

MANGO

# Mango Climate Approach

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1. Introduction

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2. Climate targets

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3. Our carbon footprint methodology

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4. Our carbon footprint

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5. Our decarbonization strategy

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6. Climate-related risks & opportunities

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7. Closing remarks

# I. Introduction

Our Mango Climate Approach encapsulates all our efforts related to climate change in one comprehensive report.

This document primarily focuses on our trajectory towards 2030, leveraging the outcomes of our past initiatives and our robust emissions calculation framework. It outlines our goals, strategy, and approach, delving into the risks and opportunities, as well as the internal mechanisms driving our climate initiatives.

All the data and information in this report comes either from our latest Sustainability Report and Carbon Footprint Calculation. Mango carries out annually the verification and review of the data contained in both the carbon footprint calculation and the sustainability report by external auditors:

- The greenhouse gas inventory has been conducted following the GHG Protocol (Scope 3 Emissions of the GHG Protocol) by the World Business Council for Sustainable

Development (WBCSD) and the World Resources Institute (WRI).

- The Sustainability Report has been conducted according to the GRI standards and the regulations of the Non-Financial Information State (NFIS).

## 1.1. Governance

In 2021 the sustainability committee was established, consisting of various members of the steering committee and other key decision-making areas in the company's sustainability strategy. The aim of Mango's sustainability committee is to supervise the implementation of all the different sustainable strategies of the company worldwide, including the Decarbonization Action Plan. The sustainability committee is also responsible for change-making and promoting cross-departmental decision-making that affects all business areas in the organization.

**Toni Ruiz** CEO

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**Jonathan Andic** Chief Mango Man Officer

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**Elena Carasso** Chief Online & Customer Officer

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**Luis Casacuberta** Chief Product and Sustainability Officer

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**Josep Estol** Mango Man Executive Director

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**Andrés Fernández** Sourcing and Sustainability Executive Director

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**Nuria García** Woman Creative Design Executive Director

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**Clàudia Hosta** Circularity Senior Manager

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**Luis Maseres** Mango Woman Executive Director

**Berta Moral** Mango Kids Executive Director

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**Teresa Pérez** Environment Senior Manager

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**Paula Rico** Social Impact Senior Manager

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**Margarita Salvans** Chief Financial Officer

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**Blanca Muñoz** Chief Brand Officer

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**Nuria Font** Mango Home Director

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**Eugenia Jover** Head of legal department

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# I. Introduction

## 1.2. Traceability & transparency of our value chain

Traceability in the value chain is paramount for obtaining primary data and truly understanding Mango climate impact. At Mango we consider data one of our biggest allies to make informed decisions that can drive positive change. By having access to accurate and detailed data at every stage of the value chain, we can identify areas for improvement, optimize processes, and minimize our environmental footprint. Moreover, transparency fosters trust among our stakeholders and enhances accountability.

Mango wants to prioritize long-term relationships with our suppliers so that they are built on a firm and lasting basis. We also want our suppliers to actively participate on all our strategies by providing feedback, data and relevant information to set ambitious targets for the company. Mango was

the first major fashion company in Spain to publish a list of its traced finished product factories in 2020, as well as a list of its fabric and trim factories and a good portion of its spinning factories in 2022.

For more information, you can visit our website: <https://www.mangofashiongroup.com/en/transparency>

## 2. Climate targets

Mango embraces the concept of decoupling emissions from growth, acknowledging the urgent need to mitigate our adverse environmental and social impacts. As such, we are committed to consistently improving (1) the incorporation of recycled fibres/materials in our garments and (2) the adoption of eco-design methodologies to minimize waste generation and maximize resource efficiency. Mango recognizes that our commitment to decoupling necessitates a comprehensive transformation, influencing not only our entire value chain but also our approach to product design.

Mango looks towards the future with a focus on elevating the quality, durability, and timelessness of our products, driven by a clear conviction in the efficiency of our productions. In 2021, we first submitted our Science Based Targets initiative (SBTi), and where approved in 2022. Our SBTi:

1. Mango has set a 80% absolute reduction of scope 1 & 2 emissions by 2030, compared to 2019.

2. Mango has set a 35% absolute reduction of Scope 3 emissions by 2030, compared to 2019.

Mango also commits to achieve net-zero by 2050. Between 2024 & 2025 Mango will submit and get the approval by SBTi.

### 2.1. Land - Related emissions & goals

In 2022, SBTi published the Forest, Land and Agriculture Science Based Target Setting Guidance (SBTi FLAG), which has created the need for organizations to set targets to address land-related emissions (forestry, agriculture and other land uses).

In 2023, Mango conducted an applicability exercise to, firstly, better identify FLAG emissions as well as to determine the relevance and materiality of the potential FLAG emission sources in Mango's carbon footprint.

This exercise allowed the company to show that its FLAG emissions represented 10% of Mango's total emissions in 2022, mainly from cotton, viscose and wool sourcing. Second-

ly, this exercise has allowed the company to corroborate the non-applicability of the FLAG guidelines to Mango's activities, since the percentage of FLAG emissions does not reach 20% of total GHG emissions.

Nonetheless, Mango indirectly, has set objectives to reduce FLAG emissions with its objective to achieve 100% more sustainable cotton and man-made cellulose fibres by 2025. In addition, in 2023 50% of Mango's total wool sourcing was already GRS/RCS recycled. We also plan to keep increasing this % of recycled wool to keep reducing our FLAG emissions. In 2030, all fibres and materials used by Mango will already be more sustainable than their conventional one.

### 2.2. Phase-out combustion of thermal coal & transition to renewable energy and electricity in our value chain

**Phase-out combustion of thermal coal (or other fossil fuels) goals:**

- By 2025, Mango will not accept new facilities using thermal coal (or other fossil fuels). For the already active facilities that are currently using thermal coal, our plan is to not stop working with them, but rather help them make the transition to renewable energy and electrification of energy-intensive processes, through the introduction of collaborative decarbonizations projects and initiatives that organizations such as Cascale and Fashion Pact are working on.
- By 2030, all facilities tier 1 & 2 used by Mango productions will be thermal coal free.

### Renewable electricity & energy goals:

- By 2030, Mango will source a minimum of 30% of its production with renewable energy\*.
- By 2030, Mango will source a minimum of 30% of its production with renewable electricity.

\*We understand as renewable energy any of the following options:

- Biodiesel
- Biogas
- Geothermal (onsite, self-generation)
- Hydro (onsite, self-generation)
- Mini or Macro-Hydro (onsite, self-generation)
- Purchased Renewables (with PPAs, EACs/RECs)
- Solar Photovoltaic Electricity (onsite, self-generation)
- Wind (onsite, self-generation)

### 2.3. Energy procurement of our own offices, distribution centers and stores

In 2023, 69% of total electricity consumption in our own offices, stores and distribution centers was renewable electricity with guaranteed origin reaching 94.169.365 Kwh.

By 2030, all our electricity in our own offices, stores, and distribution centers will be renewable electricity. Mainly through purchasing renewable electricity with guaranteed origin.

## 2. Climate targets

### Corporate stores and facilities

#### CONSUMPTION (KWH)

SOURCE	2022	2023
Electricity of conventional origin	44,443,587	42,315,928
Electricity from renewable sources	89,794,982	94,169,365
<b>Total electricity</b>	<b>134,238,570</b>	<b>136,485,292</b>
<b>Gas</b>	<b>2,677,530</b>	<b>1,677,558</b>
<b>Other fuels</b>	<b>6,454,247</b>	<b>7,496,876</b>
<b>Total</b>	<b>143,370,346</b>	<b>145,659,727</b>

## 3. Our carbon footprint methodology

In 2023, as in previous years, Mango has conducted a thorough and rigorous analysis of its activities using the Greenhouse Gas Protocol, GHG Protocol, as its accounting and reporting standard due to its wide international acceptance. The company has adopted the broadest scope for system analysis, cradle to grave, whereby Mango accounts for all emissions generated throughout the life cycle of the products it markets, from design to end use. Methodologically, Mango has always prioritized primary data, i.e. data recorded first-hand by the organization itself or by third parties. The company has only used secondary data in the event that the former were not available. In these cases, reputable sources such as Cascale (former Sustainable Apparel Coalition), the Ministry for Ecological Transition and the Demographic Challenge (MITECO), the International Energy Agency (IEA), Department for Environment Food and Rural Affairs (DEFRA) and Comprehensive Environmental Data Archive (CEDA), among others. The magnitude of the carbon footprint demonstrates

the challenge the company faces. 98.7% of emissions occur at some point in the value chain where Mango has indirect influence. For this reason, the company considers it essential to participate in all coalitions and forums where tools or work spaces are generated in this area, as the success of Mango's emissions reduction strategy will depend on the degree of collaboration that the company builds with its entire value chain.

As previously mentioned, Mango follows the GHG protocol.

Hence our scopes are as following:

- Scope 1: Direct emissions associated with the company's activity. Emissions generated by fixed and mobile combustion sources, fugitive emissions resulting from the replacement of refrigerant gases in the installations, and others.
- Scope 2: Indirect emissions associated with the company's energy consumption. Emissions associated with the energy consumption of offices, warehouses, and owned stores worldwide.

- Scope 3: Procurement of goods (materials and product manufacturing) and services. Capital goods. Activities related to energy production (not included in scope 1 or scope 2). Upstream transportation and distribution. Waste generated during operations. Business travel. Commutes between home and work locations for employees. Leased assets used by the organization. Downstream transportation and distribution. Use of products sold by the organization. Waste derived from products sold by the organization. Franchise operations.

### 3.1. Data quality

Ensuring high-quality data is essential in accurately assessing and managing our carbon footprint calculations. Reliable data forms the foundation for informed decision-making, enabling us to effectively identify, prioritize, and implement emission reduction strategies. In the following paragraph, we provide an explanation of our data quality assessment process

and share the results, highlighting the reliability and accuracy of the data used in our carbon footprint calculations.

#### 3.1.1. Reliability of the data origin

The reliability of the data has been internally evaluated and scored on a scale from 1 to 5, with 1 being low reliability and 5 being very high reliability. The scoring has been based on the following criteria:

- Is the data from an internal or external source?
- If the data is internal, can it be verified across multiple systems?
- If the data is external, is it an official document? (e.g., consumption invoice, maintenance report, etc.)
- If the data is internal, can it be easily manipulated?

#### Reliability Score Description

1. Internal data not originating from an

internal system, not internally verifiable, and/or easily manipulable.

2. Internal verifiable, estimated, or extrapolated data used for other reporting and/or departments.
3. Internal business-related data verifiable across multiple internal systems and used by various departments.
4. Internal data used by multiple departments, internally verifiable and audited.
5. External data that cannot be manipulated by the company and comes from an official source and/or external company/entity. Internally verifiable and externally verified and/or reported.

#### 3.1.2. Reliability of emission factors

The reliability of databases used for emission factors has been evaluated on a scale from 1 to 5, with 1 being low reliability and 5 being very high reliability, according to the following criteria:

- Is the database internal or external?

### 3. Our carbon footprint methodology

- Is the data source an internal or external study?
- If the database is external, is it a public or private internationally reputable source?

#### Reliability Score Description

1. Internal source without verification.
2. Internal or external source with low traceability.
3. Internal or external source of a documented own study that must be updated at least every 5 years.
4. External source of private international reputation access.
5. External source of public international reputation access.

#### 3.1.3. Use of primary vs secondary data

The calculation prioritizes the use of primary data whenever possible. A distinction is made between primary and secondary data according to the following description:

- Primary data: Real, verifiable data collected during the reporting year.
  - Secondary data: estimated data based on available real data.
- For the calculation of reliability and uncertainty, the percentage of primary vs. secondary data used is recorded for each scope and category of emission calculation. This percentage is calculated by classifying data sources according to the definition of primary and secondary data mentioned above for each scope (1+2) and for each category of scope 3.

#### 3.1.4. Reliability and uncertainty assessment result of our carbon

→ See graphic table Page 8. Reliability Assessment - Carbon Footprint

Below, it can be found the detail of the corresponding formulas for calculating the reliability and uncertainty of the 2023 carbon footprint:

- Partial Result (column F) = column C + column D + column E
  - Reliability Result (column G) = column F \* column A
- Maximum possible score = 20

<b>Reliability index</b> (reliability result divided by maximum score (18.3/20))	<b>91%</b>
<b>Uncertainty index</b>	<b>9%</b>

The reliability of the emissions inventory calculation is subjectively evaluated as high, taking into account the following reliability points and data sources:

1. The categories where estimated (secondary) data has been used entirely are three: category 7 and 14. Together, these categories represent 3.6% of the total calculation of scope 1, 2, and 3 emissions and therefore are not of high relevance.
2. All emission factors used are from internationally recognized databases used for GHG inventory calculations.
3. The tool design has been done jointly with an external consultant, Ecoact, following the corresponding protocols to set science-based targets and adhere to the SBTi initiative.

### 3. Our carbon footprint methodology

#### Reliability Assessment - Carbon Footprint

	A	B	C	D	E	F	G
	% Emissions	% Primary Data	Primary Data Score	Reliability: Data Source	Reliability: Emission Factor	Partial Result	Reliability Result
Scope 1	0,2%	99,9%	9,99	4,3	5	19,3	0,04
Scope 2	1,1%	40%	4	4,5	4,7	13,2	0,15
Category 1	55,3%	100%	10	4,5	4,3	18,8	10,37
Category 2	-	-	-	-	-	-	-
Category 3	0,4%	55%	5,5	4,5	4,5	14,5	0,06
Category 4	9,7%	100%	10	3,0	5	18,0	1,74
Category 5	0,5%	44%	4	4,7	5	14,0	0,07
Category 6	0,3%	100%	10	4,8	5	19,8	0,06
Category 7	0,9%	0%	0	4,0	5	9,0	0,06
Category 8	0,02%	100%	10	4,0	4	18,0	0,00



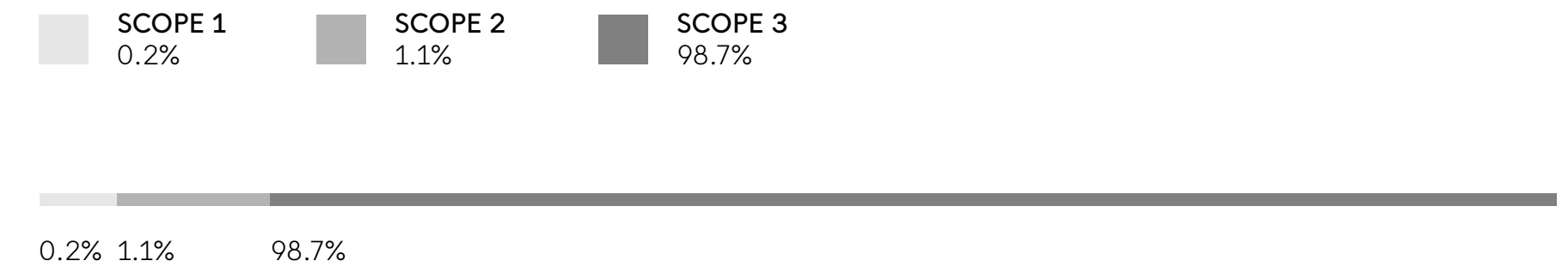
### 3. Our carbon footprint methodology

#### Reliability Assessment - Carbon Footprint

	A	B	C	D	E	F	G
	% Emissions	% Primary Data	Primary Data Score	Reliability: Data Source	Reliability: Emission Factor	Partial Result	Reliability Result
Category 9	-	-	-	-	-	-	-
Category 10	-	-	-	-	-	-	-
Category 11	27,9%	100%	10	5,0	4	19,0	5,30
Category 12	0,9%	94%	9,4	4,3	5	18,7	0,17
Category 13	-	-	-	-	-	-	-
Category 14	2,7%	0%	0	3,0	4	7,0	0,19
Category 15	-	-	-	-	-	-	-
							<b>18,2</b>

# 4. Our carbon footprint

Emissions in 2023 amounted to 1,593,762 tons of CO2e and were between the scopes as follows:



## HISTORICAL EVOLUTION

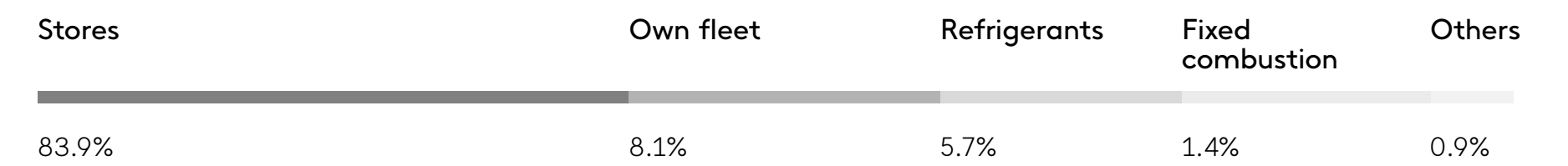
SCOPE	2019 (TN CO2e)	2020 (TN CO2e)	2021* (TNCO2e)	2022** (TN CO2e)	2023*** (TN CO2e)
Scope 1	3,200	2,290	2,813	2,786	3,294
Scope 2	46,025	20,743	22,961	20,480	18,312
Scope 3	1,539,628	1,376,762	1,378,787	1,483,514	1,572,156
<b>TOTAL</b>	<b>1,588,852</b>	<b>1,399,795</b>	<b>1,404,561</b>	<b>1,506,779</b>	<b>1,593,762</b>

\*Data redefined due to change in methodology in 2022. The emissions values indicated reflect the market calculation methodology. According to the localisation methodology, the values for 2021 are: 2,812.7 tCO2e (Scope 1); 35,761.9 tCO2e (Scope 2); 1,384,994.1 tCO2e (Scope 3).

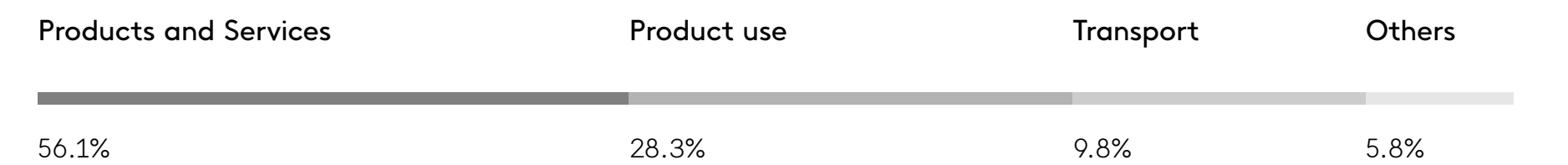
\*\* The emissions values indicated reflect the market calculation methodology. According to the localisation methodology, the values for 2022 are: 2,785.8 tCO2e (Scope 1); 28,258.7 tCO2e (Scope 2); 1,488,531 tCO2e (Scope 3); Scope 3 for 2022 has been restated due to a change in methodology.

\*\*\* The emissions values indicated reflect the market calculation methodology. According to the localisation methodology, the values for 2023 are: 3,294 tCO2e (Scope 1); 28,597 tCO2e (Scope 2); 1,577,460 tCO2e (Scope 2); 1,577,460 tCO2e (Scope 3); 1,577,460 tCO2e (Scope 3); and 1,860 tCO2e (Scope 4).

## SCOPE 1 + SCOPE 2



## SCOPE 3



# 5. Our decarbonization strategy

COMMITTED TO PLANET

## Lines of performance by scope

### SCOPE 1

#### Electrification of the land fleet

In 2023, Mango has presented an electrification plan to be implemented over the next few years.

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### SCOPE 2

#### Mazimising energy efficiency

Mango continues with the plan to replace conventional lighting fixtures with LED lamps and the installation of motion sensors to turn on lights and fixed and mobile meters to optimise the operation of the new Building Management Systems (BMS). Along the same lines, the company increases the efficiency of data processing centres by adjusting the air conditioning and insulation systems, obtaining an improvement in the consumption and power factors of the facilities. With respect to its digital footprint, to improve the efficiency of data processing centres, Mango improves the enclosure of facilities to maximise the efficiency of cooling equipment, replacing old equipment with more modern and efficient ones, as well as optimising space, reducing the number of equipment rooms from four to two.

#### Transition to 100% renewable energy by 2030

In 2023, Mango has had a consumption of 69% of renewable energy with guaranteed origin, reaching 94,169,365 MWh. This increase not only affects the company's headquarters, warehouses and corporate stores in Spain, but Mango has worked to incorporate operations in Germany, Andorra, Austria, Belgium, France, Italy, Greece, the Netherlands, Portugal, the United Kingdom, Sweden and Switzerland.

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### SCOPE 3

#### Materials strategy

Mango is working to prioritise the use of raw materials with lower climate and environmental impact, and on eco-design. The preference for recycled fibres from organic or regenerative agriculture allows the company to significantly reduce scope 3 emissions. In relation to regenerative agriculture, in 2023, Mango has signed an agreement with Materra, to incorporate for the first time fibres from regenerative agriculture in selected garments.

#### Collaboration with suppliers

- Spinners, weavers, garment manufacturers, farmers and/or ranchers. In order to positively influence the value chain, Mango seeks to develop strategic alliances that enable its suppliers to improve their environmental performance and, consequently, reduce their emissions. To this end, Mango is evaluating options for collaborative projects with industry to support its suppliers in their decarbonisation strategy.
- In relation to logistics, Mango is committed to reviewing and improving the efficiency of routes, optimising vehicles through the use of the duo trailer on the most frequent land routes such as Barcelona-Madrid. And the approach of replacing conventional fuels with less polluting options. Such as HVO and K-Cube for land transportation and, the progressive integration of SAF in the use of airplanes is being contemplated.

#### Identification and improvement of more sustainable processes

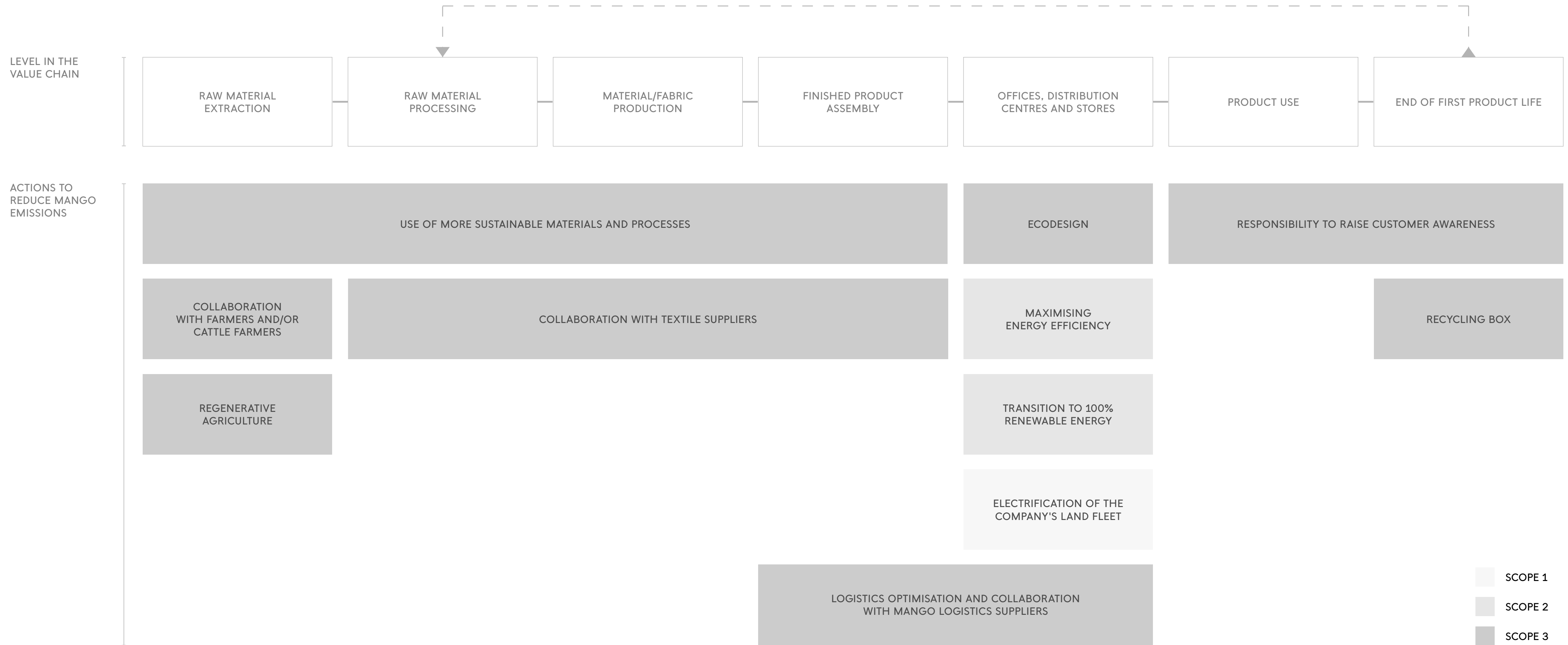
Through the Higg FEM tool, Mango performs an analysis with primary data of its supply chain emissions, allowing it to better target its efforts to reduce emissions.

### 5.1. Focus areas for decarbonization

In 2021, the company established working groups within areas such as product, transportation, maintenance, and construction, among others, with the aim of developing specific action plans for emissions reduction. In 2022 and 2023, these working groups have been maintained and consolidated.

The definition of proposed initiatives and their results are presented to Mango's sustainability committee for approval and validation, ensuring alignment with the company's strategy.

### Actions to reduce emissions in the value chain



## 5. Our decarbonization strategy

Currently, the two pivotal actions essential for Mango to attain its absolute reduction goals are: (1) Adoption of more sustainable materials, and (2) Strengthening collaboration with our textile suppliers.

### 5.1.1. Use of more sustainable materials and processes

Due to the extensive use of natural materials and resources in the production of its collections and the impact they have on the environment, Mango aims to make 100% of the materials used in its garments more sustainable and with a lower environmental impact by 2030.

In order to move towards the goal of 100% more sustainable materials in its garments by 2030, Mango prioritises the use of materials obtained from more sustainable sources, basing its choice on their impact on the environment (CO2 emissions, water footprint, use of non-renewable resources, impact on biodi-

versity, among others). One of the tools used by Mango to select materials for its products is the Textile Exchange Preferred Fibre and Material Matrix (PFMM). In relation to the use of lower impact fibres in its products, Mango has intermediate objectives that prioritise the use of more sustainable alternatives for the three most used fibres in its collections. The company aims that by 2025:

- 100% of the cotton used will be of lower impact.
- 100% of the polyester used will be recycled.
- 100% of the cellulosic artificial fibres (viscose, lyocell, modal, etc.) will be of controlled and traceable origin.

Mango also drives the use of lower-impact materials by exploring innovative materials. In 2024, Mango will include regenerative cotton in its collection with Materra, a British-Indian company specialized in designing solutions for the cultivation and sourcing of regenerative cotton.

On the following page, you'll find our breakdown of the various types of fibers sourced in 2023 and 2022, along with the percentage change between these two years.

→ See graphic table Page 15.  
Breakdown of fibers & materials.

### 5.1.2. Collaboration with textile suppliers

In order to optimize and build loyalty to its supplier portfolio, Mango's suppliers are evaluated each season by the different areas of the company with which they are involved to a greater or lesser extent.

Within the framework of the Best project, the evaluation criteria refer to quality, innovation

capacity, compliance with Mango's requirements and contribution to sustainability objectives.

In Mango's supplier scorecard, the environmental sustainability accounts for a 15% of the overall grade. To compute the environmental sustainability score of our suppliers we take into consideration (1) the percentage of preferred fibres/materials used in the products they produce for us, and (2) how these products have been manufactured/processed based on the environmental assessment Higg vFEM of the different facilities for which their Mango products pass.

By evaluating these factors, we aim to ensure that our suppliers adhere to environmental sustainability practices throughout their production processes, thereby minimizing their environmental footprint and contributing to our overall sustainability goals.

In 2024, this scorecard is being revised to make sure all ESG sustainability KPIs obtain a bigger portion on the overall assessment.

## 5.2. Achieve Net-Zero

### 5.2.1. Scaling carbon dioxide removal - Collaboration Greenova Foundation

In line with its commitment to the environment and in relation to capture projects, Mango has established a partnership with the Greenova Foundation. The company is aware that reducing and offsetting its emissions will not be sufficient to comply with the Paris Agreement scenarios and that it will be necessary to capture and store atmospheric CO2. For this reason, Mango establishes an alliance with the Greenova Foundation to support research and development of technologies to eliminate CO2 already present in the atmosphere. The Greenova Foundation, in collaboration with the University of Barcelona, Rovira i Virgili University and Eurecat, is developing, through the industrial doctoral student format, technologies for capturing CO2 in the air using permeable membranes and graphene. This

## 5. Our decarbonization strategy

technology converts CO<sub>2</sub> into a compound that allows its subsequent use.

### 5.2.2. Offsetting

Since 2009, we have been offsetting part of the emissions we generate through projects that operate in our areas of greatest influence to stimulate their sustainable development. In 2023, 25,000 tons of CO<sub>2</sub>e were offset, covering at least all emissions within scopes 1 and 2 for 2022.

#### Qianbei Afforestation Project

The Qianbei Afforestation Project, located in Guizhou province (China) and carried out in a region affected by desertification, aims to support regional biodiversity by establishing interconnected forest habitats. In addition to preserving local flora and fauna, the project focuses on the challenges of soil and water conservation, while capturing significant

amounts of greenhouse gases. The Qianbei afforestation project started in 2015 and aims to be active for 30 years. The transformation of more than 50,000 hectares of barren land to native forest is expected to remove more than 21 million tons of CO<sub>2</sub> equivalent from the atmosphere. The 6,000 carbon credits acquired by Mango are VCS (Verified Carbon Standard) certified, a globally recognised standard for certifying carbon credits for offsetting emissions, and CCB (Climate, Community and Biodiversity), a standard that certifies and evaluates projects that both contribute positively to the capture of greenhouse gases and support local communities and promote biodiversity conservation. At the socio-economic level, the Qianbei project has given a boost to the community, generating new jobs and raising the quality of life of local communities. The Qianbei Reforestation Project is achieving a comprehensive and sustainable impact on the local community, the environment and the fight against climate change.

Its focus on community participation, job creation, and ecological restoration positions it as a model for the successful convergence between environmental conservation and human development in the fight against environmental challenges.

#### Camlica-3 HPP Run-of-River Hydro

The Camlica-3 hydropower plant, located in the Yahyalı district of the city of Kayseri, Turkey, represents a significant advance in sustainable energy production. This innovative installation harnesses the natural flow of the Zamanti River to generate clean energy with a capacity of 28.48 MWm/27.62 MWe. The plant has three state-of-the-art turbines, each capable of producing approx. 9.206 MWe. This infrastructure converts the kinetic energy of the river into electricity, with an expected annual production of 104,488 MWh. The Camlica-3 project contributes significantly to the conservation of the environment by substan-

tially reducing emissions. These reductions are achieved by substituting electricity produced from the conventional electricity mix in the Turkish grid, which comes mainly from fossil fuels, with renewable hydropower. This strategic shift plays a key role in Turkey's commitment to reducing greenhouse gas emissions and diversifying its energy mix. In economic terms, Camlica-3 addresses Turkey's energy deficit and diversifies its electricity generation mix, reducing dependence on energy imports. It also catalyses the development of infrastructure, benefiting local communities, especially in remote areas of the country. This comprehensive approach makes Camlica-3 a benchmark project that demonstrates the potential of renewable energy projects. The 19,000 VCS-certified Camlica-3 carbon credits purchased by Mango are equivalent to the annual electricity consumption of more than 11,500 homes in Turkey. It is expected that around 800,000 tons of CO<sub>2</sub>e reductions will be achieved over the 20-year project period.

## 5. Our decarbonization strategy

Breakdown of fibers &amp; materials

	2023		2022		% CHANGE FROM 2022
	KG	% KG	KG	% KG	
<b>COTTON</b>	<b>18.042.254</b>	<b>35,1%</b>	<b>18.277.610</b>	<b>37,6%</b>	<b>-1,3%</b>
Conventional	914.183	5,1%	1.542.134	8,4%	-41%
Better Cotton	16.572.990	91,9%	16.220.912	88,7%	2%
Organic	25.464	0,1%	44.765	0,2%	-43%
Recycled	529.617	2,9%	469.799	2,6%	13%
<b>POLYESTER</b>	<b>16.402.743</b>	<b>31,9%</b>	<b>13.654.263</b>	<b>28,1%</b>	<b>20,1%</b>
Conventional	10.183.587	62,1%	9.871.007	72,3%	3%
Recycled	6.189.998	37,7%	3.782.500	27,7%	64%
Recycled (registered trademarks: Repreve, Solotex, Sorona)	29.159	0,2%	756	0,01%	3755%
<b>MAN-MADE CELLULOSE FIBERS</b>	<b>6.216.991</b>	<b>12,1%</b>	<b>6.162.216</b>	<b>12,7%</b>	<b>0,9%</b>
Conventional Acetate	5.808	0,1%	5.365	0,1%	8%

## 5. Our decarbonization strategy

Breakdown of fibers &amp; materials

	2023		2022		% CHANGE FROM 2022
	KG	% KG	KG	% KG	
MAN-MADE CELLULOSE FIBERS	6.216.991	12,1%	6.162.216	12,7%	0,9%
Naia Acetate	9.939	0,2%	-	-	-
Conventional Cellulose	13.092	0,2%	37.711	0,6%	-65%
Conventional Lyocell	72.312	1,2%	98.645	1,6%	-27%
FSC Lyocell	3.723	0,1%	6.921	0,1%	-46%
Registered Trademark Lyocell (Lenzing, Seacell)	183.906	3,0%	293.480	4,8%	-37%
Conventional Modal	31.628	0,5%	22.280	0,4%	42%
FSC Modal	254	0,0%	910	0,0%	72%
Registered Trademark Modal (Lenzing, Tangcell Lenzing, Birla)	74.614	1,2%	42.535	0,7%	75%
Conventional Viscose	1.744.979	28,1%	2.353.832	38,2%	-26%
Registered Trademark Viscose (Circulose, Ecotang, Ecovero, Enka, Livaeco)	2.017.986	32,5%	1.617.353	26,2%	25%



## 5. Our decarbonization strategy

Breakdown of fibers &amp; materials

	2023		2022		% CHANGE FROM 2022
	KG	% KG	KG	% KG	-
<b>MAN-MADE CELLULOSE FIBERS</b>	<b>6.216.991</b>	<b>12,1%</b>	<b>6.162.216</b>	<b>12,7%</b>	<b>0,9%</b>
FSC/PEFC Viscose	2.056.797	33,1%	1.675.393	27,2%	23%
Recycled Viscose	1.953	0,0%	7.790	0,1%	-75%
<b>POLYAMIDE</b>	<b>1.978.900</b>	<b>3,9%</b>	<b>1.994.298</b>	<b>4,1%</b>	<b>-0,8%</b>
Conventional	1.827.161	92,3%	1.916.027	96,1%	-5%
Recycled	151.738	7,7%	78.271	3,9%	94%
<b>ACRYLIC</b>	<b>1.267.436</b>	<b>2,5%</b>	<b>1.593.940</b>	<b>3,3%</b>	<b>-20,5%</b>
Conventional	1.121.266	88,5%	1.377.777	86,4%	-19%
Registered Trademark Radianza	9.077	0,7%	36.643	2,3%	-75%
Recycled	137.093	10,8%	179.520	11,3%	-24%

## 5. Our decarbonization strategy

Breakdown of fibers &amp; materials

	2023		2022		% CHANGE FROM 2022
	KG	% KG	KG	% KG	
<b>POLYURETHANE</b>	<b>2.250.595</b>	<b>4,4%</b>	<b>2.092.371</b>	<b>4,3%</b>	<b>7,6%</b>
Conventional	2.225.339	98,9%	2.069.455	98,9%	8%
Recycled	6.790	0,3%	3.011	0,1%	125%
Water-based	18.465	0,8%	19.905	1,0%	-7%
<b>LEATHER</b>	<b>1.354.302</b>	<b>2,6%</b>	<b>1.435.477</b>	<b>3,0%</b>	<b>-5,7%</b>
Conventional Bovine Leather	32.407	2,4%	46.103	3,2%	-30%
LWG Bovine Leather	1.034.715	76,4%	1.159.822	80,8%	-11%
Recycled	1.629	0,1%	-	-	-
Conventional Buffalo Leather	1.483	1,6%	-	-	-
Conventional Caprine Leather	-	-	13.039	0,9%	-
LWG Caprine Leather	44.619	3,3%	81.986	5,7%	-46%

## 5. Our decarbonization strategy

Breakdown of fibers &amp; materials

	2023		2022		% CHANGE FROM 2022
	KG	% KG	KG	% KG	-
<b>LEATHER</b>	<b>1.354.302</b>	<b>2,6%</b>	<b>1.435.477</b>	<b>3,0%</b>	<b>-5,7%</b>
Conventional Ovine Leather	964	0,1%	28.754	2,0%	-97%
LWG Ovine Leather	218.483	16,1%	105.772	7,4%	107%
<b>WOOL</b>	<b>1.478.880</b>	<b>2,9%</b>	<b>1.260.292</b>	<b>2,6%</b>	<b>17,3%</b>
Cashmere	23.595	1,6%	23.480	1,9%	0%
Recycled Cashmere	1.353	0,1%	-	-	-
Conventional Wool	686.167	46,4%	554.384	44,0%	24%
Recycled Wool	738.022	49,9%	678.054	53,8%	9%
Responsible Wool Standard	29.743	2,0%	4.374	0,3%	580%
<b>LINO</b>	<b>1.275.860</b>	<b>2,5%</b>	<b>1.006.198</b>	<b>2,1%</b>	<b>26,8%</b>
Conventional	1.001.181	78,5%	962.641	95,7%	4%

## 5. Our decarbonization strategy

Breakdown of fibers &amp; materials

	2023		2022		% CHANGE FROM 2022
	KG	% KG	KG	% KG	
European Flax	274.679	21,5%	43.556	4,3%	531%
<b>SILK</b>	<b>7.906</b>	<b>0,02%</b>	<b>3.643</b>	<b>0,01%</b>	<b>117,0%</b>
Conventional	7.906	100%	3.643	100%	117%
OTHERS (metals, other natural fibers like hemp, other synthetic fibers like elastane, ceramics, feathers, etc.)	1.115.248	2,2%	1.089.375	2,2%	2,4%
<b>TOTAL</b>	<b>51.391.114</b>	<b>100%</b>	<b>48.569.683</b>	<b>100%</b>	<b>5,8%</b>

## 6. Climate-related risks & opportunities

This analysis was carried out through two workshops that included a first theoretical phase of current context and a second brainstorming phase to develop probability and impact matrices and to identify and prioritize the company's main climate risks and opportunities. Mango defines climate risk as the impact of physical or transitional hazards multiplied by the probability of occurrence of these hazards or climate threats. The company has analyzed two types of climate risks: transition risks and physical risks. Mango has identified five types of opportunities classified into the following categories: products and services, resilience, new markets, resource efficiency and energy sources. This analysis of climate risks and opportunities serves both to assess the suitability of the present sustainability strategy to the current climate context and to take into account strategic sustainability decisions for the future of the company. The main climate risks and opportunities identified by Mango are already integrated into the company's sustainability strategy. In 2023, this analysis has

been complemented with an environmental risk map developed in collaboration with the CSR Chair at the Universitat Pompeu Fabra (UPF). This risk map, published on the Chair's website, assesses the environmental risks of 191 countries by considering eight indicators in relation to the impact on water, land, biodiversity and climate. This tool will serve as a guide for prioritizing projects and actions to protect and restore ecosystems and their biodiversity in the most at-risk countries. Through this analysis, Mango has been able to reaffirm that among all its main production countries, India, Bangladesh, Morocco, Pakistan and Turkey are the countries with the highest environmental risk, classified as high or medium-high.

## 6. Climate-related risks & opportunities

During 2024 & 2025 we plan to update our Climate-Related Risk & Opportunities analyses and relate it to their respective financial cost/gain.

### Main climate risks identified

DESCRIPTION OF THE IDENTIFIED RISK	TYPE OF RISK	TERM	LINES OF ACTION TO ADDRESS RISKS
Existence of increasingly stringent climate change regulation	Transition, legal	Short	Creation of a working group, involving the legal and sustainability department, with the external collaboration of a consulting firm, to monitor new legislation on sustainability, study its impact on Mango's activity and ensure that the company's strategy and operations are aligned with current and future legal requirements.
Reduced seasonal variability	Physical, chronic	Short	Mango is working on the definition of a short, medium and long term materials strategy based on the incorporation of materials of recycled origin, from organic or regenerative agriculture, of preferential origin according to Textile Exchange, and innovative materials. The definition of this strategy will allow the company to be resilient in the future in the face of these challenges, in addition to contributing to reducing the environmental impact caused by raw materials. Through partnerships with industry organisations such as The Fashion Pact, Textile Exchange, Cascale and Better Cotton, Mango is committed to industry collaboration to collectively address these challenges. In addition, through supply agreements with companies such as Materra, a regenerative cotton company, they allow Mango to have a more diverse basket of materials and reduce risks.
Increase in raw material costs	Physical, chronic	Short	
Temperature increase	Physical, chronic	Short	
Lack of investment in new technologies for supply chain traceability	Transition, technological	Long	In 2024, Mango will start working with a new digital platform for traceability, which will help and facilitate the company to manage the traceability of materials and also the supply chain. The implementation of this tool will start in early 2024. The use of this tool will allow the company to have transparency from fibre to product and guarantee the authenticity and provenance of sustainable materials. However, Mango publishes for the second consecutive year its list of factories.

## 6. Climate-related risks & opportunities

During 2024 & 2025 we plan to update our Climate-Related Risk & Opportunities analyses and relate it to their respective financial cost/gain.

### Main climate opportunities identified

DESCRIPTION OF THE IDENTIFIED RISK	TYPE OF RISK	TERM	LINES OF ACTION TO ADDRESS RISKS
Promote actions for a circular economy throughout the production chain.	Resource efficiency	Medium	Mango has a team dedicated to implementing circular economy criteria in the company. This includes changes in the design approach, prioritising recycled materials and promoting projects such as the collection of used clothing and footwear through in-store garbage cans.
Participation in renewable energy programs and adoption of energy efficiency measures	Energy sources	Short	Mango's emissions reduction strategy includes the goal of reducing Scope 1 and 2 emissions by 80%. To achieve this goal, Mango's works and sustainability department prioritises the negotiation and purchase of renewable energy throughout the company's corporate store network.
Reduce packaging material used (especially plastic)	Resilience	Short	By 2023, Mango's more sustainable packaging project is implemented in nine countries. In addition, the company is working to reduce unnecessary components and packaging as much as possible and to find lower-impact alternatives for all packaging that cannot be eliminated. Mango's goal is to achieve 100% more sustainable packaging and the elimination of single-use plastic.
Use of more efficient production and distribution processes	Resource efficiency	Long	Mango fosters long-lasting relationships with its suppliers, accompanying them in the environmental challenges of the industry. The company provides guidelines with environmental requirements during article production and evaluates the environmental performance of its suppliers using the Higg Index FEM tools and the ZDHC initiative. These actions are part of the company's decarbonisation strategy and its materials strategy to reduce the impact of Scope 3 emissions.
Shifts in consumer preferences toward a lower impact product	Product and services	Medium	Mango's more sustainable collection objectives are focused on prioritising the use of materials and processes with a lower environmental impact throughout the company's collection, in response to changing consumer preferences.

## 7. Closing remarks

We are dedicated to reducing emissions throughout our value chain to limit global temperature rise to below 1.5°C. While we are walking our long journey to achieve our ESG objectives, notable challenges persist. In order to transform this systematic challenges into actions, the industry needs collaboration among all stakeholders (government, academy, brands, retailers, manufacturers, farmers, etc).

In recent years, we have made substantial advancements in refining our data and calculation methodologies to accurately assess emissions and track improvement initiatives. This ongoing effort will continue as we intensify our focus on decarbonization.



# Contact information

## Contact information

For any inquiries regarding the company's GHG emissions inventory and the Decarbonization Action Plan, please contact:

**Environmental Sustainability Team**  
environment@mango.com

## Headquarters

Mango MNG HOLDING, S.A.U.  
Calle Mercaders 9-11  
Pol. Ind. Riera de Caldes C.P. 08184  
Palau-solità i Plegamans  
Barcelona (España)

**mango.com**

**MANGO**