



George COUVARAS

Qatar's enormous natural reserves and the South African company's innovative technology provided the perfect marriage to produce gas-to-liquids on a commercial scale. In 2006, the Qatar Petroleum-Sasol joint venture Oryx GTL opened Qatar's first gas-to-liquids plant, the prototype for turning the "GTL capital of the world."

The Oil & Gas Year: *Can you describe the genesis of Sasol's activities in Qatar?*

George Couvaras: I joined Sasol in the mid 1980s and I was part of the international of business growth at Sasol. The company started in the early 1950s as the main synthetic fuels producer in South Africa. Since then it has grown significantly over the years, and was privatised in the 1970s. In the '80s, we were supplying about half of South Africa's fuel needs and today we still supply about 40 percent of the country's needs. In the late '80s and early '90s we looked towards the global market to implement our homegrown value proposition and to commercialize our technology.

We earmarked a few places that had significant volumes of unutilised or flared natural gas that could be used as feedstock for our proposed plants. We narrowed down our options to a few countries and the most significant was Qatar. In 1996 we met His Excellency Abdullah Bin Hamad Al-Attiyah, Minister of Energy and Industry, for the very first time.

TOGY: *How did the Oryx GTL project come about?*

GC: I have lived in Qatar for over a year now, but I have been travelling to Qatar about twice a month since 1996. Initially it was challenging to fly into Qatar from South Africa, as there were no direct flights. At the time, one of the few buildings in Doha was the Sheraton Hotel and since then Qatar has come a long way as you can see with all the development in the country. The birth of the Oryx GTL project began when we approached HE Minister Al-Attiyah and explained the GTL concept. Qatar at that time was committed to diversifying its business and to economically utilise its large reserves of natural gas. Qatar's gas had also been earmarked for power generation via LNG and pipeline. Our vision was to internationally commercialise our technology and to utilise our over 60 years of operational experience. At the time our current

A first of its kind

TOGY talks to

George COUVARAS, Country President
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chief executive, Pat Davis, presented the concept to the Qatar Petroleum Board and three years later we were able to witness the positive results of all our efforts.

During the concept phase, one of the key focus areas was to agree on the plant capacity in light of the then 18.50 US dollars oil price. We ultimately decided to design and build it in two trains, each with about 16,000 barrels a day capacity. On that basis, the project was approved. This represented some significant scale-up for us, but the risk proved to be manageable based on Sasol's past experience. Qatar Petroleum (QP) and Sasol awarded the EPC contract in 2003 and built the plant for less than 1 billion US dollars, which was a remarkable achievement.

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TOGY: *At one point in time, there were seven GTL projects under consideration in Qatar. Four of them were scrapped due to the North Field moratorium and the Exxon-Mobil project was cancelled due to costs. That left Oryx GTL and Shell's Pearl GTL, which isn't finished yet. How you were able to succeed?*

GC: Fisher-Tropsch is a complex technology. There are only a handful of companies with any significant and successful commercial experience both in design and operations of such facilities. Sasol, with more than 60 years of experience with large-scale commercial Fischer Tropsch plants, is well positioned to be successful in the industry. We were also fortunate to have built the Oryx GTL

plant at the time that we did, when capital costs were still in our favour.

TOGY: *The project has had its own share of obstacles, described initially by Sasol CEO Pat Davis as “teething problems.” Describe those challenges and how you were able to overcome them?*

GC: The Oryx GTL plant is a complex facility, utilising a sophisticated technology and some of the largest pieces of equipment in the world. We did initially have some challenges, but we were able to use our past experiences to quickly identify and resolve the key technical issues. Today the plant is operating stably and at significantly high levels.

TOGY: *With the bulk of the challenges behind you, what does it take to work at full production capacity?*

GC: Oryx GTL is focusing on increasing plant on-line time, improving plant reliability and achieving full sustainable operation. There were many new challenges in setting up Oryx GTL in Ras Laffan but again, with the support of the experience out of Sasol South Africa with its large-scale operations, Oryx GTL has been successfully ramping up ahead of schedule. If plant reliability continues, we will soon see the plant not only meeting full production capacity, but even exceeding it.

TOGY: *As this project is now really going into full operation, are you viewing this as a projection of the opportunities for GTL in worldwide?*

GC: The Oryx GTL plant is the first of its kind not only in Qatar but also in the world. Many countries and organisations with abundant gas reserves are looking at the Oryx GTL plant and its operation. Oryx GTL serves as a beacon and viable option to other countries. We are looking at a number of opportunities internationally where we can further utilise our GTL offering.

TOGY: *How much is the GTL plant currently producing?*



GC: The average production for the month of August was 24,600 barrels per day and production has continued to increase with each passing month. There is nothing technically that is holding us up from reaching our goal. In December 2008 and January 2009, we saw record production levels.

TOGY: *For future expansions, are you looking more at Qatar or other markets in the region?*

GC: Qatar and Iran are the only countries in the region with sufficient natural gas reserves to support a GTL business. Qatar, with all its great infrastructure and excellent business environment, still remains an ideal location within the Middle East for GTL. With the financial success of Oryx GTL and with the increasing confidence in GTL as a sound alternative to LNG, combined with Qatar’s commitment to energy diversification into the high quality transportation fuels market, the future of more GTL facilities in Qatar is looking good.

TOGY: *What is your vision for Oryx GTL for the next five years?*

GC: The focus at Oryx GTL is to achieve sustainable operation at full capacity as soon as possible and to then further debottleneck the plant beyond its design by taking advantage of any spare capacity. Oryx GTL is also continuing to assess ways in which to improve product slates and plant efficiencies in order to enhance the venture’s economic attractiveness. In parallel, further expansions to the facility are being considered.

TOGY: *What you have been most proud about this project and the joint venture?*

GC: What I am most proud of is that we managed to build the Oryx GTL facility within 36 months for less than 1 billion US dollars and that we were also able to quickly overcome the initial technical challenges that we faced. I am also proud of the way Oryx GTL has successfully managed to sell its products into the high-quality consumer markets, thus achieving premiums for its products. All this experience will be invaluable for the GTL industry as a whole.

