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Baker Hughes takes on both e-LNG and conventional liquefaction

Baker Hughes received a letter of award from ADNOC to provide two electric liquefaction systems for the Ruwais LNG project in Al Ruwais Industrial City, UAE. Valued at more than \$400 million, the award is expected to be booked in Q4. The LNG trains, with combined

capacity of 9.6 mtpa, will be driven by Baker Hughes' 75 MW Brush electric motor technology, making Ruwais LNG one of the first all-electric LNG projects in the Middle East. The service company also said the Ruwais

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UAE plant to use Brush Power Generation, which Baker acquired in 2022.

plant and its electric processing facilities will run on clean power, making it one of the lowest carbon-intensity LNG facilities in the world. Through the Ruwais LNG growth project, ADNOC intends to more than double its LNG production capacity.

"This award represents an important milestone for Baker Hughes in the LNG market and demonstrates the strength of our portfolio, which we strategically expanded through the Brush Power Generation acquisition in 2022," said Ganesh Ramaswamy, Baker Hughes EVP of industrial and energy technology. Baker Hughes acquired the power generation division of Brush Group from One Equity Partners for an undisclosed amount. *Read more...*

ProFrac looking for frac sand options after 2022's buying spree

ProFrac Holding Corp. is considering drastic changes to its frac sand production business. The hydraulic fracturing company is evaluating strategic options to maximize the full value of its Proppant Production segment, which operates through its Alpine Silica subsidiary. Options under strategic review include a public offering, a sale or merger of Alpine Silica, or a potential recapitalization.

CEO Ladd Wilks said ProFrac is also looking for a way to maintain its "unique competitive advantage" from vertical integration while "enhancing our commercial capabilities for unaffiliated customers." ProFrac engaged in a frenzy of acquisitions in 2022, adding frac equipment and sand mines. On the proppant side, ProFrac bought Performance Proppants and its Haynesville mines, the Eagle Ford sand mining operations of Monarch Silica and the West Texas subsidiaries of Signal Peak Silica in 2022.

"After our recent acquisitions, Alpine Silica is now the largest proppant producer in the industry, with a multi-basin footprint," ProFrac executive chairman Matt Wilks said. "Alpine Silica has entered into multiple attractive long-term proppant supply contracts with unaffiliated customers ramping into 2024." *Read more...*

ProFrac Expects M&A to Boost Sand Pricing

Proppant Market Fundamentals Are Supportive of ProFrac's Business

- In-basin proppant supply in the Permian, Eagle Ford and Haynesville markets is expected to remain insufficient to meet demand
- Proppant market consolidation serves as a tailwind for pricing
- Minegate pricing reflects market tightness and continued reliance on Northern White sand to meet E&P producers' demand for proppant



Source | Profrac Holding Corp. 06/21/23 presentation via Enverus docFinder

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Contracts & Projects

ADNOC doles out \$16.9B in EPC after Hail and Ghasha FID

ADNOC awarded two EPC contracts, one offshore and one onshore, valued at a combined \$16.9 billion following its Oct. 5 FID for the Hail and Ghasha gas development project offshore Abu Dhabi. One of the keys for ADNOC's gas masterplan, the Hail

and Ghasha project is part of the Ghasha concession, which is slated to produce more than 1.5 Bcf/d by 2030.

A JV of Saipem and Abu Dhabi-based National Petroleum Construction Co. was

awarded the offshore package, valued at around \$8.2 billion. The work scope encompasses the EPC of four drilling centers and one processing plant to be built on artificial islands, as well as various offshore structures and more than 300 km of subsea pipelines. Saipem said its portion of the contract comes to \$4.1 billion.

The onshore package was awarded to Tecnimont, the EPC subsidiary of Maire. Valued at \$8.7 billion, the award is the largest ever for the Maire group. The scope includes two gas processing units, three sulfur recovery sections, associated utilities and offsites as well as export pipelines. The engineering and procurement will be executed by in Europe, India and the UAE, under the central coordination of Maire's headquarters in Milan, Italy.

While the package is the largest in Maire history, the company has experience in delivering large gas treatment plants and sulfur recovery projects. It also has worked in the UAE since the late 1990s, completing \$17 billion in projects there.

The Ghasha concession consists of nine fields, including the Hail, Ghasha, Dalma, Nasr, SARB and Mubarraz offshore sour gas fields. The concession is expected to produce enough gas to provide electricity to more than 2 million homes. Once complete, the Hail and Ghasha project will also produce more than 120,000 bbl/d of oil and high-value condensate.

The project was expected to come onstream in 2025, ramping up to produce more than 1.5 Bcf/d before the end of the decade, but pandemic slowdowns and contract cancellations led to delays. At least four of the 10 artificial islands have now been completed, and development drilling is underway.



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Onshore package valued

at \$8.7B, a record amount

for recipient Maire.

ADNOC to repurpose EV batteries, deploy drones to cut emissions

DeepOcean finishes Dunlin Alpha decom a few months after award

Olso-based offshore services provider DeepOcean completed a significant decommissioning project on Fairfield Energy's Dunlin Alpha platform on the U.K. Continental Shelf. The company removed six subsea conductors and four vertical supports at varying water depths and removed the upper conductor guideframes, with an estimated weight of 400 tonnes. The work scope also included design and installation of bespoke clamps. The entire project was completed within 12-16 weeks of contract award, avoiding the risk of loose conductors experiencing another winter in the field.

Gary Scott, DeepOcean's U.K. commercial manager and legal counsel, called Dunlin Alpha as a "flagship project" for his company given the subsea engineering and specialist tools required to execute the decommissioning. "The project required intensive dynamic and structural analysis to enable the removal of the upper conductor guideframes. The scope also required significant shallow-water ROV operations for the removal of the upper guideframe and conductors." he said.

The Dunlin Alpha installation, located 137 km northeast of Shetland in a water depth of 151 meters, produced its first oil in 1978. During its 37 years of operations, more than 522 MMbo were recovered from the Greater Dunlin area, comprising Dunlin, Dunlin S/W, Osprey and Merlin fields. Fairfield acquired the assets in 2008 and took over full operatorship in 2014. Key subcontractors that assisted in the decommissioning include Claxton, Machtech and Global Energy Group.

CGG reimaging 6,400 sg km near newly producing Baleine field

CGG has started a multiclient 3D pre-stack depth migration reimaging program in the Tano Basin offshore Côte d'Ivoire in association with the country's energy department, Direction Générale des Hydrocarbures, and its NOC, Petroci Holding. The 6,400-sq-km reimaged seismic data set near Baleine field will give interested industry operators unique insight into this high-potential new play. The project is supported by industry funding and is expected to be complete by YE24, with a fast-track volume available in 1Q24.

The company will draw on its two decades of geoscience experience in Côte d'Ivoire to reimage the 3D seismic data with its latest proprietary technologies, including time-lag full waveform inversion, viscoacoustic FWI and the potential application of targeted FWI imaging. The team will also conduct a regional interpretation of the project area to provide a better understanding of the distribution of the prospective clastic and carbonate plays in the Tano Basin.

"The recent discovery of the Baleine field has led to heightened exploration interest in offshore Côte d'Ivoire," CGG Earth data EVP Dechun Lin said. "Our reimaging project is the first of its kind to utilize cutting-edge technology to enable confident evaluation at a prospect as well as regional level, to give a better picture of the subsurface in this world-class basin. The resulting ultramodern data set will offer unique access to near-field exploration opportunities, placing IOCs a step ahead in fast-tracking the development of these high-impact prospects."

Baleine field was discovered in 2021. Eni started production there this August, using a refurbished FPSO capable of handling up to 15,000 bo/d and 25 MMcf/d. A second phase is expected to start up in 2024 and will increase production capacity to 50,000 bo/d and 70 MMcf/d. The third phase will bring overall Baleine production to 150,000 bo/d and 200 MMcf/d. All gas production from the field, including from future phases, will be delivered onshore through a new pipeline.



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