

FIGHTNER

Busy, busy, busy

German engineering consultant Fichtner continues to leave its mark on the region's power sector



■ **PRIME REFERENCE:** Taweelah helped to establish Fichtner's reputation in the region

Few areas of the Middle East business scene are as buoyant as the utility sector. And there are very few international consultants as active as Germany's Fichtner. This year alone, the Stuttgart-based firm has been brought on board to oversee delivery of more than 4,000 MW and 60 million gallons a day (g/d) of new capacity, and to advise Abu Dhabi Municipality & Town Planning (ADMTP) on a landmark privatisation of the Abu Dhabi solid waste system.

In recent years, Fichtner's name has become increasingly associated with the rise of the Gulf private power project. Since being taken on board for the landmark Taweelah A2 independent water and power project (IWPP) in 1997, the firm has been involved in four of the five IWPPs in Abu Dhabi and the four captive independent power projects (IPPs) at Ras Tanura, Juaymah, Uthmaniyah and Shedgum for Saudi Aramco.

The firm's IPP and IWPP reference list is growing all the time. Today, it is acting as technical consultant to Saudi Arabia's Water & Electricity Company (WEC) on the landmark Shouaiba IWPP and will be involved in the next three IWPPs planned by WEC, the first of which, Shuqaiq, is at the prequalification

FIGHTNER: SELECTED ONGOING MAJOR MENA PROJECTS

Country	Project	Client	Scope
Egypt	Kureimat ISCC plant	NREA	Design, preparation of specification and contract documents, evaluation of bids from EPC contractors, and contract negotiations. The project will be contracted in two lots: the combined cycle island and the solar island. Total capacity will be 150 MW
Iran	Rudeshur IPP	Unit International	Basic design and specifications for inviting bids from subcontractors for a 750-MW simple cycle gas turbine power plant. Detailed design for mechanical, electrical and civil works for Unit, which is the EPC contractor
Iran	Flower of the East, Kish island integrated urban development/ infrastructure project	Flower of the East Kish Development Company	Fichtner is the engineer for the entire integrated infrastructure comprising 3 million cubic metres of land reclamation, 160,000 square metres of roads and paved areas, 7,000 metres of causeway and marina facilities, 21,000 cm ³ /d of seawater desalination capacity, 10,000 cm ³ /d of sewage treatment works, 70 MW of power generation, 80 MW of central cooling generation, complete central supplies and services networks for potable water, irrigation water, sewerage, central cooling network and electrical networks
Lebanon	Cost comparison for decentralised and centralised concepts of waste treatment and deposition	CDR	Several project phases have been completed: preparation of requests for qualification; comparative study on decentralised and centralised municipal solid waste (MSW) management approaches; and preparation of requests for proposals (RFP) for the MSW management privatisation. The next phases will come under a new contract. Total investment in the project, which will serve 4 million inhabitants in four regions, will be \$425 million
Morocco	Ain Beni Mathar ISCC plant	ONE	Conceptual design, development of technical specification and validation of CO ₂ abatement, evaluation criteria, tariff structure, contract agreements, RFPs, environmental impact study, evaluation of bids, and assistance during contract negotiations with the first ranked bidder for the 200-250-MW power plant
Qatar	Ras Abu Fontas B	Kahramaa	Audit of dual-purpose 825-MW power generation and 150,000-cm ³ /d seawater desalination plant
Qatar	Mesaieed facility B extension	Kahramaa	Technical and financial adviser on the 1,000-MW IPP; preparation of tender documents, tender evaluation, and support until financial close
Sudan	Khartoum combined cycle power plant	NEC	Engineering for a new 450-MW combined cycle power plant
UAE	Jebel Ali Station M and 400-kV substations	DEWA	Engineering and construction supervision for up to 2,000 MW of combined cycle and 60 million g/d of desalination capacity with possible expansion up to 105 million g/d
UAE	Fujairah IWPP	Privatisation Committee	Technical adviser for privatisation of Fujairah dual-purpose seawater desalination and power plant, including extension of power generating capacity by 250 MW
UAE	Solid waste privatisation	Abu Dhabi Municipality & Town Planning	Study of existing and current state, and procedures of waste collection, transportation and disposal in Abu Dhabi and related consultancy services
Yemen	Marib power plant, stage 2	PEC	Feasibility study for integration of power station into the high-voltage network and conceptual design and tender documents for transmission lines and substations
Yemen	Hadramout phase 2 electrification	PEC	Feasibility study, conceptual design and tender documents for 132-kV and 33-kV overhead lines, and 132/33-kV and 33/11-kV substations

cm³/d=cubic metres a day; g/d=gallons a day; CDR=Council for Development & Reconstruction; DEWA=Dubai Electricity & Water Authority; ISCC=integrated solar combined cycle; Kahramaa=Qatar General Electricity & Water Corporation; NEC=National Electricity Corporation; NREA=New & Renewable Energy Authority; PEC=Public Electricity Corporation; ONE=Office National de l'Electricite; IWPP=independent water and power project; IPP=independent power project; EPC=engineering, procurement and construction
Source: Fichtner



■ **KAHRAMAA: Recipient of Fichtner's advice for Mesaieed facility B**

stage. In Qatar, it is advising Qatar General Electricity & Water Corporation (Kahramaa) on the facility B project at Mesaieed, which will ultimately have capacity of 1,000 MW. In Fujairah, it is working with Abu Dhabi Water & Electricity Authority (ADWEA) on the utility's sixth IWPP. And across the Gulf in Iran, it is providing engineering services to Belgium's Unit International on the Rudeshur IPP, which is on track to become the Islamic republic's next private power scheme.

The widespread adoption of the IPP and IWPP models has not come as a surprise to Fichtner. "For an international investor the region is one of the better places to invest in,"

"Clients set tight timeframes. On all projects that we are working on, the timeframes are extremely tight"

Mansour Hamza, managing director for Africa, Middle East and the Far East, Fichtner

says Mansour Hamza, Fichtner's managing director for Africa, Middle East and the Far East. "These are rich countries, they have the financial means, modern infrastructure and the risks for international investors are limited."

The growing number of opportunities in the private power sector is enticing new developers into the market. "We see newcomers

from Asia – from India, Singapore and Malaysia – some of which have been involved in private power projects at home," says Hamza. "[Bid] evaluations will show whether these investors will be acceptable for clients and consultants in the region, and whether they bring the guarantees and the right constellations in terms of EPC [engineering, procurement and construction] contractors, suppliers and operators, to complete such projects successfully."

M for Mega

Not everyone is convinced about the merits of private power. Dubai, which is having to confront an annual increase in power demand of about 15 per cent, remains committed to the conventional EPC approach. Its latest project, for which Fichtner was appointed consultant in late September, is the 2,000-MW combined cycle and 60 million-g/d Jebel Ali M station project. Outside the energy-rich Gulf, Fichtner – through its subsidiary Fichtner Solar – is acting as consultant on integrated solar combined-cycle (ISCC) power schemes in Morocco and Egypt, both of which are supported by the World Bank.

But it is not only generation projects that have been keeping Fichtner busy (see Table). Among the largest projects the company is working on is the integrated infrastructure engineering package for the Flower of the East development on Iran's Kish island. The estimated \$1,700 million project aims at transforming Kish into a major tourist destination for Iranian and regional visitors. Waste ➔

management projects are also becoming an increasingly important source of business, as privatisation extends into the sector. In the summer, Fichtner was brought on board as technical adviser to ADMTP for the proposed privatisation of the Abu Dhabi solid waste sector. In Qatar, it is involved as owner's engineer with one of the bidding consortiums for the privatisation of the state's cleaning services and waste treatment facilities.

Not surprisingly, in view of its heavy regional workload, the Middle East has become an increasingly significant market for Fichtner. Last year, the Middle East, excluding North Africa, generated Eur 14 million (\$16.8 million) in turnover, equivalent to 17 per cent of the firm's total of Eur 83 million (\$99.7 million). This year, the figure is expected to rise further.

"In the past 30 years, the Middle East has been one of the key regions for us," says Hamza. "This year has been very successful so far, not only because of the new contracts we have been awarded but also as we managed to wrap up a number of projects very successfully."

Fast growth

Nevertheless, there are challenges of working in such an active market. Says Hamza: "The region is seeing very fast growth at the moment, which means countries need power and water quickly. As a result, clients are setting extremely tight timeframes on all projects."

Dealing with aggressive schedules is one thing, managing a business in a volatile exchange rate environment is quite another. Like many European companies, Fichtner has been affected by the appreciation of the euro against the dollar and dollar-pegged regional currencies in the past two years, making the company's services more expensive compared with competition from the region and the US. "We suffer of course from the euro-dollar exchange rate," says Hamza. "It makes a huge difference, which has to be compensated somehow. This means we have to work more efficiently and make more use of our resources worldwide."

With more than 1,000 employees in offices elsewhere in Europe, Asia, Africa, Latin America and the Middle East, Fichtner has plenty of resources at hand. "Capacity is not an issue at the moment," Hamza says. "Some projects are being carried out in the region, others are being shared between our international offices and our Stuttgart office, and there are those that are being exclusively done here."

"There is a lot of investment out there and enough work," says Hamza. "The greatest challenge for us will be to continue performing. We need to make sure that we satisfy our clients, which is why wrapping up a project successfully is so important."

Oliver Klaus