

Success Stories

INFRASTRUCTURE ADVISORY

This series provides an overview of successful public-private partnerships in various infrastructure sectors, where IFC was the lead advisor.

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Saudi Arabia: KAIA Desalination Project

The King Abdulaziz International Airport Desalination Project is IFC's first advisory project in the desalination sector. The airport is the main international gateway and hub for Saudi Arabian Airlines, and in 2005 served more than 14 million passengers.

IFC was the lead adviser to Saudi Arabia's General Authority of Civil Aviation (GACA) in relation to introducing private sector participation for the development of a new 30,000 cubic meters (m³) per day desalination plant to supply potable water to the airport. The successful transaction closed in June 2007. Commercial production started ahead of schedule.

The winning bidder quoted a water price of SAR 2.92 (US\$ 0.78), a precedent-setting price for desalinated water in the Middle East.



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BACKGROUND

The city of Jeddah, where the airport is located, had a population of approximately 2.8 million in 2006 and faced severe water shortages. The city lacked adequate water production and distribution systems around the airport, so GACA had relied on its own (captive) desalination plants, which it had funded and operated using its own resources. These plants, however, were outdated, inefficient and were approaching the end of their economic life; and although GACA had three of them with a total capacity of 33,000 m³ per day, only one, with a capacity of 25,000 m³ per day, was operational.

GACA is responsible for constructing, managing, operating, maintaining, and developing airports and air navigation infrastructure in Saudi Arabia and is in the process of restructuring to achieve full commercialization by 2015. Its objectives for this project were to concentrate on its core activities of airport operation, increase water production to meet projected growth in demand, and improve service quality and reliability while lowering production costs. GACA also aimed to avoid incurring capital costs, to reduce its reliance on subsidies from the Ministry of Finance, and to develop a viable public-private partnership model that could be replicated for future transactions

IFC'S ROLE

IFC was appointed as the lead financial adviser to help structure and implement the public-private partnership for the new desalination project. IFC's technical due diligence examined the benefits of refurbishing the existing plants compared with constructing a new plant and concluded that the most cost-efficient option was a new seawater reverse-osmosis desalination plant. The benefits of a new plant were as follows:

- improved reliability,
- no reduction or disruption in water output during construction,
- significant reductions in energy consumption,
- no atmospheric emissions and no thermal pollution of seawater, and
- flexibility to increase capacity through modular construction.

IFC also conducted a highly transparent bidding process, ensuring universal distribution of all information and fair treatment of all bidders. The transparency of the process ensured credibility and a successful transaction.

TRANSACTION STRUCTURE

The selection process for GACA's private sector partner began with an initial prequalification of prospective bidders based on certain technical and financial criteria that included experience with Build-Operate-Transfer (BOT) projects and private sector participation, experience with operating and designing reverse-

osmosis desalination plants, and minimum revenues and net worth.

The winning bidder was selected through an international competitive bid process based on the lowest water price offered and technical expertise and experience. GACA and the investor signed a 20-year take-or-pay water purchase agreement under a BOT arrangement. The investor would finance, design, construct, operate, and maintain a new desalination plant with an initial capacity of 30,000 m³ per day of potable water, increasing to 35,000 m³ per day in year eight. The investor would also decommission the old plant and rehabilitate and beautify the site.

Off-taker commitment is guaranteed through GACA's reliance on the project for 100 percent of its water demand. Moreover, GACA established and funded a credit enhancement through an escrow account of US\$2.5 million to secure payment obligations to the investor. GACA would be responsible for providing electricity to the project.

BIDDING

Bidding was organized as a two-envelope procedure whereby the technical bid was evaluated first, and only those bidders who passed the technical evaluation were invited to the commercial bid opening.

Of the four Saudi and international groups that participated in the commercial bidding process in December 2006, the consortium led by SETE Technical Services S.A. of Greece, in association with Aquatech International Corporation of the United States, Haji Abdullah Alireza and Company of Saudi Arabia, and WTD srl of Italy was selected as the winning bidder.

EXPECTED POST-TENDER RESULTS

Project construction was completed ahead of schedule in February 2009 and the plant started commercial production in March 2009. Expected results include

- mobilizing US\$40 million in private investment;
- lowering the cost of water;
- introducing international best practices;
- realizing savings of US\$ 12 million per year as a result of technical, economic, operational, and managerial efficiencies;
- realizing a total net present value fiscal impact of US\$401 million over the 20-year concession period.