FOR A SUSTAINABLE EARTH
WE MUST LEAVE A BETTER EARTH
AND BETTER CHILDREN
FUTURE
FOR OUR CHILDREN.
FOR OUR EARTH.
Reporting Practice

The National Gas Company of Trinidad and Tobago Limited (NGC) is pleased to present our second annual Sustainability Report. We remain committed to being a recognised global leader in the development of sustainable energy-related businesses.

This Sustainability Report 2018 outlines information on the Company’s main achievements, activities and opportunities for improvements in the area of sustainability for the period 1 January 2018 to 31 December 2018. Our most recent previous report was for 2017 and covered the period 1 January 2017 to 31 December 2017.

The information presented reflects the operations of NGC in Trinidad and Tobago, headquartered on Orinoco Drive, Point Lisas Industrial Estate, Point Lisas. For the purposes of this report, the activities of NGC are deemed to be in one geographic location – Trinidad and Tobago. The report does not reflect information on any of our subsidiary companies, other than noting our shareholdings under “NGC Group of Companies Legal Structure” presented on page 16 and emissions data presented for our 100% owned subsidiary NGC CNG Company Limited, presented on page 61.

The complete financial performance of NGC and that of its subsidiary companies are published separately in the NGC Annual Report. Both the Annual Report and the Sustainability Report can be accessed electronically via www.ngc.co.tt.

To provide feedback on this report, please contact NGC at info@ngc.co.tt.
Global Reporting Initiative (GRI)

NGC is pleased to produce a “GRI-Referenced” report. The GRI Standards set out the principles and disclosures that organisations can use to report on economic, environmental and social impacts of their operations. This material references:

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</table>
Our Priorities

Our Vision is to be a recognised global leader in the development of sustainable energy-related businesses.

Our Mission is to create exceptional value from natural gas and related energy businesses through our people and strategic partnerships.

Our Core Values include:
- Safety and Environmental Preservation
- Integrity
- Employee Engagement
- Excellence
- Transparency
- Customer Focus
- Corporate Social Responsibility

Our work aligns with our four strategic pillars that guide our approach to sustainability.

- Secure Our Current Business
- Develop Our Organisation
- Grow Locally and Internationally
- Strengthen National Contribution

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Noteworthy in 2018

**FIRST GAS FROM IGUANA FIELD**
In November 2018, NGC’s energy partner, De Novo, produced the first commercial supply of natural gas from the Iguana field located in Block 1(a).

**SAP ARIBA GOES LIVE**
Q4 2018 marked the launch of the full SAP Ariba Cloud Procure-to-Pay system which can digitise several elements of the procurement process, including Requests for Information, Quotations and Tenders.

**LEGACY PROJECTS**
The legacy Liquid Fuels Pipeline Project (LFPP) achieved 100% mechanical completion. The facility is now mechanically complete with its jet fuel lines equipped to receive jet fuel. The diesel and gasoline systems are awaiting final commissioning with fuels. Another legacy project, the Phoenix Park Valve Station (PPVS), received permission to flow hydrocarbons through the facility in 2018.

**GAS DEALS**
In 2018, NGC signed a number of gas deals with local and regional operators including Nutrien, Caribbean Nitrogen Company Limited, Nitrogen (2000) Unlimited and the Global Petroleum Group (relative to work in Grenada). A Term Sheet was also signed with Venezuelan state energy company PDVSA and Shell to advance negotiations towards accessing gas from the Dragon marine field.

**MAINTAINING AGGREGATOR ROLE**
Despite the challenge of significant volume shortages due to month-long shutdown works of a major upstream gas supplier, no plants on the Point Lisas Estate suffered ill effects of insufficient gas supply to their operations.
Keeping The Focus on You

“... to be sustainable you have to look forward and take into account the changes going on in the environment and how they may affect your business.”
A sustainable organisation requires a sustainable business model and over the past year, NGC’s model has continued to evolve as we position ourselves as a strategic player at the centre of the natural gas industry in Trinidad and Tobago.

The organisation is guided by four strategic pillars which are centred around sustainability: developing the organisation, securing current business, growing nationally and internationally, and strengthening our national contribution. This is the foundation that remains constant. In the current economic climate, we must continue to adapt the way we do business and focus on getting the best value for each molecule of gas produced.

To ensure that we create this exceptional value and to be sustainable, you have to look forward and take into account the changes going on in the environment and how they may affect your business.

NGC will continue to play a central role in the future of natural gas in Trinidad and Tobago. To ensure this, our focus in 2018 has been on what we call the "Big Five"; these are the things that we must get right to position us for the future.
HSSE/Asset Integrity
Asset Integrity Management is a core function of our organisation; we are not going to grow the business well unless we have good infrastructure with a clear focus on the environment where people work. In 2018, we renewed our focus on HSSE and Asset Integrity. We have had some improvements over the prior year, but we are not where we want to be. We know we can do better and we are working towards that goal. Dedicated resources were recruited to focus on Asset Integrity, and we have planned and mapped a progression for continuous improvement.

Project Excellence
Much of the work we do at NGC is project-based. Whether we are doing infrastructure improvements, running a line, enhancing safety and reliability, projects are critical to the way we do business and we have to be smarter in the way we execute and manage this area of the business. We have restructured our approach to projects, separated the function and, as with Asset Integrity, recruited dedicated senior resources. We have already begun to reap the rewards. The Liquid Fuels Pipeline Project (LFPP) that was in progress for more than a decade, achieved 100% mechanical completion in 2018.

“NGC will continue to play a central role in the future of gas in Trinidad and Tobago and beyond”
Cost and Revenue Management
In this area, we are looking both at how we generate revenue and what we are spending on. On the cost side, in 2018 we looked at every part of the business and examined where we are spending our money. We have assembled a number of cross-group teams that focus on issues such as procurement and supply chain management, all with a view to increasing the efficiency of our operations and the way we manage our limited resources.

On the revenue side, there has been a great emphasis on how we generate new revenue for the business, diversifying revenue streams beyond Trinidad and Tobago through various regional and international partnerships.

People
As our business evolves, we need to ensure that we have the right people with the right competence, knowledge, skills and development (CKSD) for the future NGC. In 2018, we recruited as well as trained and developed the skill sets required to equip us moving forward. Phase 2 of the CKSD exercise started in 2018 with the Operations and Commercial teams and will be rolled out to all areas by the end of 2019. As we shape the future NGC, succession planning has also been a very important feature to ensure continuity with the least possible disruption to business.

Results from our employee benchmark survey for 2018, while above the national average, showed we are not where we want to be as an organisation and we are paying close attention to addressing some of the weaknesses identified.

Governance
Governance at NGC focuses on risk and compliance. In 2018, risk management assumed greater importance. Our Risk Council was operationalised with defined actions to mitigate risk and embed our risk management system. This council, which I chair, includes the Leadership team, Internal Audit and our strategy team. We have concentrated on the continuous identification and close-out of high-risk areas. This approach is filtered down through the leadership team to identify and address operational risk within each area of business.
Shaping the Future

We recognise that to be a sustainable organisation, we need to plan with the future NGC in mind, shaping our systems and processes to match the NGC we want to be. Since 2017, we have been systematically restructuring the organisation to align with our evolving business model.

One area that has been particularly important to me, which is critical for any sustainable player in the sector, is that of energy efficiency. We have established an entirely new department to focus on manufacturing industries and energy efficiency, and we are playing a leading role in establishing the National Policy Agenda on Energy Efficiency.

We are researching and continuously learning from other players in the sector to develop our own approaches to enhance and embed energy efficiency, not only within our organisation but for our customers, partners and community.

We are grateful for the continued efforts of our employees who remain dedicated and continue to make significant contributions even in the most challenging of environments.

On behalf of the entire NGC team, I am delighted that we have been able to produce our second Sustainability Report demonstrating our commitment to enhancing and communicating our performance in all areas of business.

Mark Loquan
President
The Sustainability Report 2018 describes the performance of NGC with respect to its main environmental, social, economic and governance issues.

About This Report

This edition, published in January 2020, is the second such report produced by NGC. It does not present the performance of any of our subsidiary companies which are mentioned in the “NGC Group of Companies Legal Structure” on page 16.

SCOPE
The Sustainability Report 2018 outlines information for the period 1 January to 31 December 2018.

The complete financial performance of NGC and its subsidiary companies is published separately in the NGC Annual Report which can be accessed via www.ngc.co.tt

GLOBAL REPORTING INITIATIVE (GRI)
To ensure that we continue to present quality content to our stakeholders the NGC has prepared a GRI-Referenced report. The material references for each standard used are outlined on page 5 of this report.
Who We Are and What We Do

NGC is a wholly owned state enterprise incorporated in 1975 to create value from the natural gas industry for the benefit of the people of Trinidad and Tobago.

Today, 44 years later, still positioned at the centre of the natural gas industry, NGC has evolved as an organisation to meet the changing energy landscape and the pressing need to remain relevant as a business. Our core activities are the purchase, aggregation, sale, transmission and distribution of natural gas to large and small customers.

However, the way we do business, whether through strategic partnerships, new investments or technological innovations, continues to evolve as we strive to become a global business entity with a structure that supports our vision to be a recognised global leader in the development of sustainable energy-related businesses.

As an internationally investment-graded company, NGC shows consistent profitability and is a significant contributor of both dividends and taxes to the local economy. The Company owns, maintains and operates the country’s approximately 1,000km gas transmission and distribution pipeline network comprising both onshore and offshore segments. This complex network has an installed capacity of 4.4 billion standard cubic feet per day (bscf/d) and supplies feedstock and energy to global scale production plants, power generation firms and a wide range of light manufacturing and commercial enterprises.

NGC leads a diverse group of companies that positions the Company throughout all segments of the energy value chain. Through subsidiaries, investments and associated companies, NGC is involved in the development of industrial port and site infrastructure, the production of Liquified Natural Gas (LNG) and Natural Gas Liquids (NGLs), the marketing of Compressed Natural Gas (CNG), as well as upstream oil and gas exploration and production. NGC also holds shares in the Caribbean Gas Chemicals Limited (CGCL) Natural Gas to Petrochemical Complex.
Our Credit Ratings

STANDARD AND POOR’S

BBB Stable

MOODY’S

Ba1 Stable

CARICRIS

AA+ Stable

NGC IS A MEMBER OF THE FOLLOWING EXTERNAL ASSOCIATIONS

• American Chamber of Commerce of Trinidad and Tobago (AMCHAM)
• Association of Upstream Operators of Trinidad and Tobago (AUOTT)
• Center for Chemical Process Safety
• Employers’ Consultative Association (ECA)
• Energy Chamber of Trinidad and Tobago
• International Gas Union (IGU)
• Point Lisas Energy Association (PLEA)
• The Couva/Point Lisas Chamber
• Trinidad and Tobago Chamber of Industry and Commerce (TTCIC)
• Trinidad and Tobago Manufacturers’ Association (TTMA)
• Trinidad and Tobago Upstream Operators Group (TTUOG)

NGC IS A MEMBER OF THE FOLLOWING EXTERNAL INITIATIVES:

• Cabinet-Appointed Committee for the Development of a National Energy Conservation and Energy Efficiency Action Plan for Trinidad and Tobago
• Energy Sector Security Initiative (ESSI)
• Safe to Work (STOW)
• South East and South West Security Councils
• Trinidad and Tobago Emergency Mutual Aid Scheme (TTEMAS)
• Trinidad and Tobago Extractive Industries Transparency Initiative (TTEITI)
The Government of Trinidad and Tobago

The National Gas Company of Trinidad and Tobago

100% 100% 62.16%

Pipeline LNG CNG

Upstream Assets

Atlantic LNG Co. of T&T Ltd.

Atlantic Gas Processing Co. Ltd.

Atlantic E&P Investments Ltd.

South-East Coast Consortium

NGC E&P Investments Ltd.

NGC E&P (Barbados) Ltd.

De Novo Energy Block 1A Ltd.

Pheonix Park Gas Processing Ltd.

Caribbean Gas Chemical Ltd.

Processing Other Port & Infrastructure

La Brea Industrial Development Company Ltd.

National Energy Corporation Ltd.

National Energy Corporation of T&T Ltd.

Eastern Caribbean Gas Pipeline Co. Ltd.

National Helicopter Services Ltd.

NGC Petrochemicals

Downstream Petrochemicals Research & Development Ltd.

NGC Group Captive Insurance (Barbados) Limited

Operated Company

Fully Owned Company

Partially Owned Company/Asset
Oil and Gas companies operating in the upstream sector explore, appraise and produce oil and gas for sale.

NGC aggregates and purchases gas from upstream producers and sends to PPGPL for extraction of natural gas liquids. Dry gas is then returned to NGC for distribution to downstream consumers.

Consumers purchasing and using natural gas include: T&TTEC for Power Generation, Petrochemical companies, Light Industrial Commercial Sector, Heavy Industries and the Compressed Natural Gas (CNG) Supply Network.
Performance Metrics

Monitoring and managing our performance are critical to ensure not only that targets are achieved but that we can also identify and investigate variances at an early stage to take corrective actions, where necessary.

While the industry in which we operate continues to present complexities, uncertainty and volatility, a targeted risk-based approach to monitoring and measuring what matters to the business will ensure that we can navigate this environment.

To achieve this, we focus on five areas which we refer to as the "Big Five".
## Financial Performance

<table>
<thead>
<tr>
<th></th>
<th>2018</th>
<th>2017</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Assets</strong></td>
<td>29,995,776</td>
<td>31,346,933</td>
</tr>
<tr>
<td><strong>Tax payments 2018</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Corporation Tax</td>
<td>614,961</td>
<td>188,837</td>
</tr>
<tr>
<td>Green Fund Levy</td>
<td>46,827</td>
<td>34,744</td>
</tr>
<tr>
<td>Petroleum Profit Tax</td>
<td>63,423</td>
<td>8,899</td>
</tr>
<tr>
<td>Supplemental Petroleum Tax</td>
<td>66,761</td>
<td>41,338</td>
</tr>
<tr>
<td><strong>Total Revenue</strong></td>
<td>12,067,090</td>
<td>10,143,838</td>
</tr>
<tr>
<td>Dividends paid to GORTT</td>
<td>1,047,226</td>
<td>1,422,208</td>
</tr>
</tbody>
</table>

**Natural Gas Supplied (MMscf/d)**
- **Purchases**: 1,429, 1,451
- **Sales**: 1,440, 1,445

## HSSE/Asset Integrity

<table>
<thead>
<tr>
<th></th>
<th>2018</th>
<th>2017</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Man-hours Worked</strong></td>
<td>1,904,762</td>
<td>1,859,265</td>
</tr>
<tr>
<td><strong>Accident Frequency Rate</strong></td>
<td>0.52</td>
<td>1.61</td>
</tr>
<tr>
<td><strong>Preventable Vehicular Accidents (PVAs)</strong></td>
<td>10, 16</td>
<td>10, 16</td>
</tr>
<tr>
<td><strong>Recordable Injuries</strong></td>
<td>1, 3</td>
<td></td>
</tr>
<tr>
<td><strong>Days Lost</strong></td>
<td>179, 73</td>
<td></td>
</tr>
<tr>
<td><strong>Near Misses</strong></td>
<td>66, 70</td>
<td></td>
</tr>
<tr>
<td><strong>Let’s Connect</strong></td>
<td>16,284, 6,958</td>
<td></td>
</tr>
<tr>
<td><strong>Hazardous Waste Collected (tonnes)</strong></td>
<td>5.29</td>
<td>4.07</td>
</tr>
<tr>
<td><strong>Percentage Recovery Rate (%)</strong></td>
<td>76.76</td>
<td>57.59</td>
</tr>
<tr>
<td><strong>Non-Hazardous Waste Collected (tonnes)</strong></td>
<td>3.42</td>
<td>2.89</td>
</tr>
<tr>
<td><strong>Percentage Recovery Rate (%)</strong></td>
<td>46.79</td>
<td>53.88</td>
</tr>
<tr>
<td><strong>Total Carbon Sequestered by tree planting (kgs)¹</strong></td>
<td>2,243,169</td>
<td>N/A</td>
</tr>
<tr>
<td><strong>Total Carbon removed from atmosphere from tree planting (tonnes)</strong></td>
<td>8,232</td>
<td>N/A</td>
</tr>
</tbody>
</table>

**Asset Integrity Systems Audit²**
- (National Average in 2016 – 2.02) | 2.08 | N/A |

¹ The Carbon Sequestration study was undertaken in 2018
² The Asset Integrity Systems Audit was conducted in December 2017 with the final report received in 2018.

## Project Excellence

<table>
<thead>
<tr>
<th></th>
<th>Planned</th>
<th>Actual</th>
<th>Planned</th>
<th>Actual</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Cost performance</strong></td>
<td>80%</td>
<td>40%</td>
<td>80%</td>
<td>30%</td>
</tr>
<tr>
<td><strong>Schedule performance</strong></td>
<td>80%</td>
<td>60%</td>
<td>80%</td>
<td>72%</td>
</tr>
<tr>
<td><strong>Defect Liability Claims</strong></td>
<td>3%</td>
<td>0%</td>
<td>10%</td>
<td>0%</td>
</tr>
</tbody>
</table>

## Governance

- Completed Conflict of Interest Declaration Forms Received: 100% 100%
- Whistle-blower Hotline matters received (Hotline activated in December 2018 and all matters addressed by the end of Q2 2019): 4 N/A

## People

<table>
<thead>
<tr>
<th></th>
<th>2018</th>
<th>2017</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Number of Permanent Staff</strong></td>
<td>600</td>
<td>570</td>
</tr>
<tr>
<td><strong>Number of Contract Staff</strong></td>
<td>70</td>
<td>133</td>
</tr>
<tr>
<td><strong>Total Number of Employees</strong></td>
<td>670</td>
<td>703</td>
</tr>
<tr>
<td><strong>Number of New Hires of Permanent Staff</strong></td>
<td>5</td>
<td>10</td>
</tr>
<tr>
<td><strong>Number of New Hires of Contract Staff</strong></td>
<td>4</td>
<td>6</td>
</tr>
<tr>
<td><strong>Total Number of New Hires</strong></td>
<td>9</td>
<td>16</td>
</tr>
<tr>
<td><strong>Employee Turnover Rate (with retrenchment)</strong></td>
<td>7%</td>
<td>9%</td>
</tr>
<tr>
<td><strong>Employee Turnover Rate (without retrenchment)</strong></td>
<td>6.5%</td>
<td>3%</td>
</tr>
<tr>
<td><strong>Total Number of Training Hours</strong></td>
<td>14,723</td>
<td>7,338</td>
</tr>
</tbody>
</table>

## LOCAL CONTENT

### Local Persons Engaged

<table>
<thead>
<tr>
<th></th>
<th>Beachfield Local</th>
<th>NGC Beachfield plus Contractor</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>% Local Beachfield</strong></td>
<td>21.95%</td>
<td>21.95%</td>
</tr>
<tr>
<td><strong>Tobago Local</strong></td>
<td>28</td>
<td>28</td>
</tr>
<tr>
<td><strong>NGC Tobago plus Contractor</strong></td>
<td>35</td>
<td>36</td>
</tr>
<tr>
<td><strong>% Local Tobago</strong></td>
<td>80.00%</td>
<td>77.7%</td>
</tr>
<tr>
<td><strong>Overall Local Persons Engaged</strong></td>
<td>37</td>
<td>37</td>
</tr>
<tr>
<td><strong>Overall Persons</strong></td>
<td>76</td>
<td>77</td>
</tr>
<tr>
<td><strong>Overall % Local</strong></td>
<td>48.68%</td>
<td>48.05%</td>
</tr>
</tbody>
</table>

¹ The Carbon Sequestration study was undertaken in 2018
² The Asset Integrity Systems Audit was conducted in December 2017 with the final report received in 2018.
Engaging Our Stakeholders

- Employees
- Business Associations
- Local and International Media
- Academia
- CSR Partners and Beneficiaries
- Citizens of Trinidad and Tobago
- Government Partners
- Suppliers/Contractors
- Board of Directors
- Downstream Operators
- Potential International Partners/Investors
- Upstream Operators

20 | Engaging Our Stakeholders
NGC engages with a wide network of stakeholders, each of which plays an important role in moving us towards achieving our vision of being a recognised global leader in the development of sustainable energy-related businesses.

Proactive, meaningful engagement is critical, and our dedicated Stakeholder Relationship Management Department established in 2017 continued its focus on targeted engagement with our diverse stakeholders through various activities in 2018.

**National Brand Survey**

As a state-owned company, we engage with the national community. In 2018, through its Communications and Brand department, NGC conducted a National Brand Survey with more than 2,000 respondents to understand national perceptions of the NGC brand and help guide the organisation in its approach to various aspects of our communication and outreach to stakeholders. This survey revealed that many citizens were not aware of the role that NGC plays in the local energy sector, nor did they see the Company as a sector leader. This information will help inform our stakeholder engagement moving forward as we seek to educate and inform national opinion on the critical role that NGC plays in the local economy.

**Light Industrial Commercial (LIC) Customer Forum**

The sustainability of NGC’s LIC customers, which include some 100 local businesses, is critical to NGC’s own sustainability as an organisation. Employing just under 50,000 employees and playing an important role in the economy, LIC customers use approximately 9 MMscf of gas per day. Appreciating the importance of this sub-sector NGC hosted its inaugural LIC Customer Forum in November 2018 at a time when many customers were facing challenges in their businesses. The forum sought to foster collaboration between NGC and this strategic group of customers to forge solutions for a sustainable future for all entities, especially in terms of more efficient uses of energy. At the forum, NGC also launched a new online portal that allows 24-hour communication and customer access to relevant tools.
Industry Communication and Engagements

As NGC continues to position itself as a global energy leader, communication with potential investors and industry partners is critical. In this regard, NGC has sought a presence in sector-specific print media publications such as *The Oil and Gas Year* and *The Report: Trinidad and Tobago 2018* produced by Oxford Business Group. Additionally, NGC continues to actively participate in and support both local and international sector conferences and other symposia, including the Trinidad and Tobago Energy Conference and Expo and the World Gas Conference.

Sustainability Report

NGC has committed to the publication of an annual *Sustainability Report* which we see as another important tool to reach our diverse stakeholder base with robust economic, social and economic information in a format that is both engaging and easily understandable.

Our stakeholders are encouraged to provide feedback on this report and any other NGC communication via email at info@ngc.co.tt or by visiting our website at www.ngc.co.tt.

Leveraging Technology for Internal Communication

In 2018, NGC also placed focus on internal stakeholders and building workplace relationships. Leveraging technology, a number of tools were introduced to encourage people to collaborate and share ideas that are important to them.

Additionally, NGC continues to actively participate in and support both local and international sector conferences and other symposia, including the Trinidad and Tobago Energy Conference and Expo, and the World Gas Conference.

Yammer, a platform similar to Facebook, was launched in August. The platform allows employees to create their own accounts, join groups with co-workers, share links and photos and connect with individuals across the organisation on shared interests which may or may not be work-related. At the end of 2018, 48.3% of staff connected to the network. Microsoft Teams was another tool which was introduced to enhance productivity across many cross-functional work units. This facilitates collaboration and virtual meetings, allowing employees to work more efficiently.

Employee-centred podcasts are another initiative being used to encourage and deepen engagement across the organisation. These podcasts continue to be developed and feature a variety of discussions, stories and interviews with employees across the organisation.
Integrating Sustainability

Our approach to sustainability is guided by our strategic pillars and at a global level, our efforts are aligned to the Sustainable Development Goals.

By focusing on the issues that are material to us, we can do our part in shaping the future, addressing some of the most significant challenges facing our planet. Our process for determining material issues takes into consideration our ongoing communication with both internal and external stakeholders that provides feedback on issues of importance and impact.
Developing our Organisation with Governance, Ethics and Compliance in mind.

- Focus on Risk
- Policy Development and Alignment
- Transparency and Accountability
- Compliance

16 Peace, Justice and Strong Institutions

100% Conflict of Interest Declaration Forms Completed

4 Matters Received

Whistle-Blower Hotline *Hotline Established December 2018
Management Approach

Governance is one of our “Big Five” areas deemed critical to the future of the organisation. We place strategic focus on this area with a risk-based approach, recognising that the implementation of standardised policies, together with consequence management approaches, is essential to operations. Strong leadership sets the tone for ethical behaviours supported by a system of guiding principles, policies and practices.

As a state company, we are guided by the State Enterprise Performance Monitoring Manual (SEPMM), against which we actively monitor our compliance and ensure that reporting to the government is done on a timely basis.

Focus on Risk

In 2018, we sustained emphasis on de-risking the Company by focusing the Leadership Team on the top risks identified in all areas of business. The Risk Council meets on a quarterly basis with a view to understanding and mitigating risks to the business both at a strategic and operational level. The Company was able to close outstanding P1 (high priority) audits and moved from 80% in 2017 to 100% closure in 2018.

Policy Development and Alignment

As we continue to develop and align policies to ensure good governance and ethical business practices, the Company’s Whistle-blower Policy was completely rolled out in December 2018 with a hotline for making reports. All reports are received by the internal audit department which investigates and prescribes the necessary action to address and close the matter. The policy was immediately effective with four hotline matters received in December 2018.
All employees are required to complete Conflict of Interest Declaration Forms and for 2018, completed declarations were received for 100% of employees. Also, in 2018 our Delegation of Authority Manual was reviewed and amended. This clearly outlines authority for operations throughout the organisation.

There has also been an active review of all policies to ensure alignment with the forthcoming Public Procurement and Disposal of Public Property Act, with the establishment of a cross-group team to oversee group-wide implementation.

Transparency and Accountability

NGC continues to play an important and active role as a member of the Multi-Stakeholder Group (MSG) of the Trinidad and Tobago Extractive Industries Transparency Initiative (TTEITI). NGC served as part of this group since 2010. We see this transparency initiative aligning with our own efforts towards transparency and accountability and since fiscal year-end 2011, we have been voluntarily reporting all our payments to government, including taxes, royalties and dividends.

Details of our disclosures as part of this initiative can be found at www.tteiti.org.tt.

In the vein of transparency, we also ensure compliance with the Freedom of Information Act and have designated alternate officers to accept requests and respond accordingly, in line with the Act.

Compliance

As a state enterprise, NGC has a number of reporting obligations as outlined in the SEPMM and compliance is closely monitored to ensure submissions are made on a timely basis. For 2018, NGC satisfied all its reporting requirements under the SEPMM.
### NGC’s Reporting Obligations under the SEPMM

<table>
<thead>
<tr>
<th>DOCUMENT</th>
<th>SUBMISSION DATE</th>
<th>RECEIVING AGENCY</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strategic Plan</td>
<td>To be submitted six months prior to the start of the plan period (for companies receiving subvention), one month for others.</td>
<td>Investments Division, Ministry of Finance and Ministry of Energy and Energy Industries</td>
</tr>
<tr>
<td>Annual Budget</td>
<td>To be submitted six months prior to the start of the plan period (for companies receiving subvention), one month for others.</td>
<td>Investments Division, Ministry of Finance and Ministry of Energy and Energy Industries</td>
</tr>
<tr>
<td>Annual Financial Statements/Annual Reports</td>
<td>To be published in at least one daily newspaper within four months following the completion of the financial year.</td>
<td>Investments Division, Ministry of Finance and Ministry of Energy and Energy Industries</td>
</tr>
<tr>
<td>Administrative Reports</td>
<td>To be submitted by the end of June each year.</td>
<td>Ministry of Energy and Energy Industries</td>
</tr>
<tr>
<td>Board Minutes</td>
<td>To be submitted within one week following confirmation</td>
<td>Investments Division, Ministry of Finance and Ministry of Energy and Energy Industries</td>
</tr>
<tr>
<td>Monthly Cash Statements Operations</td>
<td>To be submitted within three weeks after month end.</td>
<td>Investments Division, Ministry of Finance and Ministry of Energy and Energy Industries</td>
</tr>
<tr>
<td>Quarterly Returns Report</td>
<td>To be submitted by the end of the first month after the quarter end.</td>
<td>Investments Division, Ministry of Finance</td>
</tr>
<tr>
<td>Quarterly Status of Litigation Proceedings</td>
<td>To be submitted by the end of the first month after the quarter end.</td>
<td>Investments Division, Ministry of Finance</td>
</tr>
<tr>
<td>Monthly Status of Loan and Overdraft Portfolio (Debt)</td>
<td>To be submitted by the seventh day following each month end.</td>
<td>Investments Division, Ministry of Finance</td>
</tr>
<tr>
<td>Quarterly Status of Investments in Securities Portfolios</td>
<td>To be submitted by the end of the first month after the quarter end.</td>
<td>Investments Division, Ministry of Finance</td>
</tr>
<tr>
<td>Return of Award of Contracts</td>
<td>To be submitted 14 days after the month end.</td>
<td>Investments Division, Ministry of Finance</td>
</tr>
<tr>
<td>Internal Audit Reports</td>
<td>To be submitted 14 days after the end of each quarter.</td>
<td>Investments Division, Ministry of Finance</td>
</tr>
</tbody>
</table>
Developing our Organisation with you in mind

**HUMAN CAPITAL**

- Organisational Development and Training
- Performance Management
- Employee Benefits

- **8**
  - DECENT WORK AND ECONOMIC GROWTH

- **670**
  - TOTAL NUMBER OF EMPLOYEES

- **7%**
  - EMPLOYEE TURNOVER RATE (INCLUDING RETRENCHMENT)

- **14,000+**
  - HOURS OF TRAINING FOR 491 EMPLOYEES
Management Approach
As the organisation continues to evolve, playing a central role in the future of gas in Trinidad and Tobago and beyond, human capital is critical to our success. NGC must ensure that it attracts, develops and retains the right talent to not only sustain current business, but to evolve and grow both locally and internationally. Managing the talent in our organisation and engaging our employees is the responsibility of the Human Resources (HR) Division which works to develop and engage, empower and motivate a workforce that will effectively and efficiently achieve the Company’s business objectives. Our approach focuses on the efficient delivery of quality human resource management and office management services in a caring, compassionate, credible and confidential manner that meets and exceeds our customers’ expectations.
Organisational Development and Training

Employee learning and growth are important components in creating an agile organisation that can respond to the fast-changing demands of the sector. 2018 saw the implementation of several in-house training interventions to equip employees with required knowledge and skills for personal and professional development. A total of 491 employees received over 14,000 hours of training in 2018.

In July 2018, employees of the Projects and Procurement, Operations and HSSE Divisions participated in a two-day TapRoot – Root Cause Analysis training, which exposed persons to the essential techniques to perform TapRoot investigations. The five-day TapRoot – Advanced Root Cause Analysis training for leaders was an extension of the two-day training and was done by some of the participants. Some important areas covered were:

- Precursor incidents – Incidents that could have been worse
- Essentials to find and fix the root cause of incidents, accidents, quality problems, near misses and operational errors

Performance Management

In 2018, the organisation upgraded its integrated performance management system on SAP Success Factors. There were a few challenges as we transitioned to the upgraded system. The HR team has used this experience to inform improvement going forward. To ensure that our employees understand their role in performance management, HR rolled out its approved Performance Management Policy in Q4 2018 and will continue these education awareness sessions in 2019.

Other key sessions delivered during 2018 were workshops on performance management and techniques for effectively giving and receiving feedback.
**Employee Benchmark Survey**

In 2018, NGC completed an Employee Benchmark Survey (EBS) to determine satisfaction levels with specified areas in the Company. The results revealed that average employee satisfaction in the Company was lower than ideal, despite being above the national average. The top three areas of satisfaction were Corporate Social Responsibility, Customer Satisfaction and Supervision, while the lowest performing areas were People Management Practices, Leadership and Management/Employee Relations. Plans have already been developed to work on addressing employee satisfaction concerns and are being rolled out in 2019.

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**Employee Benefits**

Our permanent employees are provided with a number of benefits, including:

1. **Employee Savings Plan**
2. **Easter Initiated Training and Development**
3. **Paid Leave, including business 'sick, vacation, study**
4. **Professional Membership Subscriptions**
5. **Pension & Life Insurance**
6. **Health Insurance**
7. **Wellness services, including gym facilities**
8. **Computer Lease**
9. **Employee Wellness Programme**

* Our contract employees are also offered these benefits.
TOTAL NUMBER OF EMPLOYEES

2018

PERMANENT STAFF
600

CONTRACT STAFF
70

TOTAL
670

2017

PERMANENT STAFF
570

CONTRACT STAFF
133

TOTAL
703

NEW HIRES

2018

PERMANENT STAFF
5

CONTRACT STAFF
4

2017

PERMANENT STAFF
10

CONTRACT STAFF
6
### Employee Training Hours by Gender

<table>
<thead>
<tr>
<th>Year</th>
<th>Total No. of Training Hours Received</th>
<th>No. of Employees Receiving Training (Female)</th>
<th>No. of Employees Receiving Training (Male)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2018</td>
<td>14,273</td>
<td>171</td>
<td>320</td>
</tr>
<tr>
<td>2017</td>
<td>7,338</td>
<td>134</td>
<td>218</td>
</tr>
</tbody>
</table>

### Levels of Employees Receiving Training (Hours)

<table>
<thead>
<tr>
<th>Level</th>
<th>Description</th>
<th>No. of Training Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>2018</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>L0</td>
<td>– President (1)</td>
<td>0</td>
</tr>
<tr>
<td>L1</td>
<td>– Vice Presidents (4)</td>
<td>168</td>
</tr>
<tr>
<td>L2</td>
<td>– Managers (31)</td>
<td>1,170</td>
</tr>
<tr>
<td>L3</td>
<td>– Assistant Managers/Heads (51)</td>
<td>1,918</td>
</tr>
<tr>
<td>L4</td>
<td>– Supervisors (16)</td>
<td>3,589</td>
</tr>
<tr>
<td>L5</td>
<td>– Individual Contributors (289)</td>
<td>7,428</td>
</tr>
<tr>
<td><strong>2017</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>L0</td>
<td>– President (1)</td>
<td>24</td>
</tr>
<tr>
<td>L1</td>
<td>– Vice Presidents (3)</td>
<td>67</td>
</tr>
<tr>
<td>L2</td>
<td>– Managers (21)</td>
<td>608</td>
</tr>
<tr>
<td>L3</td>
<td>– Assistant Managers/Heads (49)</td>
<td>1,001</td>
</tr>
<tr>
<td>L4</td>
<td>– Supervisors (86)</td>
<td>1,763</td>
</tr>
<tr>
<td>L5</td>
<td>– Individual Contributors (192)</td>
<td>3,875</td>
</tr>
</tbody>
</table>

**Total Number of Employees Receiving Training**

<table>
<thead>
<tr>
<th>Year</th>
<th>Total No. of Employees Receiving Training</th>
</tr>
</thead>
<tbody>
<tr>
<td>2018</td>
<td>491</td>
</tr>
<tr>
<td>2017</td>
<td>352</td>
</tr>
</tbody>
</table>

**Developing Our Organisation with You in Mind**
Securing Our Current Business with Health, Safety, Security and Environment

12 RESPONSIBLE CONSUMPTION AND PRODUCTION

- Destination: World-Class Safety
- Emergency Management Systems
- HSSE Performance
- Process Safety Management
- Security Management System
- Waste Management

1,904,762 Man-Hours Worked
0.52 Accident Frequency Rate
Management Approach

At NGC, our HSSE Division is guided by a mission to provide leadership and be a resource for the protection of health, safety, security and the environment. In executing this mission, we are actively moving forward toward our goal of ‘zero unsafe behaviours’ resulting in zero harm to people, loss of assets, loss of business continuity and damage to the natural environment. Per the theme of our ongoing HSSE campaign, our destination is "World-Class Safety".

HSSE serves as internal consultant for and collaborator with management and employees for protecting people, company assets and the natural environment. Beyond our internal stakeholders, collaboration extends externally to our stakeholders both private and public, advocating for interests relevant to the industry and maintaining a synergistic relationship with regulators. As consultant and collaborator, our approach involves planning, implementation, performance monitoring and application of lessons learned.

Destination: World-Class Safety

Our focus on improving safety performance continued in 2018 under the theme Destination: World-Class Safety. After “Lift-Off” in 2017, the second phase in 2018 “Ascension”, saw the execution of over a dozen targeted interventions and routine engagements aimed at raising awareness on matters of health, safety, security and the environment. Some of these activities included:

Knowledge Café Road Shows

These employee knowledge sharing events are seen as an important way to build HSSE awareness in the organisation. Sessions included:

- Environmental Sustainability – The National Agenda
- Taking Flight with Risk-Based Process Safety Management
- Personal Security: Cyber Crime and Gangs in Trinidad and Tobago
- Wellness: Mindfulness for a Happier You
Health Fairs
Special sessions were organised to educate and advise staff around important health issues including mental health, vision, nutrition and lung cancer.

School Fire Drill
An assessment of the emergency response system at one of our fenceline schools, Holy Faith Convent, Couva, was conducted to help the institution better prepare for and manage emergencies. This involved an evaluation of the fire alarm system and a response time drill exercise. Recommendations for improvement were provided to the school.

Emergency Management Systems
NGC conducted a Full-Scale Emergency Response Drill in November 2018 along the NGC 24” pipeline near our Picton Valve Station. The scenario involved a rupture of the 24” pipeline, resulting in the uncontrollable release of natural gas into the atmosphere. In the scenario, an unauthorised person entered our Right of Way with a lit cigarette during the release, resulting in a flashback and explosion.

This exercise, which was evaluated by a dozen external private and public stakeholders, sought to achieve the following objectives:

- To test NGC’s Communication Protocols
- To assess the capabilities of NGC’s Incident Control and Management Teams
- To assess our Mutual Aid Capabilities
- To test NGC’s Incident Management Team’s Business Continuity focus

These important exercises assist the organisation in better preparing to respond to and manage Tier II and Tier III emergencies as they may arise. All emergency response gaps were identified, recommendations were documented and received and actions agreed for implementation to further improve NGC’s Emergency Management Systems.
NGC continues to focus on improving safety performance and in 2018, conducted a review and revision of our Safe Systems of Work, including:

These revised systems will be rolled out in 2019 with retraining and implementation.
Our ‘Let’s Connect’ safety system, introduced as a mechanism whereby employees are encouraged to spot and discuss safe and unsafe behaviours and practices, trended well in 2018, indicative of a positive change in safety awareness.

**Let’s Connect Submissions as at 31 December 2018**

![Chart showing number of reports submitted]

**Process Safety Management**

Continuing from our 2017 renewed focus on process safety, in 2018 NGC adopted the American Institute of Chemical Engineers (AIChE) Center for Chemical Process Safety (CCPS) standard for process safety. With the objective of avoiding disaster by keeping products safely in the pipeline, this standard focuses on risk management and operational discipline.

Our focus on establishing a Risk-Based Process Safety (RBPS) Management System saw the training of 43 key personnel, with members of the executive leadership team receiving training in the Foundations of Process Safety. As we work towards developing operational excellence in our approach to process safety, this group of trained personnel will lead by demonstrating and committing to process safety advancements.

We are also moving forward on establishing a formal Root Cause Analysis (RCA) process for incident investigations and 30 employees were trained in the world-renowned TapRoot RCA model.

Finally, a comprehensive gap analysis of NGC’s current HSE and Asset Integrity Management System (AIMS) was completed in 2018 against the standard 20 elements of Risk-Based Process Safety. An implementation guide document was prepared to close the gaps identified. The roll-out of these started in 2019. We expect noticeable advancement in our process safety as the RBPS Management begins to shape our processes.
Security Management Systems

NGC continues to maintain an enhanced Security Management System and is moving towards the installation of a full-body and handheld scanner facility at the newly redesigned state-of-the-art Security Main Office. This will further enhance the Company’s access control capabilities for all personnel and visitors entering the Head Office facility. The office will be outfitted with a training room and a secured area for the storage of arms and ammunition during state and executive visits by foreign and local dignitaries.

In 2018, NGC recorded five security incidents, two of which involved the theft of materials stored at one of our unmanned sites. The perpetrators were apprehended and materials recovered. The NGC Security representatives, in conjunction with contracted security, were directly involved in this exercise. The SMS Department was also very instrumental in the detection and recovery of a laptop stolen from one of NGC’s senior employees. The other two incidents involved the theft of batteries stored at another unmanned location and the apparent breach of a manned facility which was addressed by the on-site officers by following their established Standard Operating Procedures (SOPs).

Waste Management

As in 2017, our approach to waste management promotes the principles of “Prevent, Reduce, Re-use, Recover and Recycle".

<table>
<thead>
<tr>
<th>WASTE TYPE</th>
<th>2018 TOTAL (LBS)</th>
<th>2017 TOTAL (LBS)</th>
<th>TREATMENT TYPE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Plastic Packaging</td>
<td>4,056</td>
<td>2,932</td>
<td>Recycled</td>
</tr>
<tr>
<td>Paper and Cardboard</td>
<td>1,896</td>
<td>2,492</td>
<td>Recycled</td>
</tr>
<tr>
<td>Glass (domestic)</td>
<td>726</td>
<td>699</td>
<td>Recycled</td>
</tr>
<tr>
<td>Metallic Packaging</td>
<td>172</td>
<td>185</td>
<td>Recycled</td>
</tr>
<tr>
<td>Paper and Cardboard Packaging</td>
<td>0</td>
<td>50</td>
<td>Recycled</td>
</tr>
</tbody>
</table>

TOTAL NON-HAZARDOUS WASTE 2018 (COLLECTIONS)

TOTAL WASTE (TONNES) 3.42
TOTAL WASTE (LBS) 6,850
PERCENTAGE (%) RECOVERED 40.79
We continue to promote these principles among our contractors who are required to comply with our waste management policies. Both hazardous and non-hazardous waste for recycling are collected by an external contractor for the appropriate treatment and disposal.

### TOTAL HAZARDOUS WASTE 2018 (COLLECTIONS)

- **TOTAL WASTE (LBS)**: 10,578
- **TOTAL WASTE (TONNES)**: 5.29
- **PERCENTAGE (%) RECOVERED**: 76.76

<table>
<thead>
<tr>
<th>WASTE TYPE</th>
<th>2018 TOTAL (LBS)</th>
<th>2017 TOTAL (LBS)</th>
<th>TREATMENT TYPE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Computer Equipment</td>
<td>5,363</td>
<td>2,529</td>
<td>Recycled</td>
</tr>
<tr>
<td>Other Engine/Gear and Lubricating Oils</td>
<td>2,048</td>
<td>3,520</td>
<td>Incinerated</td>
</tr>
<tr>
<td>Waste Printing Toner Containing Dangerous Substances</td>
<td>1,594</td>
<td>913</td>
<td>Recycled</td>
</tr>
<tr>
<td>Fluorescent Tubes and Other Mercury-Containing Waste</td>
<td>1,079</td>
<td>773</td>
<td>Crushed/Recycled</td>
</tr>
<tr>
<td>Fuel Filters</td>
<td>374</td>
<td>0</td>
<td>Incinerated</td>
</tr>
<tr>
<td>Alkaline Batteries (except 16 06 03)</td>
<td>74</td>
<td>115</td>
<td>Recycled</td>
</tr>
<tr>
<td>Spent/Unused Chemicals</td>
<td>36</td>
<td>0</td>
<td>Incinerated</td>
</tr>
<tr>
<td>Empty Aerosol Cans/Gas Cylinders</td>
<td>10</td>
<td>30</td>
<td>Crushed/Recycled</td>
</tr>
<tr>
<td>Steel Drums</td>
<td>0</td>
<td>360</td>
<td>Crushed/Recycled</td>
</tr>
<tr>
<td>Oily Rags/Gloves/Contaminated Protective Clothing</td>
<td>0</td>
<td>256</td>
<td>Incinerated</td>
</tr>
<tr>
<td>Edible Oil and Fat</td>
<td>0</td>
<td>184</td>
<td>Incinerated</td>
</tr>
<tr>
<td>Lead Batteries</td>
<td>0</td>
<td>150</td>
<td>Recycled</td>
</tr>
<tr>
<td>Plastic Drums</td>
<td>0</td>
<td>40</td>
<td>Recycled</td>
</tr>
<tr>
<td>Oil Filters</td>
<td>0</td>
<td>36</td>
<td>Incinerated</td>
</tr>
<tr>
<td>Incandescent Bulbs</td>
<td>0</td>
<td>25</td>
<td>Crushed/Recycled</td>
</tr>
<tr>
<td>Tubing</td>
<td>0</td>
<td>8</td>
<td>Landfill</td>
</tr>
<tr>
<td>Ni-Cd Batteries</td>
<td>0</td>
<td>3</td>
<td>Recycled</td>
</tr>
<tr>
<td>Iron and Steel</td>
<td>0</td>
<td>1</td>
<td>Recycled</td>
</tr>
</tbody>
</table>
Securing Our Current Business with You in Mind

**Asset Integrity**

- Asset Integrity Action Tracker
- Digitised Data Management
- Management of Change

**Systems Audit Score (2017)**

2.08

**Systems Audit Score (National Average 2017)**

2.02
Management Approach

Asset Integrity Management (AIM) is critical to our strategic pillar, “Securing our Current Business” and is also necessary to maintain operational effectiveness. One of our “Big Five” areas, AIM is a core function of our organisation and how we equip ourselves for the future.

2018 saw a continued focus on improving Asset Integrity Compliance with the ongoing implementation of measures to address deficiencies identified in the 2017 audit. This audit report showed NGC in the “Developing” to “Implementing” stage towards the end of 2018. Appreciating the importance of addressing asset integrity audit recommendations and maintaining a focus on this critical business area, a decision was taken to recruit a dedicated resource for this function. In early 2019, a new AIM coordinator was recruited to focus on implementing audit recommendations and maintaining high performance in this area.

Asset Integrity Action Tracker

In 2018, an Asset Integrity Action Tracker was developed which details specific activities to be undertaken based on systems audit recommendations. These activities are detailed in line with the elements of the management system, and assigned specific timelines and persons responsible for actions. With dedicated attention now being placed on addressing actions, NGC is committed to continued implementation and continuous improvement to the AIM system.
Digitised Data Management

One opportunity for improvement identified during the 2017 audit was the need to “digitise files and make embedded data accessible”. This recommendation required three main activities to be undertaken:

- Extraction of relevant data from reports
- Making data searchable, which would allow the use of this data for AI trend analysis
- Trending of historic inspection activity

NGC has made significant progress in this area, facilitated by the implementation of changes to the SAP system which integrated AI-related records management and data analysis for centralised storage of technical data and documents.

Management of Change (MOC)

Change management was the element of the AIM System for which NGC scored the lowest. However, there were improvements noted over the previous audit conducted in 2015. An MOC procedure was developed that included mechanisms for review and authorisation, action planning and a risk matrix. There were however, potential gaps identified as it related to training which will be addressed in 2019.
Growing Locally and Internationally with Industry, Innovation and Infrastructure

Diversification and Internationalisation

- Gas Deals
- NGC at World Gas Conference
- Commercial Agreement with Global Petroleum Group
- Collaborative Partnership with ENH of Mozambique
Management Approach

To achieve local and international growth, one of our Strategic Pillars, requires both diversification across the value chain and internationalisation of our operations. Our approach has seen the expansion of equity interests in operations outside the mid-stream gathering and processing activities, as well as capturing higher value through diversification of revenue streams, positioning NGC for long-term growth. In the interest of expanding the scope of NGC’s business portfolio, the Company has also hired a dedicated manager to oversee Gas Business Development.

Diversification and Internationalisation ensure that we continue to play a central role in the future of natural gas in Trinidad and Tobago and beyond.
Gas deals

In 2018, NGC entered into several new or renewed gas deals with upstream and downstream industry operators.

NGC and DeNovo Energy/NGC E&P signed a Gas Sales Agreement (GSA) on August 29th, for NGC to purchase gas from the Block 1(a) asset, in which NGC, through its fully owned subsidiary, NGC E&P, owns a 20% stake. DeNovo delivered first gas from the Iguana field in Block 1(a) in November. This GSA will enhance current natural gas supply and give a much-needed boost to the local energy industry.

On November 2nd, NGC signed a deal with ammonia giant Nutrien. This company is NGC’s largest industrial estate consumer, accounting for 13% of NGC’s gas supply to the petrochemical sector. This deal ensures that Nutrien’s four ammonia plants and one urea plant remain a significant part of the country’s energy infrastructure for the foreseeable future.

In December 2018, NGC signed a Gas Sales Agreement with Nitrogen (2000) Unlimited (N2000). This new agreement will allow for the continued operation of N2000’s world-scale anhydrous ammonia plant located at the Point Lisas Industrial Estate. N2000’s sister plant is owned by Caribbean Nitrogen Company Limited (CNC), another company with which NGC signed an agreement in April 2018.
NGC at World Gas Conference

NGC appreciates that its strategy for international growth requires building brand recognition. In this regard, in June 2018 NGC President, Mark Loquan, and Commercial Analyst, Shane Wilson, were speakers at the 27th World Gas Conference in Washington DC. According to its website, ‘The World Gas Conference is the most important global gas industry gathering of influential leaders, policymakers, buyers, sellers and experts.'
Conducted since 1931 by the International Gas Union (IGU), the triennial event aims to raise the voice of natural gas while offering timely updates on strategic, commercial and technical issues facing the entire gas value chain.

Participation at this important industry event allowed NGC to showcase its brand and its work on the world stage while exploring opportunities for international partnership, collaboration and growth.

**Commercial Agreement with Global Petroleum Group (GPG)**

April 2018 saw the signing of a commercial agreement with Global Petroleum Group (GPG), an oil and gas operator currently undertaking exploration and appraisal activities off the south coast of Grenada, near the Patao/Dragon fields in Venezuela and North Coast Marine Area (NCMA) fields in Trinidad. The relationship between the two companies is a result of the Energy Sector Development Framework Agreement signed between the Government of the Republic of Trinidad and Tobago (GORTT) and the Government of Grenada. It is anticipated that the partnership will be of mutual benefit allowing NGC to utilise its capabilities and expertise to assist GPG in the development of the natural gas-based energy sector in Grenada, while addressing the challenges of gas supply shortages in Trinidad and Tobago.

**Collaborative Partnership with ENH of Mozambique**

In keeping with its drive for internationalisation and diversification, NGC signed a Technical Services Agreement (TSA) with Empresa Nacional de HidroCarbonetos (ENH), the state-owned petroleum company of the Republic of Mozambique. This agreement follows a Memorandum of Understanding (MOU) signed between the two companies in 2017.

The TSA covers the assessment of the commercial framework across the energy value chain of the upstream, midstream (LNG and pipeline network) and domestic sectors. Also covered under the umbrella of the TSA, is local content policy formulation, institutional capacity building, infrastructure and industrial estate development.

The opportunity supports NGC’s strategic objective of expanding NGC’s reach in international jurisdictions and diversifying business and revenue streams through partnerships of mutual benefit.
In 2018, Trinidad and Tobago utilised just over 88 bcf of gas, about 16.6% of gas supply produced that year.
ENERGY EFFICIENCY (CONTINUED)

Management Approach

In line with a call to action at the 2017 Gas Exporting Countries Forum by NGC’s President for the energy sector to work towards energy efficiency, NGC has remained committed to working with the government, value chain partners and citizens of Trinidad and Tobago to drive energy efficiency, not only across the industry, but across the country. Strategically positioned within its Commercial Division, NGC has established a Manufacturing Industries and Energy Efficiency Division to focus on various initiatives to develop and promote energy efficiency. Using a multi-pronged approach, its mandate ranges from supporting national policy development to shaping organisational culture as it relates to sustainable energy competencies. Further, information on energy conservation has formed an integral part of the Corporate Communication’s Division public education programme from 2018.
National Policy and Action Plan for Energy Efficiency

In 2018, NGC was the main driver for the development of a note to Cabinet on energy efficiency and energy conservation. A series of engagements were initiated with various stakeholders, including the Ministry of Energy and Energy Industries, Ministry of Public Utilities, Regulated Industries Commission, Trinidad and Tobago Electricity Commission and the Energy Chamber of Trinidad and Tobago to develop an integrated strategy that considers shared and aligned interest for promoting Energy Efficiency (EE) and Energy Conservation (EC) locally within the power generation and petrochemical space.

These efforts bore fruit in 2019 with the establishment of a Cabinet-appointed committee for the Development of a National Energy Conservation and Energy Efficiency Action Plan for Trinidad and Tobago, to which NGC has been appointed. The committee’s mandate includes the development of an Energy Efficiency Action Plan for Trinidad and Tobago within a three-month time frame.

Energy for Power – Working with T&TEC on Energy Efficiency

One of the primary uses of natural gas in Trinidad and Tobago is power generation. In 2018, natural gas for power utilised just over 88 bcf of gas, about 16.6% of gas supply (excluding gas supply for LNG). Enhancing energy efficiency at power generation plants has the potential to reduce gas consumption, ensuring that Trinidad and Tobago makes the most efficient use of gas molecules by extracting the maximum value from its natural gas resources. As part of its efforts to manage consumption, NGC is working collaboratively with T&TEC to optimise gas use at the independent power producers. To date, these efforts have yielded an annual 4% reduction in gas consumption.

Promoting Energy Efficiency through PLEA

NGC has been an active member of the Point Lisas Energy Association (PLEA) since its inception and continues to support its objectives, including encouraging cooperation among members. NGC has been working through PLEA for greater collaboration between upstream and downstream players to promote gas optimisation and energy efficiency. By being more transparent with its activities, including sharing gas outlook and curtailment information as it becomes available, NGC has been able to work with members to coordinate activities, including turnarounds and outages, to ensure gas optimisation.

NGC has also been working with members to understand and assess their energy efficiency with a view to promoting energy efficiency projects on various plants. Members have been encouraged to engage the organisation for support of energy efficiency projects and initiatives on the estate.
Energy Efficiency Education and Awareness

Appreciating the importance of Energy Efficiency (EE) and Renewable Energy (RE), not only for the energy sector, but for the population at large, NGC partnered with local NGO, IAMovement, for the development of a three-part video series entitled ‘REthinking Energy’.

The series comprises three short infographic videos:
1. The Opportunity Cost – T&T’s natural gas shortage
2. T&T’s Electricity Subsidy
3. Solutions for T&T – Guided by the MEEI-EU Sustainable Energy Roadmap 2021-2030

Anchored on the message of the need to reduce gas consumption, the intent is to educate the public in a very user-friendly way on important issues of gas curtailment and electricity generation and most importantly, how the population can contribute to being part of the solution.

Following the launch of these videos, secondary school students were invited to enter an essay competition, probing message recall in the areas of energy efficiency, the electricity subsidy and renewable energy. The competition began in December 2018 and continues into 2019.
Shaping Communities with you in mind

Corporate Social Responsibility

11 SUSTAINABLE CITIES AND COMMUNITIES

13 CLIMATE ACTION

- Sustaining Steelpan through Education
- National Heroes Project - Pat Bishop
- NGC Bocas Literary Festival
- Athletics - NAAATT
- Environmental Restoration - No Net Loss
- Emissions saved through CNG
OUR CSR PRINCIPLES

TRANSPARENCY

ACCOUNTABILITY

ETHICAL BEHAVIOUR

RESPECT FOR STAKEHOLDER INTERESTS

RESPECT FOR THE RULE OF LAW

RESPECT FOR INTERNATIONAL NORMS

RESPECT FOR HUMAN RIGHTS
MANAGEMENT APPROACH

Our approach to Corporate Social Responsibility (CSR) is guided by our seven CSR Principles and supports initiatives in the areas of Arts & Culture, Sport, Education, Youth Empowerment & Development and Environmental Preservation. As a state-owned company, we appreciate that our community is the community of Trinidad and Tobago, therefore our initiatives are national in scope while still paying close attention to our fenceline communities that are close to our assets and operations. We continue to review and evaluate our social investments to ensure that they make lasting, sustainable contributions to beneficiaries. We also provide sponsorships and one-off reactive donations to worthy causes as determined by our Contributions committee.
Sustaining Steelpan through Education

NGC continues to be an active patron of steelpan through the support of four steel bands – NGC Couva Joylanders, NGC La Brea Nightingales, NGC Steel Xplosion and Gonzales Sheikers. To ensure the sustainability of our national instrument, NGC recognised that education and training were critical components for the bands. It was with this in mind that in July 2018 we signed a Memorandum of Agreement with the MIC Institute of Technology (MIC-IT) for the delivery of a customised Mechanical Engineering Technology with Steelpan manufacturing Programme for members of these four steel bands.

This programme is divided into three six-month cycles and runs from 2018-2021. It will introduce pannists to the fundamentals of pan manufacturing, tuning and associated skills. These skills will help the bands to be able not only to manufacture their own pans, but to do blending and tuning on their instruments, a skill which is usually in high demand, especially for the annual Panorama competitions, and can be quite expensive for bands to outsource.

National Heroes Project – Pat Bishop

The NGC National Heroes Project is an annual programme aimed at recognising and preserving the legacy of national heroes in Trinidad and Tobago. Following on from the successful launch of the NGC National Heroes Project in 2017, which saw Hasely Crawford as the inaugural honoree, in 2018 NGC honoured the lifetime achievements of the late Dr. Pat Bishop. In collaboration with the Pat Bishop in Art, Literature and Music (PALM) Foundation, NGC launched the programme in May 2018 with an exhibition of Pat’s final collection of paintings entitled “She Sells Sea Shells by the Seashore”. The project seeks to promote and sustain the numerous contributions that Dr. Pat Bishop made in the spheres of art, literature and music.
The NGC Bocas Lit Fest is a flagship investment under our CSR portfolio which we see as a valuable opportunity to lend support in the areas of Education, Arts & Culture, and Youth Empowerment & Development.

The theme for 2018, "An Island State of Mind", put the focus on island writers and island realities. In its eighth year, the festival boasted over 100 events, featuring both world-renowned authors as well as new and emerging talent. The book Curfew Chronicles by Trinidadian writer Jennifer Rahim was named the winner of the 2018 OCM Bocas Prize for Caribbean Literature, the most prestigious international award for Caribbean writing.

Apart from traditional literature, the festival highlights a range of cultural expression, including spoken word, dramatic interpretation, ole mas presentations and extempo debate.

NGC Bocas Lit Fest

8,400 ATTENDEES
131 EVENTS
56 LOCAL FIGURES
46 VISITING WRITERS
Sport has always formed an important part of NGC’s CSR portfolio given its power to unite community and country as well as develop skill and instil discipline among youth. Our Right on Track programme has benefited more than 20,000 participants in 105 communities since its inception in 1999, and its athletes continue to make strides in track and field both locally and internationally.

Since 2013, NGC has been a main sponsor of the National Association of Athletics Administrations of Trinidad and Tobago (NAAATT), the governing body for athletics which supports and provides general oversight for national and school competitions, as well as clubs and associations.

In 2018, NAAATT undertook exciting new initiatives including a partnership with the Sports Entertainment Company of Trinidad and Tobago (SPENTT) in the marketing of the Championship Series, as well as capacity-building workshops and seminars to provide technical training to officials.

The NGC/NAAA Youth Elite Programme launched in 2017 continued to deliver results into 2018. In the first year of the developmental programme aimed at producing a cadre of well-rounded, high performing junior track and field athletes, most of the 12 participants who passed through the programme achieved new personal bests. Several athletes qualified to represent the country at the CARIFTA, Commonwealth Games and World Junior Championships, with a number copping gold, silver and bronze medals for Trinidad and Tobago. Seven (7) of the athletes were guaranteed places in US colleges.
Environmental Restoration – No Net Loss

More than a decade ago, in 2005, NGC recognised the importance of creating a positive and sustainable impact on the environment by operating on the principle of "no net loss". We have been planting trees to offset the damage that resulted from clearing a path through forests in the southland to bury pipeline for cross-country distribution. By the end of 2018, over 100,000 trees had been planted over 300 hectares with an 85% survival rate.

These restoration efforts are critical to absorbing and trapping large amounts of carbon that would otherwise pollute the atmosphere. 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.

This study, led by Professor John Agard, sought to address three main questions:

1. How many tonnes of carbon have been sequestered by the NGC sites from 2005-2018?

2. How many tonnes of carbon are projected to be sequestered by the reforested sites from 2019-2030?

3. What is the approximate value of the tonnes of carbon sequestered based on current market prices?

Data collection, analysis and results tabulation took approximately five months and the results showed that at the end of 2018, total carbon sequestered by NGC’s reforestation initiative was valued at just over TT$1.5 million.
Total carbon sequestered by NGC planting

<table>
<thead>
<tr>
<th>Location Description</th>
<th>2018 Estimate</th>
<th>2030 Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dump Road, Rio Claro (kg)</td>
<td>125</td>
<td>6,494</td>
</tr>
<tr>
<td>Edward Trace, Moruga (kg)</td>
<td>339,953</td>
<td>625,039</td>
</tr>
<tr>
<td>Grant Trace, Rousillac &amp; Guapo-Parrylands, Morne L’Enfer (kg)</td>
<td>1,739,062</td>
<td>4,307,660</td>
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<tr>
<td>Mayaro (kg)</td>
<td>164,029</td>
<td>288,980</td>
</tr>
<tr>
<td><strong>TOTAL carbon sequestered (kg)</strong></td>
<td>2,243,169 (or 2,243 tons)</td>
<td>5,228,173 (or 5,228 tons)</td>
</tr>
<tr>
<td><strong>TOTAL CO₂ₑ (= C×3.67) (tons)</strong></td>
<td>8,232</td>
<td>19,187</td>
</tr>
<tr>
<td><strong>Approximate value at European Union Allowance (EUA) spot price of €24.52 per tCO₂ₑ on 8th April 2019</strong></td>
<td><strong>£201,849 (TT$1,542,191)</strong></td>
<td><strong>£470,465 (TT$3,594,502)</strong></td>
</tr>
</tbody>
</table>

*Carbon Sequestration Study, Office of Research Development and Knowledge Transfer, The University of the West Indies (The UWI) St Augustine, July 2018*
Emissions saved through CNG

Through the work of NGC CNG Company Limited, a wholly owned subsidiary of NGC charged with expanding the use of Compressed Natural Gas (CNG) in Trinidad and Tobago, approximately 13,363 tonnes of CO$_2$ emissions have been avoided since 2014. In 2018 alone, 3,931 tonnes of CO$_2$ were saved from use of CNG instead of liquid fuel.
For NGC, the environment within which we operate is changing as the global natural gas industry is in constant flux. The continuously evolving clean energy revolution and rapidly changing technology compel us to manage today’s business to meet tomorrow’s demands.

At NGC, we embrace this constant change and actively seek opportunities to prepare our business for the needs of future generations in Trinidad and Tobago and beyond. Sustainability is part of how we do business and this, our second Sustainability Report, demonstrates how we hold ourselves accountable as a strategic player at the centre of the natural gas industry in Trinidad and Tobago.

Our journey towards sustainability is one that we cannot embark on alone and we hope that all our stakeholders, every citizen of Trinidad and Tobago, will play an active role and join us on this journey towards creating a better tomorrow.

Looking ahead, we intend to develop our sustainability performance and reporting as well as expand to include other companies in the NGC Group.

We encourage and value your feedback and thank you for your support.
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