

**Product Environmental Footprint (PEF)
Men's 100% Wool Jackets and Suits
Summary**

Canali S.p.A.

References

Organisation:	Canali S.p.A.
Registered Office and Plant	Via Lombardia, 17, 20845 Sovico MB
Business Code (ATECO)	14.1 - Manufacture of wearing apparel, except fur apparel
Geographical validity	The PEF study is developed in the Italian context. The market for the organisation's products is international.
Technical Support	ICA - Società di Ingegneria Chimica per l'Ambiente S.r.l. – Bergamo, Italy
Audit Procedure	Independent external auditor, Certiquality S.r.l.
Certificate number	CERTIFICATE NO. PEF017/22

This study was conducted in accordance with the PEF method defined by Recommendation 2279/2021/EU.

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2 OBJECTIVES OF THE STUDY

A leading manufacturer of luxury tailored garments and proponent of typically Italian masculine elegance, since 1934 Canali S.p.A. has been promoting traditional craftsmanship and Made in Italy, focusing on fabric quality, attention to detail and constant innovation and creativity in its sartorial tradition. Today, the Canali Group, led by the third generation, relies on 5 production centres in Italy, more than 1500 employees worldwide and 190 boutiques and is present in more than 1000 points of sale in over 100 countries. The primary values pursued by Canali S.p.A., as declared in its Code of Ethics, include protection of the environment and the safeguarding of the ecosystem through sustainable business decisions based on a conscious balance between economic initiative and environmental concerns. Respect for the environment and the ecosystem is a primary value for the Company. Therefore, business decisions and operating activities must respond to the principles of balance between economic initiatives and environmental concerns, in full compliance with current environmental and ecosystem protection regulations. The Company is also committed to making sustainable business decisions that have a negligible impact on the environment; this is achieved through investments in energy efficiency, the quality of the resources used, the low environmental impact of production and the reduction of waste. 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. 2279/2021 to quantify the impact of its production activities on the broad spectrum of environmental sectors, monitored according to the 16 different indicators established by the scheme.

To this end, the impact of the entire organisation (Organisation Environmental Footprint) was quantified for the activities carried out in the year 2019. This study represents a more in-depth version of this analysis, quantifying the environmental performance of some representative products and in particular pure wool jackets and suits manufactured by the organisation during the reference year 2019.

The results of the study are intended to be an internal tool within the organisation 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 and using plant and machinery that involve minimal environmental impact and a conscious and ethically oriented use of all resources, including energy.

The results of the study can be used to enhance the organisation's performance with respect to its (B2C) customers as well, however, the study is not intended to directly corroborate comparisons or comparative statements to be disclosed to the public.

For the products subject to the study, the PECFR for the apparel and footwear sector (Product Environmental Footprint Category Rule - Apparel and Footwear - Version 1.3; 28 March 2022; Valid to:TBC), which was applied for this evaluation, is currently being drafted (starting from 2020).

3 DEFINITION OF THE SCOPE OF THE STUDY

3.1 Definition of the organisation

Organisation:	Canali S.p.A.
Registered Office	Via Lombardia, 17, 20845 Sovico MB
Production sector	Manufacture of wearing apparel, except fur apparel
ATECO Code	14.1

3.2 Products analysed in the PEF study and functional unit.

A '**Functional Unit**' is defined as the quantified performance of a product system to be used as a unit of reference. The units of analysis adopted in this environmental footprint study are:

- a Canali jacket (lined/unlined);
- a Canali suit (lined)

What	Men's jacket	Men's suit
How much	1 men's jacket size 50 including packaging	1 men's suit size 50 including packaging
How well	Men's jacket made of 100% wool lined/unlined solid colour (U); striped (R) or check (Q), worn in good condition.	Men's suit (jacket plus trousers) made of 100% wool lined solid colour (U); striped (R) or check (Q), worn in good condition.
How Long	One use. This aspect includes the jacket durability parameters, the manner and frequency of washing and the quality of the product. ¹ The expected life of the jacket is 167 uses with an expected use of 20 days before each dry cleaning. It is also estimated that jackets are used for 5 months of the year and worn once a week.	One use. This aspect includes the jacket durability parameters, the manner and frequency of washing and the quality of the product. ² The expected life of the suit is 142 uses with an expected use of 10 days before each dry cleaning. It is also estimated that suits are used for 5 months of the year and worn once a week.
Reference year	2019	2019

Table 3.1 Definition of the functional unit

One use is defined as a 24-hour period, regardless of how many hours the garment is worn during the period. One use may not always include a washing phase as some products require washing only after a few uses. As stipulated in the draft PEFCR *Apparel and Footwear - Version 1.3* the average pre-wash usage of a

¹ The How Well aspect was defined on the basis of the most recent indications from the PEFCR Transition phase development on apparel. (PEFCR (Product Environmental Footprint Category Rule – Apparel and Footwear - Version 1.3; 28 March 2022; Valid to: TBC))

² The How Well aspect was defined on the basis of the most recent indications from the PEFCR Transition phase development on apparel. (PEFCR (Product Environmental Footprint Category Rule – Apparel and Footwear - Version 1.3; 28 March 2022; Valid to: TBC))

jacket, i.e. the number of times it is worn before washing, is 20. The PEFCR also defines the expected average pre-wash trouser usage as 3 times. However, it is believed that the trousers are washed together with their jackets, so an average number of uses of 10 before each wash is estimated for the suit (jacket+trousers).

Both the “how well” and “how long” aspects will depend on product quality. If the durability of the garment increases, the impact of the use phase will be greater as more washes take place during its life cycle, however the impact of the production phase will be lower as it is therefore divided to a greater number of uses.

Aspects related to the repairability and durability of the garment are discussed in more detail in the dedicated section.

In order to represent all jackets and suits manufactured by Canali during the reference year, 3 fabric types were selected, i.e. solid colour (U), striped (R) and check (Q), which are variables that affect the placement and energy consumption of tailoring.

The weighted average grammage for the reference year of the fabric used to make the garments was also calculated by identifying three main grammage classes³ as shown in the table below.

Weighted average grammage 2019 [g/m ²]	Class 1	Class 2	Class 3
	220<x<250	250<x<280	280<x<310
Jackets	239.51	254.92	284.87
Suits	235.31	256.92	289.57

The results of the PEFs studies will then be linked to the various product classes, as indicated in the table above (class 1, class 2 and class 3), and to the specific production types (solid colour, striped or check).

³ 100% wool suits in the selected grammage classes account for more than 95% of the total suits made in 2019. 100% wool jackets (lined/unlined) in the selected grammage classes account for more than 92% of the total jackets made in 2019.

3.3 Definition of system boundaries

As stated in the reference guidelines (Recommendation 2021/2279/EU), system boundaries include the activities carried out directly by the organisation (site-level processes) and all upstream activities, encompassing all processes linked to the product supply chain relating to the unit of analysis. Upstream processes include all impacts associated with the production of material and energy flows entering the boundaries of the production site subject to analysis. The transport of these flows from the production site to the organisation was also considered.

As set forth in PEF CR, the following life cycle stages and processes must be included in the system boundary: the entire life cycle (cradle to grave) of apparel products, including the production of raw materials (including packaging), production, distribution, use and end of life stages. All emissions and waste generated by the activities were included. The system boundaries considered in the study are outlined in Figure 3.1. The study is therefore defined as cradle-to-grave.

The core processes represented in the Sankey diagram are the direct aspects controlled by the organisation. System boundaries also include indirect impacts correlated to upstream processes.

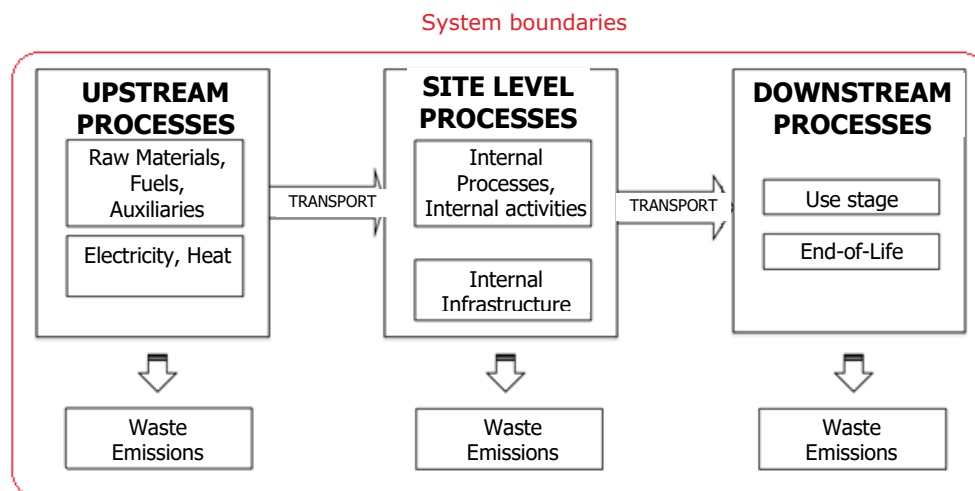


Figure 3.1: General outline of the system boundaries adopted in the study

Having generally outlined the system boundaries adopted in the study, we proceed below by analysing the site in detail, in particular by analysing the process stages, in order to specify which of the processes included in the system boundaries are to be considered foreground processes (those processes in the product life cycle for which direct access to information is available) and background processes (those processes in the product life cycle for which no direct access to information is possible). Details are given in the table below.

In Figure 3.4 the system boundaries included in the study are graphically illustrated by means of a Sankey diagram.

Processes	Brief description
Wool Fabric Production	<p>Primary data were collected (involving the main suppliers representing more than 50% of the wool consumed by the organisation in the reference year) on the main raw materials for the production of the garments, particularly wool fabrics, including:</p> <ul style="list-style-type: none"> - Energy and water consumption and emissions and waste treatment for the farming phase; - Energy and water consumption and emissions and waste treatment for the yarn production phase; - Energy and water consumption and emissions and waste treatment for the fabric production phase; - Transport between the different stages of the supply chain.
Cupro Fabric Production	<p>Primary data were collected (involving the main supplier) on the main raw materials for the production of the garments, in particular Cupro fabrics, which account for about 10%, calculated in the LCA study performed by the supplier.</p>
Production of reinforcements (camel and horsehair fabric)	<p>Based on the data sheets, the specific fabric composition, grammage and placement was modelled. The fabric manufacture stage was approximated with primary data on wool production, including energy and water consumption, emissions and waste treatment and transport between the different stages of the supply chain.</p>
Production of Accessories and Packaging	<p>Production of accessories (buttons) and packaging (cardboard boxes, hangers, film):</p> <ul style="list-style-type: none"> - Extraction and transport of main raw materials for accessory and packaging production; - Energy consumption (electricity and heat) for accessory and packaging production - Water consumption for accessory and packaging production - Emissions (into air, water and soil) for accessory and packaging production - end-of-life treatment of waste leaving plants for the production of production auxiliaries (additives)
Fuel production	<p>Fuel production including:</p> <ul style="list-style-type: none"> - Extraction of fuels (natural gas/diesel) - transport of fuels (natural gas/diesel)
Power generation	<p>Electricity production based on the sources indicated by the supplier EON and including impacts related to its transport and transformation.</p>
Transport of Raw Materials, Accessories and Packaging between supplier and Canali	<p>Transport of raw materials, accessories and packaging based on specific distances between suppliers and the Canali plant in Sovico.</p>
Internal logistics of Raw materials between Sovico and internal production sites	<p>Transport of raw materials, accessories and packaging on the basis of specific distances between the Canali plant in Sovico and internal production sites.</p>

Processes	Brief description
Garment production at Canali internal Production Sites	Consumption of Raw Materials (fabrics) and energy related to the different steps in the process, in particular: <ul style="list-style-type: none"> - consumption of raw materials and additives - Energy consumption; - Atmospheric emissions; - end-of-life treatment of waste generated; for all activities taking place at Canali S.p.A.'s internal production sites.
Internal logistics Finished Products internal production sites and Sovico	Transport of finished products including accessories and packaging based on specific distances between internal production sites and the Canali plant in Sovico
Distribution	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 (E-commerce/Stores/Company Stores/Retail).
Stores	The consumption of energy and utilities was modelled on the basis of primary data from the points of sale directly controlled by Canali S.p.A.
Customer transport	Customer transport is the customers' trip from their home to stores or the point of delivery. The modes of transport considered are: car, scooter, bicycle, public transport (such as trams and buses), walking. Home delivery via online purchase was not considered.
Use	Dry clean the garment according to the instructions on the label.
End-of-Life	The end-of-life stage includes the recycling/disposal (incineration or landfill) of jackets/suits and the end-of-life of primary packaging. This also includes transport between the consumer and the point of delivery of the waste and its subsequent disposal. According to PEFCR Apparel and Footwear v1.3 ⁴ the expected scenarios are as follows: <ul style="list-style-type: none"> • 17% recycling • 44% landfill • 39% incineration with energy recovery On a conservative basis, reuse of the garments is not considered. The details of the end-of-life modelling using the CFF (Circular Footprint Formula) can be found in Appendix D.
	Background Processes
	Foreground Processes

Table 3.2 Background and Foreground Processes

⁴ Synthesis of the Environmental Assessment of the Value Chain of Used Textiles (RDC Environment and EcoTLC, 2019)

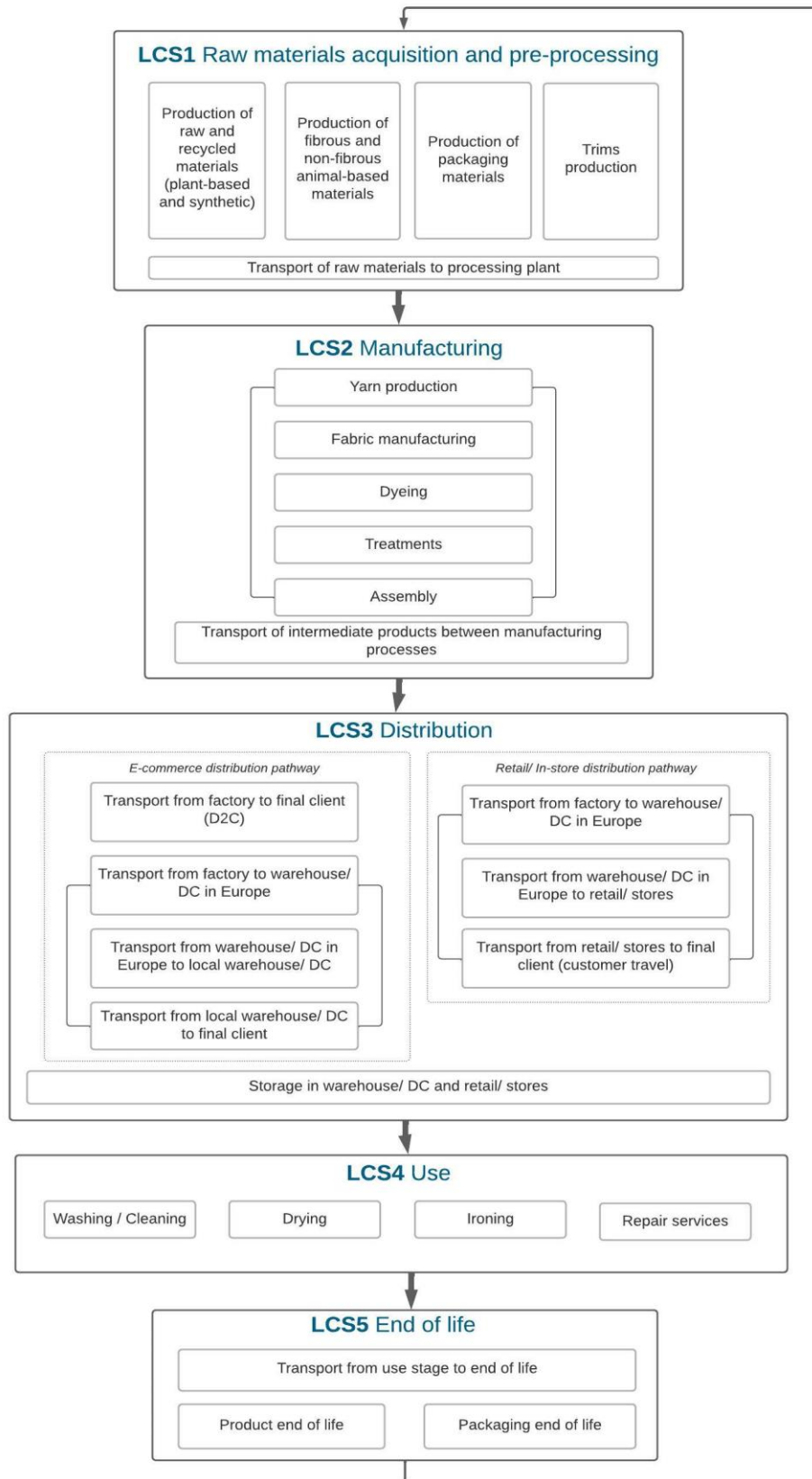


Figure 3.2 Life cycle stages included in Draft PEFCR Apparel And Footwear v1.3

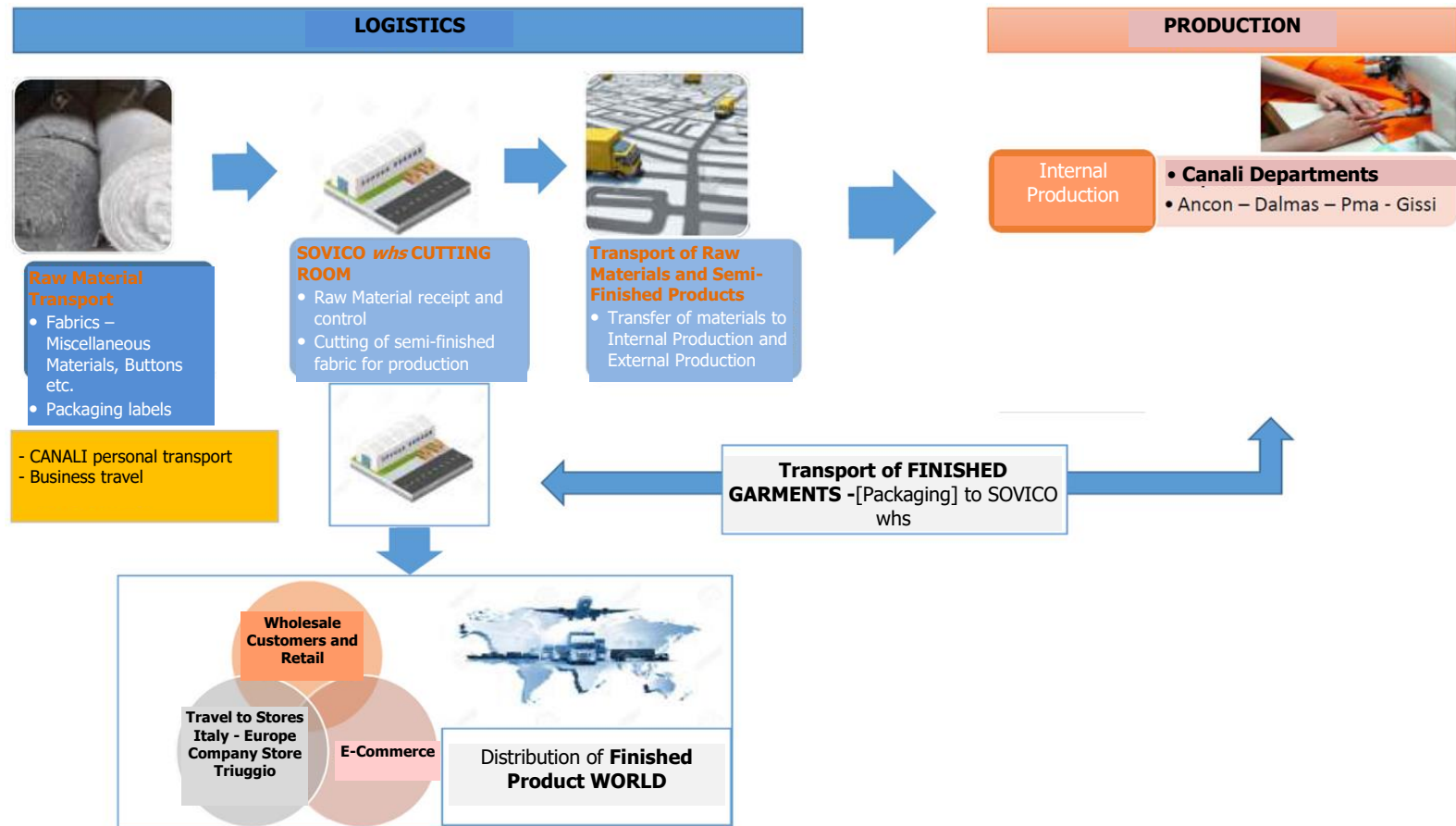


Figure 3.3 Stages of the Canali production process

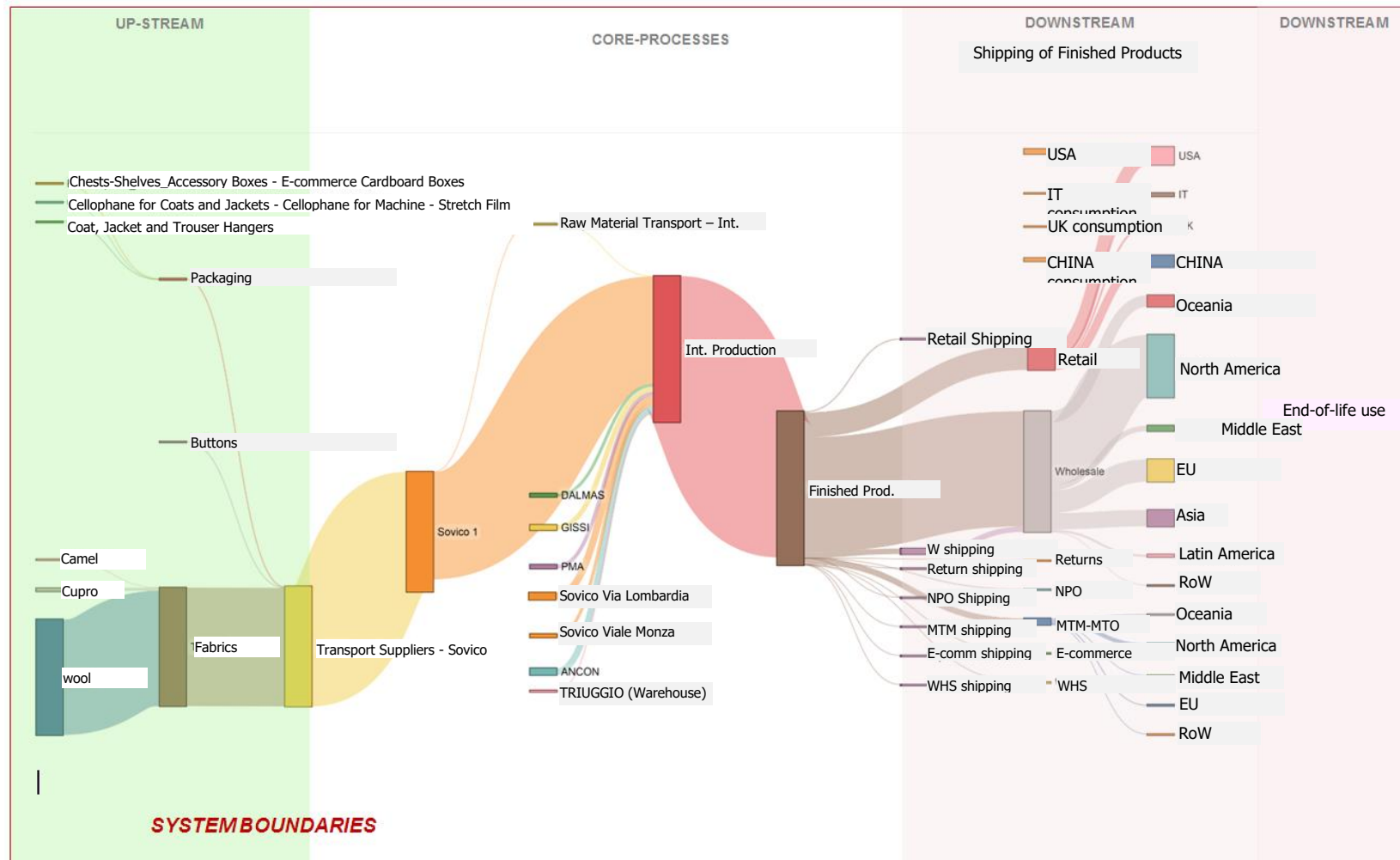


Figure 3.4 System Boundaries

3.4 Assumptions, limitations and cut-offs

All data collected during the reporting period (year 2019) were taken into account in the analysis, regardless of their percentage contribution in terms of mass. 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. In accordance with the draft *PEFCR Apparel and Footwear v 1.3*, the following limitations are listed:

- microplastic leakage is often associated with the production, use and end-of-life phases of apparel and footwear products. Microplastics are not analysed by the PEF methodology because the impact assessment methods do not yet exist. However, for the type of garment under consideration, the environmental issue is not relevant, as these are pure wool products.
- Because the PEF methodology is product- and not user- centric, these PEFCRs do not allow for differentiation between the impact of a new or second-hand item.
- The duration of service of items is included, but the methodology to measure the duration of service is highly debated and may be refined in the future. Non-physical durability attributes such as design (use of adjustable design features such as adjustable waist, enabling detaching and replacing parts such as pockets), or making the garment fit for different purposes, which may have an impact on how long a single user will use a product, were not included in these PEFCRs. However, investigations are currently looking into how to include it in a future version.
- The toxicity aspects are measured with the LCIA method USEtox, which includes human toxicity (cancer and non-cancer effects) and freshwater ecotoxicity, but currently no marine water or terrestrial ecotoxicity. This method therefore does not cover the full impacts of chemicals on humans and ecosystems, which are covered by chemical legislation and other methodologies in Europe.

For cut-offs of 1%, infrastructure and capital goods were excluded. Activities such as personnel commuting, canteens at production sites, consumer goods not strictly related to production processes, marketing, business travel and R&D activities were excluded, in accordance with §A.2.4 of Annex II to Recommendation 2279/2021/EU.⁵

The composition of the raw materials was modelled as far as possible by involving the suppliers of the main raw materials, namely Wool and Cupro (lining). The fabrics used in smaller quantities (reinforcements) were modelled using available databases. Note that for some accessories that are not relevant in terms of weight or impact on the total (tags, ribbons, labels), approximations were developed with similar materials from studies conducted previously.

Specific data on incoming materials were also collected in terms of suppliers, distances and modes of transport, energy consumption, waste production and transport.

⁵ These exclusions are the same as in the PEFCR for T-shirts ([...] the following processes were excluded by cut-off: the warehouse (distribution centre), the retail sale location, employee-related activities such as travel, meals, business trips, water (tap water, toilets) and transport between different users during the use phase).

The electricity purchased by the organisation, and in relation to contract manufacturing, was modelled conservatively as the Italian 2019 Residual Mix⁶.

3.4.1 Data gaps and proxies

In the future, more robust primary data on the lifespan of garments and footwear could be made available to make key parameters, such as number of uses, more robust. In the meantime, the default duration of service must be used as described in Section 3.3.3 of the draft *PEFCR Apparel and Footwear v 1.3*.

Significant investments are being made in both innovation and in the scalability of apparel and footwear recycling. Various pathways and technologies are being developed, but in this version of the PEFCR only those recycling pathways currently implemented on a large scale are considered. Assumptions regarding durability and end-of-life are described in detail in the dedicated section.

3.5 Representativeness, appropriateness and types/sources of data and information

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 data collected are organised in Excel sheets for each stage of the production cycle under consideration. In particular, internal production data are broken down in the sheets on raw materials, energy consumption, emissions, waste, transport and maintenance operations. For each piece of data, the reference management source and the person responsible for the data were defined. The data were then critically reviewed by internal audit to validate their comprehensiveness and accuracy.

3.6 Selection of impact categories

In the impact assessment of the product's environmental footprint, all impact categories and relative methods established in Recommendation 2021/2279/EU were applied.

3.6.1 Selection of additional environmental information to be included in the PEF

The predefined set of environmental footprint impact categories and the predefined impact assessment models adequately cover the potential environmental impacts of the products under assessment.

⁶ *European Residual Mixes - Results of the calculation of Residual Mixes for the calendar year 2019 - Version 1.1, 2020-09-08 (European Residual Mixes 2019 - Association of Issuing Bodies)*

3.7 Multifunctionality

The PEF was calculated using specific data representing resource and waste flows which cross system boundaries for each product type. The organisation did not apply any allocation procedure to disaggregate product level data, taking into account the multifunctionality of the process. The energy consumption (electricity and thermal energy) and water consumption of garment production were specifically estimated for each product subject to the study. Subsequently, an allocation was developed of the total flow calculated in the OEF study on the organisation on the total number of garments produced with regard instead to waste deriving from garment production activities and the energy consumption of production-related stages such as warehouses and offices. The allocation procedures are laid out in detail below:

Figure	Allocation	Description
Fabric	No	Specific, resulting from placements of the representative garment.
Raw material transport	No	Specific, resulting from placements of the representative garment and based on the specific distances of the suppliers during the year
Internal transport	No	Specific on the basis of the weight of the representative garment and on the basis of specific distances to production departments, calculated as a weighted average on the number of garments produced in the specific category.
Garment production consumption (electricity, thermal energy, water consumption)	No	Specific for the representative garment, calculated as the weighted average of the specific consumption per garment on the number of garments produced in the specific category.
Utilities consumption (offices, marketing, warehouses)	Yes	Allocation of the total flow calculated within the OEF study of organisation on the total number of items produced
Waste and its transport	No	Specific, resulting from placements of the representative garment and considering the specific distance of the waste recipient.
Accessories	No	Specific from representative garment bill of materials
Packaging	No	Specific from representative garment bill of materials
Distribution	No	Specific on the basis of the weight of the representative garment and on the basis of specific market distances, calculated as a weighted average over the number of garments sold in the specific category.
Points of sale	Yes	Allocation of the total flow associated with points of sale calculated in the OEF study on the organisation over the total number of garments produced.

Figure 3.5 Any allocations and summary description of the calculation approach for each input subject to the study

4 LIFE CYCLE INVENTORY

An inventory analysis of all incoming/outgoing material/energy flows and emissions to air, water and soil was carried out for the plant under assessment as the basis for modelling the study, using directly plant-specific data wherever possible.

As far as time aspects are concerned, the specific data refer to the **year 2019**. *Non-elementary* flows were modelled to be transformed into *elementary flows*. For background processes for which primary data could not be obtained, generic data were used deriving from official databases in their most up-to-date version, representative of the Italian and Central European situation, particularly for some of the fabrics used. As previously illustrated for the most widely used fabrics, suppliers were involved to obtain primary data. It is specified that the data on the consumption of raw materials, production and logistics/transportation were all extrapolated from the management system, while the other environmental aspects were inferred from other documents such as utility bills, MUDs [single environmental reporting form] and certificates of analysis of both atmospheric and water discharge emissions, which were verified during internal audit phases in order to ensure the robustness and accuracy of the model.

Databases Used: **Ecoinvent v. 3.8**

5 CALCULATING THE RESULTS OF ENVIRONMENTAL FOOTPRINT IMPACT ASSESSMENTS

The software used for modelling the environmental impact results is *SimaPro 9.4*.

The method used in the calculation is as follows:

- *EF 3.0 Method (adapted) v.1.03*.

5.1 Results

The following table shows the environmental impact results for the garments subject to the study manufactured by Canali S.p.A. during the year 2019.

The results are reported for the entire life cycle and are expressed for one day's and one year's use of the garments, respectively.

In order to identify the most relevant impact categories, the environmental impact results were normalised against the reference data set forth in Recommendation 2279/2021/EU and then weighted.

The following table shows the impacts that emerged as most relevant when normalising and weighting the results, and which account for approximately 80% of the overall impact associated with jackets.

5.1.1 Results for 1 day of use

JACKETS - 1 day of use										
Whole life cycle impact										
Impact indicators		Jacket Solid Class 1	Jacket Solid Class 2	Jacket Solid Class 3	Jacket Striped Class 1	Jacket Striped Class 2	Jacket Striped Class 3	Jacket Check Class 1	Jacket Check Class 2	Jacket Check Class 3
Climate change	kg CO ₂ eq	0.57	0.59	0.63	0.57	0.60	0.64	0.60	0.62	0.67
Particulate matter	disease inc.	2.88E-08	3.02E-08	3.28E-08	2.89E-08	3.03E-08	3.29E-08	3.06E-08	3.21E-08	3.50E-08
Acidification	mol H+ eq	4.14E-03	4.33E-03	4.69E-03	4.17E-03	4.36E-03	4.72E-03	4.41E-03	4.61E-03	5.01E-03
Eutrophication, terrestrial	mol N eq	1.54E-02	1.62E-02	1.77E-02	1.55E-02	1.63E-02	1.78E-02	1.65E-02	1.73E-02	1.89E-02
Land use	Pt	32.72	34.48	37.90	32.85	34.61	38.04	35.17	37.08	40.80
Water use	m ³ depriv.	0.84	0.88	0.95	0.84	0.88	0.96	0.90	0.94	1.03
Resource use, fossils	MJ	4.68	4.78	4.98	4.81	4.92	5.11	4.93	5.03	5.25
Resource use, minerals and metals	kg Sb eq	3.02E-06	3.15E-06	3.39E-06	3.07E-06	3.19E-06	3.43E-06	3.23E-06	3.36E-06	3.62E-06

Table 5.1: Jackets PEF Environmental Impact Indicator Values; 1 day of use

SUITS - 1 day of use										
Whole life cycle impact										
Impact indicators		Suit Solid Class 1	Suit Solid Class 2	Suit Solid Class 3	Suit Striped Class 1	Suit Striped Class 2	Suit Striped Class 3	Suit Check Class 1	Suit Check Class 2	Suit Check Class 3
Climate change	kg CO ₂ eq	1.01	1.07	1.17	1.02	1.08	1.18	1.04	1.10	1.20
Particulate matter	disease inc.	5.41E-08	5.81E-08	6.41E-08	5.42E-08	5.82E-08	6.42E-08	5.53E-08	5.94E-08	6.55E-08
Acidification	mol H+ eq	7.62E-03	8.16E-03	8.98E-03	7.66E-03	8.20E-03	9.02E-03	7.81E-03	8.36E-03	9.20E-03
Eutrophication, terrestrial	mol N eq	2.84E-02	3.06E-02	3.39E-02	2.85E-02	3.07E-02	3.40E-02	2.91E-02	3.14E-02	3.48E-02
Land use	Pt	61.16	66.17	73.72	61.37	66.39	73.97	62.89	68.04	75.84
Water use	m ³ depriv.	1.54	1.66	1.83	1.55	1.66	1.84	1.58	1.70	1.88
Resource use, fossils	MJ	8.01	8.33	8.81	8.17	8.48	8.96	8.24	8.56	9.04
Resource use, minerals and metals	kg Sb eq	5.56E-06	5.92E-06	6.47E-06	5.62E-06	5.98E-06	6.52E-06	5.72E-06	6.09E-06	6.65E-06

Table 5.2: Suits PEF Environmental Impact Indicator Values; 1 day of use

5.1.2 Results for 1 year of use

JACKETS - 1 year of use										
Whole life cycle impact										
Impact indicators		Jacket Solid Class 1	Jacket Solid Class 2	Jacket Solid Class 3	Jacket Striped Class 1	Jacket Striped Class 2	Jacket Striped Class 3	Jacket Check Class 1	Jacket Check Class 2	Jacket Check Class 3
Climate change	kg CO ₂ eq	11.31	11.73	12.54	11.50	11.91	12.72	12.01	12.46	13.33
Particulate matter	disease inc.	5.76E-07	6.03E-07	6.56E-07	5.78E-07	6.06E-07	6.59E-07	6.13E-07	6.42E-07	7.00E-07
Acidification	mol H+ eq	8.28E-02	8.66E-02	9.39E-02	8.35E-02	8.72E-02	9.45E-02	8.82E-02	9.22E-02	1.00E-01
Eutrophication, terrestrial	mol N eq	3.09E-01	3.24E-01	3.53E-01	3.10E-01	3.25E-01	3.55E-01	3.30E-01	3.46E-01	3.78E-01
Land use	Pt	654.47	689.64	757.99	656.98	692.28	760.88	703.31	741.58	815.98
Water use	m ³ depriv.	16.73	17.53	19.10	16.85	17.66	19.23	17.92	18.80	20.50
Resource use, fossils	MJ	93.57	95.63	99.62	96.28	98.32	102.27	98.53	100.69	104.91
Resource use, minerals and metals	kg Sb eq	6.05E-05	6.30E-05	6.78E-05	6.14E-05	6.38E-05	6.87E-05	6.45E-05	6.72E-05	7.25E-05

Table 5.3: Jackets PEF Environmental Impact Indicator Values; 1 year of use

SUITS - 1 year of use										
Whole life cycle impact										
Impact indicators		Suit Solid Class 1	Suit Solid Class 2	Suit Solid Class 3	Suit Striped Class 1	Suit Striped Class 2	Suit Striped Class 3	Suit Check Class 1	Suit Check Class 2	Suit Check Class 3
Climate change	kg CO ₂ eq	20.23	21.45	23.31	20.45	21.67	23.52	20.77	22.02	23.90
Particulate matter	disease inc.	1.08E-06	1.16E-06	1.28E-06	1.08E-06	1.16E-06	1.28E-06	1.11E-06	1.19E-06	1.31E-06
Acidification	mol H+ eq	1.52E-01	1.63E-01	1.80E-01	1.53E-01	1.64E-01	1.80E-01	1.56E-01	1.67E-01	1.84E-01
Eutrophication, terrestrial	mol N eq	5.68E-01	6.12E-01	6.78E-01	5.70E-01	6.14E-01	6.80E-01	5.83E-01	6.27E-01	6.95E-01
Land use	Pt	1223.29	1323.33	1474.49	1227.36	1327.72	1479.35	1257.75	1360.89	1516.72
Water use	m ³ depriv.	30.80	33.11	36.59	30.97	33.28	36.77	31.68	34.05	37.63
Resource use, fossils	MJ	160.21	166.59	176.22	163.37	169.67	179.20	164.76	171.13	180.74
Resource use, minerals and metals	kg Sb eq	1.11E-04	1.18E-04	1.29E-04	1.12E-04	1.20E-04	1.30E-04	1.14E-04	1.22E-04	1.33E-04

Table 5.4: Canali 2019 PEF study Environmental Impact Indicator Values - Suits; 1 year of use

6 INTERPRETATION OF RESULTS

6.1 Data quality assessment

It is reiterated that all data relating to processes directly controlled by the organisation and its main suppliers are primary data. When the formula given in the guidelines for calculating the overall data quality rating is applied, the DQR (Data Quality Rating) of the data used is found to be of Excellent quality. The requirements set forth in the reference Guidelines for the study are therefore met.

6.2 Hotspot Analysis

The results obtained for each impact category were then interpreted. In order to highlight the most relevant impact categories, the environmental footprint results were normalised and weighted as described in the previous paragraphs.

An analysis was then developed to highlight the life cycle stages, processes and elementary flows that have the greatest impact on the different impact categories (Hotspot Analysis). In order to better understand the results of the Hotspot Analysis, the results were represented by means of histograms showing the distribution of the different impact indicators between the different life cycle stages and between the different contributions. Indeed, the value of each impact indicator has been broken down between the various contributions, highlighting in particular which are attributable to the production processes taking place at the plant and which are instead associated with other stages of the life cycle.

The most impactful phases are those connected to the acquisition of raw materials and their transport (LCS1), followed by the internal production phase (LCS2).

6.3 Uncertainty assessment

The following table shows the results of the uncertainty analysis performed for each of the impact indicators relating to the environmental footprint of the jackets and suits considered. By way of example, the results for the class 3 check jacket and suit are shown, as they have the most significant environmental impacts. A Monte Carlo Analysis with a 95% confidence interval was used to assess the uncertainty associated with the results. Analysing the results, it can be observed that the impact categories found to be the most relevant are characterised by a low margin of uncertainty, particularly with reference to GWP, acidification, terrestrial eutrophication and fossil resource use. The uncertainty levels were classified into five classes on the basis of the variation coefficient. The uncertainty associated with the "Land Use" and "Water use" categories are associated with high values of uncertainty that depend on characterisation models that are still being developed. Impact categories relevant to the study are highlighted in bold.

Impact category	Unit	VC% Jackets	VC% Suits
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Acidification	mol H+ eq		
Climate change	kg CO₂ eq		
Eutrophication, terrestrial	mol N eq		
Land use	Pt		
Particulate matter	disease inc.		
Resource use, fossils	MJ		
Resource use, minerals and metals	kg Sb eq		
Water use	m³ depriv.		

Key	
	<i>VC < 10%</i>
	<i>10% < x < 20%</i>
	<i>20% < x < 50%</i>
	<i>> 50%</i>

Table 6.1: Indicator uncertainty analysis - 95% confidence interval

APPENDIX A - RESULTS JACKETS 1 USE

Whole Life Cycle - Impact of one day's use							
Jacket _S_class1		LCS1 Raw materials acquisition and transport	LCS2 Manufacturing	LCS3 Distribution	LCS4 Use	LCS5 End of life	Total impact per Use
Climate change	kg CO ₂ eq	3.73E-01	1.14E-01	5.91E-02	1.67E-02	2.38E-03	0.57
Particulate matter	disease inc.	2.52E-08	1.31E-09	1.52E-09	7.10E-10	3.43E-11	2.88E-08
Acidification	mol H+ eq	3.46E-03	3.24E-04	2.81E-04	6.90E-05	6.22E-06	4.14E-03
Eutrophication, terrestrial	mol N eq	1.37E-02	6.40E-04	9.17E-04	1.39E-04	4.03E-05	1.54E-02
Land use	Pt	3.22E +01	2.91E-01	1.72E-01	3.08E-02	-9.08E-04	3.27E+01
Water use	m ³ depriv.	7.70E-01	5.02E-02	1.08E-02	5.06E-03	-1.14E-04	8.36E-01
Resource use, fossils	MJ	1.90E +00	1.77E +00	8.18E-01	2.14E-01	-2.63E-02	4.68E+00
Resource use, minerals and metals	kg Sb eq	2.32E-06	4.55E-07	1.97E-07	5.12E-08	-3.10E-09	3.02E-06

Whole Life Cycle - Impact of one day's use							
Jacket _S_class2		LCS1 Raw materials acquisition and transport	LCS2 Manufacturing	LCS3 Distribution	LCS4 Use	LCS5 End of life	Total impact per Use
Climate change	kg CO ₂ eq	3.92E-01	1.14E-01	5.98E-02	1.77E-02	2.43E-03	0.59
Particulate matter	disease inc.	2.65E-08	1.32E-09	1.53E-09	7.55E-10	3.47E-11	3.02E-08
Acidification	mol H+ eq	3.64E-03	3.24E-04	2.84E-04	7.34E-05	6.34E-06	4.33E-03
Eutrophication, terrestrial	mol N eq	1.44E-02	6.41E-04	9.31E-04	1.47E-04	4.11E-05	1.62E-02
Land use	Pt	3.40E+01	2.92E-01	1.73E-01	3.28E-02	-9.56E-04	3.45E+01
Water use	m ³ depriv.	8.10E-01	5.02E-02	1.08E-02	5.38E-03	-1.17E-04	8.77E-01
Resource use, fossils	MJ	1.98E+00	1.77E +00	8.28E-01	2.28E-01	-2.69E-02	4.78E+00
Resource use, minerals and metals	kg Sb eq	2.45E-06	4.56E-07	1.97E-07	5.45E-08	-3.17E-09	3.15E-06

Whole Life Cycle - Impact of one day's use							
Jacket _S_class3		LCS1 Raw materials acquisition and transport	LCS2 Manufacturing	LCS3 Distribution	LCS4 Use	LCS5 End of life	Total impact per Use
Climate change	kg CO ₂ eq	4.29E-01	1.14E-01	6.11E-02	1.98E-02	2.52E-03	0.63
Particulate matter	disease inc.	2.91E-08	1.33E-09	1.54E-09	8.44E-10	3.56E-11	3.28E-08
Acidification	mol H+ eq	3.99E-03	3.25E-04	2.91E-04	8.20E-05	6.56E-06	4.69E-03
Eutrophication, terrestrial	mol N eq	1.59E-02	6.43E-04	9.59E-04	1.65E-04	4.26E-05	1.77E-02
Land use	Pt	3.74E+01	2.93E-01	1.76E-01	3.67E-02	-1.05E-03	3.79E+01
Water use	m ³ depriv.	8.88E-01	5.02E-02	1.08E-02	6.01E-03	-1.22E-04	9.55E-01
Resource use, fossils	MJ	2.14E+00	1.77E +00	8.47E-01	2.55E-01	-2.80E-02	4.98E+00
Resource use, minerals and metals	kg Sb eq	2.68E-06	4.57E-07	1.97E-07	6.09E-08	-3.31E-09	3.39E-06

Whole Life Cycle - Impact of one day's use							
Jacket_Str_class1		LCS1 Raw materials acquisition and transport	LCS2 Manufacturing	LCS3 Distribution	LCS4 Use	LCS5 End of life	Total impact per Use
Climate change	kg CO ₂ eq	3.75E-01	1.24E-01	5.85E-02	1.57E-02	2.34E-03	0.57
Particulate matter	disease inc.	2.53E-08	1.40E-09	1.51E-09	6.68E-10	3.39E-11	2.89E-08
Acidification	mol H+ eq	3.47E-03	3.52E-04	2.78E-04	6.49E-05	6.12E-06	4.17E-03
Eutrophication, terrestrial	mol N eq	1.37E-02	6.93E-04	9.04E-04	1.31E-04	3.96E-05	1.55E-02
Land use	Pt	3.23E+01	3.14E-01	1.71E-01	2.90E-02	-8.65E-04	3.28E+01
Water use	m ³ depriv.	7.73E-01	5.44E-02	1.08E-02	4.76E-03	-1.12E-04	8.43E-01
Resource use, fossils	MJ	1.91E+00	1.92E+00	8.10E-01	2.02E-01	-2.58E-02	4.81E+00
Resource use, minerals and metals	kg Sb eq	2.33E-06	4.94E-07	1.97E-07	4.82E-08	-3.03E-09	3.07E-06

Whole Life Cycle - Impact of one day's use							
Jacket_Str_class2		LCS1 Raw materials acquisition and transport	LCS2 Manufacturing	LCS3 Distribution	LCS4 Use	LCS5 End of life	Total impact per Use
Climate change	kg CO ₂ eq	3.94E-01	1.24E-01	5.91E-02	1.67E-02	2.38E-03	0.60
Particulate matter	disease inc.	2.66E-08	1.40E-09	1.52E-09	7.11E-10	3.43E-11	3.03E-08
Acidification	mol H+ eq	3.65E-03	3.52E-04	2.81E-04	6.91E-05	6.23E-06	4.36E-03
Eutrophication, terrestrial	mol N eq	1.45E-02	6.94E-04	9.18E-04	1.39E-04	4.03E-05	1.63E-02
Land use	Pt	3.41E+01	3.15E-01	1.72E-01	3.09E-02	-9.10E-04	3.46E+01
Water use	m ³ depriv.	8.13E-01	5.44E-02	1.08E-02	5.07E-03	-1.15E-04	8.83E-01
Resource use, fossils	MJ	1.99E+00	1.92E+00	8.19E-01	2.15E-01	-2.63E-02	4.92E+00
Resource use, minerals and metals	kg Sb eq	2.45E-06	4.94E-07	1.97E-07	5.13E-08	-3.10E-09	3.19E-06

Whole Life Cycle - Impact of one day's use							
Jacket_Str_class3		LCS1 Raw materials acquisition and transport	LCS2 Manufacturing	LCS3 Distribution	LCS4 Use	LCS5 End of life	Total impact per Use
Climate change	kg CO ₂ eq	4.31E-01	1.24E-01	6.04E-02	1.87E-02	2.47E-03	0.64
Particulate matter	disease inc.	2.91E-08	1.41E-09	1.54E-09	7.95E-10	3.51E-11	3.29E-08
Acidification	mol H+ eq	4.00E-03	3.53E-04	2.88E-04	7.72E-05	6.44E-06	4.72E-03
Eutrophication, terrestrial	mol N eq	1.59E-02	6.96E-04	9.44E-04	1.55E-04	4.17E-05	1.78E-02
Land use	Pt	3.75E+01	3.16E-01	1.74E-01	3.45E-02	-9.98E-04	3.80E+01
Water use	m ³ depriv.	8.91E-01	5.44E-02	1.08E-02	5.66E-03	-1.19E-04	9.62E-01
Resource use, fossils	MJ	2.14E+00	1.92E+00	8.36E-01	2.40E-01	-2.74E-02	5.11E+00
Resource use, minerals and metals	kg Sb eq	2.69E-06	4.95E-07	1.97E-07	5.73E-08	-3.23E-09	3.43E-06

Whole Life Cycle - Impact of one day's use							
Jacket_C_class1		LCS1 Raw materials acquisition and transport	LCS2 Manufacturing	LCS3 Distribution	LCS4 Use	LCS5 End of life	Total impact per Use
Climate change	kg CO ₂ eq	4.00E-01	1.24E-01	5.85E-02	1.57E-02	2.34E-03	0.60
Particulate matter	disease inc.	2.70E-08	1.41E-09	1.51E-09	6.68E-10	3.38E-11	3.06E-08
Acidification	mol H+ eq	3.71E-03	3.53E-04	2.78E-04	6.49E-05	6.12E-06	4.41E-03
Eutrophication, terrestrial	mol N eq	1.47E-02	6.95E-04	9.04E-04	1.30E-04	3.96E-05	1.65E-02
Land use	Pt	3.47E+01	3.15E-01	1.71E-01	2.90E-02	-8.64E-04	3.52E+01
Water use	m ³ depriv.	8.26E-01	5.52E-02	1.08E-02	4.76E-03	-1.12E-04	8.96E-01
Resource use, fossils	MJ	2.01E+00	1.93E+00	8.09E-01	2.02E-01	-2.58E-02	4.93E+00
Resource use, minerals and metals	kg Sb eq	2.49E-06	4.94E-07	1.97E-07	4.82E-08	-3.03E-09	3.23E-06

Whole Life Cycle - Impact of one day's use							
Jacket_C_class2		LCS1 Raw materials acquisition and transport	LCS2 Manufacturing	LCS3 Distribution	LCS4 Use	LCS5 End of life	Total impact per Use
Climate change	kg CO ₂ eq	4.20E-01	1.25E-01	5.91E-02	1.67E-02	2.38E-03	0.62
Particulate matter	disease inc.	2.84E-08	1.41E-09	1.52E-09	7.11E-10	3.43E-11	3.21E-08
Acidification	mol H+ eq	3.90E-03	3.53E-04	2.81E-04	6.91E-05	6.23E-06	4.61E-03
Eutrophication, terrestrial	mol N eq	1.55E-02	6.96E-04	9.17E-04	1.39E-04	4.03E-05	1.73E-02
Land use	Pt	3.66E+01	3.16E-01	1.72E-01	3.09E-02	-9.09E-04	3.71E+01
Water use	m ³ depriv.	8.69E-01	5.52E-02	1.08E-02	5.06E-03	-1.15E-04	9.40E-01
Resource use, fossils	MJ	2.10E+00	1.93E+00	8.19E-01	2.15E-01	-2.63E-02	5.03E+00
Resource use, minerals and metals	kg Sb eq	2.62E-06	4.95E-07	1.97E-07	5.13E-08	-3.10E-09	3.36E-06

Whole Life Cycle - Impact of one day's use							
Jacket_C_class3		LCS1 Raw materials acquisition and transport	LCS2 Manufacturing	LCS3 Distribution	LCS4 Use	LCS5 End of life	Total impact per Use
Climate change	kg CO ₂ eq	4.60E-01	1.25E-01	6.04E-02	1.86E-02	2.47E-03	0.67
Particulate matter	disease inc.	3.12E-08	1.42E-09	1.54E-09	7.94E-10	3.51E-11	3.50E-08
Acidification	mol H+ eq	4.28E-03	3.54E-04	2.87E-04	7.72E-05	6.44E-06	5.01E-03
Eutrophication, terrestrial	mol N eq	1.71E-02	6.99E-04	9.44E-04	1.55E-04	4.17E-05	1.89E-02
Land use	Pt	4.03E+01	3.17E-01	1.74E-01	3.45E-02	-9.97E-04	4.08E+01
Water use	m ³ depriv.	9.54E-01	5.52E-02	1.08E-02	5.66E-03	-1.19E-04	1.03E+00
Resource use, fossils	MJ	2.26E+00	1.93E+00	8.36E-01	2.40E-01	-2.74E-02	5.25E+00
Resource use, minerals and metals	kg Sb eq	2.88E-06	4.96E-07	1.97E-07	5.73E-08	-3.23E-09	3.62E-06

APPENDIX B - RESULTS SUITS 1 USE

Whole Life Cycle - Impact of one day's use							
Suit _S_class 1		LCS1 Raw materials acquisition and transport	LCS2 Manufacturing	LCS3 Distribution	LCS4 Use	LCS5 End of life	Total impact per Use
Climate change	kg CO ₂ eq	7.05E-01	1.67E-01	7.84E-02	5.73E-02	3.80E-03	1.01
Particulate matter	disease inc.	4.78E-08	1.95E-09	1.91E-09	2.44E-09	5.08E-11	5.41E-08
Acidification	mol H+ eq	6.52E-03	4.73E-04	3.76E-04	2.37E-04	9.85E-06	7.62E-03
Eutrophication, terrestrial	mol N eq	2.57E-02	9.39E-04	1.26E-03	4.77E-04	6.45E-05	2.84E-02
Land use	Pt	6.04E+01	4.28E-01	2.22E-01	1.06E-01	-2.01E-03	6.12E+01
Water use	m ³ depriv.	1.44E+00	7.30E-02	1.28E-02	1.74E-02	-1.88E-04	1.54E+00
Resource use, fossils	MJ	3.65E+00	2.58E+00	1.09E+00	7.37E-01	-4.34E-02	8.01E+00
Resource use, minerals and metals	kg Sb eq	4.49E-06	6.62E-07	2.35E-07	1.76E-07	-5.18E-09	5.56E-06

Whole Life Cycle - Impact of one day's use							
Suit _S_class2		LCS1 Raw materials acquisition and transport	LCS2 Manufacturing	LCS3 Distribution	LCS4 Use	LCS5 End of life	Total impact per Use
Climate change	kg CO ₂ eq	7.59E-01	1.67E-01	8.02E-02	6.26E-02	3.94E-03	1.07
Particulate matter	disease inc.	5.15E-08	1.97E-09	1.93E-09	2.67E-09	5.21E-11	5.81E-08
Acidification	mol H+ eq	7.03E-03	4.74E-04	3.86E-04	2.59E-04	1.02E-05	8.16E-03
Eutrophication, terrestrial	mol N eq	2.78E-02	9.42E-04	1.30E-03	5.21E-04	6.68E-05	3.06E-02
Land use	Pt	6.54E+01	4.30E-01	2.25E-01	1.16E-01	-2.16E-03	6.62E+01
Water use	m ³ depriv.	1.55E+00	7.31E-02	1.28E-02	1.90E-02	-1.96E-04	1.66E+00
Resource use, fossils	MJ	3.87E+00	2.59E+00	1.11E+00	8.05E-01	-4.51E-02	8.33E+00
Resource use, minerals and metals	kg Sb eq	4.84E-06	6.63E-07	2.35E-07	1.92E-07	-5.39E-09	5.92E-06

Whole Life Cycle - Impact of one day's use							
Suit _S_class3		LCS1 Raw materials acquisition and transport	LCS2 Manufacturing	LCS3 Distribution	LCS4 Use	LCS5 End of life	Total impact per Use
Climate change	kg CO ₂ eq	8.40E-01	1.67E-01	8.29E-02	7.06E-02	4.14E-03	1.17
Particulate matter	disease inc.	5.71E-08	2.00E-09	1.96E-09	3.01E-09	5.41E-11	6.41E-08
Acidification	mol H+ eq	7.80E-03	4.76E-04	4.00E-04	2.92E-04	1.07E-05	8.98E-03
Eutrophication, terrestrial	mol N eq	3.09E-02	9.47E-04	1.36E-03	5.87E-04	7.03E-05	3.39E-02
Land use	Pt	7.29E+01	4.33E-01	2.31E-01	1.31E-01	-2.37E-03	7.37E+01
Water use	m ³ depriv.	1.72E+00	7.31E-02	1.29E-02	2.14E-02	-2.07E-04	1.83E+00
Resource use, fossils	MJ	4.21E+00	2.59E+00	1.15E+00	9.08E-01	-4.77E-02	8.81E+00
Resource use, minerals and metals	kg Sb eq	5.35E-06	6.65E-07	2.36E-07	2.17E-07	-5.72E-09	6.47E-06

Whole Life Cycle - Impact of one day's use							
Suit_Str_class1		LCS1 Raw materials acquisition and transport	LCS2 Manufacturing	LCS3 Distribution	LCS4 Use	LCS5 End of life	Total impact per Use
Climate change	kg CO ₂ eq	7.07E-01	1.79E-01	7.76E-02	5.48E-02	3.74E-03	1.02
Particulate matter	disease inc.	4.79E-08	2.07E-09	1.90E-09	2.33E-09	5.02E-11	5.42E-08
Acidification	mol H+ eq	6.54E-03	5.11E-04	3.72E-04	2.27E-04	9.69E-06	7.66E-03
Eutrophication, terrestrial	mol N eq	2.57E-02	1.01E-03	1.24E-03	4.56E-04	6.34E-05	2.85E-02
Land use	Pt	6.06E+01	4.59E-01	2.20E-01	1.01E-01	-1.95E-03	6.14E+01
Water use	m ³ depriv.	1.44E+00	7.79E-02	1.28E-02	1.66E-02	-1.85E-04	1.55E+00
Resource use, fossils	MJ	3.66E+00	2.78E+00	1.08E+00	7.05E-01	-4.25E-02	8.17E+00
Resource use, minerals and metals	kg Sb eq	4.51E-06	7.14E-07	2.35E-07	1.68E-07	-5.08E-09	5.62E-06

Whole Life Cycle - Impact of one day's use							
Suit_Str_class2		LCS1 Raw materials acquisition and transport	LCS2 Manufacturing	LCS3 Distribution	LCS4 Use	LCS5 End of life	Total impact per Use
Climate change	kg CO ₂ eq	7.61E-01	1.79E-01	7.93E-02	5.98E-02	3.87E-03	1.08
Particulate matter	disease inc.	5.16E-08	2.08E-09	1.92E-09	2.55E-09	5.14E-11	5.82E-08
Acidification	mol H+ eq	7.05E-03	5.12E-04	3.81E-04	2.48E-04	1.00E-05	8.20E-03
Eutrophication, terrestrial	mol N eq	2.78E-02	1.01E-03	1.28E-03	4.98E-04	6.56E-05	3.07E-02
Land use	Pt	6.56E+01	4.61E-01	2.24E-01	1.11E-01	-2.08E-03	6.64E+01
Water use	m ³ depriv.	1.56E+00	7.79E-02	1.28E-02	1.82E-02	-1.92E-04	1.66E+00
Resource use, fossils	MJ	3.88E+00	2.78E+00	1.10E+00	7.69E-01	-4.42E-02	8.48E+00
Resource use, minerals and metals	kg Sb eq	4.85E-06	7.15E-07	2.35E-07	1.84E-07	-5.28E-09	5.98E-06

Whole Life Cycle - Impact of one day's use							
Suit_Str_class3		LCS1 Raw materials acquisition and transport	LCS2 Manufacturing	LCS3 Distribution	LCS4 Use	LCS5 End of life	Total impact per Use
Climate change	kg CO ₂ eq	8.43E-01	1.80E-01	8.19E-02	6.74E-02	4.06E-03	1.18
Particulate matter	disease inc.	5.72E-08	2.11E-09	1.95E-09	2.87E-09	5.33E-11	6.42E-08
Acidification	mol H+ eq	7.82E-03	5.13E-04	3.94E-04	2.79E-04	1.05E-05	9.02E-03
Eutrophication, terrestrial	mol N eq	3.10E-02	1.02E-03	1.33E-03	5.61E-04	6.89E-05	3.40E-02
Land use	Pt	7.32E+01	4.64E-01	2.29E-01	1.25E-01	-2.29E-03	7.40E+01
Water use	m ³ depriv.	1.73E+00	7.79E-02	1.29E-02	2.05E-02	-2.02E-04	1.84E+00
Resource use, fossils	MJ	4.22E+00	2.79E+00	1.14E+00	8.67E-01	-4.66E-02	8.96E+00
Resource use, minerals and metals	kg Sb eq	5.37E-06	7.18E-07	2.36E-07	2.07E-07	-5.59E-09	6.52E-06

Whole Life Cycle - Impact of one day's use							
Suit_C_class1		LCS1 Raw materials acquisition and transport	LCS2 Manufacturing	LCS3 Distribution	LCS4 Use	LCS5 End of life	Total impact per Use
Climate change	kg CO ₂ eq	7.24E-01	1.81E-01	7.69E-02	5.28E-02	3.69E-03	1.04
Particulate matter	disease inc.	4.90E-08	2.08E-09	1.89E-09	2.25E-09	4.97E-11	5.53E-08
Acidification	mol H+ eq	6.70E-03	5.16E-04	3.68E-04	2.19E-04	9.56E-06	7.81E-03
Eutrophication, terrestrial	mol N eq	2.64E-02	1.02E-03	1.23E-03	4.39E-04	6.25E-05	2.91E-02
Land use	Pt	6.21E+01	4.64E-01	2.19E-01	9.77E-02	-1.89E-03	6.29E+01
Water use	m ³ depriv.	1.48E+00	7.94E-02	1.28E-02	1.60E-02	-1.82E-04	1.58E+00
Resource use, fossils	MJ	3.72E+00	2.81E+00	1.07E+00	6.79E-01	-4.19E-02	8.24E+00
Resource use, minerals and metals	kg Sb eq	4.61E-06	7.21E-07	2.34E-07	1.62E-07	-5.00E-09	5.72E-06

Whole Life Cycle - Impact of one day's use							
Suit_C_class2		LCS1 Raw materials acquisition and transport	LCS2 Manufacturing	LCS3 Distribution	LCS4 Use	LCS5 End of life	Total impact per Use
Climate change	kg CO ₂ eq	7.79E-01	1.82E-01	7.85E-02	5.77E-02	3.81E-03	1.10
Particulate matter	disease inc.	5.28E-08	2.10E-09	1.91E-09	2.46E-09	5.09E-11	5.94E-08
Acidification	mol H+ eq	7.22E-03	5.17E-04	3.77E-04	2.39E-04	9.87E-06	8.36E-03
Eutrophication, terrestrial	mol N eq	2.85E-02	1.02E-03	1.26E-03	4.79E-04	6.46E-05	3.14E-02
Land use	Pt	6.73E+01	4.66E-01	2.22E-01	1.07E-01	-2.02E-03	6.80E+01
Water use	m ³ depriv.	1.59E+00	7.94E-02	1.28E-02	1.75E-02	-1.89E-04	1.70E+00
Resource use, fossils	MJ	3.95E+00	2.82E+00	1.09E+00	7.41E-01	-4.35E-02	8.56E+00
Resource use, minerals and metals	kg Sb eq	4.96E-06	7.22E-07	2.35E-07	1.77E-07	-5.19E-09	6.09E-06

Whole Life Cycle - Impact of one day's use							
Suit_C_class3		LCS1 Raw materials acquisition and transport	LCS2 Manufacturing	LCS3 Distribution	LCS4 Use	LCS5 End of life	Total impact per Use
Climate change	kg CO ₂ eq	8.63E-01	1.82E-01	8.10E-02	6.50E-02	4.00E-03	1.20
Particulate matter	disease inc.	5.86E-08	2.13E-09	1.94E-09	2.77E-09	5.27E-11	6.55E-08
Acidification	mol H+ eq	8.01E-03	5.19E-04	3.90E-04	2.69E-04	1.03E-05	9.20E-03
Eutrophication, terrestrial	mol N eq	3.18E-02	1.03E-03	1.32E-03	5.40E-04	6.78E-05	3.48E-02
Land use	Pt	7.50E+01	4.69E-01	2.27E-01	1.20E-01	-2.22E-03	7.58E+01
Water use	m ³ depriv.	1.77E +00	7.95E-02	1.29E-02	1.97E-02	-1.99E-04	1.88E+00
Resource use, fossils	MJ	4.30E+00	2.82E+00	1.12E+00	8.36E-01	-4.58E-02	9.04E+00
Resource use, minerals and metals	kg Sb eq	5.50E-06	7.24E-07	2.36E-07	2.00E-07	-5.49E-09	6.65E-06