

Energy Transition Solutions



For more than 20 years, Ikon Science has combined scientific expertise, technology and workflows that support the energy transition. Our understanding of Rock Physics together with our multidisciplinary approach to the subsurface provides unparalleled insight into the challenges associated with repurposing fields. Our ongoing partnerships within the industry and leading research institutions allow us to drive forward innovation within this space.

Solutions for Evolving Energy



Tested solutions to understand changes in the subsurface from fluids and gases



A team of global experts with industry leading experience



More than 20 years of Rock Physics and geomechanical expertise

Carbon Capture, Utilization and Storage



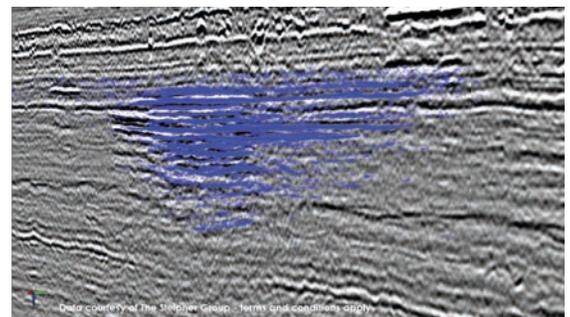
We characterize the physical and mechanical properties, chemistry and structure of the subsurface to determine the feasibility of subsurface storage prospects and inform effective location screening.

Our multidisciplinary team brings an understanding of where to place injection wells to best navigate cap-rock, sealing capacity, fault-seal integrity, fracture limits, and stress states to safely utilize your reservoir.

Injecting Expertise

We utilize rock physics and 4D analysis to determine the acoustic/elastic rock properties of reservoirs and their sensitivities to fluid/CO₂ saturations to give the greatest understanding of the impacts from injecting.

Our real-time monitoring capabilities enable clients to effectively predict, track and monitor plumes and other geomechanical changes to the subsurface over time.



Geothermal Services



Ikon Science can perform feasibility screening of basins with geothermal resource potential. Utilizing our bespoke workflows we deliver an understanding of where overpressure is predicted, the permeabilities of the reservoir formations, methane saturation of the formation brine and formation temperatures.

Over-Field Geomechanical Feasibility

Re-utilization of existing fields and infrastructure requires an understanding of the potential impacts of compaction from any structures on the transformed subsurface. Ikon's rock physics and geomechanical expertise can determine site feasibility and define parameters for safe and sustainable engineering of structures in over-field environments.



Dedicated Work-flows and Outputs

Our team of experts help your team understand risks and investment decisions around storage capacity, injectivity, and site integrity for CCUS or overpressures, permeability, saturation and temperatures in geothermal feasibility.

We have utilized our RokDoc software to develop bespoke workflows for activities across the energy transition spectrum. From monitoring drilling pressure and stresses in real-time for geothermal or image and predict plume behaviour and build technical due diligence for regulator review of CCUS, our experts can help you efficiently navigate the subsurface.

Our Digital Services team can help you capture and manage your data and project assets for your exploration, appraisal and characterization activities and deliver this data to users, stakeholders and clients via a web interface through our Curate Knowledge Management Platform.

Some of Our Recent Project Experience

- Due diligence and screening studies for containment/site suitability
- Pressure & geomechanical assessment of site potential
- Rock physics modelling studies for CO2 monitoring feasibility
- Data review and quality assessment for plume modeling
- 4D Seismic analysis for CO2 plume monitoring / tracking and improved reservoir / facility management
- Geomechanical compaction study for over-field Wind Farm construction

Energy Transition Services

We offer services targeted around (but not limited to) the following work-flows:

- Feasibility studies, including petrophysics, reservoir modelling and simulation of CO2/Hydrogen plume movement
- Injection for storage and enhanced oil recovery
- Storage site screening and characterisation for potential CO2/Hydrogen storage and third-party verification
- Assessment and mitigation of the risks associated with CO2/Hydrogen leakage
- Drilling, completion, and injection tests of CO2/Hydrogen wells
- Over-field geomechanical compaction studies to determine the feasibility of structures such as wind turbines over existing fields