

# Fuelling Tanzania's growth

By PIERRE RAILLARD

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**PIERRE RAILLARD** has been associated with Orca's Tanzania project since 2000 and played a significant role as General Manager/Vice President Operations. He graduated as a Chemical Engineer from the University of Toulouse and has a post graduate qualification from the IAE Business School in Aix en Provence. He has a broad project and operations background in various countries including working for Single Buoy Moorings as Technical Manager, Perenco as Project/Production Engineer, Kelt Oil & Gas as Project Coordinator and Total Austral in Argentina.

Orca Exploration's involvement in developing Tanzania's natural gas sector dates back more than 35 years to the discovery of the country's Songo Songo gas field in 1974. To bring Songo Songo on line and to build markets for natural gas in East Africa, Orca's predecessors attracted industrial partners to the project and facilitated financing through a consortium of multi-lateral lending agencies led by the World Bank. Gas production commenced in 2004.

Orca's integrated natural gas activities in Tanzania operate from the reservoir to the burner tip through its subsidiaries PanAfrican Energy Corporation (PAE) and PanAfrican Energy Tanzania Limited (PAT) via a Production Sharing Agreement (PSA) with the Tanzanian Petroleum Development Corporation (TPDC).

The majority of gas produced by Orca is used by the power sector, meeting a significant percentage of Tanzania's electricity needs. The company also supplies gas to industries in Dar es Salaam through its own low-pressure downstream distribution network. Last year, the company increased sales by 20 per cent on the previous year to 28.5 million cubic feet per day (MMcf/d).

A new initiative by PAT and TPDC to supply Compressed Natural Gas (CNG) to local industries and businesses was commissioned in 2009. CNG is currently supplied by truck to hotels in Dar es Salaam, and also provides an alternative, clean fuel to cars converted to run on CNG.

This cash-generative natural gas production and marketing business provides Orca with a solid financial and operating foundation. Orca is expected to continue to increase its cash generation from its Tanzanian assets through 2010 and is excited about its potential to grow substantially through exploration drilling in Tanzania and other drilling programs involving acquisitions now under active review. They must meet carefully selected strategic growth criteria – a proven hydrocarbon basin, the ability to draw on a knowledge base about the region, significant upside potential and the ability to drill within two years. The preference is for oil interests that can be commercialised rapidly with low upfront capital expenditure.

The company is well placed to add assets due to its strong financial base and a management team that has the full range of expertise needed to manage oil and gas exploration and production at the highest standards.

## 2010 Tanzanian targets

The principal targets for 2010 are to temporarily increase gas processing and transportation capacity to 105 MMcf/d by assisting the infrastructure owners, Songas Limited, in planning a permanent expansion of the infrastructure system, with the goal of extra capacity being operational by the end of 2012.

The company will also prepare for the drilling of a high impact exploration prospect in 2011 with the view to connecting this to the gas processing facilities on Songo Songo Island in 2012 if successful. Since the Songo Songo field was brought on production in 2004, there has been a 125 per cent increase in proven reserves and a 92 per cent increase in proven and probable gross reserves. Orca's recoverable gross proven and probable reserves stand at 490.2 billion cubic feet (Bcf).

Orca continues to collect pressure data to be used in future reserve evaluations. Based on the current reserves and anticipated field deliverability profiles, Orca intends to develop gas markets that will utilise approximately 100 to 120 MMcf/d of Additional Gas (140-160 MMcf/d including Protected Gas) on an average annual basis. To meet these sales levels, there is the need to drill two new development wells in the field. Orca anticipates that reserves can be further increased by the drilling of the Songo Songo West exploration prospect. McDaniel evaluated this prospect and assessed it to contain unrisked mean resources of 551 Bcf and an upside case in excess of 1 Tcf. This prospect will be drilled in 2011.

Last year saw the connection of the new Tegeta 45 MW power plant, and the completion of the initial phase of the compressed natural gas (CNG) project for vehicles. The total cost of these activities in 2009 was US\$3.6 million. With the addition of Tegeta there are now three large power stations connected to and consuming natural gas supplied by Orca. The industrial market also continues to expand.

Orca has emerged from the financial turmoil of the past year in a strong operating, marketing and financial position. General and administrative expenses have been reduced and opportunities for growth in the market for Tanzanian natural gas continue to increase.

The outlook for Orca Exploration is positive. After some consolidation in 2010 as the Company grows its asset base, 2011 is expected to be a significant year with the potential that relatively low risk exploration wells will be drilled.