

Monitoring Mountain Water: Valais Becomes a European Demonstrator for the Next 5 Years.

EPFL+TECAL LAB

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PRESS RELEASE

EUROPEAN PROJECT

RESEARCH



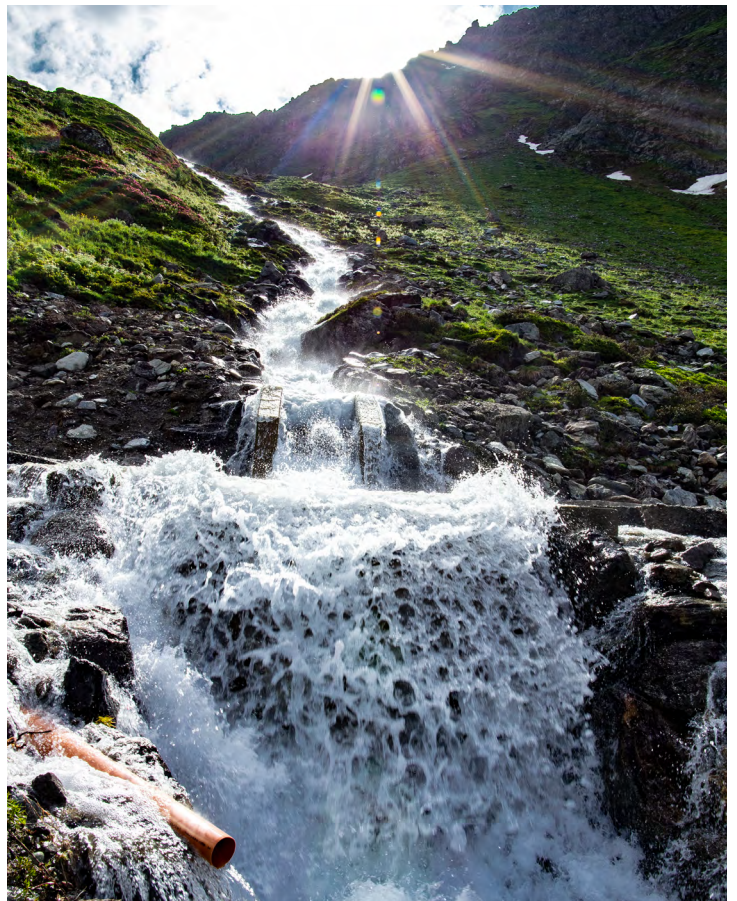
Monitoring Mountain Water: Valais Becomes a European Demonstrator for the Next 5 Years.

Global warming is accelerating while the ability to make decisions becomes more complex. Understanding how to adapt to climate change is becoming a global issue. The European Commission's Horizon Europe research and innovation programme has made this one of its missions. Switzerland and Valais feature prominently, with the creation of a demonstrator on smart mountain water management – an adventure that will involve the key players as well as citizens.

The scale of the consortium selected by the European Commission is impressive: 47 partners across Europe, a budget exceeding 17 million francs, for 6 demonstrators, 4 replicator sites and a large section devoted to research and innovation methods. One of these demonstrators will take shape in Valais, more precisely in Val de Bagnes.

The concept proposed by Switzerland is based on the observation that global warming is accelerating whereas the ability to make far-sighted decisions often takes much longer. One of the reasons is the complexity of the systems to be understood. Water is the perfect example, with its different origins, its many uses and its multiple parameters. The mission of the various actors is therefore to collect all the available data and complement them in order to create a more precise image of the situation in the mountains, then transforming this into an interactive digital system which offers everyone better access to the related knowledge and data. This objective requires a new transdisciplinary approach, bringing together science, technology, human perception, social dynamics and interaction design.

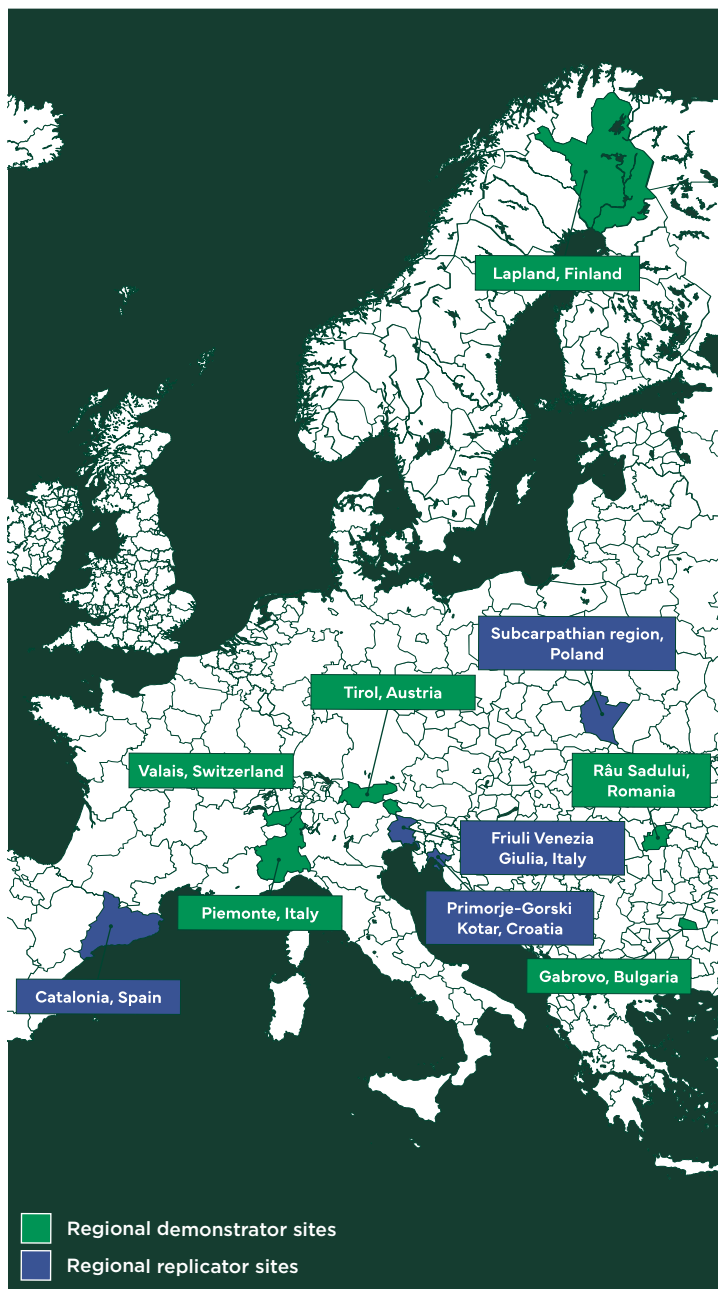
Switzerland's main ambition is to develop dialogue between various users such as energy specialists, farmers, industry, households, municipalities and water managers by offering them direct access to the situation actually happening in the mountains, showing the data in a transparent way that is understandable to everyone, by allowing everyone to understand how these data are linked together, according to the decisions made. This approach, proposed by EPFL+ECAL Lab – the EPFL Design Research Centre – aims to create a new form of interaction between citizens, observations in the mountains and existing knowledge.



↑ Torrent (image © Altis)

An ambitious project, with key partners such as: BlueArk, an innovation hub in water management, located in Entremont, whose mission will be to develop access to data in the mountains with various companies and start-ups. The EPFL river ecosystems research laboratory, now based at the Alpôle in Sion, provides its skills in understanding phenomena linked to rivers as well as water quality measurements. The FDDM Fondation pour le développement durable des régions de montagne (Foundation for the Sustainable Development of Mountain Areas) contributes its long-term experience in involving various stakeholders, including citizens, in the development of solutions and their implementation. The State of Valais is also part of the consortium. As part of this project, which is in line with the cantonal Water Strategy, it contributes to the understanding of the context – legislation on water and organisation of its management – and supplies data – measurement instrumentation, monitoring and warning – in order to pool knowledge that is useful for decision-making. Finally, the digital innovation company Apptitude will enable the demonstrator to deliver an operational, innovative and reliable digital platform, based on interaction design research by the EPFL+ECAL Lab.

The European consortium plans to implement the demonstrator in other regions in Europe. It also allows Switzerland to access the knowledge and tools developed by other demonstrators, offering a considerable network of expertise.



↑ Regions involved (image © mountresilience.eu)

TO BE DISCOVERED DURING TEDXMARTIGNY

Launched last September, this European project will be presented for the first time in the framework of TEDxMartigny.

Speaker during this event, Nicolas Henchoz, Director of the EPFL+ECAL Lab and Coordinator of the Demonstrator in Valais, will share insights on the topic.

Wednesday November 8, 2023, from 6pm

Théâtre Alambic, Rue du Simplon 1B, CH-1920 Martigny

Registration required: www.tedxmartigny.ch

PARTNERS



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