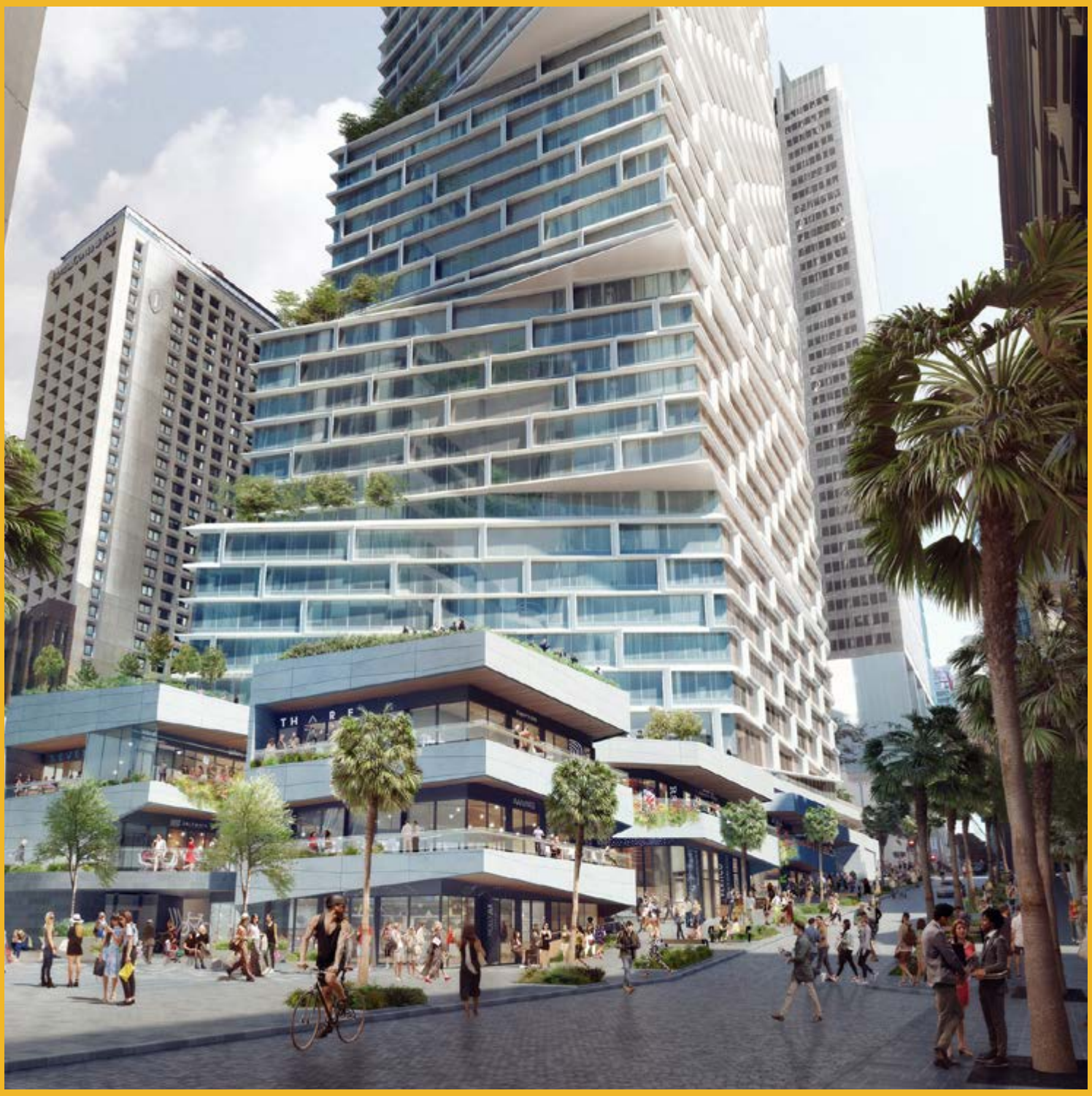

# SIKA METHODOLOGY FOR SCOPE 3 EMISSIONS CALCULATION

OCTOBER 2022

BUILDING TRUST

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# OUTLINE

The calculation of scope 3 carbon emissions is an evolving topic based on various data sources. Sika is continuously reviewing the calculation methodology to ensure transparency and data robustness. This process helps Sika better understand how it can lower its scope 3 emissions and engage within the organization. Moreover, the identification of material scope 3 categories provides detailed information to drive scope 3 reduction initiatives.

This document is a high-level summary of the methodology applied by Sika to calculate its scope 3 greenhouse gas (GHG) emissions.

The scope 3 assessment project is aligned to the recommendations outlined in the "Corporate Value Chain (Scope 3) Accounting and Reporting Standard"[1] and the "Technical Guidance for Calculating Scope 3 Emissions" published by the World Resources Institute (WRI)[2] and World Business Council for Sustainable Development (WBCSD)[3] as a supplement to the Greenhouse Gas Protocol (GHGP). Additional guidelines used or consulted during the process are referenced in the document.

The assessment covers all entities consolidated in the Group financial statements for FY 2021[4]. An operational control approach, as defined by the GHGP[5], was applied during the assessment. This approach considers a company accountable for 100% of the emissions over which the organization or any of its subsidiaries have operational control.

The Sika scope 3 emissions assessment project took place between January 2021 and September 2022, and it was divided into:

**Phase 1:** in 2021, Sika completed its first comprehensive scope 3 GHG emissions assessment for the FY 2020 which included the following scope 3 categories:

- **Category 1** – Purchased goods and services
- **Category 2** – Capital goods
- **Category 4** – Upstream transportation and distribution
- **Category 5** – Waste generated in operations
- **Category 6** – Business travel
- **Category 9** – Downstream transportation and distribution
- **Category 11** – Use of sold products
- **Category 12** – End-of-Life (EoL) treatment of sold products

**Phase 2:** in 2022, to cover 90% of all Sika scope 3 emissions, as required by the Science-Based Targets initiative (SBTi)[6], and to strengthen the methodological approach for developing a net-zero strategy, Sika expanded the list of scope 3 categories by adding additional ones and further developing the related methodologies. According to the Net-Zero Standard of the SBTi "companies must develop a complete scope 3 inventory, which is critical for identifying emission hotspots, reduction opportunities, and areas of risk up and down the value chain". As a result, the following categories were added to the previous list:

- **Category 3** – Fuel- and energy-related activities
- **Category 7** – Employee commuting
- **Category 8** – Upstream leased assets

In the chapter "Material scope 3 categories", dedicated sections describe the applied methodology and assumptions made for each material scope 3 category. In the chapter "GHG emissions calculation methodology for material scope 3 categories", criteria for excluded categories are explained. Moreover, the chapter "Overview and screening" provides information on data used for the scope 3 assessment (data input), exclusions within material categories (coverage), and limitations in data quality. Finally, identified methodologies limitations are presented in the chapter "Excluded scope 3 categories".

1 Corporate Value Chain (Scope 3) Standard | Greenhouse Gas Protocol (ghgprotocol.org)
2 World Resources Institute
3 World Business Council for Sustainable Development (WBCSD)
4 Data from Shenzhen Landun Holding Co., Ltd. (China) and Hamatite (Japan) have been excluded from this assessment for categories 3, 5 and 7 as they were not included in the 2021 Sustainability Reporting.
5 Corporate Standard | Greenhouse Gas Protocol
6 Specifically, long-term targets must cover 90% of scope 3 emissions to be aligned with the SBTi.



# MATERIAL SCOPE 3 CATEGORIES

In alignment with the WBCSD sector guidance, a screening of all material categories was conducted. Each category was rated with respect to Sika's influence on the emissions and its size. The related symbols shown in the table below are used to:

- label all categories into low, medium, or large influence. It appears in fact that an assessment of influence helps to develop a scope 3 methodology that balances between measuring, reporting, and managing material scope 3 emissions in alignment with any emission reduction strategy;
- indicate the size of each category as the percentage contribution to the full scope 3 inventory.

| Category | Description | Influence | Size |
|---|---|---|---|
| **Purchased goods and services** | Upstream emissions (cradle-to-gate) of raw materials, trading products and packaging purchased or acquired by Sika in the reporting year | ● | ● |
| **Capital goods** | Upstream emissions from the production of capital goods purchased or acquired by Sika in the reporting year | ◍ | ○ |
| **Fuel- and energy-related activities** | Extraction, production, and transportation of fuels and energy purchased by Sika in the reporting year, not already accounted for in scope 1 or scope 2 | ● | ○ |
| **Upstream transportation and distribution** | Transportation and distribution services purchased by Sika, including inbound logistic, outbound logistic (e.g., of sold products), and transportation and distribution between Sika's own facilities (in vehicles and facilities not owned or controlled by Sika) | ● | ◉ |
| **Waste generated in operations** | Disposal and treatment of waste generated in Sika's operations in the reporting year (in facilities not owned or controlled by Sika) | ◍ | ○ |
| **Business travel** | Transportation of employees for business-related activities (air, train, rail, etc.) during the reporting year (in vehicles not owned or operated by Sika) | ● | ○ |
| **Employee commuting** | Transportation of employees between their homes and their worksites during the reporting year (in vehicles not owned or operated by Sika) | ◍ | ○ |
| **Upstream leased assets** | The life cycle emissions associated with manufacturing or constructing leased assets purchased or acquired by Sika in the reporting year | ○ | ○ |
| **Downstream transportation and distribution** | Transportation and distribution of products sold by Sika between Sika's operations and end consumers (if not paid for by Sika), including retail and storage (in vehicles and facilities not owned or controlled by Sika) | ◍ | ○ |
| **Use of sold products** | The scope 1 and scope 2 emissions of end users that occur from the use of: products that directly consume energy (fuels or electricity) during use; fuels and feedstocks; and GHGs (Greenhouse Gas) and products that contain or form GHGs that are emitted during use | ◍ | ○ |
| **End-of-Life (EoL) treatment of sold products** | Waste disposal and treatment of products and packaging sold by Sika (in the reporting year) at the end of their life | ◍ | ◉ |

● **Large influence on emissions**
◍ **Medium influence on emissions**
○ **Small influence on emissions**

● **> 50% coverage of scope 3 emissions**
◉ **5%–49% coverage of scope 3 emissions**
○ **< 5% coverage of scope 3 emissions**

# GHG EMISSIONS CALCULATION METHODOLOGY FOR MATERIAL SCOPE 3 CATEGORIES

The GHG emissions topic is continuously evolving, and better knowledge, understanding, and data availability will impact the accuracy and granularity of Sika's scope 3 assessment. For each scope 3 category, a specific methodology, based on the GHGP and the WBCSD chemical sector guidance, has been defined. However, as specifications and availability of both activity and secondary data change, Sika expects scope 3 categories' methodologies to continuously evolve. Identified methodologies limitations are presented in the chapter "Excluded scope 3 categories".

Additionally, the SBTi will publish its Sectoral Decarbonization Approach (SDA) for the chemical sector which will define the realistic reduction pathways to reach net zero in 2050. The chemical and the cement sectors are expected to decarbonize less rapidly than the SBT (Science-Based Targets) Net-Zero absolute contraction trajectory. Methodologies to calculate decarbonization pathways and the related accounting of emissions are continuously evolving. Sika believes the requirements and guidance to calculate a scope 3 inventory will progress based on increasing knowledge and information becoming available over time. For such reason, Sika actively reviews its methodology by participating in various initiatives, such as:

- Together for Sustainability (TfS)[7] workstream on scope 3 GHG emissions, with overall project leadership and active involvement in working groups on methodological approaches, data-sharing solutions and supplier engagement
- WBCSD SOS 1.5 Partnership for Carbon Transparency (PACT)[8]

Sika has identified the following material scope 3 categories and, where necessary, next steps or "Roadmaps" for improving data quality are described.

## Category 1
### Purchased goods and services

The calculation of upstream GHG emissions (cradle-to-gate) of purchased goods and services were structured based on:

- **1. Raw materials:** for all raw materials, the average-data method was applied. The quantities purchased were multiplied with the relevant emission factor obtained from life cycle inventory databases. Emission factors were mapped to raw materials using the information available in the procurement spend management system and the EHS database. Geographical and technological representativeness was considered where possible. When a specific dataset was not available, relevant proxies were applied. Research & Development (R&D) experts reviewed the mapped raw material to ensure data governance. The mapping of emission factors was completed for the top 62% (measured by invoiced quantity) of materials. The top materials of each material class were considered. An extrapolation of GHG emissions to the remaining materials was carried out, by considering the average $CO_2$-eq. intensity of each material eClass[9].

- **2. Trading products and packaging:** for the calculation of upstream emissions of trading products and purchased packaging, a spend-based methodology was applied. The procurement spend in CHF was multiplied with the relevant monetary emission factor. Trading products and purchased packaging were assigned to categories to match the available monetary emission factors.

- **3. Indirect goods:** for the calculation of indirect goods, a spend-based methodology was applied. The procurement spend in CHF was multiplied with the relevant monetary emission factor.

**Roadmap:** in the short term, the focus will be on improvements in the data quality (conversion factors, quantities, location) of purchasing data. In the long-term, Sika aims for supplier-specific data. Sika is part of TfS and is currently chairing TfS workstream 5: scope 3 GHG emissions. In scope of this workstream, Sika supports the work to standardize the measurement of GHG emissions data and to develop data collection and sharing approaches to support efforts to decarbonize the chemical supply chain. Finally, Sika executes continuous review by R&D and procurement to identify issues with data quality.

7 TfS Initiative
8 WBCSD – Partnership for Carbon Transparency (PACT)
9 Materials are classified into eClasses by Procurement. EClass refers to the most granular segmentation available and is based on chemical functions.



## Category 2
### Capital goods

For the calculation of GHG emissions associated with capital goods, a spend-based methodology was applied. The CAPEX (capital expenditure) in CHF was multiplied with the relevant monetary emission factor. For all infrastructure projects, a mixed monetary emission factor was calculated. This mixed factor was based on the ratio of steel, concrete, earthworks, and electrical installations within a Sika plant. The ratio was determined from an analysis of representative Sika plant construction projects.

## Category 3
### Fuel- and energy-related activities

GHG emissions associated with fuel- and energy-related activities were based on data obtained from the Sika Sustainability and Operations (S&O) corporate reporting system. To calculate the fuel-related Well-to-Tank (WTT) emissions, the Group consumption per fuel category – collected at factory level through the quarterly Sika S&O corporate reporting system – was multiplied with the chosen WTT emission factor. For electricity Transmission & Distribution (T&D) losses, the electricity consumption per Sika country was multiplied with the relevant country-based emission factors. Emissions from upstream production and transportation of purchased electricity were calculated by multiplying the electricity consumption with the relevant country-based emission factor.

## Category 4
### Upstream transportation and distribution

Total GHG emissions from upstream transportation were calculated by multiplying the tons purchased with the kilometers shipped and with the relevant emission factors, taking geographical differences into consideration. Uplifts on vessel transportation were included in alignment with the Global Logistics Emissions Council (GLEC) Framework[10]. For countries integrated in the SAP software, the distance (kilometers) between the Sika entity and suppliers was calculated based on postal codes using an automated distance calculation solution (BING). Supplier postal codes[11] were extracted from SAP from purchasing invoices. Distances calculated for SAP transactions were averaged and applied to non-SAP transactions as default distances. Tons shipped were based on quantities purchased as reported in the procurement spend management system. Currently, data on inbound transportation mode is not reported nor collected. It was assumed that all goods are transported by truck and/or vessel. For vessel transportation, each country was assigned a default harbor.

In accordance with the GHGP guidelines, the outbound transportation paid by Sika is included in category 4, whereas the outbound transportation paid by customers falls under category 9. For the methodology applied to calculate the outbound transportation paid by Sika, please refer to the section describing category 9.

**Roadmap:** improvement and maintenance of local master data to be carried out to get the detailed locations of Sika raw material suppliers. Furthermore, the rollout of SAP freight module will provide more insights on outbound freight.

## Category 5
### Waste generated in operations

GHG emissions from waste treatment were based on data obtained from the Sika S&O corporate reporting system. Waste by weight was collected at factory level through the quarterly Sika corporate reporting system. This reporting includes production waste and non-production waste. The waste is categorized based on destination (landfill, incineration, reuse) and type (hazardous, non-hazardous). The destination "reuse" refers to recycling and reuse in external facilities. The weight of waste allocated to relevant destinations was multiplied with appropriate emission factors. All hazardous waste was allocated to incineration. For recycled waste, average emission factors for transportation to recycling facility gate were applied.

**Roadmap:** from 2022 onwards, the S&O corporate reporting system will be more granular on waste. Waste disposal will be further detailed as hazardous and non-hazardous for all waste destinations. This will improve the accuracy of the methodology.

10 GLEC Framework: a universal method for logistics emissions accounting | Greenhouse Gas Protocol
11 The supplier postal code may refer to the HQ of the legal entity.

## Category 6
Business travel

The GHG emissions for category 6 are based on the emission data calculated directly by the travel agencies for the main high-spend countries (Germany, France, US, and Switzerland) and collected at Corporate Procurement level. Calculation and emission factors come from travel agencies. The main high-spend countries are estimated to cover 42% of the Sika Group business travel expenditures for FY 2021. To provide an estimate for the whole Group, data was extrapolated to 100%.

**Roadmap:** coverage will be extended to collect activity data from more Sika countries.

## Category 7
Employee commuting

The GHG emissions associated with employee commuting are estimated with full-time equivalents (FTEs). FTEs are reported and compiled within the corporate reporting system. FTEs include both Sika employees and external temporaries, but exclude contractors. In alignment with the WBCSD sector guidance, the following assumptions were made:

- Default mode of 100% travel by car (1 employee per car)
- Default average number of trips as 440 (220 working days * 2 = 440)
- All Sika Services entities related to Corporate Departments were considered to include 50% home office in 2021
- Default travel distance of 30 kilometers (per trip) by car
- Diesel was considered as the fuel used and the relevant emission factor was applied

**Roadmap:** the methodology will be reviewed and, if possible, a location-specific approach will be applied in the long term. Potential employee surveys will support the methodology review.

## Category 8
Upstream leased assets

GHG emissions from upstream leased assets were calculated in the same way as category 2 – capital good, using a spend-based approach. Operations of assets leased by the reporting company in the reporting year (e.g., fuels used) are included in scope 1 and 2. Category 8 includes the upstream life cycle emissions of manufacturing or construction of leased assets. The spend categories associated with leased assets used for the calculation include:

- Leased heavy machinery and factory equipment
- Leased motor vehicles
- Leased IT hardware
- Leased other equipment

## Category 9
Downstream transportation and distribution

GHG emissions from downstream transportation and distribution were based on annual data collected at company level through the Sika corporate reporting system. The collection form included ton.km, total outbound distance and tons transported considering diverse types of shipments. This downstream transportation reflects all outbound transportation to customers and intercompany transportation to warehouses and distribution facilities. Transportation modes included: truck, train, air, and sea. The information on outbound logistic was provided for both transportation activities paid by Sika (Delivery at Place – DAP) and transportation activities paid by the customer (Ex Works – EXW). In accordance with the GHGP guidelines, the outbound transportation paid by Sika is included in category 4, whereas the outbound transportation paid by customers falls under category 9.

**Roadmap:** the methodology for downstream transportation will be aligned to the one for upstream transportation. Distances calculated with postal codes may improve the accuracy of the methodology.



## Category 11
Use of sold products

Direct and indirect GHG emissions from the use of sold products were screened to assess the materiality of category 11. After an extensive screening and a deep dive into different cases, the following sources were included in the accounting of this category: direct emissions from hydrofluorocarbons (HFCs); semi-volatile organic compounds (SVOCs), and volatile organic compounds (VOCs) from solvents, silanes, and plasticizers. In alignment with the WBCSD sector guidance, VOCs and SVOCs were converted to $CO_2$ using stoichiometric calculations based on carbon content. For more information regarding carbon content, please refer to the section on category 12. A screening of the Environment, Health, and Safety (EHS) database for HFCs was carried out. During the screening, the following hydrofluorocarbons were identified as relevant for Sika: HCFC-141b, HCFC-142b, HFC-152a, HFC-227ea, HFC-245fa, and HFC-365mfc. As provided by the GHG protocol, for each HFC, the relevant Global Warming Potential (GWP) value was applied.

## Category 12
End-of-Life (EoL) treatment of sold products

GHG emissions associated with the EoL of sold products were calculated using the carbon content method, in alignment with the WBCSD sector guidance. The carbon content method was applied to Sika's raw materials, using the same activity data as in category 1 calculation. To determine the carbon content of raw materials, R&D experts performed a screening of the top materials. Based on this screening, an average carbon content could be determined for each material eClass[12]. This average carbon content was then applied to the total purchased kilograms of each material eClass. The final carbon content was converted to $CO_2$ and $CH_4$ using stoichiometric calculations. Using factsheets from environmental databases, an end-of-life scenario was chosen for each material category[13]. Based on these assumptions, approximately 33% of sold products are incinerated and 67% of sold products are placed into landfill. In the case of incineration, 100% of carbon was converted to $CO_2$. For the case of landfill, it was assumed that 20% of materials decompose in a 100-year period and, according to the WBCSD sector guidance, this leads to a 50% decomposition into $CO_2$ and a 50% decomposition into $CH_4$. The carbon content method was used to calculate the end-of-life GHG emissions of all material groups that contain organic raw materials. EoL GHG emissions from inorganic (not containing carbon) materials were calculated with a generic emission factor for the treatment inert matter and construction waste. Packaging is not considered a raw material, and each eClass was mapped to five overarching categories: paper, cardboard, plastics, metal, and wood. For each category, a default carbon content and EoL scenario was determined based on the Base Carbone database[14].

**Roadmap:** Sika aims to collect secondary and primary data on EoL scenarios to enable a location and product-specific approach. This data will help verify the current assumptions made.

12 EClass refers to the most granular segmentation in the procurement data available and is based on chemical functions.
13 Material category refers to the highest level of segmentation in the procurement data.
14 Documentation Base Carbone (ademe.fr)

# OVERVIEW AND SCREENING

## DATA INPUT

Each material scope 3 category is based on specific activity data and relevant emission factors.
An overview of the data used for the scope 3 assessment is provided in the table below.

| Category | Activity data | Emission factors |
|---|---|---|
| **Purchased goods and services** | Corporate procurement database in combination with EHS database | Base Carbone v19.0, Sphera CUP2022.1 and Ecoinvent version 3.7.1. |
| **Capital goods** | CAPEX totals for all categories – Corporate Reporting System | Monetary emission factors from Base Carbone v19.0. |
| **Fuel- and energy-related activities** | Consumption data for fuels and electricity – Corporate Reporting System | Defra 2021 and IEA 2021 |
| **Upstream transportation and distribution** | Corporate procurement data | GLEC Framework version 2.0, 2019 and EcoTransIT |
| **Waste generated in operations** | Waste reporting by weight (by disposal destination and by type) – Corporate Reporting System | Ecoinvent 3.8, Sphera CUP2022.1 and Defra 2021 |
| **Business travel** | Reports from travel agencies | N/A |
| **Employee commuting** | FTEs from all Sika entities – Corporate Reporting System | Defra 2021 |
| **Upstream leased assets** | CAPEX totals for relevant leased assets categories – Corporate Reporting System | Monetary emission factors from Base Carbone v19.0. |
| **Downstream transportation and distribution** | Ton.kms per freight type – Corporate Reporting System | GLEC Framework version 2.0, 2019 and EcotransIT |
| **Use of sold products** | Corporate procurement data in combination with EHS database | GHG Protocol GWP values (AR5 – Fifth Assessment Report) |
| **End-of-Life (EoL) treatment of sold products** | Corporate procurement database in combination with EHS database | GHG Protocol GWP values (AR5 – Fifth Assessment Report), Base Carbone v19.0, Sphera CUP 2022.1, Defra 2021 |



## COVERAGE

The following table provides an outline of all identified exclusions with respect to each category. The methodologies defined for each scope 3 category are limited by the activity data and emission factors available in the current year. The materiality of all exclusions has been assessed to ensure that overall results are not compromised. Exclusions are monitored yearly and significant changes are tracked and documented.

| Category | Exclusions | Materiality statement for exclusions |
|---|---|---|
| **Purchased goods and services** Raw materials | 1. Fuels<br>2. Direct spend not allocated<br>3. Angola, Albania, Kazakhstan | 1. Included in scope 1<br>2. Approximately 3% of procurement spend<br>3. Less than 0.1% of procurement spend |
| **Purchased goods and services** Indirect spend | 1. All expenses related to personal charges or financial charges were excluded from the scope 3 calculation<br>2. Furthermore, the spend categories related to travels, waste and leased assets were excluded from category 1 | 1. Outside of scope and boundary according to the GHG protocol<br>2. Included in other scope 3 categories |
| **Purchased goods and services** Trading products and packaging | 1. Toll manufacturing<br>2. Angola, Albania, Kazakhstan | 1. 2.5% of global procurement spend<br>2. Less than 0.1% of procurement spend |
| **Capital goods** | Includes all CAPEX categories aligned to the financial reporting except “Land additions” | Land additions were assessed as not relevant for GHG emissions |
| **Fuel- and energy-related activities** | 1. Acquisitions – Hamatite and Shenzhen Landun Holding Co., Ltd.<br>2. Heat, cooling and steam | 1. Data from Shenzhen Landun Holding Co., Ltd. (China) and Hamatite (Japan) have been excluded from consolidated 2021 figures to facilitate companies onboarding and ensure a proper integration in the Sika sustainability reporting framework<br>2. Significance of heat, cooling and steam will be assessed in 2022 |
| **Upstream transportation and distribution** | 1. Supplier intercompany logistics<br>2. Air transportation | 1. No transparency and no data available<br>2. Air transportation is only used as a transportation mode in exceptional circumstances |
| **Waste generated in operations** | 1. Acquisitions – Hamatite and Shenzhen Landun Holding Co., Ltd.<br>2. Emissions from recycling processes, relevant for the waste classified as “waste to reuse” | 1. Data from Shenzhen Landun Holding Co., Ltd. (China) and Hamatite (Japan) have been excluded from consolidated 2021 figures to facilitate companies onboarding and ensure a proper integration in the Sika sustainability reporting framework<br>2. Recycling processes are outside of scope and boundary according to the GHG protocol |
| **Business travel** | Only air travel included | |

| Category | Exclusions | Materiality statement for exclusions |
|---|---|---|
| **Employee commuting** | Includes Sika employees and external temporaries | |
| **Upstream leased assets** | Categories "Leased production sites" and "Leased office and warehouses" were excluded | These categories represent long-term rent contracts where Sika's expenditure does not necessarily reflect the manufacturing on construction of leased assets |
| **Downstream transportation and distribution** | Acquisitions – Hamatite and Shenzhen Landun Holding Co., Ltd. | Data from Shenzhen Landun Holding Co., Ltd. (China) and Hamatite (Japan) have been excluded from consolidated 2021 figures to facilitate companies onboarding and ensure a proper integration in the Sika S&O reporting system |
| **Use of sold products** | 1. Indirect use-phase emissions<br>2. Direct $CO_2$ release from chemical curing | 1. Indirect emissions amount to less than 0.5% of total scope 3 emissions<br>2. Full carbon content of relevant materials allocated to category 12 |
| **End-of-Life (EoL) treatment of sold products** | Please refer to the category "Purchased goods and services – raw materials" and "Purchased goods and services – trading products and packaging" | |



## DATA QUALITY

The GHGP[15] provides a suggested rating system to evaluate the data quality of both primary and secondary data used in the scope 3 assessment. The table below provides a high-level overview of the limitations in data quality identified for each material scope 3 category. A continuous evaluation of these parameters will help to assess the accuracy and reliability of all relevant methodologies and results. Where possible, identified data quality limitations will be addressed and thus used to improve the overall quality of Sika's scope 3 assessment.

| Category | Technology | Geography | Completeness | Reliability |
|---|---|---|---|---|
| **Purchased goods and services** | Emission factors from secondary data sources could not be found for all purchased raw materials. Proxies were applied | Geographical considerations were limited by the secondary data available | Only 62% were calculated directly. The other 38% were included as an extrapolation | Average-data method. Supplier-specific data <1% |
| **Capital goods** | Different technologies cannot be differentiated with monetary emission factors | Global monetary emission factors were applied hence different geographies were not considered | Land additions were not considered | The spend-based method was applied. The spend-based method is considered the least specific according to the GHGP |
| **Fuel- and energy-related activities** | From 2022 onwards, additional granularity regarding the reporting of vehicle fuel will be available | Emission factors were chosen to reflect the relevant geography | Data from Shenzhen Landun Holding Co., Ltd. (China) and Hamatite (Japan) have been excluded as they were not included in the 2021 sustainability reporting | Based on scope 1 and 2 reporting data |
| **Upstream transportation and distribution** | Currently, it is not possible to distinguish between transportation modes for upstream transportation | Assumptions were made based on aggregated regions. Emission factors were applied on regional granularity | Supplier intercompany logistics were not included in the calculation | Potential data quality issues related to limited maintenance of supplier postal code information in SAP |
| **Waste generated in operations** | From 2022 onwards, additional granularity regarding the reporting of waste disposal by type of waste will be available | Emission factors were chosen based on three high-level regions. No country-specific data was available | Data from Shenzhen Landun Holding Co., Ltd. (China) and Hamatite (Japan) have been excluded as they were not included in the 2021 sustainability reporting | Based on S&O corporate reporting system |
| **Business travel** | Only flights were considered | Activity data restricted to four countries | The calculation was based on an extrapolation of data from travel agencies of four high-spend countries | Based on reports from travel agencies |

15 Table 7.6 found on page 76 in the "Corporate Value Chain (Scope 3) Accounting and Reporting Standard" of the GHGP

| Category | Technology | Geography | Completeness | Reliability |
|---|---|---|---|---|
| **Employee commuting** | Currently, it is not possible to distinguish between different transportation types | No geographical differences included | All Sika employees were considered | The calculation was based on generic assumptions |
| **Upstream leased assets** | Different technologies cannot be differentiated with monetary emission factors | Global monetary emission factors were applied, hence different geographies were not considered | Leased assets which are paid with yearly rents (e.g. building rentals) were not included. It was assumed that rents do not reflect the upstream emissions | The spend-based method was applied. The spend-based method is considered the least specific according to the GHGP |
| **Downstream transportation and distribution** | Differences between transportation modes were considered. Per transportation mode, a default vehicle type was chosen | Data was assessed on country level. Emission factors were applied to aggregated regions | Data from Shenzhen Landun Holding Co., Ltd. (China) and Hamatite (Japan) have been excluded as they were not included in the 2021 sustainability reporting | Reliability depends on data quality and availability at local level |
| **Use of sold products** | Where applicable, information about specific technologies was included in the screening | Geographical differences are unknown and were thus not considered | Indirect emissions were screened, assessed as immaterial and thus excluded. Continuous investigation in alignment with innovation is needed to assess the materiality | A screening of indirect emissions has been carried out based on several business cases, which covers a limited number of use cases |
| **End-of-Life (EoL) treatment of sold products** | Currently, no information/ data is available regarding the end-of-life scenarios of Sika products. Assumptions were made | No geographical differences were considered | Only 62% were calculated directly. The other 38% were included as an extrapolation | Assumptions were made regarding the carbon content for each material eClass[1] |

1 EClass refers to a grouping of raw materials applied by corporate procurement.



# EXCLUDED SCOPE 3 CATEGORIES

All the GHGP scope 3 categories were assessed for their relevance. Categories 10, 13, 14 and 15 were identified as insignificant or irrelevant for Sika and thus excluded from the assessment. Detailed exclusion criteria for each category are provided in the table below.

| Categories | Exclusion criteria |
|---|---|
| **Processing of sold products** | – Final products: emissions from application of Sika sold products fall under indirect Cat. 11 Use of sold products<br>– Intermediate products: from WBCSD Chemical Sector Standard recommendation, which applies to intermediate products only, "chemical companies are not required to report Scope 3, category 10 emissions, since reliable figures are difficult to obtain, due to the diverse application and customer structure" |
| **Downstream leased assets (assets owned by Sika and leased to others)** | There is only one known case of downstream leased assets: dispensers (tank to store admixtures) in the USA leased to strategic partners of larger contracts. A screening estimated the $CO_2$ emissions at 600 tons $CO_2$-eq. It was determined that emissions from the downstream leased assets are not significant |
| **Franchises** | In 2021, Sika did not operate any franchises and as such, this category was deemed to be irrelevant. Franchises are not part of Sika's business model |
| **Investments** | Sika's investment categories:<br>– Subsidiaries: all subsidiaries with +50% equity investments are consolidated in the financial reporting and included in the scope 1, 2 and 3 assessments for FY 2021 (see exception mentioned in the chapter "Outline")<br>– Shares: Sika has some minority shares (20%–50%) in three small companies: HPS North America, LLC, Chemical Sangyo, Seven Tech<br>– Financial assets (> 0%–20%): if Sika holds shares with an ownership interest of 20% or less, those will be reported as financial assets. In 2021, such investments amounted to CHF 85.2 million. The major part (CHF 64.3 mn) came from the USA and it is related to funds for an employee benefit plan which is not restricted to equity investment |

**Cover image**
Quay Quarter Tower is one of kind in terms of redevelopment of an existing building instead of complete demolition and rebuild. The idea was to preserve the structure and add on where possible which would reduce waste, pollution, $CO_2$, natural resources etc.

Sika supplied fire rated joint sealants, floor leveling, waterproofing, concrete repair mortars, structural grouts, and concrete admixtures.

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