

## Trinidad & Tobago—an Oil Pioneer With a Bright Future

By Paul Tempest\*

This article will focus on the long-term future. In my view, Trinidad and Tobago today stands on the brink of an energy opportunity offering an extended period of rapid growth and enhanced economic prosperity bringing a boost to employment, education and training through huge new investment opportunities in the energy sector.

I quote from Anthony E. Paul's contribution to Boopsingh and McGuire's book, *From Oil to Gas and Beyond*:

“Trinidad & Tobago stands at the gateway of one of the last unexplored deep-water extensions of a major river delta system in the world. T & T stands to benefit from the experiences of other deep-water developments round the world, so that development cycles and costs should be lower than bench-marks round the world...”

This means that Trinidad & Tobago can expect to be highly competitive in a steadily expanding market for internationally traded gas.

I fully endorse this together with the convincing detailed background and conclusions enshrined in this authoritative new volume. It is by far the most comprehensive, wide-ranging and well-judged analysis I have seen. It provides both a well-written overview of the history of oil and gas development in and around these islands over the past century and an up-to-date assessment of where new opportunities will probably lead.

Just as Trevor Boopsingh's first book, *Oil, Gas and Development – A View from the South* published in 1990, won top awards and was widely applauded throughout the Caribbean to find a wider audience among the governments of several other emergent nations and among the oil and gas multinationals, I am sure that the new book will strike similar resonance world-wide. Trevor will be remembered as a sound petroleum engineer and top civil servant, but above all as a thinker of global stature who was constantly looking around and forward on behalf of his country.

May I add a short explanation of where I am coming from. I first came to Trinidad on several occasions in 1981-83 carrying the proposals of the UK Government to finance development of your new gas resources by a gas purchase contract for the gas to be liquefied and transported as LNG to the UK. The contract was modeled on the maturing 20-year LNG contract for British Gas, then publicly owned, to import LNG from Algeria. (It has since been adapted to import vast quantities of LNG from Qatar.) I was back in Trinidad for a month in the following year heading an eight-person World Bank energy mission where the World Bank had decided to use Trinidad as its global model for LNG, other downstream gas development, and marketing worldwide. The credit for this rests with Trevor Boopsingh, Ken Julian, and Patrick Manning (Energy Minister and later President).

My prediction – offered without hesitation – is that the development of the Orinoco deep-water gas resources off Trinidad could double the per capita income in these islands within 10 years, from the first confirmed discoveries and development, and could double again within another 10 years. This would lead to prosperity on a scale unseen in the Caribbean – at least four times the present level with a production horizon of 50 years.

Trinidad & Tobago has the opportunity to become the Qatar of the Americas, North, Central and South, with long standing markets for its gas in the U.S., Europe, and probably Brazil. Qatar, you will know, has the highest per capita income in the world. Up to World War II, however, Qatar was among the worst poverty-stricken economies in the world – nomad Bedu dependent on their camels and abundant fish.

How did Qatar achieve such immense prosperity in so short a time? Two points:

- It welcomed the multi-nationals,
- It preserved its own national interest and national identity.

I should explain why I am so close to Qatar.

Before I first came to Trinidad in 1981, I had been sent by the Bank of England to supervise the transition of the new Gulf currency authorities prior to the independence of the Lower Gulf states in December 1971. The Qatar and Dubai Currency Board, where I was the General Manager, very quickly became the Qatar Central Bank and the Central Bank of the United Arab Emirates (UAE),

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operating to the same prudent, sensible guidelines as those used by the Central Bank of Trinidad & Tobago today. All of these three institutions, like the Bank of England, were firm, strong, financial pillars that had no difficulty in surviving the global financial and banking meltdown of 2007-09, the worst in global history since World War II.

I have been invited back many times by my good friends in Qatar, and have observed their success with pride and their few mistakes with dismay.

First and foremost, Qatar welcomed the leading multi-nationals who brought state-of-art technology, complete finance packages and the best experience of efficient exploration and development. But, for Shell there was one serious snag. Shell had discovered the offshore Qatar gas with one well almost on-shore and the next close to the Qatar-Iran median line. This is the second largest gas field in the world. It extends far into the offshore waters of Iran. Meanwhile, however, Shell had fallen out of favour with the Qataris following a huge explosion at a Shell-run downstream plant at Umm Said. The Qataris referred the dispute to the International Court in The Hague and Shell's presence in Qatar was reduced to one man.

I was selected as a well-respected friend of Qatar and newly appointed Head of International Energy in Shell to secure a reconciliation. It was not an easy task, and took some time. Today, Qatar leads the world in gas-to-liquids (GTL) technology brought in by Shell where Qatar now represents a very large pearl in its vast global treasure of technological achievement and development success.

### **Two Final Points for Trinidad & Tobago**

While I was with Shell, I was engaged in similar problems in Venezuela. With regards to the development of deep-water Orinoco gas, I do not think Venezuela presents any problems at all today as a competitor. They have many higher domestic energy priorities and, given recent political turbulence, it is unlikely, in my view, that the multi-nationals will wish to go back and invest heavily until government attitudes change. Once Trinidad begins to produce deep-sea gas or oil, those attitudes of the Venezuelan government will most probably soften and the vast hydrocarbon resources, some quite shallow, of the Venezuela Orinoco basin and delta will be unlocked, most probably with the vital cooperation of Trinidad & Tobago – bringing even more employment and prosperity to these islands.

My final point regarding Trinidad & Tobago is on how to attract the leading multi-nationals to develop the deep sea gas on terms acceptable to the Trinidad & Tobago government. The multinationals have to be assured of continuity of government support while the government retains the bulk of the net profit. This they will determine by applying their corporate requirement of meeting a worldwide corporate rate of return which satisfies their shareholders and other stakeholders. If the Trinidad & Tobago Government cannot fully understand this and tries to claw back more than the share agreed, the multinationals, one by one, will walk away.

The secret, learned by the UK Government in 1975-1990 in the North Sea is never to deal on these mega-projects with a single multi-national. In the North Sea, we licensed development to consortia of two, three or four major multi-nationals, such as Shell/Exxon on a 50/50 basis. This was highly successful, and the UK went in five years from insignificant oil production in 1975 to self-sufficiency by 1980 and then on to become a substantial net exporter of oil over an extended period.

So finally, Trinidad & Tobago, *TOES IT!*<sup>1</sup> Do not dither or delay if a discovery is made from one of the seven exploratory wells in the current drilling programme. Ignore any politician or political party that advocates delay and presents excuses. This is your future and that of your children and grandchildren. It could be beyond your and their wildest dreams. The first spurt of oil, gas, or condensate from one of these seven wells will begin to change everything. Ignore the opposition, the environmental and maverick doomsters who preach the extinction of the hydrocarbon era within 50 years. They are talking poppycock.

### **Footnote**

<sup>1</sup> The expression *TOES IT!* has long been used all over Trinidad and Tobago in place of HURRY UP or GET GOING or GET READY. It derives from the sprinter preparing for the start – his or her fingertips are on the ground with heels raised to deliver maximum power and acceleration through the toes.

### **A Brief History of Oil and Gas in Trinidad & Tobago**

The transition of Trinidad & Tobago from oil to gas dates from a detailed timetable drawn up by Trevor Boopsingh in the late 1970s and an investment programme endorsed by the World Bank in 1980-84.

Oil production began in 1908, reached a peak at around 240,000 barrels per day before entering a slow

persistent decline to the level of 80,000 barrels per day today.

Gas production was the newcomer on the block from the late-1970s. By 1982, seismic and exploratory drilling indicated that there was much more gas to be found. Downstream industries sprang up – methanol, urea, fertilisers, and LNG. By 2000 Trinidad had emerged as the leading global exporter of methanol and ammonia and its first Atlantic LNG train had a capacity of 3.3 million tons pa.

By 1996 natural gas production had already exceeded oil production (based on energy equivalents). By 2001 gas income surpassed oil revenue. There was plenty of gas to maintain momentum. A second LNG export train was added in 2002 and a third in 2003.

In 2005, Methanol Holdings (Trinidad) Ltd. commenced the construction of the world's largest methanol plant at an estimated cost of US \$450 million. Methanex of Canada then increased the methanol export capacity of Trinidad & Tobago to 6.5 million tonnes.

Since then the export of gas to the United States was adversely affected by a flattening market demand and much lower gas prices. The rapid development of U.S. shales has more recently provided strong competition to higher-cost imported LNG.

Today there is a new phase of optimism in T & T oil and gas. Onshore, the depletion of shallow resources looks inevitable but a new wave of drilling for deeper deposits is widely expected to produce some favourable results. Offshore, attention is focussed on a programme of seven wells in deep water.



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Employers are invited to use this database, at no cost, to advertise their graduate, senior graduate or seasoned professional positions to the IAEE membership and visitors to the IAEE website seeking employment assistance.

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Further, IAEE has also launched a Scholarship Database, open at no cost to different grants and scholarship providers in Energy Economics and related fields. This is available at <http://www.iaee.org/en/students/List-Scholarships.aspx>

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