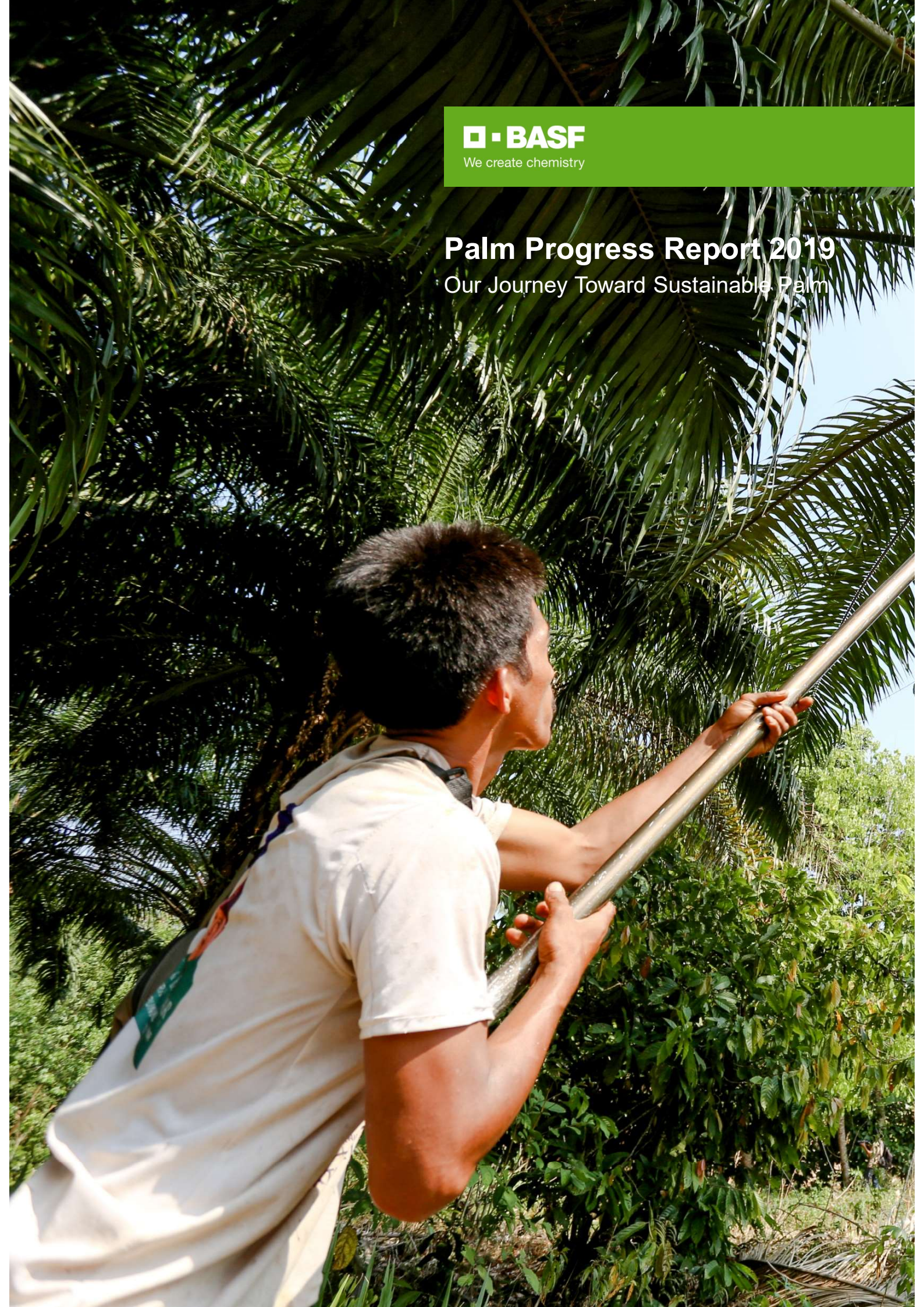




We create chemistry

Palm Progress Report 2019

Our Journey Toward Sustainable Palm



Letter to our Stakeholders

We create chemistry for a sustainable future – this is BASF's corporate purpose, and it reflects what we do and why we do it: We want to contribute to a world that provides a viable future with enhanced quality of life for everyone. We do so by creating chemistry for our customers and society and by making the best use of available resources. This also includes taking an active role in developing sustainable supply chains for raw materials.

Two of our key renewable raw materials are palm oil and palm kernel oil and their respective derivatives, which we mainly use to produce home and personal care ingredients and, to a lesser extent, food ingredients. We therefore aim to ensure that these raw materials come from certified sustainable sources.

In order to pursue sustainability in procurement we believe it is essential that our suppliers support our commitment. In 2019, we again made a step closer to reach our Palm Commitment – procuring all oils only from RSPO physically certified sources by 2020. We purchased 140,400 metric tons of certified sustainable palm kernel oil, representing around 83,5 percent of the company's total volume. And with a traceability back to the oil mill level of 90 percent of our global palm footprint of 382,000 metric tons in 2019, we also made further progress with regards to traceability.

And while we are working towards reaching our 2020 commitment, we are further committed to foster sustainable palm by expanding our oil commitments to significant intermediates based on palm oil and palm kernel by 2025.

I am even more convinced that adherence to our sustainability targets is absolutely business-critical. A no-deforestation, no-peat and no-exploitation (NDPE) commitment plays an important role here. Therefore, we are actively engaged in projects supporting smallholders to foster sustainably produced palm. To this end we collaborate closely with customers, partners and NGOs. I would like to share a rather recent example from this year, 2020: at the beginning of the Covid-19 pandemic, together with our partners Estée Lauder and Solidaridad, we locally supported more than 3,000 individuals with a Covid-19 intervention package in seven sub-districts in Way Kanan District, Lampung, Indonesia. We did this not only to stand in solidarity with our smallholders, but also to strengthen the ongoing and mutually beneficial relationship with our suppliers.



Ralph Schweens

President Care Chemicals, BASF SE

Core Elements of our Palm Commitment



Agenda

- 1 | Key Figures
- 2 | Our Journey
- 3 | Our Collaborations
- 4 | Our Progress
- 5 | Outlook



Key Figures BASF Palm Footprint 2019



by **2020**

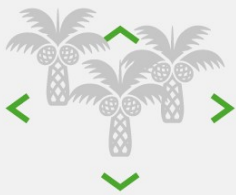
we are sourcing only RSPO-certified sustainable palm and palm kernel oil



~**382,000**

metric tons represent BASF's oil palm exposure in 2019

~**590,000**
hectares



the average equivalent area required for the palm kernel oil and other palm-based raw materials we use



24

BASF RSPO-certified sites globally



>800

BASF raw materials are palm-based

We will step up our efforts to improve transparency and **traceability** in the supply chain. We were able to trace **90%** of our overall oil palm exposure back to oil mill level in 2019.

Based on our voluntary commitment to sustainably source palm oil products, we purchased 140,400 metric tons of certified palm kernel oil in 2019.

This represents around

83,5% of our total volume.



Product Carbon Footprint

>180,000t
CO₂ eq. emission savings



conventionally sourced palm kernel oil



36%
reduction* of CO₂ eq. emissions



RSPO sustainable certified palm kernel oil

* Consultant 2.0, www.LCA-net.com/club/palm-oil/, 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. Therefore, 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 free, prior-informed-consent, social impact assessment and human and labor rights.

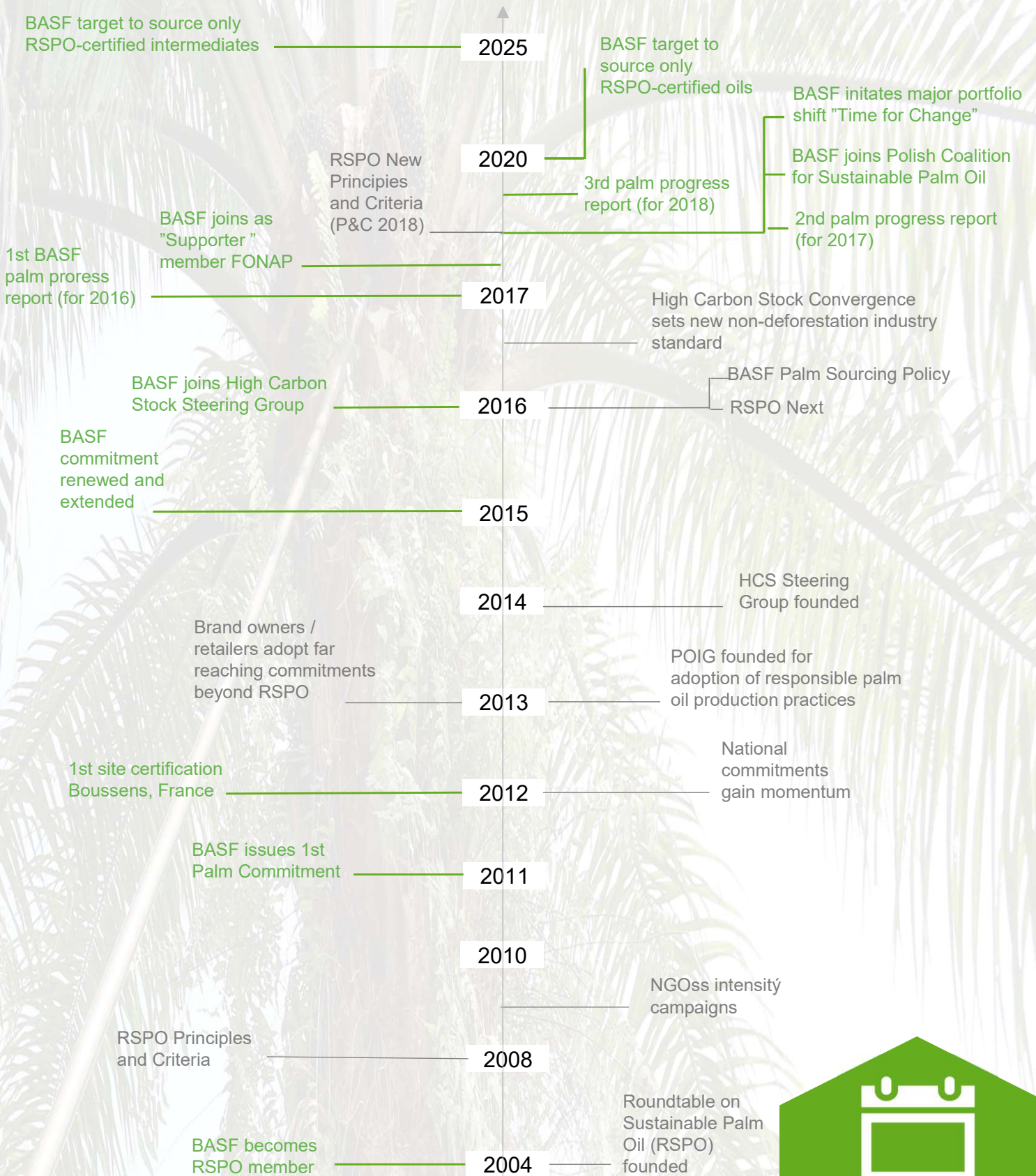
We have committed ourselves to foster sustainable palm by procuring all oils only from RSPO physically certified sources by 2020 and expanding our oil commitments to significant intermediates based on palm and palm kernel oil by 2025. BASF supports the High Carbon Stock Approach (HCSA) initiative to reflect integrated land use planning for oil palm development, including the conservation of high carbon stock and peatlands.

As part of its strategy, BASF has initiated its 'Time for Change' initiative in 2018 to offer its palm-based specialities exclusively as RSPO-certified sustainable.

Today, our experts continue to engage with numerous stakeholders along the value chain, including our internal stakeholders who serve as important ambassadors for sustainable palm to create transparency and collaborate on solutions.

Our Journey

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



Timebound Plan

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:



World Business Council for Sustainable Development



Our Collaborations Responsible Partnering

We support progress in the palm oil sector by moving the supply chain toward certified products. In this way, we take part in global palm initiatives and in networks with various stakeholders in order to drive change for oleo-derivatives.

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 has 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
oleju palmowego



FORUM
Nachhaltiges Palmöl
Supporter



2-0010-04-100-00

HCSA
HIGH CARBON STOCK APPROACH



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.

Improved livelihoods for around 8,000 farmers in West Kalimantan, Indonesia, by June 2019.

Support for around 1,000 independent smallholders in Lampung, Indonesia.



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.

In 2018, we have initiated a portfolio shift and offer palm-based speciality ingredients exclusively RSPO-certified.



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®), all the way to the main surfactants used in home care applications (Dehydol®, Glucopon®). In total, more than 120 RSPO Mass Balance-certified ingredients are available globally. The product range enables formulators to create entire RSPO-certified formulations.

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

The human nutrition business has a comprehensive range of health ingredients that are used in the industries of dietary supplements, food, beverages and in functional nutrition, including the fortification of staple foods through our food fortification initiatives. In addition, our portfolio includes food performance ingredients that help to enhance the taste, volume and texture of baked goods, desserts and ice-cream. We offer a broad range of RSPO-certified health ingredients and food performance ingredients from our production facilities in Ludwigshafen, Ballerup and Illertissen.

Mass Balance-certified health ingredients include Carotenoids, Vitamin A, Vitamin D, Plant Sterols and Conjugated Linoleic Acid (CLA). For ingredients in the food performance category based on palm and palm kernel oil, we offer both Mass Balance or Segregated certification. These ingredients include a broad range of emulsifiers such as Lamegin® and Lametop®, the Spongolit® range of aerating systems and the Lamequick® range of performance systems.



Physical
Transformation

Our Progress in 2019

Raw Material Market Development & Availability

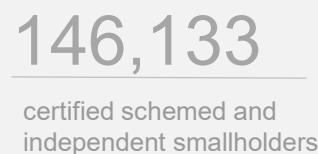
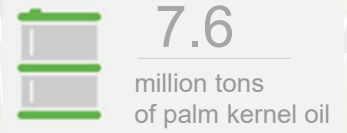
Our Achievements

In continuation of our commitment made in 2011, BASF's goal is to source only RSPO-certified sustainable palm oil and palm kernel oil. In the dynamic market environment of 2019, we purchased 140.397 metric tons of RSPO-certified palm kernel oil (2018: 127,000 metric tons). Our share of RSPO-certified sustainable palm kernel oil amounted to approximately 83,5 percent (2018: 70 percent).

Market Development & Availability

Many major worldwide 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 in 2019. More than thirteen out of 76 million metric tons of palm oil are certified sustainable and predominantly enter the food chain. From 8.1 million metric tons of palm kernel oil about 1.5 million metric tons is certified sustainable, This means that the availability of certified sustainable palm kernel oil is still limited.

RSPO Key Figures



Our Progress in 2019

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 2019, we were able to achieve traceability for 90 percent of our global palm footprint of 382 thousand metric tons back to the oil mill level. We source 77.6 percent of our traceable raw material from top 10 provinces in Indonesia and Malaysia and are connected to 37 provinces in the two countries in total matching 89.2 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 369 oil mills (2018: 269).

BASF is connected to 37 provinces in **Indonesia** and **Malaysia**

Top 10 provinces we source from

Sumatera Utara

Riau

Sumatera Barat

Jambi

Sumatera Selatan

Sabah

Sarawak

Malaysia

Kalimantan Barat

Kalimantan Timur

Kalimantan Tengah

Indonesia



Traceability

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. In addition, our BASF Palm Sourcing Policy addresses the requirements for protecting and preserving forests and peatland, as well as the involvement of local communities. We will strengthen our engagement in terms of smallholder support, e.g. education and training of smallholders.

In order to support our BASF NDPE commitment, we have developed an agile, responsive and insightful palm grievance procedure that covers direct and third-party suppliers. The BASF palm grievance process outlines our approach to handle 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.

BASF recognizes the importance of protecting the world's forests for the well-being of the environment and society. BASF purchases a range of renewable raw materials including oils and fats (palm, soya, coconut, castor), grains, sugar and wood for the use as feedstock for various products. The commodities evaluated with high deforestation risks are palm (kernel) oil, soya oil and its derivatives, and lignosulphonates extracted from wood. Therefore BASF has embedded its Palm Commitment into an overarching BASF Group Position on Forest Protection. This global BASF Group position encompasses our renewable raw material supply chains including the 3rd party supply chain of our direct supply base, our own operations, as well as our products, effective immediately. It comprises primary forests and areas of High Conservation Value (HCV), as well as High Carbon Stock (HCS) forest areas and peatlands. The human rights aspects beyond our ambition in the forest protection position are addressed in BASF's human rights position and the Supplier Code of Conduct.

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, e.g. certified sustainable material, and introducing change for the better on the ground. To prioritize further traceability and supply chain management activities CORE (Consortium of Resource Experts, comprising Proforest, and Daemeter Consulting) issued an environmental and social risk assessment for BASF.

Furthermore, BASF will continue its engagement within the RSPO and HCSA. In addition, we will further implement the BASF Palm Commitment. We are expanding our offering of certified sustainable products in accordance with the RSPO's Mass Balance supply chain model.



Progress Report

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 derivatives, 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



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**



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



Forest Conservation

BASF has RSPO certification of its production sites in all regions – 24 sites in 2019



North America

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

PO

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](#)

BASF SE

67056 Ludwigshafen, Germany

Contact: Alexandra Spiegel-Kutschenreuter (+49-621-60-93253)

Email: palm-dialog@basf.com

www.basf.com