WATER FOR OIL & GAS

Lower oil prices pay dividends for industrial water work at Saudi Aramco – and AES

With oil prices still weak despite a recent production cut agreement, investment in efficiency is the name of the game for the oil industry. For domestic market leader AES Arabia, the next few years are looking positive for oil and gas water work in the Kingdom.

Saudi state oil giant Aramco is expected to spend up to $200 million on water and wastewater infrastructure over the next few years, as it looks to improve efficiency and stabilise its production and refining processes in the light of lower oil prices that have become the norm over the past couple of years.

And local market leader AES Arabia is examining its strategic options for expansion ahead of an expected boom in work with its most significant client. The Riyadh-based water and wastewater company, which was established in the Kingdom in 1993, receives around 65% of its revenue from the oil and gas business, largely thanks to a strong presence in the domestic O&G market. The market for water and wastewater services in the industry is set to grow further, GWI understands.

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>
> Fawaz Malki (President, AES Arabia)

Oil prices have rallied in recent weeks after Russia and other major producers joined the OPEC group in agreeing to cut production next year. However, prices are still significantly below the $100-a-barrel numbers seen earlier this decade.

Around $50 billion of major EPC projects have been recently awarded by Aramco, or are expected in the next few months (*see table below*), a process that is expected to translate into around $150-200 million of spending on water and wastewater facilities. A further wave of tenders is expected within the coming few years.

Fawaz Malki, the president of AES, told GWI that lower oil prices are actually a stimulant for spending on water and wastewater services. The company has seen revenues grow to around $60 million (expected) in 2016, with the figure projected to reach $100 million in coming years, chiefly as a result of the boom in oil and gas work, where it expects procurement to continue to ramp up. The company is also in the final stages of delivering a 75,000m^3/d SWRO desalination facility to serve the Jazan refinery and integrated gasification ▶

SELECTED MAJOR EPC PROJECTS AT SAUDI ARAMCO

The world's largest oil company is lining up more than $40 billion of spending over the next five years alone, which is likely to mean up to $200 million spent on water and wastewater installations to serve its new facilities.

Project	Type	Budget	Status	Progress	Completion
Fadhili gas plant, central processing facility	Gas plant	$2.2 billion	Execution	29%	Jun 2019
Fadhili gas plant, offsite and utilities	Gas plant	$1.2 billion	Execution	29%	Jun 2019
Fadhili gas plant, sulphur recovery unit	Gas plant	$1.9 billion	Execution	29%	Jun 2019
Fadhili gas plant, industrial support	Industrial support	$260 million	Execution	25%	Sep 2018
Fadhili IPP	Power plant	$896 million	Execution	9%	Nov 2019
Ras Tanura pipeline re-route	Gas transmission	$450 million	Execution	9%	Mar 2019
Uthmaniyah gas treatment units	Gas processing	$727 million	Execution	-	Nov 2019
Khurais increment programme	Oil pipeline	$250 million	Execution	55%	Mar 2018
Berri gas plant sulphur railcar loading	Infrastructure transport	$400 million	Execution	63%	Jul 2017
Shale gas development	Upstream gas extraction	$3.22 billion	Execution	22%	Dec 2020
Ras Tanura refinery clean fuel project 1	Refining	$2 billion	Bid evaluation	-	Oct 2019
Ras Tanura refinery clean fuel project 2	Refining	$1 billion	Bid evaluation	-	Oct 2019
Eastern Province infrastructure and support	Infrastructure support	$107 million	Bid evaluation	-	May 2019
Hail bulk plant	Bulk plant	$300 million	Bid evaluation	-	May 2019
North Jeddah bulk plant	Bulk plant	$300 million	Bid evaluation	-	May 2020
Wasit bulk plant upgrade	Bulk plant	$100 million	Design	-	Jun 2021
JER expansion phase 2	Petrochemical	$5 billion	Design	-	Oct 2022
Hawiyah and Haradh compression facilities	Gas compression	$450 million	Design	-	Sep 2020
Yanbu integrated refinery and petrochemicals	Petrochemical	$20 billion	Study	-	Oct 2023
Master gas system expansion phase 3	Gas compression	$800 million	Study	-	Jul 2021

Source: Saudi Aramco

plant, which will be the largest desalination plant to be owned directly by Aramco.

"Many people look at the oil and gas market in terms of the barrel price," he said. "But we are not selling oil. If the market is going down in terms of the barrel price, this is the time for oil companies to get their act together, to refurbish and improve their plants, reduce the cost of production, and upgrade their facilities. We have seen this happen multiple times. Aramco and its partners have got the lesson – they are no longer talking about the next five years, but about the next 25 years. It's a matter of survival for the country."

Water and wastewater facilities are procured by both Aramco itself and the EPC contractors that carry out the company's major infrastructure expansion projects. Initiatives involving water handling are usually delivered on an engineering and procurement basis.

"Remaining focused on this industry has proved to be very rewarding," Malki said. "If you are bidding projects directly with Aramco, you know Aramco prequalifies companies and you are confident you are bidding against respectable competitors. If bidding projects with EPC companies, the process becomes even more interesting. In a typical tender, four to five companies are bidding. Initially we are typically the highest bidder, but then the technical clarification process starts and by the time it is over, we observe that the remaining bidders become much higher in price as a result of compliance requirements, while our price becomes quite competitive."

HOME IMPROVEMENTS

AES's manufacturing facility in Riyadh has meant the company can keep costs down by manufacturing components in-country.

The company stands out for its commitment to domestic manufacturing, producing its own ASME pressure vessels, skid mounts and other packages at an $18,000m^2$ facility in Riyadh.

"There are multiple benefits," said Malki. "Synergies on cost are definitely one, and given the nature of the work we do, we need to be in control of all the variables. A slight delay on one element can blow a whole project off its timetable. With the manufacturing facilities in place, our engineers and technicians can counter challenges aggressively."

The focus on local production also means that while the company works on a turnkey project basis, it receives around 20-25% of its revenue from existing clients through the supply of spare parts and maintenance, as well as through the chemicals it produces, often in partnership with its Florida-based sister company American Water Chemicals.

Outside the Kingdom, the company is also looking to secure more work in the oil and gas sphere based on its experience with Aramco. It has already snapped up contracts from Nigeria and Algeria to Sudan, Oman and the UAE, often through relationships established in Saudi Arabia with multinational oil and gas EPC contractors.

"The oil and gas industry is the same wherever you go – it is very stringent and demanding in nature," Malki said. "Qualifications with Aramco allow you to prequalify for O&G work worldwide. People in the O&G domain anywhere in the world prefer to deal with companies that have an established reputation in the industry, rather than with someone who might leave them with a bad experience." ■

DESALTING THE WATER

Reverse osmosis has proved a major growth market for companies supplying the O&G industry. AES Arabia is in the final stages of commissioning Saudi Aramco's largest desalination facility, at Jazan.