

OEF – Organisation Environmental Footprint 2023

Synthesis

CANALI

Rev00 of 06 December 2024

This study was conducted in accordance with the OEF method defined by the Commission Recommendation (EU)

2021/2279. Independent external auditor, Certiquality S.r.l., Statement No. OEF017/24

OEF Canali 2023 – Results Overview

- Introduction and Objectives
- Organisation
- Phases of the Life Cycle
- Environmental Footprint Results
- Relevant Environmental Impact Categories
- Interpretation of Results
- Annex 1 – Statement Information
- Annex 2 – Normalised and weighted results

Introduction and Objectives

Considering environmental protection to be a primary objective to be pursued with a view to continuous improvement, the Organisation has decided to adopt the LCA (Life Cycle Assessment) approach in order to determine the impacts associated with its activities and the level of significance of its environmental aspects from a **life cycle perspective**. In particular, it has selected the OEF/PEF method described by European Recommendation No. 2021/2279 to quantify the impact of its production activities during the year 2023 on the broad spectrum of environmental sectors, monitored according to the 16 different indicators established by the scheme.

The results of the study are intended to:

- Be an internal tool within the company to investigate the contributions of the various phases of the life cycle of its activities, so that they can be oriented by adopting technologies and operating procedures that involve minimal environmental impact and a conscious and ethically oriented use of all resources, including energy.
- Measure the emissions associated with the life cycle of the entire organisation for inclusion in the **Sustainability Report** for the reporting year.
- Assess the performance of the organisation.

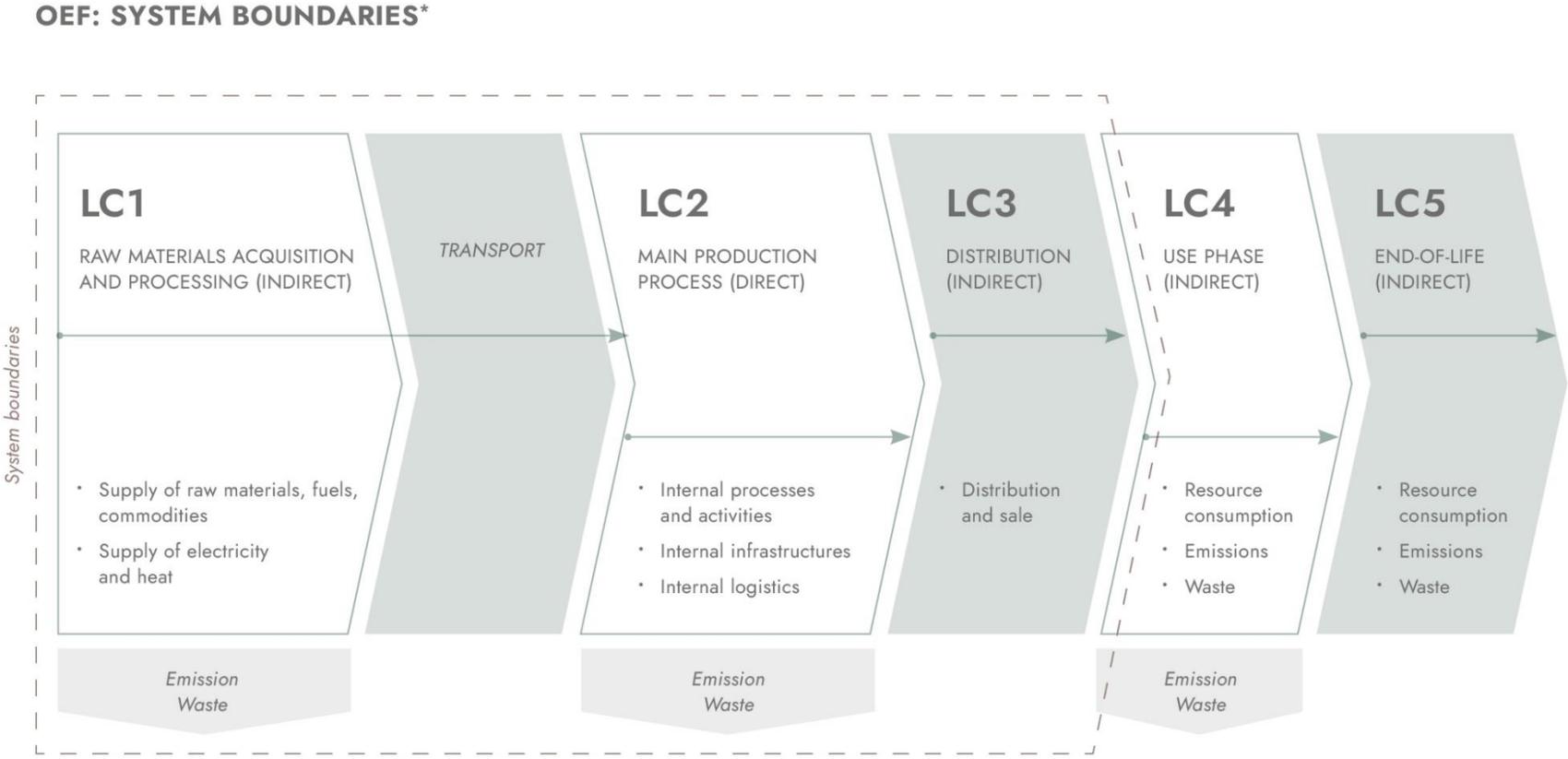
Organisation

Organisation:	Canali S.p.A.
Registered Office	Via Lombardia, 17, 20845 Sovico MB
Production sector	Manufacture of wearing apparel, except fur apparel
Description	Luxury tailored garments for men
ATECO Code	14.1
Reference year	01-01-2023 / 31-12-2023

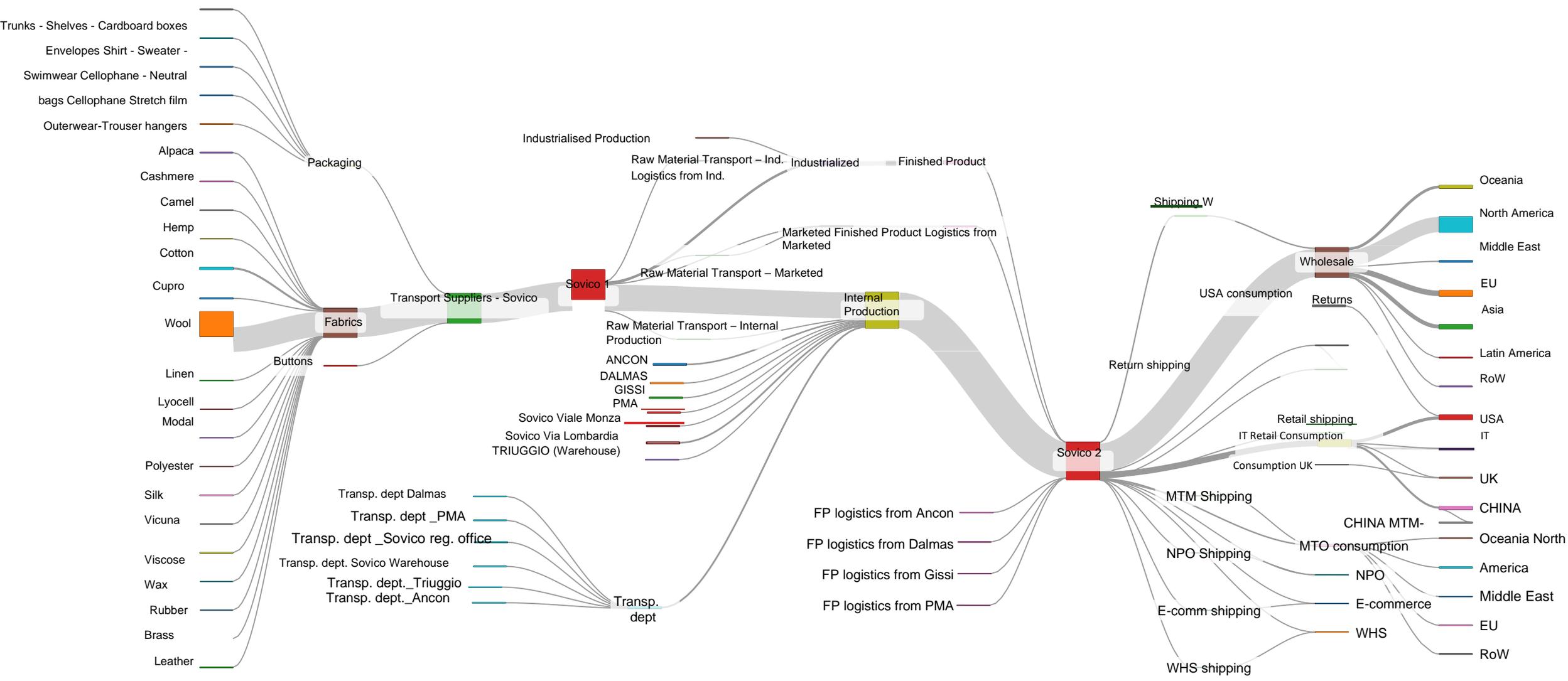
Production Sites included	Address
Sovico	Sovico Logistics, Via Lombardia 17 (MB)
Sovico V.Le Monza	Sovico Logistics, Viale Monza 24 (MB)
Ancon	Filottrano Via Schiavoni 9
Dalmas	S.M. Nuova Industrial Zone Pradellona
Pantalonificio Marche	Filottrano Via Dell'Industria 162
Gissi	Gissi, Industrial Zone
Triuggio	Via Pellico 2 - Triuggio

Phases of the Life Cycle

- The system boundaries determine the life cycle phases that are part of the study. The study is defined as 'cradle-to-gate', meaning it excludes both the use and end-of-life phases of the product.

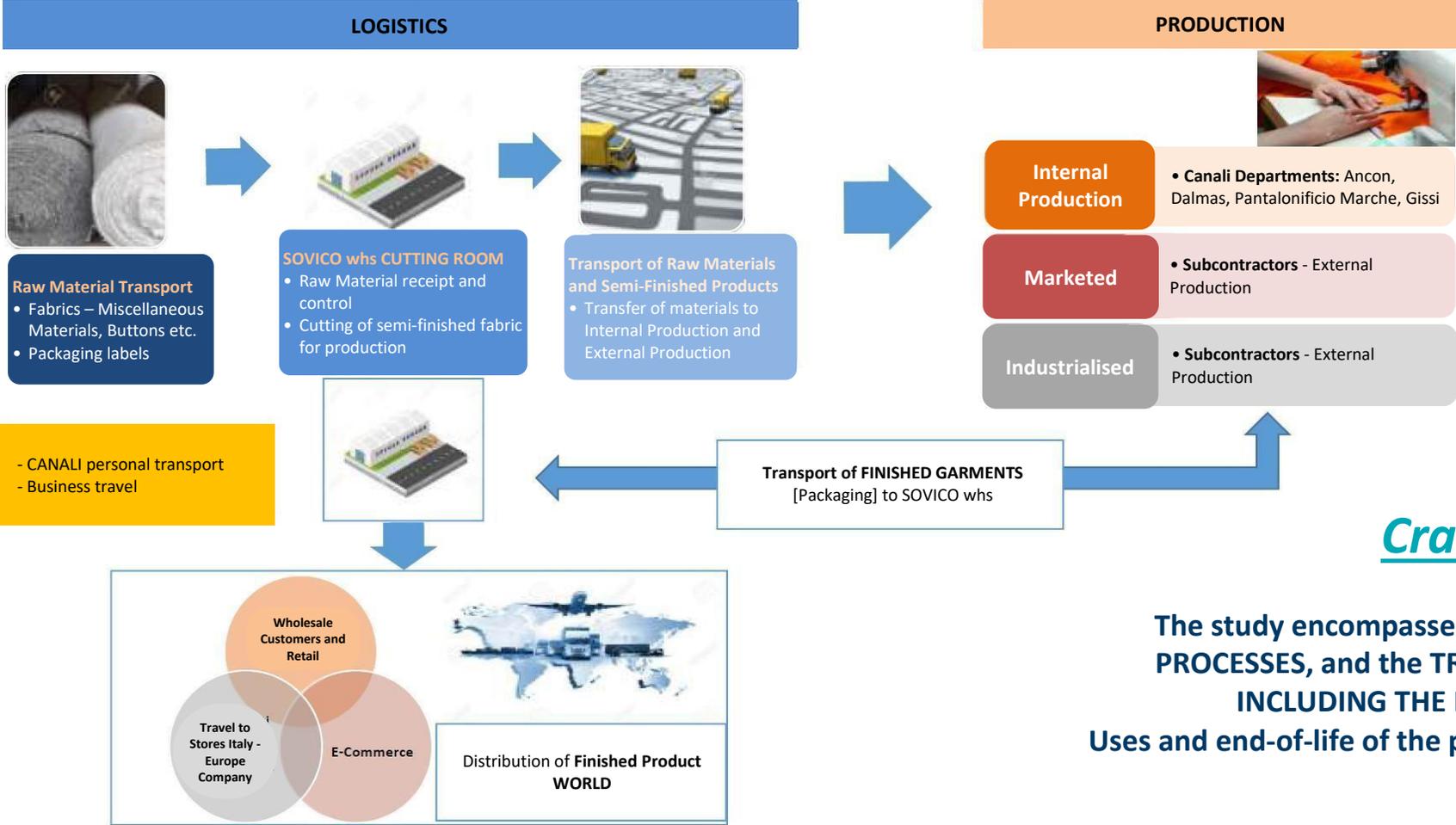


* LC=Life Cycle stage.



Detail of the system boundaries

Life Cycle Phases: Production (LCS2)



Cradle-to-gate

The study encompasses all UPSTREAM processes, all CORE PROCESSES, and the TRANSPORT OF FINISHED PRODUCTS, INCLUDING THE IMPACTS OF POINTS OF SALE. Uses and end-of-life of the products covered by the organisation are excluded.

LCA phase	Processes included within OEF boundaries	Brief description
LCS1	Wool Fabric Production	<i>The wool fabric was modelled based on the document 'National Voluntary Scheme Made Green in Italy Product Category Rule (CPR) of Fabrics of combed wool or combed fine hair; Fabrics of coarse hair and horsehair [NACE 13.20.12]' (Version 1.0; Validity: 25/01/2028).</i>
LCS1	Production of Other Fabrics	<i>The other fabrics used (e.g. cupro, cotton, etc.) by the organisation during the reference year were modelled based on the processes in the EF 3.1 database, covering the consumption of resources, energy, water consumption and emissions, and waste production from the fibre production stage, followed by the spinning, weaving, dyeing and finishing of the fabric, as well as transport along the different stages of the supply chain. The process yields are those provided by the EF3.1 database.</i>
LCS1	Production of Accessories and Packaging	<i>Production of accessories (buttons) and packaging (cardboard boxes, hangers, film):</i>
LCS1	Fuel Production	<i>Fuel production including extraction and transport</i>
LCS1	Power Generation	<i>Power generation based on the national residual energy mix in the reference year.</i>
LCS1	Transport of Raw Materials, Accessories and Packaging Between Supplier and Canali	<i>Transport of raw materials, accessories (buttons/zips) and packaging based on specific distances between suppliers and the Canali plant in Sovico.</i>
LCS2	Internal Logistics of Raw Materials Between Sovico and Internal and Third-Party Production Sites	<i>Transport of raw materials, accessories and packaging on the basis of specific distances between the Canali di Sovico plant and internal and third-party production sites.</i>
LCS2	Garment Production at Canali Internal Production Sites	<i>Consumption of raw materials (fabrics) and energy, waste management, and emissions related to the different process phases for all activities that take place at Canali's internal production sites.</i>
LCS2	External Production (Industrialised)	<i>Consumption of Raw Materials (fabrics) and energy related to the different steps of the process carried out externally.</i>
LCS2	External Production (Marketed)	<i>Consumption of Raw Materials and energy, particularly for the production of the marketed articles.</i>
LCS2	Personnel Transport	<i>Transport to and from the Canali Spa production sites for personnel was included, taking into account specific origins and actual modes of transport (car/bus/foot).</i>
LCS2	Business Travel	<i>Travel associated with business trips of Canali Spa employees has been included, taking into account specific destinations and actual modes of transport (air/road).</i>
LCS2	Internal Logistics Finished Products in Sovico	<i>Transport of finished products including accessories and packaging based on specific distances between internal and third-party production sites and the Canali plant in Sovico</i>
LCS3	Transport of Finished Products	<i>Transport of the finished product to customers based on market destinations. Shipments were modelled on the basis of primary data regarding product destinations and on the basis of actual shipping and sales methods.</i>
LCS3	Stores in Italy	<i>The consumption of energy and water and waste production of the outlets controlled directly by Canali Spa was modelled.</i>
LCS3	Stores, Rest of the World	<i>The consumption of energy and utilities was modelled from the points of sale directly controlled by Canali Holding</i>
LCS = Life Cycle Stage		

Data Quality, Assumptions, Limitations and Cut-Off

- Following what is laid out in the specific management procedure, which defines at company level how input and output data should be collected, the sources and respective responsibilities, the organisation has compiled an inventory of all inputs and outputs for its proprietary processes.
- The quality of the inventory data was very good (DQR<2)
- The wool fabric, the main raw material of the production process, was modelled based on the document 'National Voluntary Scheme Made Green in Italy Product Category Rule (CPR) of Fabrics of combed wool or combed fine hair; Fabrics of coarse hair and horsehair [NACE 13.20.12]' (Version 1.0; Validity: 25/01/2028). The model was regionalised in terms of electricity consumption, water consumption, and land use based on the origins of the wool during the reference year.
- The other fabrics used by the organisation during the reference year were modelled based on the processes in the EF 3.1 database, covering the consumption of resources, energy, water consumption and emissions, and waste production from the fibre production stage, followed by the spinning, weaving, dyeing and finishing of the fabric, as well as transport along the different stages of the supply chain. The process yields are those provided by the EF3.1 database.
- Specific data on incoming materials were also collected in terms of suppliers, distances and modes of transport, energy consumption, water discharge and air emissions, waste production and transport.
- The electricity purchased by the organisation, and in relation to contract manufacturing, was modelled using the Italian Residual Mix in the reference year. It is specified that renewable electricity has not been purchased for 2023.
- The exclusion of specific consumption items for which no reliable LCA data could be found in the databases is in no case higher than 1% of the total by mass. For cut-offs of 1%, infrastructure and capital goods were excluded.

OEF Environmental Footprint Results

Results	UOM	OEF - Canali 2023
Acidification	mol H+ eq	721,181
Climate change	kg CO ₂ eq	49,511,918
Ecotoxicity, freshwater	CTUe	626,686,510
Particulate matter	disease inc.	6.89
Eutrophication, marine	kg N eq	171,286
Eutrophication, freshwater	kg P eq	11,597
Eutrophication, terrestrial	mol N eq	2,955,810
Human toxicity, cancer	CTUh	0.07
Human toxicity, non-cancer	CTUh	0.52
Ionising radiation	kBq U-235 eq	1,028,594
Land use	Pt	709,814,060
Ozone depletion	kg CFC11 eq	0.54
Photochemical ozone formation	kg NMVOC eq	123,912.04
Resource use, fossils	MJ	396,213,410
Resource use, minerals and metals	kg Sb eq	123.31
Water use	m ³ depriv.	63,733,944
<i>Climate change - Biogenic</i>	<i>kg CO₂ eq</i>	<i>12,564,235</i>
<i>Climate change - Fossil</i>	<i>kg CO₂ eq</i>	<i>34,450,573</i>
<i>Climate change - Land use and LU change</i>	<i>kg CO₂ eq</i>	<i>2,497,110</i>

Normalisation and Weighting of Results

The identification of the most relevant categories was achieved through the normalisation and weighting of the results.

Normalization: the environmental impact values have been normalised, that is, divided by a 'reference value' so as to be able to establish the magnitude of each environmental effect against a reference value, represented by the average annual emission factors per person worldwide.

Weighting: the normalised environmental footprint results are multiplied by a set of weighting factors, which reflect the relative perceived importance of the impact categories considered. The weighted environmental footprint results can then be compared to assess their relative importance. Weighting allows for the determination of the scale of each environmental issue and makes it possible to identify significant impact categories that together represent 80% of the total environmental impact.

Relevant Categories, Phases and Processes (>80%)

OEI - Canali 2023	Most relevant phases of the life cycle	Relevant process 1	Relevant process 2	Relevant process 3	verification
Climate change	[LC1]	Raw material	Internal productions (thermal energy)		
		80%	5%		85%
Particulate matter	[LC1]	Raw material			
		97%			97%
Acidification	[LC1]	Raw material			
		96%			96%
Eutrophication, terrestrial	[LC1]	Raw material			
		97%			97%
Resource use, fossils	[LC1][LC2]	Raw material	Internal productions (thermal energy)	Distribution of Finished Products	
		64%	9%	8%	81%
Water use	[LC1]	Raw material			
		95%			95%

Interpretation of Results

OEF - Canali 2023	Unit	Button/ zippers	Packaging	Raw material	Transport IN	Internal logistics	Third-party processing	Electricity	Thermal energy	Water consumption	Waste	Owned motor vehicles	Finished Products distribution	Stores	Employees commuting	Business travel
Acidification	mol H+ eq	0,18%	0,10%	94,71%	0,01%	0,09%	0,19%	1,76%	0,19%	0,01%	0,00%	0,05%	1,26%	0,82%	0,46%	0,16%
Climate change	kg CO ₂ eq	0,10%	0,35%	76,93%	0,06%	0,43%	0,69%	6,49%	4,50%	0,02%	0,00%	0,20%	4,39%	3,31%	1,96%	0,58%
Ecotox., fw	CTUe	0,22%	0,34%	95,86%	0,02%	0,16%	0,10%	0,93%	0,32%	0,00%	0,00%	0,11%	0,34%	0,62%	0,93%	0,05%
Particulate matter	disease inc.	0,11%	0,09%	96,47%	0,03%	0,18%	0,12%	0,60%	0,12%	0,00%	0,00%	0,10%	0,35%	1,00%	0,77%	0,05%
Eutrophication, marine	kg N eq	0,21%	0,15%	94,08%	0,02%	0,12%	0,16%	1,27%	0,29%	0,00%	0,00%	0,06%	2,14%	0,74%	0,50%	0,27%
Eutrop., fw	kg P eq	0,44%	0,69%	87,98%	0,02%	0,15%	0,55%	5,80%	0,21%	0,01%	0,00%	0,12%	0,29%	2,62%	1,05%	0,07%
Eutrophication, terrestrial	mol N eq	0,12%	0,07%	96,35%	0,01%	0,07%	0,09%	0,77%	0,18%	0,00%	0,00%	0,04%	1,36%	0,45%	0,32%	0,17%
Human toxicity, cancer	CTUh	0,55%	0,93%	66,13%	0,27%	2,22%	0,76%	7,77%	4,03%	0,04%	0,00%	1,16%	3,16%	2,84%	9,66%	0,48%
Human toxicity, non-cancer	CTUh	1,28%	0,53%	85,65%	0,05%	0,34%	0,28%	2,82%	0,51%	0,01%	0,00%	0,22%	4,20%	1,92%	1,63%	0,54%
Ionising radiation	kBq U-235 eq	0,15%	2,09%	61,97%	0,07%	0,54%	1,64%	16,10%	0,58%	0,07%	0,00%	0,26%	0,81%	13,51%	1,95%	0,26%
Land use	Pt	0,30%	0,63%	96,68%	0,03%	0,18%	0,05%	0,53%	0,07%	0,01%	0,00%	0,07%	0,31%	0,44%	0,65%	0,06%
Ozone depletion	kg CFC11 eq	0,05%	1,02%	61,76%	0,11%	0,79%	0,95%	10,00%	10,83%	0,04%	0,00%	0,39%	6,22%	3,63%	3,39%	0,83%
Photochemical ozone formation	kg NMVOC eq	0,15%	0,66%	67,76%	0,11%	0,77%	0,78%	7,13%	3,59%	0,02%	0,00%	0,36%	10,36%	3,64%	3,35%	1,33%
Res. use, fossils	MJ	0,08%	0,86%	59,44%	0,10%	0,75%	1,17%	11,65%	8,73%	0,04%	0,00%	0,33%	7,27%	5,44%	3,18%	0,96%
Res. use, minerals and metals	kg Sb eq	6,40%	3,25%	71,72%	0,08%	0,75%	0,26%	3,25%	0,42%	0,05%	0,00%	0,90%	0,57%	4,74%	7,45%	0,16%
Water use	m ³ depriv.	0,03%	0,18%	95,30%	0,00%	0,02%	0,27%	1,18%	0,07%	2,37%	0,00%	0,01%	0,07%	0,36%	0,13%	0,02%

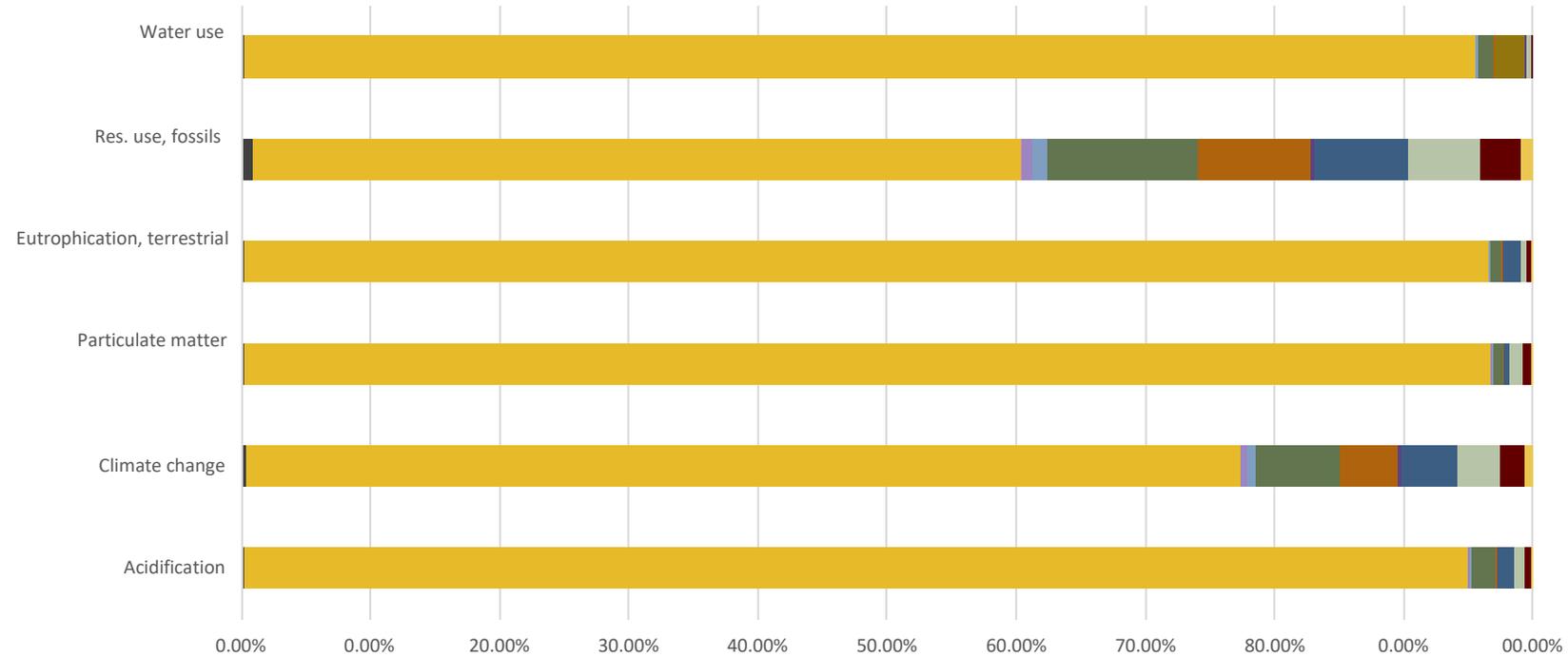
Key

	1%<x<5%
	5% < x < 10%
	10% < x < 50%
	50%<x<80%
	>80%

Interpretation of Results

- *The most relevant phase is the procurement of raw materials for the manufacturing of wearing apparel, in particular those used for the production of initial fabrics.*
- *A Monte Carlo Analysis with a 95% confidence interval was used to assess the uncertainty associated with the results.*

Uncertainty for the relevant categories was low (<5%) except for the Water Use indicator.



	Acidification	Climate change	Particulate matter	Eutrophication, terrestrial	Res. use, fossils	Water use
Buttons/zip	0, 8%	0, 0%	0, %	0, 2%	0,08%	0,03%
Packaging	0, 0%	0,35%	0,0 %	0,07%	0,86%	0, 8%
Raw materials	4,7 %	76, 3%	6,47%	6,35%	5 ,44%	5,30%
Transport IN	0,0 %	0,06%	0,03%	0,0 %	0, 0%	0,00%
Internal logistics	0,0 %	0,43%	0, 8%	0,07%	0,75%	0,02%
Third-party processing	0, %	0,6 %	0, 2%	0,0 %	, 7%	0,27%
Electricity internal productions	,76%	6,4 %	0,60%	0,77%	,65%	, 8%
Thermal energy internal productions	0, %	4,50%	0, 2%	0, 8%	8,73%	0,07%
H2O internal productions	0,0 %	0,02%	0,00%	0,00%	0,04%	2,37%
Waste internal productions	0,00%	0,00%	0,00%	0,00%	0,00%	0,00%
Owned vehicles internal productions	0,05%	0,20%	0, 0%	0,04%	0,33%	0, 0%
Distribution FP	,26%	4,3 %	0,35%	,36%	7,27%	0,07%
Stores	0,82%	3,3 %	,00%	0,45%	5,44%	0,36%
Employees commuting	0,46%	, 6%	0,77%	0,32%	3, 8%	0, 3%
Business travels	0, 6%	0,58%	0,05%	0, 7%	0, 6%	0,02%

Conclusions and Possible Developments



Public disclosure of information in a transparent and verified manner
Data can be used for the **Sustainability Report**



Selection of electricity supply sources with reduced environmental impact (renewable)



Optimisation of energy consumption in internal production phases



90% of the impacts are related to incoming fabrics.

- Improvement in the representativeness of data by involving other relevant suppliers to enhance the traceability of the supply chain and select the most sustainable products

Implementation of the Environmental Management System in accordance with the **UNI EN ISO 14001:2015 standard in the Life Cycle Perspective.**

Annex 1 – Information on the Study

This synthesis of the Canali Organisation's environmental footprint refers to the 'Organisation Environmental Footprint (OEF) Canali 2023 Environmental Footprint Assessment Study' (Revision no. 01 of 06/12/2024).

Both documents have been subjected to an independent verification process by Certiquality Srl.

The study was carried out using the European Union Organisation Environmental Footprint (OEF) method. The software used is Simapro 9.6, the database is Ecoinvent 3.10, and the calculation method is the Environmental Footprint 3.1.

The PEF study is conducted in accordance with the following international documents and standards:

- ISO 14040:2021 Environmental management - Life cycle assessment - Principles and Framework
- ISO 14044:2021 Environmental management - Life cycle assessment - Requirements and Guidelines
- Commission Recommendation (EU) 2021/2279 on the use of environmental footprint methods to measure and communicate the life cycle environmental performance of products and organisations
- Draft PEFCR (Product Environmental Footprint Category Rule) – Apparel and Footwear - Version 2.1; 26 July 2024; Valid to: TBC
- National Voluntary Scheme 'Made Green in Italy' Product Category Rule (PCR) for Fabrics of combed wool or combed fine hair; Fabrics of coarse hair and horsehair [NACE 13.20.12] (Version 1.0; Validity: 25/01/2028).

Annex 2 – Normalised and Weighted OEF Results

Results	OEF - Canali 2023 Normalised	OEF - Canali 2023 Weighted [kPt]	Relevant
Acidification	1.30E-04	0.805	x
Climate change	6.56E+03	1.381	x
Ecotoxicity, freshwater	1.10E+04	0.212	
Particulate matter	1.16E+04	1.037	x
Eutrophication, marine	8.76E+03	0.259	
Eutrophication, freshwater	7.22E+03	0.202	
Eutrophication, terrestrial	1.67E+04	0.62	x
Human toxicity, cancer	4.28E+03	0.091	
Human toxicity, non-cancer	4.04E+03	0.074	
Ionising radiation	2.44E+02	0.012	
Land use	8.66E+02	0.069	
Ozone depletion	1.02E+01	0.001	
Photochemical ozone formation	3.03E+03	0.145	
Resource use, fossils	6.10E+03	0.507	x
Resource use, minerals and metals	1.94E+03	0.146	
Water use	5.56E+03	0.473	x

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