

# *From CGG to Viridien:* **A NEW ERA OF GEOSCIENCE INNOVATION**

Karim Lassel, SVP, global business, Viridien, discusses his company's bold rebrand and its commitment to drive innovation for the energy industry.



*According to Lassel, the new brand represents a big step for the company.*

**Oil Review Middle East (ORME):** After serving the energy industry for over 90 years as CGG, how does your new name, Viridien, align with its strategic goals?

Karim Lassel (KL): The energy sector has been evolving rapidly since before Covid-19 and so have we. Initiatives to diversify and expand our offerings into adjacent markets began in 2018 and now

represent about 10% of our 2023 turnover. The logical next step was to rebrand, but we remain focused on our core activity of providing high value-added products and services to the oil and gas sector. Our new brand reminds us of where we come from and encourages us to move forward with momentum. It represents a big step for our company.

Image Credit: Viridien

**ORME: Can you outline your main activities in the MENA region currently?**

KL: Viridien has been active in the MENA region for many decades, having acquired and/or processed seismic data in every country.

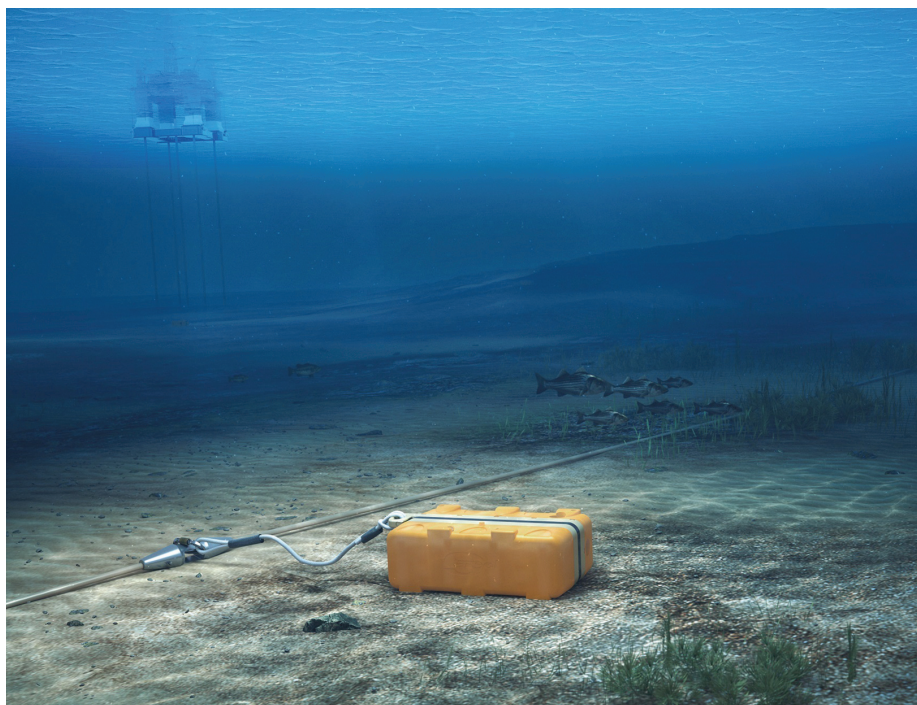
With offices in Egypt, Oman, UAE and KSA, our Geoscience team works closely with NOCs and IOCs to deliver high-resolution subsurface images that help them de-risk their exploration and development activities. We also provide geological services, reservoir characterisation and prospect identification.

Our Sensing & Monitoring specialists supply high-end Sercel solutions for seismic data acquisition on land, offshore and in shallow water as well as services assisting operators and contractors during the entire survey project lifecycle. Take-up of our land and marine nodes to increase operating efficiency and data accuracy is also growing.

Our Earth Data team conducts multi-client projects to either acquire new data or reimage legacy data with our latest technologies while working closely with governments.

**ORME: Where do you see opportunities for growing your business in the region?**

KL: I see growth potential in many areas. Our expertise and ongoing technology advances will continue to help clients resolve their oil and gas challenges to meet their



*The Sercel GPR300 seabed nodal solution.*

ambitious business targets.

Industry requirements for ultramodern seismic data and higher-resolution seismic images, to better understand increasing reservoir complexity while reducing prospect-to-barrel cycle time, play to our core strengths. Kuwait, KSA and Algeria are examples of growth opportunities for us.

Digitalisation is a key strategy. Data remains at the heart of

everything we do and is no less crucial for our clients. Our Data Hub team offer a unique solution to analyse, curate and organise all kinds of structured and unstructured data in order to generate analytical-ready, OSDU-compliant data and unlock a treasure-trove of information for client technical teams and decision-makers.

**ORME: How are developments in AI and digital technology impacting your business and reshaping the subsurface imaging landscape? Where is the next frontier in seismic technology?**

KL: Very positively. We use AI and ML to drive innovation and accelerate geoscience workflows. For example, we leverage AI and

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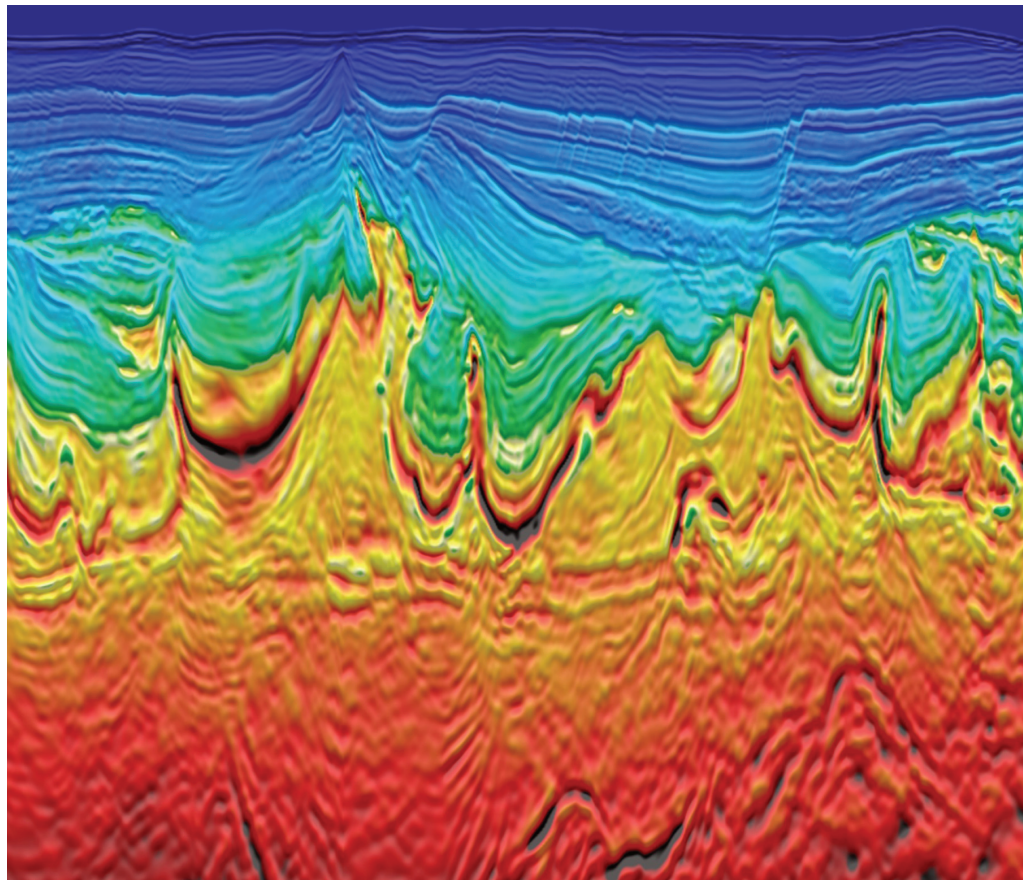
our ever-growing HPC capabilities to optimise our imaging workflows and deliver rapid geological interpretation of vast seismic datasets in the region.

In MENA, we are using elastic full-waveform inversion (FWI) to deliver breakthroughs in seismic imaging. Implementing this for onshore projects is a real technical achievement and is providing greater subsurface understanding of the complex geology in the Middle East. Compressive sensing and multiple attenuation are also strategic “must-have” technologies for the region.

The next frontier is further advancing elastic FWI towards ever higher frequencies and multi-parameter elastic FWI – which will require massive HPC capabilities. 4D elastic FWI will also continue to evolve for better reservoir monitoring and is currently being tested in the Middle East.

**ORME: To what extent are sustainability and energy transition trends impacting your business? Do you see further potential in areas such as carbon storage?**

KL: Carbon capture & storage (CCS) is integral to the energy transition and one of our new businesses where we see potential to extend our services to the NOCs. We also recently announced an alliance with Baker Hughes to support the rapid increase of CCS projects that is underway.



*Elastic FWI is revolutionising seismic imaging in the complex geological settings of the Middle East (courtesy of Viridien Earth Data).*

With a team dedicated to CCS, from screening to planning and monitoring, and expertise from decades of subsurface storage evaluation and reservoir

modeling, Viridien has projects ongoing to identify the best storage locations, either in aquifers or depleted reservoirs, and to model storage scenarios. We have already participated in a CCS project in Algeria.

Mining and critical minerals are other key energy transition areas. We have a range of relevant technologies, such as seismic, multiphysics imaging, satellite imagery, as well as longstanding expertise supporting mining exploration and exploitation, that can help accelerate sustainable mining development. ■

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