



We create chemistry

# RESPONSIBLE SOURCING REPORT 2023

**FOR THE CARE CHEMICALS  
OPERATING DIVISION**

## LETTER TO OUR STAKEHOLDERS

Dear readers,

You are holding BASF's Responsible Sourcing Report in your hands. Thank you for being interested in our efforts. We at BASF have firmly anchored the three pillars of sustainability: the economy, environment and society into our strategy, our targets and our operations.

"We create chemistry for a sustainable future." Our corporate purpose makes it clear: We are committed to contributing to a world that provides a viable future with an enhanced quality of life for everyone by creating chemistry for our customers and society, making the best use of available resources.

In my role as President of the company's Care Chemicals Division, this vision is particularly close to my heart. We source and produce responsibly and act as a fair partner, especially by recognizing the critical role of smallholders and we are committed to improving their livelihoods through responsible sourcing. To make this a reality, we work closely with partners in the supply chain to transform the market and emphasize the importance of social measures to protect high carbon stock forests. We have also entered a future-oriented partnership to support Indonesian smallholders in sustainable palm and palm kernel oil cultivation. This partnership exemplifies BASF's commitment to sustainability, showcasing our dedication to supporting smallholders and promoting sustainable practices. At Care Chemicals, we carry the passion to care in our DNA: We care for our customers, consumers, employees, society and our planet.

Our global approach "Care360° – Solutions for Sustainable Life" bundles all topics relevant to the future of our markets and industries, namely, sustainability, digitalization, innovation and new approaches to working together.

In this report, you will discover comprehensive information about our activities and progress. This encompasses our Palm commitment, which establishes sustainability standards for palm and palm kernel oil sourcing. We also showcase our Responsibly Active program, which centers around the sustainable sourcing of bioactives and the promotion of empowerment while safeguarding the planet's resources. Furthermore, we take pride in being the pioneering chemical company to provide Rainforest Alliance certified personal care ingredients derived from coconut oil and engage in sustainable castor oil production.

I hope you enjoy diving into this year's edition of our Responsible Sourcing Report.

For more information, I invite you to visit [www.care360.basf.com](http://www.care360.basf.com)

Sincerely,



**Mary Kurian**  
President Care Chemicals,  
BASF SE



## FOREWORD



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## CARE 360° – SOLUTIONS FOR SUSTAINABLE LIFE

We as the Care Chemicals division of BASF carry the passion to care in our DNA: We care for our customers, consumers, employees, society and our planet. This is what sets us apart and motivates us.

Care 360° – Solutions for Sustainable Life is our global, cross-business and holistic approach to cover all topics relevant to the future of our markets and industries: sus-

tainability, digitalization, innovation and new approaches to working together.

Think of it as a canvas where we can sketch the future and collaboratively find solutions for sustainable life.

Care 360° lays the foundation for us to evolve our relationship with you – and create value together.



CARE 360°



## CARE 360°

### CARE 360° – SOLUTIONS FOR SUSTAINABLE LIFE

#### WHY DO WE CARE?

Across BASF, we share a passion for excellence in chemical engineering and innovation in the service of our customers, society and our planet. Our expertise and the power of our Verbund integration place us in a uniquely strong position to make a decisive contribution to changing the world for the better. We are committed to achieve this goal, as summed up in our corporate statement, “We create chemistry for a sustainable future.”

As a globally leading supplier to the industries of personal care, home care, industrial & institutional cleaning, and technical applications, BASF’s Care Chemicals division is by nature aligned with this mission. We not only create ingredients and solutions we also care for the needs of our customers, society and the environment.

Our dedication and passion to care in all dimensions is a challenge and an opportunity: each and every one of us at Care Chemicals is called upon to advance our role as the first-in-mind partner for using our knowledge to deliver high-performance sustainable solutions. Whether renewable feedstocks, sustainable supply chains or products with lower product carbon footprint, we have the expertise, resources and passion to help transform the industries we serve. This means taking a proactive approach to the marketplace, not only meeting existing needs, but also providing solutions for a sustainable future.

#### WHAT’S IN IT FOR YOU?

##### We want to make a difference

Consumers are increasingly aware of sustainability topics. And the markets we serve across the Care Chemicals division are particularly sensitive to public scrutiny, especially given the increase in transparency that digitalization is bringing; whether the environmental impact of detergents, naturalness of cosmetics or overall CO<sub>2</sub> footprint, manufacturers using our products need to meet high standards. We can help you turn this challenge into an opportunity through our expertise, knowledge and leveraging digital solutions.

## WE OFFER SUSTAINABLE SOLUTIONS FOR TODAY'S AND TOMORROW'S CHALLENGES

From nature-sourced, renewable actives for personal care products to plant-based surfactants for cleaning products, our sustainable solutions answer the demands of today's consumers and industrial users. Equally importantly, we can back our sustainability promise with transparent and verifiable facts. It is our collective responsibility to raise internal and external awareness of our sustainability credentials and how they benefit our customers, our company and society.

## CREATING A NEW CUSTOMER EXPERIENCE IS KEY TO MAKING A DIFFERENCE

Power in innovation and application knowledge is what BASF is known for. In the past, we have successfully proven our broad capabilities and deep expertise. This made us a leader in our markets. Care 360° builds on this foundation. With our digital services we are there for our customers 24/7, enhancing daily interaction with existing customers and offering new opportunities for potential customers. And by conjoining personal relations with digital interactions, we as Care Chemicals will deliver a seamless experience that is enriching the transition to Solutions for Sustainable Life.

From discovering and exploring solutions, to sampling and buying our products, Care 360° – Solutions for Sustainable Life will create a number of advantages such as more convenience, improved ease-of-doing business, and faster go-to-market through our cutting-edge digital services.



# CARE 360°

# SUSTAINABILITY NETWORKS & RATINGS

## OUR COLLABORATIONS

BASF engages 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:

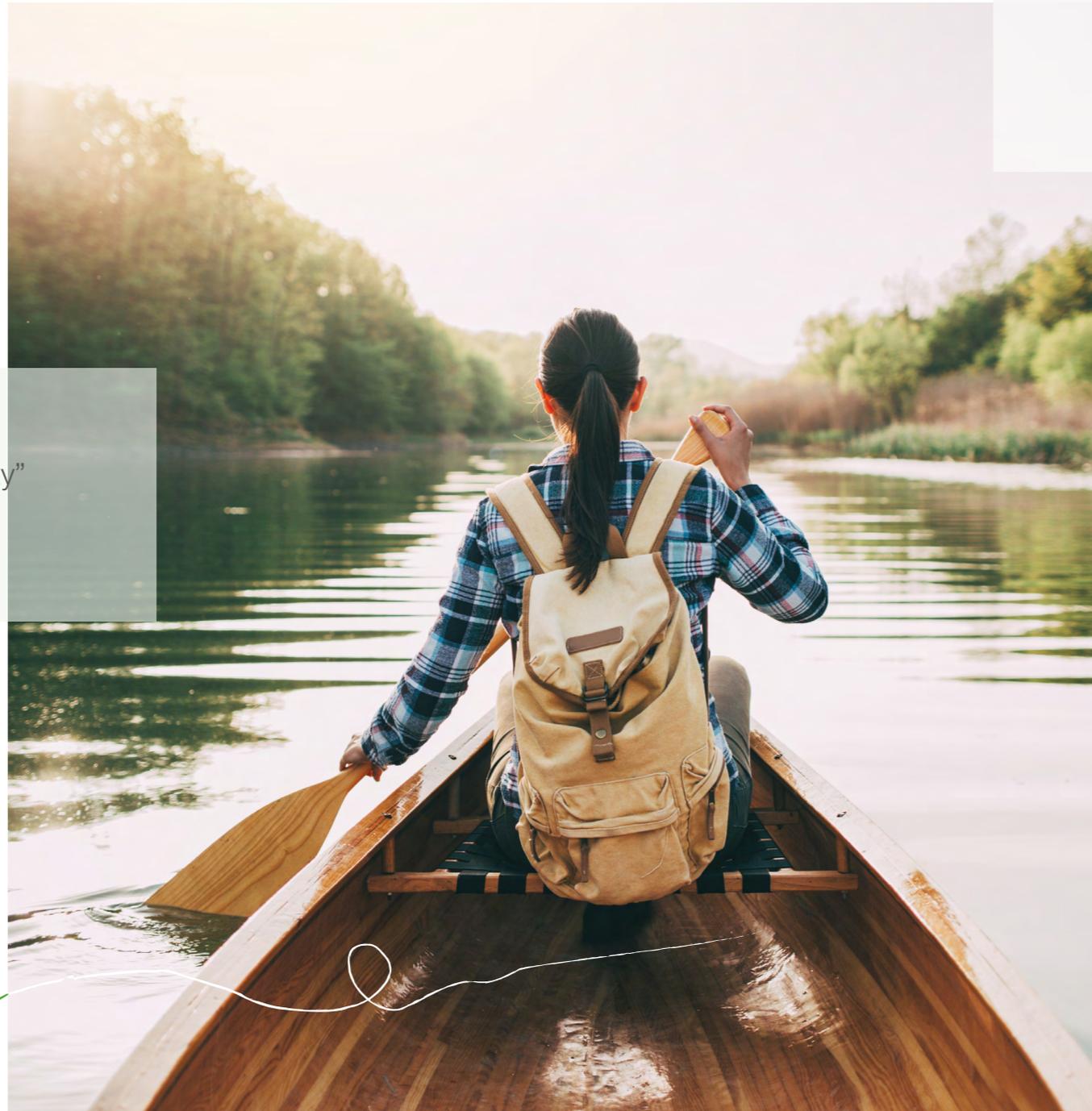


## RATINGS





Founding member of the “Together for Sustainability” initiative for the joint evaluation of suppliers



# WE SOURCE RESPONSIBLY



### BASF 2025 GOAL:

Cover **90% of our relevant spend<sup>1</sup>** with sustainability evaluations by 2025, and have **80% of our suppliers improve** their sustainability performance upon re-evaluation

**Supplier Code of Conduct** rooted in internationally recognized standards such as the principles of the UN Global Compact

Engaged in **global initiatives** to improve sustainability performance in the supply chain, e.g. Roundtable on Sustainable Palm Oil (RSPO), Sustainable Castor Oil Association, High Carbon Stock Approach (HCSA).



**INCREASE IMPACT OF EVALUATIONS AND IMPROVE SUSTAINABILITY PERFORMANCE IN THE SUPPLY CHAIN**



**TOGETHER FOR SUSTAINABILITY**

<sup>1</sup> We understand relevant spend as procurement volumes with relevant suppliers

# 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 lignosulfonates 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



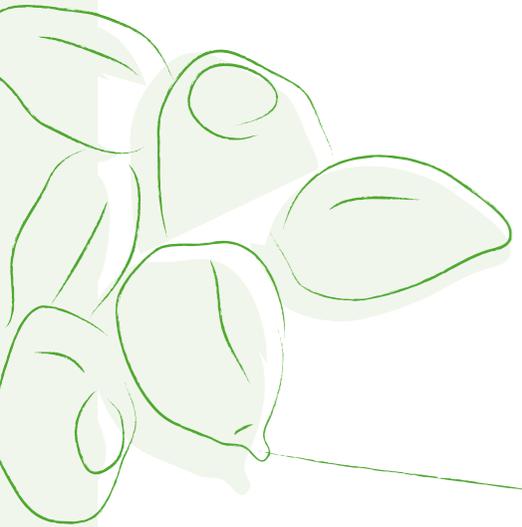
Collaboration is needed to raise and increase awareness, drive the necessary market transformation and achieve impact on the ground



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



“We acknowledge our responsibility as an actor in various value chains and therefore, strive to end deforestation within those.”



# PALM OIL



# KEY FIGURES

## BASF PALM FOOTPRINT 2023



in **2023**

we sourced only RSPO-certified sustainable palm and palm kernel oil



We will step up our efforts to improve transparency and traceability in the supply chain. We were able to trace almost 96%. All of our overall palm oil exposure back to oil mill level in 2023.

~ **294,000**



metric tons represent BASF's oil palm exposure in 2023



> **800**

BASF raw materials are palm-based

Product Carbon Footprint

> **225,000 t**

CO<sub>2</sub> eq. emission reduction due to sourcing of RSPO-certified material



**25**

BASF RSPO-certified sites globally



conventionally sourced palm kernel oil



**36%**

reduction\* of CO<sub>2</sub> eq. emissions



RSPO sustainable certified palm kernel oil

\* Consultant 2.0, www.LCA-net.com/club/palm-oil/, 2019  
RSPO = Roundtable on Sustainable Palm Oil



# CORE ELEMENTS OF OUR PALM COMMITMENT



Forest conservation



Traceability



Time-bound plan



Physical transformation



Stakeholder dialog



Smallholder inclusion



Progress





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 Criteria 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.

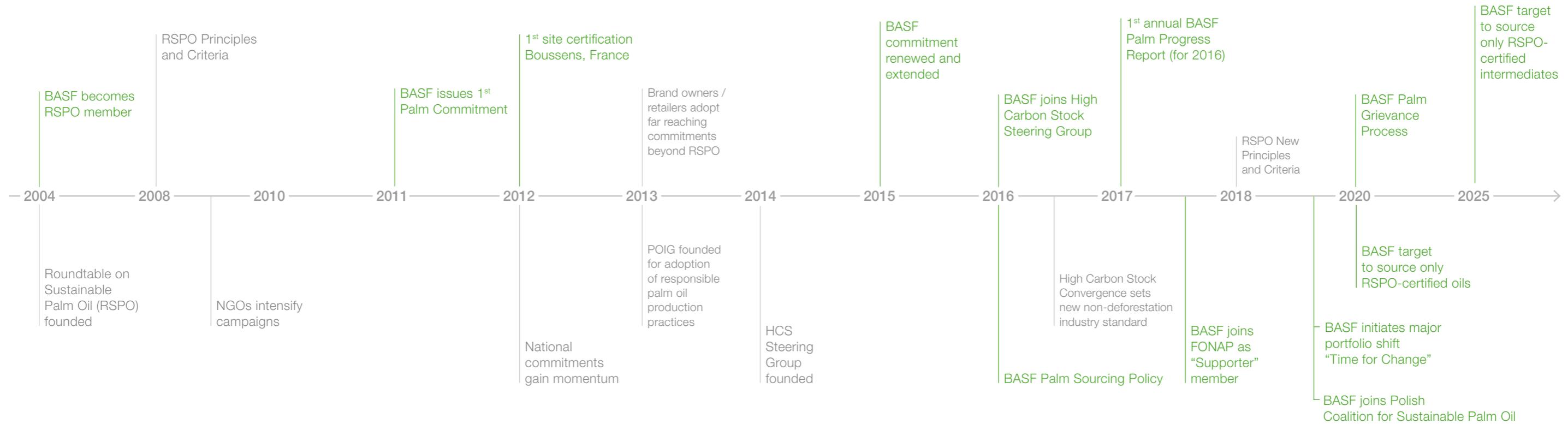
BASF achieved its commitment and procures palm (kernel) oils exclusively from sources certified by the RSPO since 2020. Additionally, BASF embedded its Palm Commitment into an overarching BASF Group Position on Forest Protection. The scope encompasses oils and fats, grains, sugar and wood from our third 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 third 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 BASF Palm Dialog Webpage.

For our efforts to halt deforestation caused by palm oil production, BASF was awarded an A- rating by CDP (Carbon Disclosure Project) in 2023. 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'S PALM COMMITMENT



# TIMELINE



“Collaboration and dialog along the value chain is key for pursuing our ambitious goals.”

## RESPONSIBLE PARTNERING

### OUR COLLABORATIONS

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.

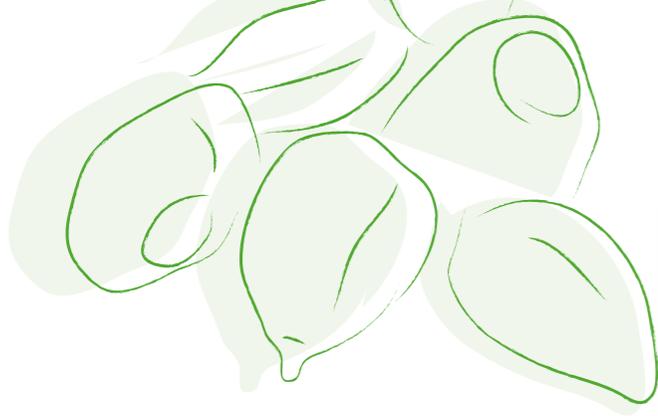
BASF became a member of the RSPO in 2004. Since then, we have actively participated in consultations within the organization, most notably in the subgroup oleochemicals and derivatives under the RSPO working group Trade & Traceability.

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 (high carbon stock approach) 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 eleven founding members the Declaration of ‘Polish Coalition for Sustainable Palm Oil – PKZOP (Polskiej Koalicji ds. Zrównowazonego Oleju Palmowego)’. The PKZOP is an independent coalition and aimed at achieving 100 percent sustainable palm oil in Poland by 2030.





## SMALLHOLDER INCLUSION

### OUR COLLABORATIONS

In Indonesia and Malaysia, smallholder 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, the certification is in high demand and can provide valuable premiums to the smallholders.

In 2023 BASF, alongside a leading company for natural cosmetics, has partnered with the Indonesian non-profit organization Kaleka, to support the sustainable management of palm and palmkerneloil production in Indonesia. The smallholder project is implemented by Kaleka and follows a jurisdictional approach. The partner aim to promote sustainable land use in Selunuk Village in the Seruyan District in Central Kalimantan and to involve local authorities in the active management of the project.

The project partners support the creation of policies and regulations to replicate and scale up regenerative agriculture and ensure living wages through legal certification. The aim is to implement regenerative agriculture in 22 hectares of palm oil smallholder farms and to certify 200 hectares of land to the RSPO smallholder standard. These farmers will benefit not only from technical know-how and improve framework conditions, but also from the social and economic benefits through ongoing training in the implementation and maintenance of sustainable palm oil practices.

Through Project Lampung, a collaborative sustainability initiative, Solidaridad, BASF, The Estée Lauder Companies (ELC), and The Roundtable on Sustainable Palm Oil (RSPO) have made real progress strengthening the sustainable palm oil supply chain and supporting smallholder farmers. Since its launch in 2018, Project Lampung has provided technical education and training to 1,003 independent palm oil smallholders.

“No sustainability policy can be effective without considering smallholders as a crucial part of the value chain.”

Upon completion of the project, the declared goal of certifying one-third of the participants of the program according to the RSPO Smallholder Standard was almost achieved (313 certifications). This is the very first project in Way Kanan aimed at enhancing the capacity of palm oil smallholders. Before the intervention, the smallholders had limited exposure to sustainable palm oil production practices, and the cooperative did not have a strategic focus on supporting smallholders. Through a program of continuous education, these independent palm oil farmers have improved their knowledge on sustainable production, including, for example, an awareness about the importance of planting certified seedlings. The project ensured access

to certified seedlings in order to support these farmers in improving productivity. With the support of a strengthened cooperative the project partners worked with the Indonesian government and other local organizations to conduct a Social Impact Assessment and an Environmental Impact Assessment. They also mapped farmers' fields and uploaded all relevant data to the RSPO database to verify that no deforestation or land conversion had taken place. While the project was originally anticipated to take three years, it ended up taking five due to the Covid-19 pandemic. The collaboration evolved during that time to help accommodate shifting priorities for the farmers and best support them during this challenging period.



## THE FORUM FOR SUSTAINABLE PALM OIL (FONAP)

Since March 2023, BASF has participated in a FONAP-supported Indonesian palm oil forum FORTASBI and the local NGOs CAPP and Setara Jambi in the Tanjung Jabung Barat district on Sumatra, Indonesia. The first project phase was completed in March 2023. During this time, the project pursued three strategies: sustainable landscape management through social forestry, protection of water bodies and riparian strips, and sustainable oil palm cultivation through regenerative agriculture.

A total of 536 smallholder farmers were trained; native plants were planted on 17 hectares of forest; 70 women were supported in the construction of three tree nurseries; and the Pengabuan River was placed under the protection of village regulations along 4.5 kilometres of length.

Setara Jambi is currently collecting information about the farmers in its project regions. However, it lacks the tools to evaluate this information. To change this, the project is bringing Koltiva on board in the second phase. The project uses the GDPR compliant KoltiTrace system to collect GPS data from smallholder farmers. This not only helps with the planning of future interventions, but also simplifies the tracing of the palm oil produced. This is an important prerequisite for compliance with the EU Deforestation Regulation (EUDR) and therefore market access in Europe.

When finishing the project, the announced aim of certifying a third of the project-participants according to the RSPO Smallholder standard was almost reached. All in all 313 Certifications were realized.

## SMALLHOLDER INCLUSION



“This nursery will be sustainable in the future.”

**Mevi Ayati**

LEADER OF KP3 NURUL HUDA  
LESTARI WOMEN GROUP

## OUR PROGRESS

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.

BROAD RANGE  
OF SUSTAINABLE  
INGREDIENTS

# CUSTOMER INDUSTRIES

## CARE CHEMICALS

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

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.

## NUTRITION & HEALTH

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 lipid-based excipients for the pharmaceutical industry. We offer the widest range of IPEC-GMP lipid-based excipients, suitable for topical and oral drug formulations. Our lipid-based 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<sup>®</sup>); multi-functional solvents and emollients that enhance solubilization and skin penetration of some pharmaceuticals while offering a relatively benign mildness profile (Kollcream<sup>®</sup>); an extensive portfolio of structuring agents and lubricants that provide formulation stability, used in the development of numerous oral and topical dosage forms (Kolliwax<sup>®</sup>); and a product line comprised of versatile solvents functioning as solubilizers, plasticizers, lubricants, emollients, and skin penetration enhancers, ideal for both oral and topical applications (Kollisol<sup>®</sup>).





**OUR COLLABORATIONS**



**TRACEABILITY**



BASF has ties to **38** provinces in **Indonesia** and **Malaysia**

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 makes it possible to identify and monitor if sustainable practices are adopted at the origination.

In 2023, we were able to trace 96.2 percent of our global palm footprint\* of 296,000 metric tons back to the oil mill level. We source 81.7 percent of our traceable raw material from 10 provinces in Indonesia and Malaysia and have ties to 38 provinces in the two countries in total, corresponding to 97 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 418 RSPO-certified oil mills.

\*The global palm footprint in this context includes certified and non-certified palm-based raw materials.



Source: palmoil.io

## SATELLITE MONITORING

### THE CHALLENGE

Like many derivative manufacturers, BASF sources from hundreds of palm mills (~1,495) scattered along the equator. These mills source from thousands of plantations, ranging from large industrial concessions to smallholder farms. Interspersed between the plantations lie blocks of remaining rainforest, some of which is home to indigenous peoples and habitat for critically endangered species such as Sumatran tigers and orangutans. The general challenge for the industry and for BASF is to monitor upstream suppliers and ensure that these remaining forests are not being cleared for new oil palm plantations – which would be a clear breach with BASF NDPE policy.

### THE APPROACH – PALMOIL.IO

Since 2021, BASF has utilized the Palmoil.io web platform (<https://palmoil.io>) to track deforestation from plantations and link it to its suppliers. Palmoil.io brings together the critical ingredients for effective forest monitoring – forest alerts, high resolution satellite scenes, supplier relationships, grievance information along with an estimated traceability to plantation approach.

### HOW IT WORKS

Palmoil.io organizes BASF's palm mills into a list and every month uses RADD forest alerts to monitor deforestation in proximity to the mill and within nearby concessions. Mills are sorted by various measures such as total hectares of alerts as well as historical deforestation and remaining forest. This helps BASF analyze not only which mills to prioritize but which concessions that they likely source from. Recent satellite imagery is also available to verify alerts and determine whether deforestation was likely caused by palm planting.

To provide further context, Palmoil.io links mills and concessions to grievances lodged by watchdogs against major palm oil traders. Grievances cover not only alleged deforestation cases but also human rights violations, land and labor conflicts, and pollution. Palmoil.io monitors the grievance trackers of all major palm traders, documenting each case and filing them with each supplier. As BASF we review whether suppliers have been suspended, initiated forest clearing moratoriums, or published an NDPE policy.

### STRUCTURAL REPORTS

Palmoil.io also produces monthly Risk Insight reports. The reports use high resolution imagery to document and map new deforestation. The report shows before and after satellite scenes of the loss, traceability from plantation to mill, and likely transport routes. It also determines whether the deforestation cause was smallholders or industrial clearance. Insights are published in a concise report that BASF sends to suppliers for further information and potential action plans to stop deforestation and to keep compliance with BASF NDPE policy.

### CONCLUSION

Deforestation is an industry wide challenge requiring an industry wide effort for stopping it. As BASF, we believe in the obligation to contribute with our efforts for more sustainable palm, and we will continue to utilize tools and approaches helping us to be successful in this endeavor.

# BASF HAS RSPO CERTIFICATION OF ITS PRODUCTION SITES IN ALL REGIONS – 25 SITES IN 2023

## North America

1. Mauldin, South Carolina, USA
2. Cincinnati, Ohio, USA
3. Mexico, Mexico
4. East Setauket, New York, USA

## South America

5. Jacarei, Brazil

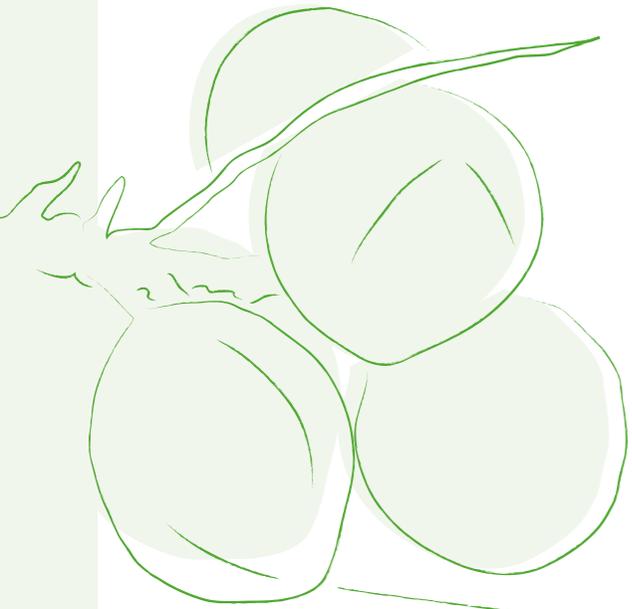
## Europe

6. Antwerp, Belgium
7. Ballerup, Denmark
8. Boussens, France
9. Pulnoy, France
10. Düsseldorf, Germany
11. Cassina Rizzardi, Italy
12. Gebze, Turkey
13. Grenzach, Germany
14. Illertissen, Germany
15. Ludwigshafen, Germany
16. Burgbernheim, Germany
17. Meaux, France
18. Castellbisbal, Spain
19. Zona Franca, Spain
20. Utrecht, The Netherlands

## Asia Pacific

21. Jinshan, China
22. Kitatone, Japan
23. Muang Chonburi, Thailand
24. Cimanggis, Indonesia
25. Dahej, India





# COCONUT OIL





## WE SOURCE RESPONSIBLY



**PHILIPPINES AND INDONESIA  
ACCOUNT FOR 69%  
OF THE COCONUT OIL PRODUCTION**

Source: Oil World annual 2023, Vol. 1, ISTA Mielke GmbH

**4%**  
Mexico

**11%**  
India

**28%**  
Indonesia

**41%**  
Philippines



## COCONUT PRODUCTION



### BACKGROUND

- More than 100 million people depend on coconut for their livelihood
- Coconut provides food and water, timber and leaves to build homes, and oil and copra for fuel and a source of income
- Coconut is planted mostly by low-income smallholders (95%)
- Due to disaggregated and complex value chain structures, farmers have limited access to market, finance and technical know-how
- Resilience and livelihoods of farmers can be positively impacted through collaborative transformation projects

# SUSTAINABLE CERTIFIED COCONUT OIL (SCNO) PRODUCTION



47%

higher income compared to farmers not participating in the project



4,100

smallholder coconut farmers have been trained in Good Agricultural and Farm Management Practices



A joint smallholder project of BASF, GIZ, Cargill and Procter & Gamble to introduce more sustainable and business-oriented farming practices and a chain of custody for the Rainforest Alliance Certified coconut oil

**Duration:** November 2015 – October 2019  
 BASF continues support of certified smallholders by sourcing Rainforest Alliance certified coconut oil.

**Country:** Philippines and Indonesia

Objective of the project was to increase the incomes and economic self-sufficiency of smallholder coconut farmers in the Philippines and Indonesia through support of sustainable certified coconut oil supply chain.

Together with the Rainforest Alliance, partners developed an innovative **Mass Balance** certification scheme.





## WHAT IS THE RAINFOREST ALLIANCE



The Rainforest Alliance is an international non-profit organization working at the intersection of business, agriculture, and forests to make responsible business the new normal. The Rainforest Alliance is creating a more sustainable world by using social and market forces to protect nature and improve the lives of farmers and forest communities. It tackles the following issues...

## OUR CORE VALUES



# SUPPORTING PEOPLE AND NATURE...



# CERTIFIED SITES

## ... THRIVING TOGETHER WITH RAINFOREST ALLIANCE CERTIFIED INGREDIENTS



### LIVELIHOODS

... contributing to lifting rural people out of poverty by improving sustainable livelihood opportunities for farmers, workers and their families.



### CLIMATE

... training farmers to grow better crops using climate-smart agriculture, which help them mitigate and adapt to climate impacts.



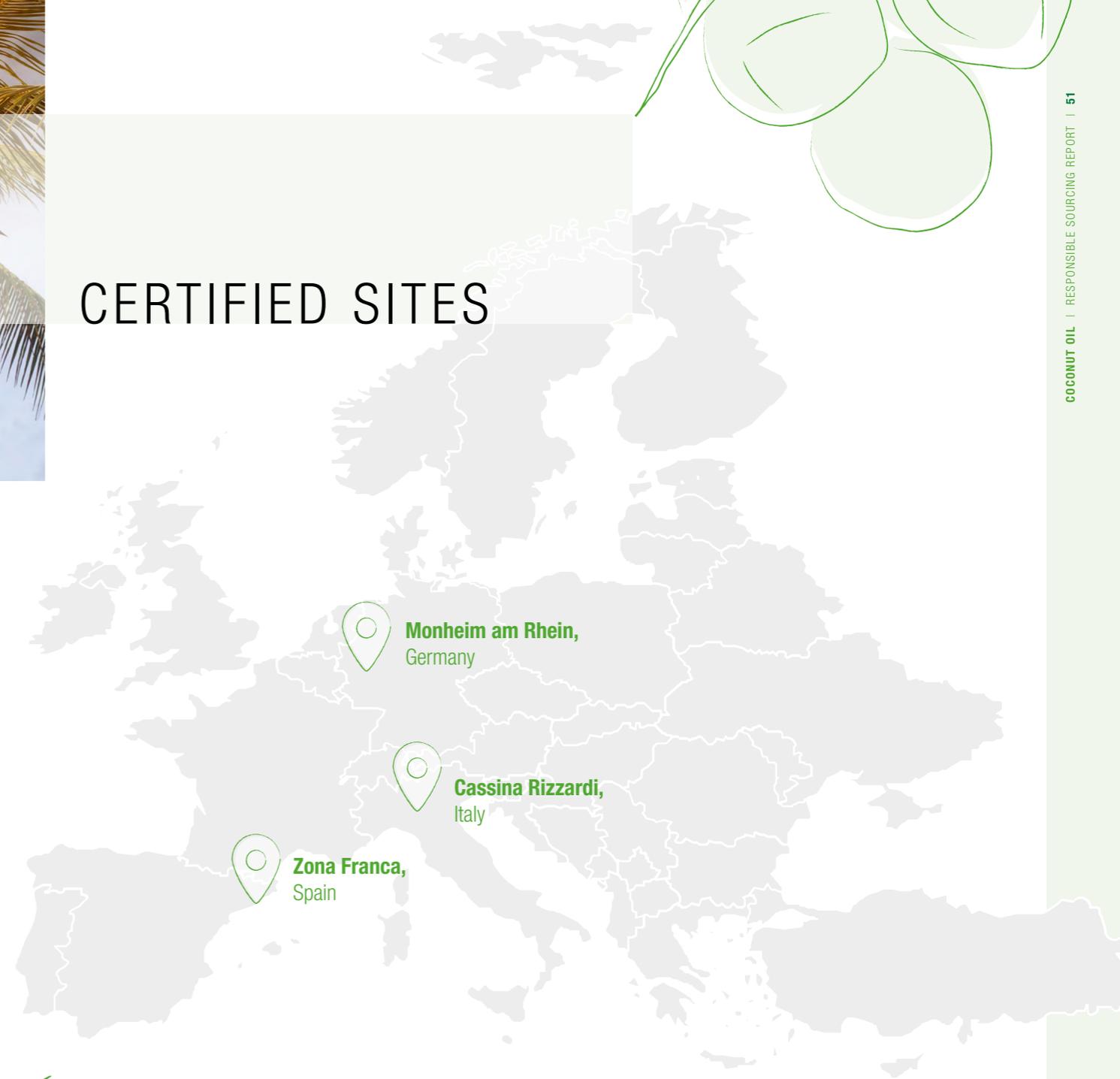
### FORESTS AND BIODIVERSITY

... promoting more sustainable land management practices to protect forests, biodiversity and natural resources.



### HUMAN RIGHTS

... addressing human rights abuses like child and forced labor, low wages, poor working conditions and gender inequality.



**Monheim am Rhein,**  
Germany

**Cassina Rizzardi,**  
Italy

**Zona Franca,**  
Spain



# CASTOR OIL





> 90%  
of the world's castor seeds produced in India in 2022 according to Oil World Annual 2023



0.7

million castor farmers in India

The demand for castor oil is steadily increasing. It contains ricinoleic acid which makes it a unique molecule and therefore an important ingredient for personal care products. The castor plant is indigenous to the southeastern Mediterranean Basin, Eastern Africa and India, and it requires a hot and dry climate with annual rainfall of 500 to 800 mm.

## WHY SUSTAINABLE CASTOR?

980,000   
hectares of land dedicated to castor farming in India 2022 according to Oil World Annual 2023

47%   
of the weight of castor beans is captured as castor oil. The remainder is generally repurposed as fertilizer

The majority of the world's supply of castor seed is produced in India. Castor cultivation is linked with some challenges and risks, especially in India (see box).



### PROJECT PRAGATI

To improve the working conditions of the farmers, create awareness for sustainable farming and increase yields due to more efficient farming practices, BASF partnered with Arkema, Jayant Agro-Organics Ltd. and the international civil society organization Solidaridad. Together they

launched the project "Pragati." The project has established the unified sustainability code SuCCESs (Sustainable Castor Caring for Environmental and Social Standards) that sets a standard for certified sustainable castor oil.

#### SOCIAL RISKS

- Risk of child labor
- Insufficient labor and living standards
- Financial problems

#### ENVIRONMENTAL RISKS

- Limited know-how in best farming practices, soil protection and crop rotation > threat to biodiversity
- Deforestation
- Weather changes may lead to an instability of yield

#### HEALTH RISKS

- Physical problems from field work
- Toxicity risk of castor seeds (Contain ricin)
- Limited access to health care

#### SAFETY RISKS

- Lack of personal protective equipment
- Limited know-how in safe and appropriate use of fertilizers and crop protection products

# OUR PARTNERS PROJECT PRAGATI



**Solidaridad**

**ARKEMA**



## PROJECT PRAGATI



### FOCUSSING ON OBJECTIVES

#### OBJECTIVE 1

Develop sustainability principles of sourcing of castor seeds which will guide and further allow castor producers to offer certified sustainable castor in the global market.

#### OBJECTIVE 2

Improving productivity and sustainability in the castor supply chain in India, notably in Gujarat, thereby enhancing economic self-sufficiency and livelihoods of smallholder producers.

### FOCUSSING ON



Using good agricultural practices to increase yield and farmer income



Efficiently using water resources and maintaining soil fertility



Driving adoption of good waste management practices



Enabling better health and safety practices, and respecting human rights



## SUCCESS CODE

SUCCESS stands for Sustainable Castor Caring Environment & Social Standard code. It is designed by multiple partners and stakeholders to ensure the objective of the Project Pragati, to develop sustainability principles for castor seeds which will guide and further allow castor producers to offer certified sustainable castor in the global market. The SuCESS code adopted 11 principles of ownership, by providing smallholders on-field support for ensuring monitoring and compliance with 41 mandatory and 25 non-mandatory control points.





# KEY OUTCOMES 2023

> 7,000

personal safety kits and crop protection product storage drums have been distributed



over 7,000 ha regularly farmed in accordance with the code



1 BASF production site certified according to the SuCCESSTM code



> 7,000

farmers trained, audited and certified



over 74,500 mt

of certified castor seeds were produced



Year 6 yield is 36%

higher than the yield published by the local government for this region

~ 21%



lower water consumption in the demo plots





## CERTIFIED SITES



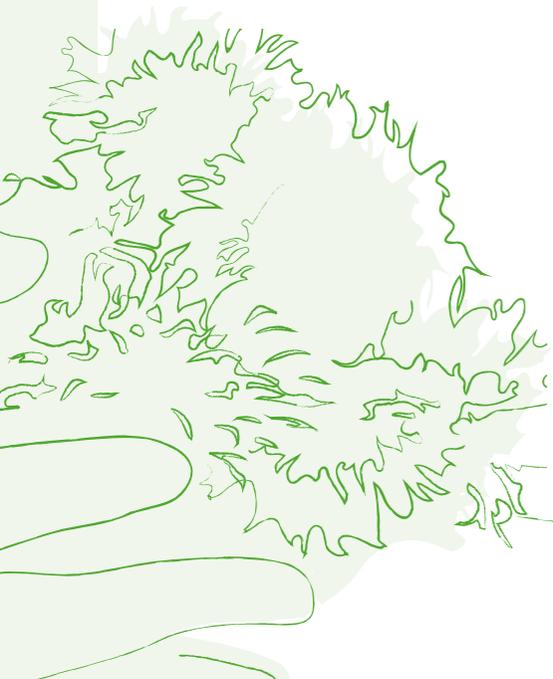
**Düsseldorf,**  
Germany



**Monheim am Rhein,**  
Germany

We are driving the market transformation toward certified, sustainably sourced castor oil. In 2023, we again sourced certified sustainable castor oil from the Pragati program after our Düsseldorf-Holthausen site in Germany became

the first chemical company in the world to be certified in 2021. The site supplies customers with certified sustainable castor-based products for the personal care industry.



# RESPONSIBLY ACTIVE

## BIOACTIVES FOR A POSITIVE FUTURE





# TOGETHER WE ARE RESPONSIBLY ACTIVE



## BIOACTIVES FOR A POSITIVE FUTURE

Botanicals unlock the door to many of our cosmetic active ingredient innovations. The responsible use and protection of natural resources as well as support for communities involved are thus among our most important tasks. To live up to this responsibility while empowering people along the entire botanical value chain, we have set up the Responsi-

bly Active program for our bioactive ingredients business in 2022. It aims to align all our actions towards more sustainable practices and includes clear targets and action plans for the coming decade. The program is based on three pillars, which include a focus on responsible sourcing of our raw materials.



### INNOVATING PRODUCTS THAT PROTECT NATURAL RESOURCES

We are responsibly active for our nature and its sustainable valorization.



### EMPOWERING AND RESPECTING PEOPLE ALONG OUR VALUE CHAIN

We are responsibly active for people and the conditions in which they live and work.



### REDUCING OUR CLIMATE IMPACT AND OPERATIONAL FOOTPRINT

We are responsibly active for our planet and its preservation.

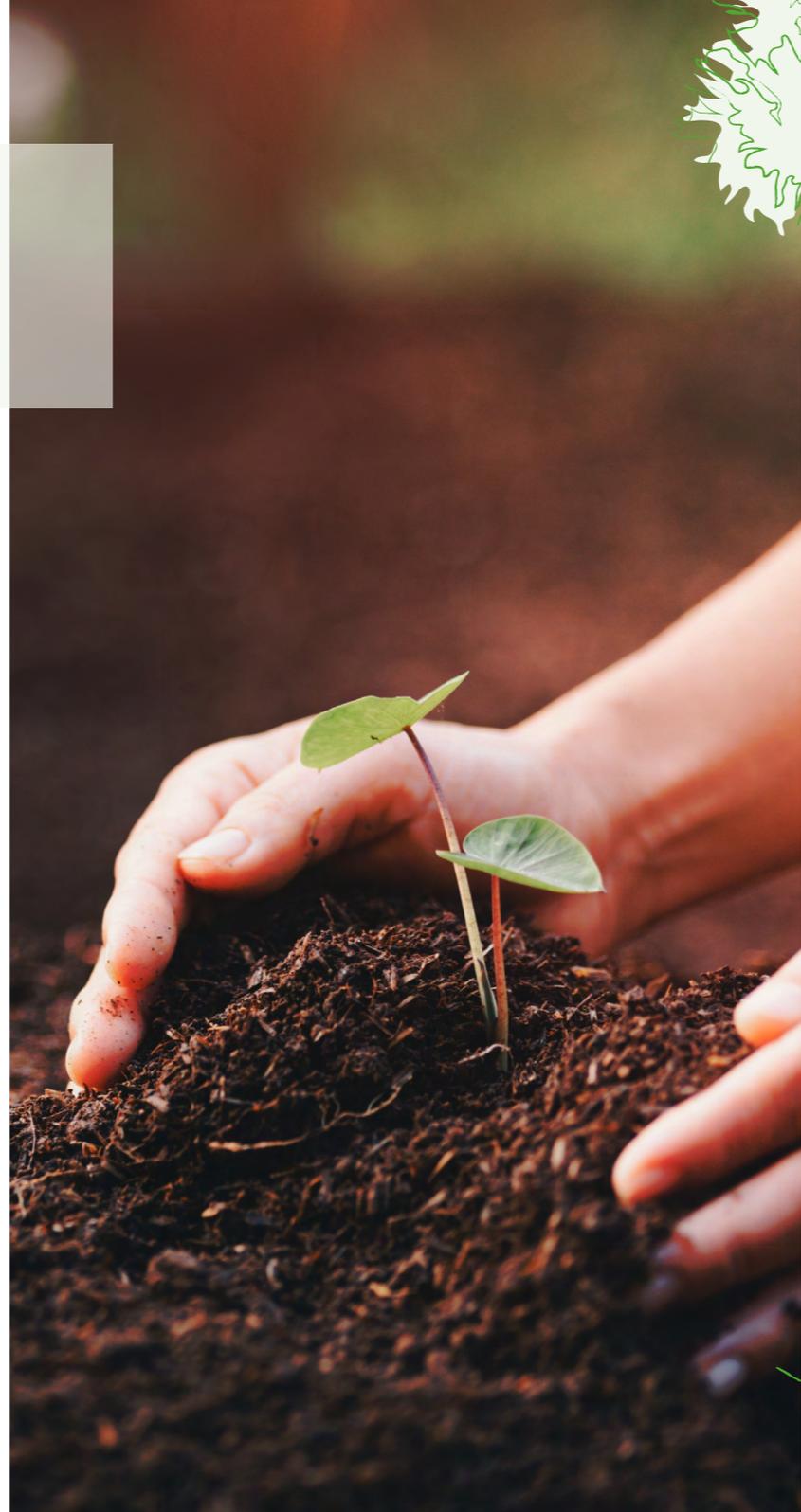
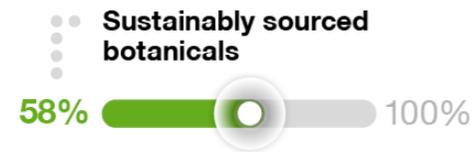


# INNOVATING PRODUCTS THAT PROTECT NATURAL RESOURCES

Because plants are at the core of our bioactives business, we seek to maximize the use of renewable resources and foster organic farming practices. Our dedicated initiatives respect and protect local biodiversity, while avoiding land degradation and deforestation along our supply chains. What's more, we are committed to sourcing all our botanicals sustainably and granting traceability to the source of every single one.

We have set ourselves ambitious targets for 2030 and have made important progress in the second year of our Responsibly Active program:

## Our targets by 2030



## PHOENIX FROM THE ASHES: HOW EPISPOT™ HARNESSSES THE POWER OF NATURE

Biodiversity is an irreplaceable source of innovation. That's why we make sure our products not only perform well, but are also responsibly sourced. Just like Epispot™, our new ingredient for blemish-prone skin. Epispot is derived by water extraction from responsibly sourced and organically certified *Epilobium angustifolium*. The plant has long been used in traditional herbal medicine to treat a wide range of health issues, including digestive problems and skin irritations. It is also known as fire grass or phoenix flower because it thrives after forest fires and logging operations.

In the heart of French woodlands, skilled harvesters collect the plant by hand in its flowering stage. Since only the aerial parts are collected in accordance with good collection practices, the plant can regenerate the following year. The certified organic harvesting takes place at six different sites to ensure the conservation of the species through careful rotation.



## READY TO MOVE FORWARD

In 2024, we look forward to further product innovations with supply chains in line with our Responsibly Active approach. We are also upgrading the supply chains of existing bioactives to improve traceability and agricultural methods. As we continue on this journey towards more sustainable practices, we invite everyone along our bioactives value chain to join us in shaping the future.

Together we are Responsibly Active



## OUTLOOK

Raw materials are the starting point of our value creation. We want to use these resources efficiently and responsibly. We therefore take the protection of biodiversity and ecosystems into account when sourcing renewable raw materials and also include social factors such as working conditions and food security in our risk analyses. At the same time, we seek dialog with our stakeholders to identify conflicting goals. We will continue to take into consideration recognized certification standards in our decisions.

The COVID-19 pandemic, the loss of biodiversity, and the already noticeable effects of climate change are the current challenges facing governments and businesses. These global challenges have raised awareness of humanity's dependence on nature and ecosystems. Forests in particular play an important role in stabilizing the climate through their ability to absorb and store carbon dioxide from the atmosphere, regulate the water cycle and provide habitat for thousands of species. Recognizing that the European Union's consumption is a major driver of deforestation and forest degradation in the world, the European Commission, Council and Parliament agreed on a regulation to halt the degradation and deforestation of the world's forests. The legislation will enter into force on June 29, 2023, with a transition period of 18 months. The law is expected to be implemented by the end of December 2024. Cattle, cocoa, coffee, rubber, wood, soy (beans, oil and its fractions), oil palm, its fractions and major derivatives are included in the scope of the regulation.

Main requirement of this regulation is a deforestation free due diligence declaration upfront to the import of commodities that are within the scope of this regulation. To do so, traceability to plot of land and the production period is requested. Cut-off date defined in this regulation is December 31, 2020. Member states need to translate the Regulation into national law. An important task for governments and industry will be to ensure that, by the implementation of this regulation, smallholders are not excluded from supply chains to Europe. In order to achieve this, collaboration with producing countries is key. That is why BASF is increasing its support of palm oil smallholder projects on the ground in the producing countries in 2024.

Also important to us is our biomass balance portfolio for which we source renewable raw materials that are certified according to recognized standards such as the organization for sustainably produced biomass REDcert. We use renewable feedstocks such as biomethane and bionaphtha in our Verbund as an alternative to fossil resources. The mass balance approach allows us to attribute the amount of certified sustainable and renewable raw materials used to a wide variety of Care Chemicals products. This results in a lower product carbon footprint of the biomass balanced product compared to the conventional BASF product. This approach will enable us to offer our customers even more certified sustainable products with a lower carbon footprint in the future.

## FURTHER MATERIAL / LINKS

### SUSTAINABLE CASTOR ASSOCIATION

<https://castorsuccess.org/>

### SUPPLIER CODE OF CONDUCT

[www.basf.com/suppliers](http://www.basf.com/suppliers)



## GLOSSARY

### ACOP

Annual Communication on Progress (RSPO)

### CSR

Corporate Social Responsibility

### CSPPO

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

### SCA

Sustainable Castor Association

### SuCESS

Sustainable Castor Caring Environment & Social Standard

### UN

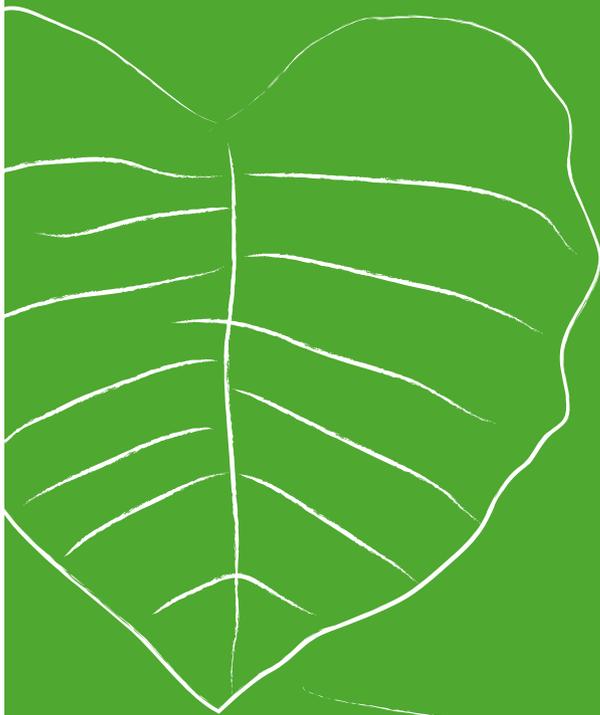
United Nations

### WHO

World Health Organization

### WWF

World Wide Fund for Nature



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