. We were able to trace almost 95% of our overall oil palm exposure back to oil mill level in 2020.

RSPO sustain-

palm kernel oil

able certified

* Consultant 2.0, www.LCAnet.com/club/palmoil/, 2019

Our Journey BASF's Palm Commitment

When the Roundtable of Sustainable Palm Oil (RSPO) was set up in April 2004, BASF envisioned it as a milestone for the palm oil world. Consequently, BASF joined the RSPO in November 2004, very soon after the start. Since then, the RSPO has had a remarkable journey towards the sustainable certified production of palm and palm kernel oil – especially with the renewal of the Principles and Criterias in 2018. Consequently, we consider RSPO to be a standardized implementation of a strong No Deforestation, No Peat, No Exploitation (NDPE) policy.

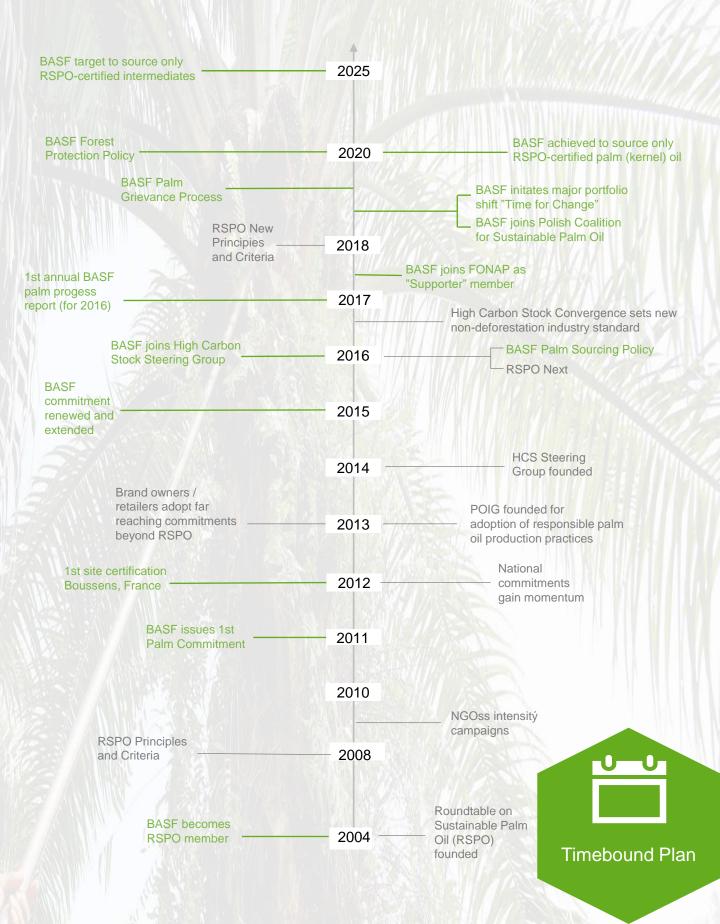
The BASF Palm Commitment was first published in 2011 and extended in 2015 including NDPE requirements by the means of a Palm Sourcing Policy for oil palm derived products that incorporates forest and peat conservation, as well as requirements for a social impact assessment and human and labor rights. We have committed ourselves to foster sustainable palm by procuring all oils only from RSPO physically certified sources by 2020 and expanding our oil commitments to significant intermediates based on palm and palm kernel oil by 2025.

As promised, BASF achieved its commitment to procure palm (kernel) oils exclusively from sources certified by the RSPO by 2020. Additionally, BASF embedded its Palm Commitment into an overarching BASF Group Position on Forest Protection. The scope encompasses oils and fats, grains, sugar and wood of our 3rd Party supply, our own operations, as well as our products. As a member, BASF is also fully committed to the High Carbon Stock Approach (HCSA) initiative which drives integrated land use planning for oil palm development.

In order to support our BASF NDPE commitment, we have developed an agile, responsive and insightful palm grievance procedure that covers direct and 3rd party suppliers. The process handles grievances related to BASF's palm oil supply chain, including suspension if needed. We respect the grievance procedure of the RSPO. Actions and decision on raised grievances made by the RSPO are taken into consideration. The BASF grievance procedure is published on <u>BASF Palm Dialog Webpage</u>.

For our efforts to halt deforestation caused by palm oil production, BASF was awarded an A- rating by CDP (Carbon Disclosure Project). CDP is a non-for-profit charity that runs the global disclosure system for investors, companies, cities, states and regions to manage their environmental impacts.

Our Journey BASF sets the course for sustainable certified oil palm products beyond time bound lans



Our Collaborations Sustainability Rankings & Ratings

We engage in sustainability networks to better **understand trends** in society as the drivers of our business, to help **shape** measurement and performance **standards**, and to **partner for** joint **contributions** to Sustainable Development.

Examples are:









Stakeholder Dialog As a strategic supplier and a connecting link between raw material producers and manufacturers, we want to make a difference in the palm industry. Collaboration and dialog along the value chain is key for pursuing our ambitious goals on our journey towards responsible sourcing of palm oil.

BASF became a member of the RSPO in 2004. Since then, we have actively participated in consultations within the organization, most notably in the subgroup oleochemicals and derivatives under the RSPO working group Trade & Traceability.

In order to leverage industry activities to stop deforestation, we became a member of the High Carbon Stock (HCS) Steering Group in 2016 and have since then integrated the criteria of the HCSA (HCSA) into our Palm Sourcing Policy. BASF stepped up its commitment to certified sustainable oil palm products in the German, Austrian and Swiss markets by joining the Forum for Sustainable Palm Oil (FONAP) in 2017 as a manufacturer of oleo-derivatives (category "Supporter").

In 2019, BASF signed together with other eleven founding members the Declaration of 'Polish Coalition for Sustainable Palm Oil – PKZOP (*Polskiej Koalicji ds. Zrównoważonego Oleju Palmowego*)'. The PKZOP is an independent coalition and aimed at achieving 100 percent sustainable palm oil in Poland by 2023.



POLSKA KOALICJA DS. ZRÓWNOWAŻONEGO Olejw palmowego









Stakeholder Dialog

Our Collaborations Smallholder Inclusion

In Indonesia and Malaysia, small holder farmers account for 40 percent of the total area of planted oil palms and as much as 33 percent of the output. This means no sustainability policy can be effective without considering smallholders as a crucial part of the value chain. Sustainability certification, such as the RSPO, can be costly and difficult to achieve for smallholders. However, it is also high in demand and can provide premiums.

In 2020, BASF and The Estée Lauder Companies partnered with the civil society organization Solidaridad Network to provide COVID-19 hygiene kits to more than 1,000 smallholder farmers and their families in the Way Kanan District in Lampung, Indonesia. Given out to approximately 3,000 people, the COVID-19 hygiene kits included face masks, soap, hand sanitizer and an information leaflet. Additionally, informative banners detailing COVID-19 preventative measures were placed in each of Way Kanan's seven sub-districts.

Improved livelihoods for around 8,000 farmers in West Kalimantan, Indonesia, between 2016 and 2019.

> Enhancing 1,000 independent smallholders to improve sustainable palm oil production in Lampung, Indonesia since 2018.



Smallholder Inclusion

Our Progress Broad Range of Sustainable Ingredients

BASF is one of the leading global suppliers for personal care, home care, industrial & institutional cleaning, and technical applications as well as for food performance and health ingredients. A significant share of our products is based on renewable raw materials, of which a substantial ratio is oil palm-based. We are one of the major users of palm kernel oil and its derivatives and to a lesser extent palm oil. We process those products into ingredients for the above-mentioned industries.

BASF offers a very broad range of ingredients based on RSPO-certified sustainable palm kernel oil in accordance with its principles and criteria. Since launching certified ingredients in 2012, BASF has been continuously moving toward a comprehensive global product range that will allow consumer goods manufacturers to develop value added formulations that meet increasing demand for ingredients that are certified sustainable.



Physical Transformation

Our Progress Customer Industries

Care Chemicals

We offer a broad range of Mass Balance certified sustainable products that cover all major Personal Care functions: from consistency factors (Cutina®, Lanette®), emollients (Cetiol®), emulsifiers (Eumulgin®), emulsion bases (Emulgade®), surfactants (Plantacare®, Dehyton®, Sulfopon® and Texapon®) and thickeners (Comperlan®) as well as all the way to the main surfactants for detergents and cleaners industry as well as industrial formulators (Dehydol®, Glucopon®, Lutensol®, Dehypon®, Disponil®, Agnique®).

Our ingredients are mainly based on palm kernel oil. The C-chain distribution for palm kernel oil includes a high percentage of C12-14 chains. This composition is ideal for ingredients used in personal and home care applications. In contrast to the food industry – where the oil is basically kept intact – the oleochemicals industry converts the oil using chemical processes, such as fractionating it into different C-chain lengths and adding different functional groups, until the final function is obtained – usually a surfactant or an emollient. This derivatization includes at least five to ten individual technological steps before the final ingredient is achieved. This is one reason why the RSPO Mass Balance standard for oleo-derivatives used in personal and home care applications is the most common certification program right now. The RSPO Segregated standard would require keeping all those steps separate, resulting in a huge amount of complexity and subsequent costs.

Human Nutrition

A key renewable raw material for numerous pharmaceutical excipients is palm kernel oil (PKO) and its respective derivatives. We are the first major supplier to offer 100% RSPO certified oleochemical excipients for the pharmaceutical industry. We offer the widest range of IPEC-GMP oleochemical excipients, suitable for topical and oral drug formulations. Our oleochemical RSPO-certified products include: a broad portfolio of emulsifiers, wetting agents, solubilizers, and cream bases that are used in a variety of oral and topical pharmaceutical applications (Kolliphor®); multi-functional solvents and emollients that enhance solubilization and skin penetration of some pharmaceuticals while offering a relatively benign mildness profile (Kollicream®); an extensive portfolio of structuring agents that provide formulation stability, used in the development of numerous oral and topical dosage forms (Kolliwax®); and a product line versatile solvents functioning as solubilizers, plasticizers, comprised of lubricants, emollients, and skin penetration enhancers, ideal for both oral and topical applications (Kollisolv®).

Physical Transformation

Our Progress in 2020 Raw Material Market Development & Availability

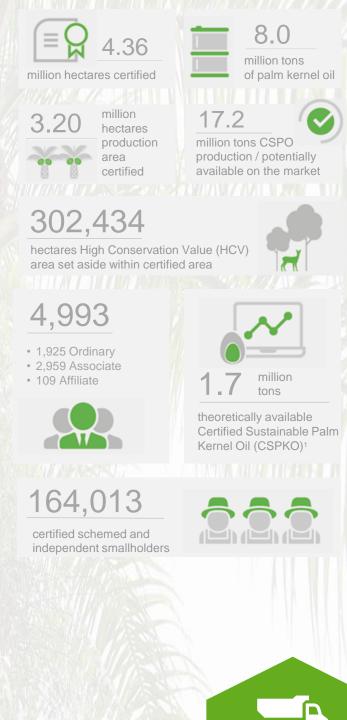
Our Achievements

In continuation of our commitment made in 2011, BASF's goal is to **RSPO-certified** only source sustainable palm oil and palm kernel oil. In the dynamic market environment of 2020. we purchased 227,213 metric tons of RSPO-certified palm (kernel) oil. BASF achieved Thus. its palm commitment to procure (kernel) exclusively oil from sources certified by the RSPO in 2020.

Market Development & Availability

worldwide Many major corporations have committed themselves to purchase or produce only sustainable palm oil to eliminate forest loss and social dilemma from their supply chains. Certification is the most widely used tool to fulfill these procurement policies. Around 19 percent of global palm oil production was certified by the Roundtable on Sustainable Palm Oil in 2020. More than 17 out of 76 million metric tons of palm oil are certified sustainable and predominantly enter the food chain. And about 1.7 out of 8 million metric tons of palm kernel oil are certified sustainable. These figures show that the availability of certified sustainable palm (kernel) oil is still limited.

RSPO Key Figures

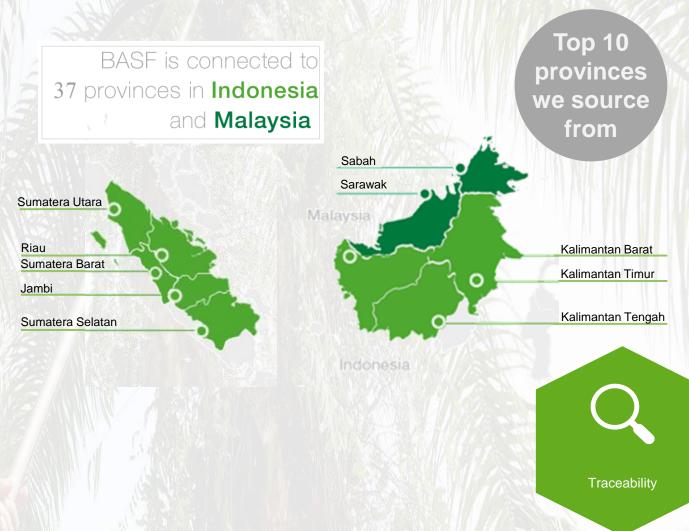


Physical Transformation

Our Progress in 2020 Traceability

The physical market transformation based on the RSPO-certification is an important element on our journey toward sustainable palm. In addition, traceability is the tool which helps companies along the palm oil supply chain to identify the origin of the oil sourced. Knowing the potential mills and their locations make it possible to identify and monitor if sustainable practices are adopted at the origination.

In 2020, we were able to achieve traceability for almost 95 percent of our global palm footprint of 441,000 metric tons back to the oil mill level. We source 75.6 percent of our traceable raw material from top 10 provinces in Indonesia and Malaysia and are connected to 30 provinces in the two countries in total matching 90.2 percent of our traceable raw material supply. Beyond this, we are in the process of risk assessment of our sourcing based on environmental and social criteria. We have once again achieved full traceability for certified sustainable palm kernel oil originating from 363 oil mills.



Outlook Forest Protection Policy: Introduced in June 2020

We recognize the importance of protecting the world's forests for the wellbeing of the environment * and society Palm (kernel) oil, soya oil and its derivates, and lignosulphonates extracted from wood are commodities with high deforestation risks

A key challenge

is to enable the sustainable intensification of agriculture by increasing productivity on existing land, thus decreasing the pressure on forests

As a consequence, we will adapt our current version of the palm sourcing policy.

Collaboration is needed to raise and increase awareness, drive the necessary market transformation and to achieve impact on the ground

We will drive the compliance to our ambition and principles in all our renewable value

chains



Forest Conservation

Outlook

NDPE implementation is the key success factor for a social license to operate in the palm value chain in the future. For BASF, an NDPE policy and its implementation have become a business-critical factor. Our reviewed BASF Palm Sourcing Policy addresses the requirements for protecting and preserving forests and peatland, as well as the involvement of local communities.

Traceability and certification have guided the palm industry for years. But traceability to palm oil mill does not solve the palm dilemma alone – it is about engaging with the right suppliers, introducing change for the better on the ground and increase transparency on the palm value chain. Therefore, we share a list of our main suppliers and the names and locations of round about 1,300 mills.

BASF will increase its efforts on traceability by renewing our palm traceability twice a year and by focusing on additional means to further investigate our palm supply chain like satellite monitoring and systematic reporting on the NDPE implementation of our suppliers. We are convinced that the outcome of this investigations together with our continued commitment to certified sustainable raw materials, and our engagement for and within the HCSA will drive change on the ground for the better – for our customers and stakeholders.



Progress Report

BASF has RSPO certification of its production sites in all regions – 25 sites in 2020

North America

- 1. Mauldin (USA)
- 2. Cincinnati (USA)
- 3. Kankakee (USA)
- 4. Mexico (Mexico)
- 5. Hartwell (USA)
- 6. East Setauket (USA)

South America

7. Jacarei (Brazil)

Europe

- 8. Antwerp (Belgium)
- 9. Ballerup (Denmark)
- 10. Boussens (France)
- 11. Pulnoy (France)
- 12. Düsseldorf (Germany)
- 13. Fino Mornasco (Italy)
- 14. Gebze (Turkey)
- 15. Illertissen (Germany)
- 16. Ludwigshafen (Germany)
- 17. Meaux (France)
- 18. Moscow (Russia)
- 19. Castellbisbal (Spain)
- 20. Zona Franca (Spain)

AsiaPacific

- 21. Jinshan (China)
- 22. Kitatone (Japan)
- 23. Bangpakong (Thailand)
- 24. Cimanggis (Indonesia)
- 25. Dahej (India)

Glossary

ACOP Annual Communication on Progress (RSPO)

CSR Corporate Social Responsibility

CSPO Certified Sustainable Palm Oil

CSPKO Certified Sustainable Palm Kernel Oil

FAO Food and Agriculture Organization of the United Nations

FFB Fresh Fruit Bunches

FONAP Forum Nachhaltiges Palmöl (Sustainable Palm Oil Forum)

FPIC Free, Prior and Informed Consent

GAP Good Agricultural Practices

GRI Global Reporting Initiative

HCSA High Carbon Stock Approach HCV High Conservation Value

NDPE No deforestation, no peat development, and no exploitation

NGO Non-Governmental Organization

OECD Organization for Economic Cooperation and Development

<mark>PO</mark> Palm Oil

PKO Palm Kernel Oil

POIG Palm Oil Innovation Group

RSPO Roundtable on Sustainable Palm Oil

UN United Nations

WHO World Health Organization

WWF World Wide Fund for Nature

Further Material / Links

BASF Palm Commitment
BASF Palm Sourcing Policy
BASF Forest Protection Policy

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