



KLIMA 2050: a research-based innovation centre for risk reduction through climate adaptation of infrastructure and buildings

Anders Solheim (1), Berit Time (2), Tore Kvande (3), Edvard Sivertsen (2), Jose Cepeda (1), Åshild Lappégard Hauge (2), Lena Bygballe (4), and Anders-Johan Almås (2)

(1) Norwegian Geotechnical Institute - NGI, Oslo, Norway (Anders.Solheim@ngi.no), (2) SINTEF Building and Infrastructure, Trondheim, Norway (Berit.Time@sintef.no), (3) Norwegian University of Science and Technology, Trondheim, Norway (Tore.Kvande@ntnu.no), (4) Norwegian Business School, Oslo, Norway (Lena.Bygballe@bi.no)

Klima 2050 - Risk reduction through climate adaptation of buildings and infrastructure is a Centre for Research based Innovation (SFI), funded jointly by the Research Council of Norway (RCN) and the partners of the centre. The aim of Klima 2050 is to reduce the societal risks associated with climate changes, including enhanced precipitation and flood water exposure within the built environment.

The Centre will strengthen companies' innovation capacity through a focus on long-term research. It is also a clear objective to facilitate close cooperation between Research & Development, performing companies, public entities, and prominent research groups.

Emphasis will be placed on development of moisture-resilient buildings, storm-water management, blue-green solutions, mitigation measures for water-triggered landslides, socio-economic incentives and decision-making processes. Both extreme weather and gradual climatic changes will be addressed.

The Centre consists of a consortium of 18 partners from three sectors: industry, public entities and research/education organizations. The partners from the industry/private sector include a variety of companies from the building industry. The public entities comprise the most important infrastructure owners in Norway (public roads, railroads, buildings, airports), as well as the directorate for water and energy. The research and education partners are SINTEF Building and Infrastructure, the Norwegian Business School, the Norwegian University of Science and Technology, the Norwegian Meteorological Institute, and the Norwegian Geotechnical Institute.

This contribution presents the main research plans and activities of this Centre, which was started in 2015 and will run for 8 years, until 2023. The presentation also includes options for international cooperation in the Centre via PhD and postdoctoral positions, MSc projects and guest-researcher stays with Klima 2050 partners.