UNIC STATEMENT ITALIAN TANNERIES

THE ITALIAN LEATHER

SUSTAINABILITY REPORT 2019





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THE SUSTAINABLE GOALS OF THE ITALIAN LEATHER

SUSTAINABILITY REPORT 2019



WE ARE TRADITION, BUT ABOVE ALL FUTURE

For 17 years UNIC has been narrating the sustainability of the Italian tanning industry with the publication of this report. Together with our sector's effort it is rich in content, and it transmits its excellence. It was decided to further highlight our important contribution to achieve the Sustainable Development Goals of the United Nations and the results confirm how, today more than ever, the Italian tanning industry is alive, dynamic and looks forward with renewed enthusiasm.

The theme of sustainability has been in the strategies of our companies for at least 50 years, anticipating in fact not only the most stringent norms on the matter but also the, much more recent, requests of our clients. This report documents how for us sustainability is a value built in time and how we have pursued it with tenacity, with instruments and investments of which we bear the cost, obtaining extraordinary results.

Our industry is born as one of the first recycling activities put in place by man. We are ecologists ante litteram and circular economy is part of our DNA. We are committed to minimize our environmental impact, to preserve natural resources and to guarantee animal welfare.

We are responsible towards our clients, our final consumers, our workforce that we value and train, committed to make our job also attractive to the eyes of young people.

For years we have been making important investments to give part of the value we create back to the community and participating in projects that help preserve and value

our cultural heritage, of which leather is proudly part of.

We are tradition, but above all future.

Cav. Gianni Russo

ITALIAN TANNING INDUSTRY AND THE SUSTAINABLE DEVELOPMENT GOALS

SUSTAINABILITY IS AN INCREASINGLY RELEVANT ELEMENT OF DEVELOPMENT FOR THE ITALIAN TANNING INDUSTRY, THAT HAS BEEN ABLE TO CREATE A SKILLFUL COMBINATION BETWEEN COMPETITIVENESS AND ECONOMIC AND SOCIAL PROGRESS OVER TIME, OPERATING RESPONSIBLY FOR THE ENVIRONMENT.

A constant commitment that the Italian tanning industry has now decided to put in relation with the 2030 Agenda for sustainable development, launched by the United Nations in September of 2015 to promote human wellbeing and protect the environment. The Agenda is an ambitious program, that defines 17 objectives (SDGs, the acronym of Sustainable Development Goals), tightly integrated and correlated with each other, which refer to different areas of the social, economic and environmental development of the planet. These are cross-cutting and complex objectives that



SUSTAINABLE GALS DEVELOPMENT



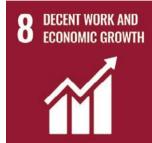






















include issues like climate change, sustainable consumption and respect for human rights.

All the components of society are called to contribute in an effective manner, through new models of responsible business, investments, innovation, technological development and the activation of multi-stakeholder collaborations.

The 2030 Agenda and the pursuit of the SDGs, declined in 169 targets, require a strong commitment, but can also represent an opportunity for development and growth, contributing to change, also in the consumption models.

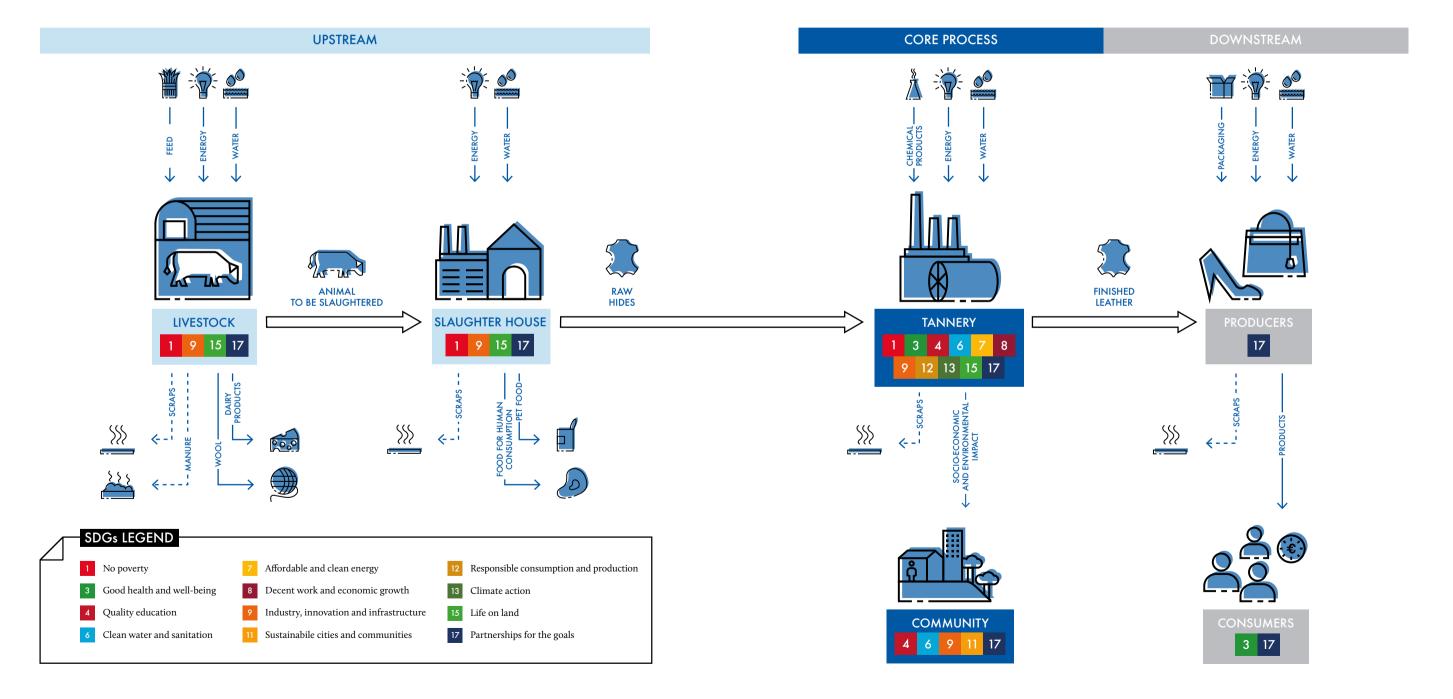
THE LIFE CYCLE OF LEATHER AND THE SDGs

THE LIFE CYCLE OF LEATHER AND THE SDGS

THE LIFE CYCLE OF LEATHER AND THE SDGs

The activities of the tannery and its value chain have a direct or indirect impact on a good part of the 17 SDGs. Some of these are considered a priority, as the contribution of the Italian tanning industry is particularly relevant. Others, up to now, are instead considered negligible. Nevertheless, initiatives, actions or good practices have already been launched,

also in collaboration with different organizations operating on a local and International level, with a long-term prospect of sharing the value. For every SDG considered relevant, studies of Life Cycle Analysis (LCA) combined with the role of the tannery in the value chain have highlighted the impacts, regardless their entity.



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Italian leather is a natural material that maintains and improvse its characteristics over time. A guarantee of quality, beauty and comfort for customers and consumers.

HOW DOES THE ITALIAN TANNING INDUSTRY ANSWER THE NEED FOR HEALTH AND WELLBEING OF THE CONSUMERS AND ITS OWN **WORKERS?**



ENSURE HEALTHY LIVES AND PROMOTE WELLBEING FOR ALL AT ALL AGES



END POVERTY IN ALL ITS FORMS EVERYWHERE



1.1 THE PRODUCT __

1./

Leather has always accompanied man. The Italian tanning industry has over time been able to make it a material that interprets the idea of wellbeing at different levels: functional, emotional, aesthetic and that, at the same time, is a guarantee of security for consumers.



1.2 THE WORKPLACE

16

The Italian tanneries are companies that combine industrial with artisanal dimension. The use of modern industrial plants and the daily attention ensure the respect of high standards of health and safety of its workers.



1.3 QUALITY STANDARDS AND CERTIFICATION

18

Italian leather is the raw material par excellence of high value-added articles of which the production processes are conducted and monitored through certified management tools that improve their quality, effectiveness and efficiency.



1.4 TRADE RELATIONSHIPS WITH DEVELOPING COUNTRIES (SDG 1)

__ 20

The internationalization of the Italian tanneries is high both in terms of exports and imports. In particular, commercial relations with suppliers in developing nations, mostly for specific typologies of raw material, are of prime importance.

1.1 - WELLBEING 1.1 - WELLBEING

THE PRODUCT

LEATHER HAS ALWAYS ACCOMPANIED MANKIND. OVER TIME THE ITALIAN TANNING INDUSTRY HAS MADE LEATHER A MATERIAL THAT INTERPRETS THE IDEA OF WELLBEING AND IS A GUARANTEE OF SAFETY FOR CONSUMERS.

> Leather is a natural and renewable material. It is an example of circularity because it comes from the recovery of a by-product from the food industry and has exceptional properties, derived from its natural structure that guarantees resistance, flexibility and adaptability to various shapes, transpiration and thermal insulation. Thanks to its characteristics and versatility, it has always been able to inspire the creative choices of fashion, the accessory industry, luxury, design and car interiors.



"Italian leather is the product of high-performance production systems and processes, which over the years have enabled the sector to improve quality and productivity".

Italian leather is a safe product that complies with the regulations on the use of chemical substances. Since coming into effect of the REACh Regulation in 2006 and the subsequent introduction of the first list of banned or restricted substances (RSL - Restricted Substances List), the Italian tanning sector has made every efforts answers clients questions adequately so as to give them evidence of the safety of the final product to guarantee the consumer. Italian leather is the result of high-performance production systems and processes, which over the years have enabled the sector to improve quality and productivity. At the same time,

they have made it possible to radically reduce the pollution generated, through treatments that use the best technologies and the progressive reduction of waste sent to landfills, improving the quality of air, water and soil and, consequently, reducing the impact on the environment and the community.

CLEAR - Confidence In Leather Analysis Results



participation of representatives of the different stakeholders tanneries, Italian and foreign

brands, experts of the sector and of chemical analysis of leather. The initiative, created to

In 2016 UNIC - Italian tanneries establish recognized criteria to quantify, reducreated a work group with the ce and manage the margins of analytical error due to the complexity of the leather matrix, has become over time a permanent discussion table on of the leather supply chain: issues related to the chemical safety of products and the critical issues that arise in the supply chain due to the lack of adequate analytical methods or interpretability of requirements.

ZDHC - Zero Discharge of Hazardous Chemicals



UNIC has joined the ZDHC Roadmap to Zero program, promoted by some fashion brands, standardization and certification bodies, companies in the supply chain, with the aim of

eliminating the use of chemicals of high concern from the production processes that characterize

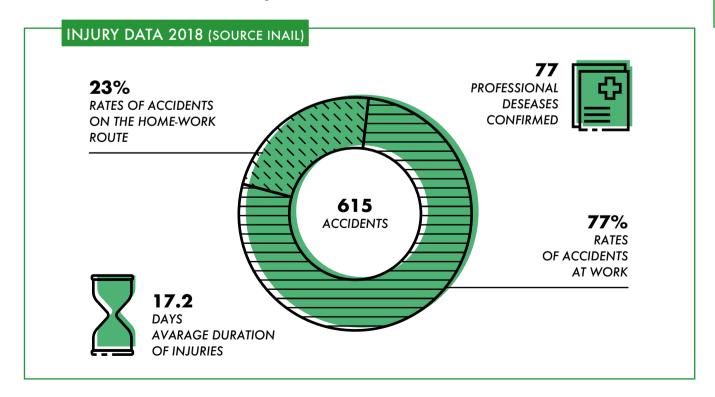
the global value chain of textiles, leather, clothing and footwear. In the context of ZDHC, in addition to the Manufacturing Restricted Substances List (MRSL), good management practices, guidelines and webtools have been defined for the collection of information on chemical products and the evaluation of their compliance with MRSL.

1.2 - WELLBEING 1.2 - WELLBEING

THE WORKPLACE

ITALIAN TANNERIES ARE COMPANIES THAT COMBINE AN INDUSTRIAL WITH AN ARTISANAL DIMENSION. THE USE OF MODERN INDUSTRIAL PLANTS AND CONSTANT ATTENTION ENSURE THE RESPECT OF HIGH STANDARDS OF HEALTH AND SAFETY OF ITS WORKERS.

> To achieve sustainable development, it is essential to ensure a healthy life and promote the wellbeing of all. In this context, companies play an active role in implementing actions that can guarantee health and safety at work for employees, so that they may conduct their activities in such a way as to avoid negative impacts of the production process on the right to health.



UNIC CODE OF CONDUCT



UNIC - Italian Tanneries has summarized in its Code of Conduct and Social Responsibility the commitments that companies must understake to ensure compliance with workers' rights, the protection of

health and safety in the workplace, consumer and

environment protection. Inspired by the ILO (International Labour Organization) Conventions and the main international standards on the subject, the Code allows companies that adopt it to implement the correct management of issues related to corporate social responsibility by using appropriate tools to measure and communicate their com-

DUE DILIGENCE FOR HEALTHY WORKPLACES IN TANNERIES



Commission "Due Diligence for Healthy workpla-

within the framework of the Social Dialogue promoted by COTANCE (Confederation of National Associations of European Community) and IndustriALL (Global Union) and funded by the EU

In 2018 a project developed ces in Tanneries", aimed at mapping the ways in which occupational health and safety is perceived along the supply chain, was concluded. The project has highlighted aspects already taken into account in the sourcing relations and others Tanners and Dressers of the that require greater awareness, developing shared tools useful for evaluation and communication within the supply chain.

For Italian tanneries this translated, into the use of the appropriate safety systems in compliance with the obligations deriving from national legislation, in the continuous monitoring of the environment and the promotion of a culture of prevention. The results are evident in the reduction in accidents at work over the years (-42% since 2003), to which the specific training of personnel, both internally and by external professionals, also contributed (6.8 hours/average hours). For women, specific risks are assessed and prevention and protection measures are adopted for periods when special care is required for their health (pregnancy, childbirth and breastfeeding). Also within the supply chain, there is an increasing number of companies that have activated supplier assessment and qualification procedures based on the guarantees they can give on the safety of their workers, in compliance with the commitments for social responsibility in tanneries, contained in the UNIC Code of Conduct.

QUALITY STANDARDS AND CERTIFICATIONS

ITALIAN LEATHER IS THE RAW MATERIAL PAR EXCELLENCE OF HIGH VALUE-ADDED ARTICLES OF WHICH THE PRODUCTION PROCESSES ARE CONDUCTED AND MONITORED THROUGH CERTIFIED MANAGEMENT TOOLS THAT IMPROVE THEIR QUALITY, EFFECTIVENESS AND EFFICIENCY.

Italian leather is a material that has always reflected the concept of quality. A quality that can be found in many areas: in processing, in finishing and stylistic effects, in physical-mechanical performance and resistance (fastness). Leather maintains these characteristics over time and, in some cases, improves with use. Leather transfers these characteristics to the products and creations in which it is employed, be they shoes, bags, design or furnishing objects, car interiors and, lastly, they become part of the identity value on the part of the wearer.

For each end use, reference standards have been defined both nationally (UNI) and internationally (CEN and ISO) for the main chemical, physical and performance parameters. Additional added value is given by the experience gained by Italian tanneries that combines know-how and creativity with an industrial and modern approach, conducted according to standards of recognized reliability, which maintain high health, environmental and social parameters, in processes as well as in the management of material flows. The implementation of voluntary international standards and accredited certification allow companies in the sector to guarantee greater reliability and efficiency, as well as offering consumers quality materials. ICEC (Institute of Quality Certification for the Leather Sector), a specialized body for the leather sector, has been operating in this field for more than 20 years.

CERTIFICATIONS



SYSTEM CERTIFICATIONS

System certifications guarantee the organization's ability to manage its resources and production processes, to meet and maintain the expected performance over time, through continuous improvement.

This is an indirect form of assurance which, as far as tanneries are concerned, pertains to the management systems, either for quality (regulated by ISO 9001), or environment (ISO 14001, EMAS), or health and safety at work (ISO 45000) or ethics (UNIC Code of Conduct and Social Responsibility).



ICEC PRODUCT CERTIFICATIONS

Product certifications are regulated by industry-specific standards or equivalent technical specifications (TS). These certifications are a direct form of guarantee for customers and consumers. Indeed, they produce evidence that leather complies with technical documents, which define both the performances and the characteristics of the certified products. The industry standards set the minimum performances required for different intended uses of leather (e.g. UNI 10594, UNI 10826), the "Made In" of leather (EN 16484) and the traceability of raw materials (ICEC TS 410/412).



ICEC CERTIFICATION OF SUSTAINABILITY

The ICEC certification of Sustainability officially recognizes the full commitment of those tanneries which have a related policy and at least one certification in each of the following fields, namely: environment, ethic-social, economic and product.

1.4 - WELLBEING

TRADE RELATIONSHIPS WITH DEVELOPING COUNTRIES

THE INTERNATIONALIZATION OF THE ITALIAN TANNERIES IS HIGH BOTH IN TERMS OF EXPORTS AND IMPORTS.



The improvement of community wellbeing and the fight against poverty, particularly in developing countries (LMCS), is also strongly connected to the economic and trade relations that these communities manage to establish. In this context,

the strong vocation for the internationalization of the sector plays a key role: every year Italian tanners import raw hides and skins and semi-finished leather from over 120 countries around the world. Among these, the developing countries account for about a quarter of total imports in quantity, worth over 600 thousand euros.

Moreover, the industry participates in numerous cooperation projects in less developed countries (LDCs - Least Developed Countries), with the aim of supporting the production of quality raw materials for the tanning sector, which traditionally represents one of the first industrial activities to develop together with farming and acts as a growth driver for the entire territory. These initiatives create virtuous partnerships, which contribute significantly to the improvement of the living conditions of the communities involved, through economic development, the creation of commercial relations and the transfer of know-how.



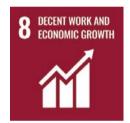
COOPERATION PROJECTS



Participation in economic cooperation projects and trade missions represents an important opportunity to develop sectoral partnerships that stimulate growth in the developing countries. In 2018,

UNIC collaborated on a project, managed by the World Bank, aimed at the development of the tanning industry in Algeria and, upon the invitation of the Egyptian Government, visited the new tanning district of Robbiki, where plans to move the tanneries located in Cairo have been under discussion for years. Collaboration in both cases was aimed at increasing the quality of local production. UNIC also participated in an explorative mission in Botswana to verify the conditions of the local tanning industry and to evaluate possible opportunities for collaboration in the upgrade of the production process, in particular of the first stages of tanning.





The Italian tanning industry is a significant element of Made in Italy and greatly contributes to the development of territories in which it has had more expansion.

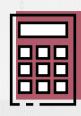
WHAT IS THE CONTRIBUTION OF THE ITALIAN TANNING INDUSTRY TO A WIDESPREAD AND INCLUSIVE SUSTAINABLE ECONOMIC GROWTH?



PROMOTE INCLUSIVE AND SUSTAINABLE ECONOMIC GROWTH, EMPLOYMENT AND DECENT WORK FOR ALL



ENSURE INCLUSIVE AND EQUITABLE QUALITY
EDUCATION AND PROMOTE LIFELONG LEARNING
OPPORTUNITIES FOR ALL



2.1 ECONOMIC DATA _

26

The Italian tanning industry counts about 1,200 companies, mainly small and medium sized enterprises concentrated in productive districts and generates a total revenue of almost 5 billion euros.



2.2 THE INTERNATIONAL ROLE AND THE TRADE FAIR SYSTE

28

The International leadership of the Italian tanning industry is strong both at a European level, where it counts for 65%, and at a global level, representing 22% of world production value.



2.3 SOCIAL INITIATIVES IN FAVOUR OF THE COMMUNITY

30

The relationship the tanneries have with the local communities are beneficial both for the businesses and the society, also thanks to the multiple initiatives financed by individual companies and employer's associations.



2.4 HUMAN RESOURCES AND THEIR ENHANCEMENT

32

In a productive entity with a strong artisanal and creative identity like the tannery, people are of great importance for the company's growth due to their competence and capability.



2.5 TRAINING AND INITIATIVES FOR YOUNG PEOPLE (SDG 4)

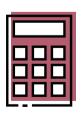
_34

To guarantee the competitiveness of the sector over time, it is fundamental to invest on young people, on their training, motivation and employability.

ECONOMIC DATA

THE ITALIAN TANNING INDUSTRY COUNTS ABOUT 1,200 COMPANIES, MAINLY SMALL AND MEDIUM SIZED ENTERPRISES CONCENTRATED IN PRODUCTIVE DISTRICTS.

The sector has always aimed at growth and full employment, through an economic development strategy based on three interconnecting elements: the district model, technological innovation and the diversification of production. The annual turnover, which amounts around 4.9 billion euros, equals 128 million square metres of finished leather and 10 thousand tons of sole leather, of which over 97% comes from the tanning districts. Each of them has its own production specialization expressing a level of diversification that has no comparison in the world. The production, composed almost exclusively of bovine raw hides and skins (82%) and sheep and goat skins (17%), is destined to numerous sectors, from the more traditional ones such as footwear, leather goods and upholstery, to more niche ones, like design, boating and technical clothing.



Localization within districts, a peculiar development model for Italian manufacturing, is a key factor because it combines collaboration and competition, as well as promoting the production flexibility that characterizes the tanning companies.

The main district, in terms of turnover and workforce, in which the large industrial tanning groups are located, is in Veneto, in the province of Vicenza. The district is specialized in the production of large bovine leather for footwear, leather goods, furniture and automotive. This is followed by the Tuscan district, located in the area of Santa Croce sull'Arno and Ponte a Egola (PI), which mainly produces medium-sized calf and bovine leather destined for high fashion brands. Tuscany is also the first European production center for sole leather, which today represents a niche, although of great importance. Sheep and goat leather is mainly produced in Campania, in the Solofra (AV) area with some important tanning companies in the vicinity of Naples, and in the Lombard district, located in the Magentino (MI), and is destined to clothing, footwear and leather goods, mainly in the high fashion segment. The reference clientele for the Italian tanning sector is global of which for more than 30% belongs to the top end of the market. The successful aspect of a capital-intensive sector is to be able to combine cutting-edge technology with the artisanal character of its products.

STRUCTURAL DATA OF ITALIAN TANNING INDUSTRY (2018)



1,201 COMPANIES



17,698 *EMPLOYEES*



128 ML m²



10,000 T. SOLE LEATHER



4.9 BILLION EUROVALUE OF PRODUCTION



3.6 BILLION EURO

2.2 - GROWTH

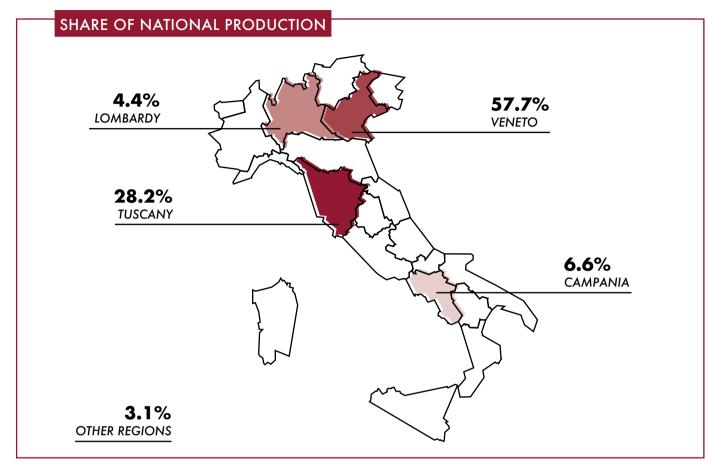
THE INTERNATIONAL ROLE AND THE TRADE FAIR SYSTEM

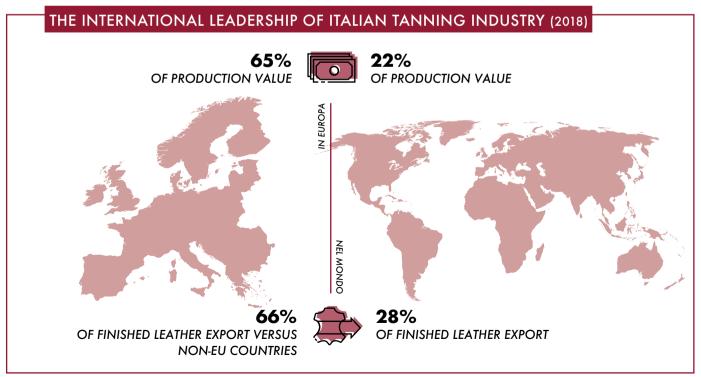
THE INTERNATIONAL LEADERSHIP OF THE ITALIAN TANNING INDUSTRY IS STRONG BOTH AT A EUROPEAN LEVEL, WHERE IT COUNTS FOR 65%, AND AT A GLOBAL LEVEL, REPRESENTING 22% OF WORLD PRODUCTION VALUE.

The internationalization of Italian tanning companies is connected both to the export of finished leathers, for a total value of 3.6 billion euros corresponding to over 70% of total turnover, and to the import of raw materials, equal to 837 tons of raw hides and semi-finished leathers from 122 countries in the world.

It is also thanks to this international exposure, in addition to the high added value that characterizes its production, that Italy has conquered and consolidated a position of international leadership compared to the major global players in the tanning sector.

The foreign vocation of the Italian tanning industry finds its natural expression in Lineapelle, a leading trade fair system in Italy which, through its main biannual event in Milan (Fiera Milano Rho) and the two previews in London and New York, anticipates the creative purchases of the market and satisfies the need to define stylistic trends that tanning companies adapt and customize according to their specialization and main clients.





SOCIAL INITIATIVES IN FAVOUR OF THE COMMUNITY

THE RELATIONSHIP THE TANNERIES HAVE WITH THE LOCAL COMMUNITIES ARE BENEFICIAL BOTH FOR THE BUSINESSES AND THE SOCIETY, ALSO THANKS TO THE MULTIPLE INITIATIVES FINANCED BY INDIVIDUAL COMPANIES AND EMPLOYER'S ASSOCIATIONS.

Attention to others is a key element in keeping alive community links and actively contribute to its well-being. In accordance with this principle, the Italian tanning industry has entered into a partnership with Stella Maris Foundation, a cutting-edge center for treatment and research in neuropsychiatry for children and adolescents, which will lead, within the many projects, to the construction of a new hospital in the Cisanello (PI) area.

Support for this important initiative has been extended and promoted on the web and through institutional channels, so that it may represent the first step on a pathway shared by other stakeholders.

The decision to devote resources to this area is based on the values and development of social responsibility indicated by UNIC and the sector it represents.





2.4 - GROWTH

HUMAN RESOURCES AND THEIR ENHANCEMENT

IN A PRODUCTIVE ENTITY WITH A STRONG ARTISANAL AND CREATIVE IDENTITY LIKE THE TANNERY, PEOPLE ARE OF GREAT IMPORTANCE FOR THE COMPANY'S GROWTH.

Through sustainable, inclusive and integrated economic growth, tanning companies promote full employment and decent working conditions.

The Italian tanning industry offers fair employment opportunities in compliance with the National Collective Labour Agreement and the pertinent regulations. The origin of the people employed confirms the sector's strong ties to the local area, making it a driving force for both economic and social development.

The majority of the workforce in fact comes from the district or surrounding areas. The significant percentage of foreign employees has demonstrated the capacity of the sector to offer and inclusive working environment and, although with regional differences now represents a fully integrated community. This reality is closely related to the stability of working relations, which characterizes the sector and guarantees workers and their families a decent lifestyle. The age diversity and the presence of female personnel, which is increasing compared to previous years, both among the operative and in administration and management



Over 90% of the employees have a stable employment contract. The use of flexible contract typologies is limited and decreasing as compared to the previous years.

functions, outlines a working environment that enhances not only the experience, but also the skills of individuals, looking to secure a fruitful collaboration between people and the sharing of experiences. To protect the knowledge acquired and enhanced by workers, the tanneries favor stable working relationships and adopt staff retention policies, which allow to invest in the long run on the human capital of employees.



Tanning companies invest in the welfare of their employees who can join the Previmoda supplementary pension fund from 1 September 2017.

On matters of Social Responsibility, industrial relations play a key role. Over time, thanks to the constructive dialogue with trade unions, solutions have been adopted that are able to meet the needs of companies and increase the value of human resources.

The CCNL, which is ever more focused on promoting change, supporting employment and enhancing competitiveness, offers tools for organization flexibility, adequate compensation, contractual welfare, as well as specific guarantees for female staff.

THE MAIN INDICATORS



22%FEMALE
EMPLOYMENT



90%PERMANENT
CONTRACTS FRAMEWORK



23% FOREIGN WORKERS



74%2ND LEVEL
BARGAINING
(AT COMPANY/
REGIONAL LEVEL)

2.5 - GROWTH 2.5 - GROWTH

TRAINING AND INITIATIVES FOR YOUNG PEOPLE

TO GUARANTEE THE COMPETITIVENESS OF THE SECTOR OVER TIME, IT IS FUNDAMENTAL TO INVEST IN YOUNG PEOPLE, ON THEIR TRAINING, MOTIVATION AND EMPLOYABILITY.



Italian tanneries operate continuously to offer their employees a motivating and inspiring working place, in which everyone's contribution is acknowledged and appreciated.

Continuous training in the company plays a key role in this process and is an important tool in the development and consolidation of individual skills and sharing the values that define the work of each company in the sector.

There are plenty of training courses designed to integrate the skills and knowledge of the employees working in the supply chain, particularly in the different sectors where leather is used, with specific and tailor-made teaching opportunities.

Also within the European Social Dialogue, the Italian tanning industry is keeping a strong focus on training. During 2018, projects



The Italian tannery sector wants to communicate the multiple employment and professional growth opportunities that the sector offers through the promotion of orientation training activities and contribute to the growth of the skills and knowledge of young people and those employed through quality education.

for the supply chain (textiles, clothing, leather and footwear) were activated with the aim of attracting and training skilled human resources and establishing a network between qualified training agencies and stakeholders in the sector.

The meeting and dialogue between schools and the manufacturing world is fostered in order to support young people's employment and guarantee the sector the availability of the professional figures it needs.

The initiatives aimed at making young people aware of the richness of the productive reality of the territory, are combined with real training sessions created to increase employment opportunities and guarantee everyone the possibility of a professional training. Sustainability, with all its multiple facets, is also the subject





SKILLS 4 SMART is an ambitious four-year project, whose aim is to update and integrate the range of training for the sector and the supply chain, to improve its image by encouraging new professional

opportunities through the creation of a dynamic community of public and private operators committed to supporting the development of skills and employment opportunities. The project also offers the promotion and inclusion of digital skil-Is in training programmes, analyzed in the previous European social dialogue initiative "Digital TCLF" which was completed in 2018, with the identification of the main digital gaps in the textile, clothing, leather and footwear industries.

FASHION STUDIO

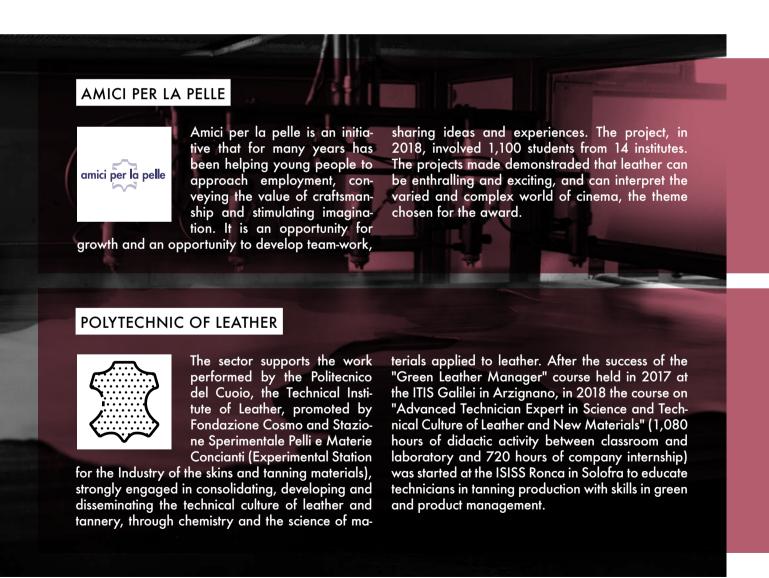


Fashion studio is a place of inspiration and study, exposing materials, stylistic suggestions tial visits for academies, fashion schools, professional

training institutes and delegations (national and foreign). This innovative space offers an international overview of leather and accessories trends and trends. It is also, the site and is a unique opportunity open to all designers for training and for experienant and researchers in the leather area.

of lesons dedicated to high school students. Students are motivated in the choice of their study programmes or future occupations by learning the characteristics of the entire supply chain and theits commitment to sustainability. Training initiatives also cover tertiary education.

In addition to post-graduate professional training courses (IFTS and ITS), there are a number of collaborations with renowned fashion schools (Polimoda, Accademia Costume e Moda in Rome, Istituto Marangoni, Accademia delle Belli Arti di Brera, IED) and cultural and scientific projects with universities such as La Sapienza in Rome and IUAV in Venice.









The Italian tanning industry has been able to develop efficient processes over time, with better and better environmental performances, also thanks to the district model.

3 - RESPONSIBLE

WHAT IS THE MODEL OF DEVELOPMENT AND REPONSIBLE CONSUMPTION THAT THE ITALIAN TANNING INDUSTRY PROPOSES?



ENSURE SUSTAINABLE CONSUMPTION AND PRODUCTION PATTERNS



ENSURE ACCESS TO WATER AND SANITATION FOR ALL



3.1 THE CIRCULAR MODEL _

42

The tanning industry can consider itself a precursor of circular economy: it utilizes a scrap as raw material and values its own residues through cutting-edge technology.



3.2 LCA AND PEFCR

46

LCA is currently the most complete methodology to assess the potential impact of a product along all its life cycle, according to rules of calculation (PEFCR) that, for leather, were established at European level.



3.3 THE ENVIRONMENTAL IMPACTS

18

As in all manufacturing activities, processes carried out in the tanneries generate an impact on the environment, the extent of which is minimized through specific treatments.



3.4 THE USE OF RESOURCES

50

The transformation from raw skin to finished leather happens utilizing resources (energy, water, chemicals) in part natural and in part transformed.



3.5 THE CYCLE OF WATER (SDG 6)

_ 52

Water plays an important role in the tanning processes, being 'the means' in which most of the manufacturing processes take place.

- 40

3.1 - RESPONSIBLE 3.1

THE CIRCULAR MODEL

THE TANNING INDUSTRY CAN CONSIDER ITSELF A PRECURSOR OF CIRCULAR ECONOMY, USING A SCRAP FROM ANOTHER INDUSTRIAL SECTOR AS RAW MATERIAL.

The Italian tanning industry represents, on the International stage, a model of excellence for circular economy. Over 99% of the leather used is waste from the food industry. But not only. With a modern industrial, systemic and cutting edge approach, it transforms food scraps into a material of quality and excellence, that has been able to go beyond its own sector's horizon creating the conditions so that its own manufacturing scraps would became raw materials for other industries, generating real symbiosis with the whole value chain. (see figure 1)



Three the pillars of its circular model:

REDUCTION

of consumption, through the continual improvement of processes and the use, where possible, of by-products or recycle-recovery products, therefore already present in other productive cycles.

RECOVERY

of scraps from other supply chains (raw hides and skins from the food industry, but also chemicals derived from by-products of other industrial sectors) and its own scraps and waste which become themselves raw materials, in a widened economic system.

DURABILITY

of the material, that derives from a natural and renewable resource, transformed in the tannery into a precious material which characteristics are such as to guarantee the reuse, the remanufacturing and recovery at the end of its life cycle.



In terms of the downstream recovery of the processing, there are a lot of virtuous examples that demonstrate how it is possible to transform scraps from leather production in business opportunities.

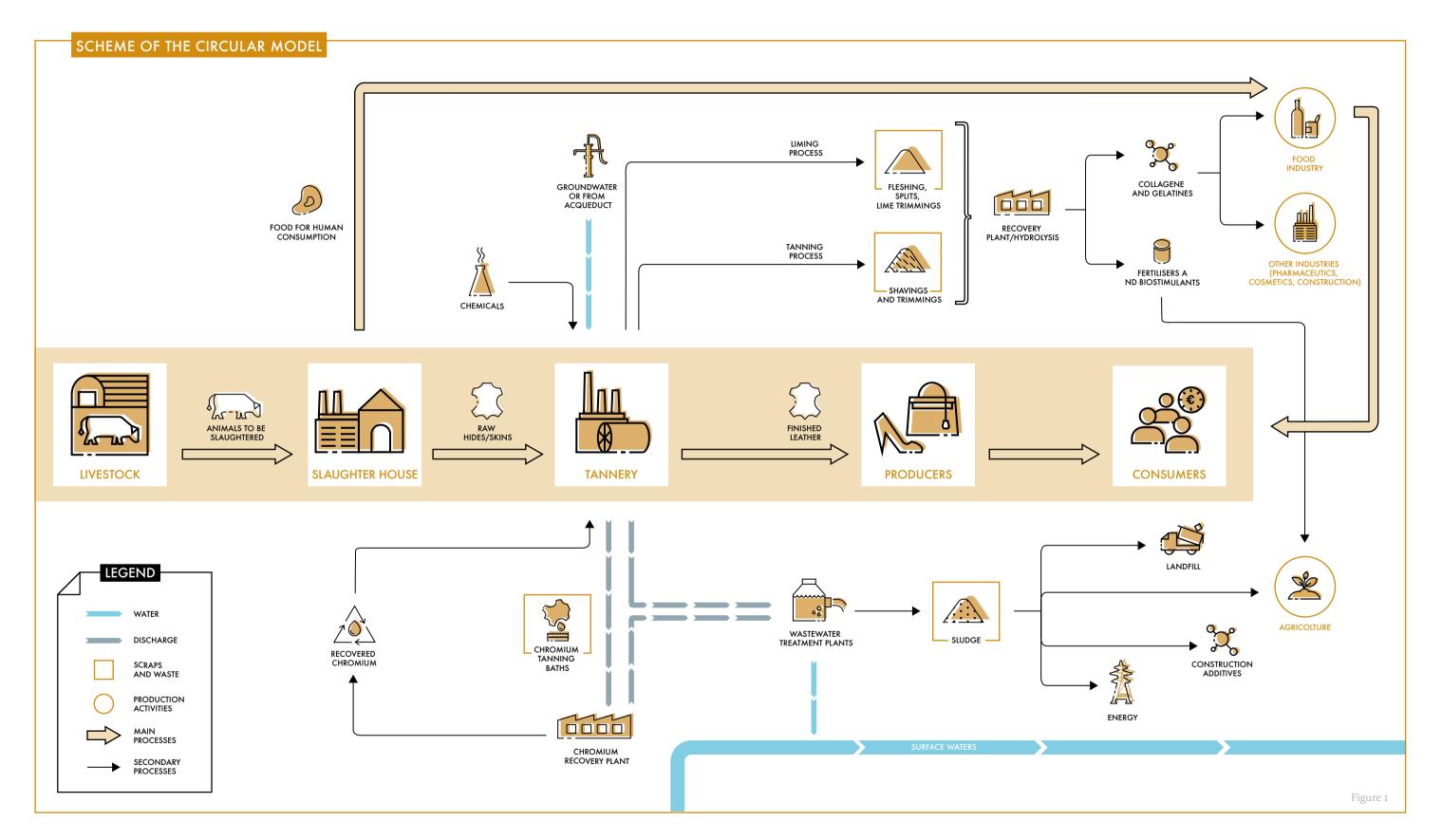
From tanned scraps (shavings, trimmings, spetches), and others (fleshing, pelt, splits) and through chemical processes, hydrolyzed amino acids are extracted, with which bio stimulant fertilizers for high quality agriculture are realized, but also retardants for construction, gelatin and collagen for food, cosmetics and nutraceutics.

Part of the sludge from treatment plants is also destined to recovery: according to the typology and treatments carried out, the use can be in agriculture or as material for construction.

An opportunity in which the sector believes.

An evidence of this is the recent investment by UNIC-Italian tanneries to acquire a holding in SICIT, the greatest producer in the world of fertilizers made of amino acids from tanned scraps.

3.1 - RESPONSIBLE — 3.1 - RESPONSIBLE —



3.2 - RESPONSIBLE

LCA AND PEFCR

LCA IS CURRENTLY THE MOST COMPLETE
METHODOLOGY TO ASSESS THE POTENTIAL
IMPACT OF A PRODUCT ALONG ALL ITS LIFE CYCLE,
ACCORDING TO RULES OF CALCULATION (PEFCR)
THAT, FOR LEATHER, WERE ESTABLISHED
AT EUROPEAN LEVEL.

Utilized resources, emissions and waste derived from the processes that characterize the tanning cycle determine the environmental impact of finished leather. The companies of the Italian tanning sector increasingly resort to the Life Cycle Assessment (LCA) to analyze the productive processes and quantify the environmental impact of products made, identifying the critical phases in which to intervene in order to minimize it, with a perspective of constant improvement.



The LCA methodology underpins the calculation of the product environmental footprint (PEF) that expresses the environmental performance of an article along its entire life cycle.

In 2013 the Italian tanning industry participated in the pilot phase of the Single Market for Green Products initiative of the European Commission for the definition of a unique method to determine environmental impact of products marketed in its member states. It was asked to all the supply chains that adhered to the initiative to develop specific rules for their own industrial sector, the PEFCR (Product Environmental Footprint Category Rules). The PEF method provides for an analysis conducted for 16 environmental impact categories, establishing for each the method of calculation to be used. The assessment must consider the upstream

phases. This translates, for the tanning sector, in the inclusion of the breeding phase, the environmental impact of which goes to the different products that derive from it, according to economic or physical criteria.

In fact, the allocation rules established by the European Commission require that "zero allocation" cannot be considered if the scrap has an economic value. The proportion of the impact of breeding attributed to leather, although insignificant in terms of percentage (0,42%), still has considerable weight on the overall impact, particularly on some indicators. Furthermore, the calculation is strongly influenced by the availability of primary data and by the quality of commercial datasets created for the analysis.

Factors that, for processes external to the tannery, introduce considerable approximations that can be overcome through a joint effort by the entire supply chain. This appeared particularly evident during the usage phase of the datasets for the modelling of the principal chemical substances employed in the tanneries, which is the reason why in 2016 a cooperation with important chemical suppliers to collect primary data was started. This job has guaranteed a timely modelling of the impact of some substances with a competitive advantage for all the supply chain due to the more reliable data.



3.3 - RESPONSIBLE

THE ENVIRONMENTAL IMPACTS

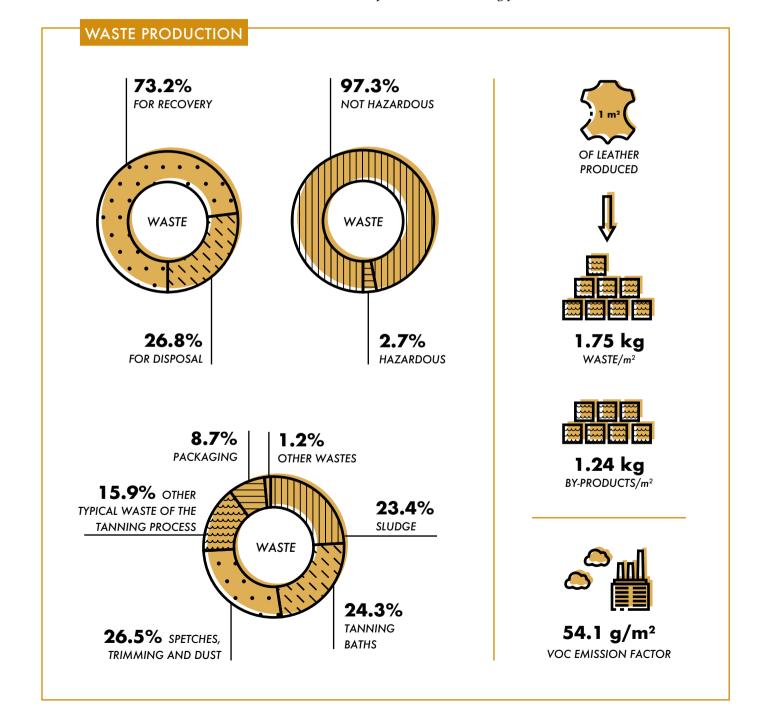
AS IN ALL MANUFACTURING ACTIVITIES,
PROCESSES CARRIED OUT IN TANNERIES
GENERATE AN IMPACT ON THE ENVIRONMENT,
THE EXTENT OF WHICH IS MINIMIZED THROUGH
SPECIFIC TREATMENTS.

Alongside the positive impacts arising from its "circular footprint", the Italian tanning industry needs to shoulder the responsibility for possible effects on the environment that, if not adequately handled, could have undesired consequences.

From the leather's transformation process, with the consumption of non-renewable resources, some significant impacts arise, such as: the production of scraps and waste, wastewater, emissions into the atmosphere of volatile substances and particulate, that need suitable and appropriate abatement systems before their release into the environment, in compliance with the relevant limits.

The production of waste for functional unit, the part of wastes destined to recovery and the incidence of the dangerous wastes are considered the most relevant indicators. Instead, regarding the emissions into the atmosphere the most important parameter is the emission factor of solvents, correlated with the quantities used. Most wastes diverted to landfills today are constituted primarily of sewage sludge, of screening and of filtering materials contaminated by oil or other substances.

Wastes produced by tanneries are for the most part peculiar to the process, recoverable if not even recyclable. It is the case of chromium tanning baths, in which the tanning agent still present is extracted and returned to the tannery for new use. Extending the assessment of the environmental impact to all the life cycle upstream to the leather, impacts derived from the breeding measured according to the already mentioned PEF rules are added to the own impacts from the tanning process.



THE USE OF RESOURCES

THE TRANSFORMATION FROM RAW HIDE
TO FINISHED LEATHER HAPPENS UTILIZING
RESOURCES (ENERGY, WATER, CHEMICALS) IN
PART NATURAL AND IN PART TRANSFORMED.

The tanning process transforms raw hides and skins into leather using chemical substances, water and energy. Over the years Italian companies have been placing more and more attention to reducing their consumptions, regarding both their manufacturing process and services related to them.



The use of resources is strongly influenced by the manufacturing processes carried out and by the type of article, intended both as animal origin and destination use.

In particular, the processes that start with raw hides and skins present indicators with significantly higher values

The indicators of consumption per product unit (square meter of finished leather) in time reveal decreasing trends for the three items mentioned, particularly for the use of water and energy.

More contained declines for the chemicals used, in relation to the different mix of typologies of productive processes developed and implemented in recent years, following requests from the market.

The measures adopted to reach such results are numerous: firstly, optimizing consumption by identifying points of waste or inefficiency (such as old plants or machinery), but also through the adoption of automated devices for the stoichiometric dosage of chemicals in drum or the employment of innovative systems

for the application of finishing, that limit dispersion, reducing consumption, the spreading in the air and in the wastewater.

The firsts, thanks to the continuous research on the chemistry of



To optimize consumption, an important contribution is also given by the supply chain upstream, both by the producers and formulators of chemical and the machinery suppliers.

the processes, support the tanneries proposing new prescriptions and auxiliary chemicals, also from biomasses and renewable sources. Machineries and implants, through technological innovation and the adoption of advanced systems within industry 4.0, instead allow better control of the processing and therefore a greater efficiency.

THE MAIN INDICATORS OF CONSUMPTION



1.90 kg/m² CHEMICALS CONSUMPTION



0.94 TEP/1000 m² ENERGY CONSUMPTION



103 I/m²
WATER CONSUMPTION

TREND CONSUMPTION INDICATORS (SINCE 2003



- 10%
CHEMICALS CONSUMPTION*



- 30% ENERGY CONSUMPTION



- 19% WATER CONSUMPTION

* Since 2008

- 50

3.5 - RESPONSIBLE

THE CYCLE OF WATER

WATER PLAYS AN IMPORTANT ROLE IN THE TANNING PROCESSES, BEING 'THE MEANS' IN WHICH MOST OF THE MANUFACTURING PROCESSES TAKE PLACE.



Water is the most important raw material in tannery, after hides and skins. It's the means by which most of the processes happen, and it represents a crucial element both on an environmental and economical level, also seen

the impact of costs for its management in tannery (58% in 2018).

Water supplied (53 % from the ground and the remaining amount from an industrial and/or civil aqueduct) often undergoes treatment before use, necessary to eliminate the presence of metals or other substances that could influence the successful outcome of the process or the final quality of the leather.

The use of water is necessary in all the wet phases (beamhouse, tanning, retanning-dyeing-fatliquoring) and in some auxiliary activities, such as washing and abating emissions. The resulting wastewater is characterized by a significant content of pollutant load, both organic and inorganic, deriving from hide/skin/pelt residuals and the chemical in exhausted baths.

Discharges are of a complicated nature and their characteristics vary accordingly to different factors, such as the type of process, the segregation or less of a part of the wastewater and its separate



The wastewater (about 90% of process water) should therefore be subject to appropriate treatments before it can be released into the surface waters.

treatment and the type of tanning. Depending on their location and the local regulations, tanneries can carry out on-site treatments or directly send the wastewater to the central treatment plants (CTPs) using sewage system collectors.

The treatment plants that belong to the tanning clusters have currently reached a notable specialization in the purification of tanning wastewater and are characterized by continual investments that include new technologies and plants. Both discharges coming from tanneries, which on average represent about half of the treated volumes (54%), and civil discharges (40%) or from other industrial activities (6%) are treated, contributing to give a service to the community and all the area concerned.

The treatments carried out by CTPs, prevalently based on the active sludge technology, reestablish the qualitative characteristics of the water that can be released in nature in accordance with the rigorous legislative regulation.

The analyses carried out on the treated water attest the efficiency of the sewage systems which can bring down near 100% of suspended solids, nitrogen, trivalent chromium and organic load (COD).

Considerable investments have been made and planned to improve the management of the water cycle in tannery and in the CTPs, also thanks to the research and development projects in place. Aim: to reduce industrial supply from groundwater utilizing using civil wastewater and improve the efficiency of wastewater treatments.

REDUCTION OF POLLUTANTS IN WASTEWATER

(MEAN VALUE OF CENTRAL TREATMENT PLANTS IN TOSCANY AND VENETO) YEAR 2018



-97.3%



-99.4%
SUSPENDED SOLIDS



-99.4% CHROMIUM III



-96,6% TOTAL NITROGEN





The Italian tanning industry has defined some prioritized areas of intervention to reduce its own energy requirements along with its own greenhouse gas emissions.

4 - COMMITMENT

WHAT ACTIONS HAS THE ITALIAN TANNING INDUSTRY DEVELOPED TO CONTRIBUTE TO THE FIGHT AGAINST CLIMATE CHANGE?



TAKE URGENT ACTION TO COMBAT CLIMATE CHANGE AND ITS IMPACTS



ENSURE ACCESS TO AFFORDABLE, RELIABLE, SUSTAINABLE AND MODERN ENERGY FOR ALL



4.1 ACTIONS AGAINST CLIMATE CHANGE

58

Together with the efficient use of resources, including energetic, Italian tanneries have equipped themselves with certified management systems under which the impacts connected with their own activity including emissions are monitored. Some tanneries, starting with the quantification of direct and indirect impacts, have put in place or are considering compensatory measures.



4.2 ENERGY EFFICIENCY

59

The tanning sector is not energy-consumptive but uses energy in manufacturing processes. Different measures have been adopted to optimize consumption and reduce inefficiencies. Many companies have invested in self-production of electricity for their own needs, recovering generated heat.



4.3 USE OF RENEWABLE ENERGIES (SDG 7) ____

rces

Self-production of electric energy from renewable resources is a good sectoral practice that however finds some technical limitations, in terms of long-term performance for the return of investments, in some geographical areas. An alternative is to turn to operators on the energy market that guarantee high shares of renewable supplies.

4.1 - COMMITMENT 4.2 - COMMITMENT

ACTIONS AGAINST CLIMATE CHANGE

THE ITALIAN TANNING INDUSTRY HAS TOO INTRODUCED CLIMATE CHANGE IN ITS ENVIRONMENTAL AGENDA

The Italian tanning industry has too introduced climate change in its environmental agenda. In the past years a lot of companies have invested in technical and managerial solutions to contribute to the reduction of emissions, certifying their effort according to ISO 14001 or EMAS standards. Some cutting-edge companies, starting from the quantification of emissions of Co2 connected with their own businesses, have already adopted compensation mechanisms. The emission of greenhouse gasses in tannery is principally correlated with the consumption of fossil energy sources. Their combustion emits a series of climate altering gases like Co2 and nitrogen oxides in the air. The impact indicator used to quantify the total gases emitted from a tannery is therefore, the content of equivalent Co2, calculated on the basis of direct inputs (consumption of methane, gas oil and other combustibles) and indirect ones (consumption of electric energy generated extra site) that characterize them.

In the past years a lot of companies have invested in technical and managerial solutions to contribute to the reduction of emissions, certifying their efforts. The impact indicator used to quantify the total gases emitted from a tannery is therefore, the content of equivalent Co2, calculated on the basis of energy consumption for the reference year. In 2018 it was equal to:

Greenhouse emissions*: 2.0 kg CO₂ EQ/m²

ENERGY EFFICIENCY

THE TANNING SECTOR IS NOT ENERGY-CONSUMPTIVE BUT USES ENERGY IN MANUFACTURING PROCESSES

> Energy consumptions are an important element of the environmental costs of a tannery. Managing them with efficiency brings notable economic and environmental benefits. For this reason, the companies in the sector have implemented energy saving actions with continuity with the goal of eliminating waste and reducing consumption.

Among the adopted solutions, the most common concern the substitution of illuminating bodies with high efficiency devices and the installation of cutting-edge technology for the recovery of dispersed heat in the form of thermal energy, usable as part of the manufacturing processes.

The transition from diesel forklifts to new electric powered vehicles with low emissions is another measure considered or being implemented by a certain number of companies, in order to gradually diminish the employment of fossil fuels.



Cogeneration is a technology that has found wide application in the tanning sector. Its role in the achievement of the proposals of the Kyoto Protocol has also been attested by the European Parliament.

Cogeneration is the combined production, in a single process, of electricity (or mechanical energy) and heat, that allows an increase in energy efficiency with a saving in fuel supply and, at the same time, a reduction in emissions of polluting agents and greenhouse gases. Finally, vital for the development of more

*Note: Factors and parameters of emissions from ISPRA (Reports 2019)

4.2 - COMMITMENT 4.3 - COMMITMENT

> efficient production models in terms of energy is the support from producers of machinery and equipments that make increasingly innovative and performative technology possible.

ENERGY PRODUCED BY COGENERATION 100% SELF-PRODUCED ENERGY

COGENERATION AT A HIGH EFFICIENCY

ENERGY USED



energy production technology characterized by a reduced environmental impact. Its peculiarity makes it a forefront technology in the energy sector,

thanks to a combined system that generates, simultaneously, electric and ther-

Cogeneration is an efficient mal energy that, thanks to the recovery of heat, ensures a constant increase of energy efficiency. In tannery it is possible to maximize its benefits due to the energy mix that requires a significant and continuous thermal consumption combined with a similar requirement for electricity.

FROM COGENERATION

GREEN LABEL



ciation Constructors of Tech-Goods and Tannery) promotes the Green Label, a voluntary labelling system that the associated companies can request

to attest and communicate their efficiency para-

ASSOMAC (National Asso- meters and the reduced environmental impact of their technology. The verification process for the nology for Footwear, Leather release of the certificate allows to express the impact of the system in the production process through CFP (Carbon Footprint), the Internationally recognized benchmark calculated according to LCA (Life Cycle Assessment) methodologies and certified by a third party.

USE OF RENEWABLE ENERGY

SELF-PRODUCTION OF ELECTRIC ENERGY FROM RENEWABLE RESOURCES IS A GOOD SECTORAL PRACTICE THAT HOWEVER FINDS SOME TECHNICAL LIMITATIONS, IN TERMS OF LONG-TERM PERFORMANCE FOR THE RETURN OF INVESTMENTS.



The energy needs of the tanning sector still depend, in large part, on fossil fuel. Their substitution with renewable energy currently presents a series of difficulties that also include the typology of energy

requirement (both thermal and electric).

Some companies have equipped themselves with photovoltaic systems to diminish the electricity network supply, but their contribution is nevertheless residual (1.5-5% of total energy consumption of the tannery) and negligible at a National level.

The choice of energy providers that guarantee and certify a high percentage or the totality of energy from renewable sources for their own energy mix is a viable road to increase the use of renewable energy and one that different companies have already taken.

The National tanneries operating in Italy benefit from an energy mix among the most virtuous in Europe, with a percentage of renewables equal to 18.1% (in 2018, MISE source), higher than the target assigned to Italy from the Guideline 2009/28/CE for 2020 (17.0%).





Technological innovation and scientific research are essential to guarantee economic competitiveness and more effective solutions to promote sustainable processes and products.

5 - FUTURE

WHICH PATHS HAS THE ITALIAN TANNING INDUSTRY TAKEN TO PROMOTE A RESPONSABILE AND SUSTAINABLE GROWTH?



5.1 THE INDUSTRIAL SYMBIOSIS OF THE TANNING DISTRICTS

66

The tanning districts are advanced models of industrial symbiosis in which a strongly interconnected system between companies for the exchange of materials (both products and scraps) and services has been developed. They are particularly relevant from an environmental point of view.



5.2 THE VALUE OF SUSTAINABILITY

_____67

Italian tanneries dedicate important economic resources to the reduction of the environmental impact related to their own processes and products. A daily commitment that guarantees clients and consumers sustainable articles and products following principles of responsibility.



5.3 TECHNOLOGICAL INNOVATION AND RESEARCH

68

Research and innovation are fundamental factors to maintain and promote the leadership of the Italian tanning industry and the entire supply chain, also thanks to the technical and scientific support of Universities and research centers, in addition to investments in new and more efficient technologies.



5.4 STANDARDIZATION

70

The activity of standardization supports the tanneries and the entire leather supply chain to identify reference standards shared by all the stakeholders, keeping economic social and environmental aspects into account. Namely, it is a guarantee of sustainability.



BUILD RESILIENT INFRASTRUCTURE, PROMOTE INCLUSIVE AND SUSTAINABLE INDUSTRIALIZATION AND FOSTER INNOVATION

THE INDUSTRIAL SYMBIOSIS OF THE TANNING DISTRICTS

THE TANNING DISTRICTS ARE ADVANCED MODELS OF INDUSTRIAL SYMBIOSIS IN WHICH A STRONGLY INTERCONNECTED SYSTEM BETWEEN COMPANIES.

The industrial symbiosis is the exchange of resources (in the form of matter, energy, water, by-products or experience and services) among companies of different sectors (sometimes very different between them) with the objective to realize, with an integrated and synergic approach, a productive model that allows the closure of resource cycles minimizing the production of waste.

Such concept is similarly borrowed from natural ecosystems in which resources are exploited in an efficient manner; what is waste for some organisms becomes food and energy for others.

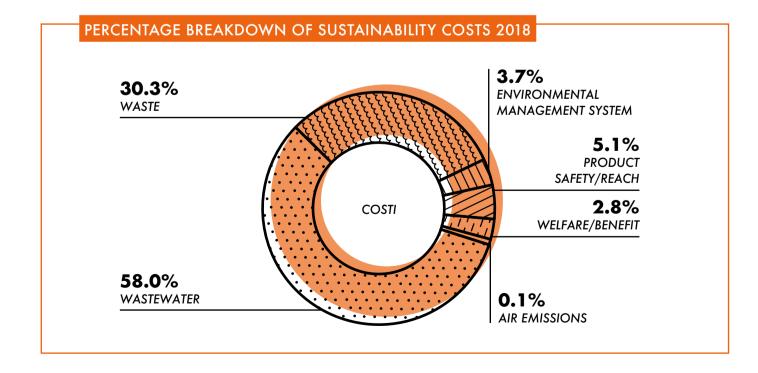
Collaboration and synergy then. The same factors that are at the basis of tanning clusters, true excellent examples of industrial symbiosis. Having developed with a strong territorial imprint (Arzignano in Veneto, the leather district in Tuscany, Solofra in Campania), which is evident in the different organization and interrelationship existent, the tanning districts have been able to give life to an effective and interconnected system of services for the companies in a few decades (recovery consortiums, water treatment plants, plants for recovery and treatment of scraps).

Over time, the districts have also become a driving force for the encounter between different stakeholders, in which companies, trade associations, suppliers of service and materials, schools, institutes of research and industrial development and institutions interact with each other in order to promote the sustainable development of the relevant territories.

THE VALUE OF SUSTAINABILITY

ITALIAN TANNERIES DEDICATE IMPORTANT ECONOMIC RESOURCES TO THE REDUCTION OF THE ENVIRONMENTAL IMPACT RELATED TO THEIR OWN PROCESSES AND PRODUCTS.

The commitment to create a sustainable industry goes through a series of important investments, not only in economic terms, but also in research, new technologies and innovative methods of production, that for the Italian tanneries have been a reality for years. The value of this commitment is on average equal to 4% of the annual turnover. It is evidence of a journey of responsibility which began early compared to the market trend and has now become an integral part of the development strategies of the Italian tanneries.



5.3 - FUTURE

TECHNOLOGICAL INNOVATION AND RESEARCH

RESEARCH AND INNOVATION ARE FUNDAMENTAL FACTORS TO MAINTAIN AND PROMOTE THE LEADERSHIP OF THE ITALIAN TANNING INDUSTRY AND THE ENTIRE SUPPLY CHAIN, ALSO THANKS TO THE TECHNICAL AND SCIENTIFIC SUPPORT OF UNIVERSITIES AND RESEARCH CENTERS.

The Italian tanning industry grows while innovating. It has particularly done so in recent years with the aid of the Industry 4.0 program that has facilitated investments in innovative and digital technologies for process management in many companies in the sector.

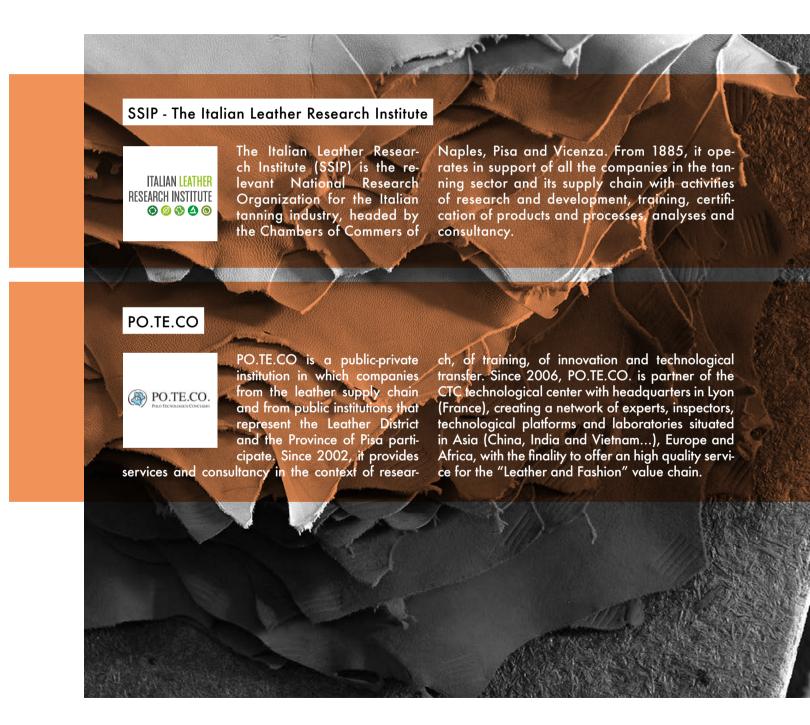


The areas of innovation in which the tanning companies are active and continue to invest in research and development are numerous.

They range from bio and nanotechnologies, to the elimination of substances "of concern", until processes to improve the recovery of scraps and optimize the treatment of wastewater.

The whole thing aimed at an increasingly sustainable productive process in economic, environmental and ethical terms and that gives life to a product of elevated physical and aesthetic performances, maybe functionalized to interact with who wears and uses it in daily life.

Challenging objectives for an industry that audaciously works to imagine and write its own future. There are numerous ongoing projects, particularly on the water treatment front, that see public/private partnerships committed to improve the environmental footprint of the processes, in the closure of the water cycle and the automation of monitoring.



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STANDARDIZATION

THE ACTIVITY OF STANDARDIZATION SUPPORTS
THE TANNERIES AND THE ENTIRE LEATHER SUPPLY
CHAIN TO IDENTIFY REFERENCE STANDARDS
SHARED BY ALL THE STAKEHOLDERS.

Standardization is an effective and powerful instrument to share knowledge and transfer new technologies, ideas and innovations in the market. In fact, research and standardization need to be closely linked to identify, quantify and optimize the benefits of change.

Standardization sets rules where there are not yet, as in the case of new products, processes and services.

Standards cover several themes: test methods to ensure reliable measurements, control of security requirements and quality of the products, definition of management systems for the control of environmental impact, health, safety etc.

In this way, rules are established for the assessment of new consumption goods (for example recycled materials deriving from new processes), for the performances of innovative processes (reduction of emissions following the introduction of new processing techniques, etc.).



Standardization allows to find shared and sustainable solutions, keeping economic, social and environmental aspects in consideration.







The manufacturing activities connected with the life cycle of the leather have a strong correlation with the sustainable use of the terrestrial ecosystem.

HAS THE ITALIAN **TANNING** INDUSTRY TAKEN RESPONSIBILITY FOR THE SUSTAINABLE USE OF THE TERRESTRIAL **ECOSYSTEMS?**



PROTECT, RESTORE AND PROMOTE SUSTAINABLE **USE OF TERRESTRIAL ECOSYSTEMS**



MAKE CITIES AND HUMAN SETTLEMENTS INCLUSIVE, SAFE, RESILIENT AND SUSTAINABLE



6.1 ANIMAL WELFARE AND TRACEABILITY

The sustainable use of natural resources is one of the most important values for the italian tanning industry, this is why traceability and control of the suppliers of raw material is a fundamental goal.



6.2 PROJECTS AGAINST DEFORESTATION 79

Biodiversity and forests are at the basis of food safety, human health and social and economic development. Their sustainable management is a focus of the development strategies of the tanning industry.



6.3 FERTILIZERS AND BIO STIMULANTS FROM TANNING SCRAPS AGAINST **SOIL DEPLETION**

80

Soil degradation and impoverishment make their use difficult for agricultural use. Bio stimulants and fertilizers produced from the recovery of tanning process waste assist the resetting of their agricultural function, facilitating plant growth.



6.4 INITIATIVES FOR THE SAFEGUARD OF ENVIRONMENTAL HERITAGE

82

The supply of some exotic articles contributes to the protection of the cultural and natural heritage of the places in which that same occurs, typically developing countries, not only through economic support, but raising awareness for the safeguard of habitat and traditions at risk.



6.5 INITIATIVES FOR THE SAFEGUARD OF CULTURAL HERITAGE (SDG 11)

Patronage is now part of the activity that the sector performs in favor of the community, aware that economic development is also based on the conservation of one's own cultural heritage.

6.1 - RESPECT —

ANIMAL WELFARE AND TRACEABILITY

THE SUSTAINABLE USE OF NATURAL RESOURCES IS ONE OF THE MOST IMPORTANT VALUES FOR THE ITALIAN TANNING INDUSTRY, THIS IS WHY TRACEABILITY AND CONTROL OF THE SUPPLIERS OF RAW MATERIAL IS A FUNDAMENTAL GOAL.

The tanning industry processes raws material of animal origin.

Responsible consumption of resources and safeguarding biodiversity are therefore a top priority for Italian companies.

These priorities are now an essential part of the concept of total quality that distinguishes the leather manufactured in our country.

Raw hides and skins of bovine and ovine and caprine origin, raw material for tanneries, are waste from the food industry and if they were not converted into a durable and versatile material they would be used for disposal and would have a high ecological and economic impact. The by-product nature, by definition, means that the tanning sector cannot play a role in the supply and demand dynamics of trade. Therefore, the availability of raw hides and skins is exclusively ruled by the demand for meat and the slaughtering carried out to satisfy human consumption.

Difficulties in sourcing information on breeding and slaughtering activities are linked to the lack of a regulatory constraint similar to the one that imposes the full traceability of each animal through the food chain. Mandatory commercial documents, which are required to accompany European animal by-products, and health certificates, for those from non-EU countries, make it possible in almost all cases to trace back to the place of slaughter of the animal, per batch of leather.

For this reason, Italian tanners have implemented a series of actions to raise the awareness of upstream operators in the supply chain and respond to the growing demand for guarantees from customers, especially those in the luxury and fashion world.



The aim is to find reliable and as complete information as possible on supplies, in order to guarantee the sustainability of sources to customers and end consumers.

A pledge that must be made by the entire supply chain and make possible to obtain significant information on the leather and on the animal from which it comes.

Italian tanneries are committed to promoting and improving animal welfare conditions. The first important milestone dates back to a few years with the publication by UNIC of the Animal Welfare Manifesto, which was inspired by the fundamental principles of the OIE (World Organization for Animal Health). Since then UNIC has continued working to increase and disseminate factual information on the issue, also in collaboration with the academic world. Similarly, the commitment of companies is on-going, through the selection of reliable suppliers, the adoption of systems to achieve the highest standards of traceability of hides and skins and the diffusion of certifications and other voluntary activities that make it possible to monitor the sources of the supply chain.

Monitoring of supplies is of strategic importance to ensure compliance with the fundamental principles of animal welfare over their entire life.

54% of the raw materials that the Italian tanning industry processes come from the EU, which has one of the most structured regulatory systems in the animal welfare field (Dir. 98/58/EC, Reg. I/2005/UE, Reg. I099/2009/UE, Dir. 2008/II9/EC).

Other important procurement areas (USA, New Zealand, Australia and many emerging countries) have also implemented similar standards. This guarantees that the hides and skins processed by Italian tanneries come from a supply chain that pays attention

6.2 - RESPECT

to animal welfare during the breeding phase (assuring animal proper nutrition, freedom of movement and health protection), transport (in order to avoid stress and injuries) and slaughter (to minimize the distress).



PROJECTS AGAINST DEFORESTATION

BIODIVERSITY AND FORESTS ARE AT THE BASIS OF FOOD SAFETY, HUMAN HEALTH AND SOCIAL AND ECONOMIC DEVELOPMENT.

UNIC supports the tanning sector in its commitment against deforestation and land use change. The support consists in a collaboration that led to the launch of the project "DCF (Deforestation and Conversion Free) Leather", focused on the bovine leather supply chains from Brazil.

It is a collaboration established in early 2019 between UNIC, ICEC (Institute of Quality Certification for the Leather Sector), the Brazilian partners CICB (Centro das Indústrias de Curtumes do Brasil) - CSCB (Certificação de Sustentabilidade do Couro Brasileiro) and the National Wildlife Federation, a US NGO.

The mission of the project is the conservation of the Amazon rainforest through the development of traceability standard of the hides/leather along the supply chain, to guarantee their origin from sources unrelated to deforested areas.

The standard also aims at increasing the level of transparency and improving governance of the supply chain and environmental responsibility. This multi-stakeholder approach incorporates DCF criteria into certification protocols of ICEC and CSCB traceability and recommends the inclusion of DCF principles in company sourcing policies and their raw material suppliers.











- 6.3 - RESPECT 6.3 - RESPECT

FERTILIZERS AND BIO STIMULANTS FROM TANNING SCRAPS AGAINST SOIL DEPLETION

SOIL DEGRADATION AND IMPOVERISHMENT MAKE THEIR USE DIFFICULT FOR AGRICULTURAL USE. BIO STIMULANTS AND FERTILIZERS PRODUCED FROM THE RECOVERY OF TANNING PROCESS WASTE ASSIST THE RESETTING OF THEIR AGRICULTURAL FUNCTION.

In the circular model of the Italian tannery, the recovery of organic waste generated in the early stages of processing plays an essential role, as it removes organic matter rich in proteins and amino acids with potential economic and agronomic value from the waste cycle.

The flesh, split tripe and even waste already tanned (shaving, trimmings, etc.) become, suitably treated by hydrolysis (chemical, thermal and/or enzymatic), a precious source of nutrients and soil conditioners used as an effective aid to prevent and combat soil infertility.

"The use of bio stimulants improves the uptake of nutrients contained in fertilizers and helps the plant to overcome the increasingly frequent conditions of stress".

Soil degradation is continuously increasing, hindering the agricultural activities necessary to produce sufficient goods and services for the entire world population, and particularly in the world's poorest regions. Fertilizers, soil improvers and bio stimulants obtained using protein hydrolysates from tanning scraps can contribute to finding a solution by reducing the environmental impact of crops. Their use reduces the need of agro-pharmaceuticals and chemical fertilizers, which, when used improperly, degrade the soil and lead to eutrophication of water. Organic bio stimulants and fertilizers also contribute to increase soil productivity and quality and thus maintain soil fertility.

The use of bio stimulants, in particular, improves the absorption of fertilizer nutrients and helps plants and vegetables to overcome the increasingly frequent conditions of climatic stress, such as drought, heavy rains, frost, etc.



6.4 - RESPECT

INITIATIVES FOR THE SAFEGUARD OF ENVIRONMENTAL HERITAGE

THE SUPPLY OF SOME EXOTIC ARTICLES CONTRIBUTES TO THE PROTECTION OF THE CULTURAL AND NATURAL HERITAGE OF THE PLACES IN WHICH THAT SAME OCCURS.

Despite representing a niche in the tanning sector (less than 1% of production, for an annual turnover of around 100 million euros in Italy), the supply of exotic leather interacts significantly with the ecosystem and local communities involved in their supply chain. The trade in exotic species, in fact, presents some critical issues related to the availability of resources, the protection of biodiversity and the livelihood of rural populations, which affect the conservation dynamics of the habitats where the harvesting takes place. For this reason UNIC takes part in the works of CITES General



The active role of UNIC in SARCA and CITES is intended to encourage the development of a trade in reptile skins that safeguards the conservation of wild species and promotes animal welfare principles.

Secretariat, the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES), which guarantees since 1975 the conservation and legality of international trade of more

than 35 thousand species of flora and fauna, and cooperates with the national authorities. The need to protect biodiversity and promote the economic development of local populations, who depend on this trade for their livelihood while maintaining high standards of animal welfare, has also triggered a series of initiatives. After an early collaboration with RESP (Responsible Ecosystem Sourcing Platform), UNIC has joined SARCA (Southeast Asian Reptile Conservation Alliance) since 2018.

The project has enabled the collection of useful scientific data to assess the sustainability of the reptile skin trade in Southeast Asia, encouraging cooperation with local operators and government representatives to promote the growth of local economies while respecting the responsible use of species and the cultural protection of native communities, on which their livelihoods depend from the exotic skin market.



- 6.5 - RESPECT

INITIATIVES FOR THE SAFEGUARD OF CULTURAL HERITAGE

PATRONAGE IS NOW PART OF THE ACTIVITY
THAT THE SECTOR PERFORMS IN FAVOR
OF THE COMMUNITY, AWARE THAT ECONOMIC
DEVELOPMENT IS ALSO BASED ON THE
CONSERVATION OF ONE'S OWN CULTURAL
HERITAGE.



Arts and culture are a heritage of extraordinary value and complexity, which can contribute to create new opportunities for sustainable development and social and economic progress. This is why tanning companies are committed on several fronts to keep

a heritage of timeless excellence alive.

By signing an agreement between UNIC and the Superintendence of Naples and Pompeii, the restoration of one of the world's oldest tanning complexes located within the archaeological excavations of Pompeii has been financed. In February 2018 works were carried out for the safety of the route leading to the tannery, its structural enhancement and the setting up of an open-air museum. The initiative has been awarded with a prize in Brussels, as an example of patronage



There is also a constant commitment to the conservation of the artistic and historical heritage. and "collaboration between the world of business and the world of art on an international level".

Also in 2018, UNIC financed the restoring of Nicolas Régnier's "Judith" bringing it back to its original splendor to, as part of the new patronage project "Rivelazioni", promoted by Finance for Fine Arts and supported by Borsa Italiana. The support of Italian tannery also reaches Venice, the Biblioteca Nazionale Marciana, where it will contribute to the conservation of the Orthopascha, an ancient manuscript, in parchment and leather, composed of 21 papers, finely decorated with miniatures and decorations.

Culture also means writing. In this context, UNIC - Italian Tanneries has promoted the project "Nella Mia Città - Cose Di Pelle" (In My City - Leather Things) to bring high school students closer to writing, giving them the opportunity to freely express ideas, creativity and thoughts around the topic of leather, elaborating a text in the form of poetry, storytelling, etc..







To achieve the Sustainable Development Goals its fundamental to create alliances and collaborations on multiple levels, from the local scene to the International one, built on shared principles and values.

7 - SYNERGY

WHICH ALLIANCES HAS THE ITALIAN TANNING INDUSTRY ACTIVATED IN ORDER TO IMPLEMENT THE 2030 AGENDA?



7.1 THE PARTNERSHIPS IN ITALY

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Through the action of its representative associations, the Italian tanning industry has activated multiple collaborations with different players from the economic, institutional and civil sector.

A strategic union that sees in the sharing of objectives, knowledge and investments, the main road to progress towards the achievement of the SDGs.



7.2 INTERNATIONAL COLLABORATIONS

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The italian tanning industry has contributed, along with economic players, organizations and institutional representatives, to create and support some initiatives in the framework of international collaboration.

The areas in which it operates are diverse. The main ones are: International cooperation, the safeguard of the environment, scientific research applied to the sector and International promotion of the excellence of its own productions.



STRENGTHEN THE MEANS OF IMPLEMENTATION AND REVITALIZE THE GLOBAL PARTNERSHIP FOR SUSTAINABLE DEVELOPMENT

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THE PARTNERSHIPS IN ITALY

THROUGH THE ACTION OF ITS REPRESENTATIVE ASSOCIATIONS, THE ITALIAN TANNING INDUSTRY HAS ACTIVATED MULTIPLE COLLABORATIONS WITH DIFFERENT PLAYERS FROM THE ECONOMIC, INSTITUTIONAL AND CIVIL SECTOR.

The implementation of sustainable development goals is strongly related to a context of global partnership between stakeholders. This allows partners to mobilize and share skills and technologies and to ensure coherent growth policies.

In this context, UNIC plays an important representative role: it is an aggregate member of Confindustria Moda (Federation of Fashion Industrial Associations) and has intense cooperative relationships with other national associations related to the supply chain and the industrial panorama (Assocalzaturieri, Assopellettieri, SMI, ASSOMAC, Federchimica, UNPAC, AICC).

UNIC dialogues with research institutions including the Italian Leather Research Institute and universities and maintains active institutional relations with ITA (Italian trade Agency) and various ministries (including in particular the Italian Ministry of Economic Development, the Ministry of the Environment, the Ministry of Health).

Fashion and luxury brands, key clients for Italian tanners, are another important partner for the coordination of sustainability strategies.

To address this complexity, several voluntary programs have been promoted over the years to reduce the chemical risk

The fashion sector is characterized by a very heterogeneous and complex supply chain.

of the environmental impact of production activities, as part of a sustainable fashion roadmap.

Traditionally, relations with trade union counterparts (FILCTEM CGIL, FEMCA CISL, UILTEC UIL) have always been good and are continuously strengthened through regular employment observatories and participation in industry sustainability initiatives.



7.2 - SYNERGY

INTERNATIONAL COLLABORATIONS

THE ITALIAN TANNING INDUSTRY HAS
CONTRIBUTED, ALONG WITH ECONOMIC
PLAYERS, ORGANIZATIONS AND INSTITUTIONAL
REPRESENTATIVES, TO CREATE AND SUPPORT
SOME INITIATIVES IN THE FRAMEWORK
OF INTERNATIONAL COLLABORATION.

The strong internationalization of the tanning sector is also reflected in the participation in representative bodies of primary importance, both in the industrial sector (COTANCE - Confederation of EU Tanners, ICT - International Council of Tanners) and on specific topics such as standardization (CEN - EU Committee for Standardization, ISO - International Standard Organization), traceability and animal welfare (SARCA - South Asian Reptile Conservation Alliance), the environment (ZDHC - Zero Discharge Hazardous Chemical, LWG Leather Working Group). In addition to these, there are synergies significant to the leather sector such as commercial aspects (GLCC - Global Leather Coordination Committee), communication and promotion of product and process sustainability (Leather Naturally).

UNIC has cooperative relationships with various international bodies, such as the European Commission, FAO and other UN agencies, that often lead to cooperation projects in support of the sustainable development of the leather sector.



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METHODOLOGICAL NOTE CONTRIBUTORS

METHODOLOGICAL NOTE

The UNIC sustainability report has highlighted the excellence of the Italian tanning sector in its most significant components, for 17 years. Over the years, it has adapted its approach and contents to embrace the trends of sustainability and corporate social responsibility. From now forward,, the sector is addressing the UN 2030 agenda in order to understand what further contributions it can make to achieve the objectives of this important programme.

As usual, the document is drawn up on the basis of data provided by the companies participating in the initiative for the year 2018, through a specific questionnaire. The time range of the initiatives, on the other hand, is broader, including events that started in 2019.

The indicators and data reported represent the weighted average of the survey sample, whose overall production accounts for more than a third of the entire sector (34%) and that is composed of companies representative of the geographical distribution of the industry in Italy and of the main types of production, in order to give a reliable picture of the overall sectorial reality. This picture is very diversified in terms of raw material, type of production, finished articles and, last but not least, availability of local services. For some specific aspects (e.g. treatment, accidents, economic data), data and information from different sources have also been acquired and processed in order to have a more complete and in-depth view of the dynamics of the sector.

Specifically, accidents data were provided by INAIL's Statistical Office, while for section 2 (Human resources) the database was expanded with an additional sample of 98 companies (72 tanneries and 26 subcontractors). The economic data, also in Section 2, refers to the official sectoral aggregate, attached to the UNIC President's Report 2019.

WITH THE COLLABORATION OF THE FOLLOWING TANNERIES

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