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Policy Brief

Towards Sustainable, Circular, and Locally Rooted Alpine Textile Ecosystems

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INTERTWINING CULTURES

Executive Summary

The Alpine region holds a rich textile heritage rooted in local aesthetics, natural fibers such as wool, hemp, linen and dye plants, and traditional circular practices. Today, as consumers grow increasingly critical of globalized supply chains and seek products that are both environmentally and culturally sustainable, this heritage represents a unique opportunity. It can serve as the foundation for re-localized, high-value textile value chains that justify premium pricing for “Made in the Alps” goods.

The AlpTextyles project was launched to accelerate this transition by developing collaborative solutions for sustainable, circular, and place-based textile production in the Alpine area. The project brought together actors from the cultural, agricultural, and industrial sectors to build new cross-border value chains rooted in Alpine traditions and innovation.

Key findings from the AlPeTextyles mapping activities reveal a diverse yet fragmented landscape of textile knowledge, resources, activities, and skills, with significant potential for reterritorialization and market interest in sustainable, heritage-linked products. Pilot Activities confirm the feasibility of circular practices using regional materials, and highlights consumer willingness to pay more for authentic Alpine products.

This policy brief provides strategic recommendations for both regional and macro-regional stakeholders, including EUSALP Action Groups, to support sustainable Alpine textile chains. It links directly to the EU Strategy for Sustainable and Circular Textiles and anticipates regulatory developments on Geographical Indications for craft and industrial products. Coordinated efforts at multiple governance levels are now essential to unlock the Alpine region's full potential as a leader in sustainable, heritage-sensitive textile production.



1. Introduction

The Alpine region boasts a centuries-old textile tradition shaped by its geography, natural resources, and community-based practices. Wool, hemp, linen and locally sourced dye plants have historically formed the basis of resilient textile systems that combined craftsmanship, ecological balance, and cultural identity. Today, these traditions offer not only cultural value but also economic and environmental potential in the context of sustainable development.

However, Alpine textile ecosystems face serious challenges. The global shift toward delocalized, industrial-scale production has weakened local supply chains, leading to the loss of skills, infrastructure, and intergenerational knowledge. Moreover, globalized textile systems have imposed high environmental costs through long-distance transport, intensive resource use, and waste generation. Policy responses across Alpine countries remain fragmented, limiting opportunities for coordinated action and innovation. It should also be noted that the craft sector, although vital for Alpine identity and strongly linked to tourism and cultural value, is not as well represented at the political level as the industrial sector. Supporting crafts requires dedicated policies, inspired for example by the Italian biodistricts, which connect stakeholders from different valleys and reinforce the role of craftsmanship in synergy with sustainable tourism.

The AlpTextyles project addresses these challenges by promoting cross-border, circular textile value chains that are deeply rooted in Alpine heritage. It seeks to strengthen local production systems, foster sustainable consumption, and contribute to broader European strategies such as EUSALP and the EU Strategy for Sustainable and Circular Textiles. Through mapping activities and pilot projects, the initiative demonstrates how heritage-sensitive innovation can support a just and green transition in the Alpine space.



2. Insights from the AlpTextyles project mapping : Alpine Textile Heritage and Industry

2.1 Heritage Overview

The Alpine region is home to a deep-rooted textile heritage shaped by its mountainous landscape, local materials, and traditional knowledge. Techniques such as wool processing, hemp and flax weaving, and the use of natural dyes reflect a long-standing culture of resource efficiency and circularity. These traditions continue to inspire contemporary artisans and small-scale producers, anchoring modern textile practices in a strong cultural identity.

2.2 Current Industry Status

The textile sector in the Alpine region features a dynamic and resilient industrial fabric, combining a strong clothing sector with leading innovations in technical textiles. This is particularly evident in Northern Italy, notably in Piedmont and Lombardy, with their rich tradition in wool, and in France's Auvergne-Rhône-Alpes region, home to many industrial producers and headquarters. The ecosystem thrives on the synergy between large international companies, which bring advanced technologies and market insights, and a dense network of SMEs and micro-enterprises, whose specialized skills, adaptability, and strong ties to local heritage create a collaborative environment where tradition and innovation coexist.

Local communities play an equally vital role. Their long-standing practices and knowledge, passed down across generations, remain deeply connected to mountain territories. As custodians of traditional techniques and cultural heritage, they complement industrial and technological capacities, enriching the sector with authenticity, place-based identity, and continuity. By adapting these traditions to contemporary needs, they provide cultural depth as well as opportunities for innovation and differentiation in competitive markets.

References to “the Alps” are common in marketing, as highlighted by the analysis of Alpine trademarks (AlpTextyles, 2024). However, this often results in a form of “Alpwashing,” where the regional image is emphasized while the actual origin of resources—such as wool from autochthonous breeds—remains obscured under generic “Made in” or brand-origin narratives. Insights from the study *Consumers' Perceptions of “Made in the Alps” Textile Products* reveal that while consumers attach strong symbolic value to the Alpine brand, awareness gaps, price sensitivity, and risks of “greenwashing” persist. The absence of frameworks that formally recognize traditional knowledge and sustainable practices further creates confusion for consumers and limits SMEs' ability to leverage regional identity authentically.

These perception challenges reflect broader structural issues within the sector. Despite its vitality, the industry operates within a complex regulatory and institutional landscape. Governance remains fragmented across borders and sectors, and while references to “the Alps” are widespread, there is no unified system that formally links products to their Alpine origin or explicitly acknowledges sustainability and the cultural value of traditional techniques. At the same time, environmental challenges—including resource-intensive processes, waste generation, and dependence on global transport—remain significant, particularly in peripheral or isolated areas where infrastructure limitations exacerbate economic and ecological pressures. The AlpTextyles pilots have demonstrated practical solutions, showing that circular production models based on local resources can help overcome isolation and foster sustainable alternatives.



2.3 Opportunities

Mapping activities highlighted several key opportunities for strengthening the Alpine textile ecosystem:

- **Re-territorialization of value chains:** Strengthening local supply chains and reestablishing regional production hubs can support economic resilience and environmental sustainability. In the textile sector, however, re-territorialization should not be interpreted as the creation of fully self-sufficient local systems, which are hardly feasible at an industrial scale given the complexity of the industry. Rather, it should be understood as a strategy to leverage the specific territorial specializations that exist across different Alpine regions and to foster cross-border collaboration in order to build resilient and sustainable value chains. This perspective is closely aligned with the founding principles of the AlpTextyles project, which emphasizes the ecological, cultural, and economic interdependencies of Alpine territories. By moving beyond a narrow national approach, such as the constraints often imposed by current “Made in” frameworks privileging national industries, it becomes possible to unlock significant opportunities for SMEs, enhance synergies across the region, and establish a more coherent Alpine-wide identity in textile production.
- **‘Made in the Alps’ positioning:** A coordinated branding and labeling strategy could enhance the market visibility and distinctiveness of Alpine textile products, while also ensuring appropriate recognition of the territories, production practices, traditional knowledge, and bearers involved. Rather than establishing a formal ‘Made in the Alps’ certification, which may be restrictive and administratively burdensome, it is more appropriate to support SMEs in developing their own strategies to highlight local value—encompassing human, territorial, intellectual, traditional, and natural resources—thereby fostering synergistic production networks and integrated governance across production chains. This can include branding products as locally produced or emphasizing the use of resources and traditional knowledge sourced from the Alpine region. Such an approach strengthens regional identity while remaining flexible and inclusive.

Given that rules for geographical brands differ significantly across Alpine countries, it is essential to encourage national and local authorities to actively support the development of territorial forms of branding, including innovative tools such as narrative labels. In this context, the emerging framework of geographical indications (GIs) for non-agricultural products represents an additional opportunity to provide legal recognition and market protection for Alpine textiles, reinforcing their authenticity and link to place. By combining more flexible branding instruments with the potential of GIs, SMEs can better communicate the sustainability, cultural value, and distinctiveness of their products, while adapting to the diverse legal frameworks of Alpine regions.



- **Improved governance and networks:** Enhancing the coordination and efficiency of regional actor networks could empower Alpine textile stakeholders and improve their bargaining position. It would also ensure that the diverse skills of all territorial actors are effectively leveraged and their interactions structured, thereby consolidating a solid, long-term strategic posture and fostering sustainability alongside meaningful engagement with relevant stakeholders.
- **Environmental innovation:** Promoting tools such as Life Cycle Assessment (LCA) and adapting environmental classifications would not only align the sector with EU sustainability goals and increase transparency for consumers, but also make it possible to better recognize and valorize the comparatively higher sustainability of locally and regionally produced and processed natural fibers, especially when contrasted with synthetic alternatives that typically rely on globalized production and have a larger environmental footprint. In this context, the recognition and integration of traditional Alpine textile practices, combined with innovation, form a cornerstone for ensuring sustainable development and consolidating the sector's long-term environmental and cultural value.

By addressing these challenges and capitalizing on its cultural and industrial strengths, the Alpine region is well-positioned to become a model for sustainable, heritage-sensitive textile production in Europe.

(Source: Lambracht & Chilla (2024): Mapping Alpine wool)

(Source: Diego Rinallo & Marta Pizzetti (2024) : The Image of the Alps in Textile Branding and Communication)

(Source: Diego Rinallo & Marta Pizzetti (2024) : Consumers' Perceptions of "Made in the Alps" Textile Products)



3. Findings from Pilot Actions and Lessons Learned

3.1 Innovations Tested

The AlpTextyles pilot actions explored practical pathways to implement circular and heritage-sensitive textile production in the Alpine region. These initiatives focused on:

- **Circular product development** using regional fibers and natural dyes, including wool and plant-based coloring materials sourced within Alpine territories.
- **Cross-sectoral collaboration** between cultural institutions, textile producers, knowledge-holding and practicing communities, farmers, and designers to integrate traditional knowledge with contemporary production and design methods.
- **Respectful ways of using textile traditional knowledge and traditional cultural expressions**, grounded in the consent of bearer communities, proper acknowledgement, and compensation, drawing on internationally established frameworks such as the Cultural Intellectual Property Right's initiatives 3C rules (Consent, Credit, and Compensation), the World Intellectual Property Right's Draft Steps When Considering the Use of Elements of Indigenous Peoples' Traditional Cultural Expressions in Fashion, and UNESCO's Draft guidance note on economic dimensions of intangible cultural heritage safeguarding.

These pilots demonstrated the feasibility of producing textiles that are both locally sourced and environmentally sustainable, while also carrying cultural and symbolic value.

3.2 Outcomes

The pilot phase provided valuable insights into both the technical and social dimensions of circular textile production in the Alps:

- **Feasibility:** Regional raw materials—especially wool—proved suitable for quality textile production, with promising results in terms of environmental performance and cultural relevance.
- **Consumer perceptions:** Market feedback revealed a growing interest in Alpine products perceived as authentic, sustainable, and locally made. Many consumers expressed a willingness to pay a premium for products with clear territorial identity and environmental benefits.



- Collaboration potential: The pilots highlighted the importance of bridging gaps between different sectors—cultural, industrial, and agricultural—and among various stakeholders, to activate new, place-based value chains.

These findings confirm that Alpine regions possess both the resources and the creative capacity to foster sustainable textile innovation grounded in local identity. However, they also underline the need for structural support in areas such as funding, certification, and network-building to scale up these initiatives.

(Source: Diego Rinallo & Marta Pizzetti (2025) : Communicating Value to Consumers)

4. Policy Context

The transformation of the Alpine textile sector toward circularity and territorial rootedness aligns closely with several key policy frameworks at both European and macro-regional levels. These frameworks provide strategic guidance, regulatory incentives, and implementation mechanisms that can support the development of sustainable and heritage-sensitive value chains across the Alps. Many of these instruments, detailed in the Annex (A.1–A.7), offer concrete tools to operationalize circular and traceable production practices.

EU Strategy for Sustainable and Circular Textiles

The European Commission's Strategy for Sustainable and Circular Textiles (2022) sets out a comprehensive vision to make textiles more durable, recyclable, and locally produced. It emphasizes transparency, product stewardship, and the reduction of environmental impacts throughout the value chain. Instruments such as the **Digital Product Passport (DPP, A.3)** and **Product Environmental Footprint (PEF, A.4)** provide practical mechanisms to implement these principles, enabling traceability of materials, reporting of environmental performance, and verification of circular practices at the product level. The AlpTextyles approach—based on regional fibers, circular design principles, and local know-how—offers a direct and practical implementation pathway for this strategy within the Alpine context, in alignment with **Safe and Sustainable by Design (SSbD, A.7)** principles to ensure safe, sustainable, and circular product development.

Geographical Indications for Craft and Industrial Products

The forthcoming EU regulation on Geographical Indications (GIs) for non-agricultural products represents a significant opportunity for the Alpine textile sector. By recognizing the link between product quality, local heritage, and geographic origin, the regulation could serve as a powerful tool to promote authentic “Made in the Alps” textiles. Compliance with **Extended Producer Responsibility (EPR, A.1)** and integration with **Taxonomy Regulation (A.6)** criteria can further reinforce territorial authenticity, sustainability, and traceability, ensuring that GI products not only reflect heritage but also meet environmental and circularity standards. Such recognition strengthens consumer trust, acknowledges and protects the value of traditional knowledge, and enables local producers to command fair market value.



Existing Framework for Foodstuffs and Byproducts

It is also worth noting that under the current EU regulation on foodstuffs, wool—classified as an animal byproduct—could already fall within the scope of geographical indications. This means that, even before the adoption of the new regulation on non-agricultural products, there is an existing legal pathway that could allow for the protection and valorization of Alpine wool under the GI framework. Linking this approach with **CSRD (A.5)** reporting mechanisms and **DPP (A.3)** traceability tools allows producers to demonstrate compliance, sustainability, and heritage protection simultaneously, creating a transparent and verifiable value chain from farm to final product.

Establishing a Geographical Indication for Alpine wool would generate several key benefits for the sector:

- **Market differentiation and competitiveness:** A GI would clearly distinguish Alpine wool from imported alternatives, often produced with lower environmental and social standards. This recognition would allow producers to justify premium pricing and position their products within high-value, sustainable markets.
- **Protection of authenticity and heritage:** By legally binding the product to its territory of origin, a GI would safeguard the traditional practices, breeds, and techniques that characterize Alpine wool. This protection would prevent the misuse of terms such as “Alpine” in marketing campaigns lacking a genuine territorial link.
- **Stronger consumer trust:** Transparent certification of origin and production methods would address current confusion in the market and give consumers confidence that they are purchasing textiles with verifiable Alpine provenance.
- **Support for local communities:** A GI could provide new income opportunities for small-scale producers, herders, and artisans, reinforcing the role of mountain communities as custodians of traditional knowledge. By enhancing the perceived value of their wool, the GI would help secure fairer remuneration across the value chain.
- **Alignment with sustainability goals:** Alpine wool production is inherently tied to extensive grazing practices that contribute to biodiversity, landscape maintenance, and cultural continuity. Embedding these values into a GI framework would highlight the positive externalities of wool production and link them to EU priorities on green transitions and sustainable regional development.



In this sense, Alpine wool could become one of the first emblematic cases to show how geographical indications in non-agricultural sectors can serve as levers not only for competitiveness, but also for sustainability and heritage preservation.

EUSALP Action Plan and Macro-Regional Synergies

The EU Strategy for the Alpine Region (EUSALP) provides an integrated governance framework that encourages cross-border cooperation and sustainable development across seven Alpine countries. Several EUSALP Action Groups (AGs) are directly relevant to the objectives of AlpTextyles:

- **AG2 (Economic Growth and Innovation):** Supports regional economic development and the emergence of resilient, place-based industries.
- **AG3 (Labour Market, Education and Training):** Promotes skill development and the transition to sustainable economic models.
- **AG6 (Natural Resources and Cultural Heritage):** Fosters the conservation and valorization of Alpine cultural and natural assets.
- **Cross-cutting Priority 4:** Boosting Circular Economy

The AlpTextyles project contributes concrete solutions that can feed into the implementation of these priorities, particularly by offering models for interregional collaboration, policy integration, and heritage-based innovation.

5. Strategic Recommendations

The transition toward sustainable and heritage-sensitive textile value chains in the Alpine region requires coordinated action across governance levels. The following recommendations are tailored to the roles and competences of regional authorities and EUSALP Action Groups, with additional suggestions under Cross-cutting Priority 4 to promote effective governance and policy integration.



For Regional Authorities

1. Department of Agriculture

- Support the cultivation and processing of natural fibers (wool, hemp, linen, dye plants) through targeted subsidies and agri-environmental schemes, especially in the case of fibers from autochthonous animal breeds and plant varieties.
- Encourage multifunctional farming models that combine fiber production with tourism and landscape stewardship.
- Develop rural development programs that integrate textile crops into biodiversity and soil protection strategies.
- Facilitate cooperation between farmers, artisans, and SMEs to strengthen short supply chains and ensure fair value distribution.

2. Department of Industry

- Create dedicated funding lines for SMEs investing in eco-design, circular production, and sustainable technologies for textile processing.
- Incentivize industrial clusters to collaborate with craft sectors, universities, and research centers to merge tradition and innovation in ways that respect the traditional knowledge and traditional cultural expressions of the bearer communities.
- Promote national strategies for the international branding of Alpine textiles, aligned with EU sustainability frameworks and geographical indications.
- Introduce tax relief or credit schemes for companies that demonstrate measurable progress in reducing their environmental footprint, enhancing resource efficiency, and contributing to local value creation.

3. Policy Development

- Formulate regional textile strategies that explicitly integrate agricultural, cultural heritage, and sustainability objectives. Embedding **EPR (A.1)** and **Taxonomy Regulation (A.6)** into these strategies ensures long-term alignment with EU goals and provides a structured framework for funding and compliance.
- Establish policy frameworks to support the re-territorialization of textile production, including land use planning for fiber resources, the safeguarding of traditional techniques, and the recognition of their bearers. The application of **DPP (A.3)** could reinforce such frameworks by enabling traceability and recognition of locally rooted production methods.



4. Funding

- Create targeted funding schemes to support SMEs and micro-enterprises adopting circular practices, including investment in eco-design, the production and use of local textile raw materials and fibers, and short supply chains. By linking funding criteria to the **Taxonomy Regulation (A.6)** and **SSbD (A.7)**, these schemes can guarantee that resources are directed toward practices with proven sustainability value.
- Facilitate cross-border projects that promote cooperation among textile actors, including joint research initiatives and shared infrastructure. Concrete examples include collaborative solutions for wool collecting, storage, and washing, which represent critical bottlenecks for the valorisation of Alpine fibers. Integrating **EPR (A.1)** and **CSRD (A.5)** elements into these projects can improve accountability and ensure that shared infrastructures support transparent, fair, and measurable outcomes.

5. Capacity Building

- Develop training programs focused on traditional textile crafts that actively involve the skills and competencies of knowledge holders, sustainable design, and circular production methods, in collaboration with vocational institutions, cultural organizations, and bearer communities.
- Support knowledge transfer between generations and between traditional artisans and emerging entrepreneurs by promoting training opportunities, establishing partnerships that engage artisans and students in medium- and long-term educational processes, and ensuring appropriate recognition and credit to knowledge holders in the development of such transmission initiatives.

For EUSALP Action Groups

Action Group 2 – Economic Growth and Innovation

EUSALP Action Group 2 focuses on identifying and supporting key economic sectors in the Alpine region, with a strong emphasis on innovation and the competitiveness of small and medium-sized enterprises (SMEs). Within the textile sector, AG2 can play a crucial role by:

- **Promoting cross-border market access platforms:** Support the creation of transnational platforms that facilitate access to domestic and international markets for Alpine textile SMEs. These platforms should prioritize sustainability, traceability, and territorial branding to enhance competitiveness and consumer trust.



- **Supporting digital tools and marketplaces:** Encourage the development of digital infrastructure that improves the visibility and traceability of Alpine textile products. Tools such as online directories, certification databases, and e-commerce marketplaces can help reinforce the value of local origin and sustainable production.

These measures align with AG2's mandate to strengthen Alpine innovation ecosystems and support resilient, place-based industries.

Action Group 3 – Labour Market, Education and Training

Action Group 3 addresses the alignment of education and training systems with emerging labour market needs, especially those linked to green and digital transitions. In the context of the textile sector, AG3 can contribute by:

- **Facilitating specialised training and curricula:** Develop and promote educational modules focused on resource-efficient textile production, including circular economy principles, sustainable design, and Life Cycle Assessment (LCA) methodologies. These curricula should be embedded in vocational training and higher education institutions across the Alpine region. At the same time, the current scarcity of training initiatives dedicated to traditional textile techniques and aesthetics represents a critical gap. Addressing this shortcoming would not only safeguard the transmission of cultural heritage, but also ensure that new generations of professionals are able to integrate traditional knowledge into contemporary practices, thereby reinforcing the distinctiveness and long-term competitiveness of the Alpine textile sector. In line with these objectives, the AlpTextyles project has implemented concrete actions to bridge this gap. A MOOC focused on Alpine heritage was developed, offering accessible online training on traditional techniques, local materials, and cultural practices. Complementing this digital initiative, a Summer School was organized, bringing young participants into direct contact with Alpine manufacturing, hands-on textile production, and the region's cultural heritage. Together, these initiatives provide practical skills, foster understanding of traditional knowledge, and inspire the new generation of entrepreneurs and professionals to integrate heritage practices into sustainable and innovative textile production.

(Source: Marcella Oliviero: "The living textile heritage of the Alps and its sustainable circular future" Massive Online Open Course (MOOC))

(Source: Regione Lombardia & RAS: Alpine Icon, Textile Summer School)

- **Encouraging apprenticeships and mobility programmes:** Support the establishment of cross-regional mobility schemes and apprenticeship programs that facilitate the exchange of skills, foster intergenerational learning, and build a shared Alpine textile identity.



These actions support AG3's objective to create a skilled, adaptable, and regionally integrated workforce capable of driving sustainable innovation.

Action Group 6 – Natural Resources and Cultural Heritage

Action Group 6 is dedicated to safeguarding and valorising Alpine natural and cultural assets. In relation to the textile sector, AG6 has a key role in:

- **Valorising Traditional Textile Knowledge as Cultural Heritage:** Advocate for appropriate recognition of the people involved; establish governance mechanisms grounded in dialogue with direct stakeholders; and support the documentation, preservation, and institutional endorsement of traditional Alpine textile techniques. This includes mobilizing public funding programs, cultural heritage registries, and sui generis intellectual property mechanisms to ensure the survival, support, and proper revitalization of these practices and their bearers, effectively balancing the protection of ancient heritage with sustainable innovation.
- **Valorising Alpine natural fibers and resources:** Enhance the sustainable use of regionally sourced fibers—such as wool, hemp, and flax—together with dyeing plants and other natural inputs, by explicitly linking their management to the safeguarding of Alpine landscapes and biodiversity. This entails promoting responsible pastoral and agricultural practices, including traditional systems such as the transhumance of sheep, which contribute to ecosystem balance and cultural continuity. At the same time, attention must be given to emerging challenges, such as ensuring the coexistence with large predators and adapting traditional practices to contemporary ecological pressures. Strengthening the value of Alpine natural fibers also means integrating them into innovative and circular textile supply chains, where their ecological qualities, territorial identity, and cultural significance become assets for regional development and international competitiveness.
- **Promoting Alpine textile crafts as assets for sustainable development:** recognize the social, cultural, and environmental value of local textile traditions, to be rediscovered in order to relocalize production chains and foster forms of sustainable tourism. These activities contribute to building a cohesive and conscious regional identity and reinforce the global distinctiveness of Alpine textile production.

By leveraging its cultural and ecological mandate, AG6 can enhance the visibility, protection, and economic potential of Alpine textile heritage.



Crosscutting Priority 4

For the Alpine textile sector, CCP4 provides a strategic opportunity to combine sustainability, territorial identity, and innovation. Its application can be articulated through the following dimensions:

- **Valorisation of local flows and reduction of waste:** Implementing systems for the collection, reuse, and recycling of locally sourced natural fibers (such as wool and flax), along with textile residues, reduces dependency on imported raw materials and prevents waste. Mechanical and chemical recycling can play an important role in closing the loop of production.
- **Circular production models:** Promoting eco-design, modularity, repairability, and recyclability extends product lifecycles and facilitates reintegration into new uses and recycling processes.
- **Territorial branding and market identity:** Linking circular practices with territorial branding initiatives such as “Made in the Alps” strengthens consumer perception of authenticity and sustainability. Local brands can thus act as catalysts for SMEs, educating them in circular practices while enhancing competitiveness.
- **Cross-border cooperation and shared infrastructure:** Transnational projects can help establish shared facilities for wool collecting, washing, or recycling, addressing critical bottlenecks in fiber valorisation and optimising economies of scale.
- **Skills and training:** Circularity requires new expertise in sustainable design, life-cycle thinking, and material management. CCP4 encourages the integration of these dimensions into vocational training and higher education curricula, ensuring that the future workforce is equipped to apply circular principles in practice.

6. Implementation Roadmap

To operationalize the strategic recommendations outlined above, a phased implementation approach is proposed. This roadmap offers a timeline of priority actions that regional authorities and EUSALP actors can adopt to progressively build a sustainable, circular, and heritage-sensitive textile ecosystem in the Alpine region. References to relevant EU policy instruments and tools from the Annex (A.1–A.7) are included to ensure alignment with broader regulatory and sustainability frameworks.



Short-Term Actions

- **Establish Regional Stakeholder Networks:** Create or strengthen local and transnational working groups that bring together public authorities, SMEs, bearer communities, artisans, cultural institutions, and research centers. Coordination with frameworks such as **CSRD (A.5)** can support structured reporting and transparency, helping stakeholders track environmental, social, and governance performance from the outset.
- **Launch Awareness Campaigns:** Develop communication strategies targeting both consumers and producers to raise awareness about the environmental and cultural value of Alpine textiles and fibers.
- **Conduct Policy Audits:** Review existing regional policies related to textiles, sustainability, and heritage to identify gaps and opportunities for alignment. Considering principles from **EPR (A.1)** and **SSbD (A.7)** can guide the integration of extended producer responsibility mechanisms and sustainable product design criteria into regional strategies, ensuring regulatory coherence and practical applicability.

Medium-Term Actions

- **Initiate Collaborative Projects and Pilot Studies:** Scale up successful initiatives from the AlpTextyles pilots, fostering cross-sectoral partnerships and innovation labs across Alpine regions.
- **Alpine Label and certifications:** Strengthening the visibility and distinctiveness of Alpine textiles requires a dual approach combining voluntary labeling initiatives with formal certification schemes. The integration of **DPP (A.3)**, **PEF (A.4)**, and **EPR (A.1)** principles can enhance traceability, demonstrate environmental performance, and strengthen consumer confidence. While a flexible “Alpine Label” can highlight cultural heritage and local sustainability, formal certifications and geographical indications provide legal recognition, ensuring that SMEs capture fair market value and maintain authenticity across markets.
- **Support Skills and Training Infrastructure:** Invest in educational programs and technical centers that specialize in circular and traditional textile crafts.



Long-Term Actions

- **Institutionalize Policy Frameworks:** Establish permanent policy instruments—such as regional textile strategies or integrated development plans—that ensure continuity and long-term support. Embedding **EPR (A.1)**, **Taxonomy Regulation (A.6)**, and circularity principles within these frameworks guarantees alignment with EU sustainability objectives and reinforces the resilience of Alpine textile ecosystems..
- **Monitor and Evaluate Impact:** Develop indicators and data collection systems to track environmental, economic, and cultural impacts of Alpine textile value chains over time. Leveraging **DPP (A.3)**, **PEF (A.4)**, and **CSRD (A.5)** enables robust monitoring, comparative analysis, and evidence-based adjustments to policies and initiatives, ensuring measurable progress toward sustainability goals.
- **Position the Alps as a Model Region:** Work toward international recognition of the Alpine region as a leading example of sustainable and heritage-sensitive textile production. Compliance with **SSbD (A.7)**, **Taxonomy Regulation (A.6)**, and other EU instruments enhances credibility, attracting investment, partnerships, and global attention while showcasing the region's unique combination of environmental stewardship, cultural heritage, and circular economy practices.

7. Conclusion

The Alpine region stands at a crossroads: it can either continue to lose its rich textile heritage to globalized production models, or it can seize the opportunity to become a European leader in sustainable and heritage-driven textile innovation.

The evidence from AlpTextyles demonstrates that circular and place-based textile value chains are not only possible, but already emerging. Local materials, traditional knowledge, and regional collaboration form a strong foundation for re-territorialized production systems that meet growing consumer demand for authenticity and sustainability.

Now is the time for decisive, coordinated action. Regional authorities and EUSALP stakeholders must translate strategic vision into concrete support—through policy, funding, certification, and capacity building.

With the right investments and governance, the Alpine textile sector can serve as a model for Europe: a region where tradition drives innovation, where sustainability is embedded in identity, and where the future of textiles is rooted in place.



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3C approach

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APPENDIX

A.1 EPR (Extended Producer Responsibility)

In recent years, the European Union has placed significant emphasis on the implementation of extended producer responsibility (EPR) measures specifically designed for the textile industry. This strategic focus on EPR within the EU's policy agenda reflects a growing recognition of the urgent need to address the environmental impact of textiles. By advocating for the adoption of EPR, policymakers aim to establish a robust framework that not only mitigates the negative consequences of textile production but also emphasizes the importance of achieving circularity within the industry.

One of the primary objectives of integrating EPR into the textile sector is to catalyze a shift towards sustainable practices that prioritize environmental conservation. Through the effective enforcement of EPR regulations, the EU seeks to instill a culture of responsibility among textile producers, encouraging them to adopt eco-friendly approaches that minimize waste generation and facilitate efficient end-of-life management.

Furthermore, the role of EPR extends beyond environmental concerns; it also serves as a pivotal tool in supporting the EU Member States in meeting their obligation to implement separate collection systems for textiles by 2025. This alignment between EPR strategies and legislative requirements underscores the EU's commitment to fostering a more sustainable and socially responsible textile industry.

In essence, the integration of EPR mechanisms within the textile sector signifies a transformative shift towards a more sustainable and circular economy, where the principles of accountability, resource efficiency, and environmental stewardship converge to shape a brighter future for the industry.

A.2 ESPR (Ecodesign for Sustainable Products Regulation)

For small artisanal businesses and brands in the Alpine region, particularly those focused on high-quality, territorially-linked productions, the ESPR could represent both a challenge and an opportunity.

The Ecodesign for Sustainable Products Regulation (ESPR) is a key component of the European Green Deal, which aims to transform the European Union into the first climate-neutral continent by 2050. This regulation is designed to establish a framework that sets eco-design requirements for a wide range of product groups, significantly improving their circularity, energy performance, and other aspects of environmental sustainability. Under the ESPR, products placed on the EU market will be required to meet performance and information requirements that cover several key areas such as product durability, reparability, environmental footprint etc.

The emphasis on durability and reparability aligns well with the traditional values of quality and craftsmanship inherent in the Alpine region. By focusing on these aspects, small producers can differentiate themselves in the market, appealing to consumers who value sustainability and long-lasting products.



A.3 DPP (Digital Product Passport) in ESPR

The Digital Product Passport (DPP) is an innovative tool mandated by the ESPR that aims to enhance transparency and sustainability in the production and consumption of goods.

It will serve four primary purposes:

1. Sharing key product-related information
2. Providing new business opportunities
3. Helping consumers make sustainable choices.
4. Allowing authorities to verify compliance

The standardization process for the DPP began in 2023 and is expected to be completed by 2025, with mandatory implementation scheduled for mid-2027. This timeline allows businesses to prepare for compliance while enabling the EU to achieve its sustainability goals.

The DPP offers a unique opportunity for small producers to showcase their commitment to sustainability and quality. By providing consumers with transparent information about the provenance of materials and the care taken during production, businesses can build stronger connections with environmentally-conscious customers. This transparency can be particularly beneficial for products linked to the territory and culture of the Alpine region, where heritage and authenticity are highly valued.

A.4 PEF (Product Environmental Footprint)

The Product Environmental Footprint (PEF) method is based on Life Cycle Assessment (LCA) standards. These methods enable companies to measure and communicate their environmental performance reliably, allowing them to compete on the market based on verifiable environmental information. These methods build on existing internationally accepted practices, indicators, and rules, providing detailed instructions on how to model and calculate environmental impacts. By adopting the PEF method, companies in the textile industry can improve their environmental performance, reduce resource consumption, and minimize waste, thus aligning with the EU's broader sustainability objectives. The PEF provides a framework for enhancing the environmental credibility of products. Artisanal producers can use the PEF to highlight the environmental benefits of traditional, small-scale production methods that typically have a lower environmental impact compared to mass production. By emphasizing the sustainability of their production processes, small businesses can attract eco-conscious consumers who prioritize products with a reduced carbon footprint.



A.5 CSRD (Corporate Sustainability Reporting Directive)

The Corporate Sustainability Reporting Directive (CSRD), adopted in February 2022, marks a significant shift in how companies report on their environmental and social impacts.

Starting in 2023/24, companies will need to incorporate sustainability information into their management reports, rather than in separate documents, to ensure greater integration between financial and non-financial information. This approach is intended to increase transparency and comparability, enabling investors and other stakeholders to assess the impact of companies on people and the environment more effectively.

The CSRD will have significant implications for companies operating in the Alpine region, especially for those focused on small-scale, high-quality production, despite the potential difficulties, the CSRD also presents an opportunity for small Alpine producers to formalize and communicate their sustainability efforts. By adopting the CSRD reporting standards, companies can provide tangible evidence of their commitment to environmental and social responsibility, which is increasingly important to consumers and investors alike.

A.6 Taxonomy Regulation

The EU Taxonomy Regulation provides a framework for identifying which economic activities can be considered environmentally sustainable. This regulation is aligned with the minimum reporting requirements outlined in the CSRD and focuses on six environmental objectives:

1. Climate Change Mitigation
2. Climate Change Adaptation
3. Sustainable Use and Protection of Water and Marine Resources
4. Transition to a Circular Economy
5. Pollution Prevention and Control
6. Protection and Restoration of Biodiversity and Ecosystems



By defining clear criteria for sustainability, the Taxonomy Regulation helps guide investment decisions, ensuring that capital flows are directed towards activities that contribute to the EU's environmental goals. For the textile industry, this means aligning production practices with these objectives, thereby enhancing sustainability and competitiveness in the global market.

The Taxonomy Regulation also opens up new opportunities for Alpine producers who focus on sustainable practices. By aligning their operations with the Taxonomy's criteria, small businesses can attract investment and funding aimed at promoting green economic activities. This alignment can also enhance their appeal to environmentally-conscious consumers who are increasingly demanding products that contribute positively to the environment.

A.7 Safe and Sustainable by Design (SSbD)

The Safe and Sustainable by Design (SSbD) framework represents an emerging approach within the European Union aimed at integrating safety and sustainability principles directly into the design and development phases of materials, products, and processes. Its goal is to encourage businesses to proactively reduce environmental and human health risks while promoting the efficient use of resources throughout the lifecycle of products. The SSbD framework aligns with the European Green Deal's broader objectives and contributes to the EU's transition to a circular economy by emphasizing product durability, repairability, and recyclability. This approach seeks to ensure that sustainability is considered from the outset, guiding companies in making decisions that balance environmental, social, and economic factors.

This framework presents significant opportunities for Alpine textile producers. By incorporating SSbD principles, businesses can differentiate themselves in the market by offering products that meet the growing consumer demand for sustainable and safe textiles. This is particularly relevant in premium markets, where the combination of high-quality, locally produced goods with verifiable sustainability credentials can be a powerful selling point. SSbD principles allow traditional producers to integrate sustainability without losing the authenticity and unique value of their craftsmanship. For example, using locally sourced, natural materials that align with SSbD standards can help maintain the cultural heritage of textile production in regions known for their distinctive techniques and designs.





AlpTextyles is an Interreg Alpine Space project that gathers the heritage of Alpine textile ecosystems to develop collaborative business and cultural solutions toward a circular and sustainable textile industry.

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