Welcome to your CDP Forests Questionnaire 2023

F0. Introduction

F0.1

(F0.1) Give a general description of and introduction to your organization.

At BASF, we create chemistry for a sustainable future. As the world's leading chemical company, we combine economic success with environmental protection and social responsibility. Around 111,000 employees in the BASF Group work on contributing to the success of our customers in nearly all sectors and almost every country in the world.

As of 2022, BASF's activities have been grouped into six segments: Chemicals, Materials, Industrial Solutions, Surface Technologies, Nutrition & Care and Agricultural Solutions. In 2022, BASF posted sales of €87.3 billion, BASF shares are traded on the stock exchange in Frankfurt (BAS) and as American Depositary Receipts (BASFY) in the U.S. Further information on BASF is available on the internet at www.basf.com.

We carry out our corporate purpose, "We create chemistry for a sustainable future", by pursuing ambitious goals along our entire value chain. In this way, we aim to achieve profitable growth and take on social and environmental responsibility. Our products, solutions and technologies contribute to achieving the United Nations' Sustainable Development Goals (SDGs).

Our leading position as an integrated global chemical company gives us the chance to make important contributions in the areas of resources, environment and climate, food and nutrition, and quality of life. Dealing with climate change is one of the major challenges to ensure a sustainable future. We recognize the importance of protecting the world's forests for the well being of the environment and society and we acknowledge our responsibility as an actor in various value chains and therefore, strive to end deforestation within those.

Palm oil, palm kernel oil, and their derivatives are some of our most important renewable raw materials. We mainly use these raw materials to produce ingredients for the cosmetics, detergent, cleaner and food industries.We aim to ensure that these raw materials come from certified sustainable sources, and we actively support the Roundtable on Sustainable Palm Oil (RSPO). In 2022, we published our sixth progress report – the BASF Palm Progress Report – for greater transparency in the value chain. We reached our goal of only sourcing RSPO-certified certified palm and palm kernel oil and purchased 191,714 metric tons in 2022. BASF's Palm Sourcing Policy addresses the requirements for protecting and preserving forests and

peatland, as well as the involvement of local communities. At the same time, we are stepping up our efforts to improve transparency and traceability in the supply chain. We were able to trace 97% of our global palm footprint to oil mill level as of the end of 2022.

We work collaboratively with value chain partners, governments and civil society to contribute to the conservation of forests. BASF partners with a variety of organizations, including Roundtable on Sustainable Palm Oil (RSPO), Forum Nachhaltiges Palmöl, and the High Carbon Stock Approach Steering Group to raise and increase awareness, drive the necessary market transformation and to achieve impact on the ground. Collaborative programs such as Mata Viva, an initiative established in Brazil to drive reforestation and preserve native forests demonstrate BASF's commitment to preventing deforestation and promoting reforestation.

Forward-Looking Statements: This document may contain forward-looking statements. These statements are based on current estimates and projections and currently available information. Future statements are not guarantees of the future developments and results outlined therein. These are dependent on a number of factors; they involve various risks and uncertainties; and they are based on assumptions that may not prove to be accurate. We do not assume any obligation to update the forward-looking statements contained in this report.

F0.2

(F0.2) State the start and end date of the year for which you are reporting data.

	Start Date	End Date
Reporting year	January 1, 2022	December 31, 2022

F0.3

(F0.3) Select the currency used for all financial information disclosed throughout your response.

EUR

F0.4

(F0.4) Select the forest risk commodity(ies) that you are, or are not, disclosing on (including any that are sources for your processed ingredients or manufactured goods); and for each select the stages of the supply chain that best represents your organization’s area of operation.

Timber products

Commodity disclosure

Not disclosing

Stage of the value chain

Manufacturing

Explanation if not disclosing

Our company sources only a small quantity of timber related products (paper for packaging, pallets for transportation). Therefore, we classify this as not significant.

Palm oil

Commodity disclosure

Disclosing

Stage of the value chain

Manufacturing

Are you disclosing information on embedded commodities?

No, because we have no embedded commodities

Cattle products

Commodity disclosure

This commodity is not produced, sourced or used by our organization

Soy

Commodity disclosure

Not disclosing

Stage of the value chain

Manufacturing

Explanation if not disclosing

Our company sources only a small quantity of soybean oil and derivatives which account for less than <0,5 % of our procurement volume. Therefore, we classify this as not significant.

Other - Rubber

Commodity disclosure

This commodity is not produced, sourced or used by our organization

Other - Cocoa

Commodity disclosure

This commodity is not produced, sourced or used by our organization

Other - Coffee

Commodity disclosure

This commodity is not produced, sourced or used by our organization

F0.5

(F0.5) Select the option that describes the reporting boundary for which forests-related impacts on your business are being reported

Other, please specify

Worldwide production sites of BASF SE, its fully consolidated subsidiaries (emissions included in full), and proportionally consolidated joint operations (emissions disclosed pro rata according to BASF's interest)

F0.6

(F0.6) Select the countries/areas in which you operate.

Argentina
Australia
Bahrain
Belgium
Brazil
Canada
Chile
China
Denmark
Finland
France
Germany
India
Indonesia
Ireland
Italy
Japan
Malaysia
Mexico
Netherlands
New Zealand
Norway
Poland
Republic of Korea
Russian Federation
Singapore
Slovakia
South Africa
Spain
Switzerland
Taiwan, China
Thailand
Turkey
United Kingdom of Great Britain and Northern Ireland
United States of America

F0.7

(F0.7) Are there any parts of your direct operations or supply chain that are not included in your disclosure?

No

F0.8

(F0.8) Does your organization have an ISIN code or another unique identifier (e.g., Ticker, CUSIP, etc.?)

Indicate whether you are able to provide a unique identifier for your organization	Provide your unique identifier
Yes, an ISIN code	BASF SE ISIN: DE000BASF111

F1. Current state

F1.1

(F1.1) How does your organization produce, use or sell your disclosed commodity(ies)?

Palm oil

Activity

Using as input into product manufacturing

Form of commodity

Crude palm oil (CPO)
Crude palm kernel oil (CPKO)
Refined palm oil
Palm oil derivatives
Palm kernel oil derivatives
Other, please specify
Refined Palm Kernel Oil (RBD PKO)

Source

Trader/broker/commodity market
Contracted suppliers (processors)
Contracted suppliers (manufacturers)

Country/Area of origin

Cambodia
Colombia
Costa Rica
Côte d'Ivoire
Gabon
Ghana
Guatemala
Honduras
Indonesia

Malaysia
Papua New Guinea
Philippines
Solomon Islands
Thailand
Unknown origin

% of procurement spend

1-5%

Comment

Traceability to origin (oil mill level) in volume terms is 96.7%, thus, 3.3% remain as unknown origin – but we do know the direct suppliers for which we not yet have the traceability information.

F1.2

(F1.2) Indicate the percentage of your organization's revenue that was dependent on your disclosed forest risk commodity(ies) in the reporting year.

	% of revenue dependent on commodity	Comment
Palm oil	1-5%	The estimation is based on the revenues we are generating with palm-based products in the Nutrition & Care unit which represent approximately 9% of BASF's total revenue. The Nutrition & Care unit processes most of the palm and palm kernel oil that we purchase.

F1.5

(F1.5) Does your organization collect production and/or consumption data for your disclosed commodity(ies)?

	Data availability/Disclosure
Palm oil	Consumption data available, disclosing

F1.5a

(F1.5a) Disclose your production and/or consumption figure, and the percentage of commodity volumes verified as deforestation- and/or conversion-free.

Forest risk commodity

Palm oil

Data type

Consumption data

Commodity production/ consumption volume

373,571

Metric for commodity production/ consumption volume

Metric tons

Data coverage

Full commodity production/consumption

Have any of your reported commodity volumes been verified as deforestation- and/or conversion-free?

Yes

% of reported volume verified as deforestation- and/or conversion-free

78.98

Please explain

Methods used to verify deforestation- and/or conversion-free status: With the Together for Sustainability program, risk matrices help us identify suppliers with a high sustainability risk potential based on country and product risks. Using this risk analysis and other evaluations, we audit raw material supplier sites on sustainability standards and initiate sustainability assessments through an external provider. The palm raw materials BASF is sourcing comply with RSPO, ISPO and MSPO standards which include regular audits to renew compliance with these standards. These standards (among others) ensure, that agricultural standards set by the government and standard specific requirements are kept and controlled. In February 2020, the revised RSPO Supply Chain Certification Standard was endorsed by the RSPO Board of Governors. The revised document is the result of an extensive review, integrating and updating the practices and procedures related to Supply Chain Certification (SCC) by the Supply Chain Certification Task Force since April 2019. BASF was member of this Task Force.

BASF also supports the RSPO Segregated certification by purchasing some RSPO Segregated volumes. We downgrade these Segregated volumes and offer Mass Balance certified sustainable products.

The RSPO Mass balance certification scheme represents the greatest certified volume for our palm-based products. RSPO has strengthened their principles and criteria in 2018 and with this being the only certification standard with verified No Deforestation and NDPE implementation. The verification is conducted on a yearly basis through structural and independent audits and assessments on the ground. BASF sources 55.28% of its entire palm exposure as RSPO certified and therefore 55.28% of BASF palm sourcing is verified deforestation / conversion free.
In addition we are sourcing another 23.7% of our palm exposure from areas / palm oil mills with a low risk profile according to Global Forest Watch (GFW) Palm Risk Approach. Given the methodology (huge impact of historic, recent deforestation) of this GFW Palm Risk Approach we consider the risk category “low” as deforestation free. Therefore, the total of 78.98% of our palm exposure is verified deforestation free.

F1.5b

(F1.5b) Provide a breakdown of your DCF and non-DCF volumes relevant to your stage in the supply chain according to how verification is achieved and the highest level of traceability, respectively.

Palm oil – DCF

% of DCF production/consumption volume from areas with no or negligible risk of deforestation/conversion

30

% of DCF production/consumption volume verified through monitoring systems

0

% of DCF production/consumption volume physically certified

70

Total percentage of production/consumption volume reported (DCF) [auto-calculated]

100

Palm oil – Non DCF

% of non-DCF production/consumption volume from unknown origin

15

% of non-DCF production/consumption volume traceable only as far as country level

0

% of non-DCF production/consumption volume traceable only as far as sub-national area

0

% of non-DCF production/consumption volume traceable only as far as processing facility level

0

% of non-DCF production/consumption volume traceable to production unit level

85

Total percentage of production/consumption volume reported (non-DCF) [(auto-calculated)]

100

F1.5c

(F1.5c) For your disclosed commodity(ies), indicate the percentage of the production/consumption volume sourced by national and/or sub-national jurisdiction of origin.

Forest risk commodity
Palm oil

Country/Area of origin
Malaysia

State or equivalent jurisdiction
Specify state/equivalent jurisdiction
Sabah

% of total production/consumption volume
17.02

Please explain
This location covers 17.02% of the palm oil sourced by our business out of the total consumption volume. The volume proportion is calculated by taking the standardized traceability information (Palm Oil Mill Name, Palm Oil Mill Owner, GPS Code = Industry Standard) of each palm oil raw material delivery and distributing the volume of this single delivery equally to each of the palm oil mills (GPS codes) associated with this single delivery. This approach enables the introduction of a volume-based sourcing priority classification.

Forest risk commodity
Palm oil

Country/Area of origin
Indonesia

State or equivalent jurisdiction
Specify state/equivalent jurisdiction
Riau

% of total production/consumption volume
12.15

Please explain
This location covers 12.15% of the palm oil sourced by our business out of the total consumption volume. The traceability systems described in the first row covers this location.

Forest risk commodity
Palm oil

Country/Area of origin
Indonesia

State or equivalent jurisdiction
Specify state/equivalent jurisdiction
Sumatera Utara

% of total production/consumption volume
11.76

Please explain
This location covers 11.76% of the palm oil sourced by our business out of the total consumption volume. The traceability systems described in the first row covers this location.

Forest risk commodity
Palm oil

Country/Area of origin
Indonesia

State or equivalent jurisdiction
Specify state/equivalent jurisdiction
Sumatera Selatan

% of total production/consumption volume
9.15

Please explain
This location covers 9.15% of the palm oil sourced by our business out of the total consumption volume. The traceability systems described in the first row covers this location.

Forest risk commodity
Palm oil

Country/Area of origin
Thailand

State or equivalent jurisdiction
Specify state/equivalent jurisdiction
Surat Thani

% of total production/consumption volume

6.88

Please explain

This location covers 6.88% of the palm oil sourced by our business out of the total consumption volume. The traceability systems described in the first row covers this location.

Forest risk commodity

Palm oil

Country/Area of origin

Indonesia

State or equivalent jurisdiction

Specify state/equivalent jurisdiction

Kalimantan Tengah

% of total production/consumption volume

4.39

Please explain

This location covers 4.39% of the palm oil sourced by our business out of the total consumption volume. The traceability systems described in the first row covers this location.

Forest risk commodity

Palm oil

Country/Area of origin

Indonesia

State or equivalent jurisdiction

Specify state/equivalent jurisdiction

Lampung

% of total production/consumption volume

3.39

Please explain

This location covers 3.39% of the palm oil sourced by our business out of the total consumption volume. The traceability systems described in the first row covers this location.

Forest risk commodity

Palm oil

Country/Area of origin

Indonesia

State or equivalent jurisdiction

Specify state/equivalent jurisdiction

Aceh

% of total production/consumption volume

3.11

Please explain

This location covers 3.11% of the palm oil sourced by our business out of the total consumption volume. The traceability systems described in the first row covers this location.

Forest risk commodity

Palm oil

Country/Area of origin

Indonesia

State or equivalent jurisdiction

Specify state/equivalent jurisdiction

Kalimantan Barat

% of total production/consumption volume

3.07

Please explain

This location covers 3.07% of the palm oil sourced by our business out of the total consumption volume. The traceability systems described in the first row covers this location.

Forest risk commodity

Palm oil

Country/Area of origin

Malaysia

State or equivalent jurisdiction

Specify state/equivalent jurisdiction

Johor

% of total production/consumption volume

2.78

Please explain

This location covers 2.78% of the palm oil sourced by our business out of the total consumption volume. The traceability systems described in the first row covers this location.

Forest risk commodity

Palm oil

Country/Area of origin

Malaysia

State or equivalent jurisdiction

Specify state/equivalent jurisdiction

Sarawak

% of total production/consumption volume

2.67

Please explain

This location covers 2.67% of the palm oil sourced by our business out of the total consumption volume. The traceability systems described in the first row covers this location.

Forest risk commodity

Palm oil

Country/Area of origin

Indonesia

State or equivalent jurisdiction

Specify state/equivalent jurisdiction

Bengkulu

% of total production/consumption volume

2.28

Please explain

This location covers 2.28% of the palm oil sourced by our business out of the total consumption volume. The traceability systems described in the first row covers this location.

Forest risk commodity

Palm oil

Country/Area of origin

Indonesia

State or equivalent jurisdiction

Specify state/equivalent jurisdiction

Kalimantan Timur

% of total production/consumption volume

2.14

Please explain

This location covers 2.14% of the palm oil sourced by our business out of the total consumption volume. The traceability systems described in the first row covers this location.

Forest risk commodity

Palm oil

Country/Area of origin

Indonesia

State or equivalent jurisdiction

Specify state/equivalent jurisdiction

Jambi

% of total production/consumption volume

2.06

Please explain

This location covers 2.06% of the palm oil sourced by our business out of the total consumption volume. The traceability systems described in the first row covers this location.

Forest risk commodity

Palm oil

Country/Area of origin

Indonesia

State or equivalent jurisdiction

Specify state/equivalent jurisdiction

Bangka Belitung

% of total production/consumption volume

2

Please explain

This location covers 2.00% of the palm oil sourced by our business out of the total consumption volume. The traceability systems described in the first row covers this location.

Forest risk commodity

Palm oil

Country/Area of origin

Malaysia

State or equivalent jurisdiction

Specify state/equivalent jurisdiction

Pahang

% of total production/consumption volume

1.77

Please explain

This location covers 1.77% of the palm oil sourced by our business out of the total consumption volume. The traceability systems described in the first row covers this location.

Forest risk commodity

Palm oil

Country/Area of origin

Malaysia

State or equivalent jurisdiction

Specify state/equivalent jurisdiction

Perak

% of total production/consumption volume

1.18

Please explain

This location covers 1.18% of the palm oil sourced by our business out of the total consumption volume. The traceability systems described in the first row covers this location.

Forest risk commodity

Palm oil

Country/Area of origin

Colombia

State or equivalent jurisdiction

Specify state/equivalent jurisdiction

Bolivar

% of total production/consumption volume

1.08

Please explain

This location covers 1.08% of the palm oil sourced by our business out of the total consumption volume. The traceability systems described in the first row covers this location.

Forest risk commodity

Palm oil

Country/Area of origin

Indonesia

State or equivalent jurisdiction

Specify state/equivalent jurisdiction

Kalimantan Selatan

% of total production/consumption volume

0.89

Please explain

This location covers 0.89% of the palm oil sourced by our business out of the total consumption volume. The traceability systems described in the first row covers this location.

Forest risk commodity

Palm oil

Country/Area of origin

Malaysia

State or equivalent jurisdiction

Specify state/equivalent jurisdiction

Pulau Pinang

% of total production/consumption volume

0.74

Please explain

This location covers 0.74% of the palm oil sourced by our business out of the total consumption volume. The traceability systems described in the first row covers this location.

Forest risk commodity
Palm oil

Country/Area of origin
Thailand

State or equivalent jurisdiction
Specify state/equivalent jurisdiction
Krabi

% of total production/consumption volume
0.7

Please explain
This location covers 0.70% of the palm oil sourced by our business out of the total consumption volume. The traceability systems described in the first row covers this location.

Forest risk commodity
Palm oil

Country/Area of origin
Thailand

State or equivalent jurisdiction
Specify state/equivalent jurisdiction
Chumphon

% of total production/consumption volume
0.68

Please explain
This location covers 0.68% of the palm oil sourced by our business out of the total consumption volume. The traceability systems described in the first row covers this location.

Forest risk commodity
Palm oil

Country/Area of origin
Thailand

State or equivalent jurisdiction
Specify state/equivalent jurisdiction
Chon Buri

% of total production/consumption volume

0.68

Please explain

This location covers 0.68% of the palm oil sourced by our business out of the total consumption volume. The traceability systems described in the first row covers this location.

Forest risk commodity

Palm oil

Country/Area of origin

Malaysia

State or equivalent jurisdiction

Specify state/equivalent jurisdiction

Selangor

% of total production/consumption volume

0.47

Please explain

This location covers 0.47% of the palm oil sourced by our business out of the total consumption volume. The traceability systems described in the first row covers this location.

Forest risk commodity

Palm oil

Country/Area of origin

Malaysia

State or equivalent jurisdiction

Specify state/equivalent jurisdiction

Negeri Sembilan

% of total production/consumption volume

0.36

Please explain

This location covers 0.36% of the palm oil sourced by our business out of the total consumption volume. The traceability systems described in the first row covers this location.

Forest risk commodity

Palm oil

Country/Area of origin

Guatemala

State or equivalent jurisdiction

Specify state/equivalent jurisdiction

Izabel

% of total production/consumption volume

0.35

Please explain

This location covers 0.35% of the palm oil sourced by our business out of the total consumption volume. The traceability systems described in the first row covers this location.

Forest risk commodity

Palm oil

Country/Area of origin

Indonesia

State or equivalent jurisdiction

Specify state/equivalent jurisdiction

Sumatera Barat

% of total production/consumption volume

0.34

Please explain

This location covers 0.34% of the palm oil sourced by our business out of the total consumption volume. The traceability systems described in the first row covers this location.

Forest risk commodity

Palm oil

Country/Area of origin

Indonesia

State or equivalent jurisdiction

Specify state/equivalent jurisdiction

Banten

% of total production/consumption volume

0.23

Please explain

This location covers 0.23% of the palm oil sourced by our business out of the total consumption volume. The traceability systems described in the first row covers this location.

Forest risk commodity

Palm oil

Country/Area of origin

Indonesia

State or equivalent jurisdiction

Specify state/equivalent jurisdiction

Sulawesi Tengah

% of total production/consumption volume

0.22

Please explain

This location covers 0.22% of the palm oil sourced by our business out of the total consumption volume. The traceability systems described in the first row covers this location.

Forest risk commodity

Palm oil

Country/Area of origin

Malaysia

State or equivalent jurisdiction

Specify state/equivalent jurisdiction

Trengganu

% of total production/consumption volume

0.19

Please explain

This location covers 0.19% of the palm oil sourced by our business out of the total consumption volume. The traceability systems described in the first row covers this location.

Forest risk commodity

Palm oil

Country/Area of origin

Colombia

State or equivalent jurisdiction

Specify state/equivalent jurisdiction

Meta

% of total production/consumption volume

0.19

Please explain

This location covers 0.19% of the palm oil sourced by our business out of the total consumption volume. The traceability systems described in the first row covers this location.

Forest risk commodity

Palm oil

Country/Area of origin

Malaysia

State or equivalent jurisdiction

Specify state/equivalent jurisdiction

Kelantan

% of total production/consumption volume

0.18

Please explain

This location covers 0.18% of the palm oil sourced by our business out of the total consumption volume. The traceability systems described in the first row covers this location.

Forest risk commodity

Palm oil

Country/Area of origin

Malaysia

State or equivalent jurisdiction

Specify state/equivalent jurisdiction

Kedah

% of total production/consumption volume

0.15

Please explain

This location covers 0.15% of the palm oil sourced by our business out of the total consumption volume. The traceability systems described in the first row covers this location.

Forest risk commodity

Palm oil

Country/Area of origin

Colombia

State or equivalent jurisdiction

Specify state/equivalent jurisdiction

Cesar

% of total production/consumption volume

0.14

Please explain

This location covers 0.14% of the palm oil sourced by our business out of the total consumption volume. The traceability systems described in the first row covers this location.

Forest risk commodity

Palm oil

Country/Area of origin

Colombia

State or equivalent jurisdiction

Specify state/equivalent jurisdiction

Casanare

% of total production/consumption volume

0.13

Please explain

This location covers 0.13% of the palm oil sourced by our business out of the total consumption volume. The traceability systems described in the first row covers this location.

Forest risk commodity

Palm oil

Country/Area of origin

Indonesia

State or equivalent jurisdiction

Specify state/equivalent jurisdiction

Sulawesi Selatan

% of total production/consumption volume

0.13

Please explain

This location covers 0.13% of the palm oil sourced by our business out of the total consumption volume. The traceability systems described in the first row covers this location.

Forest risk commodity

Palm oil

Country/Area of origin

Papua New Guinea

State or equivalent jurisdiction

Specify state/equivalent jurisdiction

West New Britain

% of total production/consumption volume

0.11

Please explain

This location covers 0.11% of the palm oil sourced by our business out of the total consumption volume. The traceability systems described in the first row covers this location.

Forest risk commodity

Palm oil

Country/Area of origin

Guatemala

State or equivalent jurisdiction

Specify state/equivalent jurisdiction

Alta Verapaz

% of total production/consumption volume

0.09

Please explain

This location covers 0.09% of the palm oil sourced by our business out of the total consumption volume. The traceability systems described in the first row covers this location.

Forest risk commodity
Palm oil

Country/Area of origin
Guatemala

State or equivalent jurisdiction
Specify state/equivalent jurisdiction
Petén

% of total production/consumption volume
0.07

Please explain
This location covers 0.07% of the palm oil sourced by our business out of the total consumption volume. The traceability systems described in the first row covers this location.

Forest risk commodity
Palm oil

Country/Area of origin
Gabon

State or equivalent jurisdiction
Specify state/equivalent jurisdiction
Ngounié

% of total production/consumption volume
0.07

Please explain
This location covers 0.07% of the palm oil sourced by our business out of the total consumption volume. The traceability systems described in the first row covers this location.

Forest risk commodity
Palm oil

Country/Area of origin
Indonesia

State or equivalent jurisdiction
Specify state/equivalent jurisdiction
Sulawesi Barat

% of total production/consumption volume

0.06

Please explain

This location covers 0.06% of the palm oil sourced by our business out of the total consumption volume. The traceability systems described in the first row covers this location.

Forest risk commodity

Palm oil

Country/Area of origin

Indonesia

State or equivalent jurisdiction

Specify state/equivalent jurisdiction

Papua Barat

% of total production/consumption volume

0.06

Please explain

This location covers 0.06% of the palm oil sourced by our business out of the total consumption volume. The traceability systems described in the first row covers this location.

Forest risk commodity

Palm oil

Country/Area of origin

Malaysia

State or equivalent jurisdiction

Specify state/equivalent jurisdiction

Melaka

% of total production/consumption volume

0.06

Please explain

This location covers 0.06% of the palm oil sourced by our business out of the total consumption volume. The traceability systems described in the first row covers this location.

Forest risk commodity

Palm oil

Country/Area of origin

Colombia

State or equivalent jurisdiction

Specify state/equivalent jurisdiction

Magdalena

% of total production/consumption volume

0.04

Please explain

This location covers 0.04% of the palm oil sourced by our business out of the total consumption volume. The traceability systems described in the first row covers this location.

Forest risk commodity

Palm oil

Country/Area of origin

Colombia

State or equivalent jurisdiction

Specify state/equivalent jurisdiction

Santander

% of total production/consumption volume

0.04

Please explain

This location covers 0.04% of the palm oil sourced by our business out of the total consumption volume. The traceability systems described in the first row covers this location.

Forest risk commodity

Palm oil

Country/Area of origin

Gabon

State or equivalent jurisdiction

Specify state/equivalent jurisdiction

Estuaire

% of total production/consumption volume

0.04

Please explain

This location covers 0.04% of the palm oil sourced by our business out of the total consumption volume. The traceability systems described in the first row covers this location.

Forest risk commodity

Palm oil

Country/Area of origin

Honduras

State or equivalent jurisdiction

Specify state/equivalent jurisdiction

Colón

% of total production/consumption volume

0.04

Please explain

This location covers 0.04% of the palm oil sourced by our business out of the total consumption volume. The traceability systems described in the first row covers this location.

Forest risk commodity

Palm oil

Country/Area of origin

Côte d'Ivoire

State or equivalent jurisdiction

Specify state/equivalent jurisdiction

Bas-Sassandra

% of total production/consumption volume

0.03

Please explain

This location covers 0.03% of the palm oil sourced by our business out of the total consumption volume. The traceability systems described in the first row covers this location.

Forest risk commodity

Palm oil

Country/Area of origin

Guatemala

State or equivalent jurisdiction

Specify state/equivalent jurisdiction

Escuintla

% of total production/consumption volume

0.02

Please explain

This location covers 0.02% of the palm oil sourced by our business out of the total consumption volume. The traceability systems described in the first row covers this location.

Forest risk commodity

Palm oil

Country/Area of origin

Cambodia

State or equivalent jurisdiction

Specify state/equivalent jurisdiction

Kaôh Kong

% of total production/consumption volume

0.01

Please explain

This location covers 0.01% of the palm oil sourced by our business out of the total consumption volume. The traceability systems described in the first row covers this location.

Forest risk commodity

Palm oil

Country/Area of origin

Ghana

State or equivalent jurisdiction

Specify state/equivalent jurisdiction

Eastern

% of total production/consumption volume

0.01

Please explain

This location covers 0.01% of the palm oil sourced by our business out of the total consumption volume. The traceability systems described in the first row covers this location.

Forest risk commodity

Palm oil

Country/Area of origin

Philippines

State or equivalent jurisdiction

Specify state/equivalent jurisdiction

Agusan del Sur

% of total production/consumption volume

0

Please explain

This location covers 0.002% of the palm oil sourced by our business out of the total consumption volume. The traceability systems described in the first row covers this location.

Forest risk commodity

Palm oil

Country/Area of origin

Indonesia

State or equivalent jurisdiction

Specify state/equivalent jurisdiction

Papua, Sulawesi Tenggara, Kepulauan Riau, orontalo, Bangka Tengah, Jawa Barat

% of total production/consumption volume

0.12

Please explain

These locations (Papua, Sulawesi Tenggara, Kepulauan Riau, orontalo, Bangka Tengah, Jawa Barat) cover 0.12% of the palm oil sourced by our business out of the total consumption volume. The traceability systems described in the first row covers this location.

Forest risk commodity

Palm oil

Country/Area of origin

Papua New Guinea

State or equivalent jurisdiction

Specify state/equivalent jurisdiction

Morobe, Oro, Milne Bay, New Ireland

% of total production/consumption volume

0.07

Please explain

These locations (Morobe, Oro, Milne Bay, New Ireland) cover 0.07% of the palm oil sourced by our business out of the total consumption volume. The traceability systems described in the first row covers this location.

Forest risk commodity

Palm oil

Country/Area of origin

Colombia

State or equivalent jurisdiction

Specify state/equivalent jurisdiction

Norte de Santander

% of total production/consumption volume

0.02

Please explain

This location covers 0.02% of the palm oil sourced by our business out of the total consumption volume. The traceability systems described in the first row covers this location.

Forest risk commodity

Palm oil

Country/Area of origin

Thailand

State or equivalent jurisdiction

Specify state/equivalent jurisdiction

Trang, Nakhon Si Thammarat

% of total production/consumption volume

0.01

Please explain

These locations (Trang, Nakhon Si Thammarat) cover 0.01% of the palm oil sourced by our business out of the total consumption volume. The traceability systems described in the first row covers this location.

Forest risk commodity

Palm oil

Country/Area of origin

Honduras

State or equivalent jurisdiction

Specify state/equivalent jurisdiction

Yoro, Atlántida

% of total production/consumption volume

0.01

Please explain

These locations (Yoro, Atlántida) cover 0.01% of the palm oil sourced by our business out of the total consumption volume. The traceability systems described in the first row covers this location.

Forest risk commodity

Palm oil

Country/Area of origin

Cambodia

State or equivalent jurisdiction

Specify state/equivalent jurisdiction

Krong Preah Sihanouk

% of total production/consumption volume

0.01

Please explain

This location covers 0.01% of the palm oil sourced by our business out of the total consumption volume. The traceability systems described in the first row covers this location.

Forest risk commodity

Palm oil

Country/Area of origin

Any other countries/areas

State or equivalent jurisdiction

% of total production/consumption volume

0.06

Please explain

These countries (Costa Rica & Solomon Islands) cover 0.06% of the palm oil sourced by our business out of the total consumption volume. The traceability systems described in the first row covers this location.

Forest risk commodity

Palm oil

Country/Area of origin

Unknown origin

State or equivalent jurisdiction

% of total production/consumption volume

3.3

Please explain

3.3% remain as unknown origin – but we do know the direct suppliers for which we not yet have the traceability information.

F1.5f

(F1.5f) How does your organization produce or consume biofuel derived from palm oil?

Does your organization produce or consume biofuel derived from palm oil?

No

Data type

Volume produced/consumed

Metric

Country/Area of origin

State or equivalent jurisdiction

% of total production/consumption volume

Does the source of your organization's biofuel material come from smallholders?

Comment

F1.6

(F1.6) Has your organization experienced any detrimental forests-related impacts?

No

F1.7

(F1.7) Indicate whether you have assessed the deforestation or conversion footprint for your disclosed commodities over the past 5 years, or since a specified cutoff date, and provide details.

Forest risk commodity

Palm oil

Have you monitored or estimated your deforestation/conversion footprint?

No, but we plan to monitor or estimate our deforestation/conversion footprint in the next two years

Coverage

Reporting deforestation/conversion since a specified cutoff date or during the last five years?

Known or estimated deforestation/ conversion footprint (hectares)

Describe methods and data sources used to monitor or estimate deforestation/ conversion footprint

F2. Procedures

F2.1

(F2.1) Does your organization undertake a forests-related risk assessment?

Yes, forests-related risks are assessed

F2.1a

(F2.1a) Select the options that best describe your procedures for identifying and assessing forests-related risks.

Palm oil

Value chain stage

Direct operations
Supply chain

Coverage

Full

Risk assessment procedure

Assessed as part of an established enterprise risk management framework

Frequency of assessment

More than once a year

How far into the future are risks considered?

> 6 years

Tools and methods used

Internal company methods
External consultants
Global Forest Watch Pro
Sustainability Policy Transparency Toolkit (SPOTT)
Other, please specify
HCS Approach, Together for Sustainability, RepRisk, Risk Matrix, NDPE & RSPO Certification

Issues considered

Availability of forest risk commodities
Quality of forests risk commodities
Impact of activity on the status of ecosystems and habitats
Regulation
Climate change
Impact on water security
Tariffs or price increases
Loss of markets
Leakage markets

Brand damage related to forests risk commodities
Corruption
Social impacts

Stakeholders considered

Customers
Employees
Investors
Local communities
NGOs
Other forest risk commodity users/producers at a local level
Regulators
Suppliers

Please explain

Risk assessment procedure: The sustainability-related topics relevant for BASF are addressed by the responsible operating divisions, functional units and the regions, which assess the risks identified as being relevant according to impact and probability of occurrence. As we usually update our traceability information twice a year, this also applies to the frequency of our risk assessment. We also systematically assess opportunities and risks with effects that cannot yet be measured in monetary terms, such as reputational risks. Our suppliers are evaluated based on risk due to the size and scale of our supplier portfolio. We define relevant suppliers as those showing an elevated sustainability risk potential as identified by our risk matrices and our purchasers' assessments.
Description of each of the tools/methods: We use the Together for Sustainability (TfS) evaluation program, which is based on third-party online assessments and on-site audits and is simplified for both suppliers and TfS member companies by a globally uniform questionnaire. In addition, the service provider RepRisk provides us with ad-hoc information if any suppliers have been publicly observed in connection with negative sustainability incidents, including forest-related aspects. We also use tools and services like publicly available SPOTT data, Global Forest Watch Pro (GFW Pro) online management, external consultants and HCS Approach to create a holistic picture in order to assess forest-related risks on many different levels. One of the most significant issues considered is the violation of regulation and negative impacts on the status of ecosystems and habitats, which could lead to increased risks for other issues considered. Through our satellite monitoring approach (Palmoil.io platform by MapHubs) and our comprehensive traceability information on palm (internal company method), BASF is observing its palm supply chain for recent potential deforestation cases and bring these cases up for resolution with our direct supplier which connects BASF accordingly to the area of potential deforestation.

F2.2

(F2.2) For each of your disclosed commodity(ies), has your organization mapped its value chains?

	Value chain mapping

Palm oil	Yes, we have partially mapped the value chain

F2.2a

(F2.2a) Provide details of your organization's value chain mapping for its disclosed commodity(ies).

Forest risk commodity

Palm oil

Scope of value chain mapping

Own operations

Tier 1 suppliers

Other, please specify

BASF publishes the connected palm oil mills

% of total suppliers covered within selected tier(s)

96.7

Description of mapping process and coverage

Our procurement organization ensures a reliable supply of raw materials, energy, precursors, technical goods and services to BASF. Alongside economic and qualitative criteria, we also take environmental, social and ethical aspects into account in cooperating with our suppliers.

Our sustainability-oriented supply chain management is an integral part of our risk management. We have defined our standards in a global guideline. We are continually refining and optimizing this guideline and our structures and processes in response to changing conditions, such as the new obligations arising from the German Supply Chain Due Diligence Act (SCA), which requires large companies to conduct due diligence on human rights and certain environmental standards in their supply chains from January 1, 2023. In principle, this applies both to our own business operations and to direct and indirect suppliers.

Our established supply chain management tools, such as our Supplier Code of Conduct or the systematic risk-oriented assessment and auditing of suppliers, remain important elements and have been updated accordingly. Our risk-based approach aims to identify and evaluate sustainability matters in our value chains as best possible to improve sustainability performance together with our suppliers. We regularly review and document progress based on the risk level.

Since 2021, BASF has signed up 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.

Traceability and certification have guided the palm industry for years. But traceability to palm oil mill does not solve the palm dilemma alone it is about engaging with the right

suppliers, introducing change for the better on the ground and increase transparency on the palm value chain. Therefore, we share a list of our main suppliers and the names and locations of round about 1,300 mills.

The disclosed % of total suppliers covered within selected tier(s) is based on coverage of our commodity consumption volumes.

Your own production and primary processing sites: attach a list of facility names and locations (optional)

Your suppliers' production and primary processing sites: attach a list of names and locations (optional)

F2.3

(F2.3) Do you use a classification system to determine risk of deforestation and/or conversion of other ecosystems for your sourcing areas, and if yes, what methodology is used, and what is the classification used for?

	Use of a classification system to determine deforestation and/or conversion risk of sourcing areas	Methodology used for classifying levels of risk	Use of risk classification	Attachment indicating risk classification for each sourcing area (optional)
1	Yes, we use a classification system	We source 72.9 percent of our traceable raw material from top 10 provinces in Indonesia and Malaysia and are connected to 31 provinces in the two countries in total matching 90.9 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	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	

		kernel oil originating from 415 oil mills.	information and potential action plans to stop deforestation and to keep compliance with BASF NDPE policy.	

F3. Risks and opportunities

F3.1

(F3.1) Have you identified any inherent forests-related risks with the potential to have a substantive financial or strategic impact on your business?

	Risk identified?
Palm oil	Yes

F3.1a

(F3.1a) How does your organization define substantive financial or strategic impact on your business?

Deforestation and forest degradation are an element of BASF's risk management, which identifies and evaluates opportunities and risks as early as possible to take appropriate measures in order to seize opportunities and minimize risks. The aim is to avoid risks that pose a threat to BASF's continued existence and to make improved managerial decisions to create lasting value.

Definition of substantive impact:
We understand risk to be any event that can negatively impact the achievement of our operational or strategic goals. We define opportunities as potential successes that exceed our defined goals. A specific risk or opportunity is considered as having a substantive impact if the resulting deviation from planned earnings exceeds €10 million. We have further defined the magnitude of impact to be linked to the following net financial implications for BASF's EBIT: High = more than €100 million, Medium = €10-100 million, Low= less than €10 million. If a new risk is identified that could have an impact on earnings of more than €10 million or bears reputational risks, it must be immediately reported to the Board of Executive Directors.

Description of the quantifiable indicators used to define substantive impact:
(a) Potential financial implications for BASF: Depending on the nature of the risk or opportunity, different methods for quantification are considered. In case of a clear understanding about the direction of change driven by the risk/opportunity, the effects will be quantified based on expert assessments about the potential level of change and cause-effect-relationships. If the direction of change is unclear, i.e., the effect can be positive or negative and thus represents a volatility/uncertainty, a case-specific probability distribution over the impact range is estimated.
(b) Probability of occurrence: Financial impacts will only be considered where a risk or opportunity has a probability of occurrence of at least 1% or the potential to threaten BASF's license to operate. The method for estimation of probability depends on the nature of the risk or

opportunity. In case that statistical data about the occurrence of the risk/opportunity are available (e.g., area of illegal deforestation), such information will be the basis for calculation of likelihoods. If no such statistical relationship can be relied on (e.g., when assessing the probability of implementation of certain policy measures), likelihood will be subject to expert estimates. We classify probabilities as follows: low = less than 30%, medium = 30-70%, high = more than 70%.

Scope: The mentioned definitions and thresholds apply regardless to where in the value chain the risk/event is located, i.e., direct operations, supply chain, customers etc.

F3.1b

(F3.1b) For your disclosed forest risk commodity(ies), provide details of risks identified with the potential to have a substantive financial or strategic impact on your business, and your response to those risks.

Forest risk commodity

Palm oil

Type of risk

Reputational and markets

Geographical scale

Global

Where in your value chain does the risk driver occur?

Supply chain

Primary risk driver

Availability of certified sustainable material

Primary potential impact

Constraint to growth

Company-specific description

BASF offers a broad range of ingredients based on RSPO certified sustainable palm kernel oil. We mainly use Palm oil, palm kernel oil and their derivatives. The Nutrition & Care unit, which makes up approx. 9% of BASF's total revenue processes most of the palm and palm kernel oil that we purchase. BASF has committed to source 100% RSPO certified palm and palm kernel oil by 2020 and to source 100% RSPO certified palm and palm kernel oil derivatives by 2025. As in general the years 2021, 2022, 2023 are years of commitments of that kind, also in the industry by important players - it is unclear whether enough RSPO certified palm kernel oil will be available to serve all demands (currently the RSPO certified output is growing at a very small scale). In 2022 our overall palm exposure amounted to 373,571 metric tons, compared to 462,894 metric tons in 2021. We are expecting a growing demand for certified palm oil for our own consumption as well as for the global market demand. The risk of a limited availability of

certified palm oil are twofold: physical availability as such and dramatically increased premiums to pay for securing BASF's demand on certified palm kernel oil and its derivatives. The consequence of insufficient physical availability would be that BASF is not able to serve the demands of their customers. This goes along with increased operational costs (premiums) which might endanger the competitiveness of BASF in the market and would lead to a loss of market share.

Timeframe

>6 years

Magnitude of potential impact

Medium-high

Likelihood

More likely than not

Are you able to provide a potential financial impact figure?

Yes, an estimated range

Potential financial impact (currency)

Potential financial impact figure - minimum (currency)

75,000,000

Potential financial impact figure - maximum (currency)

150,000,000

Explanation of financial impact

Assumptions: The financial impact is taken from a scenario where the premiums for RSPO certified material increase dramatically due to limited availability and increased demand on the global market for certified palm oil. In addition, the lack of supporting some of our customers' demands, due to lack of appropriate raw material is also considered in our calculation. The maximum potential financial impact figure is based on a scenario where the premiums for BASFs entire palm exposure would result in additional costs in a range of 75 mio € (doubling the premiums) and 150 mio € (tripling the premiums).

Primary response to risk

Supplier diversification

Description of response

Strategy and actions taken: Broadening of our supplier base for supplying RSPO certified palm products and engaging with our supplier on long term business relations / contracts to secure BASF's demand is an already implemented strategy and we effectively established long-term relationships with this strategy to mitigate and prevent reoccurring risks associated with the availability of certified sustainable raw materials. This targets to increase supplier intimacy and to establish BASF as a reliable and long-term partner to better anticipate supply volatility for certified commodities and strengthen our resilience to effectively meet our market demands. In addition, we are working on

alternative raw material solutions which are compliant with our palm commitment. The diversification of our supplier portfolio started already in 2018 as we were facing our commitment in 2020 and it is an ongoing process to have the broadest possible supplier base available.
Timescale of implementation: Broadening our supplier base and establishing long-term relationships with our suppliers has always been an important aspect of our value chain engagement. In the context of our palm suppliers, BASF intensified these efforts since 2018 and this strategy remains a continuous effort.

Cost of response

20,000,000

Explanation of cost of response

Supplier diversification and long-term contracting diminished the negotiation power due to smaller volume allocation per supplier – estimation of costs of approx. 2-3 million EUR / annum. In case of overcoming supply shortage of certified material by CNO (coconut oil) – these potential costs are calculated to be 10 – 17 million EUR per annum. CNO can serve as a substitute for palm kernel oil to mitigate risk of certified palm kernel oil shortage. The sum of these main cost aspects of supplier diversification result in the estimated cost of response.

Forest risk commodity

Palm oil

Type of risk

Reputational and markets

Geographical scale

Global

Where in your value chain does the risk driver occur?

Supply chain

Primary risk driver

Other reputational and market driver, please specify

BASF not delivering on its palm commitment

Primary potential impact

Brand damage

Company-specific description

BASF has publicly committed to source 100% RSPO certified palm and palm kernel oil by 2020 and to source 100% RSPO certified palm and palm kernel oil derivatives (Fatty Alcohols, Fatty Acids, Methylesters) by 2025. A failure to meet the timelines of the commitment and subsequently to continue the sourcing of 100% RSPO certified Palm Kernel Oil beyond 2020 and of Palm Kernel Oil Derivatives beyond 2025 will be a public topic and will damage the BASF brand with potential decrease in shareholder value and loss of social license to operate in palm (potential NGO activism).

Timeframe
>6 years

Magnitude of potential impact
High

Likelihood
About as likely as not

Are you able to provide a potential financial impact figure?
No, we do not have this figure

Potential financial impact (currency)

Potential financial impact figure - minimum (currency)

Potential financial impact figure - maximum (currency)

Explanation of financial impact
A brand damage based on not delivering on our palm commitments could lead to a reputation loss and potentially have a high magnitude of impact. Due to the complexity of this risk and impact on a company-wide scale a single potential impact figure cannot be estimated.

Primary response to risk
Supplier diversification

Description of response
All efforts are taken to secure meeting BASFs palm commitment. In addition, potential additions to the BASF Palm commitment are evaluated which have the potential to compensate for inability to source all palm raw material 100% certified sustainable and to keep BASFs Social license to operate on Palm.

Cost of response
0

Explanation of cost of response
For the various responses to this risk a cost estimation of the response cannot be singled out and is not evaluated.

Forest risk commodity
Palm oil

Type of risk
Chronic physical

Geographical scale

Global

Where in your value chain does the risk driver occur?

Supply chain

Primary risk driver

Increased severity of extreme weather events

Primary potential impact

Supply chain disruption

Company-specific description

BASF operates one of the biggest fatty alcohol plants in the world. The raw material supply of several 100 kt of palm kernel oil (and Coconut oil) to Reisholz (Düsseldorf) is implemented via barging along the river Rhine (approx. 57% of all purchased volumes in Germany need to be transported via the river rhine). Given the volume size to be transported and the involved transportation costs this is by far the most efficient way of transport. In the recent years we experienced increased frequency of low water levels along the river Rhine – being partially extremely low. In case of low water in the river Rhine the transportation costs are rising the lower the water level gets. At the same time the loading capacity of the Rhine barges decreases the lower the water level gets (down to 10% of their loading capacity) and at a certain point of low water level the barges cannot operate at all. Already at the point where the barges are still operating but with substantially decreased capacity supply chain disruptions are present as no other logistic means is currently possible to compensate here. This can go as far as a shut down of operations as the raw material feed cannot be replenished in time.

Timeframe

>6 years

Magnitude of potential impact

Medium-high

Likelihood

Likely

Are you able to provide a potential financial impact figure?

Yes, an estimated range

Potential financial impact (currency)

Potential financial impact figure - minimum (currency)

0

Potential financial impact figure - maximum (currency)

50,000,000

Explanation of financial impact

BASF operates one of the biggest fatty alcohol plants in the world. The raw material supply of several 100 kt of palm kernel oil (and Coconut oil) to Reisholz (Düsseldorf) is

implemented via barging along the river Rhine (approx. 57% of all purchased volumes in Germany need to be transported via the river rhine). Given the volume size to be transported and the involved transportation costs this is by far the most efficient way of transport. In the recent years we experienced increased frequency of low water levels along the river Rhine – being partially extremely low. In case of low water in the river Rhine the transportation costs are rising the lower the water level gets. At the same time the loading capacity of the Rhine barges decreases the lower the water level gets (down to 10% of their loading capacity) and at a certain point of low water level the barges cannot operate at all. Already at the point where the barges are still operating but with substantially decreased capacity supply chain disruptions are present as no other logistic means is currently possible to compensate here. This can go as far as a shut down of operations as the raw material feed cannot be replenished in time.

Primary response to risk

Other, please specify

Diversification of transportation means for Lauric supply into Düsseldorf

Description of response

In the course of diversification of transportation means of Laurics into Düsseldorf, BASF has increased the possibilities for deliveries of tank trucks and is evaluating other more efficient means of securing the Lauric oil supply into Düsseldorf.

Cost of response

12,000,000

Explanation of cost of response

Estimated costs of up to 12 million EUR are based on investments in additional unloading capacities for several different transportation means and their connection to the production plant and storage facilities.

F3.2

(F3.2) Have you identified any forests-related opportunities with the potential to have a substantive financial or strategic impact on your business?

	Have you identified opportunities?
Palm oil	Yes

F3.2a

(F3.2a) For your selected forest risk commodity(ies), provide details of the identified opportunities with the potential to have a substantive financial or strategic impact on your business.

Forest risk commodity

Palm oil

Type of opportunity

Markets

Where in your value chain does the opportunity occur?

Direct operation

Primary forests-related opportunity

Increased demand for certified materials

Company-specific description

With estimates of palm oil being present in up to 70% of cosmetic products and over 50% of all supermarket products, palm oil is both extremely important to the supply chain and increasingly risky due to the potential for loss of consumer acceptance. Impact specific to BASF: BASF offers a very broad range of ingredients based on RSPO certified sustainable palm kernel oil. We mainly use Palm oil, palm kernel oil and their derivatives to produce ingredients for the cosmetics, detergent, cleaner and food industries. The Nutrition & Care unit, which makes up approx. 9% of BASF's total revenue processes most of the palm and palm kernel oil that we purchase. Although not all consumers are currently aware of palm oil, those that are aware view it in a negative light, associating it with environmental destruction, human right abuses and climate change. As one of the leading global suppliers for personal care, home care, industrial & institutional cleaning, and technical applications as well as food performance and health ingredients, BASF is highly exposed to this risk. However, its position also provides an opportunity to benefit if it capitalizes on the opportunity to solidify its reputation as a supplier, that support the sustainability strategy of its customers with ingredients that are ecologically sourced, conserve resources or help avoid negative environmental or social impact.

Estimated timeframe for realization

4-6 years

Magnitude of potential impact

Medium-high

Likelihood

Likely

Are you able to provide a potential financial impact figure?

Yes, a single figure estimate

Potential financial impact figure (currency)

80,000,000

Potential financial impact figure – minimum (currency)

Potential financial impact figure – maximum (currency)

Explanation of financial impact figure

According to the 2022 Sustainable Market Share Index products marketed as sustainable grew ~2x faster than products not marketed as sustainable and achieved a 5 year CAGR (Compound Annual Growth Rate) of 9.43% vs. 4.98% for its conventional counterparts. Based on the 2022 revenue of BASF's Nutrition and Care segment of 8,066 million € and a taking into consideration that more than 50% of all supermarket products contain palm (kernel) oil, we estimate a revenue increase of approximately 1% annually. (8,066 million € * 0,01 = 80 million).

Cost to realize opportunity

2,800,000

Strategy to realize opportunity

Example of action: In 2014, supported by the agency Futureye, the BASF team started targeting for a social and economic license to operate our business linked to palm. The discussion led to a more comprehensive and shared understanding of the issues across the whole supply chain, including suppliers, manufacturers, retailers & non-governmental organizations. Our priority is to help our customers deal with the complexity of oleoderivatives and gain a better understanding on how to approach physical transformation towards sustainable palm. BASF has been continuously moving towards a comprehensive global product range that will allow consumer goods manufacturers to develop value added formulations that meet increasing demand for ingredients that are certified sustainable. To speed up that process, we have initiated a major shift of our specialty portfolio in 2018 and offer palm-based specialty ingredients for the personal care market exclusively RSPO certified sustainable. With this 'Time for Change' initiative, we broaden our portfolio offerings on certified sustainable products, and we aim to provide our customers the ability to meet commitments they have made to their stakeholders. By the end of 2020 we have achieved our 2020 goal to only source RSPO certified palm and palm kernel oil (excl. significant intermediates based on palm oil and palm kernel oil).

EXPLANATION OF COST TO REALIZE OPPORTUNITY
An annual increase of 1% revenue would lead to an additional demand of approx. 10,400 mt MB (Mass Balance) Certified Sustainable Palm Oil (CSPO). According to the WWF report "Business Case for Certified Sustainable Palm Oil", premiums to be paid for RSPO MB-CSPKO in 2022 were 250-300$. This leads to an increased cost for RSPO MB-CSPKO of approx. 2.8 million € (based on average exchange rate of € vs $ of 1:1,05 in 2022) compared to conventional Palm Kernel Oil (PKO).

Forest risk commodity

Palm oil

Type of opportunity

Markets

Where in your value chain does the opportunity occur?

Supply chain

Primary forests-related opportunity

Increased shareholder value

Company-specific description

With the “We create chemistry” strategy, BASF has set itself ambitious goals. We want to contribute to a world that provides a viable future with enhanced quality of life for everyone and have embedded this into our corporate purpose: “We create chemistry for a sustainable future.” We do so by creating chemistry for our customers and society and by making the best use of available resources. To ensure sustainability and, thus, the interplay between ecological, economic and social issues, an ongoing dialog and cooperation are essential. We engage intensively with our stakeholders at all levels of the supply chain to understand their needs and help them achieve their targets: suppliers, customers, civil society, associations and employees. As a founding member of the U.N. Global Compact, we support the implementation of the United Nations’ Sustainable Development Goals with our social commitment around the world. For the palm value chain, this means we work closely with the companies we buy our raw materials from and with our customers. Beyond this, we support smallholders as an important link within the value chain. With the end consumer in view, we address the consequences of using and selling products based on palm and palm kernel oil. More and more investors want to invest in stocks of companies that conduct their business in accordance with the principle of sustainable development. This means that investment decisions are based on environmental and social aspects as well as economic performance. BASF shares are particularly attractive for such investors.

Estimated timeframe for realization

>6 years

Magnitude of potential impact

Medium-high

Likelihood

Very likely

Are you able to provide a potential financial impact figure?

No, we do not have this figure

Potential financial impact figure (currency)

Potential financial impact figure – minimum (currency)

Potential financial impact figure – maximum (currency)

Explanation of financial impact figure

Attractiveness of BASF shares for investors depend on a combination of performance indicators, therefore it is not possible to calculate the financial impact to a single indicator.

Cost to realize opportunity

Strategy to realize opportunity

F4. Governance

F4.1

(F4.1) Is there board-level oversight of forests-related issues within your organization?

Yes

F4.1a

(F4.1a) Identify the position(s) of the individual(s) (do not include any names) on the board with responsibility for forests-related issues.

Position of individual or committee	Responsibilities for forest-related issues
Director on board	The President of the Care Chemicals Division represents the highest responsibility for overall governance for forest protection with regard to the purchase of palm(kern)oil below the Board of Directors (delegation of governance from Board). The President leads the Care Chemical Division and reports directly to a Board member with overall responsibility for forest protection within BASF. RATIONALE OF ASSIGNMENT Biodiversity protection is a core element of BASF's corporate strategy, which underpins BASF's purpose "We create chemistry for a sustainable future". The President of the Care Chemical Division has overall responsibility for the development and implementation of the BASF palm sourcing strategy. Example: The President commissions the preparation of the Palm Progress Report on BASF's measures and progress towards more sustainability and transparency in the palm(kern)oil value chain and he signed the final report. In August 2022, BASF published the sixth BASF Palm Progress Report.

F4.1b

(F4.1b) Provide further details on the board's oversight of forests-related issues.

	Frequency that forests-related issues are a scheduled agenda item	Governance mechanisms into which forests-related issues are integrated	Please explain

Row 1	Scheduled - some meetings	Monitoring implementation and performance Monitoring progress towards corporate targets Overseeing acquisitions, mergers, and divestitures Overseeing major capital expenditures Reviewing and guiding annual budgets Reviewing and guiding business plans Reviewing and guiding corporate responsibility strategy Reviewing and guiding major plans of action Reviewing and guiding risk management policies Reviewing and guiding strategy Reviewing innovation / R&D priorities Setting performance objectives	Our Management Board regularly reviews forest-related topics, e.g., Forest-related risks and opportunities, target performance, budgets for functions and business units involved in forest related topics and progress on specific measures supporting BASF's sustainability strategy. The board also approves what is released regarding forest-related information, in our corporate report or the CDP questionnaire. Information on who briefs the board. The Board of Executive Directors is supported by the Corporate Centers, bundling group wide steering and defining adequate governance. The Environmental Protection, Health & Safety unit in the Corporate Center defines Group-wide management and control systems regarding forests topics (e.g., Environmental protection, EHSQ management system, EHS Data management & reporting), monitors compliance with internal requirements and legal regulations, while the sites and legal entities implement these requirements locally.

F4.1d

(F4.1d) Does your organization have at least one board member with competence on forests-related issues?

Row 1

Board member(s) have competence on forests-related issues

Yes

Criteria used to assess competence on forests-related issues

The competence profile of Board members requires many years of management experience in scientific, technical and commercial fields. One BASF board member has

topic related knowledge of forests-related issues due to long lasting responsibility for environmental and forests- related topics during different steps of the career, e.g., responsibility for agricultural business and nutrition & health business. The board member was also responsible for the integration of an external chemical company (acquisition) with palm-related expertise.

F4.2

(F4.2) Provide the highest management-level position(s) or committee(s) with responsibility for forests-related issues (do not include the names of individuals).

Name of the position(s) and/or committee(s)	Forests-related responsibilities of this position	Frequency of reporting to the board on forests-related issues	Please explain
President	Managing annual budgets relating to the implementation of forest-related policies and commitments Monitoring progress against forests-related corporate targets Assessing forests-related risks and opportunities Assessing future trends in forest risk commodity demand	More frequently than quarterly	Processes by which the position/committee is informed of and monitors forests-related issues: The President of the Care Chemicals Division is responsible for overall governance for forest protection with regard to the purchase of palm(kern)oil below the Board of Directors (= delegation of governance from Board). The President leads the Care Chemical Division and reports directly to a Board member with overall responsibility for forest protection within BASF. Rationale as to why the forests-related responsibilities have been assigned to this position/committee: A member of the Board of Executive Directors is supported by the Corporate Centers, bundling group wide steering and defining adequate governance. The Environmental Protection, Health & Safety unit in the Corporate Center defines Group-wide management and control systems regarding forests-related topics (e.g., Environmental protection incl. Biodiversity). EHSQ management system, EHS Data management & reporting), monitors compliance with internal requirements and legal regulations while

			the sites and legal entities implement these requirements locally.

F4.3

(F4.3) Do you provide incentives to C-suite employees or board members for the management of forests-related issues?

	Provide incentives for management of forests-related issues	Comment
Row 1	No, not currently but we do plan to introduce them in the next two years	

F4.4

(F4.4) Did your organization include information about its response to forests-related risks in its most recent mainstream financial report?

Yes (you may attach the report – this is optional)

sha-basf-capital-market-basf-ar22.pdf

BASF includes forest-related information in the BASF Online Report 2022: https://report.basf.com/2022/en/. Forest- and palm-related information are included in various chapters, e.g., Biodiversity, Sustainable Investment & Raw Materials

F4.5

(F4.5) Does your organization have a policy that includes forests-related issues?

Yes, we have a documented forests policy that is publicly available

F4.5a

(F4.5a) Select the options to describe the scope and content of your policy.

Row 1

Scope

Company-wide

Commodity coverage

General forests policy covering all commodities
Palm oil

Content

Commitment to eliminate conversion of natural ecosystems
Commitment to no land clearance by burning or clearcutting
Commitment to eliminate deforestation
Commitment to no deforestation, to no planting on peatlands and to no exploitation (NDPE)
Commitment to remediation, restoration and/or compensation of past harms
Secure Free, Prior and Informed Consent (FPIC) of indigenous people and local communities

Adoption of the UN International Labour Organization principles
Commitment to resolving both social and environmental issues in own operations and supply chain
Commitment to protect rights and livelihoods of local communities
Commitments beyond regulatory compliance
Commitment to transparency
Commitment to stakeholder awareness and engagement
Commitment to align with the SDGs
Recognition of the overall importance of forests and other natural ecosystems
Description of business dependency on forests
Recognition of potential business impact on forests and other natural ecosystems
Description of forest risk commodities, parts of the business, and stages of value-chain covered by the policy
List of timebound milestones and targets
Description of forests-related standards for procurement

Document attachment

2020 05 BASF Group Position Deforestation_EN_Webpage (7).pdf
BASF_Palm_Sourcing_Policy (4).pdf

Please explain

General forest policy: BASF considers that a resilient and equitable solution halting deforestation will have to include fair compensation for the above-mentioned ecosystem services. BASF recognizes the importance of protecting the world's forests for the wellbeing of the environment and society. We acknowledge our responsibility as an actor in various value chains and therefore, strive to end deforestation within those. In 2020 BASF released its group wide BASF Group’s Position on Forest Protection. We want to help to achieve the SDG 15 (life on land) and call on governments to end deforestation. Our global BASF Group’s Position on Forest protection Policy encompasses our renewable raw material supply chains including the 3rd party supply chain of our direct supply base, our own operations, as well as our products with detailed commitments to actions, such as collaboration and partnering with suppliers, evaluating and assessing current and potential non-compliance and systematically evaluating sustainability topics (e.g., Potential impacts on forests and biodiversity criteria).

Commodity specific policy: The publicly available BASF Palm Sourcing Policy further specifies key elements of our palm related sourcing and is based on our Supplier Code of Conduct. In 2021, we purchased around 1.3 mio metric tons of renewable raw materials. Palm oil, palm kernel oil and their derivatives are some of our most important renewable resources. We expect our suppliers to increasingly address the key elements, such as supporting the process towards convergence to reach an enhanced industry standard to conserve and restore High Conservation Value (HCV) and High Carbon Stock (HCS) Areas, developing new plantings in accordance with the HCS Approach Toolkit until convergence is found (Forest Conservation), abstaining from development of peat land, support the rigorous implementation of a free-prior-informed

consent process and social impact assessments with regard to the development of plantings, promote upstream traceability and transparency to oil mill level and promote smallholder inclusion into certified supply chains.
BASF's forest-related policies are subject to constant reviews by procurement and stakeholder relations employees and are updated based on new arising market and/or industry information.

F4.6

(F4.6) Has your organization made a public commitment to reduce or remove deforestation and/or forest degradation from its direct operations and/or supply chain?

Forest risk commodity	Public commitments made
Palm oil	Yes

F4.6a

(F4.6a) Has your organization endorsed any of the following initiatives as part of its public commitment to reduce or remove deforestation and/or forest degradation?

Other, please specify
RSPO, High Carbon Stock (HCS) Steering Group, Forum for Sustainable Palm Oil (FONAP), Polish Coalition on sustainable Palm Oil, Brazilian Coalition on Climate, NDPE Implementation Reporting Framework of the POCG (Palm Oil Collaboration Group)

F4.6b

(F4.6b) Provide details on your public commitment(s), including the description of specific criteria, coverage, and actions.

Forest risk commodity

Palm oil

Criteria

No conversion of natural ecosystems
Zero gross deforestation/ no deforestation
No new development on peat regardless of depth
Best management practices for existing cultivation on peat
Restoration and compensation to address past deforestation and conversion
Avoidance of negative impacts on threatened and protected species and habitats
No land clearance by burning or clearcutting
No conversion of High Conservation Value areas
No conversion of High Carbon Stock forests
Secure Free, Prior and Informed Consent (FPIC) of indigenous people and local communities

Operations are in accordance with the UN Declaration on the Rights of Indigenous Peoples
Promotion of gender equality and women's empowerment
Adoption of the UN International Labour Organization principles
Resolution of complaints and conflicts through an open, transparent and consultative process
Facilitate the inclusion of smallholders into the supply chain
No sourcing of illegally produced and/or traded forest risk commodities
Restricting the sourcing and/or trade of forest risk commodities to credible certified sources
Recognition of legal and customary land tenure rights

Operational coverage

Direct operations and supply chain

% of total production/ consumption covered by commitment

100%

Cutoff date

2018

Forest risk countries/areas that the cutoff date applies to

Applied globally

Reason for selecting cutoff date

Compliance with initiative, please specify

The RSPO Principles and Criteria (P&C) 2018, adopted at the 15th annual General Assembly (GA15) on 15th November 2018, incorporated the High Carbon Stock (HCS) Approach as a new requirement to halt deforestation (Criterion 7.12)

Commitment target date

2021-25

Please explain

When the Roundtable of Sustainable Palm Oil 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. The RSPO Principles and Criteria (P&C) 2018, adopted at the 15th annual General Assembly (GA15) on 15 November 2018, incorporated the High Carbon Stock (HCS) Approach as a new requirement to halt deforestation (Criterion 7.12).
Further, Criterion 7.12.2 requires that any new land clearing after 15 November 2018 (i.e. after the adoption of the P&C 2018 at GA15) must be preceded by a High Conservation Value (HCV)-HCS assessment. This applies to all plantations (existing and new), which are certified or yet to be certified by RSPO. Key elements of BASF's Palm Commitment include a sourcing policy for oil palm-derived products that incorporates forest and peat conservation, as well as requirements for a free, prior-informed-consent, social impact assessment, human and labor rights. We have committed ourselves to foster sustainable palm by procuring all oils only from RSPO certified sources by 2020 and expanding our oil commitments to significant

intermediates based on palm oil and palm kernel by 2025. BASF supports initiatives to reflect integrated land use planning for oil palm development, including the conservation of high carbon stock and peatlands. We have integrated additional forest conservation requirements regarding these land types into our BASF Palm Sourcing Policy (as defined by the High Carbon Stock Approach). Additionally, we have incorporated requirements for a Free, Prior Informed Consent (FPIC) process as well as labor and human rights into our Palm Sourcing Policy. As part of its strategy, BASF has initiated its 'Time for Change' initiative in 2018 to offer its palm-based specialties exclusively as RSPO certified sustainable. A No-deforestation, No-peat and No-exploitation (NDPE) policy and its implementation have become a business-critical factor for BASF. In June 2020, BASF introduced its Forest Protection Policy. The company focuses on raw materials supply chains, own operations, as well as products in the combat against further deforestation.

Example of actions taken in the last year to meet the commitments "No conversion of natural ecosystems" & "Zero gross deforestation / no deforestation": In 2022 we applied our satellite monitoring approach (Palmoil.io platform by Maphubs) in Sabah, Malaysia, where watchdogs and our satellite monitoring indicated potential deforestation in the catchment area of some palm oil mills we are indirectly sourcing from. After receiving further information from our suppliers we decided to suspend the plantation company from our supply chain.
Example (including locations) of actions taken in the last year to meet the commitment "Secure Free, Prior and Informed Consent (FPIC)": In 2022 a palm oil plantation company in Indonesia connected to our supply chain was alleged that it didn't obtain FPIC for development of 3 of its concessions. In the discussion with our supplier, we were informed that, as corrective action, the plantation company has engaged with the Conflict Resolution Union (CRU) to evaluate their human rights related practices. Incubated through the Indonesia Business Council for Sustainable Development (IBCSD) in 2015, CRU is a conflict resolution service agency that provides independent support for resolving conflicts in the management of agrarian and natural resources.
Example (including locations) of actions taken in the last year to meet the commitment "Restoration and compensation to address past deforestation and/or conversion": BASF is supporting the Mata Viva initiative in Brazil to protect water quality, conserve soil, and create areas to preserve native vegetation and wildlife. Annual monitoring occurs in the areas recovered in the BASF sites, covering about 170 hectares in 2022.

F5. Business strategy

F5.1

(F5.1) Are forests-related issues integrated into any aspects of your long-term strategic business plan, and if so how?

	Are forests-related issues integrated?	Long-term time	Please explain

		horizon (years)	
Long-term business objectives	Yes, forests-related issues are integrated	11-15	Description of the long-term business objectives: BASF recognizes the importance of protecting the world's forests for the wellbeing of the environment and society. We acknowledge our responsibility as an actor in various value chains and therefore, strive to end deforestation within those. We want to help to achieve the SDG 15 (life on land) and call on governments to end deforestation. When the Roundtable of Sustainable Palm Oil 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. The BASF Palm Commitment was first published in 2011 and extended in 2015 to foster a market transformation towards sustainable palm oil production and usage. Our forest-related ambition and principles are defined in the BASF Group's Position on Forest Protection. This global BASF Group position encompasses our renewable raw material supply chains including the 3rd party supply chain of our direct supply base, our own operations, as well as our products. It comprises primary forests and areas of High Conservation Value (HCV), as well as High Carbon Stock (HCS) forest areas and peatlands. The human rights aspects beyond our ambition stated in this document are addressed in BASF's Human Rights Position and the Supplier Code of Conduct. An example of forests-related actions taken that align with the strategic business plan aspect: We have committed ourselves to foster sustainable palm by procuring all oils only from RSPO certified sources by 2020 and expanding our oil commitments to significant intermediates based on palm oil and palm kernel by 2025. Apart from these certification objectives, our company purpose "We create chemistry for a sustainable future" and the commitment of protecting the world's forests for the wellbeing of the environment and society and call to end deforestation in an ongoing commitment and goes beyond the next 10 years (consistent with the long-term time horizon).
Strategy for long-term objectives	Yes, forests-related issues are integrated	11-15	Description of the strategy for achieving long-term objectives: We see it as our responsibility to work intensively with the companies we buy our raw materials

			from, to engage more closely with the palm supply chain from the smallholder to the end consumer. To reach our long-term objectives and commitments BASF supports initiatives to reflect integrated land use planning for oil palm development, including the conservation of high carbon stock and peatlands. We have integrated additional forest conservation requirements regarding these land types into our BASF Palm Sourcing Policy and our Group's Position on Forest Protection with actions for our supply chains, operations & products. As part of our strategic business plan a continuous stakeholder engagement is extremely important to BASF. We will continue to work collaboratively with value chain partners, governments and civil society to conserve forests and to drive our ambition stated in our group-wide Position on Forest Protection. BASF partners with a variety of organizations, and we are looking to partner with additional relevant stakeholder groups and organizations to raise and increase awareness, drive the necessary market transformation and to achieve impact on the ground. An example of forests-related actions taken that align with the strategic business plan: BASF has initiated its 'Time for Change' initiative in 2018 to offer its palm-based specialties exclusively as RSPO certified sustainable. In August 2022, we published our sixth progress report – the BASF Palm Progress Report – for greater transparency in the value chain. In order to better understand and quantify the environmental impacts of our commitments and objectives, we published our product carbon footprint (PCF) for sourcing certified sustainable palm kernel oil. Compared to conventionally sourcing, BASF saves more than > 290,000 metric tons CO2. RSPO-certified production of palm kernel oil shows around 36 percent lower global warming impact than non-certified production. Our strategy is key for our long-term business objectives the commitment of protecting the world's forests for the wellbeing of the environment and society and call to end deforestation in an ongoing commitment and goes beyond the next 10 years (consistent with the long-term time horizon).
Financial planning	Yes, forests-related issues are integrated	11-15	Details of financial planning elements used to achieve long-term objectives and/or strategy: BASF is one of the leading global suppliers for personal care, home care, industrial & institutional cleaning, and technical applications as well as for food performance and health

			ingredients. A significant share of our products is based on renewable raw materials, of which a substantial ratio is oil palm based. We are one of the major users of palm kernel oil and its derivatives and to a lesser extent palm oil. We process those products into ingredients for the above-mentioned industries. BASF offers a very broad range of ingredients based on RSPO-certified sustainable palm kernel oil in accordance with its principles and criteria. Since launching certified ingredients in 2012, BASF has been continuously moving toward a comprehensive global product range that will allow consumer goods manufacturers to develop value added formulations that meet increasing demand for ingredients that are certified as sustainable. To fulfill its Palm Commitment to source all oil palm-based products (oil and derivatives) RSPO certified, BASF had to pay a significant amount on premiums for RSPO certified oils and derivatives. As BASF is sourcing mainly PKO and its derivatives and to a lesser extend palm oil, we expect these premiums to be substantial, as the availability of CSPKO is expected to be limited. Our Accelerator products, which also contain oil palm raw materials, or RSPO certified oil palm raw materials make a substantial sustainability contribution in the value chain. Our target of generating €22 billion in Accelerator sales by 2025, which was based on our corporate strategy, was already achieved in 2021 with sales of €24.1 billion. In order to address the growing sustainability requirements in our markets with innovative solutions, we want to align our product portfolio even more strongly with climate protection, climate neutrality and the circular economy going forward. That is why we are updating our methodology and our product portfolio steering target and will introduce a revised method in 2023. In order to fulfill our company's purpose and long-term deforestation commitments as described above, we have to outline necessary actions, assets, and resources that go beyond our short and medium-term financial plan (consistent with the long-term time horizon).

F6. Implementation

F6.1

(F6.1) Did you have any forests-related timebound and quantifiable targets that were active during the reporting year?

Yes

F6.1a

(F6.1a) Provide details of your forests-related timebound and quantifiable target(s) and progress made.

Target reference number

Target 1

Forest risk commodity

Palm oil

Year target was set

2015

Target coverage

Company-wide

Target category

Third-party certification

Metric

% of volume third-party certified

Traceability point

Third-party certification scheme

RSPO Mass Balance

Base year

2015

Base year figure

0

Target year

2025

Target year figure

100

Reporting year figure

8.1

% of target achieved relative to base year [auto-calculated]

8.1

Target status in reporting year

Underway

Is this target linked to a commitment?

Zero net/gross deforestation

Please explain

Rationale for the coverage: When the Roundtable of Sustainable Palm Oil 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. Since then, the RSPO has had a remarkable journey towards the sustainable certified production of palm and palm kernel oil and we have actively participated in consultations within the organization, most notably in the subgroup oleochemicals and derivatives under the RSPO working group Trade & Traceability. The BASF Palm Commitment was first published in 2011 and extended in 2015 to foster a market transformation towards sustainable palm oil production and usage. Key elements include a sourcing policy for oil palm-derived products that incorporates forest and peat conservation as well as requirements for a free, prior informed-consent, social impact assessment, human and labor rights. We have committed ourselves to foster sustainable palm by procuring all oils only from RSPO certified sources by 2020 and expanding our oil commitments to significant intermediates based on palm oil and palm kernel by 2025. We support progress in the palm oil sector by moving the supply chain toward certified products. In this way, we take part in global palm initiatives and in networks with various stakeholders in order to drive change for oleo-derivatives.

Target description: Time bound target of sourcing all palm- and palm kernel oil derivatives (e.g., Fatty Acids, Fatty Alcohols, Methylester) to 100% as RSPO certified sustainable by 2025. By this BASF will drive even further the market transformation towards certified sustainable oil palm value chains. BASF offers since 2012 a broad range of MB (Mass Balance) palm- and palm kernel oil-based ingredients for the Personal Care industry globally. BASF uses mainly palm kernel oil or palm kernel oil-based derivatives. In 2018, BASF has implemented a major portfolio shift towards sustainable palm and offers palm- based specialties for the cosmetics industry exclusively as RSPO certified. We have switched about 330 palm-based products to ‘Mass Balance’ standard globally. This helps our customers to meet their obligations to customers, consumers, and stakeholders. To fully complete the switch on a global level, BASF discusses with all its stakeholders to expand the demand for RSPO Mass Balance certified products.

Target reference number
Target 2

Forest risk commodity
Palm oil

Year target was set
2015

Target coverage
Company-wide

Target category
Traceability

Metric
% of volume traceable to traceability point

Traceability point

Mill

Third-party certification scheme

Base year
2015

Base year figure
0

Target year
2025

Target year figure
100

Reporting year figure
97

% of target achieved relative to base year [auto-calculated]
97

Target status in reporting year
Underway

Is this target linked to a commitment?
Zero net/gross deforestation

Please explain
Rationale for the coverage and target: Traceability and certification have guided the palm industry for years. But traceability to palm oil mill does not solve the palm dilemma

alone– it is about engaging with the right suppliers, introducing change for the better on the ground and increase transparency on the palm value chain. Therefore, we share a list of our main suppliers and the names and locations of more than 1,300 mills. BASF has increased its efforts on traceability by renewing our palm traceability twice a year and by focusing on additional means to further investigate our palm supply chain like satellite monitoring and systematic reporting on the NDPE implementation of our suppliers. We are convinced that the outcome of this investigations together with our continued commitment to certified sustainable raw materials, and our engagement for and within the HCSA will drive change on the ground for the better – for our customers and stakeholders.

Target description: By 2025 –we commit ourselves to source significant intermediates based on palm oil and palm kernel oil, that are traceable. This commitment includes fractions as well as primary oleochemical derivatives plus vegetable oil esters.

Target reference number

Target 3

Forest risk commodity

Palm oil

Year target was set

2018

Target coverage

Company-wide

Target category

Engagement with direct suppliers

Metric

% of direct suppliers engaged

Traceability point

Third-party certification scheme

Base year

2011

Base year figure

0

Target year

2025

Target year figure

90

Reporting year figure

85

% of target achieved relative to base year [auto-calculated]

94.4444444444

Target status in reporting year

Underway

Is this target linked to a commitment?

Other environmental commitments

Please explain

Rationale for the coverage and target: In order to enhance sustainability within the supply chain, the chemical companies BASF, Bayer, Evonik Industries, Henkel, Lanxess and Solvay joined forces in 2011 for the Together for Sustainability (TfS) initiative. Meanwhile 37 companies from all over the world are joining the initiative. The initiative is based on good practices and builds on established principles – such as the United Nations Global Compact (UNGC) and the Responsible Care Global Charter as well as standards developed by the International Labor Organization (ILO), the International Organization for Standardization (ISO), Social Accountability International (SAI) and others. TfS develops and implements a global supplier engagement programme to assess and improve sustainability practices within the supply chain of companies from the chemical sector. This enables TfS members to measure the Environmental, Labour and Human Rights, Ethical and Sustainable Procurement performance of their suppliers. The ultimate purpose is to drive and deliver tangible and measurable improvements of both suppliers and TfS member companies. To achieve this, TfS conducts Assessments and Audits. These help to create transparency in the sustainability performance of chemical companies and their suppliers, providing a solid basis for collaboration among members. Tangible improvements are facilitated by the Corrective Action Plan (CAP), providing an overview of outstanding actions to improve performance. Data mining of TfS Assessments and TfS Audits enables TfS to focus on those areas where the biggest improvements can be made.

Target description: By 2025, we aim to have conducted sustainability evaluations for 90% of the BASF Group’s relevant direct suppliers (spend-based) and will develop action plans where improvement is necessary. In addition, we aim to have 80% of suppliers improve their sustainability performance upon re-evaluation by 2025. In 2022, 85% of the relevant spend had been evaluated. Of the suppliers re-evaluated in 2022, 76% had improved. Both global targets are embedded in the target agreements of persons responsible for procurement.

Target reference number

Target 4

Forest risk commodity
Palm oil

Year target was set
2015

Target coverage
Company-wide

Target category
Third-party certification

Metric
% of volume third-party certified

Traceability point

Third-party certification scheme
RSPO Mass Balance

Base year
2021

Base year figure
100

Target year
2022

Target year figure
100

Reporting year figure
100

% of target achieved relative to base year [auto-calculated]

Target status in reporting year
Achieved

Is this target linked to a commitment?
Zero net/gross deforestation

Please explain
Rationale for the coverage: Our initial third-party certification target with a 2015 start year and 2020 target year to source only sustainable palm and palm kernel oil (RSPO certified) was achieved and turned into a yearly re-occurring target. When the Roundtable of Sustainable Palm Oil 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. Since then, the RSPO has had a remarkable journey towards the sustainable certified production of palm and palm kernel oil and we have actively participated in consultations within the organization, most notably in the subgroup oleochemicals and derivatives under the RSPO working group Trade & Traceability. How the company is planning to meet this target: The BASF Palm Commitment was first published in 2011 and extended in 2015 to foster a market transformation towards sustainable palm oil production and usage. Key elements include a sourcing policy for oil palm-derived products that incorporates forest and peat conservation as well as requirements for a free, prior-informed-consent, social impact assessment, human and labor rights. We have committed ourselves to foster sustainable palm by procuring all oils only from RSPO certified sources by 2021 and expanding our oil commitments to significant intermediates based on palm oil and palm kernel by 2025. We support progress in the palm oil sector by moving the supply chain toward certified products. In this way, we take part in global palm initiatives and in networks with various stakeholders in order to drive change for oleo-derivatives. By the end of 2022 we have achieved our 2022 goal to only source RSPO certified palm and palm kernel oil (excl. significant intermediates based on palm oil and palm kernel oil) and will continue this yearly target for 2023.

Our initial third-party certification target with a 2015 start year and 2020 target year to source only sustainable palm and palm kernel oil (RSPO certified) was achieved and turned into a yearly re-occurring target. By 2021 – source only sustainable palm and palm kernel oil RSPO certified sustainable as far as available on the market. We are expanding our offering of certified sustainable products in accordance with the RSPO's Mass Balance supply chain model.

Target reference number

Target 5

Forest risk commodity

Palm oil

Year target was set

2022

Target coverage

Company-wide

Target category

Engagement with smallholders

Metric

Number of smallholders engaged

Traceability point

Third-party certification scheme

Base year
2018

Base year figure
0

Target year
2022

Target year figure
1,000

Reporting year figure
1,003

% of target achieved relative to base year [auto-calculated]
100.3

Target status in reporting year
Achieved

Is this target linked to a commitment?
Social commitments

Please explain

Rationale for the coverage and target: 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 facing various constraints in producing high palm oil yields and high quality FFB's in a sustainable manner due to lack of knowledge on sustainable agricultural practices. The projects offer 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 is 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 are 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.

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, it is also high in demand and can provide premiums and thus improve the livelihood of smallholders. This is why BASF is engaging in appropriate smallholder projects on the ground

F6.2

(F6.2) Do you have traceability system(s) in place to track and monitor the origin of your disclosed commodity(ies)?

	Do you have system(s) in place?	Supply chain coverage	Description of traceability system	Exclusions
Palm oil	Yes	Volume from direct and indirect suppliers	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. In general, the traceability system used is set up by compiling all traceability information from all palm oil raw material supply for BASF (a list of palm oil mills for each supply) – this results in general in the overall global BASF palm oil mill list. In addition, BASF introduces a volume-based sourcing priority classification. For this, the commodity volume proportion per palm oil mill is calculated by taking the standardized traceability information (Palm Oil Mill Name, Palm Oil Mill Owner, GPS Code = Industry Standard) of each palm oil raw material delivery and distributing the volume of this single delivery equally to each of the palm oil mills (GPS codes) associated with this single delivery. This approach enables the introduction of a volume-based sourcing priority classification.	Not applicable

F6.2a

(F6.2a) Provide details on the level of traceability your organization has for its disclosed commodity(ies).

Forest risk commodity	Point to which commodity is traceable	Countries/areas to which this traceability point applies	% of total production/consumption volume traceable
Palm oil	Mill	Cambodia Colombia Costa Rica Côte d'Ivoire Gabon Ghana	96.7

		Guatemala Honduras Indonesia Malaysia Papua New Guinea Philippines Solomon Islands Thailand	
Palm oil	First importer		3.3

F6.3

(F6.3) Have you adopted any third-party certification scheme(s) for your disclosed commodity(ies)?

	Third-party certification scheme adopted?	% of total production and/or consumption volume certified
Palm oil	Yes	55.28

F6.3a

(F6.3a) Provide a detailed breakdown of the volume and percentage of your production and/or consumption by certification scheme.

Forest risk commodity

Palm oil

Third-party certification scheme

RSPO Mass Balance

Chain-of-custody model used

% of total production/consumption volume certified

52.89

Form of commodity

Crude palm oil (CPO)
Crude palm kernel oil (CPKO)
Palm oil derivatives
Palm kernel oil derivatives

Volume of production/ consumption certified

197,562

Metric for volume

Metric tons

Is this certified by more than one scheme?

No

Please explain

Since launching certified ingredients in 2012, BASF has been continuously moving toward a comprehensive global product range that will allow consumer goods manufacturers to develop value added formulations that meet increasing certification demand. To speed up that process, we have initiated a major shift of our specialty portfolio in 2018 and offer palm-based specialty ingredients for the personal care market exclusively RSPO certified sustainable. Actions taken in the reporting year: BASF reached an important milestone toward sustainable palm by fulfilling the part of its Palm Commitment to procure palm (kernel) oils exclusively from sources physically certified by the RSPO by 2020. Last year, the company purchased 206,500 metric tons of certified sustainable palm (kernel) oil and its respective derivatives. This comprises that 100% of BASF's total palm (kernel) oil volume has been sourced as RSPO certified. BASF also made further progress in developing transparent supply chains: the company was able to trace 97% of its global palm footprint – 462,894 metric tons – back to oil mill level. BASF is now focusing on its next goal: to expand the commitment to those significant intermediates which are based on palm oil and palm kernel oil by 2025. BASF also supports the RSPO Segregated certification by purchasing some RSPO Segregated volumes. We downgrade these Segregated volumes and offer Mass Balance certified sustainable products. The RSPO Mass balance certification scheme represents the greatest certified volume for our palm-based products.

Forest risk commodity

Palm oil

Third-party certification scheme

RSPO Segregated

Chain-of-custody model used

% of total production/consumption volume certified

2.39

Form of commodity

Crude palm oil (CPO)
Crude palm kernel oil (CPKO)
Palm oil derivatives
Palm kernel oil derivatives

Volume of production/ consumption certified

8,938

Metric for volume

Metric tons

Is this certified by more than one scheme?

No

Please explain

Since launching certified ingredients in 2012, BASF has been continuously moving toward a comprehensive global product range that will allow consumer goods manufacturers to develop value added formulations that meet increasing certification demand. To speed up that process, we have initiated a major shift of our specialty portfolio in 2018 and offer palm-based specialty ingredients for the personal care market exclusively RSPO certified sustainable. Actions taken in the reporting year: BASF reached an important milestone toward sustainable palm by fulfilling the part of its Palm Commitment to procure palm (kernel) oils exclusively from sources physically certified by the RSPO by 2020. Last year, the company purchased 206,500 metric tons of certified sustainable palm (kernel) oil and its respective derivatives. This comprises that 100% of BASF's total palm (kernel) oil volume has been sourced as RSPO certified. BASF also made further progress in developing transparent supply chains: the company was able to trace 97% of its global palm footprint – 462,894 metric tons – back to oil mill level. BASF is now focusing on its next goal: to expand the commitment to those significant intermediates which are based on palm oil and palm kernel oil by 2025. BASF also supports the RSPO Segregated certification by purchasing some RSPO Segregated volumes. We downgrade these Segregated volumes and offer Mass Balance certified sustainable products. The RSPO Mass balance certification scheme represents the greatest certified volume for our palm-based products.

F6.4

(F6.4) For your disclosed commodity(ies), do you have a system to control, monitor, or verify compliance with no conversion and/or no deforestation commitments?

	A system to control, monitor or verify compliance
Palm oil	Yes, we have a system in place for our no conversion and/or deforestation commitments

F6.4a

(F6.4a) Provide details on the system, the approaches used to monitor compliance, the quantitative progress, and the non-compliance protocols, to implement your no conversion and/or deforestation commitment(s).

Forest risk commodity

Palm oil

Operational coverage

Supply chain

Description of control systems

Description of the monitoring approaches selected:
- Geospatial monitoring: We monitor our supply chain and the supply chain of our suppliers via satellite monitoring. We have access to risk dashboards for major palm growers, traders, and buyers in respect of deforestation, human rights violations, water pollution, CBP withhold release order risk, land conflicts and corruption.
- Other: The NDPE Implementation Reporting Framework is a reporting tool that provides a shared and consistent view of progress towards NDPE commitments and implementation on the ground across the full supply base of companies throughout the supply chain. Information on actions being undertaken to deliver NDPE commitments is collected.
- Third-party verification: With the Together for Sustainability program, risk matrices help us identify suppliers with a high sustainability risk potential based on country and product risks.

Monitoring and verification approach

Geospatial monitoring tool
Third-party verification
Other, please specify
NDPE IRF

% of total volume in compliance

81-90%

% of total suppliers in compliance

81-90%

Response to supplier non-compliance

Retain & engage
Suspend & engage
Exclude

% of non-compliant suppliers engaged

71-80%

Procedures to address and resolve non-compliance with suppliers

Developing time-bound targets and milestones to bring suppliers back into compliance
Assessing the efficacy and efforts of non-compliant supplier actions through consistent and quantified metrics
Re-integrating suppliers back into supply chain based on the successful and verifiable completion of activities

Please explain

BASF response to non-compliance: BASF is monitoring public campaigns and RSPO case tracker on a monthly basis. For every grievance received by BASF, the credibility and validity of the grievance needs to be evaluated in order to determine whether to pursue the grievance with suppliers. When grievance is addressed, BASF will check if sufficient information is provided in grievance trackers. If information is not sufficient, BASF will follow-up with supplier to address the gaps and may need to support them

with identifying experts, root causes and actions to take. Once an action plan is provided, BASF will evaluate if it is aligned with its expectations. Where further clarifications are required or where action/engagement plans are not considered adequate, BASF will follow up. If the action plan is not approved by relevant parties, BASF needs to assess whether it is an important supplier and decide whether to undertake further engagement to ensure resolution process progresses or to engage direct suppliers to suspend or shift volumes to other third-party suppliers or to BASF itself and suspend or shift volumes from the direct supplier. If the action plan is approved, BASF will inform grievance raiser, and continue to monitor, with the possibility of additional engagement. Percentage of total volume in compliance is based on the total volumes already certified and traceable. This does not imply that the remaining percentage of consumption volume is not in compliance.

F6.6

(F6.6) For your disclosed commodity(ies), indicate if you assess your own compliance and/or the compliance of your suppliers with forest regulations and/or mandatory standards.

	Assess legal compliance with forest regulations
Palm oil	Yes, from suppliers

F6.6a

(F6.6a) For your disclosed commodity(ies), indicate how you ensure legal compliance with forest regulations and/or mandatory standards.

Palm oil

Procedure to ensure legal compliance

Procedure to ensure legal compliance: The palm raw materials BASF is sourcing comply with RSPO, ISPO and MSPO standards which include regular audits to renew compliance with these standards. These standards (among other) ensure that agricultural standards set by the government and standard specific requirements are kept and controlled. ISPO is mandatory for all oil palm growers operating in Indonesia. Because of its national reach, ISPO has the potential to improve the entire Indonesian plantation industry. The MSPO aligns the management of palm oil production with many existing national laws and regulations. The standard was launched in order to help small and mid-range growers, who could not afford RSPO certification, to operate sustainably. RSPO is the main certification standard for the use of oil palm and its fractions. It requires that companies abide by national laws and requirements and in some instances to go far beyond what national law dictates.

Methods and/or tools used: The NDPE Implementation Reporting Framework is a reporting tool that provides a shared and consistent view of progress towards NDPE commitments and implementation on the ground across the full supply base of companies throughout the supply chain. The NDPE IRF is aggregating information on performance with NDPE across the whole production base supplying a refinery or

(further down the supply chain) a user of palm oil. Currently the information is collected and analysed for mills but in future can be for FFB supply to a mill.
With the Together for Sustainability program, risk matrices help us identify suppliers with a high sustainability risk potential based on country and product risks. Using this risk analysis and other evaluations, we audit raw material supplier sites on sustainability standards and initiate sustainability assessments through an external provider.
Methods/tools used to assure compliance, such as the Together for Sustainability (TfS) supplier audit scheme and NDPE IRF profiles are also not supplier or country exclusive and are potentially functioning to ensure compliance across every country in our palm supply chain.

Country/Area of origin

Cambodia
Colombia
Côte d'Ivoire
Gabon
Ghana
Guatemala
Honduras
Indonesia
Malaysia
Papua New Guinea
Philippines
Thailand

Law and/or mandatory standard(s)

General assessment of legal compliance
ISPO
MSPO

Comment

F6.7

(F6.7) Are you working with smallholders to support good agricultural practices and reduce deforestation and/or conversion of natural ecosystems?

	Are you working with smallholders?	Type of smallholder engagement approach	Smallholder engagement approach	Number of smallholders engaged	Please explain
Palm oil	Yes, working with independent smallholders	Capacity building	Offering on-site technical assistance and extension services	9,600	No palm sustainability progress can be effective without considering smallholders as a crucial part of the palm value chain. Smallholder farmers

			Providing agricultural inputs Organizing capacity building events Investing in pilot projects		produce around 40 percent of the world's palm oil; their families depend on palm oil for their livelihood. Sustainability certification, such as the RSPO, can be costly and difficult to achieve for smallholders. However, it is also high in demand and can provide premiums. Description of the main strategy of engagement: As the connecting link between suppliers of palm kernel oil and our customers, smallholder inclusion is one pillar of our palm commitment. Since 2016, BASF has been collaborating with Henkel and the Solidaridad civil society organization to improve the livelihoods of palm oil smallholders in West Kalimantan, Indonesia. The project was implemented by Solidaridad in cooperation with Credit Union Keling Kumang (CUKK), a farming cooperative that unites more than 180,000 smallholder farmers in the region. The project aims to enhance the living conditions of the people in the farming areas by improving agricultural practices, increasing yields and helping to preserve forests. Through train the trainer already 8,600 farmers could be reached. Participants see their yield increase and spend less on

					agricultural inputs - a win-win situation for the farmers and the environment. This project has been finalized in 2019. In a second continuous project BASF finalized in December 2022), The Estee Lauder Companies and the Roundtable on Sustainable Palm Oil, are partnering with Solidaridad to promote sustainable palm oil and palm derivatives production in the district of Waykanan, Lampung, Indonesia. The project supports 1,000 independent Indonesian smallholder farmers to improve their livelihoods and their sustainable production of palm oil and palm kernel oil. It offers continuous education and technical support on implementing and maintaining sustainable palm oil practices. The project's target is that at least one-third of the supported smallholder farmers become certified according to the Smallholder Standard of RSPO at the end of three years.

F6.8

(F6.8) Indicate if you are working with your direct suppliers to drive action on forests-related issues and if so, provide details of the engagement.

Forest risk commodity

Palm oil

Are you working with direct suppliers?

Yes, working with direct suppliers

Action(s) on forests-related issues driven by engagement

Ending deforestation and/or conversion of other ecosystems

Type of engagement

Supply chain mapping
Capacity building
Financial and commercial incentives

Details of engagement

Supplier questionnaires on environmental and social indicators
Developing or distributing supply chain mapping tool
Supplier audits
Offering on-site training and technical assistance
Organizing capacity building events
Investing in pilot projects
Long-term contracts linked to forest related commitments

Description of engagement

Engagement strategy: Our partnerships with suppliers are based on mutual value creation, as well as a reliable supply of raw materials, technical goods and services at competitive prices. We work together in an open and transparent way to generate long-term benefits for both sides. In doing so, we create value added that goes above and beyond procurement alone.
Number of direct suppliers engaged: Our more than 75,000 Tier 1 suppliers of which are approx. 300 involved in our palm value chain play a significant role in value creation at our company. We work in long-term partnership with companies from different industries around the world. Due to the size and scale of our supplier portfolio, our suppliers are evaluated based on risk, including both country and industry-specific risks. We actively promote sustainability in the supply chain and have set ourselves ambitious targets for this: By 2025, we aim to have conducted sustainability evaluations for 90% of the BASF Group's relevant spend and will develop action plans where improvement is necessary. We will work towards having 80% of suppliers improve their sustainability performance upon re-evaluation.
Example of direct supplier engagement activities completed: In 2022 we have requested twice pe year NDPE Implementation Reporting Framework (IRF) profiles from our palm suppliers. These profiles serve as a tool designed to understand and track progress in delivering NDPE commitments in our supply chain. We have requested IRF profiles from approx. 96,7% of our direct palm suppler base in 2022.

% of suppliers engaged by procurement spend covered by engagement

85

Explain the impact of your engagement on the selected action

Impact on "Ending deforestation and/or conversion of other ecosystems": Like many derivative manufactures, BASF sources from hundreds of palm mills (~1300) 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 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 oil new oil palm plantations – which would be a clear breach with BASF NDPE (No Deforestation, No Peat and No Exploitation) policy. 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. BASF is regularly checking our satellite monitoring approach for potential breaches (risk insights) in the palm supply chain and engages regularly with its direct suppliers through which the endangered sourcing area has come to BASF supply chain. The target of the engagement is to stop deforestation / conversion at a very early stage.

Is this engagement helping your suppliers engage with their suppliers on the selected action?

Yes

Does this engagement contribute to achieving a reported target?

Yes, please specify target ID(s)

Target 3 (F6.1a)

F6.9

(F6.9) Indicate if you are working beyond your first-tier supplier(s) to drive action on forests-related issues, and if so, provide details of the engagement.

Forest risk commodity

Palm oil

Are you working beyond first tier?

Yes, working beyond first tier

Action(s) on forest-related issues driven by engagement

Ending deforestation and/or conversion of other ecosystems

Type of engagement

Supply chain mapping

Capacity building

Details of engagement

Developing or distributing supply chain mapping tool

Offering on-site training and technical assistance

Participating in workshops

Investing in pilot projects

Description of engagement

Engagement strategy: BASF purchases a range of renewable raw materials for the use as feedstock for various products. By purchasing volume and equivalent area of land

needed to grow the raw material, the most relevant touchpoint for BASF is palm (kernel) oil in comparison to other renewable raw materials, for which the detailed Palm Commitment has been in effect since 2011 and extended in 2015 and which is put into practice through our Palm Sourcing Policy accordingly. In Indonesia and Malaysia, small holder farmers account for 40 percent of the total area of planted oil palms and as much as 33 percent of the output. This means no sustainability policy can be effective without considering smallholders. Sustainability certification, such as the RSPO, can be costly and difficult to achieve for smallholders. However, it is also high in demand and can provide premiums.

Examples of indirect supplier engagement activities ongoing & completed: Since 2016, BASF has been collaborating with Henkel and the Solidaridad civil society organization to improve the livelihoods of palm oil smallholders in West Kalimantan, Indonesia. The project was implemented by Solidaridad in cooperation with Credit Union Keling Kumang (CUKK), a farming cooperative that unites more than 180,000 smallholder farmers in the region. The project aims to enhance the living conditions of the people in the farming areas by improving agricultural practices, increasing yields and helping to preserve forests. More than 2,000 farmers have already participated in the so-called Farmer Field School program to date. The courses place an equal focus on efficient production, sustainable farming methods and occupational health and safety standards. At the beginning of the Covid-19 pandemic in 2020, together with our partners Estée Lauder and Solidaridad, we locally supported more than 3,000 individuals with a Covid-19 intervention package in seven sub-districts in Way Kanan District, Lampung, Indonesia. This project was still ongoing in 2022. We did this not only to stand in solidarity with our smallholders, but also to strengthen the ongoing and mutually beneficial relationship with our suppliers.

Explain the impact of your engagement on the selected action

BASF and our project partners are 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.

Does this engagement contribute to achieving a reported target?

Yes, please specify target ID(s)

Target 5 (F6.1a)

F6.10

(F6.10) Do you engage in landscape (including jurisdictional) approaches to progress shared sustainable land use goals?

	Do you engage in landscape/jurisdictional approaches?
Row 1	Yes, we engage in landscape/ jurisdictional approaches

F6.10a

(F6.10a) Indicate the criteria you consider when prioritizing landscapes and jurisdictions for engagement in collaborative approaches to sustainable land use and provide an explanation.

	Criteria for prioritizing landscapes/jurisdictions for engagement	Explain your process for prioritizing landscapes/jurisdictions for engagement
Row 1	Opportunity for increased human well-being in area Opportunity to protect and restore natural ecosystems Risk of deforestation, forests/land degradation, or conversion of other natural ecosystems Risk of fires	Despite the economic benefits generated by the palm oil sector, farmers in Lampung are still facing various constraints in producing high palm oil yields sustainably. Firstly, smallholder owned plantations generally have lower productivity and FFB quality, leading to lower prices and oil extraction rates at the mill. Secondly, smallholders often lack knowledge on sustainable agricultural practices, which are crucial for their plantation and environmental conservation. Thirdly, there is a lack of extension services which are focused on good agricultural practices as well as sustainability issues. Finally, there is a limited presence of non-governmental organizations and/or civil society organizations directly working with smallholders on sustainable agricultural practices. Through this project – Enhancing Indonesian Palm Oil Smallholders to Improve Sustainable Palm Oil Production – Solidaridad and BWI seek to support smallholders in facing above mentioned problems, to improve their yields sustainably, ensure higher incomes and ensure sustainable market linkages. Key objectives: ● Smallholder group's organizational management and performance are well managed to help its members implement and maintain sustainable practices ● Increase smallholders' productivity through implementation of Good Agriculture Practices and sustainable principles on palm oil production on farm level ● Smallholders attain RSPO certification One or more local CPO mills support the smallholder group for long term sustainable market linkages. The implementation of the project is supported by Solidaridad's team in Lampung, Sumatra. To run and manage the project, some important stakeholders will be involved, such as local smallholders' organization KTNA (Kontak Tani Nelayan Andalan) and the Agriculture Office of Waykanan District. Their contribution will strengthen the project and will help the project to achieve its objectives. Related to the project mechanism, the Solidaridad team and its local partner, Business Watch Indonesia, will run the project activities with

		contributions and support from the local government, expert consultants as well as private sector representatives through ongoing mill engagement. To distribute the information, trained smallholders together with the ICS team members will conduct Farmer Field School activities to reach up to 1,000 smallholders by the end of the project. Solidaridad will conduct regular monitoring and evaluation to manage the project.

F6.10b

(F6.10b) Provide details of your engagement with landscape/jurisdictional approaches to sustainable land use during the reporting year.

Landscape/Jurisdiction ID

LJ1

Country/Area

Indonesia

Name of landscape or jurisdiction area

Sumatra, Lampung, WayKanan District

Types of partners engaged in the initiative design and implementation

Subnational government
International civil society organization(s)
Local communities
International company(ies)

Type of engagement

Funder: Provides full or partial financial support

Goals supported by engagement

Avoided deforestation/conversion of natural ecosystems and/or decreased degradation rate
Decreased ecosystem degradation rate
Implementation of livelihood activities/practices that reduce pressure on forests
Increased adoption of sustainable production practices (e.g., input use efficiency and water management practices)
Increased uptake of certification
Improved and/or maintained soil health
Other, please specify
Greater smallholder inclusion, Improved productivity, Improved water management practices

Company actions supporting approach

Engage stakeholders on importance of conservation, restoration and/or rehabilitation

Support communities and smallholders in gaining access to incentives (e.g. support achieving certification, group formation, getting land title, packaging access to loans, preferential sourcing etc.)
Capacity building for farmers, smallholders and local communities to implement good agricultural practices (including improved efficiency, crop diversification and adoption of certification)

Description of engagement

BASF is participating in the project “Enhancing Indonesian Palm Oil Smallholders to Improve Sustainable Palm Oil Production,” implemented by Solidaridad, in cooperation with Business Watch Indonesia, in Lampung, Indonesia. We support the project in cash and/or in kind (program support, knowledge sharing, procurement, marketing & communication).

Engagement start year

2018

Engagement end year

Please specify

2022

Estimated investment over the project period (currency)

Is a collective monitoring framework used to measure progress?

Yes, progress is monitored using an internally defined framework

State the achievements of your engagement so far, and how progress is monitored

- 100% of the independent smallholders’ farmers completed farmers field school and implemented GAP (Good Agricultural Practices).
- 27 smallholder groups were trained of which 313 farmers prepared for RSPO smallholder certification
- 30 Trainers trained in RSPO (Round Table on Sustainable Palm Oil); HCV (High Conservation Value), GSC (Group Certification Scheme) and GAP (Good Agricultural Practices)
- Nursery demo-plot arranged to assist farmers in obtaining direct practical lessons in good seedlings handling and management.
- Memorandum of understanding signed with Waykanan government

F6.10c

(F6.10c) For each of your disclosed commodities, provide details of the production/consumption volumes from each of the jurisdictions/landscapes you engage in.

Indicate landscape/jurisdiction ID	Does any of your commodity production/consumption volume originate from this	Commodity	% of total production/consumption

	landscape/jurisdiction, and are you able/willing to disclose information on this volume?		volume from this landscape/jurisdiction
LJ1	Yes, we do produce/consume from this landscape/jurisdiction, and we are able/willing to disclose volume data	Palm oil	3.39

F6.11

(F6.11) Do you participate in any other external activities and/or initiatives to promote the implementation of your forests-related policies and commitments?

Forest risk commodity

Palm oil

Do you participate in activities/initiatives?

Yes

Activities

Involved in multi-partnership or stakeholder initiatives

Country/Area

Not applicable

Subnational area

Not applicable

Initiatives

UN Global Compact
Roundtable on Sustainable Palm Oil (RSPO)
High Carbon Stock Approach Steering Group
Forum for Sustainable Palm Oil (FONAP)
Other, please specify
Polish Coalition for Sustainable Palm Oil (PKZOP) & NDPE IRF

Please explain

BASF takes part in global palm initiatives and in networks with various stakeholders in order to drive change towards certification. BASF became a member of the Roundtable on Sustainable Palm Oil (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, BASF became a member of the High Carbon Stock (HCS) Steering Group in 2016 and has since integrated the criteria of the HCS 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 other eleven founding members the Declaration of "Polish Coalition for Sustainable Palm Oil (PKZOP)". The PKZOP (officially known Polskiej Koalicji ds. Zrównoważonego Oleju Palmowego) is an independent Coalition and aimed at achieving 100% sustainable palm oil in Poland by 2023. It consists of twelve non-profit and non-governmental organizations, certification agencies, food and beverage, cosmetics, and chemical companies in the country. BASF is an active member of the NDPE Implementation Reporting Framework. NDPE IRF is a reporting tool designed to help companies to systematically understand and track progress in delivering NDPE commitments in their supply chains. Having a consistent framework for reporting on these activities allows individual companies and the industry collectively to:

• Understand what is required to deliver NDPE commitments
• Monitor progress
• Identify gaps
• Drive improvement

Forest risk commodity

Palm oil

Do you participate in activities/initiatives?

Yes

Activities

Engaging with policymakers or governments

Country/Area

Not applicable

Subnational area

Not applicable

Initiatives

Please explain

BASF takes part in global palm initiatives and in networks with various stakeholders in order to drive change towards certification. BASF became a member of the Roundtable on Sustainable Palm Oil (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, BASF became a member of the High Carbon Stock (HCS) Steering Group in 2016 and has since integrated the criteria of the HCS 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 other eleven founding

members the Declaration of "Polish Coalition for Sustainable Palm Oil (PKZOP)". The PKZOP (officially known Polskiej Koalicji ds. Zrównoważonego Oleju Palmowego) is an independent Coalition and aimed at achieving 100% sustainable palm oil in Poland by 2023. It consists of twelve non-profit and non-governmental organizations, certification agencies, food and beverage, cosmetics, and chemical companies in the country.

Forest risk commodity

Palm oil

Do you participate in activities/initiatives?

Yes

Activities

Involved in industry platforms

Country/Area

Not applicable

Subnational area

Not applicable

Initiatives

Please explain

BASF takes part in global palm initiatives and in networks with various stakeholders in order to drive change towards certification. BASF became a member of the Roundtable on Sustainable Palm Oil (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, BASF became a member of the High Carbon Stock (HCS) Steering Group in 2016 and has since integrated the criteria of the HCS 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 other eleven founding members the Declaration of "Polish Coalition for Sustainable Palm Oil (PKZOP)". The PKZOP (officially known Polskiej Koalicji ds. Zrównoważonego Oleju Palmowego) is an independent Coalition and aimed at achieving 100% sustainable palm oil in Poland by 2023. It consists of twelve non-profit and non-governmental organizations, certification agencies, food and beverage, cosmetics, and chemical companies in the country.

Forest risk commodity

Palm oil

Do you participate in activities/initiatives?

Yes

Activities

Engaging with communities

Country/Area

Not applicable

Subnational area

Not applicable

Initiatives

Please explain

BASF takes part in global palm initiatives and in networks with various stakeholders in order to drive change towards certification. BASF became a member of the Roundtable on Sustainable Palm Oil (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, BASF became a member of the High Carbon Stock (HCS) Steering Group in 2016 and has since integrated the criteria of the HCS 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 other eleven founding members the Declaration of "Polish Coalition for Sustainable Palm Oil (PKZOP)". The PKZOP (officially known Polskiej Koalicji ds. Zrównoważonego Oleju Palmowego) is an independent Coalition and aimed at achieving 100% sustainable palm oil in Poland by 2023. It consists of twelve non-profit and non-governmental organizations, certification agencies, food and beverage, cosmetics, and chemical companies in the country.

Forest risk commodity

Palm oil

Do you participate in activities/initiatives?

Yes

Activities

Engaging with non-governmental organizations

Country/Area

Not applicable

Subnational area

Not applicable

Initiatives

Please explain

BASF takes part in global palm initiatives and in networks with various stakeholders in order to drive change towards certification. BASF became a member of the Roundtable on Sustainable Palm Oil (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, BASF became a member of the High Carbon Stock (HCS) Steering Group in 2016 and has since integrated the criteria of the HCS 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 other eleven founding members the Declaration of "Polish Coalition for Sustainable Palm Oil (PKZOP)". The PKZOP (officially known Polskiej Koalicji ds. Zrównoważonego Oleju Palmowego) is an independent Coalition and aimed at achieving 100% sustainable palm oil in Poland by 2023. It consists of twelve non-profit and non-governmental organizations, certification agencies, food and beverage, cosmetics, and chemical companies in the country.

F6.12

(F6.12) Is your organization supporting or implementing project(s) focused on ecosystem restoration and long-term protection?

Yes

F6.12a

(F6.12a) Provide details on your project(s), including the extent, duration, and monitoring frequency. Please specify any measured outcome(s).

Project reference

Project 1

Project type

Reforestation

Expected benefits of project

Restoration of natural ecosystem(s)

Is this project originating any carbon credits?

No

Description of project

In 1984, BASF established the Mata Viva® initiative in Brazil to protect water quality, conserve soil, and create areas to preserve native vegetation and wildlife. The team’s first major achievement was to restore 128 hectares of forest along the Paraiba do Sul River, near the company’s South American chemical complex at Guaratinguetá. Over the years, the initiative restored more than 800 hectares and planted more than

1,400,000 seedlings. Mata Viva® flourished, attracting a broad range of partners from the agricultural, business and scientific communities, all united in their desire to foster biodiversity. In 2005, the Espaço ECO Foundation – set up by BASF with the support of the German government – assumed responsibility for the program. At this point, Mata Viva® began to engage directly with farmers and agricultural communities. The program has already developed initiatives in around 153 municipalities throughout Brazil. Realizing that education was the catalyst for long-term change, Mata Viva® developed an educational module to show future farmers how they could build a vital community by practicing conservation and sustainable land-use techniques. More than 2,800 teachers were trained and 230,000 students have benefited. Since 2013, the Mata Viva® program, aiming to increase its impact, has added tools to its portfolio to calculate carbon emissions, to promote restoration considering the compensation of these emissions. And, since 2020, the funds raised by the emissions offset initiative have been used to restore forests in the Mata do Barreiro Rico green reserve, which was seriously impacted by forest fires. The reserve is one of the last sanctuaries for the southern muriqui monkey (Brachyteles arachnoides), classified by the IUCN as critically endangered. In 2022, we continued with the recovery of the Verde Mata do Barreiro Rico Reserve, promoting the restoration of areas impacted by forest fires and connecting important fragments, forming an ecological corridor.

Where is the project taking place in relation to your value chain?

Project based in area with direct operations

Start year

1984

Target year

Indefinitely

Project area to date (Hectares)

750

Project area in the target year (Hectares)

750

Country/Area

Brazil

Latitude

-22.4637

Longitude

-45.1054

Monitoring frequency

Annually

Total investment over the project period (currency)

For which of your expected benefits are you monitoring progress?

Restoration of natural ecosystem(s)

Please explain

Description of how at least one expected benefit is being monitored (Restoration of natural ecosystem(s)): Mata Viva has not an explicit quantitative long-term goal on area protected or restored. Increase in numbers will depend on future level of engagement of participants. Annual monitoring occurs in the areas recovered in the BASF sites, covering about 170 hectares and all other restored areas are monitored in at least two years after the start of ecological restoration activities.
Results of monitoring to date: In 2020, 2021, and 2022, 5, 5 and 6 hectares respectively were restored - totaling 16 hectares, in a locality where endangered fauna species are located. Thus, the initiative is contributing to recover forests in strategic locations for biodiversity conservation.
Efforts for 2023: In partnership with other companies, we are developing a social business with family farmers. The intention is to create a net of native tree seeds, and we and the partners will buy the seeds to produce the seedlings that we will use in our forest restoration projects.
In addition, more than 12 thousand seedlings will be planted at BASF Site in Guaratingueta - Brazil.

Project reference

Project 2

Project type

Other, please specify

Forest and biodiversity conservation

Expected benefits of project

Restoration of natural ecosystem(s)

Is this project originating any carbon credits?

No

Description of project

Half of the area of the BASF - Demarchi plant, located in the municipality of São Bernardo do Campo, state of São Paulo, Brazil, is covered by preserved and regenerating native forest, totaling 30 hectares of native vegetation. The forest was named Suvinil Reserve. In 2021, a survey of the biodiversity of the existing flora and fauna was carried out on the site. More than 193 species of flora and more than 133 vertebrate species were found. High resolution photographs of some specimens of the fauna were made and some filming was made to document the findings. The existing water springs were also mapped and a total of five were found. In 2022, a survey of butterfly biodiversity was carried out and we found more than 30 species that were recorded in high resolution photographs. The water quality of the springs was monitored on three moments and they are within the expected quality standard.

Where is the project taking place in relation to your value chain?
Project based in area with direct operations

Start year
2020

Target year
Indefinitely

Project area to date (Hectares)
30

Project area in the target year (Hectares)
0

Country/Area
Brazil

Latitude
-22.4637

Longitude
-45.1054

Monitoring frequency
Annually

Total investment over the project period (currency)

For which of your expected benefits are you monitoring progress?
Restoration of natural ecosystem(s)

Please explain
BASF performs the preservation of the site in an integral way, investing resources for the control and protection of the Suvinil Reserve.
In 2023, it is planned to maintain water quality monitoring and the implementation of a trail with information on local biodiversity to be visited by employees and guests.

F7. Verification

F7.1

(F7.1) Do you verify any forests information reported in your CDP disclosure?
Yes

F7.1a

(F7.1a) Which data points within your CDP disclosure have been verified, and which standards were used?

Disclosure module

F1. Current State

Data points verified

Data points given within our integrated annual report; sustainably sourced purchased volume, total volume.

Verification standard

ISAE 3000

Please explain

Data points verified:
Points verified include: − Scope of disclosure − Forest commodities consumption data.

Verification standard:
Forest data have mainly been verified by KPMG as part of the moderate assurance for the 2022 Universal Registration Document, based on ISAE 3000 standard. Statements and figures pertaining to sustainability in the Management's Report and Consolidated Financial Statements of BASF's Annual Report are audited. The audit with limited assurance was conducted in accordance with ISAE 3000 (Assurance Engagements other than Audits or Reviews of Historical Financial Information) and ISAE 3410 (Assurance Engagements on Greenhouse Gas Statements), the relevant international auditing standards for sustainability reporting.

F8. Barriers and challenges

F8.1

(F8.1) Describe the key barriers or challenges to eliminating deforestation and/or conversion of other natural ecosystems from your direct operations or from other parts of your value chain.

Forest risk commodity

Palm oil

Coverage

Direct operations
Supply chain

Primary barrier/challenge type

Value chain complexity

Comment

The oil palm complex is a bulk commodity value chain with huge complexity. Keeping up standards and requirements is currently down to the industry players as often enough the enforcement of laws and rules set up by the government is not happening (Indonesia, Malaysia). This gap in central control is tried to be overcome by the industry e.g., with satellite monitoring, HCSA commitments, concepts like HCS and HCV conservation. By nature, some elements are more difficult than others in “controlling” / improving like human rights.

Forest risk commodity

Palm oil

Coverage

Direct operations
Supply chain

Primary barrier/challenge type

Lack of regulatory control and enforcement from local governments

Comment

The oil palm complex is a bulk commodity value chain with huge complexity. Keeping up standards and requirements is currently down to the industry players as often enough the enforcement of laws and rules set up by the government is not happening (Indonesia, Malaysia). This gap in central control is tried to be overcome by the industry e.g., with satellite monitoring, HCSA commitments, concepts like HCS and HCV conservation. By nature, some elements are more difficult than others in “controlling” / improving like human rights.

Forest risk commodity

Palm oil

Coverage

Direct operations
Supply chain

Primary barrier/challenge type

Limited availability of certified materials

Comment

The oil palm complex is a bulk commodity value chain with huge complexity. Keeping up standards and requirements is currently down to the industry players as often enough the enforcement of laws and rules set up by the government is not happening (Indonesia, Malaysia). This gap in central control is tried to be overcome by the industry e.g., with satellite monitoring, HCSA commitments, concepts like HCS and HCV conservation. By nature, some elements are more difficult than others in “controlling” / improving like human rights.

F8.2

(F8.2) Describe the main measures that would improve your organization's ability to manage its exposure to deforestation and/or conversion of other natural ecosystems.

Forest risk commodity
Palm oil

Coverage
Direct operations
Supply chain

Main measure
Greater alignment between company goals and goals at landscape/jurisdictional level

Comment

Forest risk commodity
Palm oil

Coverage
Direct operations
Supply chain

Main measure
Greater transparency

Comment

Forest risk commodity
Palm oil

Coverage
Direct operations
Supply chain

Main measure
Increased demand for certified products

Comment

Forest risk commodity

Palm oil

Coverage

Direct operations

Supply chain

Main measure

Greater stakeholder engagement and collaboration

Comment

Forest risk commodity

Palm oil

Coverage

Direct operations

Supply chain

Main measure

Investment in monitoring tools and traceability systems

Comment

Forest risk commodity

Palm oil

Coverage

Direct operations

Supply chain

Main measure

Investment in landscape and/or jurisdictional approaches

Comment

Forest risk commodity

Palm oil

Coverage

Direct operations

Supply chain

Main measure

Involvement in multi-stakeholder initiatives

Comment

Forest risk commodity

Palm oil

Coverage

Direct operations

Supply chain

Main measure

Improvement in data collection and quality

Comment

Forest risk commodity

Palm oil

Coverage

Direct operations

Supply chain

Main measure

Other, please specify

Verified implementation of NDPE policies on the ground moving away from company driven approaches towards industry wide approaches

Comment

NDPE (No Deforestation, No Peat, No Exploitation) policies are a strong instrument to cut the direct link between deforestation and palm oil. KPI's for an effective NDPE policy are:

- Supply chain transparency. Traceability of all sourcing at mill level, including publication of a mill list that includes GPS coordinates and parent company name.
- A robust grievance mechanism
- Effective monitoring mechanism
- A stringent and effective certification scheme, that is the lever for NDPE implementation on the ground.

F17 Signoff

F-FI

(F-FI) Use this field to provide any additional information or context that you feel is relevant to your organization's response. Please note that this field is optional and is not scored.

-

F17.1

(F17.1) Provide the following information for the person that has signed off (approved) your CDP forests response.

	Job Title	Corresponding job category
Row 1	Member of the Board of Executive Directors	Board/Executive board