



We create chemistry

RESPONSIBLE SOURCING REPORT 2022

**FOR THE CARE CHEMICALS
OPERATING DIVISION**

LETTER TO OUR STAKEHOLDERS

Dear readers,

Thank you for your interest in BASF Care Chemicals' responsible sourcing approach! When I took over as president of Care Chemicals earlier this year, I was inspired by the team's commitment to sustainability. We wish to contribute to a world that provides a viable future with enhanced quality of life for everyone. We do so by making the best use of available resources for our products. We live our corporate purpose "We create chemistry for a sustainable future" by sourcing and producing responsibly, acting as a fair and reliable partner, and connecting creative minds to find the best solutions for market needs.

The report you hold in your hands outlines the developments since the BASF Palm Progress Report covering 2021. As we use renewable raw materials beyond palm, our responsibility extends beyond palm. Accordingly, starting with this report and going forward, Care Chemicals will now report on activities, progress and challenges encompassing relevant areas in the yearly Responsible Sourcing Report.

The use of renewable raw materials is part of BASF's strategy to diversify its material basis. Using renewable raw materials comes with different challenges than the use of fossil raw materials and leads to new commitments. You will find more details about our activities in this report, for example,

- Our **Palm Commitment** which sets the sustainability standards for BASF's sourcing of palm and palm kernel oil.
- The **Responsibly Active** program, that brings our vision

of sustainably sourcing of bioactives to life, combining innovative ingredients with the principles of empowering people and protecting the planet's resources.

- BASF as the first chemical company offering **Rainforest Alliance** certified personal care ingredients based on coconut oil and engaging in sustainable castor oil production.

Not part of the report but also important to us is the focus on growing low carbon emission product concepts, e.g. with the BASF biomass balance approach. Renewable feedstocks such as biomethane and bio-naphtha are used in BASF's integrated Verbund production as an alternative to fossil resources. The REDcert2 certified biomass balance approach then allows the allocation of up to 100% certified sustainable and renewable feedstock to various Care Chemicals products.

Collaboration with various stakeholders along the value chain is key for pursuing our ambitious goals on responsible sourcing. We will be successful by supporting the preservation of ecosystems and promoting the sustainable use of natural resources in the producing countries only in collaboration with all members of the value chain.

Sincerely,



Mary Kurian

President Care Chemicals,
BASF SE

FOREWORD





CONTENT

CHAPTER CARE 360°
page 6



CHAPTER WE SOURCE RESPONSIBLY
page 12



CHAPTER PALM OIL
page 19



CHAPTER COCONUT OIL
page 39



CHAPTER CASTOR OIL
page 51



CHAPTER RESPONSIBLY ACTIVE
page 63



CHAPTER OUTLOOK
page 75



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 CO₂ 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 CHALLENGE

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 2023 GOAL:

Cover **90% of our relevant spend¹** 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

¹ 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 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 achieve impact on the ground



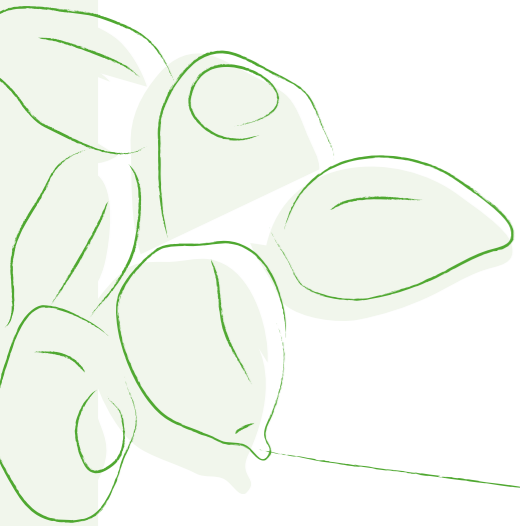
We will drive the compliance to our ambition and principles in all our renewable value chains



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

Source: BASF Forest Protection Policy





PALM OIL



KEY FIGURES

BASF PALM FOOTPRINT 2022



in **2022**

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 97% of our overall oil palm exposure back to oil mill level in 2022.



> **800**

BASF raw materials are palm-based



25

BASF RSPO-certified sites globally

~ **373,500**



metric tons represent BASF's oil palm exposure in 2022

Product Carbon Footprint

> **290,000t**

CO₂ eq. emission reduction due to sourcing of RSPO-certified material



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

RSPO = Roundtable on Sustainable Palm Oil

CORE ELEMENTS OF OUR PALM COMMITMENT



Forest conservation



Traceability



Time-bound plan



Physical transformation



Stakeholder dialog

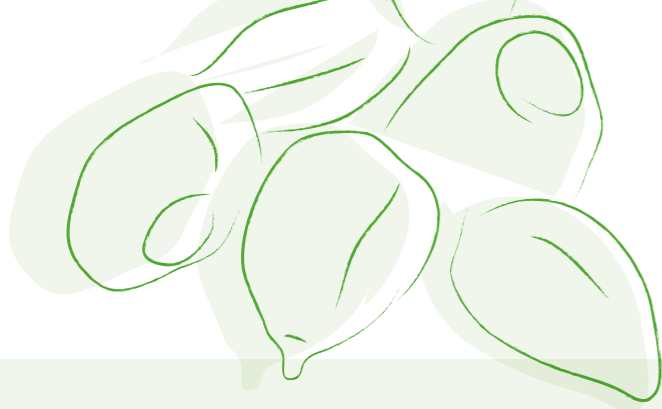


Smallholder inclusion



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.

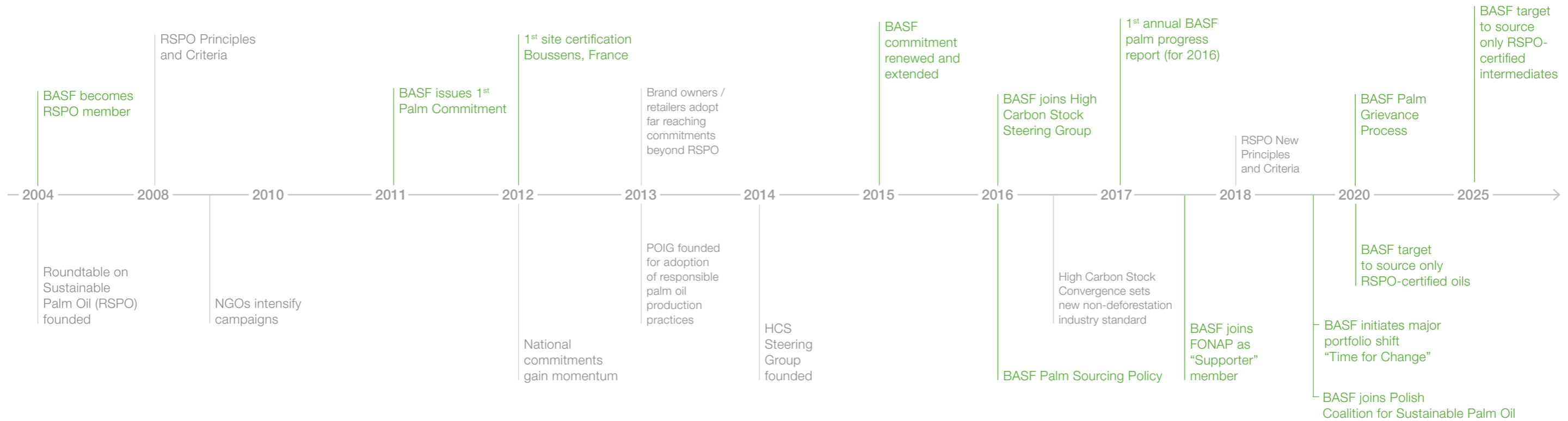
BASF achieved its commitment and procures palm (kernel) oils exclusively from sources certified by the RSPO since 2020. Additionally, BASF embedded its Palm Commitment into an overarching BASF Group Position on Forest Protection. The scope encompasses oils and fats, grains, sugar and wood from our 3rd 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 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 2022. 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.

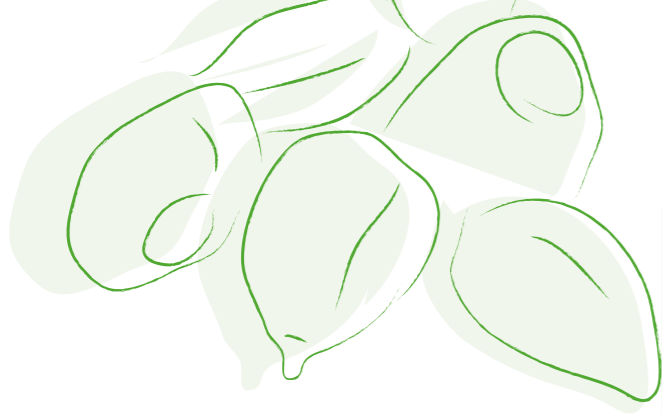
BASF became a member of the RSPO in 2004. Since then, we have actively participated in consultations within the organization, most notably in the subgroup oleochemicals and derivatives under the RSPO working group Trade & Traceability.

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 (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 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 2023.





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 2018, BASF and The Estée Lauder Companies partnered with the civil society organization Solidaridad Network to promote sustainable oil palm production in the district of Waykanan, Lampung, Indonesia. Despite the economic benefits generated by the cultivation of oil palm, farmers still face various constraints in producing high

palm oil yields and high quality Fresh Fruit Bunches (FFBs) in a sustainable manner due to lack of knowledge on sustainable agricultural practices. The project offered continuous education and technical support on implementing and maintaining sustainable palm oil practices. 1,000 independent smallholder farmers are supported to improve their livelihood and their sustainable production of palm and palm kernel oil. The project's target was at least one-third of the supported smallholder farmers become certified according to the Smallholder Standard of RSPO at the end of three years. The project partners were collaborating with the Indonesian government to foster a sustainable palm oil production supply chain in Lampung free from deforestation and competitive in the global market, while increasing the social and economic benefits for farmers.

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



THE FORUM FOR SUSTAINABLE PALM OIL (FONAP)

Since March, 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.



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[®], Lanette[®]), emollients (Cetiol[®]), emulsifiers (Eumulgin[®]), emulsion bases (Emulgade[®]), surfactants (Plantacare[®], Dehyton[®], Sulfofon[®] 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.

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[®]); multi-functional solvents and emollients that enhance solubilization and skin penetration of some pharmaceuticals while offering a relatively benign mildness profile (Kollcream[®]); an extensive portfolio of structuring agents and lubricants that provide formulation stability, used in the development of numerous oral and topical dosage forms (Kolliwax[®]); 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[®]).





OUR COLLABORATIONS



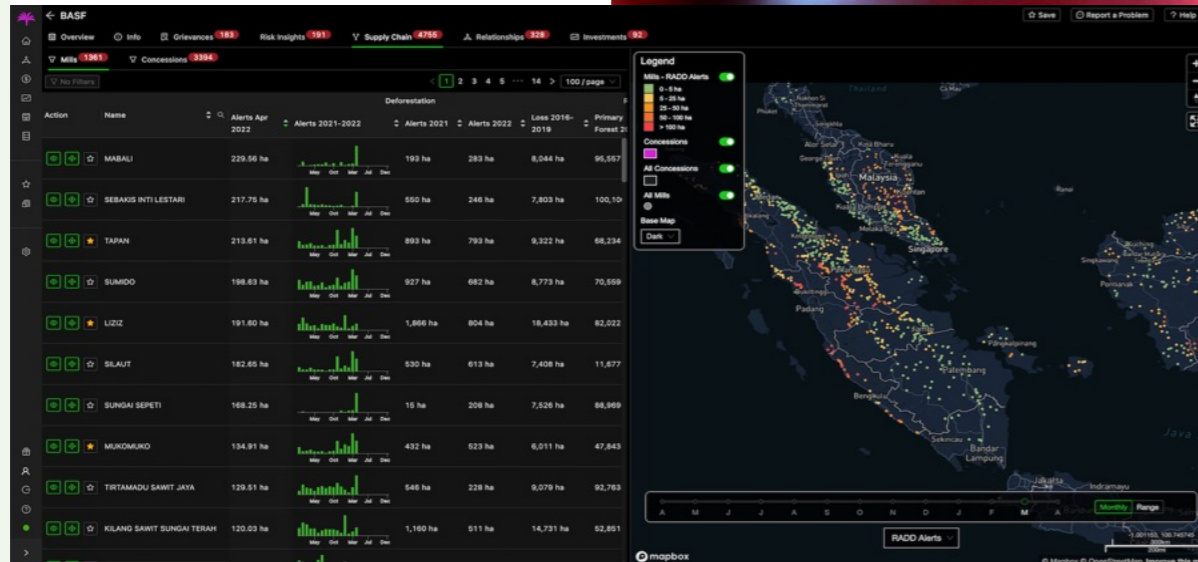
TRACEABILITY



BASF is connected to **36** 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 2022, we were able to trace 97% of our global palm footprint of 375,500 metric tons back to the oil mill level. We source 76,2 percent of our traceable raw material from top 10 provinces in Indonesia and Malaysia and are connected to 36 provinces in the two countries in total matching 88 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 400 RSPO-certified oil mills.



Source: palmoil.io

SATELLITE MONITORING

THE CHALLENGE

Like many derivative manufacturers, BASF sources from hundreds of palm mills (~1,300) 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 for 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 2022

North America

1. Mauldin (USA)
2. Cincinnati (USA)
3. Mexico (Mexico)
4. East Setauket (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. Uetrecht (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 66.1% OF THE GLOBAL
COCONUT OIL PRODUCTION**

4.1%
Mexico

11.1%
India

28.3%
Indonesia

5.7%
Vietnam

37.8%
Philippines

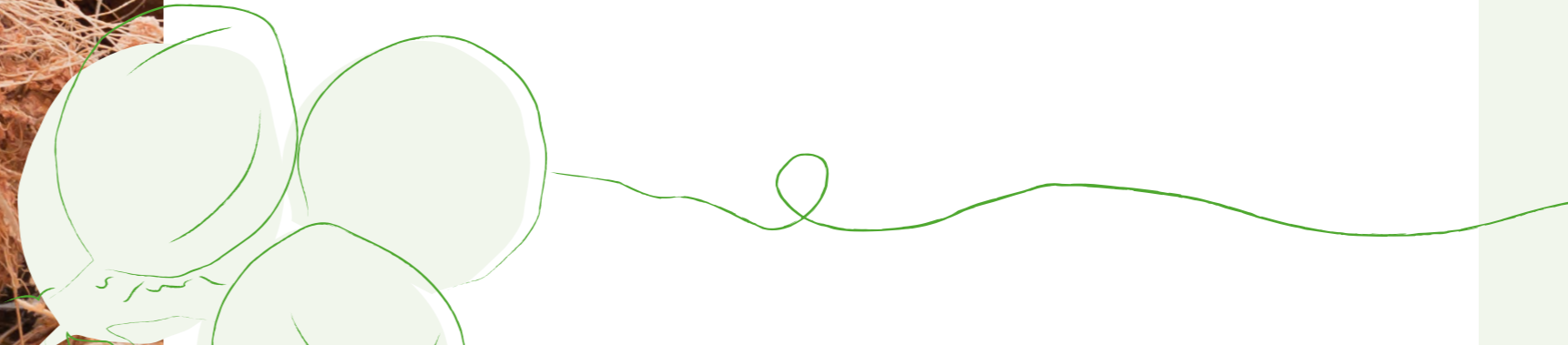


COCONUT PRODUCTION



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 smallholders (95%) with low income
- Due to disaggregated and complex value chain structures, farmers have limited access to market, finance and technical know-how
- Resilience and livelihoods of farmers could 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.





WHO 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. Tackling 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.



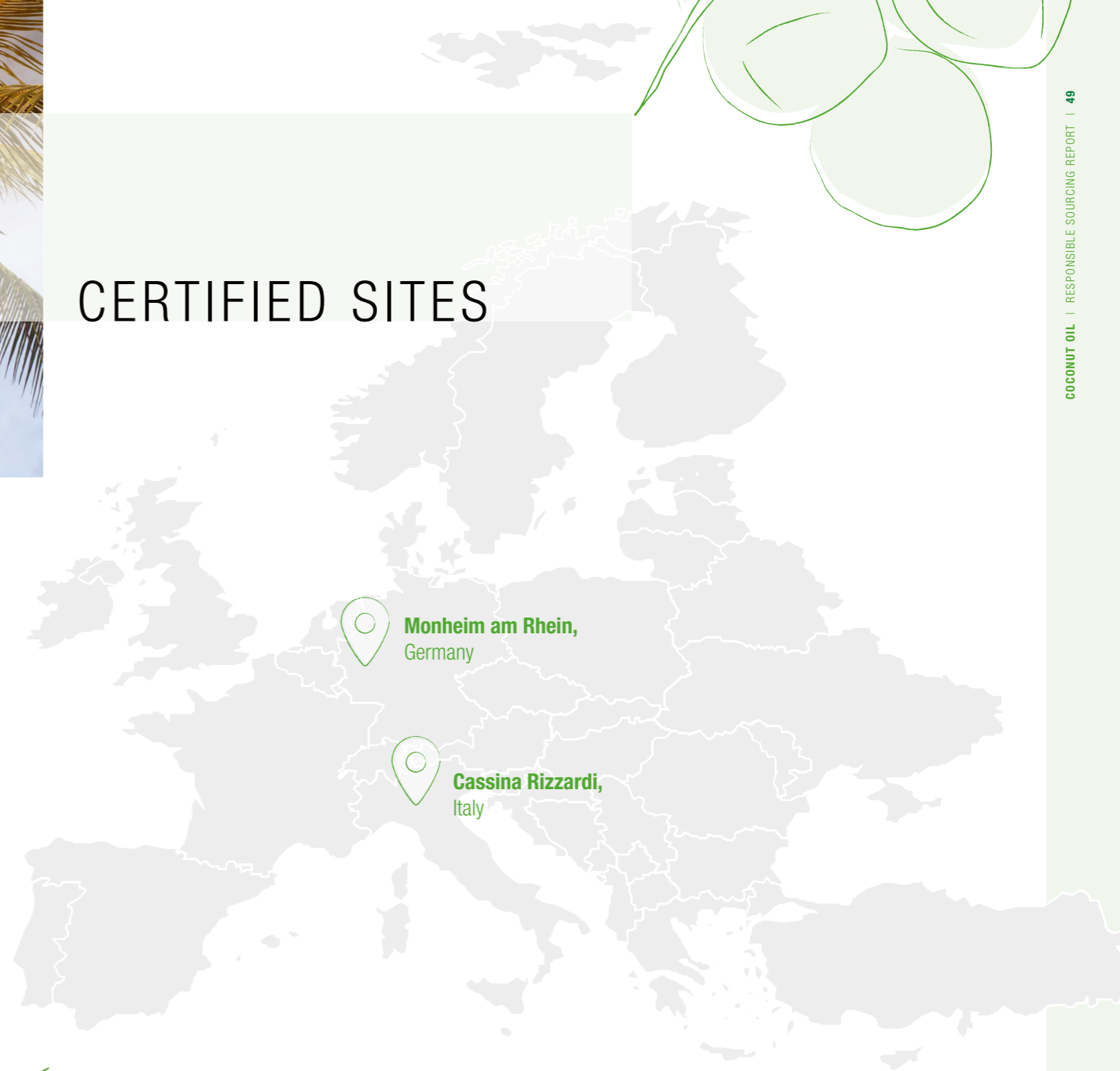
FORESTS AND BIODIVERSITY

... 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.





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 – 800 mm.

WHY SUSTAINABLE CASTOR?

980,000 
ha 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 

Majority of the world's supply of castor seed is produced in India. But there are some challenges and risks that are linked to castor cultivation, especially in India.



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 for 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 means 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 SUCCESS 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.



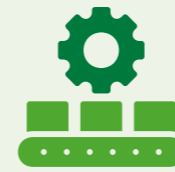
KEY OUTCOMES 2022

> 6,300

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



over 6,000 ha of castor farming in accordance with the code



1 BASF production site certified according to the SuCCESS code



> 6,200

farmers trained, audited and certified



over 50,000 mt

of certified castor seeds were produced



Year 6 yield is 22%

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

~ 30%

lower water consumption in the demo plots



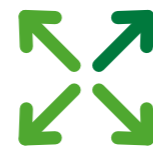
OUTLOOK 2023 PROJECT PRAGATI



> 7.000 farmers trained and audited



Further implementation of a supply chain standard

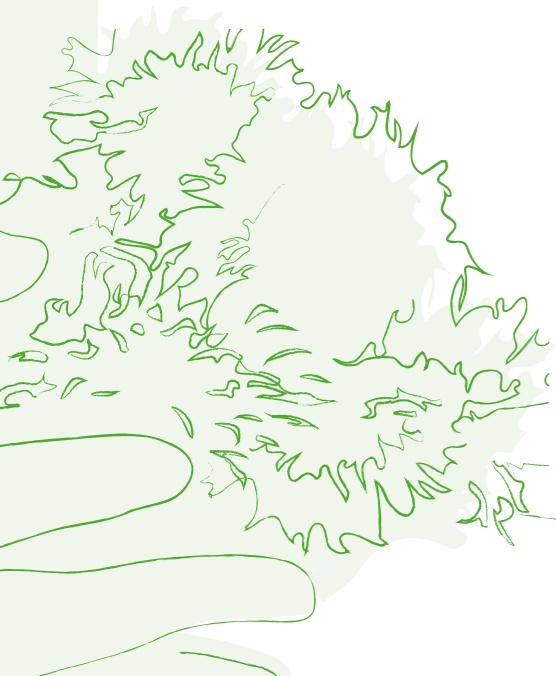


Extension of territory farmed according to the code



10% woman inclusion





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.

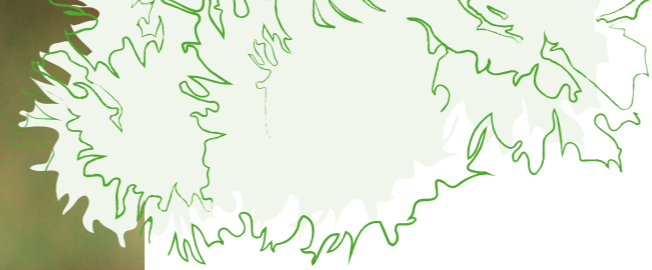
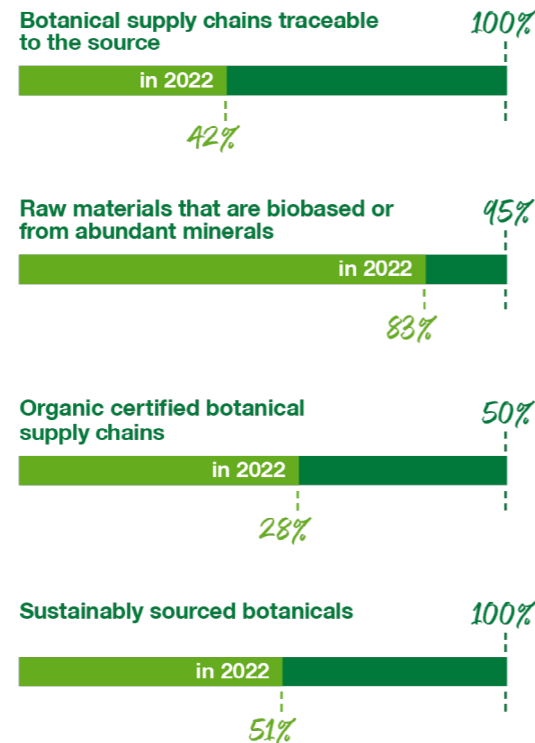


INNOVATING PRODUCTS THAT PROTECT NATURAL RESOURCES

Because plants are at the core of our bioactives business and biodiversity is our reservoir to innovate, 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 already made important progress in the first year of our Responsibly Active program:

Our targets by 2030



FULL TRACEABILITY FOR MAXIMUM TRANSPARENCY

Digitalization is a major key to reaching our ambitious goal of 100% traceability to the source. This includes advancements such as our new argan tool, designed to track every step of the argan oil production process. The digital tool helps us to monitor local sourcing by collecting detailed batch tracking data on each fruit's harvest, crushing of the nuts, and oil processing. Providing easily accessible and reliable data, the tool significantly facilitates the fair-trade certification process of this complex supply chain. It does so by measuring the extent to which income from argan activities contributes to a fair living wage. It also supports the women's cooperatives for oil processing to improve their operational excellence and drive their digital transformation forward. In the future, the data collected will be made available in real time to our customers involved in the argan supply chain.



PRESERVATIVES BECOME NATURAL

Continuous improvement of our existing portfolio is a prerequisite for meeting the increasing demand for natural ingredients. Switching from petro-based to bio-based glycols, for example, allows us to continuously improve our main portfolio's naturalness score so we can reach our goal of 100% natural origin for each ingredient. More than 20% of our bioactives containing petro-based glycol have already been reworked. And we will steadily continue to work towards reaching our target of having 95% of our raw materials being bio-based or coming from abundant minerals.

THE RAMBUTAN PROGRAM

MAKING SURE NO PART GOES TO WASTE

The cosmetics industry is constantly seeking for products with environmental consciousness and social engagements without compromising on performance. Plant based and other natural raw materials are favored by consumers who seek natural and sustainable solutions.

That's why in 2019, BASF launched three new active ingredients derived from its Rambutan Program, a socially and environmentally responsible supply chain for sustainable bioactives production that was launched in 2014. Working in close cooperation with partners in Vietnam, BASF sources the ingredients, which are extracted from the rambutan tree (*Nephelium lappaceum*), from the first organically certified rambutan gardens in Vietnam.

In Asia, rambutan is known for its many powers. The tree's fruits are rich in iron, vitamin C, fibers and antioxidants. The pulp boosts energy and immunity, prevents diseases, and contributes to eliminate free radicals. Despite rambutan's wide range of benefits, farmers only sell the fruits so far. But BASF found a way to extract the powers of the peel, leaves and seeds for cosmetic products, making sure no part goes to waste. The outcome are our new bioactives Nephhydrat™, Nephoria™ and Rambuvital™.





THE RAMBUTAN PROGRAM

THE FIRST CERTIFIED GARDENS OF THEIR KIND IN VIETNAM

The Rambutan Program involves a network of local farmers and a dedicated Rambutan team. The team maintains the gardens throughout the year, harvests the fruit, and prepares all raw materials for the extraction of the bioactive ingredients.

For its Rambutan Program, BASF selected two rambutan gardens in the Dong Nai province in Southeast Vietnam with around 200 rambutan trees. When cultivated well, the trees can live for up to 100 years, providing the rural communities from the region with a reliable income stream for years to come. To make this possible, BASF encourages and emphasises organic, sustainable farming practices, and implements measures to ensure organic farming compliance. Thanks to the joint efforts of BASF and partners from the region, both gardens received organic certification in 2017, making them the first certified gardens of their kind in Vietnam.

POSITIVE IMPACT ON THE RURAL SOCIETY

BASF also focuses on building close relationships and network with local farmers and NGOs in Vietnam to ensure social inclusiveness, best agricultural practices and biodiversity habitat preservation. The program focuses on gender equality, safer working conditions, fair incomes, fringe benefits and trainings. By leveraging BASF market access, we can also ensure sustained societal impact in the long run by creating scale at the demand side. In the case of Rambutan specifically, our unique upcycling approach ensures nothing goes to waste by capitalizing on every part of the fruit via a cosmetic application, maximizing the sources of income for local businesses.

ALREADY ACTIVE

KERASYLIUM™

Kerasylium®, a plant-based alternative to animal keratin, is obtained from industrial waste. It is the result of upcycling Silybum marianum seed cake, a by-product of milk thistle oil production. The milk thistle used is grown in France for oil production and is based on a traceable and sustainable supply chain.



SEANACTIV™

Our active ingredient Seanactiv™ is based on the organic-certified marine algae fucus vesiculosus. The seaweed is harvested manually under government license, in line with good collection practices that ensure regeneration of the biomass.



CASTALINE® BC10133

Castaline® is an extract of organic certified leaves of chestnut trees, manually harvested in France. Since the leaves are carefully collected from young trees that do not bear fruit, their use in a cosmetic active ingredient can be considered as valorization of an agricultural by-product.



OUR JOURNEY CONTINUES

Forging ahead, we will continue investing in innovations that power our sustainability commitments, such as our recently launched Kerasylium™, a plant-based and upcycled alternative to animal keratin. As part of our commitment to foster organically certified supply chains, new launches will valorize organic certified plants. Furthermore, we will drive our portfolio transformation towards a higher state of natural origins by continuously replacing synthetic preservative systems.

Because our sustainability goals can only be achieved through collaboration and exchange, generating and strengthening long-term relationships will remain a vital part

of our daily business. As we continue to transition to local sourcing, we aim to cultivate close ties to our suppliers, while steering away from intermediaries who do not add value. Our focus is on long-term relationships with suppliers providing traceability and transparency on environmental and social practices.

Today, we are happy to see that our journey towards greater sustainability is making real progress and that we are on the right track. This motivates us and spurs us on to strive even harder – together with our customers, employees, suppliers, partners, and everyone involved along the entire bioactives value chain.

*Together we are
Responsibly Active*



OUTLOOK

The COVID-19 pandemic, biodiversity loss and the already noticeable effects of climate change are the current challenges of governments and businesses. These global crises have heightened awareness of humanity's dependence on nature and ecosystems. Especially forests play an important role as they stabilize the climate due to their capacity to remove carbon dioxide from the atmosphere and store it, regulate the water cycle and provide habitat to thousands of life forms. Acknowledging that the consumption of the European Union is a considerable driver for deforestation and forest degradation in the world, the European Commission, the Council and the Parliament agreed on a Regulation with the to halt degradation and deforestation of the world's forests in December 2022. The legislation came into force on June 29, 2023 with a transition period of 18 months. The law is expected to come into application by the end of December 2024. In the scope of

the regulation are cattle, cocoa, coffee, rubber, wood, soy (beans, oil and its fractions), oil palm, its fractions and main derivatives. Main requirement of these 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 31st, 2020. During the course of 2023, the member states will 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 2023.



FURTHER MATERIAL / LINKS

SUSTAINABLE CASTOR ASSOCIATION

<https://castorsuccess.org/>

SUPPLIER CODE OF CONDUCT

<https://www.basf.com/global/en/who-we-are/organization/suppliers-and-partners/sustainability-in-procurement/supplier-code-of-conduct.html>



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

SUCCESS

Sustainable Castor Caring Environment & Social Standard

UN

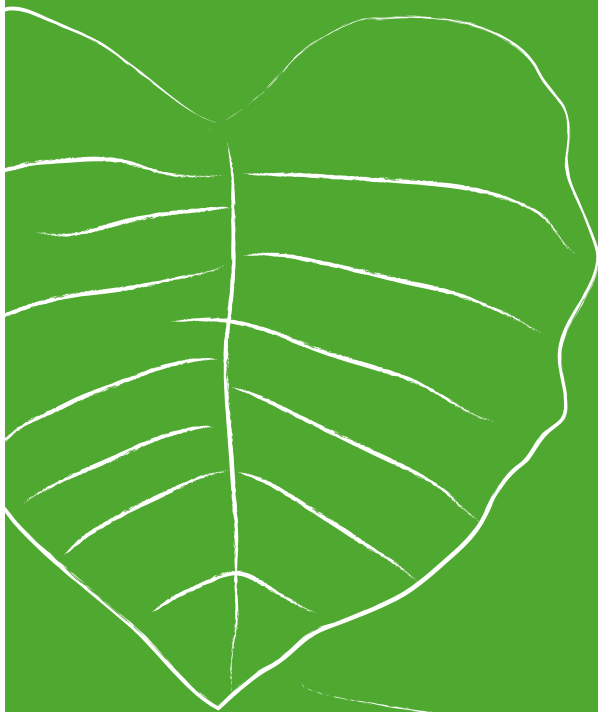
United Nations

WHO

World Health Organization

WWF

World Wide Fund for Nature



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