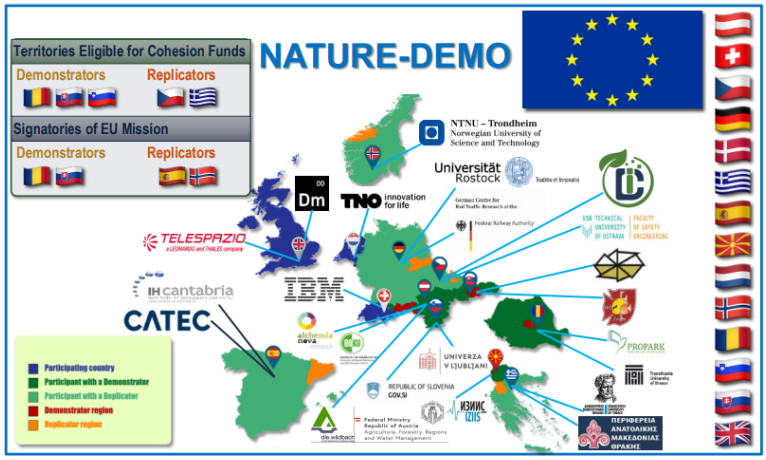
Exciting New EU Horizon Research Project

"*Nature-Based Solutions for Demonstrating Climate-Resilient Critical Infrastructure (NATURE-DEMO)*"

We are happy to announce BOKU's main role as a partner in an ambitious new EU Horizon-financed research initiative: "***Nature-Based Solutions for Demonstrating Climate-Resilient Critical Infrastructure (NATURE-DEMO)***." This project is at the forefront of combating and mitigating the adverse effects of climate change and enhancing the resilience of European infrastructures.

More information about the **NATURE-DEMO** project can be found on the website: **www.nature-demo.eu**



In an era marked by escalating climate disruptions, ensuring the resilience of Europe's infrastructure is more crucial than ever. Extreme weather, shifting landscapes, and ecological changes pose significant threats to the economic, social, and well-being foundations across the continent. However, these challenges also present a historic opportunity to integrate solutions that are in harmony with nature. This is the core vision of the NATURE-DEMO project: to develop, validate, scale, and sustain ***Nature-based Solutions (NbS)*** that enhance climate resilience and protect vulnerable infrastructure.

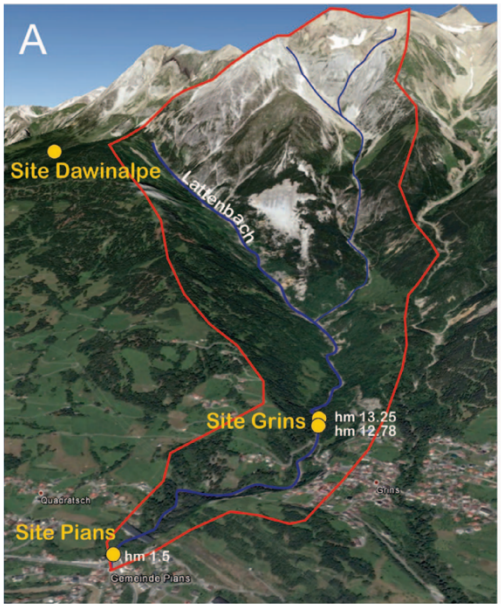
As a core partner, BOKU - Department of Civil Engineering and Natural Hazards with the ***Institutes of Mountain Risk Engineering*** (Prof. J. Hübl), the ***Institute of Structural Engineering*** (Prof. A. Strauss) and the ***Institute of Soil Bioengineering and Landscape Construction*** (Prof. R. Stangl) is leading the research and implementation of classical and Nature Based Solutions (NbS) protecting settlements and critical infrastructure against natural hazards and of climate change. The BOKU team will also

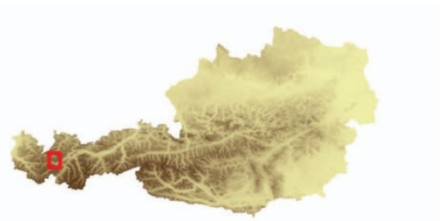
contribute with its extensive experience in developing multi-disciplinary, cross-sector evaluation methods, which will be utilised in collaboration with other project partners to assess the results of different NbS across five different European regions demonstrators.

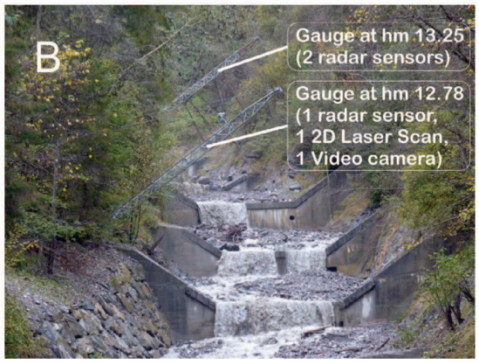
Prof. Alfred Strauss, as BOKU coordinator of the project and Deputy of the Institute of Structural Engineering, emphasises the importance of this project: " *We are living in a time that is strongly affected by climate change, which will affect our infrastructure and settlement areas in a more or less short time.* ***Nature-based solutions (NbS)*** *will play a* ***key role*** *in preserving our infrastructures and our quality of life. Therefore, the Nature Demo project is extremely important as it will help us to make effective progress in this transformation process*".

BOKU will lead the deployment and demonstration of regional nature-based solutions, setting up the Lattenbach Valley demonstrator in an active torrent region, implementing NbS, and monitoring KPIs. Additionally, it will contribute to the development of a *catalogue of NbS*, lend its expertise to a *digital decision-support platform*, and assist in preparing the project's *technical guidelines*.

Our esteemed staff, researchers and students will be deeply engaged in the research and themes mentioned above for the next four years.







The **NATURE-DEMO**, financed through the EU's Horizon Program, brings together top six industrial partners, eight academic organisations, four research organisations, and four non-profit organisations, together with the Austrian Federal Ministry as an Associated Partner.

This EU-financed project solidifies BOKU's position as a vanguard of sustainability, innovation leader in the green economy, and environmental management. We are proud to be this endeavour's partner and look forward to the possibilities ahead.

BOKU Project Coordinator: Univ. Prof. Dipl.-Ing. Dr. Alfred STRAUSS

Institute of Structural Engineering

Email: alfred.strauss@boku.ac.at