



Sustainability Report 2022

MANTECO®

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Letter to stakeholders

Dear Stakeholders,

2022 was a rambling and unpredictable year, both from an emotional and corporate management point of view.

We hadn't heard the word 'war' so frequently for a long time and Europe became once again a battlefield.

Even if I had already seen a lot of it, I couldn't help but being astonished and struck by so much pain and death.

As a consequence of the world situation, Manteco® faced skyrocketing energy tariffs and it was a true challenge to combine production needs with the compliance of supply contract conditions, without even the slightest time guarantees, but rather living and planning on a daily basis, without knowing what might happen the next day.

We managed to overcome this period also thanks to our precious and loyal MSystem partner companies.

In 2022, Manteco® continued its ESG path. More specifically, we strongly focused on emissions', measurement and sustainability reporting, which enabled better and more detailed actions aimed at improving our performance.

In the last two years, due to more urgent challenges to face, we had slowed down the training activities for our employees. However, in 2022, thanks to trainings conducted by leading global universities, we resumed them both quantitatively and qualitatively.

At the same time, thanks to the easing of COVID restrictions and the newfound possibility to move, Manteco® - with the Manteco Academy project - strongly increased the collaboration with fashion schools and gave a lot of classes on circular fashion. I am particularly proud of this activity, because it allows Manteco® to pass on its knowledge, in an effective way, to new generations.

This year, we are celebrating the 80th anniversary of the company. It is a great milestone that we have achieved, one that I do not consider as a point of arrival for Manteco®, but as a departure for new, ambitious goals to be met in the future.

I want to congratulate my sons, Marco and Matteo, as well as all our employees, for their daily commitment and hard work: the key ingredients for the success of our company, in the past, the present and the future.

Francesco Mantecassi
Francesco Mantecassi

ARCHIVIO MANTECO

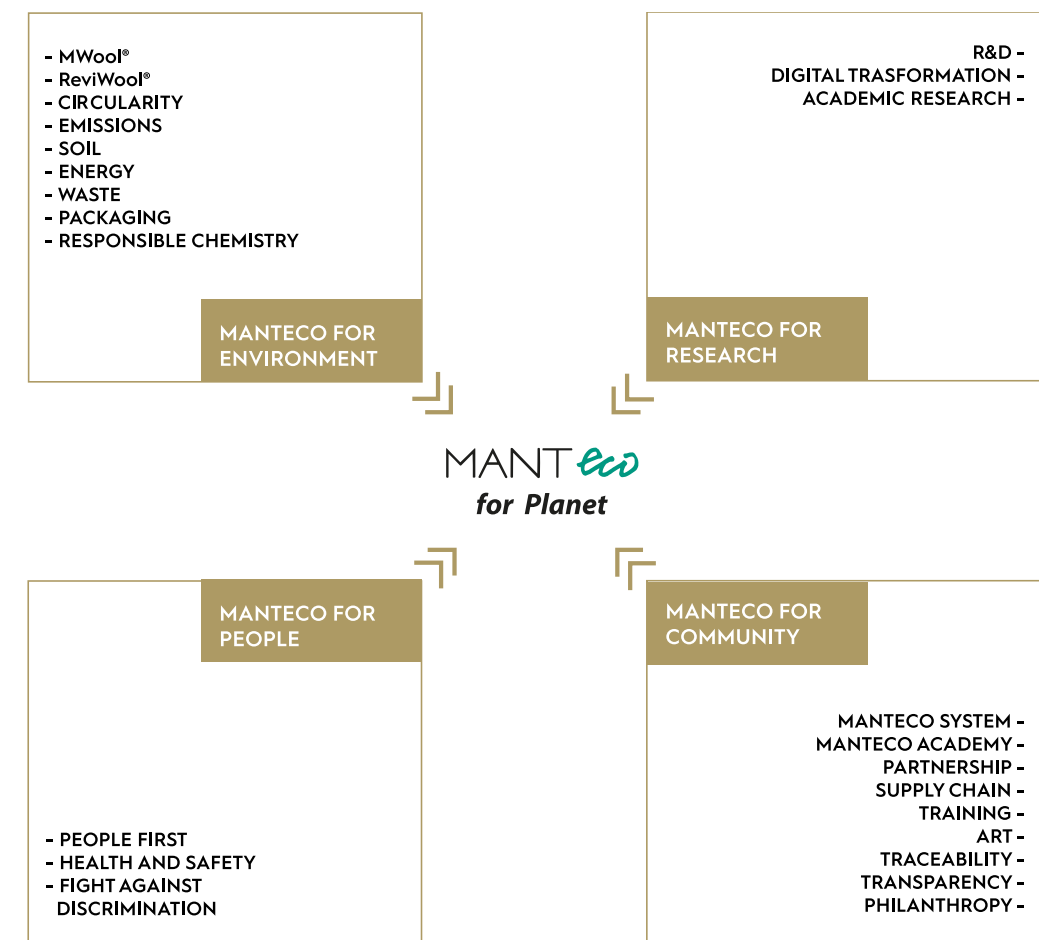
Brand Identity & Values

Made in Italy, quality, creativity, science-based innovation and circular economy

Manteco® is an Italian, leading company for premium quality textiles and wool circular economy since 1943. It was first established in 1941 as a small spinning mill by Enzo Anacleto Mantellassi, who started the production of recycled wool yarns, obtained by regenerating old military wool clothes and blankets.

Over the decades, the company has maintained the same, circular DNA and has become a point of reference in the fashion world, thanks to a high level of creativity, research, constant investments, innovative textile solutions and a scientific approach to sustainability. Today it is still a family-run business and produces 100% in Tuscany, in a specialized, zero-mile, fully traced, transparent and certified supply chain called MSystem: a network of more than 56 partner textile companies that follow the Charter of Supply Chain Commitments drawn up by Manteco® and the highest production standards.

Manteco® has its sustainability roadmap MantEco for Planet® and is particularly committed to circular fashion and avoiding value leakages along the supply chain; for this reason it has developed numerous projects: a Zero-Waste system to recover all wool industrial waste from production processes, a Sustainable Design philosophy to create durable and recyclable wool textiles, Project43 and Project53 to recycle wool fabrics' offcuts produced during the garment-making phase, and unsold or second choice wool garments.



But that's not it, Manteco® has also created its own brands of sustainable wool. M Wool®, the next generation of recycled wool, made by mechanically recycling pre- and post-consumer wool garments and scraps, and colored without added dyes and chemicals through the Recype® technique. Compared to generic virgin wool fibers, M Wool® impacts 99.2% less on climate change, 99.9% less on water use and 93.3% less on total energy consumption. ReviWool®, the low-impact virgin wool, made of valuable co-product fibers coming from the worsting process of virgin wool, which instead of being wasted, are recovered and masterfully turned into premium quality textiles - promoting value capture and enhancing wool production cycles' efficiency. Compared to generic virgin wool tops, ReviWool® impacts 65.6% less on climate change, 65.5% less on water use and 65.6% less on total energy consumption.

All of those commitments and initiatives on circular economy has led the company to become a Member of the Ellen MacArthur Foundation's Network and a partner of the Monitor for Circular Fashion by SDA Bocconi.

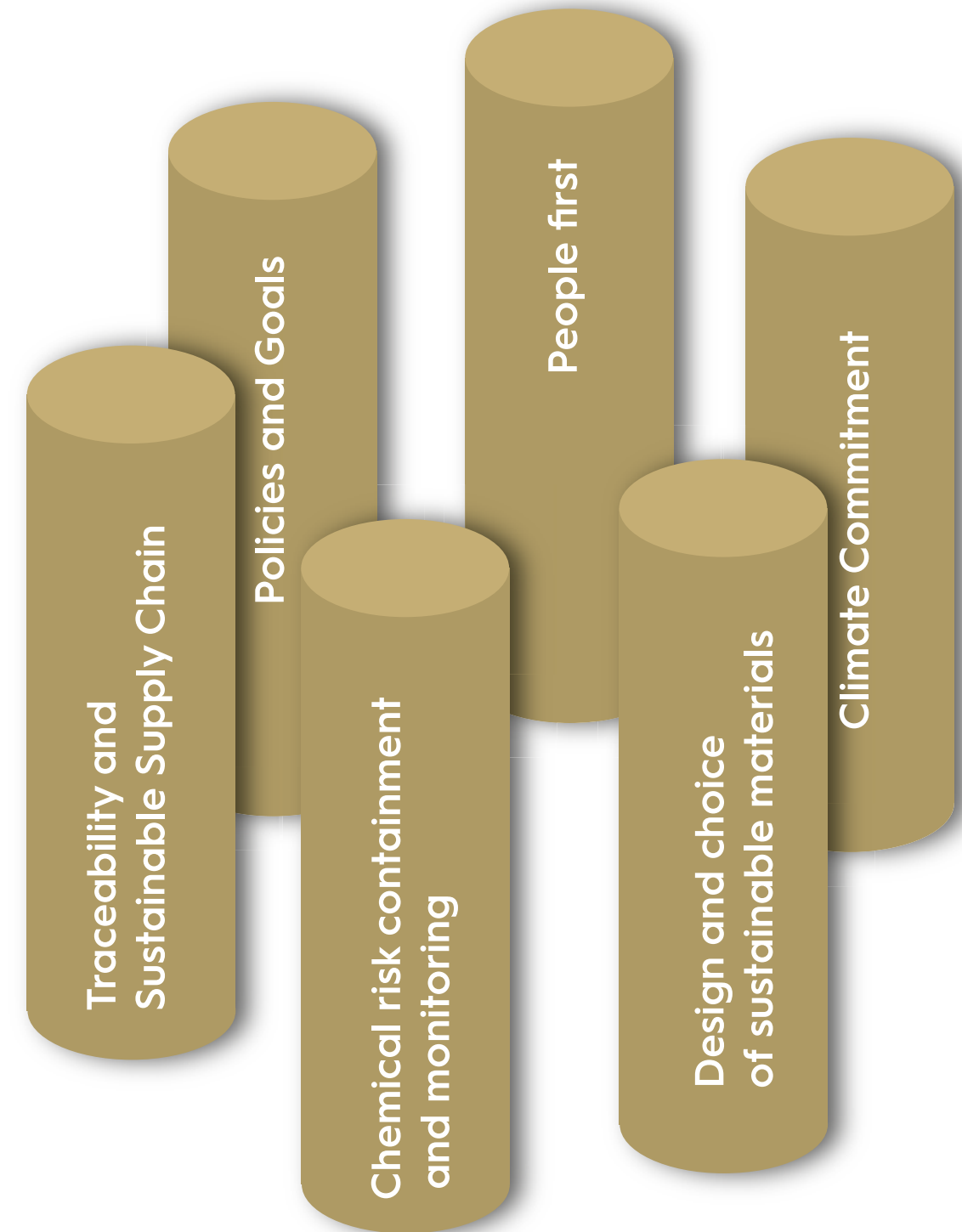
Manteco® was the first-ever textile company to apply a Life Cycle Assessment on recycled wool fibers, later also published as a scientific article on MDPI Resources, certified according to the international standard EPD® Environmental Product Declaration, and scored by the HIGG Materials Sustainability Index.

Manteco® is also strongly engaged in the field of education with the Manteco Academy project, through which we partner with the world's best fashion schools by giving lectures about circular fashion, arranging eco-design contests and donate deadstock fabrics to students for their final projects. Manteco Academy has recently been accepted among the UNECE's Sustainability Pledge submissions.

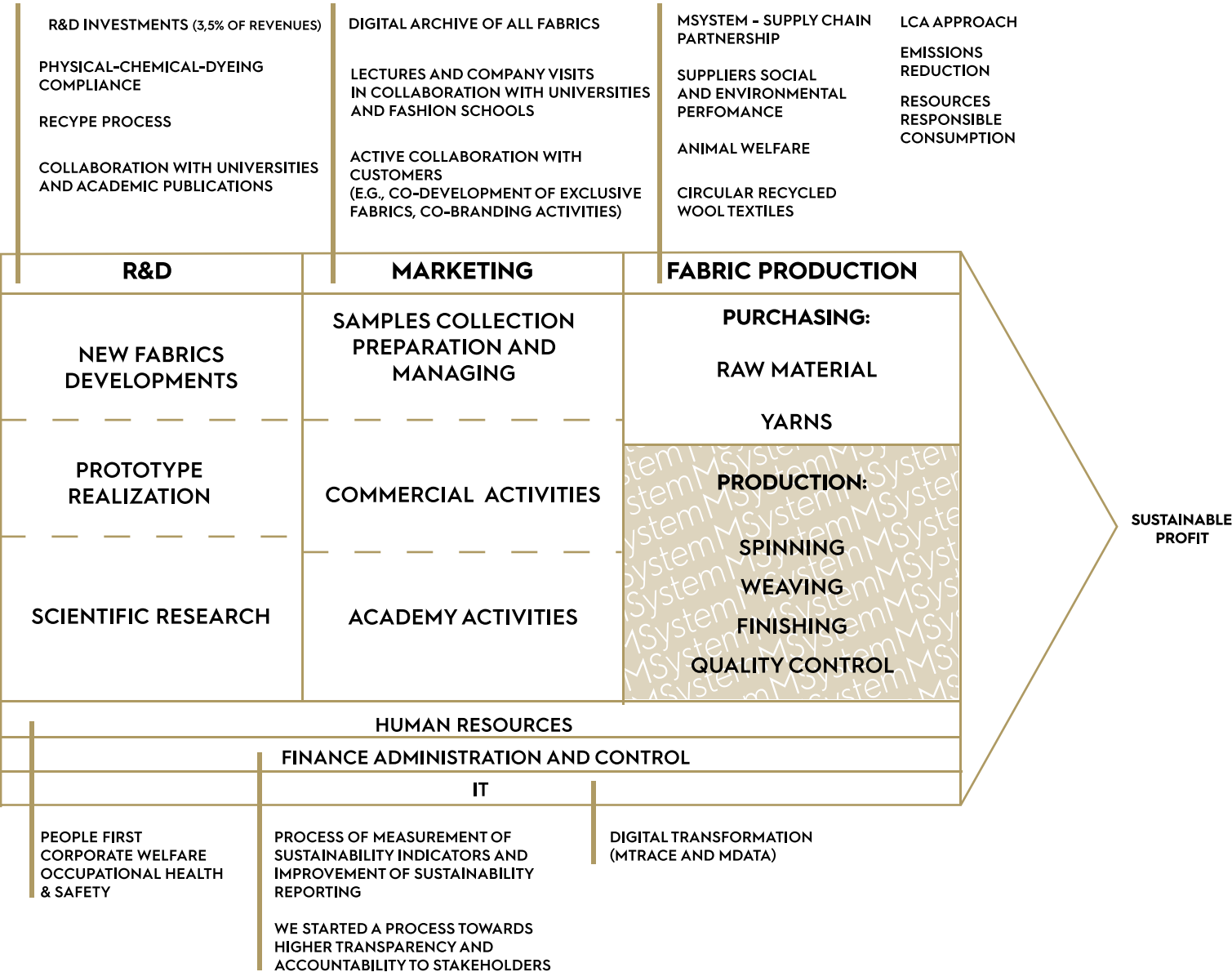
The values of sustainability and adherence to the principles of the UN 2030 Agenda for Sustainable Development are increasingly an integral part of our own way of doing business and are placed at the center of operational, management and relationship practices. In order to strengthen the dissemination of these principles and make them cornerstones, Manteco prepared and issued a Charter of Values for Sustainability in 2015, based on 6 pillars:

1. Policies and Goals
2. Traceability and Sustainable Supply Chain
3. Design and choice of sustainable materials
4. Chemical risk containment and monitoring
5. Climate Commitment
6. People first

Six pillars of our Charter of Values for Sustainability



MANTECO BUSINESS MODEL



Company's technical description

The legal form of the organization is a joint stock company, which is wholly owned by Ing. Franco Mantellassi Holding S.r.l. (IFMH S.r.l.). The organization is headquartered in Italy.

The address of the company's headquarters is Montemurlo (PO) - Via della Viaccia, 18. Company activities are carried out at three locations in Montemurlo (PO):

- Via della Viaccia 19: Headquarters of management, creative and fabric control laboratories as well as raw fabric control and finished product shipping departments
- Via della Viaccia 3: Headquarters of the warehouse for raw fabric control and sorting
- Via dei Mille 10: Location of the yarn and raw materials warehouse.

The plants described are located in the industrial area of Prato's textile district.

The main processes carried out by the organization are:

- The design and development of textiles
- The commercial activity
- The management of external production activities, with particular reference to the management of raw textiles manufacturing and finishing
- The quality control of textile production
- Product packaging and logistics
- Accounting administration and
- Human resources management



Timeline: history of Manteco

1941

Enzo Anacleto Mantellassi acquires a spinning mill destroyed by the war and starts producing recycled wool yarns by mechanically regenerating military wool blankets, garments and accessories.

Enzo Anacleto Mantellassi acquires the first looms and founds Lanificio San Marco, beginning the production of carded recycled wool fabrics for clothing.

1943

1945

Lanificio San Marco joins Confindustria and begins to grow in northern European markets.

The post-war economic boom. Lanificio San Marco grows a lot and starts building a new, ultra-modern factory, designed by "Il Patio" Studio, one of the most advanced industrial architecture studio of the time, run by architect Ghelli and Professor Zetti.

1952

1967

Enzo Anacleto Mantellassi dies unexpectedly and Franco Mantellassi takes over his father's company.

Franco Mantellassi renames the company to Lanificio Franco Mantellassi and begin to innovate, enhancing regenerated wool colors as never before and experimenting with new Spring/Summer collections, using cotton, linen, silk and viscose. It was the time of the blossoming of international fairs in Frankfurt, Paris, Hong Kong, New York, Moscow, Tokyo, and our own "Prato Espone", of which Franco was one of the founders.

1971

1983

The company changes its name to Mantellassi Compagnia Tessile (Manteco) and begins to focus heavily on internationalization, opening - in parallel with its network of agents - sales offices in Hong Kong, Shanghai and Los Angeles, and operating a geographic market differentiation.

Manteco concretely demonstrates its love for art and culture by participating in the founding of the Luigi Pecci Center for Contemporary Art.

1988

2000

Matteo and Marco Mantellassi, after their respective degrees, join their father Franco at the helm of the company, bringing their skills, energy and - above all - their forward-looking approach. In the same year, the New York office was opened, an essential step in order to maintain a proximity to a major market.

Manteco creates BiBye®, its iconic, high-end, durable and recyclable carded virgin wool double fabric hat becomes an excellence in the fashion world and mark the definitive turning point for the company's growth.

2008

2009

Manteco becomes increasingly important and begins to focus on spreading its brand. To do so, the company's historical trademark is restyled, modernized and applied to woven labels, which begin to pop up on customers' garments as a guarantee of added quality to their product. Manteco® creates BiBye® MW, its iconic, high-end, durable and recyclable carded recycled wool double fabric.

Manteco inaugurates the current complex - created by recovering and renovating old industrial warehouses - with offices, showrooms, but also the CIRCULAR ECONOMY LAB: an innovative and hi-tech spot in the raw material department, with extremely modern laboratories for studies on recycled wool fibers, yarns and textiles. All of this leads to a huge collection of data that will prove essential for the company's development and improvement.

2010

2014

Manteco begins a self-assessment path, studying its production processes to understand where it was still possible to limit the consumption of important resources such as water, to reduce the use of chemical processes and cut down the emission of CO₂. It was discovered that more than 15% of wool was lost in different production steps, from the raw material to the final fabric. Hence, the Zero-Waste project was born, through which the company recovers and reuses all the wool waste deriving from the various stages of production.

Manteco purchases, restores and put solar panels on a series of abandoned warehouses. The goal was to create welcoming workplaces that would meet the highest standards for our employees and accommodate the new needs of a booming company. Manteco creates the MantEco for Planet® roadmap to sustainability, aligned with the United Nations' SDGs. The MantEco for Planet® roadmap is also awarded with the Radical Green Prize.

2015

2016

Manteco compiles and releases its first-ever Sustainability Report.

Manteco® starts its journey through international standards for sustainability and become the district's first textile company to obtain the Global Recycled Standard (GRS) certification for recycled wool and the Responsible Wool Standard (RWS) certification for virgin wool.

2017

2018

To celebrate its 75th anniversary, the company inaugurates the Archivio Manteco, a unique facility that holds the company's entire history, with more than 83,000 fabrics and all the colors and patterns created by the company over the decades. In the same year, the Manteco Academy project is also created, through which the company supports numerous fashion schools and young designers, organizes contests and field trips, and does specialized lectures on circular fashion, both online and in-person. Manteco creates the M Wool® brand, the next generation of recycled wool and the Recype® color creation technique.

Manteco obtains the Organic Content Standard (OCS) certification and creates Project43, an innovative and traceable circular economy project, with which the company offers its customers the opportunity to recover and regenerate manufacturing offcuts to create new recycled wool fabrics and close the loop. The importance of this project is also reiterated by the European Commissioner Elzbieta Bienkowska, who visits the company and defines it as a great example of circular economy and sustainability. Manteco also adheres to the Better Cotton Initiative BCI and creates the MSystem, its supply chain network of selected partners that work by respecting a special Charter of Supply Chain Commitments.

2019

2020

Manteco becomes the first company in the world to apply a Life Cycle Assessment on a recycled wool fabric, moving toward an increasingly scientific approach to sustainability, circular economy and communication. Manteco also creates Project53, another traceable project to recycle wool fabrics' offcuts produced during the garment-making phase, and unsold or second choice wool garments.

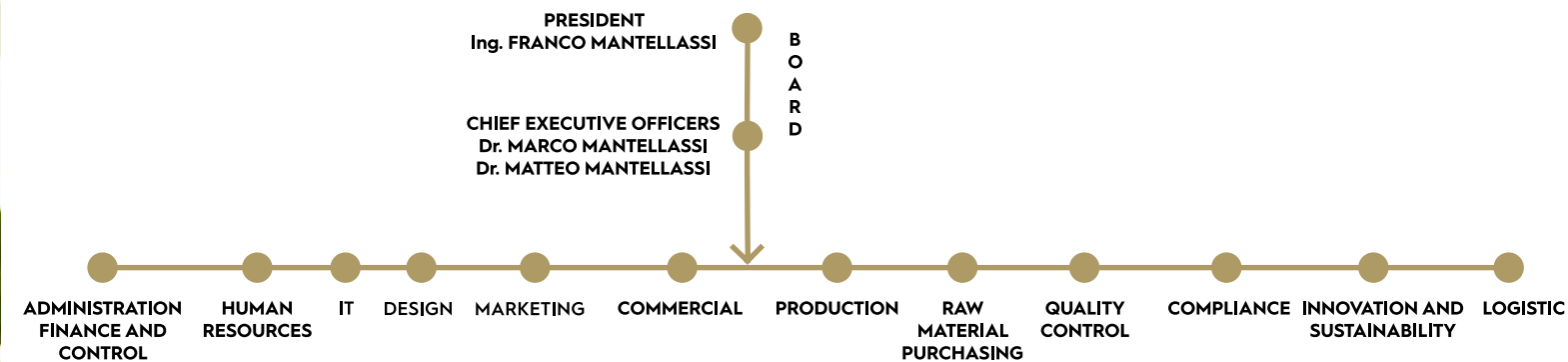
Manteco becomes a Member of the Ellen MacArthur Foundation Network, a leading international foundation that develops and promotes the circular economy, and becomes a partner of the Monitor for Circular Fashion by SDA Bocconi, a multi-stakeholder project involving leading fashion companies and supply chain actors with scientific input from the SDA Bocconi Sustainability Lab and Enel X's cross-industry vision to identify circularity KPIs. Manteco also obtains the European Flax® certification and creates Pure®, the next generation of circular and luxury outerwear fabrics made of 100% M Wool®.

2021

2022

Manteco carries out an unprecedented, in-depth LCA study on its M Wool® fibers, in collaboration with the prestigious Polytechnic of Turin. This study is approved by the scientific community and published as a scientific article on MDPI Resources, and it is also certified through the EPD® (Environmental Product Declaration) scheme. Manteco adheres to the ZDHC Supplier to Zero Initiative foundation Level which certifies the application of the MRSL ZDHC at Foundational level. Manteco creates VITA, the most durable recycled wool fabric. M Wool® is included among the Preferred Fibres in the Higg MSI platform. Manteco carries out a scientific study on the Marine Biodegradability and Ecotoxicity of M Wool® fibers and publishes it as a scientific article on MDPI Oceans. Manteco finds a way to reduce the impact of its virgin wool fabric by creating ReviWool®, the low impact virgin wool, and carrying out another unprecedented Life Cycle Assessment on virgin wool fibers.

Governance



The strategic direction of the company is set by the board of directors to which all functions report directly and is composed of Franco Mantellassi as chairman, Matteo and Marco Mantellassi as directors. Manteco, given its nature as a family-owned business, has adopted simplified governance policies without, however, neglecting the definition of strategic aspects, the monitoring of decision-making processes, and the examination of operational activity guidelines.

The President and Board of Directors communicate guidelines and goals for Sustainability to the entire organization. The Board of Directors oversees the Sustainability Report at all stages: from setting up communication and relations with stakeholders, to identifying and addressing material issues, to objectives to be pursued for subsequent periods. Directors engage in constant dialogue with the internal function responsible for sustainability and periodically participate in workshops on sustainable development issues.

Sustainability indicators and related performance are monitored by the innovation and sustainability department, which is responsible for their measurement, control and reporting. This department promotes the harmonization of sustainability activities within the organization and a dialogue with internal and external stakeholders on sustainability issues. It also continuously communicates information and guidance to the Board of Directors regarding the implementation of the sustainability strategy and related tools. Manteco's governance is often awarded with major prizes as recognition of its circular and sustainable business model.

In 2022, the company won the following awards:

- 'Forbes: le 100 aziende italiane nel campo della sostenibilità'
- 'Impresa Top 2022' ItalyPost - Corriere della Sera
- 'PERFORMARE' - SDA Bocconi
- 'Sustainability Award Top100' - Credit Suisse Kon

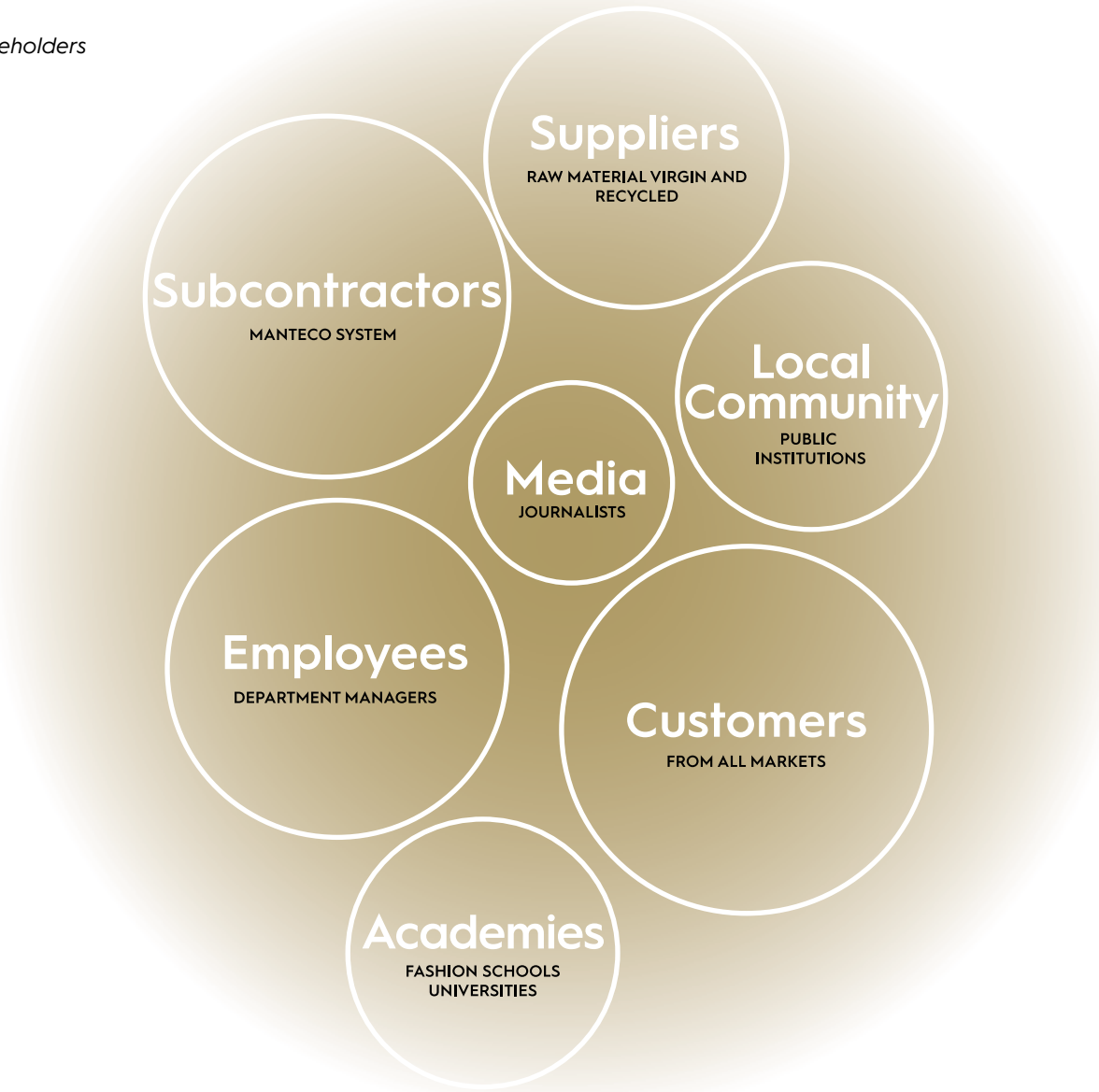


Materiality Assessment

In 2021, for the first time, we decided to arrange an engagement activity, in order to listen more closely to our stakeholders’ interests, possible needs and concerns. In line with the GRI Standards, Manteco conducts a materiality assessment in order to identify issues considered as “material” by itself, as a company, and its stakeholders. Several tools are used to collect and organize the data. Manteco, as a first approach, uses an ad hoc survey. The company identifies issues it considers material and asks its stakeholders to express their opinion on each one of these. Using a scale, chosen as a parameter, to assign a value ranging from 1 (irrelevant) to 5 (very relevant), stakeholders can provide their views on the various issues in a timely manner. The study and organization of the survey results allow for a detailed mapping.

In carrying out its business, Manteco relates to various stakeholders who are directly and/or indirectly affected by the company’s activities. The categories of stakeholders that Manteco addresses are listed below:

Our stakeholders



The results of the materiality assessment, also in light of the 2021 update of GRI standards, were reviewed again in 2022 by the innovation and sustainability department and confirmed by the board. The 14 material themes resulting from the analysis are listed below:



The sustainable development goals

Manteco, through its sustainable development strategy, contributes directly or indirectly to the achievement of the Sustainable Development Goals (SDGs), defined in 2015 by the United Nations and included in the 2030 Agenda.

Goal 3: Good health and well-being

SDG 3 is to: *“Ensure healthy lives and promote well-being for all at all ages”*. Important indicators here are life expectancy as well as child and maternal mortality. Further indicators are for example deaths from road traffic injuries, prevalence of current tobacco use, suicide mortality rate.

Goal 4: Quality education

SDG 4 is to: *“Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all”*. The indicators for this goal are for example attendance rates at primary schools, completion rates of primary school education, participation in tertiary education and so forth.

Goal 5: Gender equality

SDG 5 is to: *“Achieve gender equality and empower all women and girls”*. Indicators include for example having suitable legal frameworks and the representation by women in national parliament or in local deliberative bodies. Numbers on forced marriage and female genital mutilation/cutting (FGM/C) are also included in another indicator.

Goal 6: Clean water and sanitation

SDG 6 is to: *“Ensure availability and sustainable management of water and sanitation for all”*. The Joint Monitoring Programme (JMP) of WHO and UNICEF is responsible for monitoring progress to achieve the first two targets of this goal. Important indicators for this goal are the percentages of the population that uses safely managed drinking water, and has access to safely managed sanitation.

Goal 7: Affordable and clean energy

SDG 7 is to: *“Ensure access to affordable, reliable, sustainable and modern energy for all”*. One of the indicators for this goal is the percentage of population with access to electricity (progress in expanding access to electricity has been made in several countries, notably India, Bangladesh, and Kenya). Other indicators look at the renewable energy share and energy efficiency.

Goal 8: Decent work and economic growth

SDG 8 is to: *“Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all”*. Important indicators for this goal include economic growth in least developed countries and the rate of real GDP per capita. Further examples are rates of youth unemployment and occupational injuries or the number of women engaged in the labor force compared to men.

Goal 9: Industry, Innovation and Infrastructure

SDG 9 is to: *“Build resilient infrastructure, promote inclusive and sustainable industrialization, and foster innovation”*. Indicators in this goal include for example the proportion of people who are employed in manufacturing activities or who are living in areas covered by a mobile network or who have access to the internet. An indicator that is connected to climate change is *“CO2 emissions per unit of value added”*.

Goal 11: Sustainable cities and communities

SDG 11 is to: *“Make cities and human settlements inclusive, safe, resilient, and sustainable”*.

Important indicators for this goal are the number of people living in urban slums, the proportion of the urban population who has convenient access to public transport, and the extent of built-up area per person.

Goal 12: Responsible consumption and production

SDG 12 is to: “Ensure sustainable consumption and production patterns”.One of the indicators is the number of national policy instrument to promote sustainable consumption and production patterns.Another one is global fossil fuel subsidies. An increase in domestic recycling and a reduced reliance on the global plastic waste trade are other actions that might help meet the goal.

Goal 13: Climate action

SDG 13 is to: “Take urgent action to combat climate change and its impacts by regulating emissions and promoting developments in renewable energy”. In 2021 to early 2023, the Intergovernmental Panel on Climate Change (IPCC) published its Sixth Assessment Report which assesses scientific, technical, and socio-economic information concerning climate change.

Goal 15: Life on land

SDG 15 is to: “Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss”. The proportion of remaining forest area, desertification and species extinction risk are example indicators of this goal.



	SDG										
	3	4	5	6	7	8	9	11	12	13	15
Climate Change											
Circularity											
Raw Materials											
Customer Satisfaction											
Traceability & Transparency											
Chemical Management											
Local Production											
Cultivation of Talents											
Digital Transformation											
Animal Welfare											
Support to the Territory											
Health and Wellness											
Packaging											
Diversity and Inclusion											

The contribution to the achievement of the SDGs also comes from some themes not included in the material themes, as per the table below:

	3	4	5	6	7	8	9	11	12	13	15
R&D											
Water Consumption											
Certifications and Initiatives											



Year in short

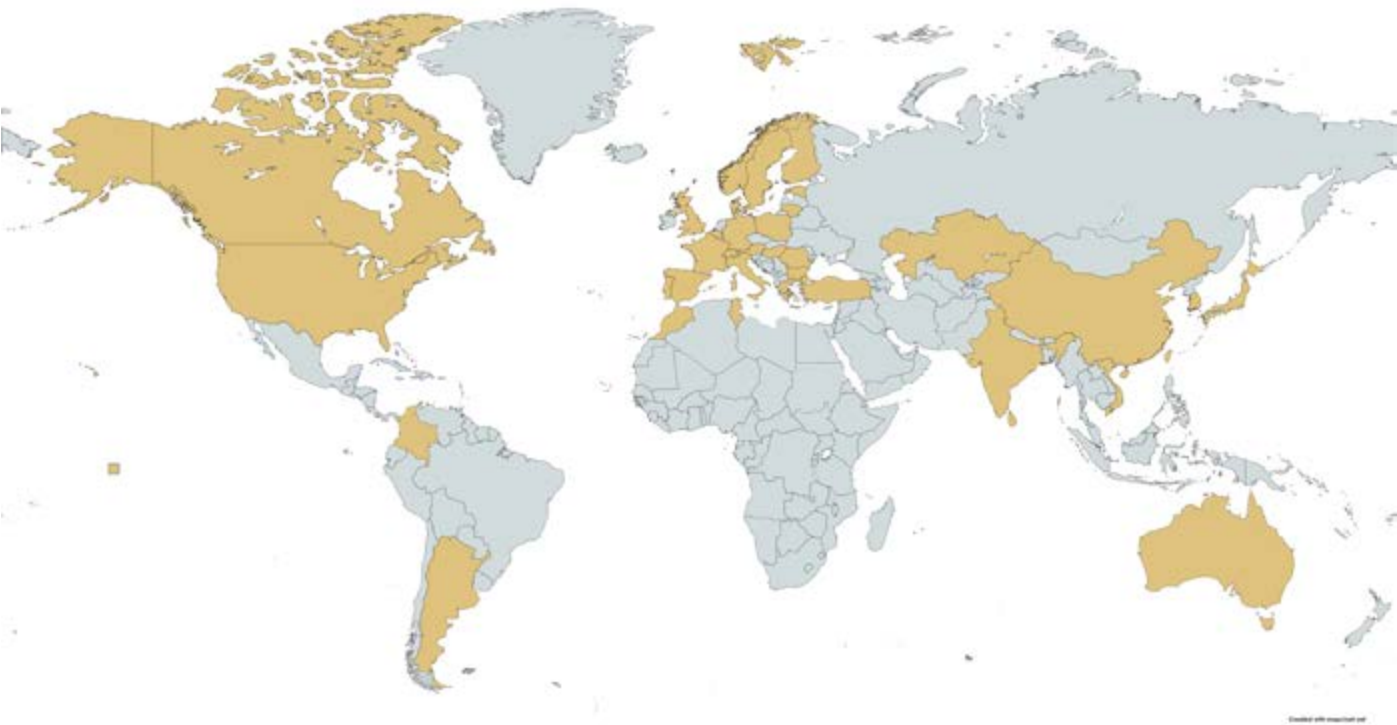
Manteco works mainly for fashion brands in the international arena. Specifically, the company produces fabrics used by fashion and apparel brands to make garments for men, women and children. Below is a look at the number of Manteco’s clients and their geographical locations.

Total customers

2021		2022	
832		961	
Italy	Abroad	Italy	Abroad
215	617	199	762

Served countries

2021	2022
44	45



The following table is about the company’s turnover. It shows how, during 2022, Manteco’s turnover grew by about 10 percent, with a strong increase recorded in Italy.

Revenues (Euro)					
2021		2022		Variation %	
77,615,784		96,846,938		+24.8	
Italy	Abroad	Italy	Abroad	Italy	Abroad
6,467,647	71,148,137	9,275,475	87,571,463	+43.4%	+23.1%

Distribution of value among stakeholders

The economic data relating to the financial year and the comparison with the previous year are shown below. The data are analyzed considering how the revenues from operations, i.e. the value of Manteco production, is redistributed to the various stakeholders to personnel through salaries; to suppliers through the purchase of goods and services useful for production, to the Public Administration through tax charges; to the community through donations, sponsorships and donations; to shareholders and to company itself through the distribution of profits, provisions and depreciation and accounting of investments. This subdivision, which takes place through the reclassification of some income statement items, illustrates the characteristics of the company’s business, and clearly directs the priorities for action to achieve its sustainability objectives.

Production Volumes

	2021	2022
Total quantity produced	6,835,406 mt.	7,457,039 mt.

Production volumes are referred to the meters sold.

Direct economic value generated and distributed (Euro)			
	2021	2022	Variation (%)
DIRECT ECONOMIC VALUE GENERATED	84,896,667	99,677,451	17.4
Revenues	77,615,784	96,846,938	24.8
ECONOMIC VALUE DISTRIBUTED	72,562,805	90,558,239	24.8
To suppliers	63,391,646	78,410,602	23.7
To employees (wages and benefits)	4,107,951	4,427,382	7.8
To credit institutions	136,126	332,331	144.1
To shareholders	1,593,539	3,501,400	119.7
To Public Administration	3,160,737	3,767,246	19.2
To community	172,806	119,278	-31.0
ECONOMIC VALUE RETAINED	12,333,862	9,119,212	-26.1

In 2022, Manteco invested 3,362,973 Euro in Research & Development to develop new styles and circular economy projects (2,719,288 Euro in 2021).

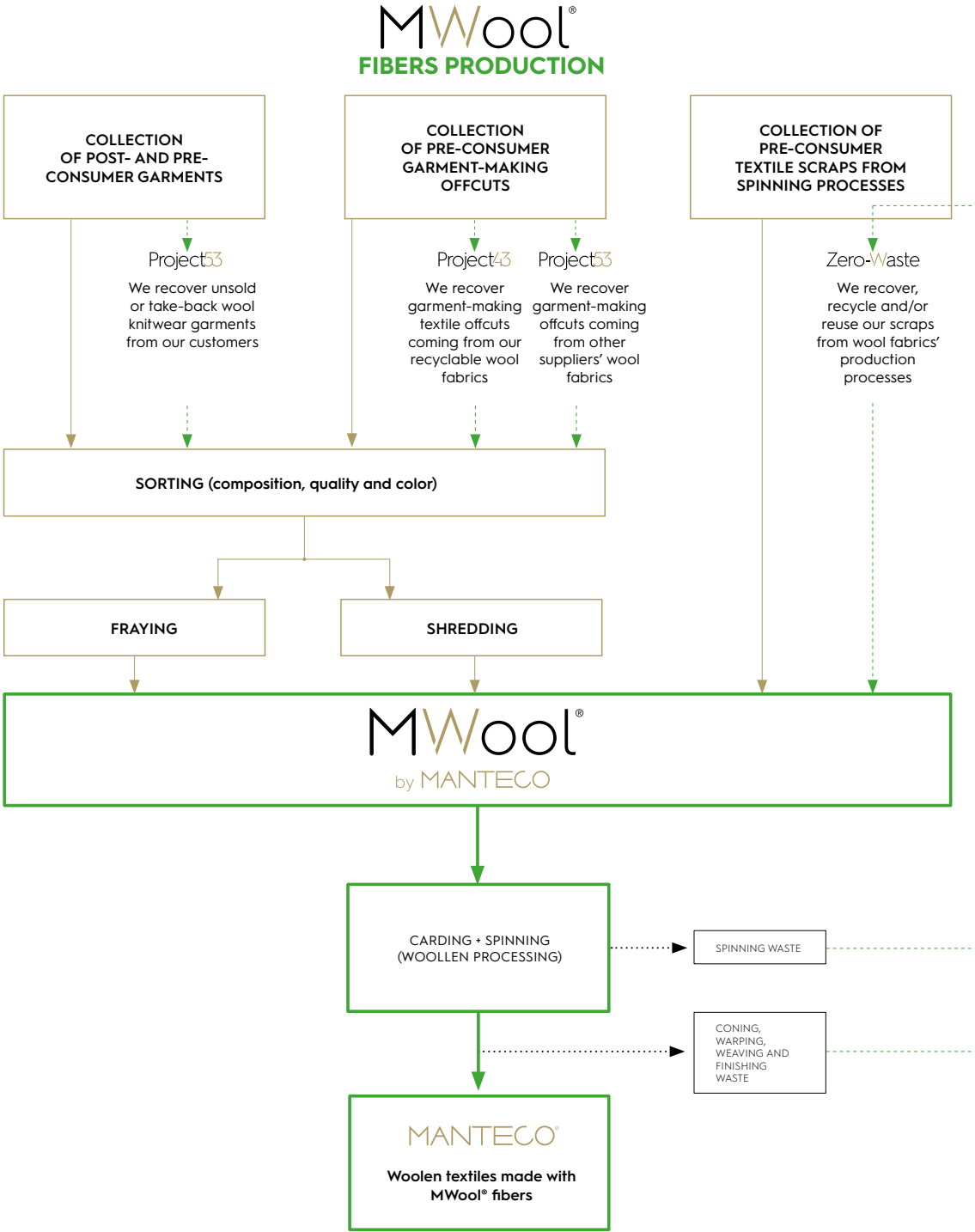
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MANTECO®
FOR ENVIRONMENT

MWool®

MWool® is the key ingredient of our premium and circular recycled wool textiles.

This low-impact and high-end fiber is the result of more than 80 years of circular know-how, innovation and science. MWool® is a raw material that fosters an all-round circular economy, as it is made by mechanically recycling post-industrial waste, pre-consumer offcuts and leftovers, and - even most importantly - post-consumer garments.



MWool® stands out for an accurate selection and deep testing of the best possible raw materials, a low-impact mechanical recycling process, a masterful and dyes-free color creation through our Recype® process, a painstaking quality control and testing, all guaranteed by our MSystem zero-mile and highly specialized supply chain.

In 2022, thanks to a collaboration with the Politecnico di Torino, MWool® became the first-ever recycled wool with a Life Cycle Assessment that was approved by scientific community (see pag. 75) As a result of the study, two certification activities were carried out:

- EPD® Environmental Product Declaration on the production of 1kg of 100% MWool® yarn [www.environdedec.com]

- MWool® was put among the Preferred Fibers of the Material Sustainability Index by Higg Index

Based on the study, and as a result of the type and source of raw material purchased, the impact of 1Kg of MWool® fibers, in 2022, is listed below in comparison to 1 kg of generic virgin wool

Impact category	Unit	MWool	Virgin wool fibre
Climate change	kg CO ₂ eq	2.83E-01	7.58E+01
Ozone depletion	kg CFC11 eq	5.12E-07	1.17E-06
Photochemical ozone formation	kg NMVOC eq	3.31E-03	7.31E-02
Particulate matter	disease inc.	1.70E-08	1.19E-05
Acidification	mol H ⁺ eq	4.27E-03	1.69E+00
Eutrophication, freshwater	kg P eq	2.57E-05	1.83E-02
Eutrophication, terrestrial	mol N eq	1.22E-02	7.43E+00
Ecotoxicity, freshwater	CTUe	2.99E+00	1.20E+03
Land use	Pt	1.43E+00	7.74E+03
Water use	m ³ depriv.	2.73E-02	1.39E+01
Resource use, fossils	MJ	3.73E+00	1.25E+02
Resource use, minerals and metals	kg Sb eq	1.71E-06	1.38E-04

Compared to previous years, there was a substantial reduction in impacts, because we used a higher percentage of wool coming from fraying recycling process rather than shredding recycling processes, which is more impactful.

The reduction in impacts due to the use of MWool® are evident, especially when these are checked on total production figures:

Given the same quantities used would have had the following impacts

If the same quantities had been of generic virgin wool, we would have had the following impacts:

	2020	2021	2022
kgs of MWool® produced	1,098,300	1,125,460	1,575,862
Climate change (t CO ₂ eq.)	683	700	446
Water use (hm ³ depriv.)	0.10	0.10	0.04
Resource use, fossils (TJ)	9.1	9.4	5.8

	2020	2021	2022
Generic virgin wool annual production	1,098,300	1,125,460	1,575,862
Climate change (t CO ₂ eq.)	83,251	85,310	119,450
Water consumption (hm ³ depriv.)	15.27	15.64	21.90
Resource use, fossils (TJ)	137.2	140.6	196.9

From the measured data, it is evident that MWool® has brought the following savings in:

	2020	2021	2022
Climate change (t CO ₂ eq.)	82,568	84,610	119,004
Saving %	99.2	99.2	99.6
Water consumption (hm ³ depriv.)	15.17	15.54	21.86
Saving %	99.3	99.3	99.8
Resource Use, fossils (TJ)	128.14	131.2	191.1
Saving %	93.3	93.3	97.0

92% is GRS Global Recycled Standard Certified.

Recype®

When it comes to creating M Wool® colors, no added dye is needed for our company, since these fibers come already dyed from their former life. Through the Recype® process, our artisans of the raw material department manage to devise new wool colors just by mixing numerous and different shades of recycled wool fibers, developing actual ‘recipes’ of no-dye colors, which are archived and adapted to the kgs of yarns that need to be produced. Thanks to this technique, and more than 80 years in the field of wool recycling, Manteco has developed more than 1,000 colors. M Wool® color creation is not only technical, but also art and craftsmanship. Batches of recycled wool of the same color tone cannot always be found on the market. The mastery of Manteco’s color specialists during the Recype® process lies in compensating these differences in the Recype® composition, in order to achieve the same final share and guarantee production consistency, scalability and repeatability. In 2022, we assessed in collaboration with Politecnico di Torino the environmental impacts of the dyeing of 1kg of virgin wool fabric, which leads to the following:

Impact category	Unit	Impacts of the piece dyeing of 1kg of virgin wool fabric
Climate change	kg CO ₂ eq	1.33E+00
Ozone depletion	kg CFC11 eq	1.88E-07
Photochemical ozone formation	kg NMVOC eq	2.34E-03
Particulate matter	disease inc.	3.86E-08
Acidification	mol H ⁺ eq	4.62E-03
Eutrophication, freshwater	kg P eq	1.81E-04
Eutrophication, terrestrial	mol N eq	7.39E-03
Ecotoxicity, freshwater	CTUe	2.28E+01
Land use	P†	2.17E+00
Water use	m ³ depriv.	2.26E-01
Resource use, fossils	MJ	1.96E+01
Resource use, minerals and metals	kg Sb eq	1.69E-06

Given that, in 2022, we produced 1,165,920 kg of fabric with M Wool®, we achieved the following savings in terms of CO2 emissions, water consumption and use of fossil resources:

Impact category	Unit	Risparmi
Climate change	† CO ₂ eq	1,550
Water use	hm ³ depriv.	0.26
Resource use, fossils	TJ	22.8

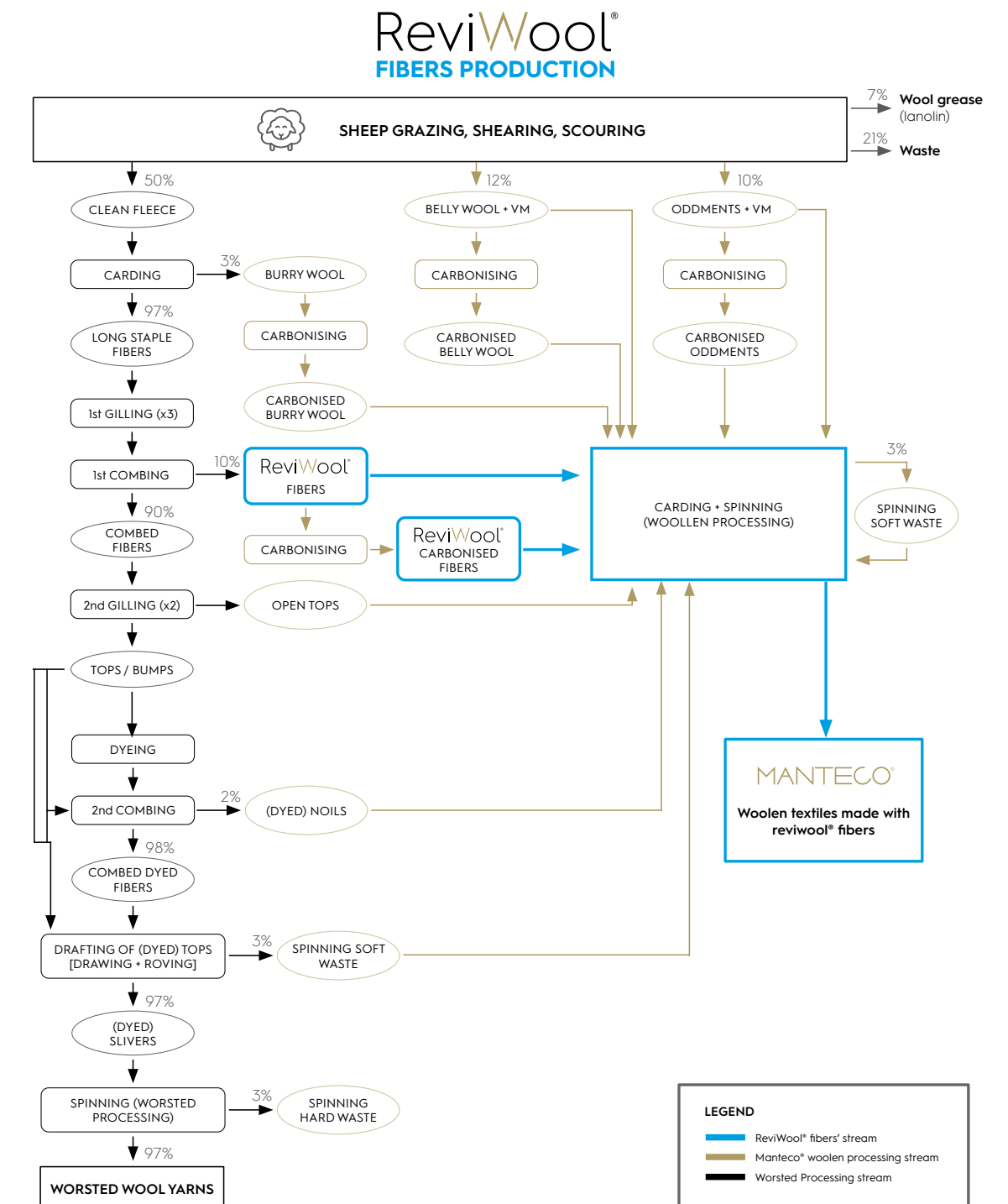


ReviWool®

The production of wool fiber follows a very complex and fragmented supply chain, and the types of fiber obtained vary a lot depending on the breed of sheep, the country of origin, the type of breeding, the body area of shearing and more.

There are various qualifying characteristics for wool fibers, but the main ones are undoubtedly the fineness and length, and according to these characteristics the fibers are used for different purposes.

In 2022, Manteco has created its new brand: ReviWool® - The low impact virgin wool



This extra-fine and recyclable virgin wool is the result of our zero-waste philosophy and our will to eliminate value leakage in the supply chain by enhancing production cycle’s and material’s efficiency.

ReviWool® is made of valuable co-product fibers coming from the worsting process of virgin wool¹, which instead of being wasted, are recovered and masterfully processed through the woollen process to create premium quality textiles with a lower environmental impact, all guaranteed by our MSystem zero-mile and specialized supply chain.

In 2022, through a study conducted in collaboration with the Politecnico di Torino Manteco calculated the impacts of the entire wool supply chain. The study firstly provides a detailed mapping of processes and products involved in the wool production chain, from the sheep grazing to the yarn production, with particular attention to the woollen part.

Secondly, this study analyses the environmental impacts of the different intermediate products. It results that shorter fibers, used in the woollen processing, generally have lower impacts than longest fibers addressed to the production of fine yarns. The study is one-of-a-kind, as not only did it manage to allocate the right impact to ReviWool®, but simultaneously managed to shed light on the impacts related to the different wool components. ReviWool® promotes value capture and enhances wool production cycles’ efficiency, but also the absence of bad chemicals, since the fibers are APEO’s free, and animal welfare, because the suppliers have all signed the policy on respect for animals. In 2022, the impact of ReviWool® fibers (carbonised and non-carbonised) compared to generic virgin wool open tops was as follows:

Impact category	Unit	Reviwool®	Open Tops
Climate change	kg CO ₂ eq	2.96E+01	8.57E+01
Ozone depletion	kg CFC11 eq	3.71E-07	1.04E-06
Photochemical ozone formation	kg NMVOC eq	2.58E-02	7.44E-02
Particulate matter	disease inc.	4.73E-06	1.37E-05
Acidification	mol H ⁺ eq	6.68E-01	1.94E+00
Eutrophication, freshwater	kg P eq	7.22E-03	2.09E-02
Eutrophication, terrestrial	mol N eq	2.95E+00	8.56E+00
Ecotoxicity, freshwater	CTUe	4.68E+02	1.36E+03
Land use	Pt	3.08E+03	8.95E+03
Water use	m ³ depriv.	5.37E+00	1.55E+01
Resource use, fossils	MJ	4.15E+01	1.16E+02
Resource use, minerals and metals	kg Sb eq	5.34E-05	1.54E-04

¹Such fibers are virgin according to EU Regulation 1007-2011 Art. 8 Entry 1.

In 2022, we produced 1,249,947 kg of ReviWool® fibers, leading to the following absolute impacts:

	2022
Climate change (t CO ₂ eq.)	36,873
Water consumption (hm ³ depriv.)	6.69
Resource use, fossils (TJ)	49.87

If the same quantities had been done with generic virgin wool open tops, the impacts would have been:

	2022
Climate change (t CO ₂ eq.)	107,120
Water consumption (hm ³ depriv.)	19.37
Resource Use, fossils (TJ)	144.99

This resulted in the following savings:

	2022	%
Climate change (t CO ₂ eq.)	70,247	65.6
Water consumption (hm ³ depriv.)	12.68	65.5
Resource Use, fossils (TJ)	95.12	65.6

Animal Welfare

On March 9, 2022, the amendment of Articles 9 and 41 of the Constitution of the Italian Republic entered into force, making the protection of animals and the environment one of the principles in the fundamental Charter on which the laws of the Republic are based.

In 2021, Manteco conducted an animal welfare action. We asked our virgin animal fiber suppliers to sign our policy related to animal welfare.

Manteco’s Animal Welfare policy is based on the Five Animal Freedoms, in accordance with the IWTO “Specifications for Wool Sheep Welfare” guidelines which recommend (iwto.org):

- 1 Freedom from hunger and thirst through free access to water and food;
- 2 Freedom from discomfort provide an appropriate environment including comfortable shelters and rest areas;
- 3 Freedom from pain, injury and disease through rapid prevention, diagnosis and treatment;
- 4 Freedom to express normal behavioral characteristics by providing sufficient space, appropriate facilities and companionship of the same animal species;
- 5 Freedom from fear and discomfort by ensuring conditions and treatments that avoid mental suffering

The official formalization of the animal welfare policy was an additional step to the actions already underway carried out by the company. In fact, over the years, increasing attention has been paid to the purchase of wool produced by responsible RWS certified farms and No Mulesing virgin wools.

	2020	2021	2022
No-mulesing wool purchases Kg	528,448	491,037	589,610
%	33.5	30.6	29.7
RWS-certified wool purchases	132,800	147,045	162,172
%	8.4	9.2	8.2
Total wool purchases	1,575,379	1,600,063	1,981,663
Total responsible wool purchases	661,248	638,082	751,782
%	42.0	39.9	37.9

Despite the difficulties in raw material sourcing that occurred in 2022, we can proudly say that we were able to source almost the same percentages of responsible wool as in the previous year.

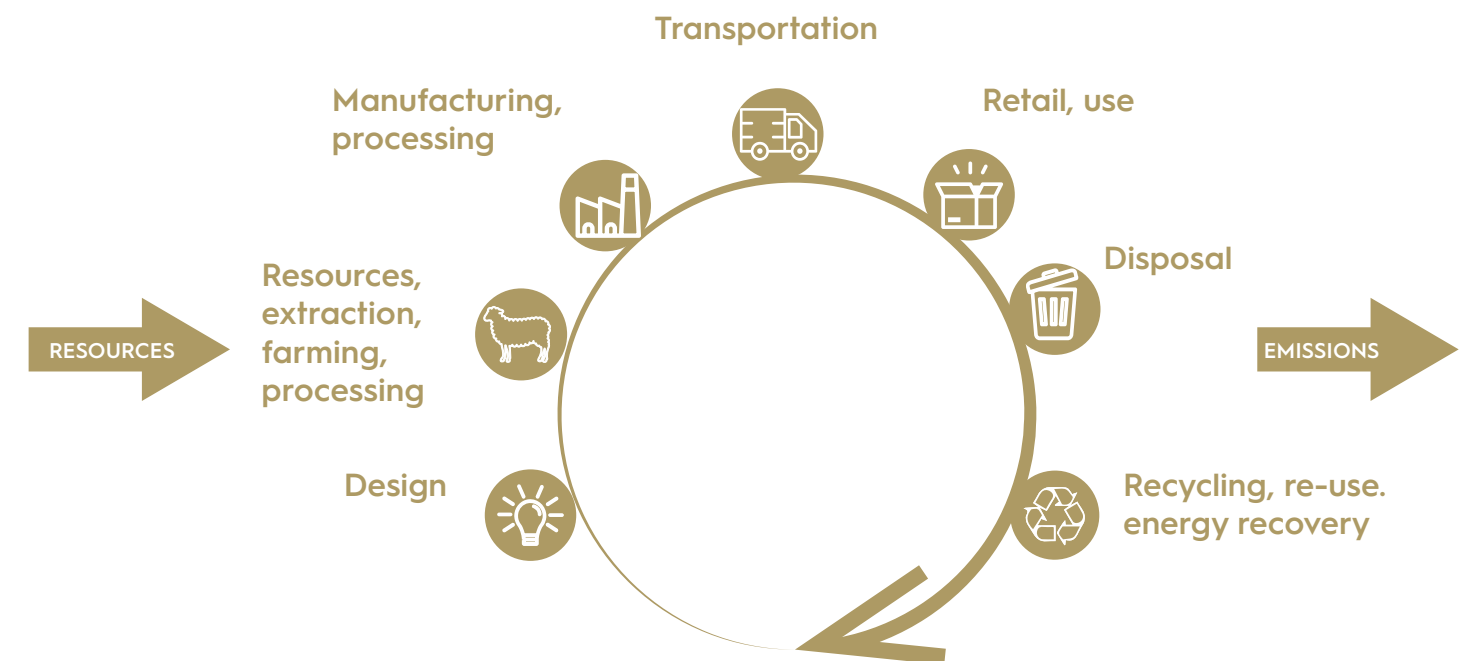
The strong increase in purchases of European wools was very positive, as it accounted for 79,611 kilograms, or 5.4% of purchases, a result that was never seen in the past.

According to the latest Textile Exchange report, (textileexchange.org/) RWS wool production is 3% of the global market, while No Mulesing (NM) and Ceased Mulesing (CM) wool production is 19% of Australian wool production. Australian wool production is 22% of global production.

Circularity

Manteco was born circular. Its governance and its production model are circular, just like the creation and production of recyclable fabrics, and the use of recycled materials are the basis of the company's industrial project.

By adopting the basic concept of Life Cycle Thinking, which refers to the need to assess the burden and benefits associated with products / sectors / projects that adopt a holistic perspective, from raw materials to the end of life², Manteco has developed a series of activities within its production.



1. Sustainable Design

Manteco fabrics are designed to be durable and recycled. Thanks to investments in R&D, the company has developed specific know-how in the design of fabrics that can be easily reused in production cycles. The "Sustainable Design" initiative shows how the company thinks in a circular way. The recycling phase is not the last step in the life cycle of the fabric, but the starting point for the sustainable production of new fabrics.

2. Zero Waste

The production waste obtained along the Manteco value chain is largely recycled and reintroduced into the production cycle. The "Zero Waste" project aims to ensure that waste is not considered as such, but as a precious raw material from which to start a new production cycle, leading to economic and environmental benefits.

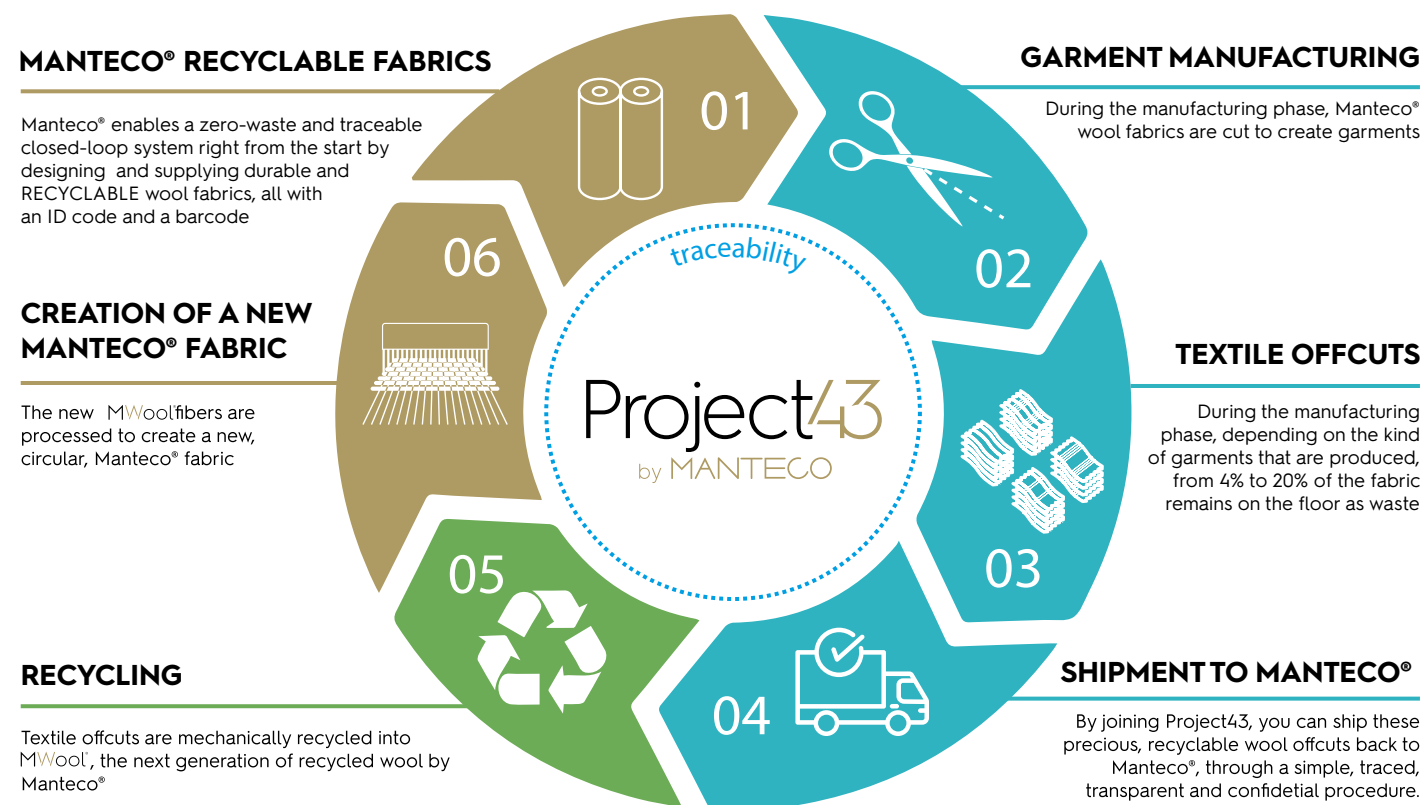
In 2022, Manteco recovered a quantity of waste equal to 215,372 kg and, following a careful sorting work, 71.5% of this returned to the production cycle.

²European Commission Service Site eplca.jrc.ec.europa.eu

Year	Total recovered materials kg	Total Reused materials kg	%
2020	198,600	126,200	63.5%
2021	234,800	158,600	67.5%
2022	215,372	153,990	71.5%

3. Project43

The manufacturing of garments leads to a fabric wastage, from 4% to 20%, depending on the design and shape. Through Project43, these scraps return to Manteco and are given a new life. This way, a complete circular project is created, with undoubted environmental benefits, as there is a waste optimization, the production of recycled fabrics with completely traced materials, the promotion of a real culture of recycling. Through a partner company, Manteco purchases waste from its customers and issues a certificate stating the quantity of fabric that has been saved from downcycling processes or even worse.



Since 2022, thanks to our life cycle assessment on M^{Wool}® fibers, it's been possible for us to calculate the impacts and environmental savings of the take-back offcuts in a timely manner. In 2022, thanks to Project43, we recovered 53,600 kg of garment-making offcuts.

P43				
Year	2019	2020	2021	2022
Total kg. of recovered offcuts	4,430	1,780	80,000	53,600

4. Production of Upcycled pochettes and other gadgets

Manteco® has found a way to make the most of deadstock fabric rolls and discarded colorings and trials leftovers from collection development. Instead of being wasted, they are upcycled into Manteco Pochettes, which are used as a container for our textile swatches when we send selections to our customers (later usable as a fancy laptop or documents case). This production is carried out on behalf of Manteco by the Flo Concept social cooperative of Florence. www.siamosolidali.it Deadstock fabric rolls and discarded colorings and trials leftovers from collection development can also be upcycled into Manteco® UpBlankets (manteco.com/upblanket), one-of-a-kind, home-bound blankets made the we currently use as a special gift.

Certifications & initiatives

Any claim of sustainability made by Manteco is supported by evidence that makes it unassailable. The legislations of various world states are gearing up against 'greenwashing', which is why Manteco, before making any kind of communication, creates a scaffold to support it.

Manteco's sustainability assertions follow the principles of UNI ISO /TS 17033:2020, which provide the following guidelines:

- Reliability;
- Transparency;
- Relevance;
- Stakeholder involvement;
- Equity

In order to fulfill the principles listed above, Manteco has conducted a series of actions related to obtaining certifications and initiatives.

Timeline of the certifications we have obtained so far:

2017

Global Recycled Standard (GRS): it certifies the amount of recycled raw material in a fabric and its value chain.



4sustainability® Commitment and the implementation of the Chemical Management Protocol (CHEM) for the elimination of toxic and hazardous substances in production through the MSRL ZDHC (Manufacturing Restricted Substances List - Zero Discharge of Hazardous Chemicals)

2017

2019

Responsible Wool Standard (RWS); voluntary standard addressing the welfare of sheep and the management of the land they graze. In 2022 this standard Textile Exchange merged this standard along with RMS (Responsible Mohair Standard) and RAS (Responsible Alpaca Standard) into the RAF Responsible Animal Standard



Organic Content Standard (OCS) that tracks the presence of organically produced fiber throughout the supply chain.

2020

2021

European Flax® that ensures traceability of the presence of fine flax grown in France, Belgium and the Netherlands.



2022

EPD® Environmental Product Declaration of a 100% M Wool® yarn, which transparently reports environmental data for a product's life cycle according to the international ISO 14025 standard



Ø ZDHC

ZDHC Supplier to Zero Foundation Level, it certifies the application of MRSL ZDHC at the Foundational level.

2022

Timeline - initiatives:

2019

BCI Better Cotton Initiative, facilitating best practices in cotton farming through education, working conditions and environmental considerations.



The Ellen MacArthur Foundation is an international charity that develops and promotes the circular economy in order to tackle some of the biggest challenges of our time, such as climate change, biodiversity loss, waste, and pollution. (ellenmacarthurfoundation.org) Manteco's participation in the Ellen Mc Arthur Foundation aims to accelerate the transition to a circular economy through the six thematic areas: learning, business, institutions governments and cities, insight and analysis, systemic initiatives, and communication. Manteco participated in both workshops organized by the foundation.

2021

2021

Monitor for Circular Fashion- SDA Bocconi, which through the collaboration of virtuous companies disseminates best practices of circular fashion, promoting technical, managerial and scientific skills in order to contribute to the transition to circular business models. (www.sdabocconi.it/circularfashion)





Responsible chemical management

Production chemical management and product chemical compliance are pillars of Manteco’s sustainability policy. According with 4Sustainability® chemical management protocol , also in 2022 Manteco has mapped and qualified the supply chain joining the level Advanced.

A separate chapter deals with chemical risk management with regard to recycled raw materials. In this case, an accomplished chemical management that succeeds in predicting chemical risk is currently not applicable because the raw materials that are used have different origins, dyeing techniques, ennobling techniques, and production periods. Thanks to an effective sampling method, fiber samples can be obtained whose analysis results are representative of the batch, but theoretically each fiber in each individual batch of recycled wool could have its own history. For this reason, Manteco punctually performs chemical tests in a systematic way at the inlet of purchased recycled wool in order to verify its compliance with worldwide mandatory regulations and brand PRSLs. In this context, Manteco respects the precautionary principle.³

In 2022, Manteco achieved achieved the ZDHC Foundational level of the Supplier to Zero program.

Integrated management of laboratory results is carried out through the MData software, which makes it possible to verify, in a comparative manner, the performance of each individual parameter.

This structured data organization allows Manteco to have a clear view of its supply chain. As a result, there is a factual and circumstantial drive to improve product quality.

Supply chain’s physical-chemical-dyeing compliance

Analytical verification of quality control parameters of incoming raw materials, process and finished product are carried out both at the company’s three in-house laboratories (raw materials, physical, dyeing) and at ISO 17025-certified external laboratories.

The large number of laboratory checks led to the following costs at external laboratories:

Cost for chemical management and compliance testing			
	2020	2021	2022
Total costs in EURO	375,041	533,661	427,345

In 2022, there was an increase in the number of physical-dye tests within the corporate laboratories.

³United Nations (UN), “RIO Declaration on Environment and Development,” 1992. The principle states, “In order to protect the environment, States will broadly apply, according to their capabilities, the precautionary approach. Where there is a risk of serious or irreversible damage, the absence of absolute scientific certainty should not serve as an excuse for postponing the adoption of cost-effective measures directed at preventing environmental degradation.”



Water consumption

The production activity does not produce industrial wastewater, and the only discharges present are domestic wastewater produced by the use of toilets, which are neglected in this analysis. Companies that carry out wet processing on behalf of Manteco are authorized to discharge industrial wastewater in accordance with legal requirements and perform the prescribed periodic inspections.

The wastewater is purified at the G.I.D.A. Consortium www.gida-spa.it

Water consumption

	2020	2021	2022
Total water used (m³)	1,416	1,179	1,381

As previously described, the Recype® process results in the saving of 0.226 m³ of water per kg of dyed wool fabric.

Soil & energy

The industrial buildings where Manteco operates derive from the renovation and upgrading of old buildings, which were modernized and made more functional according to the company's production needs and, at the same time, made safe based on current labor safety laws. Manteco's need to acquire new production space in the face of turnover growth was to avoid consuming additional land through the construction of new facilities. The renovation of the buildings was accompanied by the installation of photovoltaic panels on the roofs, which made it possible to reduce the amount of electricity purchased from third parties. The company is equipped with the following photovoltaic systems:

- Sun 1 (153 kWp)
- Sun 2 (50kWp)
- Sun 3 (200 kWp)
- Sun 4 (165,6 kWp)
- for a total of 568,6 kwp.

The company's energy consumption consists mainly of electricity for lighting the workplaces and natural gas for their heating. Consumption resulting from the use of company transportation vehicles is also reported⁴.

		u.m.	2020	2021	2022
Electricity	Electricity consumption	KWh	741,858	941,715	854,509
		GJ	2,671	3,390	3,076
	Purchased electricity	KWh	476,154	653,307	548,441
		GJ	1,714	2,352	1,974
	Electricity produced by photovoltaics	KWh	657,544	617,869	656,110
		GJ	2,367	2,224	2,362
	of which produced by photovoltaic system and sold to grid operator	KWh	391,840	329,461	350,542
		GJ	1,411	1,186	1,262
	Of which produced by photovoltaic system and consumed in-house	KWh	265,704	288,408	306,068
		GJ	957	1,038	1,102
Electricity consumed by photovoltaics	%	35.8	30.6	35.8	
Natural Gas	Heating consumption	S^m³	16,372	23,012	20,204
		GJ	586	829	721
Company vehicles	Diesel fuel consumption	l	26,939	38,229	34,482
		GJ	966	1,374	1,239
	Gasoline fuel consumption	l	2,012	2,759	4,855
		GJ	65	90	158
Total energy consumption		GJ	4,288	5,683	5,194

⁴The conversion coefficients published annually by the Department for Environment Food & Rural Affairs (DEFRA) of the U.K. government were used for the GJ conversions.



Renewable energy production from the photovoltaic plant produced 656,110 kWh of electricity in 2022. Of this self-produced energy, Manteco sold 53% to the grid, allocating the remaining 47% for self consumption. Overall, 36% of the electricity demand is met by the photovoltaic system. Although Manteco produces more energy than is purchased, the productivity of Manteco’s PV plants is linked to seasonality, which makes them particularly efficient during the summer months. During such periods, Manteco’s energy needs are less than the electricity generated by the plants. For this reason, a good portion of the electricity generated is sold to the grid operator. On the other hand, during winter periods, the company needs to supply itself from the grid.

Building n° 1: Via della Viaccia, 19
Construction date: 1970
Total surface: 6,783 mq
Covered surface: 4,863 mq

Building n° 2: Via dei Mille, 10
Construction date: 1962
Total surface: 6,311 mq
Covered surface: 5,834 mq

Building n° 3: Via della Viaccia, 27,
29 e Via 1 Maggio 31, 33
Construction date: 1978
Total surface: 5,663 mq
Covered surface: 3,839 mq

Building n° 4: Via dei Mille, 10
Construction date: 1962
Total surface: 6,311 mq
Covered surface: 5,834 mq

■ Buildings purchased prior to 2021 ■ Building purchased in 2022

Emissions

Manteco’s direct emissions (Scope 1) are related to the consumption of natural gas used in the company for heating and the combustion of gasoline and diesel in company vehicles. Scope 1 emissions do not include refrigerant gases from air-conditioning systems (F-Gas) because no maintenance work was required during 2022 as a result of established leaks of these gases. Manteco’s indirect (Scope 2) emissions are related to purchased electricity.

In line with the GHG Protocol, the calculation of indirect Scope 2 emissions is based on purchased electricity and does not take into account electricity produced by photovoltaics and sold to the grid operator. Thus, the installation avoided the CO₂ emission into the atmosphere associated with the purchase of additional electricity and contributed to the production of energy from renewable sources.

	2020	2021	2022
Scope 1 – Direct Emissions	106.06 t CO ₂ eq	148.06 t CO ₂ eq	102.90 t CO ₂ eq
Gas for heating	33.11 t CO ₂ eq	46.52 t CO ₂ eq	40.73 t CO ₂ eq
Diesel for transportation	68.59 t CO ₂ eq	96.04 t CO ₂ eq	51.68 t CO ₂ eq
Gasoline for transportation	4.36 t CO ₂ eq	6.05 t CO ₂ eq	10.50 t CO ₂ eq

Scope 2 – Non-direct Emissions

	2020	2021	2022
Location-based	123.70 t CO ₂ eq	170.19 t CO ₂ eq	169.41 t CO ₂ eq
Market-based	221.84 t CO ₂ eq	299.59 t CO ₂ eq	250.40 t CO ₂ eq

Data from the DEFRA database (Department for Environment, Food & Rural Affairs - GOV.UK) were used for the calculation of Scope 1. The respective emission factors were used for each reporting year. The following climate-altering gases were considered in the calculation: CO₂, CH₄ and NO₂.
For Scope 2 location-based calculation, emission factors published annually by ISPRA (Istituto Superiore per la Protezione e Ricerca Ambientale) were used.
For Scope 2 market-based calculation, the emission factors published annually by the Association of Issuing Bodies (AIB) “European Residual Mix” were used.



Waste

As part of its Zero Waste policy, Manteco takes great care in sorting the company’s physiological waste.

Both unaccounted municipal waste and textile waste (accounted for with MUD declaration), are collected by the Tuscan multi-utility Alia (www.aliaserviziambientali.it).

Spent toner collection, accounted for with MUD declaration, is carried out by the company lo-Recupero srl (www.iorecupero.it)

Plastic crates that had deteriorated and were no longer fit for use were recovered by the manufacturing company Capp Plast, which recycled them to produce new crates. The recovery of the old crates was accounted for on a MUD form.

The activities carried out by Manteco at its sites are mainly office activities, warehouse activities, quality control activities, and packaging of fabrics; therefore, the waste produced is mainly of processing waste, due to cutting operations, and in small quantities packaging.

Produced waste (kg)

	2020	2021	2022
Textile waste fibers	34,440	40,820	52,950
Printing toners	73	136	132
Components removed from WEEE	460	110	//
Mixed demolition waste	2,030	//	//
Old plastic crates	1,149	3,328	1,596
Paper and cardboard packaging	680	//	//
Paper and cardboard	1,635	1,708	//
Pipes and lamps	65	110	//
Mixed packaging	2,000	1,980	//
Other non-hazardous waste (septic tanks)	10,390	4,800	//

Year-to-year comparisons are not feasible at this time, as Manteco is working toward the goal of collecting waste data in a more timely manner.

It is a path of harmonization that Manteco is pursuing over the years in order to refine the indicators and measures.

Raw Materials

For the production of its fabrics, Manteco purchases fibers and yarns. Recycled fibers are preferably purchased in accordance with the GRS -Global Recycled Standard, while virgin wool - as already described - can come from responsible production in accordance with the RWS - Responsible Wool Standard or from No-Mulesing farms. The company also develops collections of fabrics produced from recycled cotton, organic cotton, FSC Viscose (whose producers are rated Green Shirt according to the Canopy scheme), European Flax certified linen, BCI cotton.

	2022 ⁵
Purchased renewable fibers (Wool)	3,602,853 Kg
Purchased Man-Made fibers	848,446 Kg
Purchased renewable yarns (Wool, cotton)	286,339 Kg
Purchased 100% Man-Made and/or Blended yarns	495,576 Kg

	2020	2021	2022
Total raw material and yarns purchased (kg)	3,874,735	4,742,547	5,233,214
Raw material and yarns with sustainability certification (kg)	1,746,306	2,049,127	2,871,347
Raw material with sustainability certification (%)	45.0	43.2	54.0
Raw material with recycled material characteristics (kg)	1,136,737	1,479,128	1,943,848
Raw material with recycled material characteristics (%)	29.3	31.2	37.1

⁵A new classification has been introduced. Therefore, comparison with previous years is not available.

Packaging

For product packaging, the company mainly uses plastic film and various paper and cardboard materials.
For the purpose of better reporting, the company has decided to classify packaging materials according to the bands defined by the CONAI Environmental Contribution⁶, so that different packaging can be grouped together according to unambiguous verification indicators⁷.

Plastic

Range	Kg.	%	Eligible for sorting and recycling	Circuit
A1	17,740	45%	Yes	Trade and industry
A2	5,444	14%	Yes	Trade and industry
B2	15,343	39%	Yes	Domestic
C	539	2%	No	
Total	39,066			

98% of plastic packaging purchased by Manteco is recyclable. 15,316 kilograms of polyethylene film (LDPE) used to package fabric rolls for shipping are 30% recycled products.

Paper

Range A1 Kg. 15,150

In continuity with Manteco’s policy, 2022 saw a major change for the purpose of collection presentation. The old plastic labels were replaced with paper labels. Thus, a further elimination of non-recyclable and non-biodegradable material within Manteco was achieved.

⁶www.conai.org/

⁷The change in methodology allows for more precise measurement. However, comparison with previous years is not available.

[illegible]

MANTECO®
FOR RESEARCH



R&D

A company’s growth comes through investment in research and development. Technical-scientific innovation pushes Manteco to take unexplored paths.

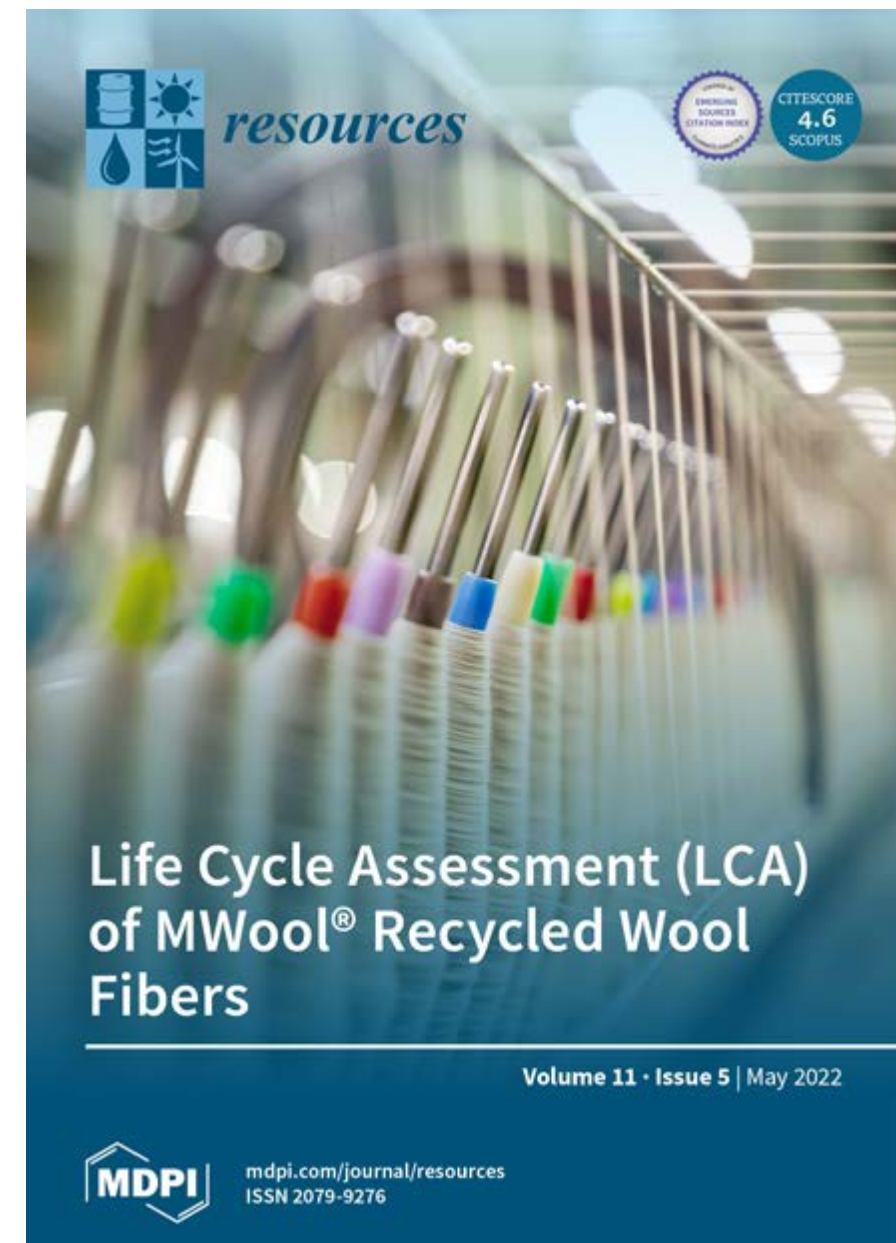
Stylistic research, quality performance and responsible production are the foundations on which Manteco’s new collections are developed. Manteco’s goal is to make the style, quality and sustainability departments of the brands dialogue and tune with each other.

It can be easily summarized that in Manteco the creation of a collection is the union of a stylistic idea reported on production principles that guarantee quality, circularity and production efficiency.

	2020	2021	2022
New styles developed by Manteco	1,613	1,813	1,503

Academic research

All environmental impact calculations performed are the result of an active and intensive collaboration with the Politecnico di Torino. Each impact figure described is derived from the processing of measurements made on appropriate mathematical models. The rigor with which the work was carried out has resulted in the scientific community's endorsement of MWOol®'s LCA study through the publication of an article in the scientific journal MDPI Resources (www.mdpi.com). The publication was also chosen as the cover of the May 2022 issue of the same journal.



The study carried out was subsequently aligned with the EPD® - Environmental Product Declaration model for the yarn produced with 100% MWOol®, thus being able to declare the absolute values of the impacts of that product (www.enviromedec.com).

Marine Biodegradability

The topic of biodegradability was already addressed by Manteco in 2021, as it is becoming increasingly important at a global level. Particularly, the repercussions of microplastic pollution is proving to be very invasive. Natural fibers such as cotton and wool are also present in the seabed, but there is no literature on the marine biodegradability of these fibers.

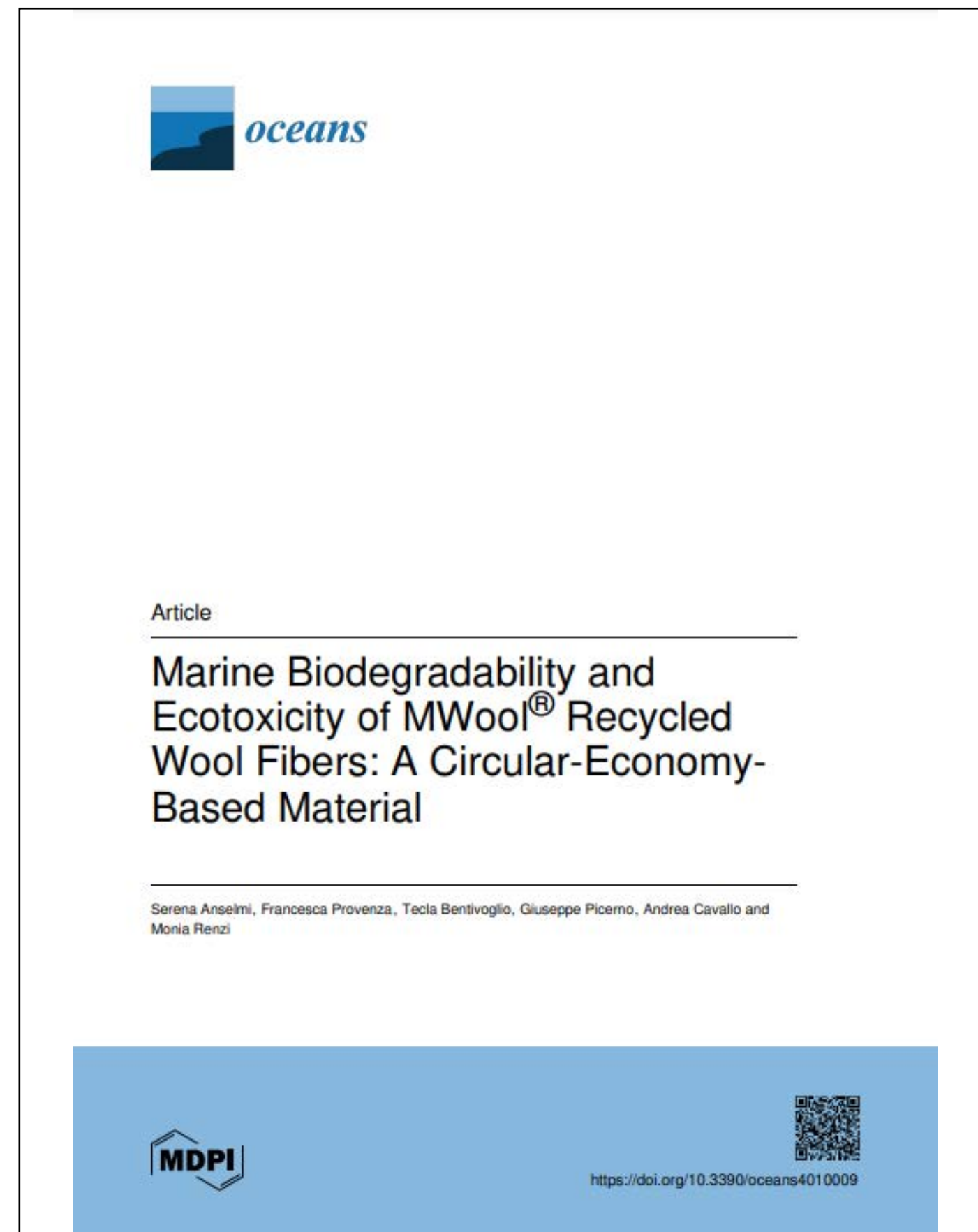
In collaboration with the University of Trieste and the Bioscience Research Center, we carried out a study on MWool® fibers' biodegradability and the resulting toxicity of substances released into the same environment.

The purpose of the study was to verify the consequences of MWool® fibers being deposited in the sea, after being dispersed into the air during wearing.

It should be emphasized that the study absolutely does not want to pass the message that one can throw a garment produced with MWool® into the sea without any consequences for the environment.

The tests performed have been published in the journal MDPI Oceans (www.mdpi.com), and give some interesting early indications, viz:

- MWool®, although very slowly, manages to biodegrade in the sea;
- the released substances do not lead to ecotoxicity problems in the marine species used for the study;



Digital Transformation

Data, the speed of information exchange and the creation of blockchains are fundamental elements in the relationships between companies. Manteco actively pursues its digitization policy. MTrace and MData are a clear example of how the company has welcomed technological innovation within its business model, recognizing its importance and potential.

The digitization of collections started in 2017, when Manteco created a digital archive of all the fabrics it produces. This archive allows us to provide a fast and efficient service to customers and, at the same time, manages to reduce the environmental impact of express shipments.

Kg CO2 eq fabric

Italy	0.98 Kg CO ₂ eq
Europe	4.36 Kg CO ₂ eq
USA	8.08 Kg CO ₂ eq
Japan	6.52 Kg CO ₂ eq
Hong Kong	7.32 Kg CO ₂ eq
China	7.15 Kg CO ₂ eq
South Korea	9.88 Kg CO ₂ eq

The average impact for Manteco turns out to be 4.33 kg CO₂/kg fabric and is related to the geographic location of its customers.

In contrast, the use of e-mail cuts down distances and results in an average environmental impact of only 0.050 kg CO₂/mail. The data show the environmental benefits that result from the digitization service.

[illegible]

MANTECO®
FOR COMMUNITY

Traceability and transparency

Traceability and transparency are one of the foundations of sustainability. By tracing the supply chain, a company can understand its complexity, strengths and weaknesses. This is important in order to enhance its merits and place appropriate corrective actions where needed.

"Improving traceability and transparency has become a priority for the apparel and footwear industry. Consumers, governments, and civil society are demanding responsible business behavior and calling on industry to identify and address actual and potential negative impacts in the areas of human rights, the environment, and human health"⁹.

To manage supply chain traceability, Manteco has created the MTrace software. Thanks to such IT tool, verifying the sources of supply and the subcontractor companies that participated in the production of the order, is an extremely simple operation for Manteco.

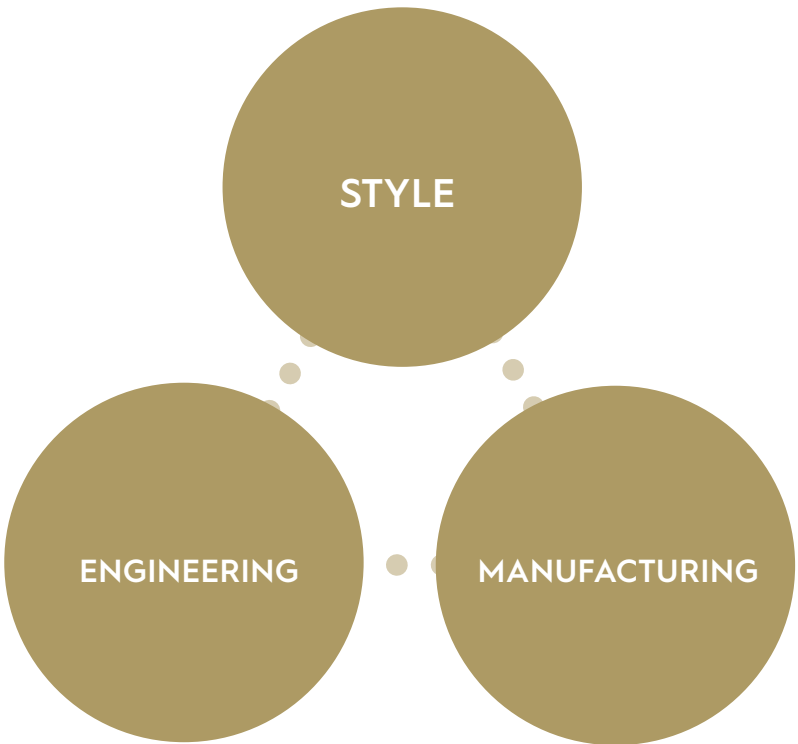
⁹Recommendation No.° 46 UNECE: Enhancing traceability and transparency of sustainable value chains in the garment and footwear sector ECE/TRADE/463

Supply chain partnership

Manteco recognizes the great value of its supply chain, aiming to build solid professional relationships with its subcontractors and suppliers. The fabric, as a finished product, is obtainable thanks to the precious work of different operators, who need to work in a coordinated and cohesive way. And it is precisely from this basic idea that our MSystem arises.

MSystem

The production of a fabric is based on 3 pillars:



In Manteco, the three pillars are considered of equal degree and equally important. Crafting a beautiful fabric requires the right idea, which is then properly engineered and made real in an artisanal way within an industrial process.

The craftsmanship within the industrial process is guaranteed by our Manteco System. The production of fabrics with high stylistic appeal would not be possible if there were no manual knowledge and skills given by the operators who daily work on Manteco fabrics. The soul of a fabric is determined by small operational details, which are learned in the field every day, and which make the difference.

The Manteco System is a set of more than 50 small and medium-sized companies, which daily work on behalf of Manteco. The relationship between Manteco and MSystem partners cannot be traced back to a simple customer-subcontractor relationship between, it is something deeper, while remaining a working relationship with his daily life. In Manteco there are eight expert

technicians who daily go to the Manteco System subcontractors to check and support in the case of technical difficulties. Manteco and Manteco System are obliged to grow together.

The MSystem companies are located around 10 kilometers from the Manteco headquarters and in 2019 the relationship between the companies was regulated by signing a Charter of Commitments for the Sustainable Supply Chain.

Methods for evaluating environmental criteria

In the Manteco System, Manteco requires the reference partners to share all data relating to their environmental performance, to control the risk of high environmental impacts of their production in terms of energy consumption, water consumption, waste production, use of resources and sustainability of raw materials. The System, organized starting from 2019, in the reporting year confirms its high level of qualification and is now overall certified according to the most well-known international standards of sustainable textile production. GRS, RWS, OCS and GOTS are some of the certifications obtained by the companies working in the Manteco System, achieved independently or through the involvement and support by Manteco in the certification phase. Furthermore, all the companies adhering to the Manteco System are subject to frequent audits by one or more customer brands.

During the reporting year, Manteco also kept the qualification of raw material and processing suppliers updated with respect to their commitment to the elimination of toxic and harmful chemicals in production, according to the 4Sustainability® Chemical Management protocol, to which the company has adhered since 2015.

Methods for evaluating social criteria

Manteco has always remained faithful to the tradition of Made in Italy, preferring the enhancement of local skills to relocation to countries where the low cost of labor is often associated with the risk that Human Rights and the guiding principles sanctioned by the International Organization of Labor are not respected.

The Manteco production chain belongs to the textile district of Prato, with a community that directly employs more than 880 workers. By joining the Manteco System project, Manteco and its subcontractors are committed to building a model of sustainable industrial development, which also includes the social responsibility of their business.

Supply chain loyalty

To obtain constant product quality, it is essential to have a loyal value chain. The supply of raw materials with which Manteco produces its yarns, the purchased yarns, and the chain of subcontractors that support the Manteco System in the production of Manteco fabrics, has an average incidence of over 80% of Manteco's costs.

Manteco is a loyal and reliable customer in the purchases and payments of its suppliers and subcontractors, with excellent credit ratings. As part of a normal day-to-day dialectic, suppliers and subcontractors are and will always be an asset to Manteco.

Local production

Manteco's business model is local. Not only Manteco does produce but it also sources locally. The supply of both pre- and post-consumer recycled wool with which Manteco creates M Wool® is completely carried out by local companies.

	2018	2019	2020	2021	2022
Number of companies	42	40	45	37	32

The decline in the number of suppliers is caused by the increasing loyalty of the supply chain, which enables the maintenance of a constant quality of input material.

The virgin wool from which ReviWool® is created is the other important source of supply for Manteco. The production of the fiber is obviously not Italian. Manteco sources from both Italian and foreign wool trading companies.

	2018	2019	2020	2021	2022
Italian	5	8	7	9	6
Foreign	9	10	16	16	13

The number of suppliers although decreased is to be considered constant as no purchases were made from marginal wool suppliers.

Percentage cost of yarn purchases

On average, 90% of yarns purchased are produced in Europe, of these a percentage in the range of 40%-45% is produced locally.

2018	2019	2020	2021	2022	
45%	46%	45%	40%	38%	Local Production
15%	25%	23%	35%	46%	Italian Production
18%	9%	18%	14%	10%	European production
22%	20%	14%	11%	6%	Extra-CEE Production

Manteco Academy

The ecodesign of a garment is the pillar on which circularity in fashion is based. If garments are not designed and manufactured according to these criteria, their end-of-life recycling will be impossible. The experience and knowledge gained over the decades is shared with students to pass on to future generations the precious values on which the fashion industry should be based. Since 2018, through the Manteco Academy project, Manteco has made significant investments on training young designers, providing them with the basic tools and knowledge to create recyclable garments.

This project is a source of enormous satisfaction for the company, because it succeeds in transferring useful skills to the new generations, who will go on to create future fashion collections. In total, the lessons done both at the company's headquarters, but also at training institutes, involved 1,177 students, belonging to 36 universities and fashion schools.

During the lectures, students have the opportunity to acquire knowledge about the production cycle of M Wool® (recycled wool) fabrics, but most importantly, they can directly verify the consequences of eco-design on garments recycling. The lectures are accompanied by practical activities such as development of projects, contests, and guided tours of the company. Manteco believes in a continuous and constant learning process over time, based on curiosity. For this reason, in 2021 a blog was created to sharing pills of knowledge focused on the intersection between the world of textiles and sustainability.

In addition, contests were organized with Istituto Marangoni, IUAV of Venice, Athens Fashion Club; and we also sponsored a contest organized by Frame Condé Nast with Istituto Secoli, IED, Istituto Marangoni, NABA Nuova Accademia delle Belle Arti, Domus Academy.



As part of Manteco Academy activities, contests and upcycling projects were organized with the following institutions:

- Athens Fashion Club
- IED Milano
- IUAV Venezia
- Politecnico di Milano
- UDIT ex ESNE (Madrid)
- DSK Kolding School (Danimarca)
- Marangoni Milano
- Naba (Milano)
- Polimoda (Firenze)
- IFM (Parigi)
- Condé Nast (Naba+Istituto Socoli+Marangoni MI+Domus Academy)

Manteco has sponsored the “Corso di Alta Formazione per il Management della Filiera Moda Sostenibile” at PIN Polo Universitario Città di Prato www.pin.unifi.it.

The dissemination activity through social has been consolidated through various actions that are increasingly followed by users.

In particular, in addition to the institutional activity on the blog Manteco, the following carousels were published on social :

Why cashmere is so boycotted? - discover the two faces of this precious animal fiber (www.instagram.com)

- Discover how linen is made - and all of its pros and cons (www.instagram.com)

- 5 reasons why wool is the circular fiber par excellence (www.instagram.com)

- How can science avoid greenwashing? - discover what a Life Cycle Assessment is! (www.instagram.com)

- Recycled wool fabrics - how are they made? (www.instagram.com)

- Recycled cotton - how is it made? (www.instagram.com)

- Easy steps to avoid wool shrinkage (www.instagram.com)

- Is recycled polyester sustainable? (www.instagram.com)

- Fabric pilling - Discover what causes it and how to remove it! (www.instagram.com/)

Customer satisfaction

At Manteco, customer satisfaction is linked to supportive and collaborative activities such as:

- Co-development and production of exclusive fabrics;
- Co-branding activities with application of Manteco labels and tags on clients' garments;
- Marketing support both conceptually and graphically;
- Manteco Academy activities at companies, done with the same methods used for Universities and Fashion Schools;
- Technical-scientific collaborations on new projects

These activities contribute to the strengthening of our customer-supplier relationships and consequently to the improvement of the level of customer satisfaction and loyalty. For Manteco, a customer is not just an organization to sell a product to, but a partner with whom to collaborate, to create value together.

Art

The pursuit of art deriving from the passion for work and for the product by Manteco collaborators in compliance with their skills is evident from the stylistic and economic results of the company. Manteco is a company that wants to leave its mark in future years, and art is one of the ways to express this will. It is not an action of appearance or patronage, but a profound belief that beauty and art will live over time. Manteco carefully selects the artistic collaborations to participate in, with the aim of helping the dissemination of art.

Manteco continually tries to bring the art of work closer to visual art, as evidenced by the shade card of Pure® articles, which was curated by the art critic Antonio Grulli, who - with extreme competence - has managed to associate each color with a work of art of the Tuscan territory, from the Renaissance to the present day. (manteco.com)

As part of the TIPO (Turismo Industriale Prato) Project, singer-songwriter Riccardo Sinigallia performed inside the Manteco Archives. (www.concertionline.live)

Manteco is a permanent partner of the Luigi Pecci Museum of Contemporary Art in Prato, and has contributed to the Prato's cathedral restoration.

Philanthropy

Manteco carries out local and international philanthropic action:

- Fundraiser for Bimbi in ANT Foundation
- Ukraine emergency: through Italian Red Cross, donation of blankets and water to people affected by conflict cri.it/toscana/emergenza-ucraina/
- Fody Eco Social Fabrics: www.fodyfabrics.com
- Arciconfraternita Misericordia di Prato
- Croce d'Oro Montemurlo

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MANTECO®
FOR PEOPLE

Internal Training

2022 was the year of internal training’s rebirth, as we arranged numerous and intensive voluntary trainings.

- University of Exeter Business School “The Circular Economy Masterclass”: 36 hours of training
- SDA Bocconi “ Sustainability Reporting”: 8 hours of training
- Politecnico Torino “Explanation of the LCA on MWool® fibers”: 1 hour
- ZDHC CMS TIG: 8 hours
- GOOGLE Workspace class: 4 hours

Manteco conducts health and safety training in the workplace according to legal requirements. All workers are trained according to their duties. In 2022, 33 workers performed 388 hours of mandatory training. Mandatory training was performed by 5 women and 28 men, the average hours of mandatory training for women was 68 for an average of 13.6 per employee, while the 28 men performed 320 hours for an average of 11.4 hours per employee.

Average number of training hours (voluntary and mandatory) per year per employee:

	2020	2021	2022
Total	11.1	3	10.7
Women	-	-	8.1 ⁸
Men	-	-	12.0

⁸Reporting of training hours by gender is available from 2022.

People First

The structure of Manteco’s board of directors has remained unchanged over the past few years. The table below shows details about the composition of the body itself.

	2020	2021	2022
Board of Directors	3	3	3
By age group (x)			
x < 30 years	0	0	0
30 years old < x < 50 years old	2	2	2
x > 50 years	1	1	1

In 2022, Manteco works with a number of employees of 66. The following table shows how employees are divided by age group, gender, and geographical area. Manteco’s employees range in age from 21 to 61 for an average age of 46.

	2020	2021	2022
Total employees	61	65	66
By age group (x)			
x < 30 years old		12	10
30 years old < x < 50 years old		29	24
x > 50 years old		24	32
Average age	46 years	45 years	46 years
By gender			
women	21	20	21
men	40	45	45
By geographical area			
North Italy	1	1	1
Center Italy	60	64	65
South Italy			

Associated with 2022 is a new-hire rate of 6 percent and a turnover rate of 3 percent.



In 2022, the number of employees with permanent contracts is 56, while there are 10 temporary workers.

	2020	2021	2022
Total Employees	61	65	66
By contract typology			
Permanent contract	49	51	56
women	18	16	18
men	31	35	38
Fixed-term contract	2	13	10
women	0	4	3
men	2	9	7
Internships	10	1	0
women	3	0	0
men	7	1	0
Full time	55	60	64
women	16	17	19
men	39	43	45
Part-time	6	5	2
women	5	3	2
men	1	2	0

	2020	2021	2022
Total employees	61	65	66
By work typology			
Administration, Commercial, Technical	25	41	42
Production, Stock and Logistics	36	24	24

Managed emergencies

In line with the previous year, there were also no environmental emergencies in 2022 related to the production processes carried out by the company. In addition, no such reports were received from the processes to which Manteco entrusts its production.

The company has not identified any non-compliance with environmental laws and/or regulations.

Corporate Welfare

As part of its MantEco for Planet® sustainability strategy, the company is committed to increasing corporate welfare activities geared toward employee well-being. Manteco sees people as the heart of the company. The company’s goal is to equip itself with useful tools to continuously intercept staff needs and improve teamwork, process effectiveness and staff satisfaction. In order to achieve this commitment, Manteco has developed a specific welfare plan 2020-2025 in which timeframes and methods have been defined for verifying the effectiveness of the planned loyalty-building and business climate improvement actions. The welfare plan is applied indiscriminately to every type of employee.

All employees of Manteco are covered by a collective agreement in accordance with the provisions of employment legislation. Specifically, all employees (100%) are represented by the Textile and Apparel CCNL. As per the CCNL, all employees are eligible for parental leave. In 2022, no employees took it. No employee in the past three years has taken parental leave. From the perspective of remuneration and gender pay gap, there are no substantial differences in different salaries between men and women. Given the economic situation, and soaring prices due to inflation, the Mantellassi family gave each employee a gift of Euro 1,500 in shopping vouchers near the Christmas holidays.

Health & Safety

Manteco identifies health and safety-related risks through an external RSPP appointed by the BoD. Safety risk management is the direct responsibility of the company, while health-related risks are reported to the competent physician appointed by the BoD. The RSPP manager conducts semi-annual safety inspections while employee health-related inspections are conducted annually.

In line with the statistics on the previous report, there were no work-related injuries in 2022 and therefore zero days of absence from work due to work-related injuries or illnesses. In addition, there are no employees in the company involved in work activities with a high rate or risk of specific diseases. In 2022, 117,748 hours were worked.

	2020	2021	2022
Occupational illnesses - employees			
Number of deaths	0	0	0
Number of recordable occupational illnesses	0	0	0
Occupational illnesses - subcontracted workers			
Number of deaths	0	0	0
Number of recordable occupational illnesses	0	0	0

	2020	2021	2022
Accidents at work - employees			
Number of deaths	0	0	0
Number of injuries with serious consequences	0	0	0
Number of recordable work accidents	0	0	0
Accidents at work – subcontracted workers			
Number of deaths	0	0	0
Number of injuries with serious consequences	0	0	0
Number of recordable work accidents	0	0	0

Fight against discrimination

Manteco's Charter of Values for Sustainability and the Charter of Commitments for the Sustainable Supply Chain signed as part of the Manteco System project sanction the prohibition of discriminatory behavior. Manteco and its supply chain have undertaken not to practice any form of discrimination in the recruitment and management of personnel (including salary treatments, career advancements, dismissals, retirements) based on race, religion, age, social origins, gender, political opinions or any other personal condition not related to experience or ability in the performance of duties.

Manteco does not tolerate discriminatory behavior throughout the entire human resource management process starting from the selection phase, during work activity and in the event of resignations that are freely presented by the employee. In line with this approach, also in 2022 the company did not receive any reports of incidents related to discriminatory practices.

Membership

Manteco is enrolled in:

- Confindustria Toscana Nord;
- Sistema Moda Italia Federazione Tessile e Moda;
- CID Consorzio Implementazione Detox
- Pratotrade
- R-Invest

GRI content index

Statement of use	Manteco S.p.a. has reported in accordance with the GRI Standards for the period January 1, 2022 - December 31, 2022.
GRI 1 used	GRI 1: Foundation 2021
Applicable GRI Sector Standard(s)	No applicable GRI Sector Standards

GRI STANDARD	DISCLOSURE	LOCATION (PAGE NUMBER)	NOTES/OMISSION
General disclosures			
GRI 2: General Disclosures 2021	2-1 Organizational details	7-9, 13	
	2-2 Entities included in the organization's sustainability reporting	13	This report is about Manteco S.p.A. as presented in the financial statements of the company.
	2-3 Reporting period, frequency and contact point		This report presents the sustainability performance of the company between January 1 and December 31, 2022. Manteco S.p.A. reports annually. In case of questions about the sustainability work, please contact giuseppe.picerno@manteco.com
	2-4 Restatements of information	63, 67, 69	To improve accuracy, the measurement of Emissions, Raw Materials, and Packaging has been revised.
	2-5 External assurance		This report has not been assured.
	2-6 Activities, value chain and other business relationships	7-9, 29-31, 85-87	
	2-7 Employees	99-101	

	2-8 Workers who are not employees	99-101	
	2-9 Governance structure and composition	19	
	2-10 Nomination and selection of the highest governance body	19	Given the governance structure, there isn't a formal nomination and selection process.
	2-11 Chair of the highest governance body	19	
	2-12 Role of the highest governance body in overseeing the management of impacts	19	
	2-13 Delegation of responsibility for managing impacts	19	
	2-14 Role of the highest governance body in sustainability reporting	19	
	2-15 Conflicts of interest		There aren't cross-board memberships or cross-shareholding with suppliers and other stakeholders.
	2-16 Communication of critical concerns		No critical concerns were communicated to the board of directors.
	2-17 Collective knowledge of the highest governance body	19	
	2-18 Evaluation of the performance of the highest governance body		There isn't a formal performance evaluation system.
	2-19 Remuneration policies		Given the governance structure, there isn't a remuneration policy.

	2-20 Process to determine remuneration		Given the governance structure, there isn't a remuneration policy.
	2-21 Annual total compensation ratio		Omitted due to confidentiality.
	2-22 Statement on sustainable development strategy	5	
	2-23 Policy commitments	7-9, 55	
	2-24 Embedding policy commitments	7-9, 19, 83, 85-87	
	2-25 Processes to remediate negative impacts		The governance structure and the managerial control system allow the company to monitor and remediate negative impacts.
	2-26 Mechanisms for seeking advice and raising concerns		Currently, there isn't a formal procedure, but a system will be implemented in the near future.
	2-27 Compliance with laws and regulations		"There were no significant instances of non-compliance with laws and regulations and no fines were paid during the reporting period."
	2-28 Membership associations	107	
	2-29 Approach to stakeholder engagement	21-22	
	2-30 Collective bargaining agreements	103	
	2-19 Remuneration policies		Given the governance structure, there isn't a remuneration policy.

Material topics			
GRI 3: Material Topics 2021	3-1 Process to determine material topics	21-22	
	3-2 List of material topics	21-22	
Climate change			
GRI 3: Material Topics 2021	3-3 Management of material topics	59-61, 63	
GRI 302: Energy 2016	302-1 Energy consumption within the organization	59-61	
GRI 305: Emissions 2016	305-1 Direct (Scope 1) GHG emissions	63	
	305-2 Energy indirect (Scope 2) GHG emissions	63	
	305-5 Reduction of GHG emissions	35-37, 39, 41-43	
Circularity			
GRI 3: Material Topics 2021	3-3 Management of material topics	47-49	
GRI 301: Materials 2016	301-1 Materials used by weight or volume	67, 69	
	301-2 Recycled input materials used	67	
GRI 306: Waste 2020	306-1 Waste generation and significant waste-related impacts	65	
	306-2 Management of significant waste-related impacts	65	
	306-3 Waste generated	65	

Animal welfare			
GRI 3: Material Topics 2021	3-3 Management of material topics	45	
Responsible chemical management			
GRI 3: Material Topics 2021	3-3 Management of material topics	55	
Raw materials			
GRI 3: Material Topics 2021	3-3 Management of material topics	67	
Packaging			
GRI 3: Material Topics 2021	3-3 Management of material topics	69	
Digital transformation			
GRI 3: Material Topics 2021	3-3 Management of material topics	79	
Traceability and transparency			
GRI 3: Material Topics 2021	3-3 Management of material topics	83, 85-87	
Local production			
GRI 3: Material Topics 2021	3-3 Management of material topics	83	
GRI 204: Procurement Practices 2016	204-1 Proportion of spending on local suppliers	85-87	
Customer satisfaction			
GRI 3: Material Topics 2021	3-3 Management of material topics	93	

Support to the territory			
GRI 3: Material Topics 2021	3-3 Management of material topics	89-90, 93	
Skills development and talent cultivation			
GRI 3: Material Topics 2021	3-3 Management of material topics	89-90, 99-101	
GRI 401: Employment 2016	401-1 New employee hires and employee turnover	99-101	
	401-2 Benefits provided to full-time employees that are not provided to temporary or part-time employees	103-104	
	401-3 Parental leave	103-104	
GRI 404: Training and Education 2016	404-1 Average hours of training per year per employee	97	
Health and safety			
GRI 3: Material Topics 2021	3-3 Management of material topics	99-101, 103-104	
GRI 403: Occupational Health and Safety 2018	403-1 Occupational health and safety management system	103-104	
	403-2 Hazard identification, risk assessment, and incident investigation	103-104	
	403-3 Occupational health services	103-104	

	403-4 Worker participation, consultation, and communication on occupational health and safety	103-104	
	403-5 Worker training on occupational health and safety	103-104	
	403-6 Promotion of worker health	103-104	
	403-7 Prevention and mitigation of occupational health and safety impacts directly linked by business relationships	103-104	
	403-9 Work-related injuries	103-104	
	403-10 Work-related ill health	103-104	
Diversity and equal opportunity			
GRI 3: Material Topics 2021	3-3 Management of material topics	107	
GRI 405: Diversity and Equal Opportunity 2016	405-1 Diversity of governance bodies and employees	99-101	
GRI 406: Non-discrimination 2016	406-1 Incidents of discrimination and corrective actions taken	107	

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