Equinor ASA

Equinor to take stake in Bill Gates-backed Kobold Metals

Energy group wants expertise in using AI and machine learning to hunt for oil and gas

Equinor hopes to use Kobold's experience in collecting and analysing multiple streams of data, from old drilling results to satellite imagery, to locate possible new deposits © Reuters

Henry Sanderson JANUARY 6, 2020

Norway's state-backed energy company Equinor plans to take a stake in the Bill Gates-backed start-up Kobold Metals, in an effort to gain expertise in using artificial intelligence and machine learning to hunt for oil and gas.

Equinor will invest tens of millions of dollars in the San Francisco-based company and have a stake just below 10 per cent, according to people familiar with the deal.

Kobold, founded in 2018, aims to create a "Google Maps" of the Earth's crust. It is backed by the Silicon Valley venture capital company Andreessen Horowitz and Mr Gates's Breakthrough Energy Ventures fund.

Kobold is focused on finding new deposits of cobalt, a metal used in electric car batteries. It collects and analyses multiple streams of data — from old drilling results to satellite imagery — from around the world to better understand where new deposits might be found.

Equinor is not interested in cobalt, but in the use of AI and machine learning on large data sets, which may be helpful for finding new sources of oil and gas.

"Data science and analytics applied to big subsurface data will be increasingly important for low-carbon and low-cost oil and gas discoveries," said Lisa Rebora, senior vice-president of exploration at Equinor. "Partnerships with companies like Kobold Metals will provide us with valuable insights and application of new techniques to the overall exploration process."

Equinor, previously known as Statoil, has one of the largest exploration budgets in the industry. The Norwegian government has also pushed for more oil and gas exploration, and issued a record number of licences last year.

Connie Chan, a partner at Andreessen Horowitz, said large resource companies could struggle to hire top computer science talent.

"The brightest minds right now in computer science are not working to solve the world's most pressing problems," she said. "What I think is Kobold's huge advantage is talent management: brilliant computer scientists who don't have a chemistry or geology background."

Kobold's database is analysed by algorithms that determine the geological patterns that indicate a potential deposit of cobalt, which occurs naturally alongside nickel and copper, said Kurt House, the company's chief executive. The technology also helps predict the type of data that needs to be collected in order to find a new deposit, he said.

At present, more than 60 per cent of the world's cobalt is mined in the Democratic Republic of Congo, much of it by hand, and often by children and young men.

Little historical exploration has been conducted for cobalt because of the small size of the market. That is likely to change with the rise of electric cars, which could create a shortage of cobalt by the

end of the decade, said Mr House.

Kobold would stake claims to promising deposits and drill for cobalt before selling to a mining company, which could build a mine. Last year the company staked a claim to an area in Saskatchewan, Canada, where it hopes to find the metal.

“Cobalt is our highest priority but our technology is in many respects commodity independent,” said Mr House, who has a background in the energy industry and a PhD from Harvard University. “The database can be applied to any commodity.