





**45<sup>TH</sup>**  
ANNIVERSARY

AT THE FOREFRONT OF *Energy*



**45**

**IN FORTY-FIVE**

MAJOR CORPORATE MILESTONES

**1975-2020**



### First commercial use of natural gas

The colonial authorities made natural gas available from land reservoirs as a low cost and environmentally-friendly fuel for the Trinidad and Tobago Electricity Commission's (T&TEC's) Penal Station.

### Major AMOCO gas find

Gas demand grew, so Government turned to offshore sources for supply. In 1968, a natural gas province of significant potential was discovered off the south-east coast by AMOCO Trinidad Oil Company. This discovery gave impetus to the transition toward gas-based development.



### Early pipelines

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.



### Construction of 30-inch diameter marine pipeline

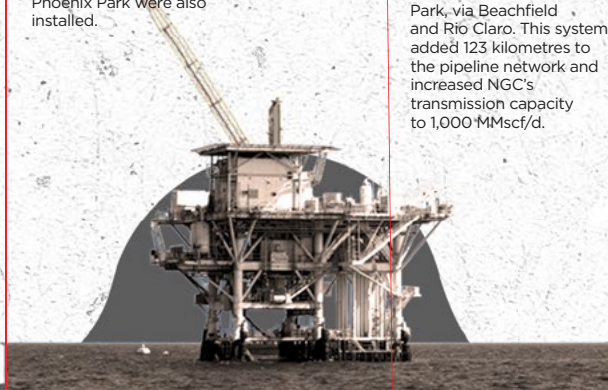
In 1982-83, a 30-inch-diameter marine pipeline with a capacity of 600 MMscf/d, was built from the Cassia offshore field to Phoenix Park, via Beachfield and Rio Claro. This system added 123 kilometres to the pipeline network and increased NGC's transmission capacity to 1,000 MMscf/d.

### NGC/NEC merger

NGC was given an expanded mandate by the Government to be the 'prime mover in gas-based development' to facilitate and promote energy projects that would deepen and broaden gas utilisation. This new mandate required a strategic merger between NGC and NEC (now National Energy).

### Major community relations programmes

NGC embarked on a programme under which the Company built or refurbished over 40 basketball courts and hosted a nationwide community basketball tournament. It also launched the Marine Environmental Awareness Programme (MEAP), offering training programmes in coastal villages.



1953

1963

1968

1975

1977-78

1979

1982-83

1989

1992



### Construction of 16-inch diameter Penal to Port-of-Spain line

The T&TEC Power Plant in Port of Spain was converted to natural gas, which led to construction of a 16-inch-diameter line from Penal to Port of Spain. A distribution network began to grow off this line as demand for gas grew among small and medium enterprises along the pipeline route.



### Birth of NGC

Government announced that The National Gas Company of Trinidad and Tobago Limited - a wholly owned State company with an authorised share capital of TT\$45 million - would be the sole seller of gas in Trinidad and Tobago. The Company commenced operations on August 22nd, 1975.



### Formation of National Energy

On September 7, 1979, National Energy Corporation of Trinidad and Tobago Limited (then 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."

### Initiation of Flare Gas Conservation Project

NGC was mandated to put in place the infrastructure to capture, compress and bring to shore the natural gas which was being wasted through flaring. Two compression platforms were commissioned by NGC in the Teak and Pouli fields.



### Incorporation of PPGPL

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.



### LABIDCO formed

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.



### First gas cooling application

In 1997, a large commercial centre became the first business in Trinidad and Tobago to use natural gas-fired air-conditioning.



### NEC reoperationalised

In January 1999 NEC was reoperationalised as a separate subsidiary with responsibilities for providing and managing port and marine facilities at Port Point Lisas; the management of the La Brea Estate and adjoining port on behalf of LABIDCO, as well as the continued development of new industrial sites.



### ALNG Train 1 completed - first LNG shipment

ALNG Train 1 was heralded as the first Greenfield LNG project to be developed in a small country in the Western Hemisphere in 25 years. In 1999, the country shipped its first LNG cargo.

### 100 LICs

In 2003, NGC reached the milestone of 100 customers in the Light Industrial/ Commercial/ Transportation sector.

### First billion dollar profit

The NGC Group achieved a record after-tax profit of TT\$ 1.2 billion in 2003, the first time the Company crossed the one billion-dollar mark.

### Introduction of SCADA system

In 2003, NGC implemented a Supervisory Control and Data Acquisition (SCADA) system, a critical milestone in the use of technology within NGC. The SCADA system of instrumentation was installed throughout the pipeline network, allowing the network to be monitored remotely from NGC's control room. Prior to this, monitoring of the pipeline network was undertaken by employees out in the field, using communication devices to call in data.



### Introduction of commodity-linked pricing

Product-related or commodity-linked pricing was a gas sales contract innovation developed and approved in 1988, and first used in 1993. This mechanism is credited with facilitating the rapid expansion of downstream industry and is considered a critical component of the Trinidad Gas Model of Development.



### Formation of ALNG

Atlantic LNG Company of Trinidad and Tobago (ALNG) was formed in July 1995 as an initiative of NGC and the Cabot Corporation.



### Expansion of network

In 1998, AMOCO built two lines: a 40-inch-diameter offshore line from its Mahogany field to Beachfield and a 36-inch-diameter landline from Beachfield to Point Fortin. NGC purchased the right to transport gas through the offshore line and acquired ownership of the landline. In 1999, NGC built a 36-inch diameter landline from Beachfield to Point Lisas. NGC's 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.



### HSSE milestone

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





### NEO and Tobago pipelines completed

In 2011, NGC completed a 36-inch-diameter North-Eastern Offshore Pipeline (NEO), which runs southwards from the Angostura field to connect to NGC's network in Guayaguayare, and a 12-inch-diameter Tobago line, which runs northwards, ending in Lowlands, Tobago.

### First international TSA signed with Tanzania

In 2011, NGC and National Energy signed a Technical Services Agreement with the Tanzania Petroleum Development Corporation for the provision of technical, legal and commercial advisory services. This was the first agreement executed to market Group services internationally and an important milestone in the Group's campaign to become a global energy player.

### Network milestone

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

### PPGPL and TOTAL acquisitions

NGC increased its ownership of PPGPL to 90% in 2013, by acquiring ConocoPhillips' 39% stake. 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.

### Incorporation of NGC CNG

NGC CNG Company Limited was incorporated to accelerate and expand the use of Compressed Natural Gas (CNG) as a major, alternative, transportation fuel in the country.



### First domestic fabrication for offshore platforms

BHP Billiton became the first company to build an offshore structure locally at the La Brea Industrial 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.



2004

2005

2011

2012

2013

### Construction of the Beachfield Upstream Development (BUD) pipeline

The 36-inch-diameter BUD marine line was constructed in 2004. It served as the catalyst for NGC to deepen and expand its operations at Beachfield. The capacity of NGC's pipeline system increased from 1.4Bcf to 2Bcf in anticipation of higher demands by new gas-based customers.

### Completion of the Cross-Island Pipeline

The Cross Island Pipeline (CIP) - a 77 km, 56-inch diameter onshore line - was built to transport gas to Atlantic LNG Train 4. 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.

### International credit ratings

NGC was awarded investment credit ratings of BBB+ from Standard & Poor's, A3 from Moody's and AAA from Caricris in 2005. This achievement was an acknowledgment of the Company's credit worthiness and strong operational position.

### Launch of reforestation programme

NGC's large-scale reforestation exercise, launched in 2005, aimed to replant an area of forest equivalent to that cleared for the development of the Cross-Island Pipeline, Beachfield Upstream Development and Union Industrial Estate. This project was aligned to the Company's policy of achieving 'no net loss' from business operations.



### First gas to Cove Eco-Industrial Business Park

Cove is the first natural gas-based industrial state in Tobago. It includes a ground flare, the first of its kind in the country. First gas was received on the estate via the Tobago pipeline in 2012.



### First direct LNG cargo marketing

On August 17, 2012, TTLNG - a subsidiary of NGC - loaded its first direct-sale cargo of LNG. It has since been marketing its cargoes directly to the global LNG market.





### Carbon sequestration study

In July 2018, NGC commissioned The University of the West Indies to conduct a Carbon Sequestration Study to determine the carbon impact of NGC's reforestation exercise. The results showed that at the end of 2018, total carbon sequestered by the reforestation initiative was valued at just over TT\$1.5 million.



### First Sustainability Report

In October 2018, NGC launched its first-ever Sustainability Report, to give account of the economic, social and environmental impacts of its business. This publication signalled a shift in organisational focus toward greater sustainability in operations and commercial activities.

### Completion of Liquid Fuels Pipeline Project and Phoenix Park Valve Station upgrade

The Liquid Fuels Pipeline Project (LFPP) achieved 100% mechanical completion, while the Phoenix Park Valve Station (PPVS) received permission to flow hydrocarbons through the facility in 2018.

### 2019 First e-auction

As an innovation in the Procurement function, online and real-time reverse auctioning via the SAP Ariba platform produced substantial savings for the NGC Group.



### First international office for NGC Group

National Energy (Guyana) Incorporated was established to pursue business opportunities on the ground in Guyana.



Trinidad and Tobago NGL Limited

### TTNGL IPO

The historic Initial Public Offering of shares in TTNGL - a subsidiary of NGC with shareholding interest in PPGPL - allowed citizens for the first time to invest directly and own stakes in the energy sector. The IPO was oversubscribed 1.77 times.



2014

2015

2017

2018

2019

2020

### Port of Galeota

Phase 1 of the new Port of Galeota, built by National Energy on behalf of the government, was opened. The Port is intended to be a logistics hub for exploration and production companies on the south-east coast and operators in regional energy provinces.



### TTNGL APO

Following the success of the IPO, an Additional Public Offering allowed further citizen investment in TTNGL. The public now holds 75% equity interest in the company.

### PPGPL acquisition of Twin Eagle assets in the USA

Effective February 01, 2020, PPGPL through its wholly owned US subsidiary, Phoenix Park Energy Marketing LLC, acquired the NGL marketing assets of Twin Eagle Liquids Marketing LLC. Twin Eagle Liquids Marketing LLC is a Company based in Houston, Texas, USA and is engaged in the business of marketing, trading and transportation of natural gas liquids in Canada, USA and Mexico via rail.

### Launch of EnergySmartTT app

An in-house team developed and launched the first local energy app aimed at raising consumer awareness around energy consumption patterns and the economics of switching to energy-efficient appliances.



### Extension of internationalisation efforts



Between 2015 and 2019, the NGC Group signed partnership agreements with state entities in Venezuela, Grenada, Jamaica, Ghana and Mozambique, while advancing discussions on opportunities in Guyana, Chile, the USA and Tanzania. In April 2019, NGC signed an MOU with Beijing Rheingau Investment Corporation of the People's Republic of China, to explore cooperation relative to the oil, gas and energy industry, beginning with LNG marketing and trading.

