

THE NATIONAL GAS COMPANY OF TRINIDAD AND TOBAGO LIMITED  
CORPORATE QUARTERLY JOURNAL



# GASCO news

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WHAT'S  
INSIDE

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and Growing  
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*Ribbon cutting for the formal reopening of the CNG supply at the Mon Repos, San Fernando carousel station - p 20*



*A dance troupe at last year's NGC Sanfest 2016 Junior Command Performance - p 15*

## Diversifying and Growing the NGC Business

2017 opens with the energy sector at a crossroads. NGC understands that it must evolve and transform as a company to ensure its long-term viability in a changing global energy landscape. This cannot be done in isolation. Our mandate for value creation requires us to not only provide the impetus for greater partnership with stakeholders locally, but also to identify and pursue opportunities outside the borders of Trinidad and Tobago.

In the upcoming year, NGC will place emphasis on business areas that are pertinent not only to NGC, but also to our stakeholders.

### Alleviating Natural Gas Curtailment Issues

The ongoing challenge of gas supply/demand imbalance and its financial ripple effect remains at the forefront for NGC and stakeholders of the local natural gas sector. Whilst myriad factors contributed to the current state of affairs, the focus now is finding solutions for both the short and long term.

In the short term, NGC, in its essential role as aggregator, given declining gas production levels, has been collaborating with suppliers and downstream customers to minimise the effects of planned upstream maintenance activities and other upsets on plant operations. NGC, in its role as gas merchant, has accelerated negotiations with gas suppliers to bring new volumes to the domestic sector as a number of upstream initiatives to increase supply, such as Trinidad Offshore Compression (TROC) and bpTT's Juniper Project, come into fruition in 2017. These supplies will address depleting reserves.

All indicators, however, suggest that increasing natural gas supply in the long term will present significant, but not insurmountable challenges. To forestall a potentially unrecoverable downturn in activity there will be need for:

- 1) A national policy position on the percentage utilisation of natural gas for power generation, liquefied natural gas (LNG) export and petrochemical manufacturing;
- 2) Increased investment in the exploration and production activity within the next three years with suitable incentives for the development of small and marginal fields;
- 3) Accelerated negotiations for alternative sources of natural gas supply from beyond the Trinidad and Tobago territorial waters, such as cross and across-the-border natural gas fields with Venezuela and emerging regional petroleum markets such as Guyana and Suriname;
- 4) Fundamental changes in pricing models and commercial arrangements to match risks between the upstream and downstream; and
- 5) Institutional strengthening at the governmental level and in operations across the local gas value chain.



*Mark Loquan, President, NGC*

### A New Business Model

Strategically, NGC will be focused on repositioning its business model to improve its ability to respond to new market dynamics, secure its core business and allow for sustainable growth here and abroad, as well as secure the Company's ability to continue contributing to national development and wealth creation.

Key focus areas for NGC in 2017, in this context, will be:

- 1) Redesigning the NGC business model for value maximisation, with emphasis on:
  - a. Corporate governance and compliance
  - b. Leadership accountability for safety, asset integrity and risk management
  - c. Talent management
  - d. Project delivery, ontime and within cost
  - e. Cost management
- 2) Active collaboration with domestic value-chain partners
- 3) Partnering with the Government of Trinidad and Tobago to implement and operationalise recommendations from the Natural Gas Master Plan
- 4) Exploration of alternative options for increasing natural gas supply, including the integration of mobile technology
- 5) Growth opportunities across the energy value chain and in other jurisdictions.

Rebounding from the current low natural gas production, low commodity prices and the attendant economic downturn will require energy sector collaboration that goes beyond pure commercial considerations. NGC stands ready to bring tremendous value to its role as aggregator, merchandiser and the key player that represents the interests of Trinidad and Tobago.

**Mark Loquan, President**

## Natural Gas Supply Outlook for 2017 and Beyond



*NGC's Head Office in Point Lisas*

Undeniably, 2016 proved to be a challenging year for the global energy sector with worldwide energy markets experiencing the disruptive effects of depressed commodity prices. Trinidad and Tobago's natural gas sector was not spared the impact of global trends, and its challenges were in fact compounded by the ongoing local gas curtailment issues. The situation of reduced natural gas supply to downstream consumers had been plaguing the sector since 2010 and analyses of the current and predicted climate have indicated that the situation will continue into 2017 and beyond. In this regard, securing the volumes required to maintain and support the demands of the sector remains the critical priority for NGC.

### OPTIMISING EXISTING GAS SUPPLY

While bringing new gas reserves into production is key to stemming the current natural gas shortage, there also remains the challenge of optimising production from existing reserves. Crucial to this is the need to identify, reduce and eliminate bottlenecks in the upstream supply system where supply shortfalls originate and unplanned downtime are of particular concern.

NGC's response has always been to moderate the impact of the gas curtailment and its ability to supply gas to its customers. The company has been working with suppliers to increase reliability and availability of the gas supply and reduce the frequency and extent

of unplanned outages. The situation requires that NGC continue to facilitate alignment between the upstream and downstream players and Atlantic LNG (ALNG) plants, with regard to planned shutdown activity, so that reduced gas supply can be offset, as best as possible, by a reduced demand from downstream plants.

The Trinidad Onshore Compression (TROC) project, undertaken by bpTT, will in 2017 assist in optimising the upstream gas delivery system. The project is designed to reduce the current gas supply shortfall within ALNG and so allow the company to meet its contractual LNG export commitments.

### SEEKING NEW RESERVES SHORT TERM

A major focus in the efforts to address gas curtailment would be to bring new gas reserves into production in 2017 to meet existing upstream contractual obligations and to cover depletion. Initiatives to do this include the development of the Sercan field, the Juniper project and Angostura Phase III project.

The Sercan field is located in the East Manzanilla Joint Venture Development Block and is a joint development block between bpTT and EOG Resources. Sercan has the capacity to produce 250 MMscf/d and first gas is expected by Q1 2017 and full project completion scheduled for Q2 2017.

Another project to address depletion is the coming on stream of bpTT's Juniper Project. This facility will take gas from the Corallita and Lantana fields located 80km off the southeast coast of Trinidad. The completed facility will have a production capacity of approximately 590 MMscf/d, thereby allowing bpTT to reduce its current shortfall of supply to the domestic market. bpTT has committed to delivering the first gas from this field by Q3 2017.

BHP Billiton has also sought to increase output from Angostura Phase III in an effort to meet the natural gas demands of the downstream sector. The development will not only upturn BHP's declining deliverability, but potentially increase volumes beyond the current required supply. Phase III is estimated to contain 500 Bscf of recoverable natural gas reserves.

NGC is also in dialogue with Shell for increased domestic deliverability from its existing fields through its production enhancement opportunities programme which should serve to mitigate some of the shortfall which accrued as a result of the Starfish project. This is part of NGC's plan to examine a number of solutions that impact positively on the shortfall in 2017.

## MEDIUM TERM

Developing small and marginal gas fields is one of the strategies for alleviating gas shortage in the medium term. While the Ministry of Energy and Energy Industries (MEEI) manages the process of engaging smaller, independent operators to extract this class of reserves, concomitantly, NGC will seek opportunities to partner with the MEEI to increase gas production to supplement the current tight supply. NGC is moving towards entering into such a partnership with DeNovo Energy Limited.

DeNovo acquired 80% ownership of Blocks 1a and 1b and the remaining 20% is currently owned by the state oil company, Petrotrin. NGC is now finalising an agreement to acquire Petrotrin's share in the blocks. Once the partnership between NGC and DeNovo is formalised, NGC will have a 20% stake in all natural gas produced from DeNovo's development of the gas fields. The first phase of development is concentrated in the Iguana field where reserves are estimated at 200 Bcf of natural gas with an 80 MMscf/d rate of production. First gas is expected in Q1 2018.

## LONG TERM

As part of NGC's long-term strategy to ensure the security of its natural gas supply through direct upstream participation and transportation, the Company is looking beyond the borders of Trinidad and Tobago and specifically to its South American neighbour, Venezuela. An agreement finalised between the two governments in December 2016

centres around the development of the Dragon field to create a cross-border natural gas supply for Trinidad. Both countries will take responsibility to operationalise the plan to extract and monetise the gas from Dragon through their key state organisations, NGC and Petróleos de Venezuela, S.A. (PDVSA - the Venezuelan state oil and gas company). Shell has also been invited to participate in this opportunity. In the first phase, the gas is expected to flow to Trinidad and Tobago from the Dragon field, which will provide a supply of gas for both LNG and the petrochemical sector.

Another field, the Loran-Manatee, straddles the international maritime border between Trinidad and Venezuela. This field is believed to contain 10 Tcf of gas, with approximately 27% of the field in Trinidad and Tobago's maritime territory. The monetisation of this field can potentially add 2.69 Tcf to local supply. Moreover, the Venezuelan government has expressed willingness to send a portion of its gas to Trinidad for processing as LNG, which, if realised, will buoy the LNG industry.

Whilst still in the early feasibility phase, NGC is currently exploring other avenues for the importation of gas to assist with ensuring the security of supply for the local gas-based sector.

## OPTIMISTIC OUTLOOK

The natural gas sector is at a critical juncture and NGC has a realistic, but no less optimistic view that the current gas curtailment will be reversed over the medium to long term. However, an increase in supply is not the only change to be expected. There is also the prospect that there will be an increase in gas prices, primarily driven by higher upstream costs of production.

Key lessons learned from adversities both locally and globally are being applied. The local natural gas sector is poised for restructuring and growth, with the Government and NGC playing integral roles to realise the right balance between the export and the domestic markets in accordance with the Gas Master Plan. As NGC remains critical to the regulation and management of the natural gas sector as an aggregator and transporter, the company is transforming its business model to pursue several opportunities for strategic partnerships across the entire energy value chain and to maximise value of the country's resources for the benefit of Trinidad and Tobago.

- Written by NGC and first published January 2017, *EnergyNow*, p 12

## The Port of Galeota: Energising Possibilities



*Foundation works ongoing for Port of Galeota's Warehouse Building*

The Port of Galeota was opened on 5th September 2014. Managed by National Energy Corporation of Trinidad and Tobago (National Energy), it offers endless possibilities for companies operating on the east coast, and the southern and south-eastern peninsulas of Trinidad. Based on its strategic location, the Port of Galeota is also positioned to become a gateway to South America, in particular Guyana and Suriname, which have had recent hydrocarbon discoveries.

Phase 1 of the Port has been operationalised in order to capitalise on the opportunities presented in the new burgeoning territories, as well as upcoming deepwater exploration projects such as bpTT's Juniper. Phase 1 comprises five berths, one of which is dedicated to the Trinidad and Tobago Coast Guard. The facility provides a draft depth of 7.6m with a 200m turning basin and 80m channel. Users also have access to 529m of quaywall, 1.2km of paved roads and 15 acres of backlands.

At present, the major activities carried out at the Port include energy services to support offshore Exploration and Production (E&P) off Trinidad's east coast. To date, major users of the Port include E&P companies - bpTT, BHP, Repsol and Trinity Exploration and Production plc. Through the implementation of the operationalisation plan, National Energy expects the number of users and scale of operations at the facility to grow steadily, as onsite services are increased and improved.

In order to facilitate bonded warehousing, equipment storage and offshore services to companies such as Peterson, bpTT and Repsol, construction of a 27,000ft<sup>2</sup>

warehouse is in progress. Administrative space will also be provided for Customs and the Trinidad and Tobago Coast Guard, the designated authority for ports in the country.

The operationalisation plan is being guided by the Port Operating Procedures and the Port Security Plan in line with the standards of all marine facilities managed by National Energy. In preparation for the transition from a sufferance port to a fully commercialised facility, an operating model is currently being developed for partnering with international port operators who will be involved in delivering key value-added investment and services while generating increased commercial activity for the Port. Simultaneously, negotiations and discussions are continuing with prospective long-term tenants to lease land at the Port while spot activities continue to be accommodated.

While the new Port of Galeota is in its early stages of development, operations are being handled by a team of employees from National Energy's Operations Group and as the work advances, the complement of staff is expected to grow. As a responsible corporate citizen, National Energy supports the maximisation of local participation on all projects and accordingly, residents of the fenceline communities of Mayaro/Guayaguayare were employed during the Port's construction and the company plans to continue this practice on this next phase of the project.

For all local and international investors seeking a gateway to South America and the wider Caribbean, the Port of Galeota may be the catalyst required to launch the next phase of their business.

## ENVIRONMENT &amp; SAFETY

## UIE GRF Tier III Full-Scale Emergency Response Drill Exercise



*The OSH Act requires industrial establishments like NGC to conduct emergency and safety drills frequently*

The Occupational Safety and Health (OSH) Act 2004, amended in 2006, states that industrial establishments are required to conduct frequent drills and keep relevant records of the exercises. A drill is used as a practical method of teaching and training through repetition of the exercise. This serves several purposes: learning to perform; developing, maintaining and perfecting efficient and effective emergency responses; and identifying possible gaps in the unlikely event of an emergency. One of NGC's ultimate strategic goals is zero unsafe behaviours and conditions throughout the organisation. Therefore, employee and management participation in emergency preparedness activities such as the Drill, allows for the recognition of good EHS performance; ascertaining areas of weakness or for improvement; providing potential early warning information; risk management; improving incident reporting and decision making; and devising solutions to unsafe conditions and behaviours, especially in an emergency scenario.

Recently, NGC's Environment, Health and Safety (EHS) Division finalised a schedule of drills for the company for the period 2016 to 2020. First on the drill schedule was NGC's Union Industrial Estate Gas Receiving Facility (UIE GRF). UIE GRF is considered one of NGC's critical facilities since it receives natural

gas via a 5km, 24-inch-diameter pipeline from the Rousillac Launcher Station, which receives natural gas from the 24-inch valve at the 65km marker off the 56-inch-diameter Cross Island Pipeline (CIP).

UIE GRF was commissioned in April 2011 and was converted from an unmanned facility to a manned facility in 2014, with 24/7 operation. Each crew consists of a Team Leader and two Technical Operators overseen by a Facility Supervisor. The five-year-old facility has multiple customers on the La Brea Industrial Estate and one primary customer, Trinidad Generation Unlimited (TGU), a power plant with a 150 MMscf/d uninterruptable natural gas supply contract.

On Friday 25th November 2016, a Full-Scale Emergency Response Drill Exercise was conducted at the UIE GRF, La Brea. EHS Assistant, Abiola Mc Cree, facilitated the Drill, along with members of NGC's EHS Department.

The objectives of the drill were:

- To assess NGC's Emergency Operations Centre (EOC) Functionality
- To check Mutual Aid capabilities
- To evaluate NGC's Communications Protocol
- To test the Company's Incident Control Team (ICT) and Incident Management Team (IMT) capabilities



*Feedback sharing and meeting following the Drill*

- To provide awareness and training
- To identify and remedy gaps relating to emergency response and
- To test NGC's ability to respond to various scenarios.

The UIE Drill Exercise was based on a hydrocarbon emergency involving fire and an explosion at the facility, and included the activation of NGC's Incident Management and Incident Control Teams, as well as external agencies and stakeholders, such as the Trinidad and Tobago Fire Services (TTFS), Trinidad and Tobago Mutual Aid Scheme (TTEMAS) and the wider community.

The scenario involved the simulation of five casualties and injuries which included major trauma, burns, a head injury, bilateral fracture of a leg, two broken arms, scratches/bruises and one death.

Observers included members from:

- Atlantic LNG
- The Office Of Disaster Preparedness and Management (ODPM)
- The Environmental Management Authority (EMA)
- Caribbean Gas Chemical Limited (CGCL)
- Lake Asphalt of Trinidad and Tobago (1978) Limited
- Ministry of Energy and Energy Industries (MEEI)
- Phoenix Park Gas Processors Limited (PPGPL)
- Tiger Tanks Trinidad Unlimited
- La Brea Industrial Development Company Limited (LABIDCO)
- Energy Sector Security Initiative (ESSI)

The exercise commenced at 10:30 a.m. and was completed in about one and a half hours. It was immediately followed by separate, brief post-mortems, where observers at the Incident Command Post and the Emergency Operations Centre respectively, shared their feedback with the respective teams.

Preliminary responses from the initial post-mortem immediately following the drill included:

- "For a first exercise, it was well executed but there are always ways or measures to improve. Further training, simulation exercise, defining of roles and responsibilities. Extending TTEMAS to all companies within the Estate (LABIDCO and Union)." (Ava Rajkumar, HSE Manager, Lake Asphalt)
- "NGC should be commended for the safe execution of this exercise. This type of activity, though not executed by many companies, is a requirement by the Trinidad and Tobago Fire Service to ensure renewal of Fire and Life Safety Certification. It also demonstrates NGC's commitment to the development of an effective Incident Management Process. Atlantic wishes to thank NGC for the invitation and looks forward to supporting the development of their Incident Management Process." (Alister Philip, Crisis Management & Emergency Response Advisor - Operations (CMER), Atlantic LNG).

After the official report was generated, a detailed drill post-mortem is scheduled for the first quarter of 2017, where lessons learnt will be shared among the key internal players, to generate continued learning and improvement in NGC's Emergency Management.



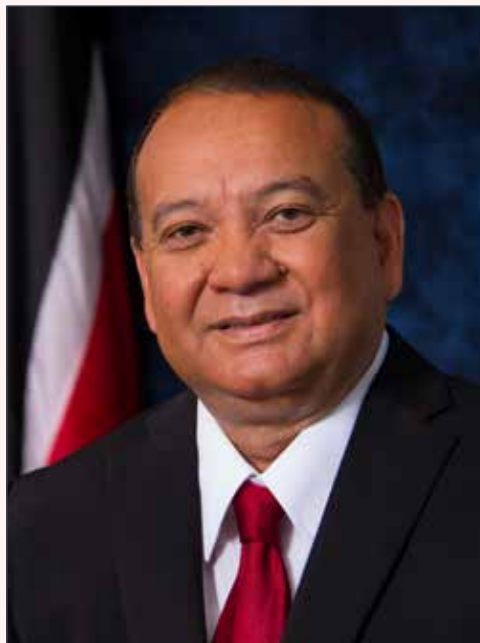
## **New Minister of Energy and Energy Industries – Senator the Hon. Franklin Khan**

Senator the Honourable Franklin Khan was appointed the Minister of Energy and Energy Industries in October 2016.

Senator Khan is a petroleum geologist by profession, having spent 20 years in the energy sector both locally and abroad in a wide range of positions both at the technical and managerial levels.

Senator Khan holds a BSc in Geology and Geography (1980) from The University of the West Indies, Mona Campus in Jamaica and an MBA from Arthur Lok Jack Graduate School of Business in Trinidad and Tobago.

Professionally, Senator Khan served as President of the Geological Society of Trinidad and Tobago on two occasions. He also served as a Director of the Water and Sewage Authority (1986-1990) and as Chairman of National Petroleum Marketing Co. Ltd (NP) from 2001-2002.



*Senator the Honourable Franklin Khan*

## **NGC Welcomes Mr. Hadyn Gittens to the NGC Board**

Mr. Hadyn Gittens joined the NGC Board in November 2017. He has over 25 years of broad-based banking experience, acquired through service in various posts in both the local and regional financial sector.

After attaining a BSc (Hon.) in Industrial Management from The University of the West Indies St Augustine, Mr. Gittens pursued an MSc in Accounting. He subsequently obtained an MBA from the University of Manchester.

Mr. Gittens began his career as a Manager at Republic Bank Limited and thereafter spent four years at the helm of Caribbean Learning Systems Limited before resuming his career in banking. He progressed through several appointments at the Royal Bank of Trinidad and Tobago Limited (RBTT) before being named Assistant General Manager at RBTT Jamaica Limited.

In 2003, he was promoted to Group Head – Corporate Banking of the RBC Royal Bank Group. Following a brief stint as a Business and Financial Consultant, Mr. Gittens assumed responsibility for overall management of the largest subsidiary of the East Caribbean Financial Holdings Group in 2013, in the position of General Manager of the Bank of St. Lucia Limited.

With discernible success in leading profitable enterprise growth, cost management, organisational



*Mr. Hadyn Gittens, new NGC Director*

restructuring, change and strategic planning, Mr. Gittens brings valuable sector experience and leadership to the NGC Board. Welcome on board.

## NGC President Appointed to the Board of the Energy Chamber

At the Energy Chamber of Trinidad and Tobago's recently concluded Annual General Meeting NGC's President, Mr. Mark Loquan was appointed a Board Member of the Chamber.

The membership ratified the nomination of the Board of Directors for the financial year 2016 - 2017 and welcomed four new board members. They are:

- Mark Loquan - President, The National Gas Company of Trinidad and Tobago Limited
- Indu Sharma - (Secretary), Director Q.E.D Consulting Limited
- Derek Hudson - Vice President, Shell Trinidad and Tobago Limited
- George Vieira - Managing Director, EOG Resources Trinidad Limited

According to its website, 'The Energy Chamber of Trinidad and Tobago is the representative organisation for the Trinidad and Tobago oil, gas, petrochemical and heavy industrial sectors. Membership of the Energy Chamber is, however, drawn from across the country and beyond.

'The Energy Chamber is governed by a 17-member Board, made up of sixteen volunteers elected from amongst the membership of the Chamber and the President/Chief Executive Officer (a full-time employee of the Chamber).'

Congratulations on this well-deserved appointment Mr. Loquan!

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## The NGC Group Hosts Members of the Ghanaian Petroleum Commission

On Friday 14th October the NGC Group, along with members of the MEEI hosted a visiting delegation from the Petroleum Commission of the Republic of Ghana. The delegation comprised officials from the Local Content Committee of Ghana's Petroleum Commission. The delegates, along with their counterparts from the Trinidad and Tobago Permanent Local Content Committee, were welcomed by Mr. Gerry C. Brooks, NGC Group Chairman; Mr. Mark Loquan, President, NGC; and Dr. Vernon Paltoo, President, National Energy.

Mr. Brooks in his opening remarks made mention of the special relationship between Ghana and Trinidad and Tobago, highlighting the fact that both countries "...enjoy a long, deep and mutually beneficial relationship. We have a similar history ... we have a similar jurisdiction and we have shared aspirations. That provides an excellent platform for our respective countries to build a future of sustainable development..."

He went on to further state that "... The NGC Group is looking at some very significant investments in Ghana that can benefit both Ghana and Trinidad and Tobago." He singled out Mr. Ernest Esdelle, Manager, Engineering Services (NGC) and Mr. Alvin Dookie, Vice President, Business Development (PPGPL) for their efforts thus far with the Ghana initiatives.

The principal presenter at the event, Mr. Ernest Esdelle, provided the delegation with key information relating to:

- The oil and gas industry in Trinidad and Tobago
- The legislative framework associated with licensing and local content
- Possible policies and programmes for development of indigenous companies
- Success stories: achievements and challenges
- Strategies for value addition in the energy sector

The delegation was then taken on a tour of the Point Lisas Industrial Estate.

## NGC Hosts Top Executive from ENH Mozambique



*Members of NGC's Executive Management, from left: Mr. Sham Mahabir, Director, NGC; Mr. Mark Loquan, President, NGC; and Mr. Ron Adams, VP, GTD, NGC sit across from Mr. Arsenio Mabote, ENH executive*

NGC facilitated a series of meetings with local energy sector players for a visiting official from Empresa Nacional de Hidrocarbonetos (ENH), the state-owned petroleum company of Mozambique.

ENH executive, Mr. Arsenio Mabote, in his capacity as Advisor to the ENH Board, participated in an NGC-led study tour of Trinidad and Tobago from 28th to 30th November, 2016. Mabote's visit is part of NGC's strategic global initiative to explore a range of business opportunities in new and emerging natural gas jurisdictions.

The southern African state has in recent years, made significant discoveries of offshore natural gas reserves. The find has the potential for Mozambique to become a major global LNG exporter. NGC has recognised that engaging with ENH at the early stages of development of Mozambique's natural gas and petroleum sector, can lead to lucrative business opportunities not just for the Company, but also Trinidad and Tobago.

Accompanied by NGC Group Chairman, Mr. Gerry C. Brooks and NGC President Mr. Mark Loquan, Mr.

Mabote met with a team from the Ministry of Energy and Energy Industries, led by Permanent Secretary, Ms. Heidi Wong. Discussions at the Ministry were centred on the current energy scenario of both Trinidad and Mozambique, in an effort to determine areas of synergy. Meetings were also held with the Trinidad and Tobago Local Content Committee, the Energy Chamber of Trinidad and Tobago, Petrotrin and of course, the NGC Group.

These meetings provided Mr. Mabote with an opportunity to gain an appreciation of the roles and business operations of key energy entities in Trinidad and Tobago, and more importantly, to identify key opportunities for collaboration and partnerships.

It is expected that a larger delegation from Mozambique will return to Trinidad in 2017, to participate in a more in-depth study tour of Trinidad and Tobago across the entire value chain. Out of this exchange, NGC's goal is to execute agreements which will create value from investments beyond this country's shores.

## NGC's Commodity Trading – First Third Party Trading



*Cross-Functional team – From L To R: Ms. Melissa Bhimsingh; Mr. Vinod Rajkumar; Mr. Leon Bryce; Ms. Alicia Neebar; Ms. Reeya Bholai; Mr. Mark Alfred; Ms. Kwailan Brathwaite and Ms. Donna Ramjattan*

On 18th September 2016, NGC's subsidiary Trinidad and Tobago LNG (TTLNG) conducted its first third party commodity trade in the LNG market. TTLNG, working with its trading partner Gunvor, purchased and loaded an LNG cargo in Bonny Island, Nigeria. TTLNG also executed its first shipping contract (charter party), and delivered the cargo to Jebel Ali, Dubai. This is the first time that NGC has sold natural gas that did not originate from Trinidad and Tobago.

This initiative is another major milestone in NGC's continued development of its commodity trading business. In 2012, TTLNG commenced directly selling its LNG cargoes (produced at Atlantic LNG Train 4) into the global LNG market. Since then, TTLNG has sold 13 LNG cargoes to several destinations around the world, namely Brazil, Mexico, Singapore, Kuwait and India. This has served to diversify NGC's portfolio by directly accessing international gas markets, for its three equity LNG cargoes per annum.

Since March 2016, TTLNG has developed strategic partnerships to support further downstream activity

in LNG. By leveraging its small portfolio, this third party September transaction means that TTLNG has grown its portfolio by an additional cargo, thereby creating incremental value for the NGC Group.

This cross-functional team, led by the Commercial Group, and comprising several Divisions in NGC, was recently recognised for its role in the development of NGC's Commodity Trading Plan – the first and key element in the implementation of a trading partnership framework for TTLNG. Team members are:

- Vinod Rajkumar – Senior Commercial Advisor
- Kwailan Brathwaite – Commercial Advisor
- Melissa Bhimsingh – Commercial Analyst
- Donna Ramjattan – Commercial Analyst
- Reeya Bholai – Legal Counsel
- Alicia Neebar – Legal Officer
- Leon Bryce – Accountant
- Mark Alfred – Head, Insurance Services

The NGC Group continues to strategically position itself to become a major global player in the downstream segment of the energy value chain.



# WELL DONE!

## NGC SANFEST 2016 WINNERS



### PRIMARY SCHOOLS

#### NGC Sanfest Winners:

##### CREATIVE WRITING

###### Short Story

- 1st S. Huzayfah Hosein, Play Smart Learning Co. Ltd.
- 2nd Sarah Neemai, San Francique Presbyterian Primary
- 2nd Matthew Malchan, San Francique Presbyterian Primary

###### Poetry

- 1st Maya Thomas, St. Xavier's Private School
- 2nd Vinaya Bharat, San Fernando TML

##### DANCE

###### Local Folk Traditional 3+ dancers

- 1st Belmont Boys' & Girls' R. C.
- 2nd Arima Boys' Government

###### Local Folk Interpretative - Solo

- 1st Sherissa Greenidge, San Fernando Girls' A. C.
- 2nd Sarafina Lewis, Tunapuna Government

###### Local Folk Interpretative - Duet

- 1st Ishana Edgar/ Shania Khan, Harmony Hall Presbyterian
- 2nd Keeli Osuna/ Emily Salina, St Finbar Girls' R. C.

###### Local Folk Interpretative 3+ dancers

- 1st St. Finbar Girls' R. C.
- 2nd Nelson Street Girls' R. C.

###### Modern Dance - Solo

- 1st Isabel Lee Sing, Cedar Grove Private School
- 2nd Sarika Mathura, St. Clement Vedic. School

###### Modern Dance - Duet

- 1st Felicia Gomez/Adara Perez, Sacred Heart Girls' R. C.
- 2nd Kimora Dickerson/Alena Dia, San Fernando Girls' A. C.

###### Modern Dance 3+ Dancers

- 1st Arima Boys' Government
- 2nd Sacred Heart Girls' R. C.

###### Foreign Folk

- 1st Arima Boys' Government

###### Social Dance

- 1st Belmont Girls' & Boys' A. C.

##### DRAMA

###### Dramatic Scene/Skit

- 1st Sacred Heart Girls' R. C.
- 2nd Newtown, Girls' R. C.

###### Public Speaking

- 1st Caelyn Roberts, Sacred Heart Girls' R. C.
- 2nd Adaylia-Marie Beddoe, Sacred Heart Girls' R. C.

###### Verse Speaking

- 1st Celeb Sealey, San Fernando Boys' R. C.
- 2nd Anthony Martinez, Sacred Heart Boys' R. C.

###### Monologue

- 1st Jaylon Newallo, San Fernando Boys' R. C.
- 1st Angeline Romain, Sacred Heart Girls' R. C.

###### Storytelling

- 1st Olotu Stephen, San Fernando Boys' R. C.
- 2nd Jael Superville, Sacred Heart Girls' R. C.

###### Choral Speaking

- 1st Belmont St. Francois Girls' R. C.
- 2nd Vos Government

##### MUSIC

###### Classical Choir

- 1st San Fernando Boys' R. C.
- 1st Siparia SDA

###### National/ Patriotic Choir

- 1st Arima Girls' R. C.
- 2nd Sacred Heart Boys' R. C.

###### Folk Choir

- 1st Sacred Heart Boys' R. C.
- 2nd Sacred Heart Girls' R. C.

###### Vocal Solo

- 1st Nissi Henry, Jordan Hill Presbyterian
- 1st Amelia Emmanuel, Sacred heart Girls' R. C.
- 2nd Shania Kabira, San Fernando Girls' A. C.

###### Calypso (Original)

- 1st Cindy-Ann Bigford, St. Gabriel's Girls' R. C.
- 2nd A'Jeane King-Fraser, Arima Girls' R. C.

###### Instrumental Solo

- 1st Jeremy Granado, San Fernando Boys' R. C.
- 2nd Charles Grey, Sacred Heart Boys' R. C.

###### Instrumental Solo (Pan)

- 1st Joelle Granado, St. Gabriel's Girls' R. C.
- 2nd Jeremy Granado, San Fernando Boys' Gov't

###### Instrumental Ensemble

- 1st San Fernando Girls' Government
- 2nd Debe Hindu

###### Afro-Caribbean Drumming

- 1st Nelson Street Boys' R. C.
- 2nd San Fernando Boys' R. C.

###### Tassa Drumming

- 1st Debe Hindu

#### NGC Sanfest Top Performers:

##### Most Outstanding Performer

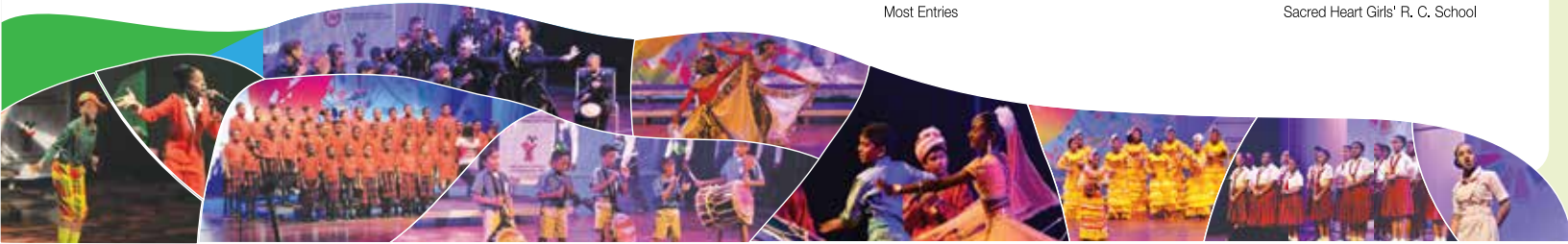
- Best Picture Making
- Best Drawing
- Best 3D Work
- Best Fabric Design
- Best Handicraft
- Best Artist
- Best Craftsman
- Best Visual Arts Display
- Best School Visual Arts
- Best Short Story Writer
- Best Poetry Writer
- Best School Creative Writing
- Best Dramatic Scene/Skit
- Best Public Speaker
- Best Verse Speaker
- Best Monologist
- Best Monologist
- Best Storyteller
- Best Choral Speaking School
- Best Actress
- Best Actress
- Best Set
- Best Stage Management
- Best School Drama
- Best Costuming
- Best Classical Choir
- Best Classical Choir
- Best National Patriotic Choir
- Best Folk Costume
- Best West Indian Folk Choir
- Best Parang Choir
- Best Parang Vocalist
- Best Parang Costume
- Best Vocal Soloist
- Best Calypsonian Original
- Best Instrumental Soloist (not pan)
- Best Steelpan Soloist
- Best Instrumental Ensemble
- Best Steelband Ensemble
- Best Afro/Caribbean Drumming
- Best Tassa Drumming
- Best School Music
- Best Local Folk Traditional (3+)
- Best Local Folk Interp. Solo
- Best Local Folk Interp. Duet
- Best Local Folk Interp. Duet
- Best Folk Interp. (3+)
- Best Modern Dance Solo
- Best Modern Dance Duet
- Best Modern Dance Duet
- Best Modern Dance (3+)
- Best Foreign Folk Dance
- Best Social Dance
- Best Male Dancer
- Best Female Dancer
- Best Dance Costume
- Best School Dance
- Most Outstanding Performer
- Best Overall School
- Most Entries

##### Joelle Granado

- Michal Grandison
- Victory Mitchel
- Darius Alexis
- Curnel Milette
- Daniel Sebro
- Elise Noel
- Kira-Lee Martin
- S. Huzayfah Hosein
- Maya Thomas
- Caelyn Roberts
- Celeb Sealey
- Jaylon Newallo
- Angeline Romain
- Olotu Stephen
- Amelia Emmanuel
- Brianna Kaufe Crooks
- Sacred Heart Girls' R. C. School
- Amerie Reyes
- Nissi Henry
- Cindy-Ann Bigford
- Jeremy Granado
- Joelle Granado
- Sherissa Greenidge
- Ishana Edgar
- Shania Khan
- Isabel Lee Sing
- Felicia Gomez
- Adara Perez
- Joel Augustine
- Adara Perez
- Joelle Granado

##### St. Gabriel's Girls' R. C. School

- Arima Boys' Government School
- Arima Boys' Government School
- Exchange R. C. School
- Maracas R. C. School
- Arima Boys' Government School
- Princes Town Presbyterian # 1
- La Brea Sacred Heart R. C. School
- Arima Boys' Government School
- Arima Boys' Government School
- Play Smart Learning Centre
- St Xavier's Private School
- San Francique Presbyterian Primary School
- Sacred Heart Girls' R. C. School
- Sacred Heart Girls' R. C. School
- San Fernando Boys' R. C. School
- San Fernando Boys' R. C. School
- Sacred Heart Girls' R. C.
- San Fernando Boys' R. C. School
- Belmont St. Francois Girls' R. C. School
- Sacred Heart Girls' R. C. School
- Newtown Girls' R. C. School
- Sacred Heart Girls' R. C. School
- Sacred Heart Girls' R. C. School
- Sacred Heart Girls' R. C. School
- Siparia SDA School
- San Fernando Boys' R. C. School
- Arima Girls' R. C. School
- Sacred Heart Girls' R. C. School
- Sacred Heart Boys' R. C. School
- Sacred Heart Boys' R. C. School
- Sacred Heart Girls' R. C. School
- Sacred Heart Boys' R. C. School
- Jordan Hill Presbyterian School
- St. Gabriel's Girls' R. C. School
- San Fernando Boys' R. C. School
- St Gabriel's Girls' R. C. School
- San Fernando Girls' Government School
- Trinidad Renaissance Prep
- Nelson Street Boys' R. C. School
- Debe Hindu School
- Sacred Heart Girls' R. C. School
- Belmont Boys' & Girls' R. C. School
- San Fernando Girls' A. C. School
- Harmony Hall Presbyterian School
- Harmony Hall Presbyterian School
- St. Finbar Girls' R. C. School
- Cedar Grove Private School
- Sacred Heart Girls' R. C. School
- Sacred Heart Girls' R. C. School
- Arima Boys' Government School
- Arima Boys' Government School
- Belmont Boys' & Girls' R. C. School
- Arima Boys' Government School
- Sacred Heart Girls' R. C. School
- Harmony Hall Presbyterian School
- Arima Boys' Government School
- St. Gabriel's Girls' R. C. School
- Sacred Heart Girls' R. C. School
- Sacred Heart Girls' R. C. School





The San Fernando Arts Council and The National Gas Company of Trinidad and Tobago Limited (NGC) are pleased to announce the winners of the NGC Sanfest 2016 in the areas of Dance, Music, Drama, Visual Arts and Creative Writing. Congratulations on your exceptional performances that raised the bar and well done to all the talented participants in this year's competition.

## SECONDARY SCHOOLS

### NGC Sanfest Winners:

#### CREATIVE WRITING

##### One-Act Play

- 1st Chevonne Mendez, Penal Secondary  
2nd Kyra Charles, Penal Secondary

##### Dramatic Scene/Skit

- 1st Bradley Dottin, Sixth Form Government  
2nd Jahamila Courtney, Fyzabad Secondary

##### Short Story

- 1st Fidelis Iwueke, San Fernando Central Secondary  
2nd Riyad Khan, Presentation College

##### Poetry

- 1st Sachelle Solomon, Iere High School  
1st Fidelis Iwueke, San Fernando Central Secondary

#### DANCE

##### Local Folk Traditional 3+ dancers

- 1st Fyzabad Anglican Secondary  
2nd Naparima Girls' High School  
2nd Pleasantville Secondary

##### Local Folk Interpretative - Solo

- Denisha Williams, Pleasantville Secondary  
Sadell Griffith, Morvant Laventille Secondary  
Makela Edwards, San Fernando Central Secondary

##### Local Folk Interpretative - Duet

- 1st Soriyah Bedasie/Soniah Bedasie, Pleasantville Secondary  
2nd K. Carraby/K. Kangal, Holy Faith Convent, Penal

##### Local Folk Interpretative 3+ dancers

- 1st Rio Claro East Secondary  
2nd Pleasantville Secondary

##### Modern Dance - Solo

- 1st Devi Singh, Barrackpore East Secondary  
2nd Alyssa Baird, Couva East Secondary

##### Modern Dance - Duet

- 1st Danya James/Aaliyah De Vlugt, Naparima Girls' High Sch.  
2nd Justine Ramsumair/Andrea Manganoo, Penal Secondary

##### Modern Dance 3+ dancers

- 1st St. Madeleine Secondary  
2nd Fyzabad Secondary

##### Foreign Folk

- 1st Rio Claro East Secondary  
2nd Marabella North Secondary  
2nd Naparima Girls' High School

##### Social Dance

- 1st Naparima Girls' High School

##### Limbo

- 1st Morvant/Laventille Secondary  
2nd Rio Claro West Secondary

#### DRAMA

##### Dramatised Speech

- 1st Youth Training Centre  
2nd Kiara Carraby, Holy Faith Convent, Penal

##### Dramatic Scene/Skit

- 1st El Dorado West Secondary  
2nd Sixth Form Government

##### Public Speaking

- 1st Fidelis Iwueke, San Fernando Central Secondary  
2nd Shiparah Lewis, Arima North Secondary

##### Verse Speaking

- 1st Fidelis Iwueke, San Fernando Central Secondary  
2nd Shayna Millette, El Dorado West Secondary

##### Monologue

- 1st Megan Cox, ASJA Girls' High School  
1st Angel Fortune, El Dorado West Secondary

##### Storytelling

- 1st T'Shara Coutain, El Dorado West Secondary  
2nd Cherister Rochford, Guaico Secondary

##### Choral Speaking

- 1st Holy Faith Convent, Penal  
2nd Marabella South Secondary

##### Spoken Word

- 1st Fidelis Iwueke, San Fernando Central Secondary  
2nd Zian Ramjohn, Cowen Hamilton Secondary

#### MUSIC

##### Classical Choir

- 1st Belmont Boys' Secondary R. C.  
2nd Sixth Form Government

##### National/Patriotic Choir

- 1st C.U.C. Secondary  
2nd St. George's College

##### Folk Choir

- 1st St. George's College  
2nd Sixth Form Government

##### Parang Choir

- 1st San Juan South Secondary  
2nd St. George's College

##### Vocal Solo

- 1st Patrice Richardson, Holy Faith Convent, Couva  
2nd Jahaziel Joseph, Caripichaima Secondary

##### Calypso (Original)

- 1st Kevan Calliste, St. Benedict's College  
2nd Mackhaydon Charles, Miracle Ministries  
2nd Nicholas Lucas, Moruga Secondary

##### Calypso (Traditional)

- 1st Romel Lezama, Youth Training Centre  
2nd Rishaun Gordon, El Dorado West Secondary

##### Instrumental Solo

- 1st Giordianne Lovelle, St. Joseph's Convent, San Fernando  
2nd Khai Alcantara, Trinity College, Moka

##### Instrumental Solo (Pan)

- 1st Dejean Cain, Trinity College, Moka  
2nd Khai Alcantara, Trinity College, Moka

##### Instrumental Ensemble

- 1st St. George's College  
2nd Rio Claro West Secondary  
2nd El Dorado East Secondary

##### Afro-Caribbean Drumming

- 1st South East Port of Spain Secondary  
2nd Malabar Secondary

##### Tassa

- 1st Rio Claro West Secondary  
2nd Naparima Boys' College

### NGC Sanfest Top Performers:

Most Outstanding Performer	Fidelis Iwueke	San Fernando Central Secondary
Best Picture Making	Mya Noel	St. Stephen's College
Best Drawing	Odera Lewis	Bon Air Secondary
Best 3D Work	Jimmy Scipio	Fyzabad Secondary
Best Ceramics	Jolene Cummings	Rio Claro West Secondary
Best Fabric Design	Reshma Hosein	Marabella South Secondary
Best Photography	La Quan Pearie	Marabella Secondary
Best Handicraft	Terri-Ann Wilson	Rio Claro West Secondary
Best Printmaking	Jolene Cummings	Rio Claro West Secondary
Best Artist	Alicia Magidulla	Rio Claro East Secondary
Best Craftsman	Alicia Magidulla	Rio Claro East Secondary
Best Visual Arts Display		Rio Claro West Secondary
Best School-Visual Arts	Chevonne Mendez	Rio Claro West Secondary
Best One-Act Playwright	Bradley Dottin	Penal Secondary
Best Dramatic Scene/Skit	Fidelis Iwueke	Sixth Form Government Secondary
Best Short Story Writer	Sachelle Solomon	San Fernando Central Secondary
Best Poetry Writer	Fidelis Iwueke	Iere High School
Best Poetry Writer		San Fernando Central Secondary
Best Poetry Creative Writing		Iere High School
Best Dramatic Scene/Skit		El Dorado West Secondary
Best Public Speaker	Fidelis Iwueke	San Fernando Central Secondary
Best Verse Speaker	Fidelis Iwueke	San Fernando Central Secondary
Best Monologist	Angel Fortune	El Dorado West Secondary
Best Monologist	Megan Cox	ASJA Girls' High School
Best Dramatised Speech		Youth Training Centre
Best Storyteller	T'Shara Coutain	El Dorado West Secondary
Best Spoken Word/Free Speech	Fidelis Iwueke	San Fernando Central Secondary
Best Drama School		El Dorado West Secondary
Best Choral Speaking School		Holy Faith Convent, Penal
Best Actor	Akil Pinder	Marabella South Secondary
Best Actress	Shayna Millette	El Dorado West Secondary
Best Set		Sixth Form Government Secondary
Best Stage Management		Sixth Form Government Secondary
Best Costuming		El Dorado West Secondary
Best Classical Choir		Belmont Boys' Secondary R. C.
Best National Patriotic Choir		C. U. C. Secondary
Best West Indian Folk Choir		St. George's College
Best Folk Costume		Holy Faith Convent, Penal
Best Parang Choir		San Juan South Secondary
Best Parang Costume		St. George's College
Best Parang Vocalist	Adanna Thomas	San Juan South Secondary
Best Vocal Soloist	Patrice Richardson	Holy Faith Convent, Couva
Best Calypsonian Original	Kevan Calliste	St. Benedict's College
Best Calypsonian Traditional	Romel Lezama	Youth Training Centre
Best Instrumental Soloist (not pan)	Giordianne Lovelle	St. Joseph's Convent, San Fernando
Best Steelpan Soloist	Dejean Cain	Trinity College, Moka
Best Instrumental Ensemble		St. George's College
Best Afro/Caribbean Drumming		South East Port of Spain Secondary
Best Tassa Drumming		Rio Claro West Secondary
Best School Music		St. George's College
Best Local Folk Traditional (3+)		Fyzabad Anglican Secondary
Best Local Folk Interp. Solo	Denisha Williams	Pleasantville Secondary
Best Local Folk Interp. Duet	Soriyah Bedasie	Pleasantville Secondary
Best Local Folk Interp. Duet	Soniah Bedasie	Pleasantville Secondary
Best Folk Interp. (3+)		Rio Claro East Secondary
Best Modern Dance Solo	Devi Singh	Barrackpore East Secondary
Best Modern Dance Duet	Danya James	Naparima Girls High School
Best Modern Dance Duet	Aaliyah De Vlugt	Naparima Girls' High School
Best Modern Dance (3+)		St. Madeleine Secondary
Best Foreign Folk Dance		Rio Claro East Secondary
Best Social Dance		Naparima Girls' High School
Best Limbo		Morvant/ Laventille Secondary
Best Male Dancer	Nazim Mohammed	Pleasantville Secondary
Best Female Dancer	Soriyah Bedasie	Pleasantville Secondary
Best Dance Costume		St. Jude's Home For Girls
Best School-Dance		Pleasantville Secondary
Best Overall School		Rio Claro West Secondary
Most Entries		Rio Claro West Secondary





*At the NGC Sanfest 2016 Senior Command Performances, Rio Claro East Secondary presents “Flying High” in the Dance category*

## NGC Sanfest 2016

NGC partnered once again with the San Fernando Arts Council to be the title sponsor for NGC Sanfest 2016. Now in its 46th year of existence, this year’s festival was launched on 18th September at the Creative Arts Centre in San Fernando.

This year’s festival, themed ‘A Divine Alternative to...’, ran from 26th September to 23rd November and targeted students up to the age of 19 competing in various categories in the Visual, Literary and Performing Arts. The San Fernando Arts Council also dedicated this year’s NGC Sanfest to Mr. James Lee Wah, who was the founder and first chairman of the Arts Council. Mr. Lee Wah was instrumental in the

establishment of the National Junior Arts Festival and the Creative Arts Centre.

At this year’s launch, Mr Lee Wah was recognised for his vision, initiative and foresight in conceptualising the formation of the festival, as well as his devoted and loyal service to the national community in the fields of education, arts, culture and community-oriented service.

An integral element of the festival is the highly anticipated teen talent competition – Mr. and Miss NGC Teen Sanfest. This leg of the competition was introduced into the Junior Arts Festival 14 years ago.



*Cindy Ann Bigford of St. Gabriel’s Girls R.C. doing her calypso rendition entitled “Child Abuse”*



*The vibrant colours and sounds of the Rio Claro Secondary School in the tassa drumming category*

• Continues on next page

## NGC Sanfest 2016 (continued)

• From previous page



*Sacred Heart Boys' R.C. wows the audience with their costumes and folk performance at the Junior Command Performances*

It is noteworthy that in 2002 NGC began its partnership with the founders of Sanfest, the San Fernando Arts Council, eventually becoming the Title Sponsor of the festival in 2013 and of the teen talent competition in 2015. This year the finals took place on Saturday 19th November 2016 and saw the crowning of the winners:

- Mr. NGC Sanfest – Nazim Mohammed, Pleasantville Secondary
- Miss NGC Sanfest – Shiparah Lewis, Arima North Government

NGC Sanfest 2016 culminated with the Command Performances on 22nd and 23rd November, 2016 at the Southern Academy for the Performing Arts after three months of performances and intense competition amongst primary and secondary school

students across Trinidad and Tobago. As in past years, the Festival concluded with the compilation of all winning portrayals in each category at these Command Performances.

NGC's employee volunteers were on hand throughout the festival, lending their support in various roles including judging, ushering, pamphlet distribution and backstage support.

NGC continues to support the holistic development of our nation's youth through this, and many other sponsorship programmes, as it recognises that the Arts are critical to national development and, as a result, the Company has long played a supporting role in its promotion as a key pathway of youth development.

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## NGC's 2016 Contribution to Habitat for Humanity

NGC's sponsorship agreement with Habitat for Humanity Trinidad and Tobago (HFHTT) has pledged TT\$1 million per year over a three-year period from 2015 to 2018 to assist in the provision of homes for families in need. Thirteen families have benefited from the first year of this three-year sponsorship.

In 2016, two homes were handed over by NGC. The first home was delivered to the Debideen family on 12th November, 2016. The second dedication ceremony was held on 8th December, 2016 at Sumaria Trace in Charleville for hand over to the Simbhu family. The

first tranche of the sponsorship was handed over to HFHTT at the latter dedication.

Manager Corporate Communications, Ms. Lisa Burkett, in delivering remarks noted that, "NGC was proud to partner with HFHTT as we seek to change lives and make Trinidad and Tobago a better place." The renewed partnership fits well with NGC's goal "to actively contribute to national development and stakeholder well-being, by creating shared value for the citizens of this country."



## NGC Bocas Lit Fest South and Tobago 2016



*NGC Bocas Lit South 2016 - Panel discussion at the San Fernando Hill. (L-R: Jorge Mr. Thielen Armand, film director of *Flor de la Mar*; Mr. Nicholas Galt, former Senator and current Chair of Association of American Chambers of Commerce in Latin America (AACCLA) and the Caribbean; Ms. Marina Salandy-Brown, Bocas Lit Fest founder and director; Mr. Curtis Mohammed, President, NGC CNG Company Ltd.)*

NGC Bocas Lit Fest South 2016 was launched on 5th November, 2016 at the Tradewinds Hotel. The noteworthy audience members included:

- Marina Salandy-Brown, Bocas Lit Fest founder and director;
- Michael Anthony, eminent author of *Green Days by the River* fame;
- Sherid Mason, Chairman, San Fernando Arts Council (SFAC) and
- Shella Murray, Vice-Chairman, SFAC and
- Ras Commander, Chairman, TUCO

NGC's President Mr. Loquan, a featured speaker at the launch, expressed that NGC was "gratified by the success of this investment, especially given the challenges facing our business sector and the concomitant need for prudent expenditure. It is much easier to justify support for an organisation when it demonstrates consistent growth, when it addresses an underserved need and when it delivers tangible results."

NGC has been partnering with Bocas Lit Fest since 2011 and the Company's support has grown from being that of a major sponsor in 2011, to Title Sponsor since 2012. For the past four years, the NGC Bocas Lit Fest has been one of NGC's flagship investments within its Corporate Social Responsibility portfolio. Attendance at the NGC Bocas Lit Fest grew from its inaugural 2011 figure of just over 3,000 to 6,500 persons in 2015.

The festival allows the country and the region to showcase their talent and creativity via literature, films, music and speech. Authors, editors and publishers gather in Trinidad for this annual event which is increasingly attracting persons from Latin America, the Caribbean and its diaspora in North America and Europe. World-renowned writers such as Earl Lovelace, Derek Walcott, Monique Roffey,

Olive Senior and Irvine Welsh have all attended and participated in previous Bocas Lit Fests.

Mr. Loquan also noted that the Company was exceedingly pleased as a locally grown company to see this investment in our indigenous craft yield such profits for our people. "Beyond building literacy, however, this festival serves another imperative of paramount importance. I have often lamented our indifference to and undervaluation of our local cultural creations, especially when they are regarded with such fascination by non-nationals. For that reason, I am thrilled and heartened by the work of NGC Bocas Lit Fest, by its efforts in developing, commending and promoting Caribbean authorship, in announcing our talent to the world with pride."

NGC Bocas Lit Fest South ran from 12th to 13th November, 2016 at San Fernando Hill.

The festival was dubbed "a celebration of words, stories and ideas — written, spoken, sung, dramatised, screened — with literary stalwarts such as Michael Anthony and Extempo master Lingo, plus new award-winning writers from South including Lance Dowrich and Kevin Jared Hosein."

The organisers of the South edition of Bocas Lit Fest also partnered with Junior Sanfest, the Oratory Foundation and the Green Screen Film Festival.

The South edition of the festival also included a children's festival and literary workshops.

And over in Scarborough, the NGC Bocas Lit Fest Tobago, took place from 17th November to 3rd December, 2016. The Tobago leg of the festival incorporated the Tobago Word Festival and Writers Guild that showcased Tobago literary talent, the top Spoken Word artists and offered workshops and film screenings.

## Repairs to Berth 2 Project Achieves Milestone



*Juniper Platform is successfully loaded out from Berth 2, Port of Brighton*

For National Energy and by extension, the energy sector of Trinidad and Tobago, 2017 has started with signs of optimism for productive times ahead. This resulted from the achievement of a major milestone at Berth 2, Port of Brighton, La Brea on 4th January 2017 when bpTT's Juniper platform was successfully loaded out from TOFCO's Fabrication Yard. The operation involved focus, precision and coordination by the TOFCO/Technip team to ensure that the platform was safely moved through the Heavy Loading Platform (HLP) at Berth 2, then on to Barge 455. The Juniper platform, with a weight in excess of 6,000 tonnes, is the largest offshore platform ever fabricated in Trinidad and therefore, the HLP was specifically designed to accommodate structures of this mass.

President of National Energy, Dr. Vernon Paltoo, who was present to witness part of the loading operation, expressed his satisfaction with the work done by the National Energy and LABIDCO teams in delivering the HLP on time and fit for purpose. He stated, "This

augurs well for the future of platform fabrication in Trinidad and Tobago. Again, we have demonstrated that we can effectively deliver on projects in support of national development."

National Energy's tugs, the *NEC Majestic* and *NEC Empress* also played a critical role in the load-out, as they were required to stabilise the barge against the currents as the day went on.

After the meticulous operation, which lasted for more than 24 hours, the platform was placed onto the barge to be welded and secured in place. Transport to the Juniper field off the southeast coast will take place on 15 January 2017. The platform will then be installed on its jacket in preparation for production.

Juniper, bpTT's first subsea field development project in Trinidad and Tobago, is expected to produce approximately 590 MMscf/d which will boost the country's gas supply.

## Update on Reconstruction of the LABIDCO Corridor and Pipeline ROW Project



*In Progress: Reconstruction of LABIDCO's corridor and pipeline ROW*

The Reconstruction of the La Brea Industrial Development Company Limited (LABIDCO) Corridor and Pipeline Right of Way (ROW) Project commenced in June 2016 and since then, the works are progressing towards completion which is scheduled for February 2017. The construction works are being carried out by contractors, under the management of National Energy's Infrastructure Planning and Development Department.

The project which is being conducted in phases, to minimise disruption to traffic flow at the estate, entails widening and realignment of the existing roadway. The new roadway will be 8m wide with a 3m wide shoulder on either side. This is being done primarily to accommodate movement of modules for the construction of the CGCL plant in 2017. For the Pipeline ROW, an embankment is being constructed to accommodate the CGCL pipeline.

The corridor's drainage is also being enhanced based on an upgrade to the design. Sub-surface drains are being installed to handle ground water and new surface drainage will also be installed throughout the length of the roadway.

Another major element of the reconstruction project involves relocation of utility lines including electricity, water and communication. Discussions are being held with stakeholders, T&TEC, WASA and TSTT in order to manage the repositioning of these lines in a safe and efficient manner while minimising disruptions to services. Relocation of electricity and telecommunications lines is ongoing. A plan has also been put in place for protection of NGC pipelines during the works.

As at the end of December 2016, the works were 60% completed and on average, 40% of persons employed on the project come from the community of La Brea and environs. Two layers of asphaltic base course was laid over the majority of the carriageway. The embankment to accommodate the CGCL pipelines on LABIDCO Estate was substantially completed at the end of December 2016 and work on the embankment on the Union Industrial Estate site has commenced.

As at 31 December 2016, there have been no accidents on the project and the traffic management plan has been working effectively.

**NGC CNG NEWS**

## NGC CNG Rolls Out Grants and Incentives for CNG Conversion

Ten compressed natural gas (CNG) stations are now operational across Trinidad. In January 2017, the CNG supply at NP’s Carrousel Service station was reopened in San Fernando and also at the NPMC Ramco station in Orange Grove Trincity.

NP Carrousel has been a long-standing station in the CNG network, and a popular spot for drivers in South Trinidad. About a year ago, the CNG compressor was shut down at this station and over the last few months, new compression, storage and dispensing equipment was installed. The reopening of the CNG supply at NP Carrousel was a big relief to the hundreds of CNG users in the busy southern city, as there was only one other CNG station. When the station was reopened

on 11 January, 2017, dozens of drivers stopped by to fill up, as word on the ground spread quickly.

NP Ramco in Orange Grove is a new addition to the industry site, which was opened in mid-2015 for liquid fuels. Located along the busy east-west Churchill Roosevelt Highway, this station has the potential to accommodate a substantial volume of traffic.

In tandem with new station openings, more and more CNG vehicles are being licensed. The Association of Maxi Taxi of Trinidad and Tobago, after launching two CNG vehicles in September 2016, got an additional six more vehicles in January 2017. A 15-seater bifuel CNG Maxi Taxi is also available from ANSA Automotive.



*From Left to Right: Mr. Razai Azard Rahaman, Chairman Rahamut Group of Companies; Mr. Sahid Hosein, Chairman National Petroleum Marketing Company; Senator the Honourable Rohan Sinanan, Minister of Works and Transport; Mr. Gerry C. Brooks, Chairman NGC Group of Companies; Mr. Bernard Mitchell, CEO National Petroleum Marketing Company; and Mr. Curtis Mohammed, President NGC CNG at the formal opening of the CNG supply at the NP Ramco Service Station, Orange Grove, Trincity.*

### NGC CNG’s Grants and Incentives

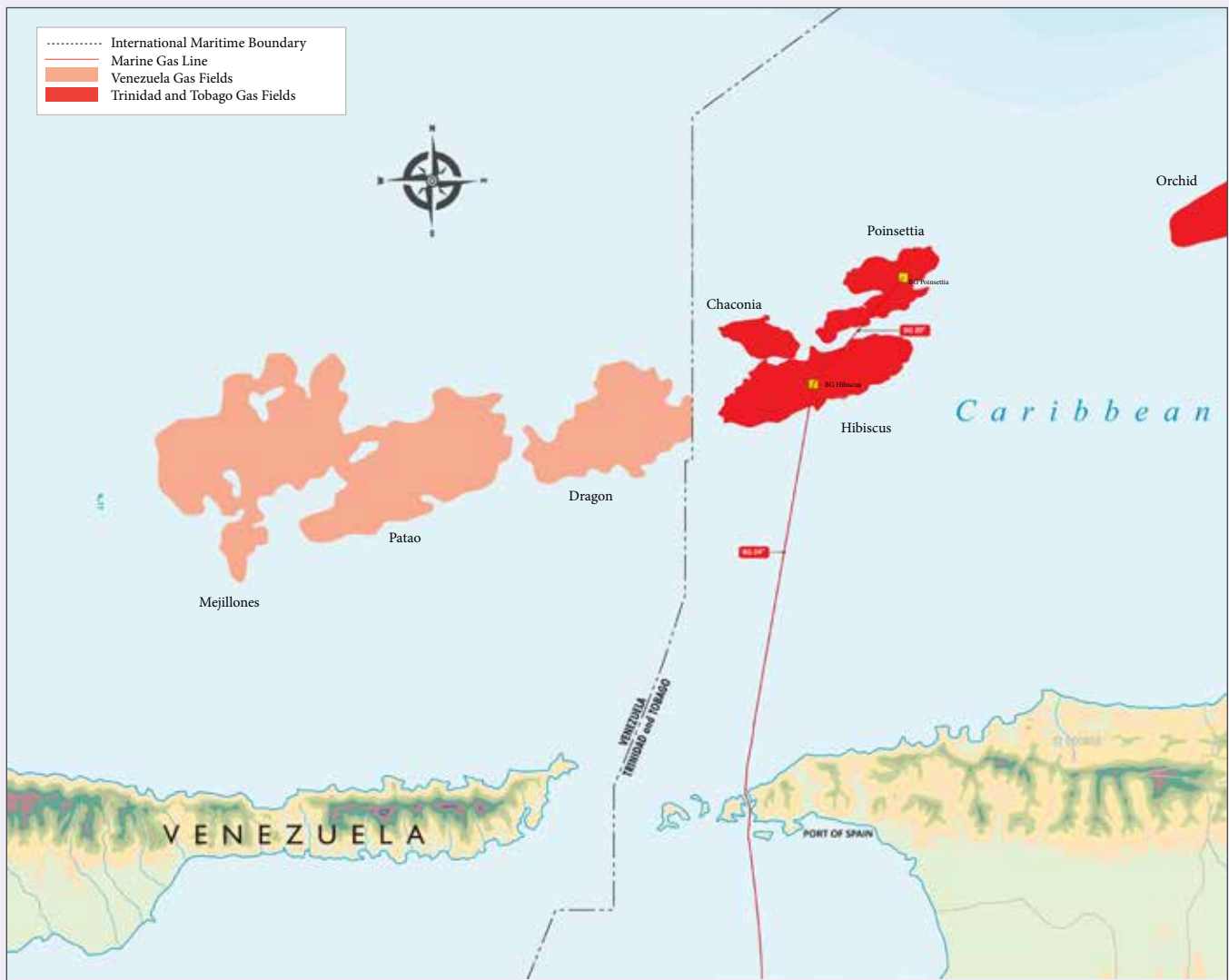
NGC CNG has signed a Memorandum of Understanding (MoU) with the Private School Transport Association of Trinidad and Tobago (PSTATT). Owners of school transport omnibuses who are members of PSTATT will receive an incentive if they switch to CNG. The MoU was signed between NGC CNG and PSTATT in November 2016 and is valid until December 31st 2018.

NGC CNG’s investment will see the first 40 drivers who purchase a new Original Equipment Manufacturer (OEM) CNG vehicle receiving \$15,000 in fuel for a

period of two years. Drivers who convert their existing diesel vehicle to CNG, will receive \$7,500 in fuel for a similar term. Note that an MoU was previously signed with the Association of Maxi Taxi for a grant of \$45,000 (small maxi) or \$75,000 (large maxi) if they were destroyed and replaced with a CNG equivalent. Owners of maxi taxis less than four years old, are also eligible for a grant of up to \$30,000 if they convert their diesel maxi to CNG. Maxis owners with vehicles above four years can receive up to \$30,000 in a fuel incentive if they switch to CNG.

INDUSTRY NEWS

## What is the Dragon Field?



Cross-section of the Trinidad and Tobago Energy Map showing the Mejillones, Patao, Dragon and Rio Caribe natural gas fields.

NGC, together with the MEEI, has been engaged in talks with Venezuelan officials to bring natural gas to market from cross-border and across border fields such as Dragon and Loran-Manatee fields. MoUs and non-disclosure agreements have been signed between Trinidad and Tobago and Venezuela, regarding a natural gas supply from the Dragon Field.

Mariscal Sucre is an area located offshore northeast Venezuela. It is comprised of four fields - Dragon, Patao, Mejillones and Rio Caribe.

### Dragon Field Facts:

1. Dragon is located 40km off Venezuela's coast and 19km off Trinidad's coast
2. Agreements were recently signed between Trinidad and Tobago and Venezuela for development of the Dragon Field in December 2016
3. The agreement regarding Dragon is separate and apart from that of Loran-Manatee, Manakin-Cocuina or Kapok-Dorado. Dragon field lies entirely within Venezuela's maritime jurisdiction. The other three are all cross-border fields which straddle the maritime boundary between Venezuela and Trinidad and Tobago.
4. First gas from Dragon is expected in 2020, though there have been calls by the leaders of both countries to decrease the timeline.
5. Petroleos de Venezuela SA (PDVSA), Venezuela's state-owned oil and gas company, expects that

**INDUSTRY NEWS**

**What is the Dragon Field? (continued)**

production from these four fields will eventually reach 1.2 billion cubic feet per day of natural gas and 28,000 barrels per day of condensate. It is worthy to note that based on the 2017 Trinidad and Tobago Energy Map, T&T’s oil reserves were estimated at 3P 409.77 million barrels (as at 2011), condensate reserves 3P 98.67 million barrels (as at 2011) and gas reserves of total 22.7 tcf (as at 2014).

- 6. The gas obtained from Dragon will produce an estimated 300 million cubic feet per day of natural gas from four wells.
- 7. The closest platform to Dragon is Shell’s Hibiscus platform.

- 8. Because of the proximity of Hibiscus to Dragon, it is recommended that the gas be transported via pipeline to this location.
- 9. It is expected that this Dragon gas will be used to address depleting resources.

Prime Minister of Trinidad and Tobago, Dr. the Honourable, Keith Rowley remarked that the deal was “significant and necessary for the commercialisation of the hydrocarbon sector which will have far reaching consequences for the people of Venezuela and Trinidad and Tobago.”

Name of Field	TT Share (tcf)	Venezuela Share (tcf)	Total (tcf)
Loran-Manatee (blocks 6d and 2)	2.69	7.30	10.00
Manakin-Cocuina (blocks 5b and 4)	0.48	0.26	0.74
Kapok (already productive)/Dorado	0.26	0.05	0.31

**TROC Project**

Several projects have been identified to alleviate natural gas curtailment in the short and medium term. One such project is the Trinidad Onshore Compression (TROC) Project.

The TROC project, promises to bring onstream, an additional 200 MMscf/d of natural gas per day by early 2017. Final approval was received in July 2016, after the finalisation of key project agreements between the Atlantic shareholders, NGC and other directly impacted upstream stakeholders.

The completion of this project, along with the bpTT Juniper and EOG Resources/bpTT Sercan project, is expected to bring some temporary relief to the LNG and petrochemical sectors, which have suffered from serious shortfalls in gas supply over recent years. However, new gas projects will be needed to offset continued falling production from existing fields in subsequent years.

The project is 100% funded and owned by bpTT and will be operated by Atlantic. bpTT operates in 904,000 acres off Trinidad’s east coast with 13 offshore platforms and two onshore processing facilities.

TROC is designed to increase production from low-pressure wells in bpTT’s existing acreage in the Columbus Basin, using an additional inlet compressor at the Atlantic LNG plant, Point Fortin. The addition of this compressor will decrease the pressure in the pipelines bringing gas from the East Coast offshore gas fields to the Atlantic facility.

Decreasing pipeline pressure will allow more gas to flow into the system from low-pressure wells in bpTT’s existing acreage in the Columbus Basin, and therefore increase overall gas production. Additional upgrades will be made to bpTT’s upstream facilities, as well as those of other companies to accommodate operations of the new onshore compressor.

TROC project is another demonstration of the co-operation of many key players in the oil and gas sectors to improve production and revenue for Trinidad and Tobago. The project will result in increased gas accessibility from our offshore fields to help alleviate the current gas supply shortfalls. Start-up of the compressor is due in early 2017.

ONE MOMENT PLEASE



**TO REFLECT ON THE BEAUTY  
THAT SURROUNDS US HERE IN  
TRINIDAD AND TOBAGO**

*What lies beneath: At the Keshorn Walcott Toco Lighthouse, overlooking Galera Point, where one can view the Caribbean Sea, embrace the Atlantic Ocean and hear the roar of their tempestuous seas.*

*Photo: Nic-Connor Alexander*



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