The Ketzin CO$_2$ storage pilot site

Post Closure Monitoring

First European and only national on-shore CO$_2$ storage project permitted under **German Mining Law** as R&D site limited to maximum amount of 100 kt CO$_2$ **not required** for Ketzin

However, post closure monitoring will be performed based on

- Surface monitoring
- 3D seismic survey
Post Closure Monitoring

• verify safe and reliable storage
• monitoring program site-specific

**Permanent:**
- monitoring of aquifers by (shallow) wells (hanging aquifers; p, T)
- geo-electric downhole electrodes if possible (to depths of 1200 m applicable, measure of contact resistance)
- cemented fiber-optic cables (measure temperature profile)
- passive seismic (record and locate events)

**Periodic:**
- surface monitoring of natural CO₂ soil gas (high resolution; long-lasting baseline required)
- 2D/3D seismics (cost-intensive)
- DAS (using fiber-optic cables of deep / shallow wells) saving costs of 3D providing high resolution services available
- geo-electric downhole and surface-downhole measurements cheap equipment
- no service routine