



# Natural Hydrogen Exploration

Employing a world-leading database with a mineral systems approach and hydrocarbon expertise to target natural hydrogen accumulations

## APPROACH

- Getech has amassed its unrivalled Globe™ knowledge platform of geological observations and interpretations and applied it to natural resource identification for more than three decades.
- Globe™ is underpinned by Getech's world leading gravity & magnetic data coverage, its unique plate reconstruction and paleoclimate models along with spatial analysis and machine learning expertise.
- Globe™ has now also been applied successfully to natural, or geological, hydrocarbon exploration worldwide.
- Integrating its experience in mineral systems, hydrocarbon exploration and geothermal energy enables Getech to identify natural hydrogen sweetspots, and quantify source, reservoir, seal and structure.

## BENEFITS

- Genetic criteria for hydrogen accumulations are determined using latest hydrogen generation & migration research.
- Thousands of Globe™ data layers are assessed to identify proxies that represent the genetic criteria (e.g. rock type, thermal gradient, subsurface ophiolites, regional stress field, structures, seals, etc.).
- 'Play Maps' are constructed indicating co-location of positive genetic conditions at each point in a study area to generate regional exploration targets.
- Results are prioritised using extensive geological and occurrence databases, while remote sensing analysis allows detection of surface hydrogen seeps.

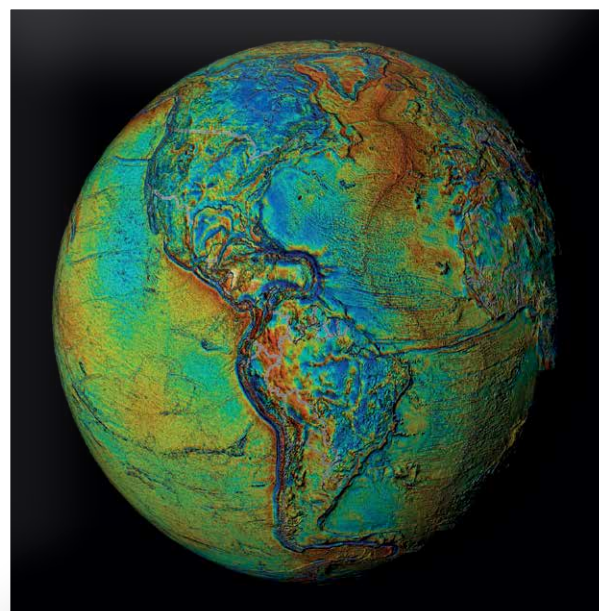
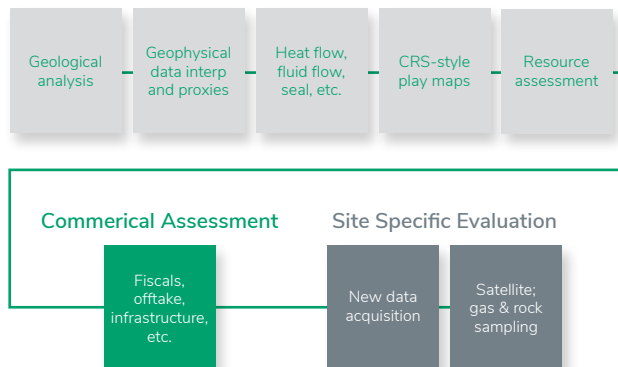
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## EXPERTISE

We can provide the following deliverables as individual components or as part of a fully integrated evaluation:

- **Data Integration** - Globe™ data, combined with complementary data from clients, accelerates exploration for geological hydrogen and helium.
- **Remote Sensing Interpretation** of multiple satellite data sources using traditional and machine learning techniques.
- **Multiphysics Interpretation** of all available data containing rock properties, to define reservoirs and source rocks.
- **Structural Interpretation** by leading experts using unmatched gravity and magnetic data combined with palaeotectonographic reconstructions and stress field analysis to model fault-based migration.
- **Magnetic Vector Inversions** that can significantly improve subsurface potential fields modelling to discriminate causative bodies and their geometries.
- **Geochemical Analysis** in conjunction with a partner to provide state-of-the-art analytical and interpretative techniques.
- **Thermal Mapping and Hydrodynamics** for H2 genesis and transport, interpreted by Getech experts using proprietary thermal gradient and structural models.
- **Hydrogen Generation Quantification** using an array of tools to interpret volume using decades of hydrocarbon experience.
- **Indicative Volume Assessment & Project Economics** - probabilistic and deterministic volumetric scenarios for prospective resource potential and associated economics based on expected exploration and exploitation cost.

## Basin Scale Hydrogen Evaluation



## TRACK RECORD

Getech enables informed, simplified decision-making using interactive GIS maps, dashboards and apps for cost-effective natural hydrogen and helium exploration.

To learn more about Natural Hydrogen targeting email [info@getech.com](mailto:info@getech.com) or visit [www.getech.com](http://www.getech.com)

## ABOUT GETECH

Getech applies its world-leading geoscience data and unique geospatial software products to accelerate the energy transition by locating, developing and operating geoenery and green hydrogen projects.

