# ALPTEXTYLES
# Orientation guide

## The decalogue of circular Alpine textiles

2025

**INTERTWINING CULTURES**

# INTRODUCTION

From 2022 to 2025, AlpTextyles has explored the alpine textile heritage, both its artisanal and industrial traditions, focusing on their **richness, preservation, and transmission.** The project aims to **foster sustainable, circular, and innovative value chains** across the Alps by promoting collaborative and consumer-sensitive approaches.

Through a wide range of activities, resources and cultures, from **wool, flax,** and **endemic plants** to **pastoralism, tourism, education, geography, traditions** and **consumption** led in **Italy, France, Switzerland, Slovenia, Austria** and **Germany**, the project has demonstrated how integrating the textile industry with various industries, **cross-border collaborations, territorial specificities** and **diverse communities** is essential in the sustainable and circular transition.

This document is designed to **help textile small and medium entreprises (SMEs)** and business support organisations **develop circular, heritage-sensitive value chains** that **meet consumer needs** for post-carbon lifestyles. It's organised around ten key points gathered in a decalogue and summarising the extensive work of project partners and offering essential insights for alpine SMEs with case studies and practical examples.

**Interreg**

Co-funded by
the European Union

**Alpine Space**

AlpTextyles

1. **Consumer expectations** highlight how Alpine products can be enhanced for end users by capitalising on Alps' image and engaging customers with story telling,

2. **Market relevance** adopts a B2B perspective to unlock the market potential of Alpine products by fostering cross-sectorial interactions and strengthening competitive advantages,

3. **Heritage consciousness** examines how exploring the diversity of traditions and foster a positive image can increase awareness and respect for Alpine heritage,

4. **Heritage protection** serves as a tool to safeguard Alpine know-how and traditions by building clear, recognisable "Alps" labels and fighting "Alpwashing",

5. **Circular and sustainable design** focuses on lowering the environmental impact of production by exploring local resources potentials and turning sustainability into an opportunity,

6. **Local value chains** demonstrate how to invent a new resilience through cooperation and circularity as key opportunities,

7. **Policy compliance** reviews EU policies for the green transition, exploring how these can be transformed into opportunities,

8. **Innovation** provides key advice on bridging gaps by fostering know-how related to extreme conditions and creating the conditions to innovate,

9. **Transmission** aims to engage the next generation by promoting traditions and developing innovative teaching methods,

10. **Inclusion** highlights the positive impact of strengthening communities and fostering collaboration across borders, territories, and generations.

## > CAPITALISE ON THE ALPS' IMAGE

**The Alps convey rich values to customers** [1], which Alpine SMEs can leverage to build powerful communication, marketing, and product design.

With their extreme environment, the Alps evoke **nature, heritage, adventure, technical performance, and luxury** with an unexpected strength. They awaken the senses, reminding us of sounds, colors, and textures. Surveyed customers even romantically refer to the sound of the wind, the seasonal colors of the landscape, and the smell of wood."

Furthermore, **Alpine textile products often rely on cross-border value chains** that can be **difficult for customers to grasp**. This strong Alpine identity and shared heritage, however, represent a valuable asset for building effective communication.
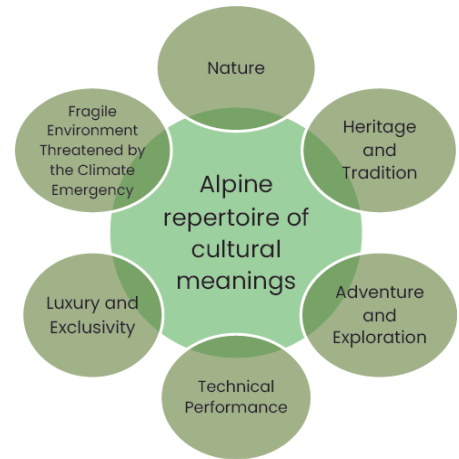


How Alps can connote brands
Alpine cultural repertoire [2]

> " By aligning with consumer values and prioritising sustainability, SMEs can meet the growing demand and contribute positively to the environment and their communities.
>
> **Marta Pizzetti, PhD and Verena Gruber, PhD [3]**



Wool on the sun, 1976 [4]

This exceptional yet increasingly fragile **nature is becoming more and more appealing to future generations**. As a strategic place to reconcile humans with nature, the Alps also connote strong benefits for human health through sport, escapes from cities, and peaceful environments for self-discovery.

These values may serve as the ground for post-carbon lifestyles, **enhancing traditional crafts**, **local value chain** and more environmentally friendly tourism. It also opens up new ways to **"frame products, not just as goods**, but as **experiences, stories,** and **acts of care"**. [5]

**5**
[1] emlyon - Bellissimo and ARPAF-III Made in the Alps studies
[2] emlyon - Report on Communicating "Made in the Alps"
[3] Highlights reports - The living Heritage of the Alps - 12 march 2024 - Keynote 11
[4] ZRC SAZU - Alpine textile heritage - Picture by P. navoni, Premana (LC), 1976 Archivio di Etnografia e Storia Sociale

## > ENGAGE CUSTOMERS WITH STORY TELLING

**Alpine SMEs have a great opportunity to connect with customers by building strong storytelling** inspired by the fantastic Alpine environment: « By focusing on transparency and engaging in authentic storytelling, SMEs can effectively communicate their commitment, making it easier for consumers to choose their products ». [3]

This storytelling can come to life with **powerful visuals of artisans** and thoughtful narratives that highlight each product's unique journey. By doing so, brands create an **emotional connection** with customers, allowing them to feel good about supporting **meaningful, prosocial choices**.

In this way, brands offer more than just products, they **deliver purpose**, **authenticity**, and the rewarding sense of **making a positive impact**.



Narrative labels by Belissimo

## > INSPIRING EXAMPLE

**Krochet Kids International : communicating handmade production**

« Consumers often lack knowledge about the production processes and the people involved in creating the products they buy and use. (…) Krochet Kids International sells products that are always signed by the person who made it. On the website, you can click on "Meet the Makers" to get a picture, profile, and some more information on the person who made the product. Customers can also leave thank you notes on that site. »



emlyon - communicating value to consumers [5]

**6**

Yet, consumers alone will not lead the change towards a more circular consumption.
Maud Herber, Université de Lille reminds that "According to the GreenFlex social barometer, which has been tracking attitudes in France for 20 years, **70% to 90% of people express concern for sustainable development, yet only 10% to 17% take sustainable actions.** These figures have remained consistent over the years — indicating that **consumers alone cannot drive the necessary changes.** "

If consumers are willing to play an active role in these issues, they should not be seen only as end-users in the value chain. They could be involved in sustainability efforts at various stages, for example, by taking a more proactive role in recycling or repairing.

## KEY LINKS

LINK 1 DOWNLOADABLE NARRATIVE LABELS
LINK 2 VIDEO CONSUMER INSIGHTS
LINK 3 CONSUMER WON'T SAVE THE WORLD

## > FOSTER CROSS-SECTORIAL INTERACTIONS

"Among products associated with the Alps, food is top of mind" [1], with spontaneous mentions of cheese, honey, herbs, spirits, and charcuterie. This makes it particularly relevant to **explore how the food industry has managed to promote and preserve its traditional know-how**.

In the context of the circular economy, **the textile industry should also consider broader applications** for its waste, particularly in connection with Alpine activities. With food and housing being the two sectors with the biggest environmental impact in Europe, "**textile waste could be employed in construction works and as fertilizer**, in two positive examples of industrial symbiosis and sustainable use of resources." [2]


Goat cheese

" Other than being "naturally" circular in itself, the textile value chain could provide cross-sectoral contributions for a wider circular economy.

**Mikael Garellick, Majda Potokar, Michael Jung, Ekaterina Stoyanova** [2]


Source : "Alpine flowers" by A_Peach is licensed under CC BY 2.0.

The Mediplant pilot project, which aims to develop new natural dyes from Alpine indigenous resources, is an interesting example of a cross-sectoral fruitful collaboration.

One of the tested essence is a **larch bark-based dye which is a forestry by-product**. This material has been successfully used to develop **natural dyeing products at a reasonable price**.

This example shows that investigating by-products as a new resource is a valid approach to effectively develop competitive products by capitalising on complementarities between sectors and tackling territorial challenges.

[1] emLyon - Report on Consumer insights
[2] Highlights reports – The living Heritage of the Alps - 12 march 2024 - Keynote 13

## > STRENGHEN COMPETITIVE ADVANTAGES

While a high price might be expected from crafted solutions or natural dyes, Mediplant mentions that dyes derived from plants like Dyer's woad or Lady's mantle are currently more expensive, but that this cost could be reduced through targeted cultivation. The price is therefore related to reaching a critical-mass and organising production by gathering several actors.

Yet, price is not the only factor when selecting a supplier: quality, flexibility, and responsiveness also play a key role. In this regard, **local and regional suppliers often prove to be more agile** by quickly responding to customer needs.



Larch bark - Extraction protocol Mediplant

As highlighted in the report "Unveiling the Potential of the Craft Sector", **the unique human touch in handcrafted products** can be especially appealing to customers. This sensitivity is even more relevant when working with recycled materials, which may produce unexpected results. While the B2B market typically relies on standardised feedstocks to ensure consistent outputs, artisans can turn the irregularity of their work into a strength, leveraging it to emphasise their uniqueness and authenticity.

Moreover, the craft business models are not limited to product sales : Mediplant has expanded its activities by offering a custom dyeing service, allowing them to **diversify their operations and strengthening their revenue streams**. Another interesting practice is the linking of craftsmanship and **tourism**, with the aim of creating new opportunities by **strengthening bonds with consumers, showcasing expertise, and generating sales**.



Report - European Craft's Alliance

## > INSPIRING EXAMPLE

In the AlpTextyles flax pilot, we connected communities from Davča in Slovenia and Val Müstair in Switzerland, who, although approaching the valorisation of flax in different ways, face similar challenges. This collaboration enabled tangible results through **knowledge transfer, sharing of experiences**, and **discussions around common issues**. Discover this incredible experience in video !

## KEY LINKS

LINK 1 MOOC – MODULE 6 NATURAL INDIGO
LINK 2 POLICIES TOWARD CIRCULAR TEXTILE
LINK 3 VIDEO REVIVING FLAX IN ŠKOFJA LOKA

## > EXPLORE THE DIVERSITY OF TRADITIONS

The **wool tradition has been put aside with the development of globalisation** as products have been valorised for their standardised characteristics and the making processes have been been vastly disappearing.

This lack of knowledge of products' making and the progressive discovery of harmful practices towards social wellness, environmental impact and health has led to a distrust of consumers.

People's interest is growing in **understanding how a product is made**, **especially when it comes to re-discover traditional practices**. Behind the wool tradition lies ten thousands years of heritage from sheep breeding and transhumance, gesture to collect, wash and transform the wool.



Two women at work in the parlour: one at the spinning wheel, the other at the loom about 1890 [1]

" In the past, luxury textiles were rare, costly, and imported from afar, while local textiles were common and affordable. Today, the value perception has reversed.

**Aziza Gril-Mariotte, Director Musée des Tissus et des Arts Décoratifs, Lyon** [2]



Flax harvest historical photo, used for promoting the reintroduction on of flax initiative [3]

**Flax has long been essential for the production of clothing and textile in Alpine area**. From the fields to the local workshops, flax contributed to the economic development and cultural heritage of local communities.

The processes to produce flax fabrics and yarns have hardly changed from prehistoric times to the beginning of the 20th century, when flax was still produced for textile purposes in some rural areas.

It is noteworthy that **these ancient activities have left architectural evidence** and artifacts that can be incorporated into **cultural journeys or museums for local communities and tourists**.

[1] ZRC SAZU - Alpine textile heritage source Swiss National Museum
[2] The living Heritage of the Alps - 12 march 2024 - Keynote 2
[3] ZRC SAZU - Alpine textile heritage source Val mustair
[4] emLyon - Report on Consumer insights

## > FOSTER A POSITIVE IMAGE OF TRADITIONS

Traditional folk cultures, especially their costumes, are linked to profound cultural streams and historical contexts. The perception of tradition is continually evolving : "**celebrated by Romanticism but rejected after World War II due to its association with Nazism, folk dress is increasingly popular** in the German-speaking Alpine regions. " [4]

Rooting traditions in a new modernity by connecting them with new mountain activities, with experiences, with education or tourism is a good way to foster a positive image of these ancient know-hows. Tourism, in particular, is crucial in the alpine space, since winter activities are threatened by global warming and the growing outlook on snow-based activities.

## > INSPIRING EXAMPLE

**La Routo: how hiking can support local wool ?**
« In 2014, the La Routo hiking trail project provided a new opportunity. By combining this project with the technical clothing, the Maison de la Transhumance secured EU funding. In 2018, under the guidance of the Maison de la Transhumance, 13 breeders founded the Collectif pour la Promotion du Mérinos d'Arles (CPMA). By 2020, membership had grown to 25, and 100 tons of wool were collected for La Routo outdoor clothing. »



ZRC SAZU - Alpine textile heritage



AlpTextyles Cultural Transhumance - 11/05/2024

In this regard, **traditional mountain activities, such as transhumance, present an interesting opportunity to attract tourists with cultural, natural, and interactive experiences** as demonstrated by the Cultural Transhumance organised by Alptextyles in May 2024, which was highly successful.

"Many consumers are willing to learn traditional techniques and work with their hands. Traditional weaving workshops, for instance, invite participants to spin, dye, and weave natural fibers using time-honoured methods. " [5]

It would be beneficial to include the potential of textile traditions in a broader **consideration in the essential shift of mountaineering activities** and the appeal of mountains as a summer destination. Winter **ski station are therefore strategic places to promote these know-hows** towards a cross-regional, wealthy and urban public.

## KEY LINKS

LINK 1 MOOC - MODULE 1 TEXTILE HISTORY
LINK 2 LA ROUTO HIKING TRAIL
LINK 3 VIDEO ALPTEXTYLES TRANSHUMANCE

[5] emlyon - Communicating value to consumers

## > BUILD CLEAR AND RECOGNISABLE "ALPS" LABELS

As the Alps convey a rich repertoire of sensations with a powerful impact in consumers' mind **"trademark analysis revealed an over-use of the term "Alps" for marketing reason"** [1]. Therefore, brands that have little or no connection to the Alps as a place of production "utilise this geographic locations to imbue their products with symbolic meanings" and "depict Alpine landscapes as a site of consumption" [2].

For this reason, it is crucial to clarify the terms related to the Alps by categorising the type of activity associated with this geographical area, in order to protect local producers—for example, distinguishing between "made in," "fiber origin," "brand origin," or simply using the Alps as a landscape reference.
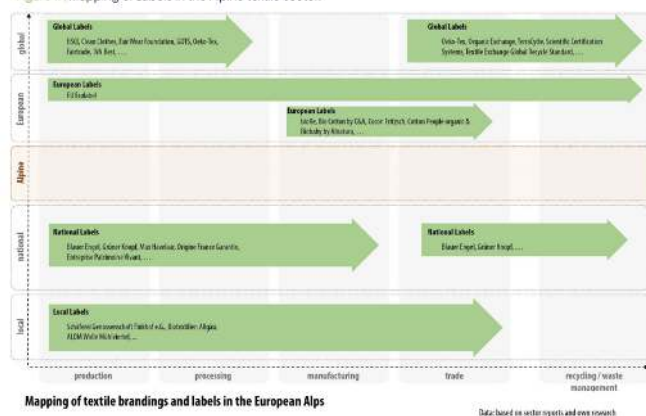


Brands and the Alps: communication models [2]

> ❝ The Alps are not really visible in terms of institutions or certifications/labels concerning the textile and clothing ecosystem.

**FAU - Alpine Textile Mapping for AlpTextyles** [3]



Fau - Mapping of labels
in the Alpine textile sector [1]

While numerous labels exist to protect local, national, or global productions, **the mapping of labels in the Alpine textile sector reveals a lack of protection**.

To this extent, studying practices in the food industry is very interesting, as numerous labels exist to protect local know-how, such as for cheeses or wines. **It is less known that wool breeds can also provide terroir in fibres, since breeding conditions create different fibre qualities** : "this can be seen as part of an "ingredient branding" strategy to highlight the importance of terroir in fibers. Terroir combines natural factors (climate, soil) and cultural factors (farming practices, know-how) that influence product quality." [4]

[1] Fau - Alpine Textile Mapping
[2] emlyon - Communicating "Made in the Alps"
[3] The living Heritage of the Alps - 12 march 2024 - Keynote 9
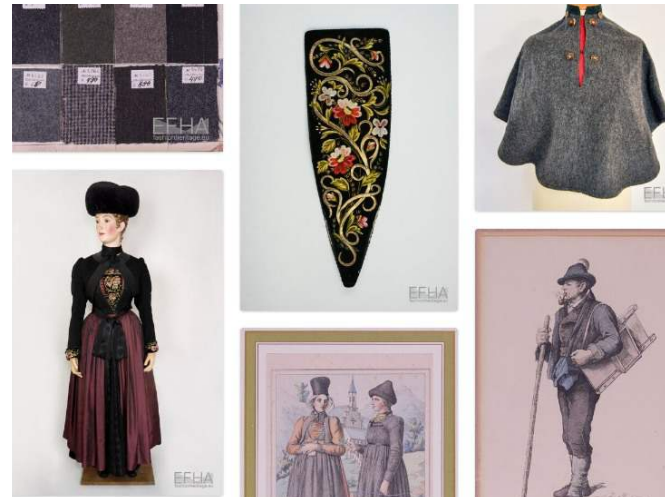[4] ZRC SAZU - Alpine textile heritage source

## > DETECT AND FIGHT "ALPWASHING"

As seen previously « the Alps (...) evoke sensations that are appealing and useful to strengthen brand marketing and messaging.» [3] which explain why brands use Alpine values intensively in their communications. Yet, it is necessary to define Alpwashing practices in order to detect them: "brands without productive connections to the Alps can still capitalise on the region's image by portraying consumption against the backdrop of the Alps' stunning landscapes. This does not constitute "AlpWashing," as these brands do not claim their products are made in the Alps."[3]

But the **legal protection of traditions and cultural expressions,** which are laying in the public domain, **is at risk** "as emphasised by the UNESCO and WIPO (World intellectual Property organisation): (...) the production and use of traditional products by individuals or brands outside their cultural group can result in cultural appropriation and exploitation."[5] For instance, the use of indigenous patterns or Sikh turbans by Luxury brands could be considered as **trivialisation of culture meaning, commercial exploitation, failure to seek permission or lack of compensation**.
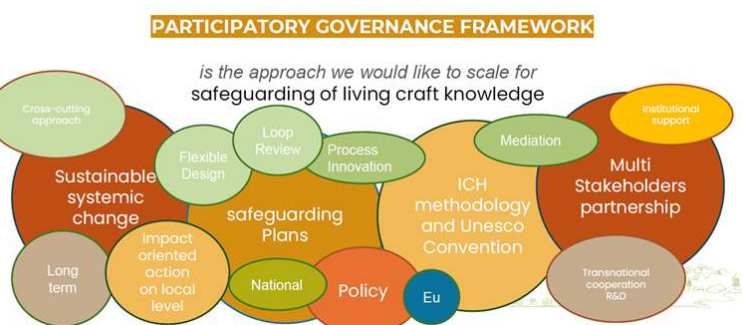


Regione Lombardia

## > INSPIRING EXAMPLE

Michael del Grande Naturfasern **registered the trademark Merinos d'Arles Selection© to market wool** from this indigenous breed. "While merino wool is often seen as a commodity, wool from specific regions can have distinct qualities and symbolism. Merino d'Arles wool, for instance, is not as fine as Australian or New Zealand wool but is « the finest merino wool of Europe ».» [4]



Digital Archives

To better protect heritage and cultural expressions which can take a wide variety of forms, the WIPO is defining a new category. The AlpTextyles Safeguarding Toolkit provides practical solutions.

However, brands with strong Alpine roots can **highlight their deep ties to the region in their communications** to set themselves apart from competitors. "Heritage is a market differentiator, but it must be narrated" [5] To achieve this, **alpine brands can detail their history,** their connections to local know-how**, they can "humanise their productions and build long-term affective bonds".** [5]

Additionally, raising consumer awareness about traditions and supporting local communities in protecting their heritage are essential for helping SMEs improve their visibility and strengthen their communication.

## KEY LINKS

LINK 1 – DIGITAL CULTURAL HERITAGE EUROPEANA
LINK 2 – THE SAFEGUARDING TOOLKIT
LINK 3 – WIPO'S ACTIVITIES

> ## EXPLORE LOCAL RESOURCES POTENTIALS

The **Alpine region is particularly rich in ecosystems and resources**. Yet, resources that were once valuable, such as wool, are now left unexploited: "Due to a broken value chain, over 90% of local wool is discarded and wasted". [1]

AlpTextyles has conducted extensive work to map these resources, producing **the most comprehensive mapping of Alpine wool breeds** and highlighting know-hows along the value chain from shearing and scouring to spinning and knitting. The project also provides **successful results** with numerous collaborations led by Mediplant **to use local and invasive plants for their dyeing properties.**


Collaboration Mediplant - Atelier Sandrine Rozier

" Local sheep breeds yield small quantities of raw wool (...). This hampered market access to the global level and favors the regional development of specialised applications.

**Dr. Tobias Chilla Markus Lambracht , FAU** [2]
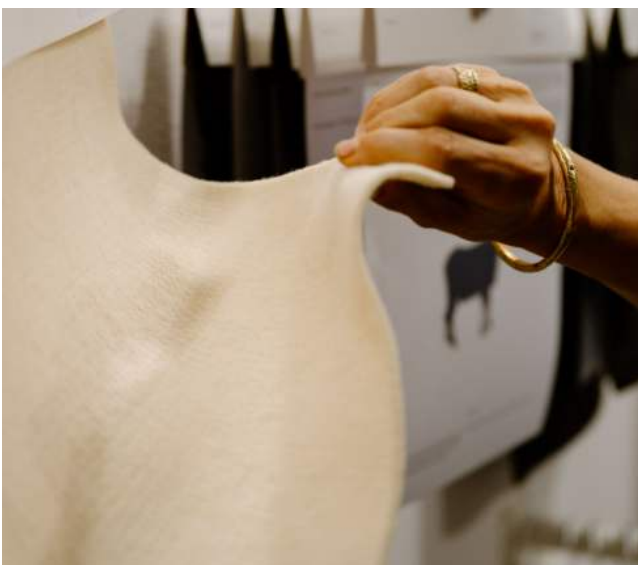

The wool library - Fibershed DACH

**Eighty-three sheep breeds have been inventoried and characterised** based on the primary purpose of their breeding—land maintenance, meat, wool, or milk [3]. This is an essential first step towards finding new ways to valorise wool instead of burning it. Further applications need to be explored, and **more detailed characterisations could be undertaken** : is this wool valuable for **keratin in cosmetics, lanolin as a PFAS replacement, building insulation, or fertiliser?**

Exploring new uses for unexploited natural resources and by-products could generate significant added value. In this context, the Wool Library developed by Fibershed-DACH has already demonstrated how design can serve as a powerful mean of enhancing the value of such materials.

[1] The living Heritage of the Alps - 12 march 2024 - Keynote 8
[2] The living Heritage of the Alps – 12 march 2024 - Keynote 7
[3] Fau - Mapping Alpine Wool
[4] Fau - Alpine Textile Mapping

## > SUSTAINABILITY AS AN OPPORTUNITY

The growing consumer interest in more sustainable products does not always translate into actual purchases, often due to price concerns or lack of awareness. Indeed, **sustainable products face an uneven competition with conventional and global alternatives**.

On the one hand, conventional goods (mostly imported and manufactured under opaque conditions) are sold at low price and promoted through simple and effective narratives. On the other hand, sustainable products must integrate into their cost structure the investments required to reduce their impact, which places them at a price disadvantage. They also require **consumers to make effort to understand their production impacts**, which demands more **complex marketing** and communication.



## > INSPIRING EXAMPLE

**A sustainable product is efficient if it's bought and used instead of a conventional product.** A good example of an effective sustainable communication is the bag « I was plastic » which highlights its environemental benefit through its very design, making it one of its main selling points. « Informing consumers about the past of the materials used for a product is a simple but effective communication strategy ». [5]


Mediplant - Alpine plants
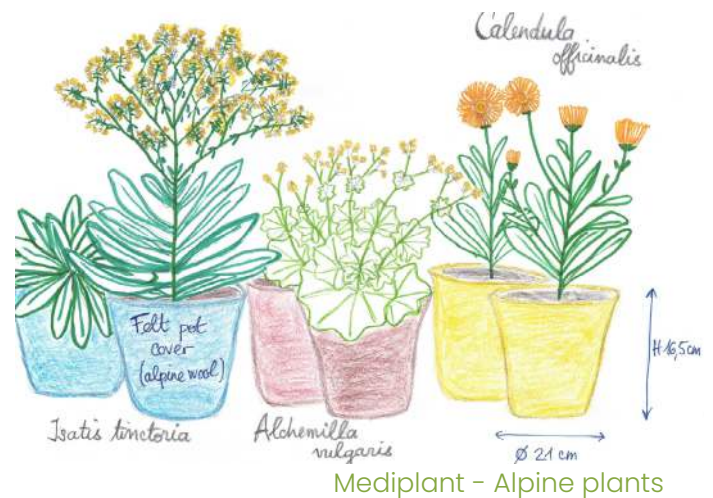
Nevertheless, **sustainability represents the future, as conventional products fail to account for the Earth's finite resources**. Yet until these limits are reached, sustainable goods will continue to face uneven competition. To move towards even market access, policy measures promoting more transparent value chains by supporting environmental classifications or new life cycle assessment (LCA) approaches can help to highlight the value of these goods. « This could lead to a situation where regional strength compared with the **safeguarding of cultural heritage increases awareness on customer side and creates regional solutions for farmers and enterprises** at all levels to better compete with regard to a growing international market. » [4]

Yet, it is worth noting that **current Alpine production is spread across many small and diverse locations**, which presents a major challenge for competing effectively at a global level and which advocate for fostering more local, resilient value chains.

## KEY LINKS

LINK 1 MOOC – MODULE 3 TEXTILE MAPPING
LINK 2 WOOL LIBRARY
LINK 3 COMMUNICATING VALUE TO CONSUMERS

> ## COOPERATION AS A KEY

The current wool production network highlights **Italy's strong position in yarn and fabric processing** at global scale. **82% of the inputs used by European yarn factories are imported,** with 68% coming from outside Europe. As a result, **Alpine wool accounts for only 8% of the inputs to these yarn factories**, even though these factories process 66% of the Alpine wool output.

This situation can be explained by the fact that **the current highest value creation for yarn companies comes from the clothing industries**, for which local wool is often not suitable. However, it raises questions about the resilience of their sourcing and the animal wellbeing given their significant dependence on imports.
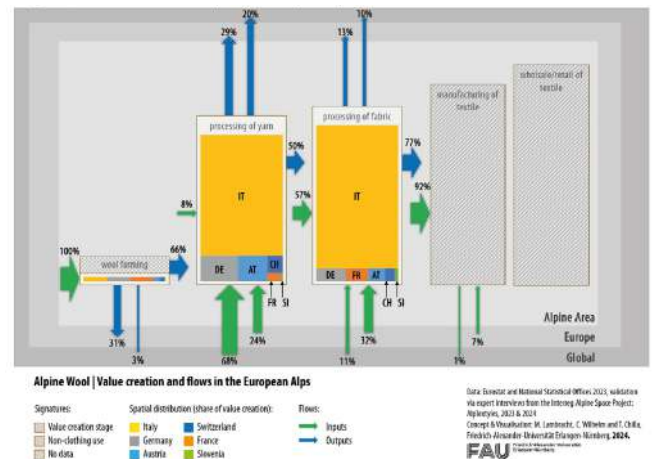


Value creation and flows of wool in Alps [1]

"

## A healthy textile ecosystem allows each actor to find its niche, with small players engaging in "co-opetition" - a blend of competition and cooperation, such as sharing resources.

**Maud Herbert, Chaire Tex&Care, Université de Lille** [2]



emlyon - Communicating "made in the alps"

**Building a more resilient value chain requires strong cooperation among all stakeholders**, particularly with competitors—a relatively new approach. This combination of competition and collaboration, named **"co-opetition", can involve sharing resources or working together to create labels and increase visibility as a collective** even at a very local scale.

Another way to strenghen sustainable textile ecosystems is to build value chain that include actors of different sizes. "It is crucial for larger entrepreneurial projects to coexist with local and ultralocal initiatives that adopt a "sobriety" business model (...) " [2] By doing so, **each actor can find its niche** either by **developing local applications** or by **targeting high-value niche market**.

[1] FAU - Mapping Alpine Wool
[2] The living Heritage of the Alps - 12 march 2024 - Keynote 12
[3] emlyon - Communicating value to consumers

## > CIRCULARITY AS AN OPPORTUNITY

Recycling and upcycling are strategic topics when considering the European and Alpine independence from imports. Since most inputs in the Alpine textile value chain are imported, **circularity represents an interesting area for development, as it relies on local resources.** It offers a strong opportunity to create competitive and local activities.

It will also require the development of strong and local value chains which will most likely operate across national borders in order to compete on a global scale. In this regard, "rather than dilute product or producer identity, **cross-border collaboration can be positioned as a strength**, anchoring products in a broader territorial narrative, while reinforcing themes of mutual cultural heritage, regional resilience, and shared ecological responsibility. With their evoking image, the Alps can lend themselves to resonant narrations in this respect." [3]

## > INSPIRING EXAMPLE

To sum up: 80% of a t-shirt's value benefits the local economy.

| Value creator | Value | % of value creation | Use of the added value |
|---|---|---|---|
| Supplier | €7 | 20% – abroad | Operating costs, purchasing raw materials, employees, taxes |
| Brand | €12.50 | 20% – France | Employees, rent, taxes, logistics, R&D, operating costs, income taxes |
| Retailer | €24–€25 | 40% – France | Employees, commercial lease, taxes, logistics, operating costs, income taxes |
| Value Added Tax | €32–€33 | 20% – France | Taxes |

Brand "Picture" price transparency [3]

**Transparent value chains can be a compelling selling point for consumers**. This can be achieved through shorter, integrated supply chains or by tracing every supplier. This process can be complex, and sometimes the results must remain confidential. The French brand Picture, took a different approach : they highlighted the economic benefits of each step in their value chain, showcasing their financial contribution to the local economy. [3]



Brächete Flax Folk Festival – Val Mustair

**Circularity also opens up new business models**, such as those referring to "product-as-a-service" which shifts the focus from ownership to use.

In particular, **repairing and renting appear especially relevant in the Alpine region**, where local activities experience **strong seasonal variations and extreme conditions** may result in occasional, one-time use.

These models not only support sustainability but also foster local economic resilience by creating new business opportunities around maintenance, logistics, and customer service.

## KEY LINKS

LINK 1 MOOC – MODULE 3 TEXTILE MAPPING
LINK 2 PICTURE WEBSITE
LINK 3

## > FIT INTO UE POLICIES FOR GREEN TRANSITION

"**Sixteen legislative proposals by the EU are changing the face and inner workings of the textile industry**. Circular economy drives new business models and reshapes the value chain: companies will have to adapt, balancing sustainability and competitiveness. They will need support through market surveillance, financial help, knowledge, and examples." [1]

This legal framework is crucial for fostering a resilient, sustainable market by enabling SMEs to compete with non-sustainable companies on a more equal footing.



Source : EURATEX - Ekaterina Stoyanova

"
# Policies must ensure fair competition by regulating imports that do not meet our stringent European standards and by promoting the use of local resources (...)

**Cassiano Luminati, Director, Polo Poschiavo**
**Diego Rinallo, PhD, Director, Lifestyle Research Center, emlyon**
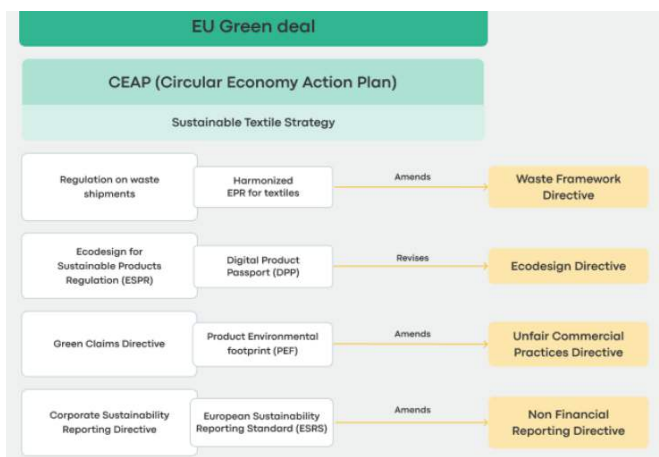


Source : Carbonfact

**The EU Green Deal** aims to make Europe the first climate-neutral continent by 2050 by targeting a **minimum reduction in net greenhouse gas emissions of 55%** compared to 1990 levels.

**The CEAP** (Circular Economy Action Plan) sets out 35 specific actions, with a particular focus on the textile sector, to **promote sustainable product design, establish circular economy practices,** and **reduce waste generation**.

The EU Strategy for Circular and Sustainable Textiles aims to increase the longevity of textiles, the use of recycled fibers, curb fast fashion, and make products easier to repair or recycle.
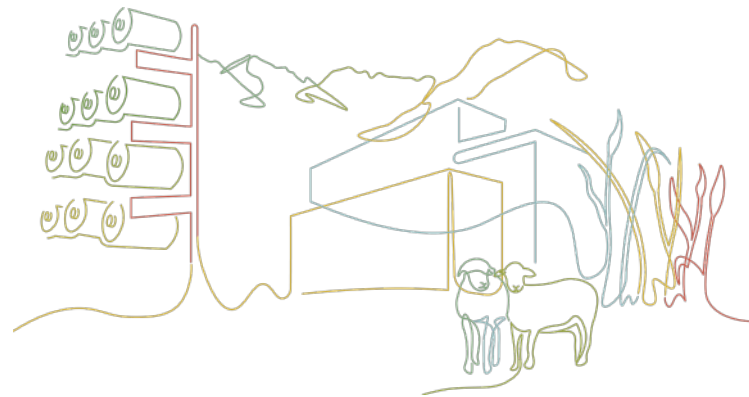
[1] The living Heritage of the Alps - 12 march 2024 - Keynote 13
[2] The living Heritage of the Alps – 12 march 2024 - Keynote 12

## > POLICY AS AN OPPORTUNITY

**ESPR** (Ecodesign for Sustainable Products Regulation) aims to make products more "durable, reliable, reusable, upgradable, reparable, easier to maintain, refurbish and recycle, and energy and resource efficient".

It also introduces the **Digital Product Passport** (DPP), which will make it **easier for consumers to repair and recycle products**, as well as to **track potentially hazardous substances**. In addition, the **Product Environmental Footprint** (PEF) lays the foundation for **calculating the impact of a product throughout its entire life cycle**.
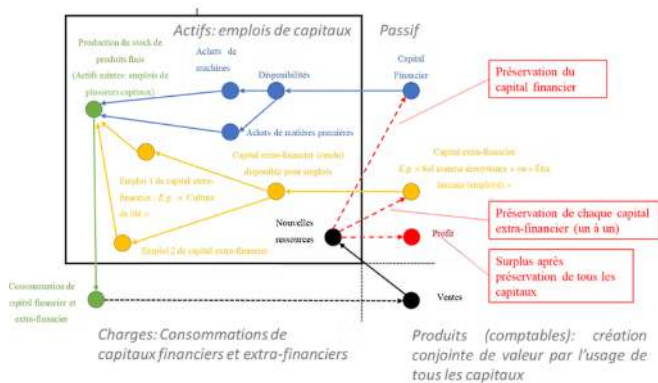
## > INSPIRING EXAMPLE



C.A.R.E. map - Cerces

**C.A.R.E.** (Comprehensive Accounting in Respect of Ecology) is a **new accounting system** which extends the logic of historical cost accounting to include the obligation to preserve natural environments and human beings : recognised as 'capitals' to protect and this, in a manner similar to the classic protection of financial capital.

Consequently, **a company can calculate its profit only once the 'repayment' of its 'ecological debt'** towards its natural and human capitals **is guaranteed**, as it already does for its financial capital.

**These new regulations**, although often seen as a drawback, **will help sustainable SMEs to display their positive impact towards consumers**. In this way, regulations can open new opportunities for Alpine SMEs by providing additional advantages over their global competitors.

Another way to help sustainable companies compete on the market **could be to integrate into accounting system the "cost" of the natural resource destruction**, which for the moment remains invisible on balance sheets.

Indeed, " Traditional accounting, which focuses solely on economic values, must be complemented by measures that address socio-environmental impacts and the climate emergency. These measures include product life cycle analyses and corporate-level environmental performance evaluations. C.A.R.E. is a promising new approach in this direction."[2]

## KEY LINKS

LINK 1 ALPTEXTYLES POLICY BRIEF
LINK 2 DISCOVER DPP WITH CIRPASS
LINK 3 C.A.R.E. WEBSITE

## > FOSTER KNOW-HOW RELATED TO EXTREME CONDITIONS

**Innovation is key to build effective value chains** and **help companies become more competitive**. An interesting avenue arises from the gap in the supply of textiles used in extreme Alpine environments, which are not produced locally. To brigde this gap, **SMEs could focus on developing « technical fabrics »**, whose global share in textile production has been increasing since 2011.[1]

"The sub-sector of technical textiles is one of the most dynamic, accounting for a growing share in the EU Textile production." [1] Inside technical textiles, niche markets could be explored that leverage the advantages of the mountain environment, such as local **testing of thermal, pressure or water performance**.
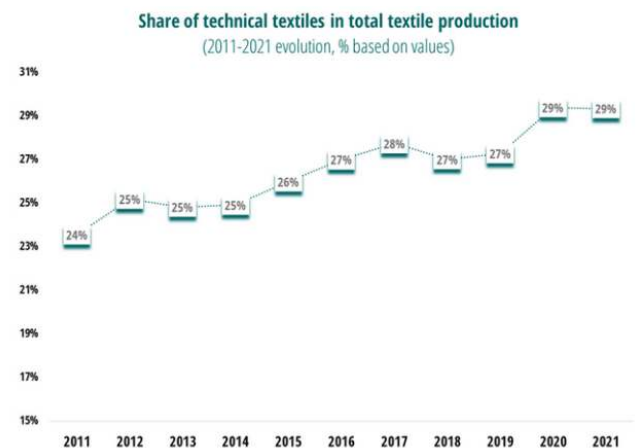


Companies in the T&C industry [1]

> " Reaching a critical mass through regional networks leads to negotiation power within an international commercial system. This is true for certifications costs but also in terms of innovation.

**Extract from FAU - Alpine Textile Mapping**



"Ski Alp Val Rendena 2009" [2]

The "growing demand for technical textiles is based on **applications in various industries** such as **healthcare, agriculture, construction, sportswear, automotive**…" [1] This quest for innovation may also open new opportunities across industries, tapping into unexplored collaborative potential. For instance, what one industry considers waste could serve as a valuable raw material for another.

**Innovation isn't limited to technical performance** : it can also **transform fields like art, communication, education, protection, and marketing.** These areas offer exciting opportunities to develop new, innovative practices and unlock the full potential of Alpine textiles.

[1] Euratex 2024 - Facts & key figures
[2] CoppaDelleDolomiti, licensed under CC BY 2.0

## > CREATE THE CONDITIONS TO INNOVATE

**Innovation requires cooperation to develop projects**. Indeed, the uncertain outcomes also mean that the risks associated with innovation need to be shared among several stakeholders. This is why **achieving a critical mass by creating consortiums is essential to support innovation**.

Yet, in the EU, 89% of textile companies have between 0 and 9 employees, which, in many cases, is too small a size to lead innovative projects efficiently. Therefore, **clusters and federations are essential to help SMEs** innovate and **develop cooperative projects capable of competing** at scale **with global competitors**.
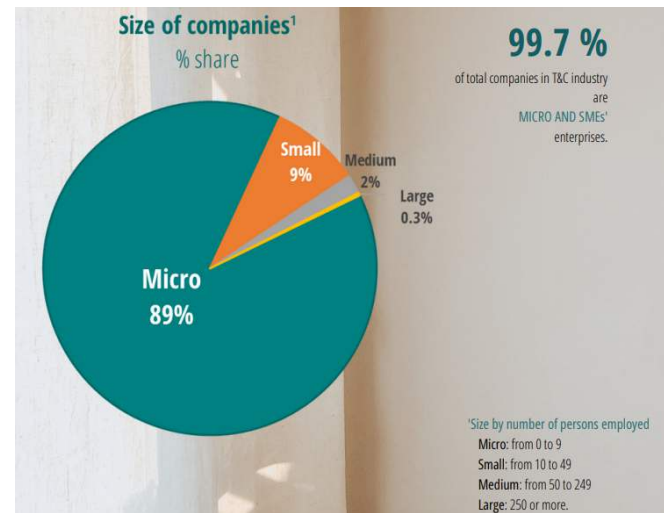


Companies in the T&C industry [1]

Innovation also requires funding which depends on the maturity of the solution, the size of the company and the amount of the investments.

**Public funding options are numerous for innovative or sustainable projects** and can be fund at regional, national or European levels. **Private funding ranges** from "love money", crowdfunding and business angels to incubators for early stage projects to family offices, Venture Capital (VC) and Company Venture Capital (CVC) funds for mature companies.

Each stage of a startup's development typically corresponds to specific average funding amounts :
-50K to 500K for pre-seed
-500K to 5M€ for seed
-5M€ to 15M€ for Serie A
-Over 15M€ for Serie B



Collectif Tricolor platform

## > INSPIRING EXAMPLE

**Collectif Tricolor developed a platform** where wool producers and weavers can **register a product and get a Digital ID of the product**. This Digital Id is hosted on a **traceability platform,** enabling the collection of data at every stage of the wool value chain. It provides consumers with a full overview of the production process and origins, serving as a powerful tool to showcase the product's quality and sustainability.

## KEY LINKS

LINK 1 CLUSTER COLLABORATION
LINK 2 EURATEX
LINK 3 COLLECTIF TRICOLOR PLATFORM

## > PROMOTE TRADITIONS

"An increasing number of European countries with a rich heritage connected to shepherding and sheep breeding face a common challenge: the wool sector is weakening, and **traditional know-how is disappearing**." [1]

Promoting traditions can be done in a "cultural" way through museums or exhibitions. It can also be more interactive, as seen with transhumance, links with tourism. However, when it comes to **attracting new generations to these traditional crafts**, **employment is a central question**. One argument in favour of this shift towards more manual, sustainable, and rural jobs is the appeal of "post-carbon lifestyles" to younger generations.



Shepherds in Val Camonica [2]

> ❝ The MOOC fosters heritage consciousness by highlighting the cultural and ecological value of Alpine textile traditions as drivers of sustainable innovation.

**Instituto Marangoni**



Shearing sheeps [3]

Yet "**wool production is declining worldwide** mainly **due to geopolitics and the climate crises**, with the fall of **sheep farmers' income making the profession unappealing to new generations.** » [1]

Patrick Fabre, founder of La Routo and the Maison de la Transhumance, who has actively worked to promote the value of Merino d'Arles wool, explains that « to sell their wool at its best, breeders had to revive forgotten skills : selecting lambs with the more beautiful fleece and sort out for spinning only the finest wool. (…) Thanks to this new value chain, breeders are able to sell their fleece at a higher price. Between €0.20 and €0.40 more per kilo. (…) It's a modest increase, but (…) above all, the breeders have regained a little pride in this exceptional wool. » [4]

[1] The living Heritage of the Alps - 12 march 2024 - Keynote 8
[2] Case Study - Pasture Val Camonica
[3] emlyon - Communicating "Made in the Alps"
[4] ZRC SAZU - Alpine textile heritage source

## > USE INNOVATIVE TEACHING METHODS

**Enhancing the visibility of these traditions and crafts among universities and schools is key** to passing this knowledge on to the next generations by raising their interest in discovering the rich Alpine heritage.

To this end, **Instituto Marangoni developed a MOOC in the AlpTextyles project**, whose program is detailed below and which has been thought to be "a learning journey into circular Alpine textiles, designed to equip students, young professionals, and researchers with the knowledge and tools to shape a more sustainable textile future."



Books on the history of Solvenian folk custumes
MOOC - Module 1



Davide Alesina – MOOC - Module 5

## > INSPIRING EXERCICE

Identify the textile heritage of your community [5]

1- Divide participants into smaller groups
2- Each group prepares a list of textile heritage elements they recognise as important : Objects e.g., garments, tools, patterns; People (knowledge bearers, elder community members; Skills e.g., weaving techniques, wool dyeing, storytelling; Stories and traditions.
At the end, groups present their lists which highlights most frequently shared elements.

Exercise outcome: The community gains a clear overview of recognised heritage elements and can decide which ones are most urgent to document and protect.

The MOOC is also innovative in its **fully online, free** and **device-accessible format**. It's combining **audiovisual content**, **downloadable resources, interactive quizzes**, to explore new ways of teaching with a playful approach. It also provides access to **cutting-edge exploratory platforms such as the metaverse**, offering an immersive experience of Alpine traditions.

1-MODULE_The Textile History of the Alps
2-MODULE_The Living Textile Heritage of the Alps
3-MODULE_Textile economics in the Alps
4-MODULE_The Digital Archives
5-MODULE_The Alpine Textile Aesthetic
6-MODULE_Raising Awareness on Circularity

Another notable tool developed during the project is the Safeguarding Toolbox, which offers adaptable workshop programs for both students and textile professionals.

## KEY LINKS

LINK 1 METAVERSE ALPTEXTYLES
LINK 2 SAFEGUARDING TOOL KIT
LINK 3 TEXTILE SCHOOL

[5] The safeguarding Tool kit

## > FOSTER COLLABORATION

"Valorising indigenous wools requires the concerted efforts of many stakeholders over time (...) Arles Merino wool, known for its high quality, has faced multiple challenges, with breeders struggling to cover even the cost of shearing. [1]

The **first collaboration takes place at the craft level** by **bringing together communities of producers and breeders dedicated to defending and promoting their know-how**. This is especially relevant for wool, which is not valorised and suffers from a lack of value on the market.



emlyon - Communication "Made in the Alps"

**"** Local communities everywhere share a common goal: preserve their textile cultural heritage, leverage it as a marketing tool, and help farmers bring their crafts to the international market.

**Dalena White, Pascal Gautrand, Patrizia Maggia, Lucija White** [2]



Alpine Icon Summer School

The **second collaboration is cross-border, enabling the creation of an efficient value chain by combining European specialities**, which in the case of La Routo would be "unattainable within a strictly French value chain." Despite involving multiple countries, this value chain remains small-scale compared to the global operations of most sports and fashion brands." [1]

The **third collaboration is by linking rural communities** of producers with urban communities of consumers. Bridging that gap is essential to increase the level of awareness of end-users and engage a wider community in supporting their traditions.

[1] The living Heritage of the Alps - 12 march 2024 - Keynote 3
[2] The living Heritage of the Alps - 12 march 2024 - Keynote 8
[3] The safeguarding Tool kit

## > PROTECT AND SUPPORT LOCAL COMMUNITIES

The **fourth collaboration is between local communities and tourists**. It's particularly relevant as it comes at a point where mountain tourism needs to be reinvented in order to prepare the after of "white-gold".

Tourism linked to traditions could be an interesting revenue stream for Alpine space and a valuable opportunity to diversify farming activities, as mentioned by Mediplant regarding their pilot project. To this extent, the cultural transhumance, the cross-border learning visit in Skofja Loka (Slovenia) and Val Camonica (Lombardia) has opened a way to link tourism and farming by sharing mountain culture to a wider community.



*Cultural Transhumance*



*Alpine Icon Summer School*

The **fifth collaboration is by fostering the link between generations**: the Alpine Icone Textile Summer School in Lombardia gathered design, cultural, and technical communities for 10 days in September 2024, with great success in linking generations by transmitting know-how and exchanging ideas.

The MOOC is also defined by Instituto Marangoni as inclusive and collaborative, as it's offering open access to diverse learners, encouraging peer exchange, and promoting shared learning experiences across disciplines, backgrounds, and regions.

## > INSPIRING EXAMPLE

The **Poschiavo (Switzerland) blanket is a compelling example of how an object can connect people** and foster inclusion by bringing generations together around a shared heritage. "It is said that every family in the valley owns its own Poschiavo blanket, with colors inherited across generations, following centuries-old traditions (…) of knowledge and **skill being passed down from parents to children**.
As part of the AlpTextyles project, under the guidance of Polo Poschiavo, a community action was organised to collect additional materials about these family blankets." [3]

**KEY LINKS**

LINK 1 ALPINE ICON SUMMER SCHOOL
LINK 2 VAL POSCHIAVO BLANKET
LINK 3 PANE E FILI

# CONCLUSION

**HERITAGE-SENSITIVE**

**AlpTextyles' multifaceted and mind-expanding approach**, linking **heritage, consumer insight, education, innovation,** and **communities**, offers a promising pathway to capture the rich interactions and shared potential across different fields to **support the sustainable and circular transition**.

In this context, strong **Alpine heritage** can both **deepen cross-border connections** and **foster more emotional**, meaningful **consumption choices**. It provides inspiration not only to designers but also more broadly, helping **reconnect communities** with their past, **bridging rural and urban** areas, **young and old generations, tourists and artisans.** The project has not only collected objects, know-how, and designs, it has **experienced innovative ways of sharing this richness**, both **digitally and physically**, through experiences that can be replicated in other regions.

When examining the Alpine region, the shared heritage of **local communities emerges as a strong foundation for building new value chains** characterised by **cross-border collaboration, "ingredient branding" communication** and **untapped consumer potential through tourism**, especially since no dedicated Alpine textile label or designation currently exist.

**Decades of globalisation have weakened local value chains**, making it impossible for Alpine production to compete globally. With **protectionism now returning in force**, the **long and highly internationalised value chains** that structure the textile industry **are increasingly perceived as risky**. Meanwhile, the direct import of goods made from tightly integrated, **short value chains such as those in China demonstrates their efficiency** in the European market, with massive quantities of products sold at minimal cost.

In this context, the **circular economy represents a major opportunity**, both by creating **smaller, local value chains** and by unlocking the **potential of resources once considered as waste**. As biologist Olivier Hamant notes in "Antidote to the Cult of Performance", that **robustness can be used as a way of assessment instead of performance.** Drawing inspiration from nature, he observes that **no organism is optimised for maximum performance**, since **this would reduce its ability to survive** in changing environments.

Applied to value chains, robustness suggests that **while shorter chains may not deliver the highest short-term performance**, **their resilience** in the face of ecosystem change **enables them to survive**. Looking back at history, the traditional know-how and practices of past generations—who relied solely on local resources— offer valuable inspiration for shaping these new, more sustainable value chains.
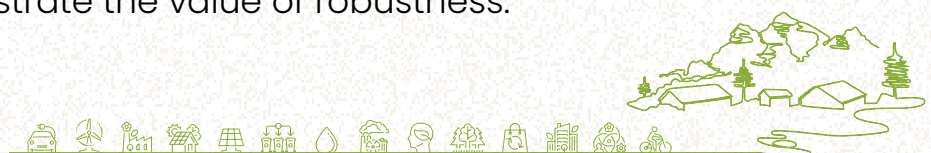
**RESILIENT TEXTILE SMES**

**Sustainable and circular value chains** are less **economically performant than conventional** ones which result in more expensive finished products, **limiting their appeal to a majority of final consumers**.

In this regard, **policy support is essential**. To strengthen the pricing position of sustainable products, **investments are required at every stage of the textile value chain.** They would be targeted to enhance performance through **automation and digitalisation,** particularly in labour-intensive processes such as **sorting and recycling,** an essential step of circular economy. In addition, **some stages of the value chain are entirely missing** and need to be rebuilt to ensure the chain as a whole can function.

**Compensation measures would** also **help sustainable products compete** and could take various forms: requiring **imported products** to **meet minimum quality** or **sustainability standards**; **reducing VAT on sustainable goods** while increasing it on more harmful ones; or **introducing new accounting methods** such as C.A.R.E., which incorporates the financial costs of restoring the natural resources used.

This could pave the way for an **innovative form of protectionism**, where **sustainability is the barrier criterion**, and would enable the EU to **lead in developing a high-performing sustainable ecosystem**, that will ultimately demonstrate the value of robustness.

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