



RIS3 Strategies for a competitive and sustainable ecosystem in the Alpine Region

The workshop held on February 25 during the EU Industry Week 2021 was a **joint initiative by AG1 and the Alpine Space Project AlpGov2 in collaboration with Lombardy Region and Milano University**. The workshop had the main objective to highlight that Alpine area specificities play an important role in the activation of the interregional cooperation processes on shared priorities and economic value chains. Research and Innovation Strategies for Smart Specialisation can support the collaboration among the research world, business and policymakers on themes that are strategic for the development, such as circular economy and digitalization.

After a short introduction on Smart Specialization three steps process (priorities list, roadmap, implementation) given by the Moderator **Michael Keller** - HES-SO Fribourg and AG1 member, Professor **Marcello Colledani** – Politecnico di Milano, introduced in his Key-Note Speech the theme of demand-driven circular value-chain and digital transformation. Even though circular economy can be applied in different phases of the production process through reuse, repair, re-manufacturing and recycling solutions, the poor exchange of information, the lack of certification protocol and the limited acceptability of products embedding re-cycled materials can be barriers to the concrete implementation at the industrial level. **The key transformation is that the demand for such products and components comes directly from the consumers, so bringing the circular value chains to the same maturity level as linear value chains**. Besides the well-known environmental advantages in a circular approach, other significant impacts are to **decouple the social and economic growth from the consumption of raw materials** and, combining the digital transformation of manufacturing and circular approach, to **improve the resource efficiency reaching economic recovery and competitive sustainability**. The demand-driven approach requires **strong interaction between the technical ecosystem** (designing and producing) **and the social ecosystem** (demanding products and supplying back the end-of-life products) and specific policy actions at a local level to support this interaction. To complete this picture exchanging practices at a cross-regional level can be crucial, as well as considering technical and non-technical enablers such as digital platforms for traceability and enhancing the capability to provide financial support to high-risk circular business cases.


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Demand-driven circular value-chains in socio-technical ecosystems enhanced by digital innovation

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Valentina Pinna - European Commission DG Regional and Urban Policy underlined the **potential role of Smart Specialisation Strategy as a coordination tool for interregional cooperation in the context of cohesion policy 2021-2027**, whose objectives are: smarter, greener, more connected, more social, closer to EU citizens. While in the first cohesion policy objective RIS3 will be useful to apply for pilot,





test, demonstration and technology transfer, RIS3 will support the deployment of new solutions in the public and private sector concerning the other cohesion policy objectives. **Smart specialization is the core of the policy objective PO1 Smarter Europe, mainly for enhancing R&I capacities and supporting SMEs competitiveness.** Thematic platforms on the three sectors Agri-Food, Energy and Industrial Modernisation have also been created to connect regional innovation ecosystems with similar priorities (based on Q-helix and bottom-up approach). The platforms have developed a methodology in 5 steps: learn, connect, demonstrate, commercialize, scale-up, supported by a methodological manual drafted by JRC; DG Regio funded 13 pilot projects within the last three abovementioned steps and an **Interregional Innovation Instrument (I3) is implemented under ERDF focusing on commercialization and scaling-up of innovation projects for the European value chains and addressing Q-Helix ecosystems.** Concerning governance, this is a hybrid model involving member States, representatives of Regions and eco-systems.

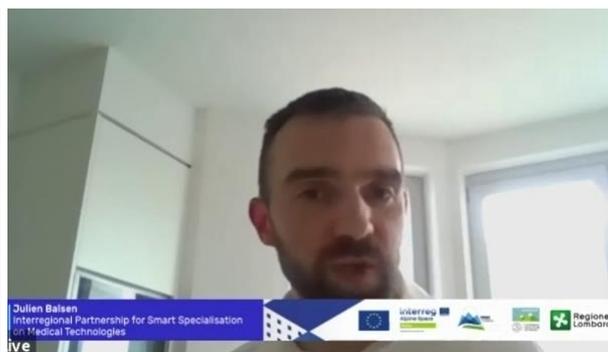


Enza Cristofaro – Lombardy Region and AG1 member presented the approved RIS3 related to the next programming period and the related new regional regulation DGR IX/4155 30.12.2020 with a human-centric approach. **The strategy identifies two challenges: supporting industrial transformation to digital transition and sustainable development and increasing the resilience and adaptability of the Lombard system to the rapid changes of the economic, productive and social context to guarantee citizens' safety.** The action plan foresees 4 groups of actions: 1. **enabling action to reinforce the R&I**, 2. **supporting technological transfer, industrial research and innovation**, 3. **supporting investments to foster the digital transition and sustainable development models**, 4. **Supporting the internalization of research and enterprises operating within the regional system.** The process involved in a multilevel governance system different typologies of stakeholders, including citizens, professional associations, experts, universities, members of the regional forum for R&I, using also bilateral meetings and public consultations to identify priorities and organizing dedicated working tables. Clusters and representatives of the industrial world are involved in the definition of Action Plans. **The approach is to have a dynamic strategy to be updated when necessary and as much as possible in line with the regional context.**





Julien Balsen - Interregional Partnership for Smart Specialisation on Medical Technologies presented the “Vanguard Initiative: Nano medicine pilot enlarged to Medtechs”, an example of how the Regions approach the subject of the medical sector, a significant market domain, very fragmented and multidisciplinary. **SMEs don’t have easy access to adequate technology platforms/infrastructures for the rapid assessment of the clinical relevance of new smart devices: Vanguard project and related Industry Driven Initiative ESTHER offer solutions to reconcile better health / healthy ageing with growth opportunities for healthcare industries, forming the hearth of the Medtech S3P Industry project.** DG Grow supported the initiative through the Re-confirm project since 2017 to support the Partnership in the Smart Specialization process: the project means to provide a mapping for the definition of the investment priorities, an investment protocol and a business plan. **After the mapping 3 thematic areas have been identified: connected health, biomaterials and implants, medical devices and imaging.** To help the achievement phase some other initiatives under the 3 thematic areas were identified, including co-investment COSME projects and the Interreg project Medtech4Europe.

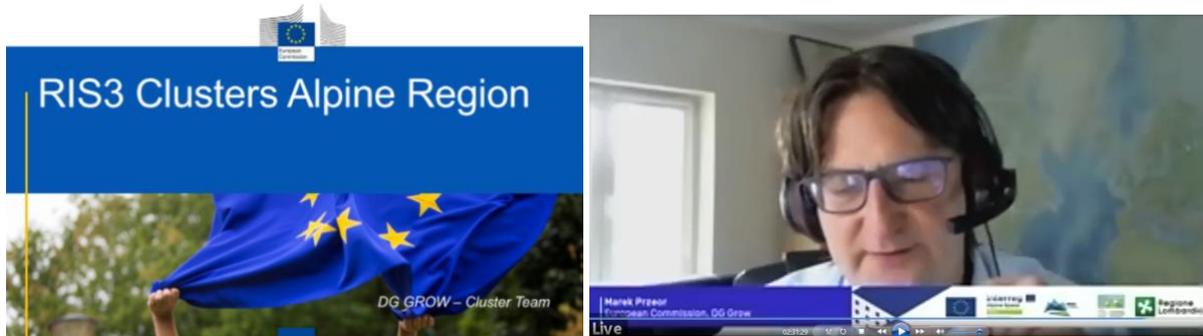


Marek Przeor - EC expert DG Grow underlined the potential role of clusters in leading green and digital transition and helping to develop industrial and economic resilience. **The Expert Group on Clusters recommends focusing cluster activities on 3 main priorities: leading the green transition, accelerating the digital transition and building resilience.** The role of clusters is in particular important in the first priorities concerning the opportunities related to the circular economy, since clusters have a perfect overview of the eco-systems and opportunities and can develop circular economy strategies/action plans and bring circularity in the business process. Clusters’ role is significant also in the priority “accelerating the digital transition” because ICT Clusters and Innovation Hub can reinforce

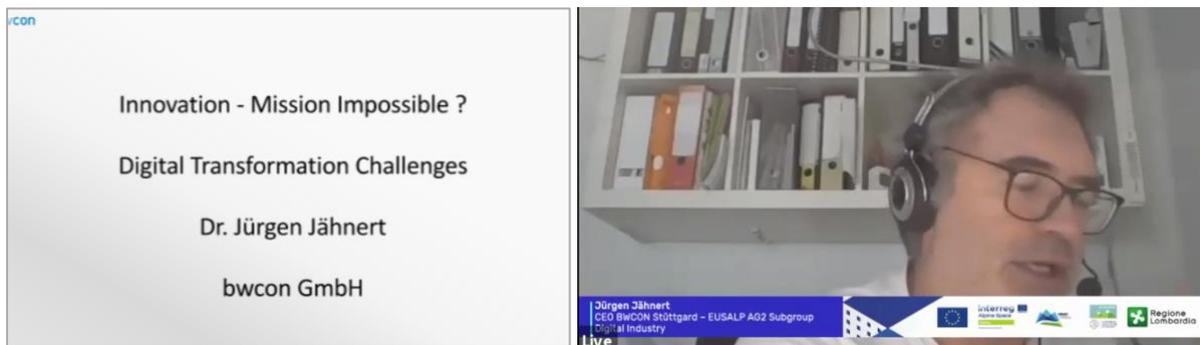




existing initiate and initiate new and public-private partnerships for boosting digital and advanced technologies value chains and technological platforms. **A new instrument called Euroclusters 2021-27 will be proposed to channel all the clusters initiatives, aiming to develop value chains interlinkages in the EU single market, building capacity to increase strategic autonomy and reinforcing transformation into a greener and more digital economy.** Also the new European Cluster Collaboration Platform has been launched in February 2021.



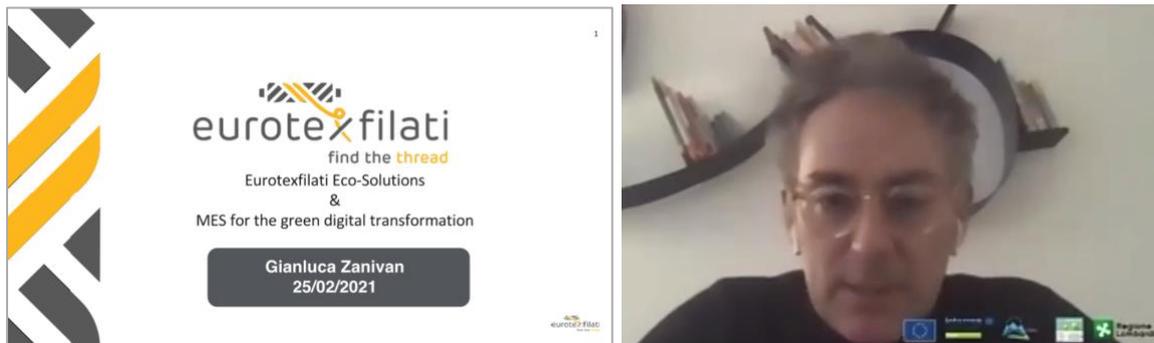
Jürgen Jähnert - CEO BWCON Stuttgart and AG2 Sub Group Digital Industry member with his intervention tried to answer the question “Is the digital transformation a concrete opportunity or just a mission impossible?” starting from the definition of innovation, as a process creating new markets (killing the old ones). Two dimensions are to be considered: exploit and explore. When we exploit we currently run successfully proven business models based on knowledge and standards: this is probably not innovation. When we explore we get rid of knowledge and must be agile, open-minded and with a try&fail approach. The digital transformation means to go this direction: in a close system, too much knowledge sometimes avoids updating the old maps (more comfortable) while the landscape is already changed. **Data is the oil for the future economy: big companies (Amazon, Google...) rely on data and Europe has none of these because we’re more conformable navigating with old map... but the landscape changed. Future is not always a matter of technology; it’s a matter of culture, mindset, risk, culture of failing, tools, skills and uncertainty. New value chains sometimes require the destruction of the old ones.** “It’s time to change but no change without self-change”.



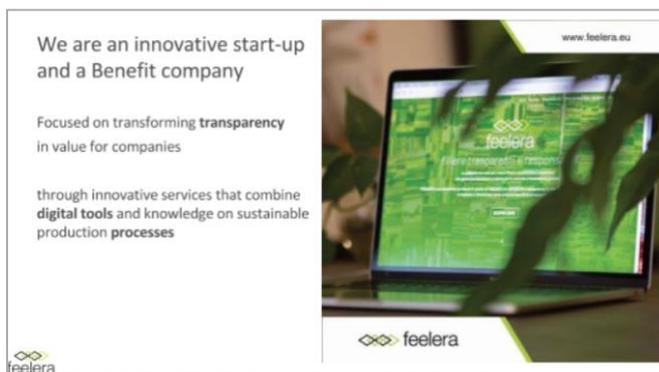


Storytelling cases for virtuous applications of circular economy and sustainability in SMEs world.

Gianluca Zanivan presented the case of circular economy developed at Eurotextfilati and how the ICT environment can support the process. Eurotextfilati is a manufacturer of semi-finished yarn products for ropes, nets, fibre-optic cables and other industrial applications. **The proposed ecological solutions include the use of recycled and regenerated materials (and the research initiatives to identify new products and collaborations) and Green Cable made with waste materials processed mechanically using 100% clean energy (avoiding for these by-products waste disposal/incineration or melting process).** The process involves of course both suppliers of waste materials and end customers. The Green Cable is expected to obtain an LCA Certification by the end of 2021.



Gianluca Mazza presented the case of Feelera start-up and benefit company focused on transforming transparency in value for companies through innovative services that combine digital tools and knowledge on sustainable production processes. **Concerning circular economy, Feelera traces and maps circular economy processes (such as product regeneration and product recycling) giving evidence to companies that wastes or end-of-life products can become by-products and new products.** The mapping of supply chain processes can generate value for the companies since it allows to build trust, brand reputation, foster competitiveness at an international level and easy better decisions based on data.



Open questions

Are the strategy elaborated i.e. by Lombardy Region for RIS3 and the elaborated policy framework of International innovation investment good enough to bring the circular value chains to the same maturity of linear value chains or what else is needed to turn the ideas into concrete actions?





Besides the demonstration phase, it's needed to make available predictive analysis of risk and to support up-scale through private funding for circular high-risk business cases.

Is it necessary to go into Interreg Project to implement interregional initiatives? Interreg is a possibility to be used during the “learn” and “connect” phase (the problem with Interreg is the limited number of Regions involved). Other opportunities are the strand3 of the Interregional Innovation Instrument that provides support to the thematic platform and partnership. A new tool is under development by JRC and will provide, through a checklist, self-assessment for the maturity of the partnership and the investment project. The EU Cluster Collaboration Platform is also an excellent opportunity for cluster collaboration.

