
40TH
ANNIVERSARY
THE NATIONAL GAS COMPANY
OF TRINIDAD AND TOBAGO LIMITED

40 KEY NATURAL GAS FACTS OF

TRINIDAD AND TOBAGO 1975-2015

THE NATIONAL GAS COMPANY
OF TRINIDAD AND TOBAGO LIMITED

40TH ANNIVERSARY

PRESIDENT'S MESSAGE

A Tribute to NGC's 40th Anniversary – 40 Key Natural Gas Facts

Natural gas is the lifeblood of the Trinidad and Tobago economy and, by extension, our people's way of life. The impressive structures and lights of the Point Lisas industrial plants, as seen across the Gulf of Paria from Port of Spain and San Fernando, in many respects represent the extent of the average citizen's knowledge of the natural gas-based energy sector.

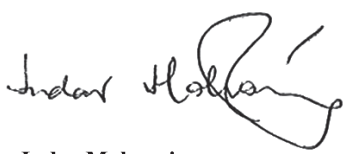
NGC's 40th anniversary commemorative fact book is an invitation, therefore, to journey with us through the history of an industry that is indispensable to our national development. Like many of my generation, I was only a teenager contemplating the future with expectation and hope at the time of NGC's inception. Indeed, for many of us, the promise of natural gas and the benefits to be derived from its capture and use were very exciting and futuristic. It has been a privilege to witness the realisation of that dream.

The energy sector has grown and prospered in tandem with our society. Over the past 40 years, natural gas has moved from being a waste product of crude oil exploration that was routinely flared, to its current position as an economic mainstay. As a result, our status as an energy producer has turned the spotlight of the global stage onto our small nation, garnering us admiration and respect for our ability to do so much with so little.

From a small company with big dreams, we have grown into our role as one of the largest energy companies in the Caribbean and Latin America in terms of assets. Since 2005, NGC has enjoyed international investment-grade status, which has afforded us access to money markets on reasonable terms. This is an expression of the trust and confidence placed in us by the international banking fraternity, a trust that has been earned through visionary foresight and prudent expansion.

After 40 years of helping to shape the energy landscape, we stand on the threshold of an even greater future defined by indigenous know-how and global reach. We are committed to creating value from our natural resource through best in class performance and strategic international partnerships. We stand confident on our strong history of achievement, ready to answer whatever challenges or opportunities the future may present.

On this happy occasion, I take the opportunity to commend all nationals who have contributed to NGC's legacy of excellence over the past 40 years – our Ruby Anniversary. Congratulations, NGC and Trinidad and Tobago, on a job well done. We hope that this publication will be a cherished memento that will find a place in your homes as our symbol of achievement.



Indar Maharaj
President, NGC

THE NATIONAL GAS COMPANY
OF TRINIDAD AND TOBAGO LIMITED

40TH ANNIVERSARY

For 40 years, The National Gas Company of Trinidad and Tobago Limited (NGC) has been the driving force in the development of Trinidad and Tobago's natural gas-based energy sector. Since its inception on August 22, 1975, the Company has been at the centre of the economy with the responsibility of building a natural gas sector in the country. Over time, NGC's role has deepened and widened to include, not just the marketing of natural gas to gas-based industrial and commercial consumers, but, also, the acquisition of strategic assets throughout the local gas value chain.

The history of NGC has been one of notable achievements, closely mirroring the economic growth of Trinidad and Tobago as a young nation and global energy producer and exporter of petroleum based products. The founding of NGC as an expression of a nascent nation's ambition to build a gas-based energy sector, to that of world leadership in petrochemical production and LNG export, is testimony to the great trust that was placed in the Company to play its role in the progress of the nation as a whole.

The occasion of our 40th anniversary is appropriate to commemorate NGC's successes and contribution to national development. It is therefore hoped that this publication of 40 Key Natural Gas Facts will be seen in the spirit of one of the nation's key watch words of productivity. The Gas Facts is therefore a snapshot of NGC's past and current states, basking in four decades of hard work and progress and recorded now for historical posterity.

THE NATIONAL GAS COMPANY
OF TRINIDAD AND TOBAGO LIMITED

CELEBRATING 40 YEARS OF NATURAL GAS

IN TRINIDAD AND TOBAGO | 1975 - 2015

OUR RUBY ANNIVERSARY

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The Natural Gas Story: Preamble

For the first half of the 20th century, natural gas was often considered a by-product in crude oil exploration activities and usually flared or vented. When of use, it was utilised for the pumping of crude to tank farms and for instrumentation, or used as cooking fuel in a few oil communities in south Trinidad. Following World War II, there was the drive to promote electricity generation as a means of stimulating industrialisation and economic growth.

The colonial authorities therefore made natural gas available from land reservoirs as a low cost and environment-friendly fuel was on hand for the Trinidad and Tobago Electricity Commission's (T&TEC) Penal Station in 1953. This development gave natural gas its first taste of commercialisation; it was the first time that a contract for the supply of natural gas to a public sector electricity company was executed. Later, in 1958, natural gas was introduced as feedstock to produce ammonia at FedChem in Savonetta.

In the 1960s, as the demand for natural gas increased; various sized pipelines were constructed by the petroleum majors operating in the country. A North-South Gas Transmission Line was also established by T&TEC's Gas Transmission Department in 1963.

With the depletion of natural gas reservoirs on land, exploration activities were taken offshore. In 1968, a natural gas province of significant potential was discovered off the south-east coast by AMOCO Trinidad Oil Company. This provided the state with the opportunity to diversify the country's petroleum portfolio to include natural gas utilisation for economic development.

The Rt. Hon. Dr. Eric E. Williams,
first Prime Minister of the Republic of Trinidad and Tobago: 1961-1981

The Rt. Hon., Dr. Eric E. Williams, the country's first Prime Minister, summed up the situation in his 1970 Budget Speech:

> ***"The decade of the 1970s begins most propitiously with the prospects of a high level of offshore production of natural gas and crude oil production. There are few developing countries which begin the decade with such assets. It is for us to utilise these assets for the national benefit so that by the end of the decade we can look upon an era of unprecedented economic and social development."***

THE TRIGGER FOR NATURAL GAS-BASED INDUSTRIALISATION

NGC's Articles of Association state that the Company was formed to be at the centre of the local natural gas industry. In the 1975 Budget Speech, the Prime Minister, the Rt. Hon. Eric E. Williams, said that the government or a designated agency would be the sole seller of natural gas, using this as a 'trigger' for industrialisation. On March 6, 1975, Cabinet agreed on the formation of such an entity, and by August 7, it announced that the Company's name would be 'The National Gas Company of Trinidad and Tobago Limited'.

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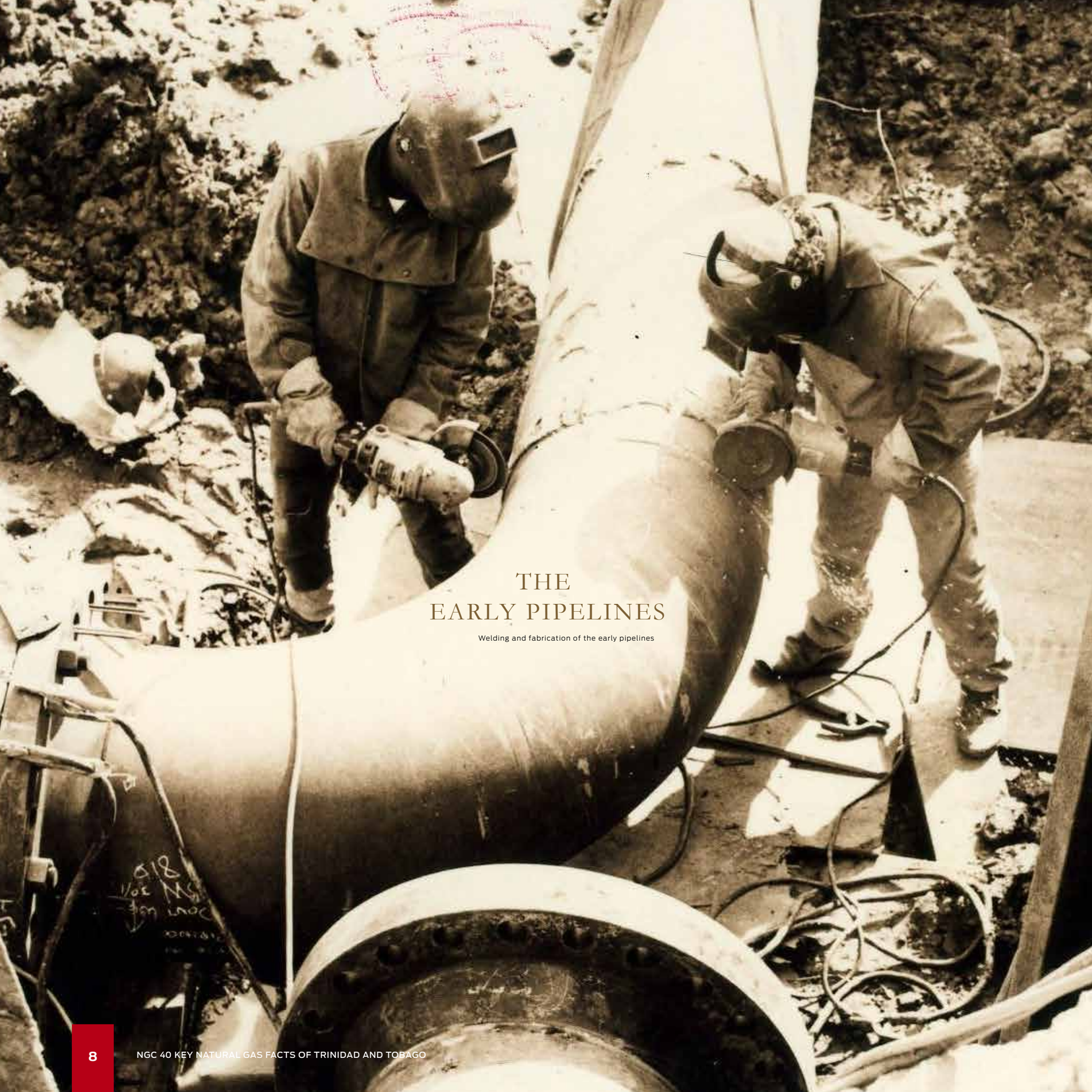


THE EARLY PIPELINES

Welding and fabrication of the early pipelines

1

The early pipelines

In the 1940s, petroleum operators laid various small diameter pipelines to transport natural gas to the fields, refineries and adjoining housing camps and communities. Within a decade, distribution lines were built to the T&TEC Penal Power Plant, Trinidad Cement in Claxton Bay and FedChem in Savonetta. In 1963, the T&TEC Power Plant in Port of Spain was converted to natural gas, thereby requiring the long-distance transport of larger amounts of natural gas than ever before. This required that T&TEC lay a 16-inch-diameter line from Penal to Port of Spain. The availability of natural gas from this line led to increasing demand for natural gas by small and medium-sized enterprises located along the pipeline route. The result was the connection of distribution lines of varying sizes to those desirous of natural gas for use in their businesses.

The T&TEC Power Plant in Penal, circa 1960s


Pipeline in construction

As natural gas reservoirs in the Penal area became depleted and as the demand for electricity grew, the Government entered into a contract with AMOCO for a supply of natural gas from off the south-east coast. This triggered the birth of a new era in the local petroleum industry where natural gas, considered a by-product of oil exploration activities, would find its place in the modernisation of Trinidad and Tobago.

The use of natural gas in Trinidad and Tobago and the existence of pipelines to transport the natural gas therefore predated the establishment of an industrial estate at Point Lisas and The National Gas Company of Trinidad and Tobago Limited (NGC).

2

The Point Lisas Industrial Estate

In January 1975, the Government of Trinidad and Tobago convened a consultation, out of which the document 'The Best Uses of our Petroleum Resources' was developed. This informed national energy policy and identified various uses of natural gas and the direction to be taken in the development of projects. A Coordinating Task Force (CTF) was appointed to examine the feasibility of the proposed projects and to oversee the development of a natural gas-based industrial sector, located on former sugar estate lands at Point Lisas that had been identified by the South Chamber of Business and Commerce.

By 1979, the Fertrin and Tringen 1 ammonia plants had been built, the iron and steel plant was nearing completion, and marine and site infrastructure had been developed at the Port of Point Lisas The Estate is the heart of Trinidad and Tobago's natural gas-based sector.

With easy access to natural gas infrastructure, electricity/power generation and a deep water harbour, Point Lisas is today the home of some of the world's leading producers of ammonia, urea, methanol and iron and steel.

PLIPDECO, the landlord of the estate, provides roads and drainage, whilst individual service companies provide the various amenities.

Left to right: The Hon. Overand Padmore, Minister in the Ministry of Finance; The Rt. Hon. Dr. Eric E. Williams (centre), first Prime Minister of Trinidad and Tobago takes a guided tour of T&TEC Point Lisas site and is escorted by Dr. Kenneth S. Julien

Minister of Petroleum and Mines, the Hon. Errol Mahabir, opens the Trans-Island Pipeline at Galeota in 1977 to connect to the Point Lisas Industrial Estate

NEC Tugs at the container port at Point Lisas

24 JAN 1985

MINISTER SIGNS AGREEMENT

MINISTER of State Enterprises Ronald Williams signed the agreement for the expansion of Tringen II yesterday afternoon at the Port of Spain offices of the National Gas Company, Frederick Street. The agreement lays principal elements of the agreement between the Government of Trinidad and Tobago and W.R. Grace. It also calls for simultaneous signing of agreements between Tringen and Trinidad and Tobago Electricity Commission, Water and Sewerage Authority, National Gas Company and the Port of Point Lisas.

In picture from left: Sharon Christopher, Senior State Counsel, Ministry of Legal Affairs; Ronald Williams, Minister of State Enterprises; L.L. Jaquier, Executive Vice President of W.R. Grace, and Jack Duggan, Assistant Secretary of W.R. Grace.

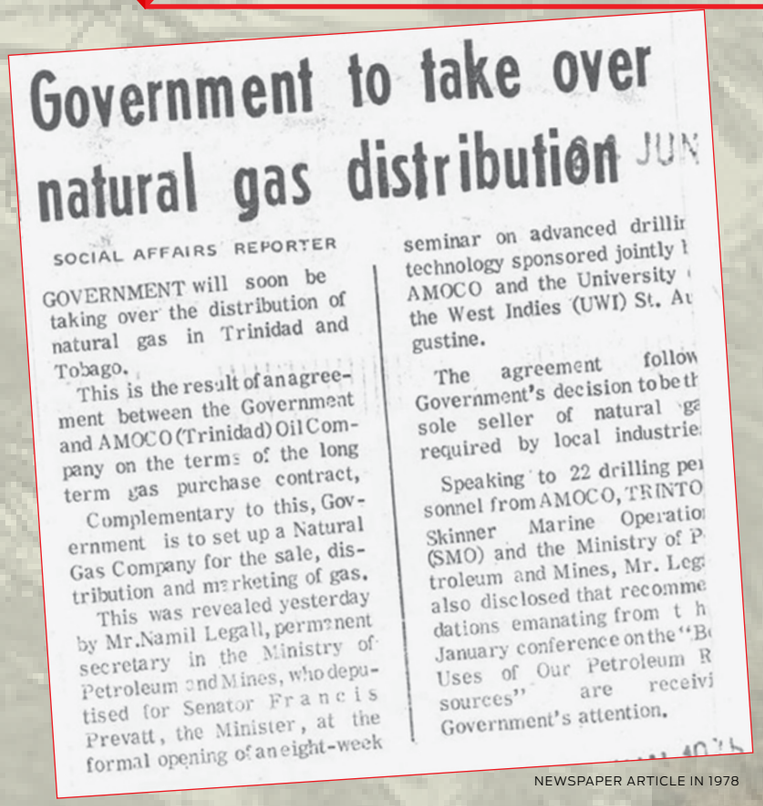
At left: The Hon. George Chambers, Prime Minister of Trinidad and Tobago at a sod turning ceremony for petrochemical plant.

Signing of Methanol Agreement at Point lisas. At centre: Hon Errol Mahabir, Minister of Petroleum and Miners and to his right, Dr Kenneth S. Julien, Chairman of PLIPDECO and Dean of the Engineering School at UWI

3

NGC: new kid on the block

By March 1975, the Cabinet had identified a designated agency, to be called The National Gas Company of Trinidad and Tobago Limited (NGC), "for the purpose of purchasing and selling natural gas in the country to industrial and commercial users." The Ministry of Petroleum and Mines' 1975 Annual Report noted that NGC was established on August 22, 1975 "with exclusive rights to transport and sell natural gas to domestic consumers through an integrated pipeline system."



Government to take over natural gas distribution

JUN

SOCIAL AFFAIRS REPORTER

GOVERNMENT will soon be taking over the distribution of natural gas in Trinidad and Tobago.

This is the result of an agreement between the Government and AMOCO (Trinidad) Oil Company on the terms of the long term gas purchase contract.

Complementary to this, Government is to set up a Natural Gas Company for the sale, distribution and marketing of gas.

This was revealed yesterday by Mr. Namil Legall, permanent secretary in the Ministry of Petroleum and Mines, who deputised for Senator Francis Prevatt, the Minister, at the formal opening of an eight-week seminar on advanced drilli technology sponsored jointly AMOCO and the University the West Indies (UWI) St. A gustine.

The agreement follow Government's decision to be th sole seller of natural ga required by local industrie

Speaking to 22 drilling per sonnel from AMOCO, TRINTO Skinner Marine Operatio (SMO) and the Ministry of P troleum and Mines, Mr. Leg also disclosed that recomme dations emanating from t h January conference on the "B Uses of Our Petroleum R sources" are receivi Government's attention.

NEWSPAPER ARTICLE IN 1978

SIGNING OF GAS CONTRACT WITH ATOC IN 1976

AT the signing ceremony yesterday (left to right) Mr. Charles Carr, president and general manager of AMOCO; Mr. Mahabir, Mr. Bernard Primus, chairman of National Gas Company; Mr. Knolly Ahloy, chief executive officer, National Gas Company. Mr. Primus and Mr. Carr signed the agreement.

20 MAR 1976

AMOCO, Govt firm sign pact for supply of natural gas

TRINIDAD'S booming natural gas development programme went past the take-off point yesterday with the signing of an agreement between the wholly government-owned National Gas Company and AMOCO Trinidad Oil Company.

The agreement is for the supply of natural gas through December 31, 1999, to meet projected national development needs.

AMOCO will begin to deliver to the National Gas Company from about March 1, 1977, some 46 million

More natural gas will be available from AMOCO when further energy-based projects come on stream. These include industries related to the manufacture of iron and steel, fertilisers, aluminium smelting, petrochemicals, furfural,

$2,000,000,000 (TT) will have to be spent to develop and produce the full quantity of gas required to meet all demands.

The Minister of Petroleum and Mines, Mr. Errol Mahabir, who witnessed the signing, em-

flared by Amoco. Because of the contract for sale of natural gas to the Electricity Commission, this fell to 75 per cent last year.

It is anticipated that the level of natural gas being flared by AMOCO will drop to 40 per cent in 1978 and it might be possible to reduce this figure even further with the establishment of additional industries using gas as raw material or as a source of energy.

It was pointed out yesterday that the National Gas Company will be the

Welding and fabrication of the early pipelines

NGC's Head Office,
Point Lisas Industrial Estate

The Hon. A.N.R. Robinson, Prime Minister of Trinidad and Tobago cuts the ribbon at the official opening of NGC's Administration Building, Point Lisas. He is flanked by NGC's Chairman, Cecil Anthony Beaubrun and NGC's Managing Director, Malcolm A. Jones

L to R: Grantley Wiltshire, NGC's Manager, Legal and Commercial; Malcolm A. Jones, NGC's Managing Director; Len Darsow, AMOCO Trinidad's President; and Robert Riley, AMOCO's Attorney, Legal and Government Affairs, signing of natural gas agreement.

Early pipeline construction in progress

4

Building a pipeline network

In 1977-78, a major 97 km/24-inch-diameter marine pipeline with a capacity of 400 million standard cubic feet per day (MMscf/d), was installed from AMOCO's offshore Teak field to Point Galeota. Two landlines, one from Beachfield to Picton and a second from Picton to Phoenix Park were also installed.

In 1982-83, a 30-inch-diameter marine pipeline with a capacity of 600 MMscf/d, was built from the Cassia offshore field to Phoenix Park, via Beachfield and Rio Claro. This system added 123 kilometres to the pipeline network and increased NGC's transmission capacity to 1,000 MMscf/d.

These two major pipeline systems served to bring natural gas from offshore to FedChem, Tringen 1, ISCOTT, FERTRIN, Petrotrin, T&TEC, and the urea and methanol plants located on the Point Lisas Industrial Estate.

Expanding the pipeline infrastructure – including pipelines and other facilities – to transport natural gas

5

National Energy Corporation is established

On September 7, 1979, National Energy Corporation of Trinidad and Tobago Limited (NEC) was established to "guide the development and management of oil, gas and other mineral resources of Trinidad and Tobago and to assist the Government in the formulation of energy and industrial policy and strategy" (NEC, 1980 Annual Report).

NEC, (now rebranded National Energy), was assigned the Coordinating Task Force's (CTF's) project development activities as the latter's responsibilities were wound up. NEC thus became, along with NGC, a key institution of the state for the ongoing development of the natural gas industry to be based at the world-class, 860-hectare Point Lisas Industrial Estate.

Continuing the work of CTF: NEC engages visiting dignataries as its offices.

Dr. Julien (right) speaking to the assembled members of the North, Central and South divisions of the Trinidad and Tobago Chamber of Industry and Commerce at the NEC Information Centre.

6

The Flare Gas Conservation Project

The Flare Gas Conservation Project was initiated 25 years before the world considered the venting or flaring of natural gas a matter of priority, not just in terms of economic losses, but also in terms of the environment. The 1969-1973 five-year plan taken to Parliament advised that, over the previous five years, more than 50% of the associated gas produced in the country had been flared. By 1979, NGC was mandated to put in place the infrastructure to capture, compress and bring to shore the natural gas which was being wasted. The two compression platforms commissioned by NGC in the Teak and Poui fields have been a resounding success from economic, social and environmental perspectives.

The compressed natural gas has been NGC's cheapest source of natural gas, allowing the government to keep the cost of electricity relatively low. Over the project's lifetime, just under one trillion cubic feet of natural gas, having an estimated value of US$3 billion, has been captured and utilised for the benefit of the nation.

Monitoring activities on the Compression Deck

Capture, compress and bring to shore: One of the two compression platforms at the Teak and Poui fields, commissioned by NGC in 1982

7

Liquids in the natural gas: creation of PPGPL

In the late 1980s, NEC identified that dispersed liquids in the natural gas were causing failure of the petrochemical plants' catalysts, thereby preventing the plants from operating at optimal efficiency. The task of removing the liquids fell to NGC. In 1989, NGC received government's approval to build and operate a natural gas processing plant through a joint venture with ConocoPhillips and Pan West. NGC's initial shareholding was 49%. This was the genesis of Phoenix Park Gas Processors Limited (PPGPL), incorporated in May 1989 and made operational in June 1991.

The plant started off with a processing capacity of 650 MMscf/d of natural gas and a liquids output of 13,000 barrels per day. After three expansions, the facility now has three processing plants, with a combined capacity of 1.95 billion standard cubic feet per day (Bscf/d) and a liquids output of 70,000 barrels. It is one of the largest natural gas processing facilities in the Americas.

Opening ceremony for PPGPL: At podium is The Hon. Herbert Atwell, Minister of Energy. At head table L to R: Malcolm A. Jones, NGC's Managing Director; Cecil Anthony Beaubrun, NGC/ PPGPL Chairman

PPGPL today: The gas processing facilities in Savonetta

8

Utilisation of solar technology offshore

In the mid-80s, contrary to earlier projections, more than 50 MMscf/d of natural gas was still being flared off the south-east coast of Trinidad. As the NGC Teak compression platform had space to accommodate additional compressors, three solar turbine-driven compressors, with a combined capacity of 33 MMscf/d, were installed in early 1988. As a result, production of compressed natural gas, obtained at a much lower unit cost than purchased natural gas, rose to about 20% of the total natural gas produced at the time.

Solar-operated compressors installed by barge in 1988 at NGC's Teak platform

PRIME MOVER IN NATURAL GAS-BASED DEVELOPMENT

1992 was a landmark year. NGC's mandate was expanded and its new role would be "prime mover in gas-based development," meaning it would be responsible for the development and evaluation of new energy projects, as well as for investment facilitation and promotion of Trinidad and Tobago as a premier natural gas-based investment location. To facilitate the speedy implementation of this mandate, NGC acquired NEC's assets, along with its knowledge of business development, project management and infrastructure development.

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Expansion of Savonetta Piers: upgrade of Port Point Lisas

The Port Point Lisas was developed in the 1970s, alongside estate development and plant construction works at the Point Lisas Industrial Estate. Two facilities were built in that period – the ISCOTT Dock, dedicated to the import and export needs of the iron and steel plant, and the Savonetta Pier, one of the few multi-user berthing facilities of its kind in the world, used mainly to load methanol, ammonia and urea.

While these facilities served the estate's needs up to the start of the 1990s, new projects being established at Point Lisas and the expansion of the estate required the provision of additional facilities. Today, the port has four multi-user petrochemical piers, two dedicated Natural Gas Liquids (NGL) piers and a steel terminal, serving over 20 worldscale customers and handling more than 18 million tonnes of product per year.

The Port Point Lisas also has a multipurpose cargo facility operated by PLIPDECO, with six commercial berths which handle a wide range of traffic, including dry and liquid bulks, containers, general cargo and break bulk.

Aerial of Savonetta Piers Nos. I and II

At the Project Signing Agreement (L to R): Minister of Energy, The Hon. Barry Barnes; Robin Crone, President of George Wimpey; Malcolm A. Jones, Managing Director, NGC and Maria Thorne, Head, Legal Affairs, NGC

L-R: Prakash Saith, President of NEC; The Hon. Basdeo Panday, Prime Minister of Trinidad and Tobago; The Hon. Lindsey Gillette, Minister of Energy; and, Kenneth Birchwood, NGC/NEC Board Member on Savonetta Pier No. IV

Aerial of Port Point Lisas - Savonetta Piers Nos. III and IV in background

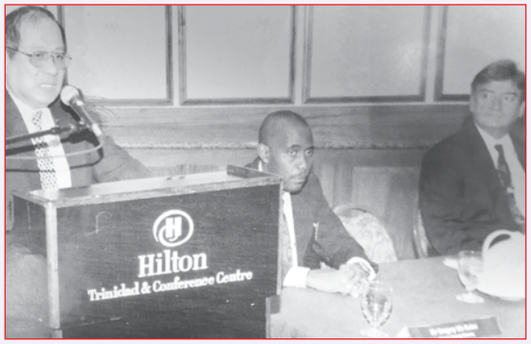
10

Embracing new technologies

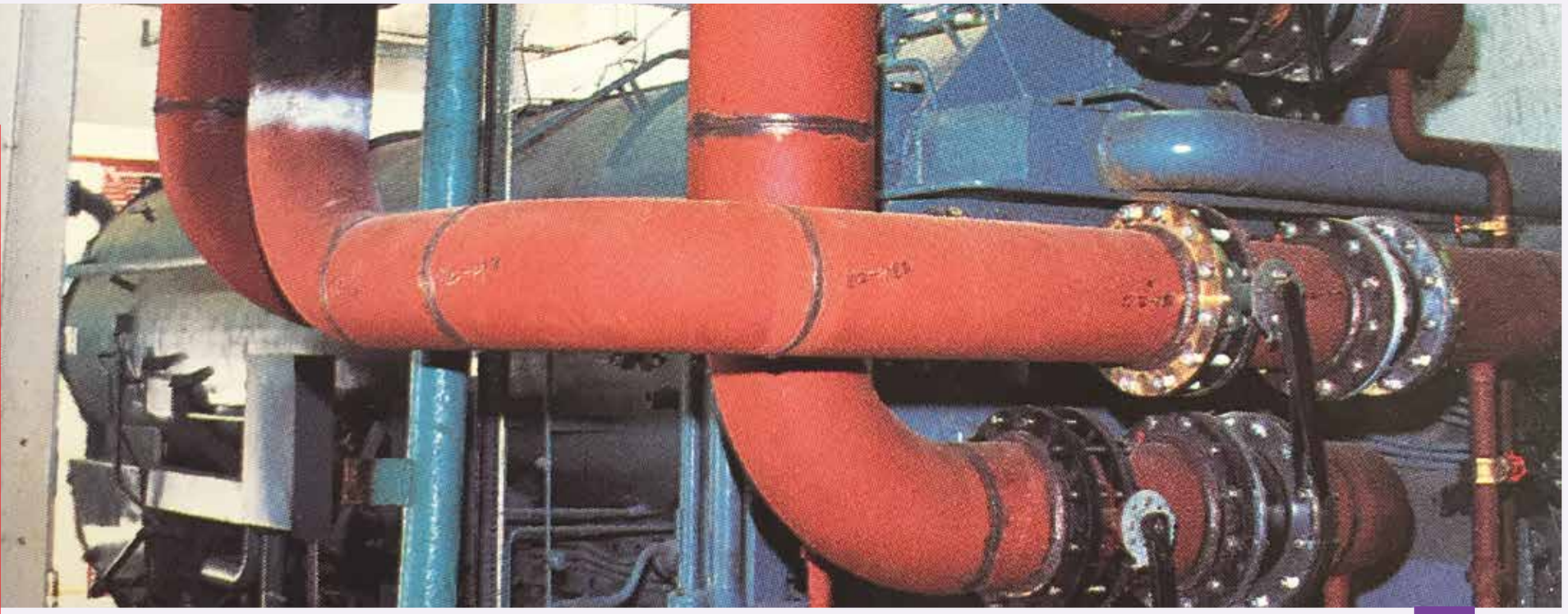
Gas Cooling

In 1997, a large commercial centre became the first business in Trinidad and Tobago to use natural gas-fired air-conditioning. In 1999, NGC also installed natural gas-fired air-conditioning equipment at its head office, demonstrating the Company's confidence in this emerging air-conditioning technology, which is more environment-friendly, cost-effective and fuel-efficient than conventional systems. The success of these two pioneering efforts encouraged others to install gas cooling systems, which led NGC to expand its distribution network to Cocorite, in Trinidad's north-western peninsula. In 1998, NGC won the Rising Star award for natural gas cooling from the American Gas Cooling Centre.

At the podium: Frank Look Kin, NGC President, introducing gas cooling technology to business forum



Raymond Franco, Gas Market Analyst, Strategic Planning; Gregory Mc Guire, Manager, Strategic Planning; and Avery Ammon, A/C Technician, NGC, received the Rising Star Award from the American Gas Cooling Centre on behalf of NGC



Natural gas-fired air-conditioning equipment

Metallurgy

Not afraid to take risks in growing the market, in the 1990s NGC attracted two companies to pioneer the use of new technologies. NUCOR Corporation, a leading US steel producer, was attracted to the country's success in the establishment and operation of natural gas-intensive projects. In light of this, NUCOR built an iron carbide plant, the first attempt to do so on a commercial basis. The second company, Cliffs & Associates, carried out the first commercial implementation of the Lurgi Circored® technology to make hot briquetted iron.

NGC attracted two companies to pioneer the development of Metallurgy in the country. The ground breaking NUCOR ceremony in June 1993.

Aerial shot of the hot briquetted iron plant at the Point Lisas Industrial Estate

NUCOR's iron carbide plant

Polyethylene piping

NGC has not hesitated to use the new technology of polyethylene piping in gas distribution. While new to the local energy industry, the use of polyethylene piping has facilitated the expansion of the distribution network and has reduced the cost and time required to lay distribution lines. The Biljah Road Industrial Estate is supplied with natural gas by polyethylene pipes, showcasing this material's suitability as a pipeline material.

Attractive gas distribution material alternative introduced to local energy industry – polyethylene piping

Ribbon cutting ceremony at Biljah Road Metering Station. From L-R: The Hon. Eric Williams, Minister of Energy; Clarence Mitchell, NGC Board Member; His Worship, Orlando Nagessar, Mayor of Chaguanas; Clarence Harnanan, NGC's VP Gas Transmission and Distribution; Chiang K. Awong, NGC's Chairman; Frank Look Kin, NGC's President and Ramkissoon Dhanraj, NGC's Project Inspector.

10 Continued

Horizontal Directional Drilling (HDD)

NGC has actively trailblazed the use of Horizontal Directional Drilling (HDD) technology in its major pipeline construction activities, including the Cross Island Pipeline (CIP), the North-Eastern Offshore Pipeline (NEO) and the Tobago lines. HDD technology minimises negative impacts in sensitive ecological environments by drilling underneath these areas, thus avoiding the destruction of natural habitats and/or man-made infrastructure, be they marshlands, lakes, reefs and rivers, or roads and/or highways.

HDD drilling activities in progress

During CIP, project HDD was utilised

11

Diversifying upstream natural gas supply

In 1992, there was a shortfall in natural gas supply which resulted in heavy industries at Point Lisas operating below capacity for several months. To address the imbalance in gas supply/demand, NGC signed contracts with AMOCO for additional natural gas and with ENRON Oil and Gas operating in the South East Coast Consortium (SECC)-licensed area. In January 1993, AMOCO brought its Flamboyant field into production, followed in November by its Immortelle field. That same month, ENRON brought the Keskidee field on stream.

Based on its projections for increasing demand, NGC also signed a contract with British Gas/Texaco for a supply from the Dolphin field. The diversification of the natural gas supply from one to three major suppliers, in addition to the output from NGC's compression services, achieved increased security of natural gas supplies for NGC's growing customer base, ensuring the continued stability of the gas-based energy sector.

Dr. Kenneth S. Julien, NGC's Chairman at podium. Head Table L to R: Trevor Boopsingh, Chairman, Petrotrin; John Andrews, Permanent Secretary, Ministry of Finance; Senator, The Hon. Wendell Mottley, Minister of Finance; Senator, The Hon. Barry Barnes, Minister of Energy; Forrest E. Hoglund, President and CEO, Enron Gas and Oil Trinidad (now EOG Resources)

Dr Kenneth S. Julien, NGC's Chairman at podium with Trinidad and Tobago's government officials. At head table left - Rupert Mends, Permanent Secretary of the Ministry of Energy and Senator, The Hon. Barry Barnes, Minister of Energy at centre at signing ceremony for the offshore Dolphin Field Development with BG and Texaco officials.

12

Deepening petrochemical production

In the 1990s, increased energy was given to promoting the country as a premier investment location for gas-based businesses interested in making Point Lisas their home. There was such renewed interest in Trinidad and Tobago by international investors that the country eventually became the largest global exporter of ammonia and methanol from a single site.

There are currently 11 companies producing ammonia, seven producing methanol, and one urea plant.

Signing ceremonies:

i) Atlas Methanol Company Unlimited

ii) Farmland MissChem Limited

iii) Trinidad and Tobago Methanol Company Limited

Aerial shot of petrochemical cluster at the Point Lisas Industrial Estate

13

New Industrial Site Development: La Brea Industrial Estate

By the mid-1990s, at a time when there was a renewed thrust to attract investment in the energy sector, the Point Lisas Industrial Estate was approaching full capacity. Several potential sites were considered for the development of a new natural gas-based industrial estate. In 1994, NGC, in a joint venture with Petrotrin (the site's former landowner), formed the La Brea Industrial Development Company Limited (LABIDCO), to build and manage an industrial site at La Brea. The site was chosen mainly for the natural deep-water harbour at the Port of Brighton.

Originally earmarked as a possible site for Liquefied Natural Gas (LNG) and ammonia, La Brea was eventually marketed as a provider of developed lands for leasing purposes, harbour and dock facilities, bio-remediation services and as a logistics base for offshore companies.

The Union Industrial Estate which adjoins the La Brea site has available 150 hectares of usable land, housing the country's newest power generation plant, Trinidad Generation Limited (TGU).

Capping of old oil wells at La Brea. From L-R: Dr Kenneth S. Julien, NGC's Chairman; Roger Packer, Tucker Energy Services; Rawle Agard, Manager, Human Resources, NGC; and Wayne Bertrand, Petrotrin.

Dismantling of old jetty at Brighton Port, adjoining the La Brea Estate

La Brea Industrial Estate's laydown yard during CIP pipeline construction activities

LNG Project makes history

Atlantic LNG Company of Trinidad and Tobago (ALNG) was formed in July 1995 as an initiative of NGC and the Cabot Corporation. Construction of Train 1, which has a capacity of 3.0 million tonnes per annum (Mtp/a), was completed in just under four years, with ALNG shipping its first LNG cargo in May 1999. A two-train expansion increased capacity by 6.6 mtp/a in 2002-2003. A fourth train with a capacity of 5.2 Mtp/a, the largest in the world, was completed in 2005, making Trinidad and Tobago the leading exporter of LNG to the USA. NGC has 10% shareholding in Train 1 and 11.11% in Train 4.

When agreement was reached on the Atlantic project, a new LNG plant had not been built in the Western Hemisphere in over 25 years. Unsurprisingly, there was considerable scepticism that ALNG would succeed and one man, it is said, swore to eat his shoe if the plant saw the light of day. Well, it did succeed and was built in record time.

From L-R front row: Frank Look Kin, President, NGC; David Wight, President, AMOCO Trinidad; Carlos Quintana, President, Repsol; Simon Bonini, President, British Gas Trinidad; Gordon Shearer, CABOT LNG.

The Hon. Patrick Manning, Prime Minister of Trinidad and Tobago, delivers his address at the LNG Off-Take Signing Ceremony. At head table – Dr. Kenneth S. Julien, NGC's Chairman; Juan Badosa, CEO, ENAGAS; Gordon Shearer, CABOT LNG; David Wight, President, AMOCO Trinidad and Martin Houston, General Manager, British Gas Trinidad.

LNG tanker docked at the Point Fortin ALNG pier.

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Academia meets industry

NGC's first major connection with academia occurred when it was given a seat on UWI's Engineering Institute, following the Company's recognition of the need for the institute and the role it could play in nation building. NGC was very proud to be a provider of seed money for the development of this important institution.

In subsequent years, NGC supported continuing education for practising professionals by making substantial monetary contributions to:

- The National Energy Skills Center (NESC) – With its primary objective of building the human resource capital in the country, the NESC was established to be an autonomous training provider, linking the state, industry and international institutions
- UWI Chair in Entrepreneurship – This organisation fosters excellence in research and promotes a culture of analysis, scholarship, and innovation
- Research Forum – This features a distinguished lecture series on topics related to research, innovation, creativity, entrepreneurship and development
- Trevor Boopsingh Endowment which fosters energy research

UWI Engineering Institute group shot of Board Members including: Prof. Clement Imbert, Prof. Gurmohan Kochhar, Kerston Coombs, Gail Bacchus, Malcolm A. Jones, Sam Martin, Neil Rolingson, Trevor Boopsingh and Stanley Ottley

NGC's President, Indar Maharaj, chats with UWI Principal Prof. Clement Sankat at the MoU signing between NGC and The UWI (UWI Chair in Entrepreneurship)

NGC was given a seat on The UWI's Engineering Institute. Trevor Boopsingh is at left, with The Hon. Patrick Manning, Prime Minister of Trinidad and Tobago at launch of Engineering Institute

The late Trevor Boopsingh's family members, including his wife Judy Boopsingh with NGC's Chief Financial Officer, Anand Ragbir at centre and to his right Christine Sahadeo, Senior Lecturer at The University of the West Indies (UWI)

16

A SCADA system is introduced

The reliable and safe transmission of gas is facilitated by a high level of system availability. For most of its 40 years, NGC has achieved a minimum availability of 99.9%, often attaining 100%. Such performance is achieved through rigorous operations and maintenance systems and practices. NGC uses a combination of automated and manual monitoring for maintenance of the pipeline network. Its key feature is a Supervisory Control and Data Acquisition (SCADA) system, which monitors the pipeline network on a real-time basis and relays data to a centralised control station. Operators can therefore respond quickly to problems such as leaks and can remotely operate some equipment along the pipeline network. NGC has odorised the natural gas at certain locations by adding a harmless, smelly substance so that members of the public can detect a natural gas leak and follow the recommended safety procedure.

Using the SCADA system for the monitoring of NGC's operations at Point Lisas

NGC's Beachfield Operations Control Room

17

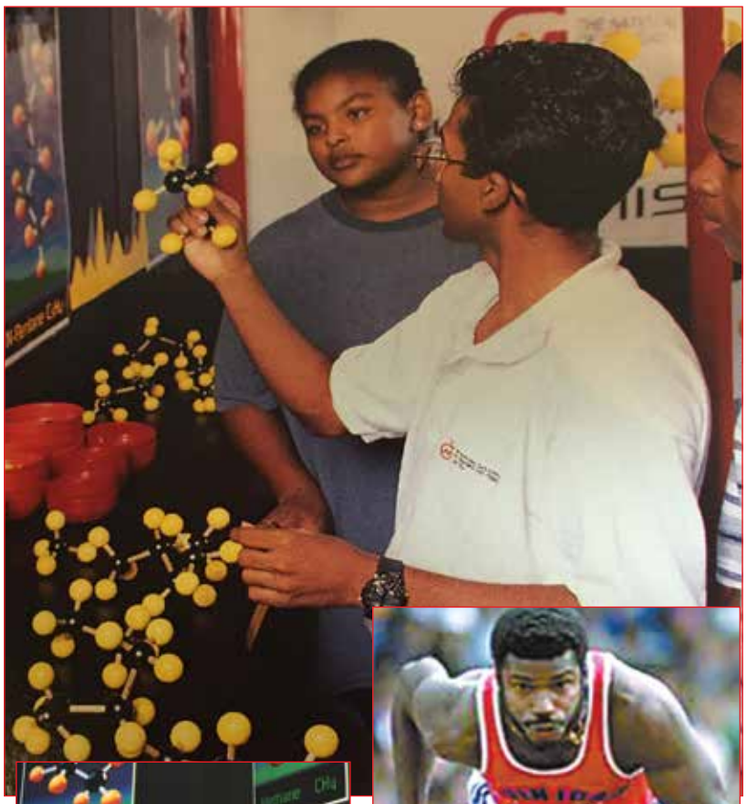
Forging Early Partnerships: corporate concern for society

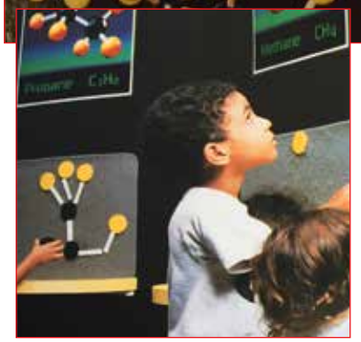
In 1992, NGC's newly formed Community Relations Department implemented two programmes on a national scale – the first, a youth development intervention and the second, a training/microenterprise facilitation programme in coastal villages. Inspired by a belief in the power of sport to enable positive behaviours and community spirit, NGC embarked on a programme under which the Company built or refurbished over 40 basketball courts and hosted a nationwide community basketball tournament.

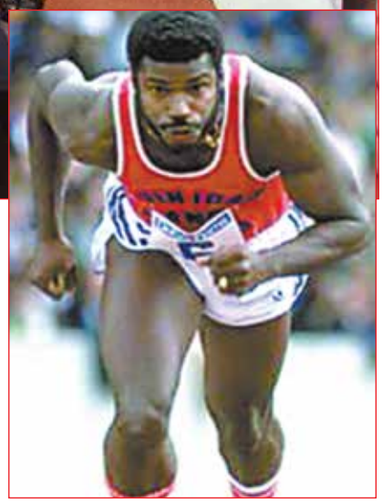
The Coastal Villages Programme, called MEAP, an acronym for Marine Environmental Awareness Programme, was developed as a response to the limited access to training and business opportunities for residents of isolated coastal villages. NGC hosted training programmes in villages along the north, south, west and east coasts, in skills relevant to their environment. These included boat engine repairs, net repairs and fish preservation, supplemented by basic business training. Many trainees went on to establish microenterprises. For the youth, NGC hosted holiday camps with a marine environmental theme.

In that period, NGC also entered into sponsorship arrangements with the Lydian Singers and The National Institute of Higher Education, Research, Science and Technology (NIHERST)/NGC National Science Centre. Support for the arts, sport and education, as well as investment in training, entrepreneurship and community facilities, have also been enduring features of NGC's social involvement.

Learning at the NIHERST/NGC National Science Centre







Trinidad and Tobago's Olympic Gold Medallist, Hasely Crawford, was the former Head of Community Relations at NGC

NGC supports the Primary Schools' District Games

Coastal Villages Programme

The Lydian Singers in concert – Dr. Pat Bishop T.C. conducts the choir

NEW MILLENNIUM

By the year 2000, NGC was providing an integrated 'one-stop-shop' approach to investors seeking to establish their operations in the country. This role was memorialised by internationally renowned musicologist and artist, the late Dr. Pat Bishop, T.C., leader of the NGC-sponsored Lydian Singers, in the metaphor of 'Keeper of the Flame', which aptly reflected NGC's role of managing the country's precious resource of natural gas for the benefit of the citizens of Trinidad and Tobago.

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Increased demand for natural gas led to increased pipeline construction activity

Project 2000: Transmission modernisation

By the mid-1990s, NGC determined a need to expand its transmission capacity. Simultaneously, AMOCO was seeking to transport natural gas to the LNG plant then under development. The companies came together to develop a pipeline system that would meet their respective needs. In 1998, AMOCO built two lines: a 40-inch-diameter diameter offshore line from its Mahogany field to Beachfield and a 36-inch-diameter landline from Beachfield to Point Fortin, via Picton. NGC purchased the right to transport 450 MMscfd in the offshore line and acquired ownership of the landline. Then, in 1999, NGC built a 36" diameter landline from Beachfield to Point Lisas, via Picton.

This arrangement worked well, as both parties were able to meet their delivery timeframes. It also represented a maturing of NGC's engineering capability, as its personnel carried out the design and construction of the NGC line in-house, and were involved in the design and engineering of the AMOCO lines. NGC entered the year 2000 with increased capacity to 1,400 MMscf/d.

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One million man-hours worked safely

In 2001, NGC achieved one million man-hours worked without a single Lost Time Incident.

This was a long-coveted performance target, although NGC has a history of safe operations. This achievement was fostered by a comprehensive environment and safety policy, operational practices which went beyond compliance, employee and contractor training, public awareness programmes, and emergency preparedness for all relevant stakeholders.

The Company makes zero incidents its standard in safety performance, and implements best practice in safety. Key programmes include the world renowned DuPont STOP for all employees, annual emergency response drills and table-top simulations, and a Community Awareness and Emergency Response (CAER) programme for its fenceline communities and schools.

Fostering a culture of safety – James Trim, NGC's Manager, Safety and Security headed safety performance goals

20

Local Content: Fabrication Yard at Brighton, La Brea

"Why can't we build offshore platforms in Trinidad and Tobago?" the Prime Minister asked NEC's President. The notion was consistent with government's thrust for local content in the energy sector. What followed was the necessary technical and financial analysis, the engagement of the oil and gas companies and the assignment of responsibility. The assignment of responsibility went to NEC to create a fabrication yard at the La Brea Industrial Estate.

In April 2004, BHP Billiton became the first company to build an offshore structure locally, the topside of its Kairi platform at the estate's marshalling yard. The 25-acre Fabrication Yard was officially opened in December 2004 in time to also accommodate the fabrication of the jacket and topsides of the bpTT Canonball platform.

Other oil and natural gas companies have since built their offshore structures at the La Brea estate and the presence of the Fabrication Yard has created jobs and other economic benefits for the La Brea community and nation as a whole.

Construction of Kairi 1 platform in progress in 2002-2003 period

A visiting overseas delegation touring the Fabrication Yard

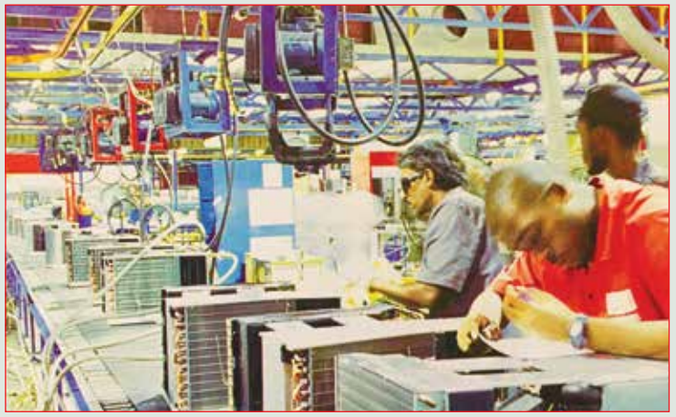
An aerial view of the Fabrication Yard at Port Brighton, La Brea

21

100 small consumers: coming of age

In 2003, a year in which NGC surpassed previous performance in many areas, the milestone of 100 customers in the Light Industrial/ Commercial/Transportation sector was reached. Although this sector uses small volumes of natural gas and is not a big source of revenue for NGC, over the years the Company has taken many measures to expand gas usage in the domestic market so that more businesses and individuals can benefit from this price-competitive, environment-friendly source of energy. One such measure is the expansion of the distribution network to various industrial estates to integrate natural gas utilisation in the domestic economy.

Customers using natural gas include commercial enterprises; companies in food processing, light manufacturing and construction; and Compressed Natural Gas (CNG) stations.



Commemorative Ceremony for NGC's attainment of 100 small consumers or light industrial/commercial customers

Some of the light industrial consumers that utlise natural gas as fuel or for power

22

CIP: the 56-inch-diameter pipeline

Deciding that NGC should be wholly responsible for the transportation of gas, in 2003 the government mandated NGC to build a 77 km, 56-inch-diameter onshore line, the main purpose of which would be to transport gas to Atlantic LNG Train 4.

The line, christened Cross Island Pipeline (CIP), which has a capacity of 2.4 billion cubic feet (Bcf) without compression, went into service in December 2005. Not only was this the largest single infrastructure project carried out by the company, but CIP was among the largest natural gas pipelines in the world.

It was completed within schedule and budget. The US$200M loan, the largest in the company's history, was obtained without a government guarantee, on attractive terms. CIP was selected as the Latin American Oil and Gas Deal of the Year 2005 by Euromoney's Project Finance Yearbook. One of the technical highlights of the project was the use of Horizontal Directional Drilling (HDD) in environmentally sensitive areas.

Laying of the CIP pipelines into open-cut trenches

Stringing lengths of pipe along the right-of-way

Side booms lowering the 56-inch-diameter pipeline

23

Expansion of Beachfield facilities

While CIP was the star of pipeline infrastructure, the Beachfield Upstream Development (BUD) project was no less impressive. BUD involved an expansion of NGC's offshore transmission infrastructure and an expansion and upgrade of its gas and condensate processing facilities in Guayaguayare. BUD required the construction of an offshore pipeline from the Cassia field to Beachfield and a centralised Slug Catcher at Beachfield, replacing the old one at Abyssinia. The BUD pipeline has a transmission capacity of 600 MMsc/d and increased NGC's overall capacity, including CIP, to 4.4 Bcf/d.

At five times the size of the earlier facility, the BUD slug catcher centralised the processing of natural gas from various NGC pipelines. Commissioned in 2006, it can process 3 Bcf/d of gas and separate 5,000 barrels of condensate per day. With this project, Beachfield became the hub of gas transmission activities. Control and monitoring using automated systems, takes place on a 24-hour/7 day basis.

The vertical separator at old Abyssinia Station

New Abyssinia outlet separators at the Beachfield 'BUD' facility

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International investment credit ratings

In 2005, NGC was awarded investment credit ratings of BBB+ from Standard & Poor's, A3 from Moody's and AAA from CariCRIS. This achievement was an acknowledgment of the company's strong financial/credit worthiness and operational position.

This gives the Company better access to the international capital market, as well as position it to leverage reduced collateral requirements and interest costs.

Operating in the financial hub of the Caribbean, NGC earned international investment credit ratings in 2005

25

Conserving our forests: 10-year reforestation

Adopting a 'No net loss of forest resources' policy in 2006, NGC embarked on a ten-year reforestation programme to offset forested areas cleared for construction of the CIP, BUD and Union Industrial Estate projects. NGC is rehabilitating 315 hectares of forest at six locations: the Morne L'Enfer Forest Reserve, Grant's Trace, Edward Trace, Guapo/Parrylands, Mayaro and Rochard Douglas. Species to be planted include hardwood and fruit trees such as crapaud, mahogany, apamate, cashima and pommerac. Planting and maintenance activities are carried out by community groups.

Audits are conducted to determine the survival rate which consistently exceeds the Forestry Division's 80% target. This is because of frequent maintenance, the replanting of seedlings which have not survived, and fire watch by reforestation group members who are able to respond promptly, as they reside close to the reforested sites.

By the end of 2014, over 230 hectares had been replanted with 77, 280 seedlings.

No Net Loss: NGC's Reforestation Programme

Fostering energy and safety awareness

Many have bemoaned the lack of public understanding of the energy sector. For close to 20 years, NGC has sought to fill the gap among all age groups and educational levels, through a natural gas literacy programme using diverse methods. For the general public there have been information caravans, exhibitions, communication centres and informational advertising. More than 1,000 tertiary level students have participated in natural gas workshops conducted annually by NGC and the University of Trinidad and Tobago (UTT). The Gas Rush Competition was held for secondary level students and a Natural Gas Lesson Plan, which includes teacher workshops, has been developed for primary schools.

NGC delivers a safety awareness and emergency response preparedness programme for pipeline communities, schools, emergency responders and the general public. NGC works with the relevant authorities to educate Disaster Management Teams about natural gas safety, and to establish Community Emergency Response Trained (CERT) volunteers in communities. NGC has also taken its natural gas literacy and safety programme directly to hundreds of schools along its pipeline network.

Filling the gap: Energy and Safety Awareness for the national community

A drill at one of the schools earmarked for safety training

NEW FRONTIERS

Having mapped a way to establish Trinidad and Tobago as a major world player in the natural gas business, NGC sought to broaden its frontiers via new pipelines and installations, which opened new gas provinces located to the north-east of the country, as well as to expand the natural gas pipeline network to Tobago.

40TH ANNIVERSARY

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Construction of the NEO marine line

In 2011, a new offshore natural gas frontier was opened up in the Greater Angostura Field off the north-east coast of Trinidad, an area where there was no existing natural gas production and pipeline infrastructure. This involved the construction and installation by BHP Billiton of a Gas Export Platform (GEP) in the Angostura Field and, by NGC, the construction of two pipelines originating at the GEP: the 36-inch-diameter North-Eastern Offshore Pipeline (NEO), which runs southwards to connect to NGC's network in Guayaguayare, and a 12-inch-diameter Tobago line, which runs northwards, ending in Lowlands, Tobago.

NEO, with a transmission capacity of 1.2 Bcf/d of natural gas, was built to cater for growth in the Trinidad market, while the Tobago line was intended to give birth to a natural gas industry in Tobago, as well as to provide a staging point for any future plans to provide natural gas to the Eastern Caribbean.

Stringing the NEO marine line from a specialised vessel

Stringing of the NEO pipeline on board a barge

28

Phoenix Park Valve Station

The valve station (or slug catcher) located at Phoenix Park in central Trinidad is one of the critical facilities in NGC's transmission pipeline system. Here. liquids are removed from the natural gas flow before being routed to Phoenix Park Gas Processors Limited (PPGPL) for processing. The dry (residue) gas from PPGPL is then distributed by NGC to the end users.

This facility has undergone a major upgrade, which involved the construction of a new 4,000 barrel Slug Catcher and Liquid Handling Facility, geared towards providing cleaner fuel and a more reliable natural gas supply. The new slug catcher has the capacity to handle up to 3 Bcf/d of natural gas.

Panoramic view of the Phoenix Park Valve Station (PPVS) facility at dawn

29

Gas Receiving Facility at Tobago's Cove Eco-Industrial and Business Park

To make natural gas available to Tobago, NGC built a 12-inch, 54 km pipeline to transport gas from the Greater Angostura Field off Trinidad's north-east coast to the Cove Eco-Industrial and Business Park (CEIBP) at Lowlands, on the southwest coast of Tobago, as well as a Receiving Facility at the park to process the natural gas before it is supplied to customers. Cove is the first natural gas-based industrial estate in Tobago.

This receiving facility has the capacity to process up to 100 MMscf/d of natural gas, with the option to double this capacity by the addition of a second processing train. It boasts of a ground flare, the first of its kind in the country. There is, therefore, no visible or open flame and no smoke emanating from the flare. This feature is consistent with Tobago's tourism brand of 'Clean, Green, Safe and Serene'.

The Hon. Kamla Persad-Bissessar, Prime Minister of Trinidad and Tobago tours the newly commissioned Tobago Gas Receiving Facility in early 2013

An aerial view of NGC's Gas Receiving Facility at CEIBP, Tobago

30

T&TEC Tobago switches to natural gas from diesel

In 2013, T&TEC successfully switched its #1 generator from diesel to natural gas. This event made T&TEC NGC's first Tobago consumer to receive and use natural gas supplied from the Cove Estate Gas Receiving Terminal.

The availability of natural gas in Tobago since 2012 made it possible for the island to benefit from this cost-effective and clean-burning fuel. The switch from diesel to natural gas for electricity generation provided an incentive for light industrial and manufacturing concerns, with relatively heavy fuel requirements, to become tenants, in order to take advantage of natural gas as a fuel.

Islands in the Eastern Caribbean may also benefit from NGC's facilities at Cove Eco-Industrial Business Park, which may one day be the staging point for the supply of natural gas to the Eastern Caribbean.

An aerial view of the T&TEC facility at Lowlands, Tobago

31

Safe and reliable operation of 1,000 km of pipelines

In 2013, NGC's network crossed the 1,000 km mark, including both land and marine pipelines.

NGC is able to expand its network safely because of its maintenance, which includes routine inspection of the pipes for corrosion and defects; using 'pigs' (intelligent robotic devices) propelled into the pipelines to inspect and clean their interior; foot and aerial surveillance of the pipeline rights of way to detect problems such as leaks, unauthorised digging and encroachments; and routine vegetation control to keep the pipeline corridors clear.

Pipeline rights of way are marked by signage which minimises risk in two ways; first, the awareness of the presence of buried pipelines; reduces the likelihood of inappropriate activity in the vicinity of buried pipelines and second, it engages the public in supporting NGC's surveillance activities; for example, by alerting NGC if a leak or other dangerous condition is noted.

Rights of way are clearly marked by yellow marker posts, indicating the location of buried pipelines

Maintenance of pipeline network includes the use of robotic devices 'pigs' inserted into pipelines to clean and inspect their interiors

NGC valve station, with its yellow marker posts in the foreground

32

Galeota Port Development

On September 5, 2014 Phase 1 of a new port at Galeota, built by National Energy on behalf of the government, was opened. The Port is intended to be a logistics hub geared primarily towards the exploration and production companies operating on the south-east coast, but also towards operators in emerging energy provinces in the region, who can use it as a base.

Phase 1 includes five berths, one of which is dedicated to the Trinidad and Tobago Coast Guard. An integral part of the overall project was the building of a fish landing facility to provide an opportunity for fishermen in the community to enhance their livelihood and operating conditions. This facility includes the availability of fresh water, sanitary facilities, waste disposal, vending stalls, fish storage, ice-making facilities, and durable construction for a marine environment.

Aerial view of the Galeota Port Expansion, a project of National Energy

33

Leading the conversion to CNG

The value of CNG as a cheaper, more environment-friendly vehicular fuel than gasoline and diesel, has long been recognised. However, previous programmes to encourage conversion to CNG did not have a large impact and today, CNG-outfitted vehicles account for less than 1% of vehicles in Trinidad and Tobago.

Given the responsibility to change this situation, NGC has begun a two-phased, five-year programme. Phase one will involve the conversion of 17,500 high mileage vehicles, especially government vehicles, buses and maxi-taxis. In the second phase, 22 CNG filling stations will be built and CNG pumps installed in existing stations.

NGC has established a CNG subsidiary company, NGC CNG Company, with dedicated human and financial resources to implement the programme, and is leading by example by establishing its own CNG fleet, installing CNG stations at Point Lisas and Galeota.

Official opening of the CNG Fueling Station at the Public Transport Service Corporation (PTSC) South Quay Compound in Port of Spain - April 2015. L-R: Neil Gosine, NP Chairman; Senator, The Hon. Kevin C. Ramnarine, Minister of Energy and Energy Affairs; The Hon. Stephen Cadiz, Minister of Transport; Curtis Mohammed, NGC CNG President and Dr. Vincent Lasse, PTSC Chairman

NGC CNG purchased CNG buses, which have been branded as a means of promoting CNG usage in the local transportation sector

A GLOBAL COMPANY

NGC envisages itself as a global energy company with assets and investments outside of Trinidad and Tobago. NGC is today a group of companies with investments throughout the local value chain. As an internationally investment graded company owning assets in the upstream, midstream and downstream, NGC is confident it can foster strategic partnerships and investments for an even brighter future.

40TH ANNIVERSARY

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Energised Performance: stellar profitability

NGC has never failed to make a profit since its first year of business. In 2003, the NGC group achieved a record level of after-tax profit of TT$ 1.2 billion, the first time the Company crossed the one billion-dollar mark. Indeed, profits climbed to TTS 2.6 billion in 2006, exceeding TTD 3 billion in 2007 and 2008. Then, in 2011, the company crossed the four billion-dollar threshold, achieving after-tax profit of TT$ 4.6 billion. Falling just short of four billion, after-tax profit in 2012 was TT$ 3.9 billion. 2013 saw profit after tax soaring to an unprecedented level of TT$ 6.5 billion.

NGC's logo was at the heart of the performance

From L-R: NGC's Chairman Roop Chan Chadeesingh; The Hon. Kamla Persad-Bissessar, Prime Minister of Trinidad and Tobago; Senator, The Hon. Kevin C. Ramnarine, Minister of Energy and Energy Affairs; and NGC's President, Indar Maharaj

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NGC sells LNG cargoes on the global market

As part of its goal to become a global energy company, NGC has assumed responsibility for the marketing of its share of Train 4 LNG output.

Through its subsidiary, Trinidad and Tobago LNG (TTLNG), NGC holds 11.11% interest in Atlantic LNG Train 4, which grants it processing rights of 88 MMscf of natural gas. TTLNG purchases natural gas and transports it to the liquefaction plant via NGC's CIP pipeline. Up to July 2012, the produced LNG was marketed by BP Gas Marketing Limited on NGC's behalf.

On August 17, 2012, TTLNG loaded its first direct-sale cargo and has since been marketing its cargoes directly to the global LNG market, to countries as diverse as Singapore and Argentina. TTLNG has accomplished a diversification of NGC's business activities and gas sales portfolio, and has also paid healthy dividends to its parent company.

NGC undertakes the marketing of its LNG cargoes

36

Acquisition of PPGPL and TOTAL Trinidad

Two acquisitions in 2013 furthered the goal of diversifying NGC's portfolio and creating new revenue streams. First, NGC increased its ownership of PPGPL to 90%, by acquiring ConocoPhillips' 39%. This was followed by NGC's purchase of the Exploration and Production (E&P) assets in the Angostura field of the France-based energy operator TOTAL Trinidad B.V., and Elf Exploration Trinidad B.V.'s 30% interest in Block 2 (c) and 8.5% in Block 3 (a) respectively. Through these acquisitions, NGC gained a significant stake in the local gas value chain, from the highly lucrative gas and oil exploration and production business to NGLs extraction and export – indeed, landmark achievements.

Overview of PPGPL - 90% ownership by NGC

Signing Ceremony, L to R: Roop Chan Chadeesingh, NGC's Chairman; Senator, The Hon. Kevin C. Ramnarine, Minister of Energy and Energy Affairs; Juan Marcos Braga, TOTAL's Project Director; and, Indar Maharaj, NGC's President.

37

DME Project

In mid-2015, NGC forged a partnership with international giants Mitsubishi Corporation and Mitsubishi Gas Chemical Company, and local conglomerate Massy Holdings, for the establishment of a natural gas to petrochemicals complex which will produce Methanol and Dimethyl Ether (DME), one of the world's emerging alternative fuels. The partners signed the project agreement in April 2015. NGC's participation as a shareholder in this project will be in keeping with its thrust to be a more fully integrated and diversified natural gas company.

Forging a partnership: NGC, Massy Holdings Limited, Caribbean Gas Chemical Limited, Mitsubishi Corporation, and Mitsubishi Gas Chemical Company Ltd.

An energy partnership: Representatives of the stakeholders of the DME Project Agreement Ceremony held in April 2015. Senator, The Hon. Kevin C. Ramnarine, Minister of Energy and Energy Affairs is at centre, and at his left is Senator, The Hon. Larry Howai, Minister of Finance.

38

Human Potential: training young professionals

What do you do when 15-20% of your workforce will be retiring within the next ten years? This is the challenge facing NGC and the Company sees it as an opportunity for the older employees to leave a legacy by transferring capacity to the younger, newer ones through a process of knowledge sharing, teaching and mentoring.

NGC has put two key human resource development programmes in place to build employee talent. A Postgraduate Scholarship programme meets the full cost of participation in a Master's programme. The BUD Graduate Internship is a career development programme which offers graduate internships to employees, as well as to nationals who are recent graduates of a recognised tertiary institution. A requirement of both programmes is that the fields of study must be relevant to NGC's business.

NGC has also continued its longstanding Holiday Internship Programme for undergraduate students, to introduce them to the world of work and the energy industry.

The energy of human potential: NGC actively mentors aspiring young professionals from the BUD Graduate Internship and Scholarship programmes

39

CSI: influencing society through Sport, Civic Life and Empowerment

NGC's social responsibility is embodied in a Corporate Social Investment (CSI) philosophy and programme having three main themes: Sport, Civic Life and Empowerment. For NGC, CSI refers to any voluntary activity beyond the commercial and legal obligations of a firm to contribute to the economic, social and environmental sustainability of communities, particularly developing and underserved ones. This translates into a broad range of initiatives - from environmental preservation to supporting youth development through the arts and
sport – as well as stimulating economic development through training, and the provision of community facilities.

The highlights of NGC's involvement with sport include our proprietary, science-based, Right-on-Track programme, which is focused on building fundamental skills in track and field; our partnership with the National Association of Athletics Administrators of Trinidad and Tobago (NAAATT); and our association with the Trinidad and Tobago Cricket Board (TTCB).

Civic life involves the enrichment of public and community life, through projects such as the building – or refurbishment – of recreation facilities in communities. Since 1992, NGC has built or refurbished numerous basketball courts, sporting grounds and pavilions throughout the country.

The theme of empowerment encompasses programmes designed to help people, especially the young, achieve their potential. These span the sponsorship of police youth clubs, steelbands, tassa, and performing and literary arts festivals.

Primary Schools' District Games

Police Youth Club activities – Sponsorship of five clubs

NGC Right on Track modules

Steelband in session

Storytelling at NGC Bocas Lit Fest

NGC Sanfest – Indian dancing

Trinidad and Tobago cricket team

NGC Sanfest – Folk singing

40

NGC: the architect of Trinidad and Tobago's Natural Gas Model of Development

No one knows the genealogy of the term "The Trinidad and Tobago Natural Gas Model of Development". It however appears to have entered the lexicon of the natural gas industry, both in Trinidad and Tobago and internationally, denoting that the country has created a distinct, unique and successful approach to exploiting its natural gas resources that is worth studying, particularly by nations seeking to exploit newly discovered reserves of natural gas. The Trinidad and Tobago Natural Gas Model is a key component of the country's global marketing strategy and provides a powerful platform from which to launch Trinidad and Tobago's natural gas brand on the world stage.

So, what are some of the indicators of the success of this Model? In 1990, NGC implemented a market-related gas price formula, which was introduced to boost the country's international competitiveness and to respond to potential consumers' requests for lower, fixed gas prices; the formula was therefore more sensitive to the global petrochemicals market. NGC offered a flexible gas price to investments where natural gas costs made up a significant portion of total production costs – for example, ammonia and methanol, which use natural gas as a feedstock. This innovative, risk-sharing pricing formula contributed to Trinidad and Tobago's competitiveness as a premier location for petrochemical production.

The country also set benchmarks for the largest LNG and methanol plants. It has an extensive gas natural pipeline network, which includes the largest diameter natural gas pipeline in the Western Hemisphere. The Point Lisas Industrial Estate is the world's largest exporting single site for methanol and ammonia. Today, Trinidad and Tobago is the sixth largest exporter of LNG.

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In 1999, the Government established a publicly traded investment holding company, National Enterprises Limited, to hold shares in selected state enterprises, making it possible for local individuals and companies, by purchasing shares in NEL, to share directly in the nation's wealth. In 2001 and 2003, NGC sold 20% and 37.84% respectively of its shareholding in its subsidiary companies, NGC NGL and NGC LNG, to NEL. In August 2015, NGC offered for sale, shares in Trinidad and Tobago NGL Limited on the local stock exchange. The latter company was incorporated in September 2013 for the purpose of holding shares acquired from ConocoPhillips in PPGPL.

The diversity of the portfolio mix of natural gas usage, as well as the myriad of industry players in the various segment of the value chain, are other hallmarks of Trinidad and Tobago's natural gas-based energy sector.

What are the elements of the model that create such success? Of course, the natural endowments of oil and natural gas resources, deep water harbours and a strategic location with access to American and European markets play a part. But, so does the governance of the industry: the Government of Trinidad and Tobago has not ceded the direction of the industry entirely to market forces and foreign investors, but rather, has acted as financier and investor when appropriate; provided fair and efficient decision-making, as well as honoured the sanctity of contracts, making the country a haven for private capital. An innovative pricing formula was adopted for projects in which natural gas is the biggest cost item, and the Government has provided the site, port and pipeline infrastructure as core elements of its strategy to woo investors to the country. In the period of privatisation and liberalisation, the Government has maintained control of strategic aspects of the industry, including gas merchant and transportation activities, electricity transmission and fuels marketing. Finally, the people factor in all of this is not to be understated.

NGC, along with the primary companies in the NGC Group – National Energy, PPGPL and NGC CNG – has been the architect of this mystical, yet strategically designed and implemented model of development. As the global natural gas industry continues to change, so too will the T&T Natural Gas Model of Development demonstrate its dexterity to meet and surpass the challenges of the energy world.

THE NATIONAL GAS COMPANY OF TRINIDAD AND TOBAGO LIMITED

Aerial view of the Point Lisas Industrial Estate

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