



CLIMATE ADAPTATION: WHAT OPPORTUNITIES FOR MOUNTAIN BUSINESSES?

Webinar • 27 May 2021 • 14:00 – 15:45

On 27 May 2021, Euromontana held its third Smart Mountains webinar **“Climate Adaptation – What opportunities for mountain businesses?”**. This webinar belongs to a series of virtual events that Euromontana is organising to fuel the discussion for the next Euromontana Mountain Convention, that will take place on 11-12-13 October 2022, in the Sila natural park and biosphere reserve, Italy.

This webinar gave the floor to speakers from the Commission’s Directorate-General on Climate Action, the EIT Climate and Knowledge and Innovation Community, and three concrete cases showcasing how mountain businesses can adapt to climate change in Europe.

The speakers highlighted how existing policies, projects and good practices offer multiple opportunities for fostering climate adaptation of the mountain economy, with a particular attention to the tourism, agriculture and forestry sectors.



Adapt now, with local businesses

Marie Clotteau, Director of Euromontana, kicked-off the webinar by recalling that climate change is already a reality in mountain areas across all Europe. Since 1980s about half of the glaciers in the Pyrenees have disappeared, whereas in the Carpathians, summer temperatures have sometimes risen by up to 2.4°C above normal. Climate change severely affects not only mountain environments, economies and societies, but also adjacent areas and even far downstream.

According to Ms Clotteau, “adaptation to the inevitable impacts is, therefore, vital.”– in numerous sectors of the mountain economy such as the tourism sector and agriculture. For instance, she reported that, between 1960 and 2017 the snow season in Italy went through an average reduction of 38 days, and the Snow Reliability Line shifted from 1500 m.a.s.l. in 2006 to 2400 m.a.s.l., hence endangering the economic viability of the approximate 290 ski resorts. Climate change also reshapes mountain agriculture, requiring farmers to developing crops adapted to longer seasons, changes in the water availability, and to new temperatures; as well as adjusting the timing of agricultural operations such as sowing, mowing, and harvesting.

Ms. Clotteau insisted on the fact that the only way to boost the climate adaptation of the mountain economy is to develop and implement adaptation strategies at local and regional level, particularly including local businesses. Among her **recommendations**, Ms. Clotteau listed the need to help local businesses to understand the changes and their consequences at local level; offer them trustable, open and easily accessible regional climatic data on the changes and expected impacts in their economic sector; help them to identify sustainable models; provide them new technological and socially-driven innovations; inform them about financing options and facilitate their access to support them in this transition; and exchange of good practices.



Read more in Euromontana’s [declaration](#) on how to reduce mountains’ vulnerability to climate change

Stronger vision with the EU Adaptation Strategy

On February 2021, the European Commission published the new “[EU Strategy on Adaptation to Climate Change](#)”. This Strategy outlines the vision of a climate-neutral Europe and actions to reduce the unavoidable impacts of climate change in Europe by 2050, giving a particular attention on supporting adaptation at all levels of governance and across all economic sectors. In her speech, **Elena Višnar Malinovská**, Head of Unit at the Directorate General for Climate Action of the European Commission, reminded participants that high mountain ranges are among the most sensitive areas by climate change and hence relevant to climate adaptation.



The European Commission identified climate change as one of the top priorities, as reaffirmed by the [European Green Deal](#) and by its associated strategies such as the [EU Biodiversity Strategy](#), the [EU Climate Pact](#), [Farm to Fork Strategy](#), the [EU Adaptation Strategy](#) etc. This policy framework dictates the direction of other policies on trade, agriculture, biodiversity, forest etc. In particular, the [Climate Law](#) obliges the EU Member States to adopt national adaptation plans and deal with increased climate risks.

“We have no other choice than to adapt, but let’s find opportunities in this process of adaptation because there are many.” Elena Višnar Malinovská

“It’s important to explain to local actors what is out there in terms of support to adaptation”, explained the European Commission representative. For this reason, the European Commission conducted participative process for the adoption of the EU Adaptation Strategy by holding webinars, discussions with the Members States and regions, wide-ranging consultation over the past two years.

For Ms Višnar Malinovská “for the first time, the Commission set a real objective and timeframe for adaptation” to climate change in Europe thanks to a strong vision and four main objectives. First, to improve knowledge and manage uncertainty for a “**smarter adaptation**” through more, better, customised and user-friendly data and the [Climate-ADAPT platform](#). Second, to support policy development at all levels and sectors for a “**more systematic adaptation**”, making sure that Member States, regions and businesses have an adaptation strategy to take climate-informed decisions and that climate risks are taken into account by our economic and financial systems. Third, to trigger a “**faster adaptation**” by channelling R&I funds to regions for the uptake of solutions via for instance the [Horizon Europe Mission on Adaptation](#), and by strengthening dialogues with insurance companies and users to reduce climate-related risks. Forth, by “**stepping up international action**” by using the knowledge, available funds and tools for the benefit of our international partners.



More info about the EU Adaptation Strategy in [Elena Višnar Malinovská’s presentation](#)



Innovation for climate adaptation

To accelerate the rollout of adaptation solutions, the EU Adaptation Strategy will strengthen the cooperation with the [EIT Climate-KIC](#) - as presented by **Salvatore Martire**, working for the Regional Innovation Scheme of EIT Climate-KIC, this is a public-private partnership composed by a network of businesses, public authorities, research centres etc. committed to climate innovation. To date, EIT Climate-KIC has already launched multiple innovations to support adaptation including for mountain regions and businesses, learning services and other initiatives (e.g. for de-risking assets and emerging markets, on risk literacy), policy and regulatory recommendations, and studies on landscape-level climate risks for public and private actors.



The **Regional Innovation Scheme** (RIS) is one of the programmes managed by EIT Climate-KIC for which Adaptation is a priority, also because many Regions are among the most vulnerable in Europe. Fostering innovation ecosystem is crucial for climate adaptation. For example, the [MEDCLIV project](#) aims at enhancing adaptation in the wine and vine sector developing 6 hubs across 6 countries via capacity building and participatory approaches; or the [Saturn project](#), facilitating the creation of adaptation strategy linking rural and urban actors, including in the Italian mountainous territory of Trentino. Earlier in 2021, EIT Climate-KIC launched a new [Adaptation Innovation Marketplace](#) together with other institutional partners: a space where local businesses, innovators and investors can match to foster climate adaptation thanks to the availability small grants and technical assistance.

In 2019, EIT Climate-KIC initiated the Deep Demonstrations’ programme to demonstrate the feasibility of 1.5 degree-transition through system innovation, a transformational approach based on involving actors and citizen. The [Resilient Regions](#) programme is an example of Deep Demonstration using this approach to increase resilience and adaptation. The programme includes work with the Italian Dolomites communities, where the focus was on three key systems: tourism, local communities, forestry and wood value chain. In the future, EIT Climate-KIC will continue to work with the most



vulnerable communities; further bridge between local businesses with investors; connect climate innovation to a more systemic approach of adaptation by connecting the different sectors and needs.

Learn more about the activities and programmes supported by the EIT Climate-KIC in [Salvatore Martire's presentation](#)



Climate adaptation and mountain businesses

During the webinar, mountain stakeholders also presented three concrete cases of business adaptation to climate change in different sectors relevant to the mountain economy: tourism, agriculture and forestry.



Situated in France in the Jura mountains at altitude between 900 and 1400 m.a.s.l., [Metabief ski resort](#) took the ambitious decision to announce the end of ski tourism by 2035 and initiated a territorial bottom-up process to develop an all-year around tourism in the massif. This decision was taken after the CLIMSNOW showed that, in this region, ski would not be any more economically viable in the future with less than 60 days of possible exploitation without snowmaking by 2035 and less than 50 % of sale revenues by 2040. As presented by **Olivier Erard, Director of Syndicat Mixte du Mont d'Or**, from 2016 to 2019, the Metabief ski resort started to collect local data, make snowmaking analysis, and maintain ski lifts without big investments, and it also initiated to foster dialogue, pedagogy and storytelling with local actors in order to convince them of the transition in the touristic model of the region and ensure a strong commitment by elected officials.

By 2020, the climate change transition strategy has begun, partially financed via the ski pass tax. The planned activities range across decreasing the investments in ski tourism to developing outdoor activities (e.g. e-bikes, ultra-trails) that allow to couple tourism with biodiversity preservation, mountain grasslands and pastoral practices.

“There are different new models that could be used to create the new tourism ecosystems to face with climate change. What we know is that we must use all ingredients to success: values, frame of the new model and cooperation.” Olivier Erard

Furthermore, alongside with local actors (tourism operators, territorial groups, citizens), Metabief created the “ODoubs” brand to promote adaptation and the “LabO” think thank to boost innovation and collective intelligence for smarter mountains. **“Climate change is an opportunity to build a new tourism model”**, underlined Mr. Erard, with the scope to create new community activities based on natural and patrimonial wealth, adapted to climate change and sustainable, and able to replace the revenues losses due to the end of downhill ski. Questioned about the transferability of Metabief’s model, Mr. Erard stressed that each ski resort must analyse its own threats and opportunities but also warned **“you have to start now**, because 10 or 20 years is not so long”.



Learn more about climate adaptation for mountain businesses in tourism in [Olivier Erard's presentation](#) and in the [synthesis of their strategy](#)



Moving to mountain agriculture, **Valeria Leoni, Research Fellow at the University of Milan**, stated that agri-businesses began to plant more olive trees at higher altitudes (+1,000 trees each year) in Valcamonica and Valtellina (Italy), a typical plant of warm Mediterranean climate, yet also resistant to frost and drought. Although olive tree is not completely a new crop for the Italian Alps, according to the [Fojanini Foundation of Superior Studies](#),



the increase in temperature due to climate change encouraged many local producers to start family micro-productions and recover abandoned areas with olive groves.

Situated in Valcamonica, [Alena organic farm](#) is an example of family-led agri-business that opted to recover 4,000 m² of abandoned land by planting 500 olive trees. This test area (15% of the farm's area) is sought to expand the farm's offer with a high-quality product that customers are willing to pay for and, if successful, will be further expanded in the coming years with new olive trees. Climate change played a role in the Alena farm's choice, as it appears more feasible in recent years due to the perception of less cold winters. As Ms. Leoni said, in the future, research and innovation should be done to assess the most suitable varieties to adapt to climate change and to the terraced mountain environment; and solutions to improve the economic sustainability of the activity in the mountains (e.g. mechanization, smart solutions).



Learn more about climate adaptation for mountain businesses in agriculture in [Valeria Monti's presentation](#)



"The vineyard will always be preferred by farmers because it is more economically viable and profitable, but outside the DOCG areas there will be further spread of olive trees." Valeria Leoni

Climate change adaptation in the Alpine forests need also to consider the raise of non-native tree (NNT) species. However, if some of NNT species pose risks for the ecosystem functions, while other NNT offer opportunities for climate mitigation and adaptation. To speak about this dilemma, the webinar hosted **Katharina Lapin, Head of the Department for Forest Biodiversity and Nature Conservation at the Federal Forest Research Centre, Austria**, and project coordinator of the Interreg Alpine Space [ALPTREES project](#). The ALPTREES project identified 526 NNT in the Alpine Space, either introduced accidentally or for timber purposes, 67% of them being cultivated exclusively in cities. Stakeholder Perception of NNT is very different across Alpine countries, with for instance 65% interviewed Slovenian stakeholder perceiving them as a risk, whereas in Austria, Germany and Italy more than 50% interviewed actors think it depends on their use.



The ALPTREES project analysed the usage value of NNT species in a [report](#), with for instance the Douglas fir as one of the most traded species by volume and the *Juglans nigra* by price. The wood uses varies from parquet flooring with the Robinia species in Austria, to wood beehives and smartphone speaker amplifiers in Italy (Paulownia species). Yet, there are still gaps in the supply chain, NNT wood availability acquisition and manufacturing are scattered and NNT wood species occupy production's niches. The reason why is that forest actors are not encouraged to use these species as there is uncertainty on their impact on local biodiversity in different territories. "To solve this, we developed a risk assessment tool for forest management institutions to decide if the specie has a risk for the area and if it should not be used at all" stated Ms. Lapin. The tool will soon be published.

"The economic opportunities of NNT species goes from risks to benefits", concluded Ms. Lapin. Among risks, these offer the need to reinforce businesses with environmental consultants, digital solutions for biodiversity monitoring, tree nurseries, conservation management, environmental education and conservation management. From the opportunities side, carbon and timber trade, renewable energy, art & crafts, carpenters, public communication.



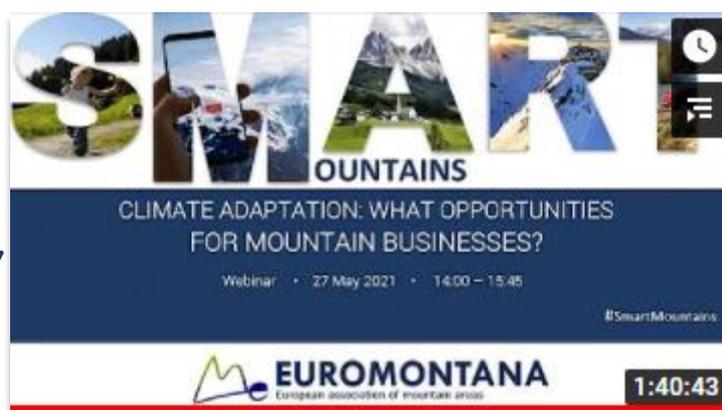
Learn more about climate adaptation for mountain businesses in the forestry in [Katharina Lapin's presentation](#)



"Most entrepreneurs see the economic benefits when seeking for the NNT species and believe there is more room for quality, marketing and research." Katharina Lapin

This third webinar of the **Smart Mountains** series was an opportunity for mountain stakeholders to reflect on the impacts of climate change on the local economy and on ways to adapt in the coming years. Discussions highlighted the **urgency of the adaptation process**, as it is a process that takes time and must be inclusive; yet the webinar also gave hope and inspiration through examples and via the European funds and support available to enhance climate adaptation. These reflections can feed into the debates for smarter mountains at the European Mountain Convention in October 2022.

Find all presentations, the webinar recording and more information on the event webpage [**“Smart Mountains: Climate Adaptation – What opportunities for mountain businesses?”**](#)



Watch the webinar recording on YouTube!