



## Smart SME's

Co-financed by the European Parliament through the Alpine Region Preparatory Action Fund (ARPAF)

POLICY MEMO - SMART SME

WP 5: Capitalization and policy Recommendations

### ABSTRACT

Bioeconomy is an important domain in the smart specialization strategies of all Alpine Regions. The most widespread renewable resources in the Alpine region, based on which commercial value chains can be built, are agricultural plants and wood. They serve as sources for natural fibres that are applied for further production up to end products sold on the market. The EUSALP strategy aims to support SMEs in the natural fibres sector in the Alpine Region. Digitalization of this sector would provide many economic, environmental, and social benefits. Policy makers at the European, national, and local level can all incentivise and support this. The digital transformation in these two fields offers enormous opportunities and at the same time poses major challenges. The Smart SMEs Project aims to identify possible actions to improve digitalization.



“...digitalization would save the equivalent of the total carbon emissions of the EU and USA combined” World Economic Forum, 2019

#### What is Digitalization and What are the Benefits?

Digitalization refers to using digital technologies to change a business model and as a result provide new revenue and

value producing opportunities. This can refer to a company, region, or country that adopts or increases the use of digital or computer technology. Digitalization is not to be confused with digitization which refers to converting information from analogue to digital format. Digitalization has significant economic, environmental, and social benefits.

#### Environmental Benefits

Digitalization has the potential to decisively contribute to Europe's efforts to reduce carbon emissions and preserve the natural environment. According to the World Economic Forum (WEF), digital technologies could help reduce global carbon emissions by as much as 15%. This would account for one-third of the reduction required by 2030. This means digitalization would save the equivalent of the total carbon emissions of the EU and USA combined (WEF, 2019). Digitalization in the agricultural sector would lead to better conservation of water resources, less spillage, and energy savings of over 2 gigatons of carbon-dioxide each year (Digital Europe, 2020).

#### Economic Benefits

Digitalization also has the potential to generate significant economic benefits. The European Parliament Research Service (EPRS) estimates that a fully functioning digitalized Single Market in the 2014-2019 period would have added €450 billion per year to the economy, and provided 350,000 jobs (EPRS, 2019). An updated estimate by the European Parliament estimates that in the 2019-2024 period, digitalization could provide economic gains ranging from €85 billion per year to €256 billion per year (EPRS, 2019). The Sustainability and Compliance Trends Survey 2019 carried out survey of 754 experts in 52 countries found that most believed



## Smart SME's

Co-financed by the European Parliament through the Alpine Region Preparatory Action Fund (ARPAF)

that digitalization would not only reduce costs but also generate higher savings (Sustainability and Compliance Trends Survey, 2019).

### Social Benefits

Depopulation is a serious problem, particularly in the Eastern half of the Alpine Region (Universität Innsbruck). This has a knock-on effect on the economy as younger people leave for other regions or even other countries due to a lack of opportunities in their own region. This leaves villages devoid of a skilled workforce, which has an impact on the general economic health of the region. There is evidence that if properly incentivised, rural populations stop declining, and can even increase.

### Digitalization and International Support

The importance of digitalization is recognised internationally. The United Nations is confident that digitalization will lead to less poverty, greater gender equality and help the world to hit Sustainable Development Goals (United Nations, 2020). Digitalization enjoys strong support from the EU under various programmes. These include the Digital Europe Programme with a €7.5 billion budget which will run from 2021-2027.

### Why the Alps

The Alpine area is composed of territories with contrasted demographic, social and economic trends and a great cultural and linguistic diversity. An Alpine macro-regional strategy would provide an opportunity to improve cooperation in the Alpine States as well as identifying common goals and implementing them more effectively through transnational collaboration. The European Union Strategy for the Alpine Region (EUSALP) constitutes a strategic agenda that should guide relevant policy instruments at EU, national and regional level, by closely aligning and mutually reinforcing them.

### The Alps and Climate Change

In terms of biodiversity, 40% of Europe's plant species are in the Alps, 200 species of birds reside there and a further 200 migrate there seasonally (European Commission, 2009). The region is also unusually exposed to climate change, and global temperature increases could negatively impact ski resorts. This would lead to a loss of €300 million per year Steiger, Damm, Prettenhaler & Proebstl-Haider, 2020). As a result, digitalization would be a factor in improving the environment of the Alps and play a role in preserving biodiversity, reducing carbon emissions, and thus protecting the local economy and environment.

### The Alps, SMEs and the Natural Fibres Sector

Whereas more prominent companies often have the financial means and competences to turn digital challenges into competitive advantages, small and medium-sized enterprises (SMEs) struggle accordingly. Given that 99.8% of non-financial businesses are SMEs, this is a huge sector of the economy in need of support and guidance (EU Committee of the Regions, 2019). The Digitalisation Potential for Resilient Regions survey identified that SMEs, which are part of value chains based on natural fibres, have revealed that additional obstacles and challenges, which companies face on the way to digitalisation, lack qualified personnel and lack of financial resources for conducting such changes (EUSALP, 2020).

SMEs in this sector have found it difficult to embrace and optimise the potential gains from digitalization. If this situation persists there will be negative consequences at the economic, environmental, and social levels.



## Smart SME's

Co-financed by the European Parliament through the Alpine Region Preparatory Action Fund (ARPAF)

The main goals that the SMEs associate with the advancing digitalisation are attracting new customers/new markets, increasing the productivity and level of innovation, and reducing costs. The survey also indicated that digitalisation helps companies from natural fibre-based business sell and promote products/services, thus increasing competitiveness through services with higher quality to customers and reducing mistakes and bureaucracy. Several companies underlined though that human skills and expertise are still more important than machinery and digital tools.

### Current Situation and Obstacles

The case for digitalization of the natural fibres sector is overwhelming for a variety of environmental, economic, social, and political reasons. That said SMEs in this sector have found it difficult to embrace and optimise the potential gains from digitalization. If this situation persists there will be negative consequences at the economic, environmental, and social levels. Local authorities will be at risk because of low economic growth and less jobs if SMEs are left behind and outside the digitalization of the supply chain.

The Smart SMEs Project has attempted to establish the state of play in the Alpine Region. Currently several Alpine regions offer support for SMEs in the natural fibres sector. German Federal Funding is available, with projects such as the “Innovative SMEs: Biotechnology Biochance” scheme, which has an unlimited deadline every sixth months, and specialises in high-risk projects. Regional funding programmes include the “Spitze auf dem Land” scheme, which funds projects in SMEs with less than 100 staff, and provides grants ranging from €200,00 to €400,000. Italy has the Piano Industria 4.0 (I4.0) which uses incentives ranging from tax incentives to access to finance to spur digitalization. Slovenia offers support to SMEs in the sector with grants from the Slovene Enterprise Fund (SEF). Since 2019 Slovenia’s Digital Innovation Hub (DIH) has supported digitalization efforts through a voucher scheme offering support ranging from €600 to €9,999 per employee. Various funding schemes exist from the Regional Government of Lower Austria, although there is low participation in national funding schemes in this region compared to other parts of Austria (Smart SMEs Synthesis Report, Working Package 2 Action 2.4).

Digital adaptation is accelerating amongst Tier 1 suppliers, but SMEs lag further behind. This poses the threat of “dual economy” i.e., SMEs left behind and outside new digitalized economy with negative impact on local governments in terms of employment and economic growth. The inability of SMEs to harness digitalization would also ultimately begin to undermine larger companies with smaller suppliers. Increasingly complex supply and value chains mean postponement is no longer an option. Consequently, it is in the interests of larger business, smaller businesses, and local governments to remedy this. Common obstacles are mentioned in box 1.



## Smart SME's

Co-financed by the European Parliament through the Alpine Region Preparatory Action Fund (ARPAF)

### Box 1. Commonly Mentioned Obstacles to Digitalization for SMEs in Natural Fibre Sector.

- Missing awareness about the topic of digitalisation, especially among SMEs, which sometimes consist of only one-two persons.
- Missing appropriate digital infrastructure, e.g. broadband mobile communications, reliable internet connection, especially in rural and mountain areas. Primary requirements to enable new technology such as Broadband coverage and good internet connection not evenly distributed within Europe.
- Missing competence where to start the digitalisation efforts and how to proceed best. Lack of knowledge of digitalisation technologies may inhibit the company's efforts. SMEs have a cultural aversion to digitalization. They lack the money and have concerns about the need to do it. Digitalization creates anxiety for workforce, who fear having to learn new skills or of being replaced. Benefits of digitalization are clear but not always presented to employees well. SMEs in SCM especially fear this
- Lack of capacity to meet challenges of digitalisation requirements. and assure the ability to value, assimilate and commercialise the knowledge generated by its potentials. Digitalisation efforts may be too specific and focus only on a subset of processes while ignoring others, despite being connected.
- Complex regulation of the data protection, security and sovereignty, as well as establishment of further starting conditions (e.g. air traffic regulations for the use of drones).

Source: Study on Available Funding Opportunities for Bioeconomy in the Alpine Region

### KEY ROLE OF GOVERNMENT SECTOR

Governments at the European, national, regional, and local level all have a role to play in removing obstacles to digitalization for SMEs in the natural fibres value chain. Digitalization will not happen spontaneously and needs guidance and support from the public sector if it is to be properly incentivised, guided and supported. There have been government initiatives before but there are several problems with some of the existing issues. The Smart SMEs project has attempted to map the current situation faced by SMEs and how they can be best supported (Smart SMEs Project (2020) WP3 Collection of good practises and existing tools).

**EU Schemes Problems** – the EU has provided support under the INTERREG programme but INTERREG scheme is not SME friendly, due to long evaluation periods, late payments and high bureaucratic demands (EUSALP, 2020).

**Wide Regional Disparity** – there is wide regional disparity in support offered to SMEs in the bioeconomy sector. Regions like Baden-Württemberg (DE) and Lombardy (IT) are among the best. However, of the 48 EUSALP regions, only 4 were found to have appropriate funding schemes, meaning 91.7% of regions lacked appropriate funding schemes. (EUSALP, 2020).

**Lack of European, Regional and National Alignment** - Funding opportunities currently exist on different levels. These leads to problems such as R&D&I being available at all levels, but investment and market development support schemes are missing. This means investments from RDI cannot be brought to market, and EIB is not viable for many SMEs.

**Isolated Actors** - Actors from the private and public sector are disconnected and act in isolation. Majority of Alpine regions (except Baden-Württemberg, Lombardy, and Slovenia) don't offer funding. Lack of alignment in regional funding schemes, thus hampering strategic value chain development.



## Smart SME's

Co-financed by the European Parliament through the Alpine Region Preparatory Action Fund (ARPAF)

**Thematic Vagueness** - some support programmes for biobased industry are widely defined so are thematically open to other sectors and thus there is heightened competition for financial support. Only 40% of the 25 identified programmes were specifically for biobased industries (EUSALP, 2020).

Governments must be particularly aware of the way their policies may create bottlenecks or obstacles in four ways. These are detailed in table 1.

**Table 1: Potential Government-Created Bottlenecks or Obstacles**

<b>General Digitalization Climate</b>	<ul style="list-style-type: none"> <li>• Requirements not feasible for SMEs. Large numbers of conditions can discourage SMEs from seeking funding.</li> <li>• Funding is often time and finance limited.</li> <li>• Same amount of funding for all SMEs regardless of their size or financial possibilities.</li> </ul>
<b>Digitalization Project Financial Viability</b>	<ul style="list-style-type: none"> <li>• Application for digitalization project funding depend on availability of financial resources.</li> <li>• Extensive documentation brings additional costs.</li> </ul>
<b>Availability of Support Mechanisms</b>	<ul style="list-style-type: none"> <li>• Limited support available to SMEs during funding application process</li> </ul>
<b>Scarcity of Information</b>	<ul style="list-style-type: none"> <li>• Knowledge gaps of SMEs regarding bureaucratic procedures can make their application invalid.</li> </ul>

### RECOMMENDATIONS

The economic, environmental, and social case for digitalization of fibre value chains SMEs in the Alpine Region is overwhelming. However there remain serious problems SMEs would like to see overcome. Research by the Smart SMEs Project found that SMEs feel their needs are not being addressed and that whilst there was an appetite for cross-border cooperation, the opportunities for doing so were minimal. SMEs also struggled with benefiting from newly elaborated digitalization tools (Smart SMEs Synthesis Report, Working Package 2 Action 2.4).

Public investments could become a game changer for SMEs with a weaker market position to become more engaged. This would be a form of “de-risking” SMEs, and investors from investments. The public sector has a unique role to play in this regard due to its unique ability to make law, shape the regulatory climate, encourage cross sector cooperation, and simplify access to statutory funding. Recommended steps to overcome obstacles are suggested in table 2.



## Smart SME's

Co-financed by the European Parliament through the Alpine Region Preparatory Action Fund (ARPAF)

**Table 2: Public Sector Problems and Proposed Initiatives to Remedy Them**

Statutory Funding Obstacles	<ul style="list-style-type: none"> <li>• Requirements, conditions, and criteria for statutory funding should be based on “as is” digital maturity of the value chain.</li> <li>• There should also be weighted distribution of funds among different sized SMEs based on current digitalization priorities.</li> <li>• Continuously work on paperless procedures and decrease paperwork needed for applications e.g. through government portals.</li> </ul>
Lack of Public/Private Cooperation	<ul style="list-style-type: none"> <li>• Encourage larger companies investing in SMEs to provide alternative funding mechanisms</li> <li>• Provide schemes to cover for lack of insurance coverage for digitalization initiatives.</li> </ul>
Lack of Knowledge and Expertise	<ul style="list-style-type: none"> <li>• Regularly organize workshops open to SMEs free of charge to learn about process and prepare for the process.</li> <li>• Establish a contact point to resolve questions regarding procedures from SMEs that are accessible to all e.g., a platform.</li> </ul>
Lack of Support Networks	<ul style="list-style-type: none"> <li>• Establish initiatives to strengthen interaction between research centres/consulting agencies and SMEs to build a support framework.</li> <li>• Provide “one stop shop” for information to prevent well-informed actors strengthening market position relative to less well-informed actors.</li> </ul>

**Emulation of Successful Regions** Another recommendation is for regions to copy the programmes and policies of the more active and successful regions. The two most respectful in this regard have been the regions of Baden-Württemberg (DE) and Lombardy (IT). These two regions should share best practise with

other regions. This would foster cross-border cooperation between regions, as well as building professional contacts between practitioners and policy makers to discuss common challenges and share models of best practise.

### Box 2 - Baden-Württemberg Voucher Scheme

The Ministry for Economy Baden-Württemberg implemented the new support scheme "Transformation Voucher" in January 2021 to support SMEs in their strategic orientation in times of industrial transformation. The volume is around €4 million

The "Transformation" voucher is mainly intended for SMEs operating in the Automotive Sector and provides support in the complex structural change of key industries of Baden-Württemberg by financially supporting strategic consulting and advice. the Voucher Programme is intended to support SMEs to kick off new types of production, service and sales processes, shorter innovation cycles of the entire value chain or business models.

The value of the vouchers EUR 10,000 and covers 80% of the eligible costs. Financial support is provided for strategic consulting in fields as varied as product development, data analytics and crisis management in the context of COVID19.

### Use of Vouchers

Vouchers provide another useful tool for the public sector to support SMEs in the natural fibres sector. Vouchers have a big advantage in being administratively light, and therefore time and costs linked to administration are lower than with other forms of statutory support. One voucher that is worthy of study is the scheme introduced by Baden-Württemberg to support SMEs in the bioeconomy sector. The vouchers have a value of €10,000 and covers 80% of the costs of eligible costs. For more details, please see box 2.





## Smart SME's

Co-financed by the European Parliament through the Alpine Region Preparatory Action Fund (ARPAF)

### Replicable Thematic Programme Templates

Successful projects and schemes also have the advantage of being replicable “templates”. This means other regions can quickly adapt them and save time and money in terms of project design. The broadly similar challenges faced by actors within the Alpine Space should mean that templates for programmes that work in one part of the Alps have a high chance of succeeding in another. That said the templates should have enough flexibility to allow for adaptation to hyper-local conditions which may vary.

### Conclusion

Digitalization refers to using digital technologies to change a business model and as a result provide new revenue and value producing opportunities. Digitalization has the potential to decisively contribute to Europe's efforts to reduce carbon emissions and preserve the natural environment. Digitalization also has the potential to generate significant economic benefits. That said SMEs in the natural fibres sector have found it difficult to embrace and optimise the potential gains from digitalization. If this situation persists there will be negative consequences at the economic, environmental, and social levels. Local authorities will be at risk because of low economic growth and less jobs if SMEs are left behind and outside the digitalization of the supply chain. Now that barriers to digitalization for SMEs are clearer, policy makers can improve the regulatory, financing and support climate for these measures. They will reap the benefits at the economic, environmental and social level if they are successful.

### References

- World Economic Forum (2019) Digital technology can cut global emissions by 15%. Here's how. <https://www.weforum.org/agenda/2019/01/why-digitalization-is-the-key-to-exponential-climate-action/> accessed January 2021.
- European Committee of the Regions (2019) EU policy framework of SMEs: state of play and challenges. Digital Europe. “Digital contribution to delivering long-term Climate Goals. <https://www.digitaleurope.org/resources/digital-contribution-to-delivering-long-term-climate-goals/> accessed January 2021
- European Parliament Research Service (2019). Digital Transformation. [https://www.europarl.europa.eu/RegData/etudes/BRIE/2019/633171/EPRS\\_BRI\(2019\)633171\\_EN.pdf](https://www.europarl.europa.eu/RegData/etudes/BRIE/2019/633171/EPRS_BRI(2019)633171_EN.pdf) accessed January 2021.
- European Parliament Research Service (2019) Europe's Two Trillion Dividend: Mapping the Cost of Non-Europe 2019-2024. [https://www.europarl.europa.eu/RegData/etudes/STUD/2019/631745/EPRS\\_STU\(2019\)631745\\_EN.pdf](https://www.europarl.europa.eu/RegData/etudes/STUD/2019/631745/EPRS_STU(2019)631745_EN.pdf) accessed January 2021.
- I-Point (2019) Can Digitalization help to save costs related to Sustainability & Compliance? <https://www.ipoint-systems.com/blog/can-digitalization-help-to-save-costs-related-to-sustainability-compliance/> accessed January 2021.
- United Nations (2020) People's Money: Harnessing Digitalization to Finance a Sustainable Future. Summary Report August 2020. <https://unsdg.un.org/resources/peoples-money-harnessing-digitalization-finance-sustainable-future> Accessed January 2021.
- European Commission (2005) Natura 2000 in the Alpine Region. [https://ec.europa.eu/environment/nature/info/pubs/docs/brochures/nat2000\\_alpine.pdf](https://ec.europa.eu/environment/nature/info/pubs/docs/brochures/nat2000_alpine.pdf) accessed January 2021.
- Steiger R, Damm A, Prettenhaler F & Proebstl-Haider U (2020) Climate change and winter outdoor activities in Austria. <https://www.sciencedirect.com/science/article/pii/S2213078020300542?via%3Dihub> accessed January 2021
- EUSALP (2020) Study on Available Funding Opportunities for Bioeconomy in the Alpine Region [https://www.alpine-region.eu/sites/default/files/uploads/result/2240/attachments/final\\_available\\_funding\\_bioeconomy\\_final\\_report\\_anteja\\_ecg\\_.pdf](https://www.alpine-region.eu/sites/default/files/uploads/result/2240/attachments/final_available_funding_bioeconomy_final_report_anteja_ecg_.pdf) accessed January 2021.
- Smart SMEs Project (2020) Synthesis Report: Mapping the actual state of play and needs. Working Package 2 (WP2) Action2.4. BIOPRO Baden-Württemberg
- Smart SMEs Project (2020) WP3 Collection of good practises and existing tools. Working Package 3. Assistant Prof. Dr. Aida Kamišalić Latifić.