# NGC: riding the second wave

**INTERVIEW WITH S. ANDREW MC INTOSH**

PRESIDENT, THE NATIONAL GAS COMPANY OF TRINIDAD AND TOBAGO LIMITED (NGC)

S. ANDREW MC INTOSH was appointed as President of NGC in March of this year. He has had 31 years' management and engineering experience in the oil and gas industry, 13 of which have been in the capacity of Vice President. He has had a distinguished career working for such companies as: the Trinidad and Tobago Oil Company, Trinidad Marine Limited, Petrotrin, Cliffs and Associates Ltd., Atlantic LNG, bpTT and Lurgi Metallurgie GmbH.

**You have assumed the Presidency of NGC at a challenging period in the company's history. What were your priorities at the outset and how do you intend to return the company to the stellar growth rates of the past decade?**

NGC's operations remain profitable and we are certainly on a growth path. Obviously it's upsetting that the profits are not as high as they were last year when, of course, we were the beneficiary of very high prices in the first half of the year in the ammonia and methanol markets. As you may know, somewhere around 80 per cent of NGC's revenues are directly indexed to the commodity prices of ammonia and methanol. So, as those prices go, so do the fortunes of the NGC. We saw volatility in the market that started in the middle of June last year and continued into the first quarter of this year and most of the second quarter before finally bottoming out and going up again. As a result our profits have declined and then come back up.

Secondly, you need to look at NGC's growth over the years since its inception in 1975. We started the company with around US$12,000 in capital and have grown that in terms of assets to probably close to US$4 billion today. Not only that but in 1975 we had just one 16-inch pipeline which went to Port of Spain – now there are over 800km of offshore and onshore pipelines: the liquefied natural gas (LNG) business has grown phenomenally, particularly in the past 10 years and the gas-based industries in Point Lisas have exploded. So, we have had a long period of sustained expansion and for at least the next two years NGC will not be in as rapid an expansion mode as before. This period of less physical growth gives us a unique opportunity to look closely at some of the other aspects of the organisation, for example the people, the processes, the way we manage performance – those are the key aspects of my presidency and will largely drive the agenda going forward.

**The company was originally set up to facilitate the creation of a new gas-based industrial sector based around the Point Lisas industrial estate. Now that Point Lisas is 'mature, what role do you see the company playing in the 'second wave' of gas development envisioned by the government?**

That's a very good question. There are a couple of parts to it, but first a bit of history. If you go back to when NGC was established in 1975, its main purpose then was the transition and distribution of natural gas, and the National Energy Corporation (NEC) was the entity that at that time was charged with executing all the gas-based developmental strategy. When NEC was merged with NGC by the government in 1992, NGC was accordingly mandated to be the prime mover in gas-based development. So between 1992 and 2004 NGC was at the very centre of the entire industrialisation project. Since 2004, NEC has again been demerged and is now again a subsidiary of NGC and so the business development function has again reverted to NEC.

When people say that Point Lisas is mature, what they really mean is that the estate has run out of physical space in the original area that was designated for the first wave of development. Since then, NEC has developed other estates: it has developed Union Estate, it has developed Point Lisas South which is a new area, and it has developed Labidco, along with other significant infrastructure. So in a sense, the Point Lisas model continues to expand beyond its original boundary.

The second point is that NGC continues to be at the centre of ensuring that our gas customers are supplied with a reliable level. Our pipeline system is nothing less than 100 per cent reliable, and of the 4 billion cubic feet (bcf) of gas that is produced in Trinidad and Tobago on a daily basis, 60 per cent goes to the LNG facility and 40 per cent or about 1.6 bcf is re-managed into the estate at Point Lisas. So, obviously our focus in on ensuring that reliability is maintained.

There's also a third aspect of our involvement in the process going forward, which is that given the recent Rider Scott Report [on Trinidad and Tobago's reserves position], it is absolutely imperative that NGC has a voice at the table in terms of making an input or recommendation to the Natural Gas Export Taskforce, under whose umbrella the allocation of gas resources comes as a recommendation to the government in order for them to decide which gas should be allocated to which projects. NEC has a slew of proposals on the table from many different organisations, but we have to be judicious in terms of choosing where we commit those resources in order to get the best return for the country.

Lastly, there is the possibility of an expansion of the LNG industry. This could take the form of a new train or it could be a debottlenecking project, but whatever form it takes NGC would be in a position to invest in it. And at the same time, Petro-Canada (now Suncor Energy) is seeking to divest its assets in Trinidad and Tobago and this is also something that NGC sees as an investment opportunity. So, there are many different forms in which NGC would continue to make a contribution to the next wave of gas development.

**Are you worried that the country's proven gas reserves will dry up? What bearing does the current scenario have on the future model for downstream development?**

My own view is that there significant areas of Trinidad that remain unexplored and in particular in deep frontier so one has to be careful about saying that the gas reserves are limited. It is true that we have on the books under the so-called 3 Ps (Proven, Probable and Possible) a number which is the proven reserves but there are whole areas out there to be explored and additional gas discovered to be discovered, so I'm looking at it optimistically. The country, I think, needs to be drilling at least between six and nine exploration wells a year which we haven't been doing, hence the drop in the reserves.

At NGC we have seen our demand decrease, especially when we had the drop in prices here, our demand fell off and we were faced with an over-supply of gas over a long period. And, because there were certain projects that were supposed to come on stream as of July this year, like Alutrint and Essar Steel, we have contracted gas where the usage has not materialised. So we do currently have an excess of gas, but that is something that will balance itself out in the next three to four years.

In the meantime, the government is reviewing the modified fiscal regime for encouraging developers to drill and explore for oil and gas. Hopefully, they will come up with a plan that would incentivise the gas suppliers to do the necessary exploration and bring some new gas to market.

At the same time there is also a decision that will have to be made soon in terms of which projects will be identified and at what amounts of gas going forward, because depending on which of these projects are chosen, that slate will definitely spur some renewed exploration, particularly if incentives grow in parallel.

**Looking further afield, do you see opportunities for NGC arising from Trinidad and Tobago's programme of assitance to African countries wishing to develop their energy sectors?**

Well there are some interesting opportunities that beckon. Ghana, for example, discovered its Jubilee field in 2007, and right now they are building an FPSO (Floating Production Storage and Offloading vessel) that will shortly be deployed to receive the oil and gas as it is produced and send it ashore. The project should start off in early 2011, producing somewhere in the region of 120,000 barrels of oil per day and about 120 million standard cubic feet (scf) of gas. Obviously there will need to be infrastructure in place to receive this gas from offshore and bring it into a gas processing facility, then extract the butanes, the propanes, much as we do here at Phoenix Park for example, and then send the residue gas to their power plants.

So, there's a great opportunity in Ghana for companies like NGC/Phoenix Park, whereby we bring to the table an amalgam of pipeline and infrastructure design and operation, and they bring liquefaction, gas processing operations, design installation and so on.

Of course, there would be many hurdles to overcome in terms of getting approval from our board and authorisation from the government but I'm just saying that these are opportunities that beckon, how we treat with them will be the subject of our own internal governance.

**As someone who has extensive experience in both upstream and downstream sectors, where do you see the potential for NGC to expand its operations in either direction, and how do you see the structure and the remit of the company evolving in the longer term?**

Well, if you look at the NGC spread of revenues, we do have an investment portfolio which includes both upstream and downstream investments. For example, we are partnered with Petrotrin and Repsol in the Teak, Samaan and Poui (TSP) fields in the upstream development for the operation. That brings its own challenges, not the least of which is the antiquity of the equipment that exists on the Teak and Poui platforms, which we are currently wrestling with.

As far as pure upstream is concerned, if we had the

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Point Lisas Industrial Estate: the epicentre of Trinidad and Tobago's 'first wave' of gas-based industrial development

*Photograph courtesy of MEEI*

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opportunity would we want to invest with other joint venture partners and buy into acreage for development? Again, this would be a new era for NGC – not one I would reject out of hand but definitely one that we would have to look at in light of our other commitments.

On the downstream side, I certainly think that our investment in Atlantic LNG – where we hold a ten per cent equity in Train 1 and 11.1 per cent in Train 4 – was a very astute one on the part of my predecessor and his team. But the opportunity clearly will beckon, whether it is a Train 5 or a debottlenecking situation, for us to invest in the further expansion of that particular industry. That is something that we would definitely consider and seek perhaps to strengthen our position as a shareholder in the LNG business. So, that's another example of where I think we need to go.

**We talked a little bit earlier about NGC's contract arrangements. Given the current situation with the over-supply of gas and the delinking of gas prices from those of oil, do you see the need for new arrangements to be put in place in order to maintain the balance between the interests of producers and consumers?**

Not really, and I'll tell you why. All our producers, as you know, are linked directly to the ammonia and methanol market, but the pricing structure we have is not really influenced by the price of gas per se – it's more to do with the demand and supply of ammonia and methanol.

So, for example, when you look at the historical spread, the arbitrage between oil and gas has generally been about six to one. Then we saw in the last month here that grew to an astronomically high ratio of almost 25 to one. We don't expect that that will continue in the long term but even with that spread, we were influenced more or less by what happened in the world market with the demand for ammonia and methanol. So that's the first thing, to link those two. Certainly, these fluctuations in the gas price will affect our profits coming back from our investments in the LNG market. All over the world the energy prices are under pressure, although right now, with winter approaching there's a much needed lift in gas prices. The United States has very high storage of gas, they have filled about 3.8 tcf, and they have another 40 million tonnes of LNG coming out from Qatar in the near future, so there's going to be increased pressure on the gas entering the US market. This has been our prime market previously – Trinidad and Tobago used to supply as much as 75 per cent of the LNG into the US and we have seen over time that we have had to reduce our delivery to that market in order to get better prices, particularly in the European market. Right now, I think that percentage is closer to 40 per cent.

Do we need to look at a new formula? I think it's solid, it's very sound, so no, I don't think we need to tinker with it. We may have to be very deliberate in how we extend contracts as they come to an end because most producers of ammonia and methanol would want to see their contracts extended by fifteen or twenty years. I don't know that that is something that NGC would want to seriously get into.

**What is your own view of the likely duration of the current low price scenario and when, if ever, do you expect prices to reach the giddy heights of mid-2008 again?**

Well I don't think in the near term that you're going to see those prices, although I think that the market will certainly get this buffer now because of the winter. I think for the next couple of years we will see gas somewhere in the region of US$6.00-6.50. I don't see it going back up to the very high prices we saw last year in the foreseeable future but I do see a continuum, and a further stability – not the seesaw fluctuations we've seen early this year. Just a few months ago we were down to US$2.45 or something like that and I don't see us quite getting down to that trough again, but I think it will be oscillating around the US$6.00-6.50 mark at the high end and probably around the US$3.50 mark, at the low end going forward.

**What, if any, silver linings do you see for NGC in the current scenario?**

Well, I see lots of silver linings. I think first of all as far as the business outlook is concerned, we have a product that people need, so therefore we will always in a position where we have something to sell, which is a great place to be. If you are in a business where people don't want your commodity you've got to close up shop, but we are in a commodity that is going be in continuous demand and so we'll be there, ready to market that commodity.

The good news for us is that the government has identified no cessation in growth of the oil and gas industry, and particularly for the gas industry. I think it gives us a great opportunity now with the challenges and the open competition in the markets in the world, to really refine our processes, enhance the skills of our people and generally re-tool the organisation to cope with the challenges that the current environment presents, so I think that for us the silver lining is all of the above. I am very optimistic that more gas will be found in Trinidad and Tobago and that will fuel a new generation of gas based industrialisation, perhaps taking us into more downstream activities, away from the traditional ammonia and methanol plants that we have seen. Perhaps it will also enable the expansion of the LNG industry. So, there's a lot to look forward to. I certainly hope that it happens while I'm President of NGC.