

Earthquake Study and Policy Recommendations for Flanders

The Flemish government has commissioned Q-con with a study on natural and induced earthquake activity in Flanders to promote a better understanding of seismogenic processes and the role of natural faults in the Campine Basin. The study, which can be found [here](#), provides today's most complete inventory of induced and natural earthquake activity in Flanders.

The study reveals that earthquakes generally occur on faults, which exhibit comparatively high levels of tectonic stresses. Nevertheless, seismic events induced by activities at two geothermal sites in the Campine Basin are not found to correlate with any of the mapped faults. Consequently, even damage relevant seismicity may occur on faults not resolved within the existing fault model.

As part of the study, the hazard and risk assessment previously performed for the Balmatt geothermal project is reviewed. We provide general recommendations for managing induced seismicity risks associated with deep subsurface operations (geothermal exploitation, gas storage, aquifer-thermal-energy-storage, coal bed methane, mining, carbon capture and storage) in Flanders.