



## **TOPIO project: Safeguarding the landscape heritage from climate change impact through Landscape Character Assessment and Public Participation**

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The landscape, as a comprehensive entity encompassing diverse ecosystems, cultural values, aesthetic qualities, and geological features, is integral to the concept of natural heritage. Climate change poses a substantial threat to landscapes. The impacts are multifaceted, affecting not only the ecological integrity of these areas but also their cultural significance and the livelihoods of people who depend on them. Efforts to mitigate climate change and adapt to its effects are crucial to preserving valuable landscapes for future generations.

TOPIO project aims to contribute to addressing these issues by developing a holistic methodology where Citizen Science, Policy Outreach, Artificial Intelligence and Public Participatory GIS approaches, with the aid of Earth Observation, Digital Twins and Geoinformatics, will find common ground in order to involve both scientists and citizens in a “bottom-up” participatory and creative initiative for the implementation of the European Landscape Convention (ELC) in different areas of Europe. In this framework, TOPIO will prepare a landscape guide inspired by the ELC, initially focused on seven study areas across Europe. The identified topics will address urgent issues impacting the evolution of landscapes, focusing, among others, on climate change mitigation and adaptation.

A Landscape Character Assessment (LCA) covering the study areas will also be conducted based on public participation. The aim is to increase citizen awareness of landscape policies and involve society in safeguarding landscape heritage from the impacts of climate change. Furthermore, the LCA can serve as a tool for local and regional authorities to assess and manage climate-related risks.