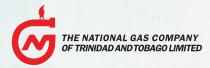


# energy future

SUSTAINABILITY REPORT

2020





# embracing the new energy future

embracing the new

## energy future

SUSTAINABILITY REPORT 2020

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## **Sustainability Reporting Practice**

For the fourth consecutive year, The National Gas Company of Trinidad and Tobago Limited (NGC) has produced a sustainability report, which provides highlights on the company's economic, social, environmental and governance performance during the period 1 January 2020 to 31 December 2020.

Our previous Sustainability Report was for the period 1 January 2019 to 31 December 2019. The complete financial performance of NGC and its subsidiary companies is published separately in the NGC Annual Report. Both the Annual and Sustainability Reports can be accessed electronically on the company's website:

#### www.ngc.co.tt

NGC is headquartered at Orinoco Drive, Point Lisas Industrial Estate.

For the purposes of this report, all activities of NGC in Trinidad and Tobago are deemed to occur in one geographic location and the information presented reflects primarily the operations of NGC and not our subsidiary companies. Where initiatives/ activities involve NGC's subsidiaries, this is indicated. Where the terms 'The NGC Group' or 'The Group' are used, these refer to NGC and subsidiaries - National Energy Corporation of Trinidad and Tobago Limited (National Energy), Phoenix Park Gas Processors Limited (PPGPL), La Brea Industrial Development Company Limited (LABIDCO) and NGC CNG Limited (NGC CNG).

The legal structure of the NGC Group of Companies is presented on page 16.



We welcome feedback on this report via email at info@ngc.co.tt

## Global Reporting Initiative (GRI) Content Index

We are pleased to present a Global Reporting Initiative (GRI) referenced report which sets out the principles and disclosures to report on economic, social, environmental and governance impacts of our operations. The material in this report references the following GRI Standards:

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GRI	וט	3	ᇈᆫ	.U	Sι	JΚ	ES

**GRI 102:** GENERAL DISCLOSURES

**GRI 103:** MANAGEMENT APPROACH

**GRI 200:** FCONOMIC STANDARDS

**GRI 300:** ENVIRONMENTAL STANDARDS

**GRI 400:** SOCIAL STANDARDS

Organisational Profile

Strategy Ethics and Integrity

Governance Stakeholder Engagement

Reporting Practice

Management Approach

Economic Performance

Energy

Effluents and Waste

Employment

Occupational Health and Safety

Training and Education

#### **STANDARDS**

102-1 to 102-9, 102-12 to 102-13

102-14

102-16

102-18 (a)

102-40 to 102-43

102-45, 102-47, 102-50 to 102-55

103-2

201-1

302-1

306-2

401-1 to 401-2

403-2

404-1

## Business Resilience:

COVID-19 and Beyond

"Organisational resilience is the ability of an organisation to anticipate, prepare for, respond and adapt to incremental change and sudden disruptions in order to survive and prosper."

- BSI AND CRANFIELD SCHOOL OF MANAGEMENT



## The NGC Group of Companies is

# resilient

We can make this bold claim, as our ability to foresee, manage and recover from disruption has been tested and proven. The NGC Group, through its Business Continuity Plan (BCP), not only survived COVID-19, but also advanced its business strategy.

The resilience we have demonstrated was the result of years of consistent and deliberate planning and commitment. From its inception, NGC placed high value on Health, Safety, Security and the Environment (HSSE) and as this field has developed, the company has modified its systems to keep pace with international standards. When it comes to HSSE, we are determined that our leadership, employees, contractors, and other key stakeholders, know, understand and practise HSSE behaviours. We take a 'bottom-up' approach to HSSE, in which all employees and contractors are empowered to be safety champions. Our HSSE culture has

been developed through awareness, training, skill development and repetition. Our goal is to achieve 'zero unsafe behaviours' resulting in zero harm to people, property, the natural environment, and the business.

Business Continuity Planning has always been an important facet of our HSSE management programme, as it prepares the company to handle sudden changes in the commercial and physical environments. In 2019, before the pandemic was on the horizon, The NGC Group established a cross-functional team to review its BCP and perform a Business Impact Analysis (BIA) for all functional areas in the organisation.

## Business Resilience: COVID-19 and Beyond (continued)

The process examined questions such as:

- How will communication with customers, vendors and other stakeholders be handled if there is a disruption to business?
- Who will be responsible for decision-making at different levels?
- How will we ensure services continue to be provided to our customers?
- What is the order and timing required to restore business processes?
- How will employees be supported?
- What technology would be critical for business to be conducted?
- What pieces of equipment would be crucial for business continuity?

The objective was to foresee challenges, so that redundancies could be built into our systems for the occurrence of various scenarios

With the onset of COVID-19 in Trinidad and Tobago in March 2020, the BCP was activated. Developed with a degree of built-in flexibility, the plan was easily modified for the specific circumstances of the health crisis. During the national stay-at-home period, NGC initiated Work-From-Home (WFH) arrangements for all functions that could be performed remotely. Even as restrictions were eased and public sector workers returned to office, NGC took the decision to continue WFH as far as practicable.

To support this process, a WFH Policy was developed and rolled out in record time. Additionally, NGC accelerated adoption of technology to enable WFH, such as virtual meeting, document sharing, and electronic signature software. The company also assisted in ensuring connectivity for its employees.

At our offices, screening of all employees, contractors and visitors was instituted. This included checking of temperatures as well as

mandatory health declaration forms, which allowed the company to identify and monitor health risks and enable contact tracing if necessary. The planned recruitment of an Occupational Health Nurse was also brought forward to provide the skills required for proper case management. A procedure was established for issues identified in the forms to be reviewed and assessed by the nurse, so that employees requiring medical intervention could be directed to the company's doctor.

Priority was placed on the preservation of the health of employees and their families. Particular attention was paid to minimising risks to frontline workers who were required to be onsite to ensure the continuous, safe transmission of gas to our customers. NGC implemented adjusted work arrangements for frontline staff to facilitate sequestering of shift employees.

Communication played a critical role in ensuring the success of The NGC Group BCP. In the early stages, the BCP team met online three times per week to facilitate ongoing communication and collaboration within the team. This was later relaxed to once per week as the plan was operationalised.

Various communication channels were used to keep staff and stakeholders informed on the virus. These included signage, a COVID-19 handbook, and a series of return-to-work videos that outlined the procedures for staff interaction in the office and at field locations. Awareness sessions were hosted with the Group's doctor, who provided medical information on the virus and cleared up popular misconceptions. Support services were also delivered online by the company's Employee Assistance Programme (EAP) provider.

On the national level, NGC sponsored a series of public service announcements on television and radio, to boost the public's awareness about the virus to minimise its spread.

NGC's story of resilience during the period of disruption extended beyond the perimeters of the company's operations, to reach the most vulnerable in society. The Group partnered with stakeholders to provide food hampers to families in need within our fenceline communities, and nationally. Financial assistance was provided to homes for the elderly across the country. NGC also

assisted in the national initiative conducted by Foundation for the Enhancement and Enrichment of Lives (FEEL), supplying masks, blankets and personal protective equipment for the public.

The NGC Group was recognised for its stellar performance in keeping the country's critical gas infrastructure running efficiently in challenging circumstances.

The Group copped three awards for BCP excellence at the American Chamber of Commerce of Trinidad and Tobago (AMCHAM T&T) HSSE conference in 2020. In the energy and manufacturing sector, The NGC Group was awarded the first BCP Planning and Surviving the Pandemic Award in the large category. National Energy, received both the BCP Planning and Surviving the Pandemic Award and the Outstanding Occupational Safety and Health/Environmental Project for the small-medium category.

These honours further validate the commitment shown by our employees who continue to go beyond the call of duty to ensure our upstream, midstream and downstream operations remain unimpeded.

The BCP team maintains a regular meeting schedule to assess the plan as the situation evolves. We continue to introspect so we can improve our BCP preparedness.

In the coming years,
The NGC Group is looking
forward to the adoption
of new technologies that
will challenge our ways of
thinking and acting. We
welcome the challenge
as we embrace the new
energy future.



### THF ENERGY TRANSITION

IS HAPPENING NOW.
PROPELLED BY SCIENTIFIC
EVIDENCE OF CLIMATE
CHANGE, COUNTRIES HAVE
ESTABLISHED TARGETS FOR
THE GLOBAL REDUCTION OF
GREENHOUSE GAS (GHG)
EMISSIONS BY 2030.

Trinidad and Tobago, with an economy based primarily on hydrocarbons, has committed to a target of 15% reduction of overall GHG emissions by 2030. Over the next 50 years, the global energy landscape is expected to move away from fossil fuels towards alternative energy sources, such as green hydrogen, and renewables. NGC, as a premier state energy company, is playing a significant role in managing this transition. NGC is therefore leveraging its position at the forefront of Trinidad and Tobago's energy sector, to influence change in the energy mix.

Founded on our four strategic pillars and underpinned by the supporting framework of HSSE, People, Project Excellence, Value Creation & Optimisation and Governance, we are embracing our role as change agents with boldness and passion.

In 2020, despite the prolonged challenging economic environment, which was exacerbated by the COVID-19 pandemic, NGC maintained its focus on building a sustainable organisation. We advanced the execution of our strategy, implementing several initiatives that will strengthen the company's position as an influencer in the energy future.

#### COVID-19 Pandemic Tests Business Continuity Preparedness

The onset of the COVID-19 pandemic provided the ultimate test of organisational preparedness. Confronted by the virus, which threatened the health of employees and their families, a decision was taken to allow employees to work from home as far as possible. This necessitated the activation of the Business Continuity Plan (BCP), which was coordinated and implemented across NGC and its subsidiaries by a cross-functional team. Through in-depth collaboration and communication, supported by technology,

The NGC Group maintained critical national infrastructure and services. NGC and its subsidiaries were recognised for this achievement, winning the first BCP Planning and Surviving the Pandemic Award in the large category of the Energy and Manufacturing Sector at the 2020 American Chamber of Commerce (AMCHAM) HSE Awards.

We are proud of this achievement. We are equally proud to have progressed normal business operations, including sustainability initiatives, within the context of the 'new normal'. NGC and its subsidiaries have demonstrated their agility throughout the pandemic, adapting in ever-changing circumstances. We have not yet arrived at our destination, but we feel assured that we are heading in the right direction.

#### Leveraging our Capabilities for Growth

Over the past few years, NGC has invested in developing institutional capacity, which is being leveraged to create business opportunities in Trinidad and Tobago and abroad. A Technical Services Agreement has been signed with the Integrated Logistics Bureau Limited (ILBL) for design, building and commissioning of the Takoradi Distribution Station (TDS) Pressure Regulator Skid in Takoradi, Western Ghana. A contract was

## A Word from Our President (continued)

also signed with e TecK for provision of gas infrastructure for the Phoenix Park Industrial Estate.

Additionally, NGC held discussions with the Water and Sewerage Authority (WASA), the national water utility company, to explore areas of synergy between NGC and WASA. An initial meeting was held among procurement professionals of both companies and following further information exchange, an MOU is expected to be signed in the coming year.

NGC continues to influence transformation through its participation on important national and international committees, including the Ministry of Energy and Energy Industry's Permanent Local Content Committee, established to ensure local content and participation in energy projects; and the Carbon Capture and CO Enhanced Oil Recovery Steering Committee, which is mandated to increase revenues through a CO Enhanced Oil Recovery project, as well as CO reduction, carbon capture and sequestration. NGC is also represented on the International Gas Union (IGU) Group of Experts on Methane Emissions, a working group formed to advocate for the reduction of methane emissions from oil and gas operations. NGC's application to join the Oil

and Gas Methane Partnership (OGMP) is being considered and if accepted, will position the company among the world's top influencers. The OGMP is an initiative of the Climate and Clean Air Commission (CCAC) and the United Nations Environmental Programme (UNEP), in which over 60 companies from five continents have voluntarily committed to reduce methane emissions around the world.

NGC is supporting the government consultant in the process of analysing the gas value chain with the view to making recommendations for optimisation of natural gas for the next ten years, in the context of diminishing reserves. The company is also working towards aiding the Caribbean region in the transition away from oil-based fuels to natural gas in the form of Liquefied Natural Gas (LNG),

#### The Green Agenda

NGC has developed its Green Agenda as a focal point for its initiatives in the green space. These include energy efficiency initiatives being pursued with our Light Industrial and Commercial customers as well as projects for educating our internal and external stakeholders on energy efficiency.

Methane, the primary component of natural gas, is a significantly more potent GHG

than carbon dioxide. NGC can make a direct contribution to reducing the rate of climate change through the monitoring and measurement of methane emissions from its pipeline network. The company has partnered with Orbital Eye B.V. of the Netherlands, to conduct research using satellite technology, to monitor and assess GHG and methane emissions from Trinidad and Tobago's industrial assets.

Sustainability permeates everything we do at NGC — from the methods we employ to create value to our interaction with our stakeholders, and our stewardship of the environment. We are committed to doing our part to ensure that we meet the energy needs of today's generation without compromising the ability of future generations to meet their energy needs.

We are pleased to present our fourth Sustainability Report, which seeks to further progress our accounting on the company's economic, social, environmental and governance performance for the year 2020.

Mark Loquan

President



## **NGC** Strategy

## **Vision**

To be a recognised global leader in the development of sustainable energy-related businesses

## Mission

To create exceptional value from natural gas and related energy businesses through our people and strategic partnerships





Ensuring the sustainability of the domestic industry

Safety

Develop the Organisation

Managing risk while ensuring that systems, processes and people are strategic fit

**Projects** 

Grow.Local & International

Grow along the natural gas value chain while exploring regional and international opportunities

Value Creation & Optimisation Strengthen National Contribution

Supporting Trinidad in its global reduction while creating a sustainable future

Governance



Safety & Environmental Preservation



tegrity



Excellence



**People** 

Employee Engagement







Corporate Social Responsibility



Customer Focus

## **About NGC**

The National Gas Company of Trinidad and Tobago Limited (NGC) was incorporated in 1975 to be the designated state agency responsible for purchasing and selling natural gas to industrial and commercial users. Over the past 45 years, NGC has evolved into a fully integrated energy company, with core and subsidiary business activities centred on:

- Natural gas aggregation, merchandising, transmission and distribution
- Investments in the upstream and downstream energy sectors, including I NG
- Natural gas processing and marketing of Natural Gas Liquids (NGLs)
- Industrial site, port and marine infrastructure development

- Marketing of Compressed Natural Gas (CNG)
- Marketing and trading of energy commodities
- Renewable Energy and Energy Efficiency projects and investments

Strategically positioned in the midstream of the natural gas value chain, NGC continues to play a key role in the sustainable development and expansion of natural gas-based industries as the sole purchaser, transporter and seller of natural gas in Trinidad and Tobago.

NGC maintains and operates the country's natural gas transmission and distribution network of over 1,000km of onshore and marine pipelines with a capacity of 4.4 billion standard cubic feet per day (bcf/d).

This network provides feedstock and energy for power generation, petrochemical plants and a wide range of light manufacturing and commercial enterprises.

Today, NGC and its subsidiaries are leading change in the domestic industrial sector to support the global clean energy agenda. We are focusing on initiatives such as methane; and carbon dioxide mitigation; investment in renewable energy projects; promotion of CNG as an alternative fuel; energy education; energy efficiency; and associated advocacy, research and development.

NGC is an international investment-graded company, and is a significant economic contributor to Trinidad and Tobago through both taxes and dividends

## **OUR MAIN OPERATING SUBSIDIARIES ARE:**











MEMBERS OF THE NGC GROUP OF COMPANIES

## **OUR VISION**

To be a recognised global leader in the development of sustainable energy-related businesses

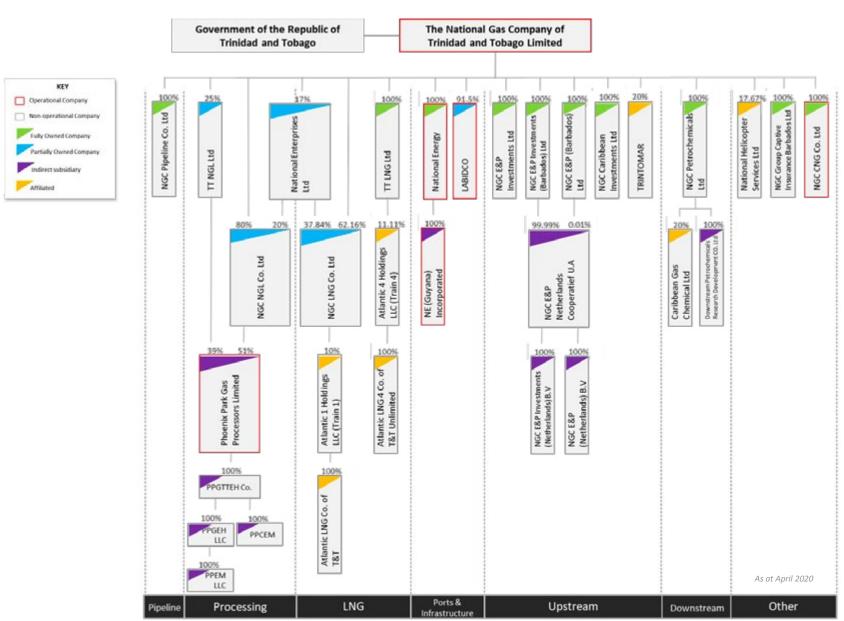
## **OUR MISSION**

To create exceptional value from natural gas and related energy businesses through our people and strategic partnerships

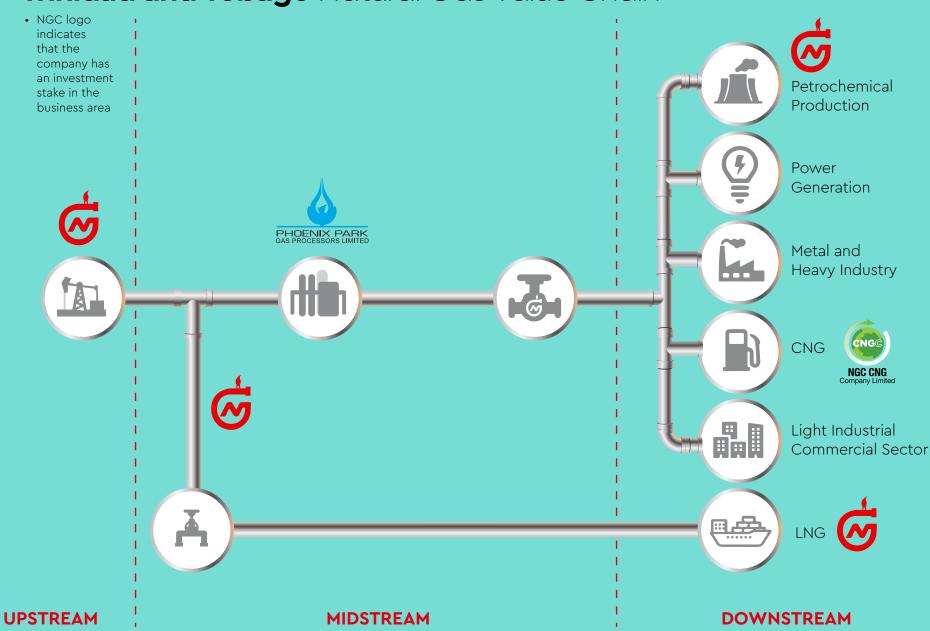
## **OUR CORE VALUES**

Safety and Environmental Preservation Integrity
Employee Engagement
Excellence
Transparency
Customer Focus
Corporate Social Responsibility

## NGC Group of Companies Legal Structure



## Trinidad and Tobago Natural Gas Value Chain



## Credit Rating (as at 31 December 2020)



BBB/STABLE





AA/NEGATIVE

## **External Associations** and Initiatives

NGC IS A MEMBER OF THE FOLLOWING EXTERNAL ASSOCIATIONS AND INITIATIVES:

#### **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 (CCPS)
- Employer's 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)

#### **External Initiatives:**

- Cabinet-Appointed Carbon Capture and Carbon Dioxide (CO<sub>2</sub>) Enhanced Oil Recovery Steering Committee
- 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)
- National Emergency Operations Centre
- Permanent Local Content Committee (PLCC)
- 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)

## Sustainability Priorities and Performance

Our Sustainability Priorities are informed by our strategic pillars, the foundation of what we do as an organisation. Our efforts and achievements in each of these pillars are aligned with National Development Themes and Sustainable Development Goals. In so doing, we know that every achievement we make as an organisation brings us closer to the vision of a better Trinidad and Tobago and a better world for generations to come.

OUR MATERIAL TOPICS	KEY ACHIEVEMENTS 2020	VISION 2030 NATIONAL DEVELOPMENT THEMES	SUSTAINABLE DEVELOPMENT GOALS (SDG)  16 Peace, Justice and Strong Institutions		
Corporate Governance & Compliance	100% Compliance with State Enterprises Performance Monitoring Manual (SEPMM) 97.2% Completion of Conflict of Interest (COI) forms 100% Adoption of virtual Board and committee meetings 68% Closure of agreed P1 Action Items 71% Closure of agreed P2 Action Items 100% Closure of agreed P3 Action Items	Delivering Good Governance and Service Excellence			
Human Capital	100% Project Milestones achieved on Competency, Knowledge and Skills Development (CKSD) Phase II 100% Connectivity for all employees working from home 85.6% of Leadership Development Programme (LDP) implemented Accelerated use of technology by all business units via integration of Power BI	Putting People First: Nurturing our Greatest Asset	Quality Education Squality Equality Equality Equality and Economic Growth		
Health, Safety, Security and Environment	100% Close out of Safety Audit and Incident P1 Action Items 92.5% completion of Life Saving Rules (LSRs) or Process Safety Fundamentals (PSFs) by NGC employees Emergency Response Committee reorganised to form Crisis Management and Emergency Response (CMER) Team	Improving Productivity through Quality Infrastructure and Transportation	12 Responsible Consumption and Production		
Asset Integrity	<b>97%</b> Asset Integrity Audit Actions completed Less than <b>0.5%</b> Gas Shortfall <b>100%</b> Reliability of Gas Pipeline				

## Sustainability Priorities and Performance (continued)

		SUSTAINABLE DEVELOPMENT GOALS (SDG)		
20 Gas Sales Agreements (downstream) and 18 Gas Supply Agreements (upstream) signed 12 Presentations at local and international business forums PPGPL's acquisition of NGL marketing assets of Twin Eagle Liquids Marketing LLC, Houston Texas Partnered with Integrated Logistics Bureau Limited (ILBL) of Ghana for design, building and commissioning of skid EPC Contract signed with e TecK for gas infrastructure at Phoenix Park Industrial Estate	Building Globally Competitive Businesses	Industry, Innovation and Infrastructure		
Accelerated use of technology by CSR partners to continue programmes  NGC sponsored steelband won national  Panorama competition (Medium Band Category)  100% Journalism training programmes completed  Partnered with Sustain □ to host  Green Screen Environmental Film Festival	Placing the Environment at the Centre of Social and Economic Development	Quality Education		
MOU signed between NGC and its subsidiaries and the University of Trinidad and Tobago (UTT) for a Climate Change Mitigation Project Energy education initiative among employees of The NGC Group Partnership with Orbital Eye for monitoring methane emissions 24% increase in CNG sales in 2020 over previous year		Affordable Clean Energy Sustainable Cities and Communities  13 Climate Action		
	and 18 Gas Supply Agreements (upstream) signed 12 Presentations at local and international business forums PPGPL's acquisition of NGL marketing assets of Twin Eagle Liquids Marketing LLC, Houston Texas Partnered with Integrated Logistics Bureau Limited (ILBL) of Ghana for design, building and commissioning of skid EPC Contract signed with e TecK for gas infrastructure at Phoenix Park Industrial Estate  Accelerated use of technology by CSR partners to continue programmes NGC sponsored steelband won national Panorama competition (Medium Band Category) 100% Journalism training programmes completed Partnered with SustainTT to host Green Screen Environmental Film Festival  MOU signed between NGC and its subsidiaries and the University of Trinidad and Tobago (UTT) for a Climate Change Mitigation Project Energy education initiative among employees of The NGC Group Partnership with Orbital Eye for monitoring methane emissions 24% increase in CNG sales in 2020	and 18 Gas Supply Agreements (upstream) signed 12 Presentations at local and international business forums PPGPL's acquisition of NGL marketing assets of Twin Eagle Liquids Marketing LLC, Houston Texas Partnered with Integrated Logistics Bureau Limited (ILBL) of Ghana for design, building and commissioning of skid  EPC Contract signed with e TecK for gas infrastructure at Phoenix Park Industrial Estate  Accelerated use of technology by CSR partners to continue programmes NGC sponsored steelband won national Panorama competition (Medium Band Category) 100% Journalism training programmes completed Partnered with SustainTT to host Green Screen Environmental Film Festival  MOU signed between NGC and its subsidiaries and the University of Trinidad and Tobago (UTT) for a Climate Change Mitigation Project Energy education initiative among employees of The NGC Group Partnership with Orbital Eye for monitoring methane emissions 24% increase in CNG sales in 2020		



# BOLD. INNOVATIVE. AHEAD OF ITS TIME.

FOR OVER 45 YEARS, NGC HAS EPITOMISED THESE WORDS.

Incorporated by the Government in 1975, NGC was given responsibility for the purchase and sale of natural gas on behalf of the state.

The company's initial task was to function as the Government's designated agency for the negotiation of gas contracts with AMOCO (predecessor of BP) and TRINGEN. NGC would also facilitate the transport of gas to the Point Lisas Industrial Estate, which was earmarked for development of petrochemical plants.

This was an impressive mandate given prevailing industrial practice at the time. Natural gas had been used in Trinidad and Tobago for electricity production since the 1940s and as feedstock for the WR Grace's Federation Chemicals (FEDCHEM) ammonia plant, built in 1959. However, the commodity was widely viewed as a nuisance by-product of the crude oil production process and was flared.

Discoveries of large oil and gas fields off the eastern and northern coasts of Trinidad in the 1970s, would be the catalyst for change in the country's industrial future. The Government, led by the country's first Prime Minister, Dr. Eric Williams, was determined to seize the opportunity presented by natural gas. Gas could be bought cheaply and monetised in the production of methanol, ammonia, urea, aluminium, iron and steel. Thus, with the formation of NGC, a new industry was born that would be fuelled by natural gas.

NGC began executing the state's resource-based industrialisation (RBI) strategy alongside the Coordinating Task Force, which would be formalised as the National Energy Corporation in 1979. By 1981, NGC owned the country's pipeline network which comprised 24-inch and 36-inch lines from the east coast to Point Lisas. The company also owned and operated the 16-inch line that supplied the Trinidad and Tobago Electricity Company (T&TEC) with gas to meet the nation's growing electricity demand.

In 1982, NGC embarked on the Flare Gas Conservation Project. Considered cutting-edge at the time, the project involved the installation of two offshore compression platforms – NGC Teak and NGC Poui – to capture, compress and bring to shore, natural gas that was being wasted through flaring.



The project made a socio-economic impact on the country, as the low-cost gas was used for electricity generation, enabling T&TEC to share low prices with its customers.

Following the oil boom of the 1970s came the period of low oil prices, which lasted into the early 1990s. Faced with managing an economy with rapidly falling revenues, the Government was forced to implement a structural adjustment programme

recommended by the International Monetary Fund. This meant that austerity measures were applied, and less funding was directed towards Government-led industrial development. Assets such as National Energy's Trinidad and Tobago Methanol Company (TTMC) and Trinidad and Tobago Urea Company (TTUC); and the Iron & Steel Company of Trinidad and Tobago (ISCOTT), were divested.

During this difficult chapter in the nation's history, NGC asserted its position as a leader in the energy industry, making strategic upstream and midstream investments that looked towards the future. In the midstream, NGC took a 49% equity stake in Phoenix Park Gas Processors Limited (PPGPL), expanding the company's asset base. NGC also invested in Trintomar – a company formed to operate the South East Coast Consortium (SECC) – positioning the company as an upstream gas supplier.

NGC would continue its evolution when its mandate was expanded through the merger with National Energy in 1993. In addition to its role as aggregator, merchant, and transporter of natural gas, NGC now had responsibility for business and infrastructure

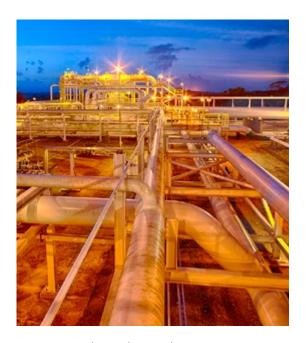
## At the Forefront of Energy for 45 Years (continued)

development. The staff of National Energy were absorbed into NGC and continued to manage and expand the marine infrastructure at the Port of Point Lisas.

In the coming decade, NGC would lead the natural gas industry through a period of unprecedented growth and expansion. In 1993, NGC made another bold and innovative move to date. The company introduced the product-related pricing model which links the gas price to the product price. Though a floor price was built into the model, NGC was effectively sharing in the risk with petrochemical customers. This model was extremely beneficial to Trinidad and Tobago in the 2000s when commodity prices were favourable.

In 1995, NGC would negotiate on behalf of the state with gas supplier, AMOCO and buyer, Cabot, for development of the country's first LNG project. NGC would also take 10% equity in Atlantic LNG Train 1, further diversifying the company's assets within the energy sector.

Another marquee project commenced in 1995 was the construction of La Brea Industrial Estate, which was managed by



La Brea Industrial Development Company (LABIDCO), jointly owned by NGC and Petroleum Company of Trinidad and Tobago (PETROTRIN). Landmark pipeline projects were undertaken in the 2000s, including the construction of the 36-inch Beachfield Upstream Development (BUD) and 56-inch Cross Island Pipeline projects, for the transport of gas from the east coast to Point Lisas Industrial Estate.

In the period from 2011 to 2020, NGC continued to expand its assets and commercial activities through strategic investments. This included the acquisition of ConocoPhillips' (39%) shares in PPGPL in 2013. These shares were transferred to a new company – TTNGL – in 2014. History was made in Trinidad and Tobago when the public was given an opportunity to own part of the energy industry in 2015 with the Initial Public Offering (IPO) of TTNGL shares.

Throughout its 45-year history, coupled with its investment in business and infrastructure, NGC has also invested in people and the environment through its Corporate Social Responsibility (CSR) programmes. Over the years, we have supported myriad developmental projects under our CSR Pillars: Arts and Culture, Sport, Education, Empowerment and Youth Development as well as Environmental Preservation.

Today, the global energy landscape has changed drastically. To reverse the effects of climate change, countries and companies have pledged to reduce their carbon footprint by 2030. The transition away from fossil fuels is well underway. Locally, NGC has been dealing with higher priced gas

supply, curtailments, and low commodity prices. These combined factors are affecting the company's profitability.

We at NGC are not daunted by the challenges we currently face. On the contrary, we are excited by the prospects for the future. At this important juncture, we have an opportunity to channel the creativity and courage that have served us well for more than 45 years. That is why NGC is embracing the new energy future through The NGC Group's Green Agenda. Through research and development into renewables and emerging energy solutions, we continue to lead the industry into the next phase of its evolution. The NGC Group is also pursuing internationalisation opportunities, both for equity participation and export of services.

NGC's commemoration of its 45th anniversary began in 2020 and will continue in the coming year. Due to the pandemic, our initiatives have been centred around communication, employing the company's communication channels in creative ways. Initiatives included greetings from the Chairman and President to all staff. A special 45th Anniversary logo was developed to appear on all corporate documents during

the year. Our commemoration included the creation of a new corporate song. A commemorative advertisement was published in the newspapers to mark the date of the company's incorporation on 22nd August 2020 and special editions of the company's publications – GASCO News and Beyond the Pipeline – were issued.

Employees got involved in the celebration, contributing short video clips about their experience at the company and expressing best wishes in the 45 in 45 series aired on social media. Our *This is Home* series, Season One, was also a hit with social media audiences

NGC has served the people of Trinidad and Tobago with pride for the past 45 years and we look forward to delivering value for the country for the next 45 years and beyond.



## Stakeholder

## Engagement



NGC acknowledges that it cannot maintain productive operations without nurturing sustainable relationships with the people and organisations that are affected by, and can influence the company's economic, social and environmental activities. This forms the basis upon which we identify and engage with our stakeholders. Strategic management of our stakeholder relationships is a critical imperative for the organisation. Through stakeholder management, we can maintain a pulse on our internal and external environments, prepare for change, and make better decisions. 2020 marked the fourth year of production of NGC's Sustainability Report, which is distributed to our stakeholders. We conducted an online survey of targeted stakeholders to ascertain their views on the efficacy of the report in providing relevant, useful information about NGC's economic, social, environmental and governance practices.

#### RESPONDENTS TO THE SURVEY CAME FROM THE FOLLOWING **STAKEHOLDER GROUPS:**



**BUSINESS ASSOCIATIONS** 



GOVERNMENT **PARTNERS** 



**SUPPLIER** CONTRACTORS



**DOWNSTREAM OPFRATORS** 



OTHER INDUSTRY STAKEHOLDERS



**CSR PARTNERS** AND BENEFICIARIES



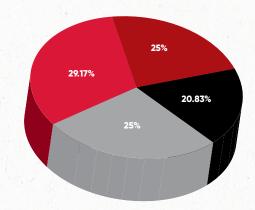
**UPSTREAM OPERATORS** 



**ACADEMIA** 

**AWARENESS OF THE REPORT** 

**HOW FAMILIAR ARE** YOU WITH THE NGC SUSTAINABILITY REPORT?



I have never seen an NGC Sustainability Report 25% I have skimmed through an NGC Sustainability Report 29.17%

I have seen an NGC Sustainability Report but never read it 20.83% I have read through an NGC Sustainability Report 25%

#### IMPORTANCE OF SUSTAINABILITY REPORTING

DO YOU THINK IT IS IMPORTANT FOR NGC TO REPORT ON ITS SUSTAINABILITY PERFORMANCE?

The majority of survey respondents thought it was critical to report on 56.52% sustainability. 34.78% 4.35% 4.35%

I don't think it's important for NGC to report its Sustainability Performance

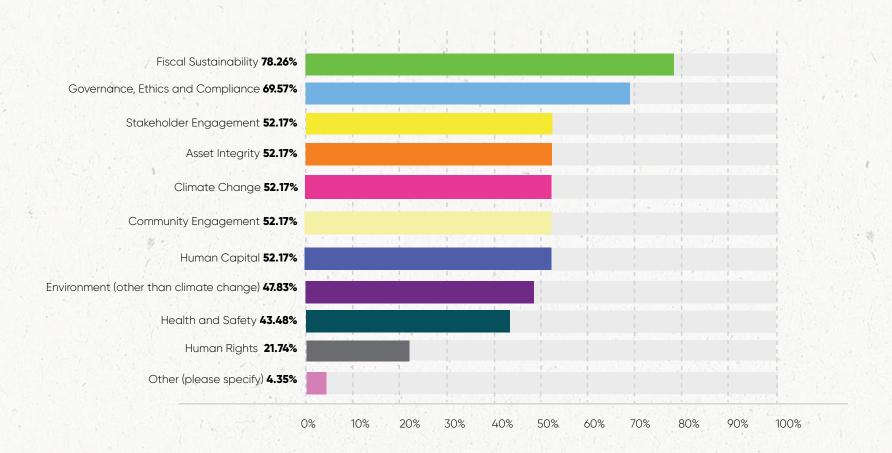
It does not matter to me if NGC reports on its Sustainability Performance

I think it is a good initiative for NGC to report its Sustainability Performance

I think it is critical for NGC to report its Sustainability Performance

#### SUSTAINABILITY ELEMENTS OUR STAKEHOLDERS CARE ABOUT MOST

Survey respondents would like NGC to report on Fiscal Sustainability measures, followed by Governance, Ethics and Compliance.



#### **Building Capacity in the Supply Chain**

In the supply chain management concept, vendors are viewed as an integral part of our business. They have the potential to reinforce the company's standards and practices by emulating the same within their organisations. The NGC Group continued the process of strengthening its supply chain through sensitisation and capacitybuilding. During the year, vendor forums were hosted virtually with prequalified vendors. The events provided an overview of the NGC Group, highlighted vendor opportunities and shared information on the pregualification process. Over 500 vendors tuned in to the session held in October under the theme, Fostering Relationships for a Sustainable Future. Questions were raised regarding pregualification for all companies within the NGC Group, SAP Ariba and the requirement for all vendors (existing and new) to re-register.

Sessions were also held with targeted groups of vendors to address field-specific subjects. For example, a session was held with HSSE suppliers to ensure that they are aware of the company's quality and environmental requirements, in keeping with adopted HSSE standards.

Prequalification also progressed during the year, as new vendors were added to The Group's list of prequalified contractors. A principled approach was taken regarding newly formed companies that may not have met all the requirements for prequalification

with feedback being provided to assist vendors in identifying and closing gaps. Based on the risk management threshold for the vendor category, conditional prequalification was allowed where possible. Advice was also provided to new vendors who may not have been aware of the various categories under which they may be prequalified. NGC also continued to encourage vendors within our fenceline communities of La Brea, Mayaro/Guayaguayare, Moruga and Tobago to prequalify.

#### NGC Partners with MIC to Host Energy Journalism Webinar Series

The media is one of the company's key stakeholders, as they have a platform from which information can be shared to inform and educate the public on energy matters. However, it has been observed that the number of 'energy' journalists in Trinidad and Tobago is on the decline. To reverse this trend and build relationships with practicing journalists in Trinidad and Tobago and the Caribbean, NGC partnered with the Media Institute of the Caribbean (MIC) and hosted a weekly Energy Journalism Webinar Series for local and regional journalists between June and July 2020.

The sessions, led by veteran journalists, reporters, editors and industry leaders, were attended by 30 journalists from Trinidad and Tobago; Haiti; Suriname; Guyana; Antigua; Anguilla; St. Lucia; St. Kitts & Nevis; and Jamaica. Topics discussed included:

- News Angles in the Energy Sector
- Dissecting Energy Contracts
- Finance and the Economy Reporting Economic Impacts
- Bringing the Story to Life Energy Reporting from a Multimedia Perspective
- Overview of the Energy Landscape

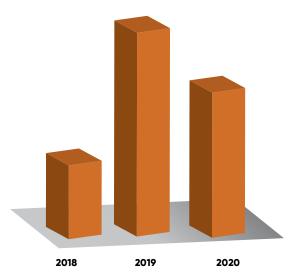
When surveyed respondents expressed 88% satisfaction with the programme, which achieved the objective of sharing knowledge on the area of energy journalism. Participants were especially happy to have had the opportunity to hear from NGC's President on the state of the local energy industry and to receive pointers from the facilitators on idea generation.

## Light Industrial and Commercial (LIC) Customers' Week

Employees and customers are two stakeholder groups that can significantly impact on the company's effectiveness and profitability. The Light Industrial and Commercial (LIC) Customers' Week was developed to bring these stakeholder groups closer together. The LIC Customers' Week, first held in 2019, showcases LIC customers and enlightens staff on the impact of LIC customers on the company and the country.

The 2020 installment was themed, The LIC Reality—An NGC Virtual Series. Employees were invited to view virtual tours of four LIC Customers to learn about their business operations. Just over 1% of NGC's gas is

## **Stakeholder Engagement (continued)**



NO. OF PRESENTERS AT BUSINESS FORUMS

utilised by LICs. However, they represent an important facet of the local economy, providing employment, investment opportunities and export revenues.

## Building Relationships through Information and Idea Exchange

During 2020, NGC presented at 12 business forums, down from 17 in 2019, as international travel was restricted, some conferences were postponed, and others were cancelled due to the pandemic.

As the year progressed, a number of conferences were hosted virtually and NGC

took the opportunity to engage with industry stakeholders at these forums.

The major local energy conference was hosted by the Energy Chamber in February 2020. The NGC Group of Companies was a platinum sponsor of the event and participated in both the conference and trade show. The conference brought together some of the world's premiere energy companies to exchange knowledge around the theme, *Shaping the Caribbean's Energy Future*. NGC's President took part in the opening panel discussion alongside the CEOs of bpTT, Shell and BHP as well as First Citizens and RBC Financial (Caribbean).

On Day 2 of the conference, The NGC Group hosted a business breakfast with the aim of stimulating dialogue around sustainability. The breakfast featured specially invited speaker, Rodrigo Barrera Rojas of Chile's Energy Sustainability Agency, who delivered a presentation on sustainable energy adoption in Chile. Mr. Barrera Rojas' presentation was a follow-up to the visit by the Presidents of NGC and National Energy to Chile in 2019.

The Group was also represented by President of National Energy, who contributed to a panel discussion on Attracting Capital in a Competitive Gas Sector. NGC's Vice President, Commercial, was part of a panel and made a presentation on The Energy Transition in the Caribbean and Latin America.

NGC, together with its subsidiaries, was a platinum sponsor of the Energy Efficiency and Renewables Conference held in June. NGC's President delivered remarks on behalf of The Group, urging attendees to join forces to find innovative ways to lower carbon while satisfying the world's growing energy needs. He also launched NGC's EnergySmarTT App, a digital tool designed to assist people in monitoring and reducing their daily energy consumption.

Also speaking at the online event were NGC's Vice President, Operations, who addressed the topic of Reducing emissions in the supply chain and opportunities for local content, and Business Analyst III at National Energy, presented on Opportunities for a Regional Clean Energy Transition. President of NGC CNG, was the final NGC Group presenter, speaking on the topic, Reducing Emissions in the Transport Sector.

NGC's Senior Manager, Supply Chain Management, rounded off the year when he presented at The Energy Chamber of Trinidad and Tobago's 8th Annual Local Content Forum on 25 November 2020. The NGC-sponsored virtual event created a forum for operating companies, suppliers to the energy sector and the Ministry of Energy and Energy Industries to discuss ways to progress local content, capacity development and methods of delivery in the local energy sector.

## **Performance** Metrics



#### FINANCIAL PERFORMANCE

	2020 \$'000	2019 \$'000	2018 \$'000
Assets	28,302,909	29,509,783*	30,271,568
NGC Tax Instalments – Cash Basis			
Corporation Tax	_	395,076	529,017
Supplemental Petroleum Tax	51	51,526	64,457
Petroleum Profit Tax	15,218	40,888	78,554
Green Fund Levy	28,829	38,869	42,513
Business Levy	54,275	_	_
otal Revenue	8,380,184	10,029,149	12,067,090
Dividends paid to the GORTT	109,930	192,941	1,047,226
	1,275	1,464	1,440
Sales  ASSETS FOR 2019 WERE RESTATED IN THE AUDITEE	-		1,440
	-		2018
ASSETS FOR 2019 WERE RESTATED IN THE AUDITED  GOVERNANCE  Compliance with State Enterprises	P FINANCIAL STATE	MENTS FOR 2020  2019 %	2018
ASSETS FOR 2019 WERE RESTATED IN THE AUDITED  SOVERNANCE  Compliance with State Enterprises Performance Monitoring Manual (SEPMM)	PINANCIAL STATE  2020 %	2019 %	<b>2018</b> %
ASSETS FOR 2019 WERE RESTATED IN THE AUDITED  SOVERNANCE  Compliance with State Enterprises Performance Monitoring Manual (SEPMM)  Close out of agreed P1 Audit Action Items	2020 % 100 68	2019 %  100 89	2018 %
ASSETS FOR 2019 WERE RESTATED IN THE AUDITED  COMPliance with State Enterprises Performance Monitoring Manual (SEPMM)  Close out of agreed P1 Audit Action Items  Close out of agreed P2 Audit Action Items	2020 % 100 68 71	2019 %	2018 % 100 52 66
ASSETS FOR 2019 WERE RESTATED IN THE AUDITED  COMPliance with State Enterprises Performance Monitoring Manual (SEPMM)  Close out of agreed P1 Audit Action Items  Close out of agreed P2 Audit Action Items	2020 % 100 68	2019 %  100 89	2018 %
ASSETS FOR 2019 WERE RESTATED IN THE AUDITED  COMPliance with State Enterprises Performance Monitoring Manual (SEPMM) Close out of agreed P1 Audit Action Items Close out of agreed P2 Audit Action Items Close out of agreed P3 Audit Action Items Whistle-blower Hotline Matters received	2020 % 100 68 71	2019 %  100 89 81	2018 % 100 52 66 75
ASSETS FOR 2019 WERE RESTATED IN THE AUDITED	2020 % 100 68 71 100	2019 % 100 89 81 100	2018 % 100 52 66 75

PEOPLE			
	2020	2019	2018
Total Number of Employees	603	620	670
Permanent Staff	568	583	600
Contract Staff	35	37	70
Total New Hires	12	14	9
New Hires - Permanent Staff	9	7	5
New Hires - Contract Staff	3		4
Employee Turnover Rate	5.12%	5.25%	6.5%
Number of Training Hours	8,074	13,506	14,723

#### HSSE/ASSET INTEGRITY

2020	2019	2018
1,632,216	1,653,678	1,904,762
6.84	3.63	0.52
7	18	10
1	<u> </u>	2
8	90	179
119	106	66
5,112	11,346	16,284
3.09	59.90	5.29
100	99.18	76.76
1.84	4.39	3.42
100	76.31	46.79
2,289,998	2,492,000	2,243,169
8,404	9,145	8,232
-		
595,366	-	-
***************************************		•
2,185	-	-
	1,632,216 6.84 7 1 8 119 5,112 3.09 100 1.84 100 2,289,998 8,404	1,632,216 1,653,678 6.84 3.63 7 18 1 7 8 90 119 106 5,112 11,346  3.09 59.90 100 99.18 1.84 4.39 100 76.31  2,289,998 2,492,000 8,404 9,145

\* INITIAL INCIDENT NOTIFICATION (IIN) SYSTEM IMPLEMENTED IN 2019.

\*\* DIVERSION RATE REFERS TO THE AMOUNT OF WASTE THAT IS DIVERTED AWAY FROM THE FACILITY WITHOUT INCINERATION OR GOING TO LANDFILL.

#### PROJECT EXCELLENCE

	2020%		2019%		2018%	
	Planned	Actual*	Planned	Actual	Planned	Actual
Cost Performance	85	93.5	80	96	80	40
Schedule Performance	85	85.3	80	86	80	60
Defect Liability Claims**	3	0	3	0	3	0

#### Note:

- \* PERCENTAGES AFTER ADJUSTMENT DUE TO THE IMPACT OF COVID-19, WHICH CAUSED TEMPORARY STOPPAGE OF SOME PROJECTS.
- \*\* DEFECT LIABILITY CLAIMS STATISTIC WILL BE REPLACED BY PROJECT MANAGEMENT METHODOLOGY (PMM) COMPLIANCE FROM 2021.

## 'Big Five' Win: Transforming through Technology

The NGC Group is on the road to the new energy future and technology is the vehicle that will take us there. This philosophy has always guided our approach to technology at NGC and served the company well in 2020. Over the past few years, NGC has endeavoured to be proactive in adopting new technology, investing heavily in systems that could reduce the need for paper transactions.

#### **Business Continuity Support**

To support business continuity and facilitate working from home during the pandemic, the company fast-tracked its roll-out of several technological solutions which were already in place, including:

- Microsoft Teams, which facilitated meetings, including Board and Committee meetings, sharing of documents, online events and collaboration on projects
- Always On VPN, to enable employees' connection to the company's network and all enterprise systems for WFH
- Multi-Factor Authentication (MFA) to protect employees' identity as staff are now distributed and working remotely

When the decision was taken to allow employees to work from home, the company accelerated the implementation of its technology strategy, ensuring that all employees were connected. NGC negotiated a DocuSign package based on the number of envelopes to be used, thereby saving costs. This system improved the tender approval process, as documents could be work-flowed to the relevant signatories, increasing efficiency, reducing overall paper consumption and thereby contributing to the reduction of NGC's carbon footprint. Following the completion of risk assessments, licences were granted to selected employees based on their job functions. To support responsible use of the technology, an Electronic Signature Policy. as well as procedures for use of electronic devices, at home were developed.

#### **Reorganisation and Process Improvements**

In embracing the new energy future, NGC has been embracing new mindsets and technologically driven business processes. In doing so, we acknowledged the need to reorganise and reorient our technology function for success in an environment where disruption is the norm. The restructuring

exercise started in 2019, continued in 2020 with emphasis on transforming the Information Communication Technology (ICT) function to meet the future needs of the company, as we seek to benchmark internationally. The ICT Department was therefore rebranded as the Technology and Innovation (TI) Division and the process of sourcing additional skills commenced.

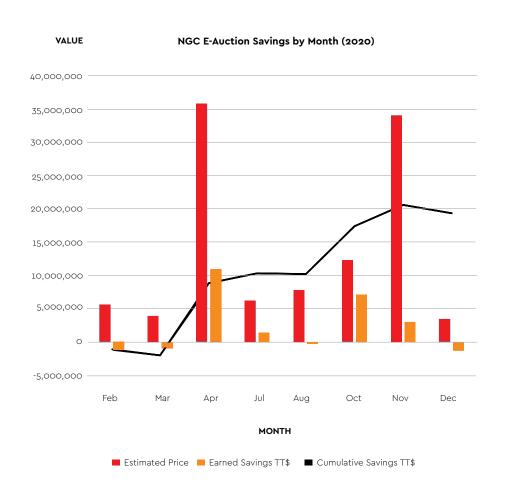
Process improvement was another focus area in which technology use was ramped-up to allow paperless transactions from remote locations. Improvements included:

- Electronic preparation of invoices
- Electronic processing of payroll
- Automation of timesheets for calculation and payment of overtime

#### **E-Auctions Generate Savings**

The company's investment in e-tendering software resulted in significant cost savings last year. E-auctions generated a 17.7% cost saving, exceeding the 10% benchmark. A total of 28 e-auctions were conducted across The NGC Group in 2020.

## 'Big Five' Win: Transforming through Technology (continued)



#### **Performance Measurement and Reporting**

The NGC Group began the process of digitising its performance measurement and reporting system in 2019, with the introduction of Power BI. The software facilitates tracking, and reporting of performance data through enhanced digital dashboards. Monitoring of the company's key performance indicators (KPIs) is improved, as managers can access visualisations of their area's actual versus planned performance, in real-time. This improves the overall decision-making process and allows managers to make required adjustments more efficiently.

During 2020, there was an unexpected, but welcome surge towards the adoption of Power BI, as managers and staff expanded their use of the platform. In addition to the organic growth, structured implementation of Power BI continued to be facilitated by a team established for implementation. Training was conducted with divisions and departments across The NGC Group, with each area appointing an internal 'Power BI Specialist' to assist in integration of the technology. Each department was also supported by an assigned Technology and Innovation (TI) representative.

Departments were challenged to review their records and upload historical data into the system. This process may have been a bit tedious, but by the end of the year, all reports for the Board and Leadership Team were transferred to Power BI. Reporting is now carried out in real-time and static reports are no longer generated. Power BI was also linked to some of the company's operating systems, such as SCADA, to continuous updating of gas utilisation levels. Plans are in progress for integrating the GIS and ROW systems with Power BI to improve reporting in these areas.

Recognising information as a strategic asset, controls have been built into The Group's information management system. This process has facilitated standardisation of information and a common approach to data management across The Group. All employees have access to Power BI Desktop for creation of operational reports. Access to strategic information in Power BI Pro is limited to authorised personnel who are accountable for its use.

While we made significant strides in 2020, we recognise that we still have far to go on our journey of transformation to succeed in the future energy landscape. In preparation



for the next phase of transition, a team comprising TI professionals from NGC and its subsidiaries came together to develop a Group Technology Strategy in 2020. The strategy is being refined and contains key initiatives such as the implementation of SAP S4 HANA Enterprise System and use of Data Analytics, Business Intelligence (BI) and Artificial Intelligence (AI).

We at NGC are excited by the prospects for the future, in which technology will be leveraged to enable revenue growth, value creation, value optimisation, and transformation of NGC's business for the benefit of the people of Trinidad and Tobago.

## embracing the new energy future

SUSTAINABILITY REPORT



corporate governance and compliance

> Peace, Justice and Strong Institutions



#### WHAT WE ARE PROUD OF:

- Transitioning quickly to facilitate virtual meetings of the Board and sub-committees
- Increasing integration of Corporate Governance and Compliance into the development of key policies and procedures



### WHERE WE COMMIT TO DOING BETTER:

- Enhancing compliance reporting
- Further automating of governance and compliance-based systems and sites to enhance ease of access to critical documents, templates and forms and to improve customer service and staff sensitisation

NGC recognises that good governance and compliance, are essential to not only sustain current business operations at the highest standards, but also to create a culture that anticipates and embraces new ethical principles and norms. The NGC Group advanced the process of embedding governance and compliance best practices into our operations at the individual and organisational levels.

### **Managing Governance & Compliance**

At NGC, our management of governance and compliance is guided by the following policies, which are currently being revised:

- Anti-fraud and Corruption
- Insider Trading
- Whistleblowing
- Business Practices and Ethics (i.e. Code of Conduct)

In addition to these policies, a revised Delegation of Authority Manual has been implemented to provide guidance to officers of the company regarding their designated financial authorisation. A Consequence Management Policy was rolled out across The NGC Group to provide a framework for disciplinary measures to be taken in the event of breaches of policies and procedures by employees.

The company's reorganisation to allow better emphasis on governance and compliance over the past few years, is having an impact on The NGC Group. As the principles of governance become more entrenched into our ethos, the Corporate Governance and Compliance (CGC) Division, is being progressively integrated into the development of key policies and procedures in various areas of The Group's operations. In 2020, the CGC Division contributed to the development of The Group's Health Declaration Policy, the Electronic Signatures Policy and Procedures, and the Ergonomics Policy necessitated by the COVID-19 pandemic, as well as the Document Numbering Procedure. This augurs well for development of more robust policies and procedures aligned to applicable laws, regulations and benchmarks.

A clear Governance and Compliance Framework was developed, identifying the key points of focus of the CGC Division. Under the sensitisation focus area, training was conducted for employees on a range of topics, including:

- Corporate Secretary Fundamentals
- Board Preparation Process Requirements
- Preparation of Board Papers and Round Robins
- Conflict of Interest (COI) Requirements



These interventions are expected to assist employees in identifying, declaring and managing potential risks for the protection of the employee and the company. The preparation of Board documents is also expected to become more efficient, as standardised processes are consistently applied.

### **Board & Sub-Committees Embrace Change**

We at NGC feel justifiably proud that within less than a month of the national lockdown and the introduction of WFH, all Board and sub-committee meetings across The Group transitioned smoothly to an electronic system, with all governance protocols being adhered to. Virtual meetings commenced in April 2020, with documents being distributed, reviewed and signed electronically.

Revision of the Terms of Reference for sub-committees was completed, to ensure the proper scoping of committees, incorporating vital governance principles and protocols. Terms of Reference were generated for a new sub-committee – the Sustainable Development and Strategic Branding Committee (SDSB) – which held its first meeting in November 2020. The SDSB Committee was established to achieve

greater synergies and alignment of focus across the Group on the strategic functions of sustainability and corporate brand management.

Subsidiary reporting was reintroduced with the aim of improving subsidiary governance. Subsidiary board meetings were held to facilitate regular updates (particularly commercial and financial). Phase 1 of the Management Services Agreement (MSA) Project commenced. This will enable The Group to better identify and manage the provision of services across The Group. The MSA Project will contribute towards sustainability by maximising our strengths, capitalising on synergies and reducing duplication and inefficiency.

### **COI Process Goes Online**

In January 2020, NGC's COI Process was automated and launched, facilitating completion of COI Declaration Forms. This proved to be a very timely initiative, as employees could complete the forms while working from home. Automation of the system also enhanced analysis and reporting on COI performance and potential risk. The overall efficiency of the process has been

improved, as forms are submitted and received instantaneously, with the added benefit of reducing paper consumption.

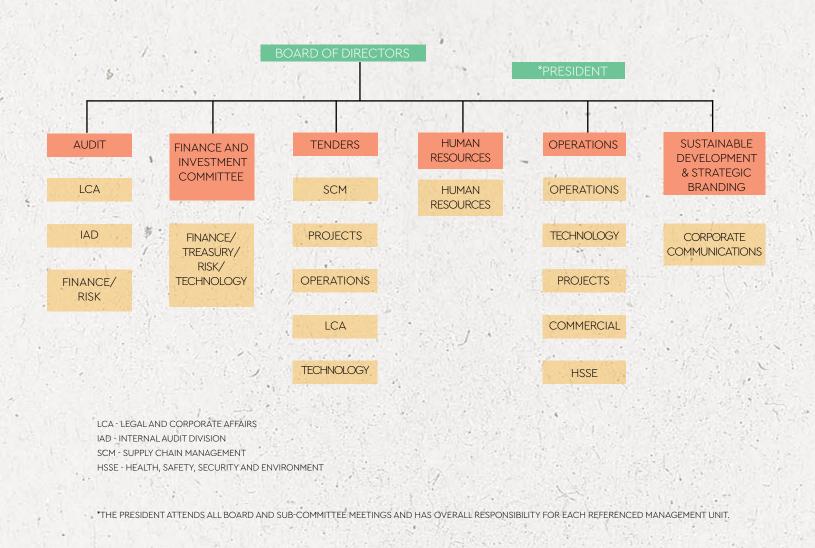
### **Publication of Annual Audited Financials**

NGC is mandated to publish Annual Audited Financial Statements in accordance with the SEPMM. In 2020, due to matters outside of the company's control, the publication of the 2019 Audited Financial Statements was delayed. However, with a view to maintaining compliance, approval for the extension of delivery time was sought and obtained from the Ministry of Energy and Energy Industries and the Ministry of Finance. This demonstrated the compliance culture at NGC, in alignment with our Group's Core Value of Transparency.

### Whistleblowing

Last year marked the second full year since the introduction of the Whistleblowing Policy. This includes an anonymous hotline where matters can be reported. A total of nine matters were received on the Whistleblowing Hotline in 2020 with two matters being addressed and/or closed during the year.

# NGC GROUP'S BOARD AND BOARD SUB-COMMITTEE STRUCTURE





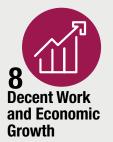
# embracing the new **energy future**

SUSTAINABILITY REPORT









human capital



#### WHAT WE ARE PROUD OF:

- Putting the safety and health of our people first during the pandemic, we were able to:
  - Adjust quickly to the changing work environment
  - Develop policies and procedures for Workfrom-Home
  - Support our employees in making the transition to working from home



#### WHERE WE COMMIT TO DOING BETTER:

- Enhancing customer service to our employees
- Managing succession of strategic roles for business optimisation and sustainability

The Government of the Republic of Trinidad and Tobago (GORTT) has articulated the country's National Development Goals in the Vision 2030 document under five themes. Theme #1 - Putting People First: Nurturing Our Greatest Asset, is directly aligned to NGC's philosophy about its people. We recognise that our people are our most valuable resource, as without them, we cannot achieve our organisational goals. Therefore, when faced with the challenges of COVID-19 in 2020, the wellbeing of our employees and contractors guided the decision-making process.

### **Managing Disruption**

While the decision to work from home may have been relatively straightforward, the implementation of this arrangement was complex and required an integrated approach across the company and its operating subsidiaries. The pandemic epitomised an EVUCA (Exponentially Volatile, Uncertain, Complex and Ambiguous) environment, which disrupted established systems and challenged us to be agile and innovative. The new situation necessitated new attitudes and tactics. Early in 2020, a Group Business Continuity Planning (BCP) Committee was formed comprising

representatives with responsibility for various functions including health and safety; human resources; communications; projects; operations; strategy; supply chain; risk; and facilities management.

The team's priority was to develop strategies and systems to minimise health risks, while ensuring that critical work continued. To this end, arrangements were made for temporary accommodation of critical operations staff, who were required to quarantine away from their families. Contingency measures were also put in place for safe travel of essential frontline staff due to limited flight arrangements via the inter-island air bridge.

Based on information at the time, a WFH Policy was developed and implemented for an initial period of two weeks in March 2020. As the global and national situation evolved and more information became available, the WFH arrangement was extended until persons could be immunised against the virus. Therefore, the company adjusted to the new way of working. Protocols were established for any persons required to access the company's facilities. Rostering guidelines were developed for management of essential workers in a safe and equitable

# **Human Capital (continued)**

manner. The TI Division accelerated adoption of software to support WFH, while employees pushed themselves to learn new technologies.

Within a few months, modifications were implemented, and initiatives resumed online. Recruitment, orientation of new employees, training, development, and Employee Assistance Programme (EAP) services were delivered virtually. The HR, Corporate Communications and Office of Strategic Management Divisions conducted virtual check-ins with employees based at remote facilities.

At the end of 2020, the climate continued to be volatile and not all challenges were resolved. However, we are heartened by this year's achievements and confident in the ability of our staff to adapt and grow in difficult times. We are committed to the ongoing use of information to make the best decisions possible to promote the health and safety of our people and the sustainability of our business operations.

# Competency, Knowledge and Skills Development (CKSD)

Phase II of the CKSD Project, initiated in 2019, was 100% completed in 2020. The project allows employees and line managers to identify and close competency gaps within job classifications to international standards. CKSD is expected to have a positive impact on productivity and reduce business and safety risks, which would in turn, improve profitability. Additionally, by bolstering its employee bench strength, NGC is ensuring its ability to keep pace with the evolving energy business and strengthening its market appeal as an international service provider.

In 2020, 100% of planned interviews and records validation were completed for the following groups/departments:

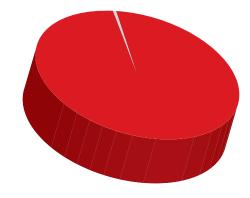
- Commercial
- Electrical
- Pipeline & Gas Facilities Reliability Services
- Control & SCADA (Supervisory Control & Data Acquisition)
- Automation & Measurement
- Upstream Operations
- Corrosion Management

In the coming year, Employee Development Plans (EDPs) will be implemented for the Phase II teams to close the gaps that were identified. EDPs will include training, development, coaching, and mentoring involving line management, employees, and external service providers where applicable.

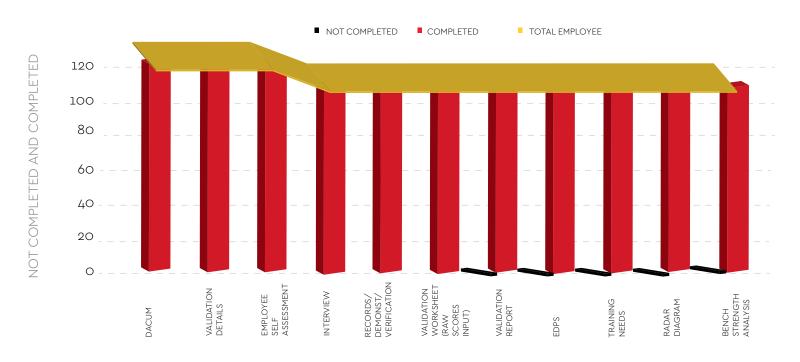
Phase III of the CKSD project was approved in 2020 for four areas – Supply Chain Management Division; Projects Division; Finance, Technology and Risk Group; and the Operations Group. Employee engagement sessions were held, curriculum standards developed and validation of records commenced with the Supply Chain Management team. The Green Agenda will be further developed as the company continues to prepare for the new energy future. This focus will be progressively incorporated into CKSD employee training plans to align the knowledge and skill sets of employees with the requirements of the evolving industry.





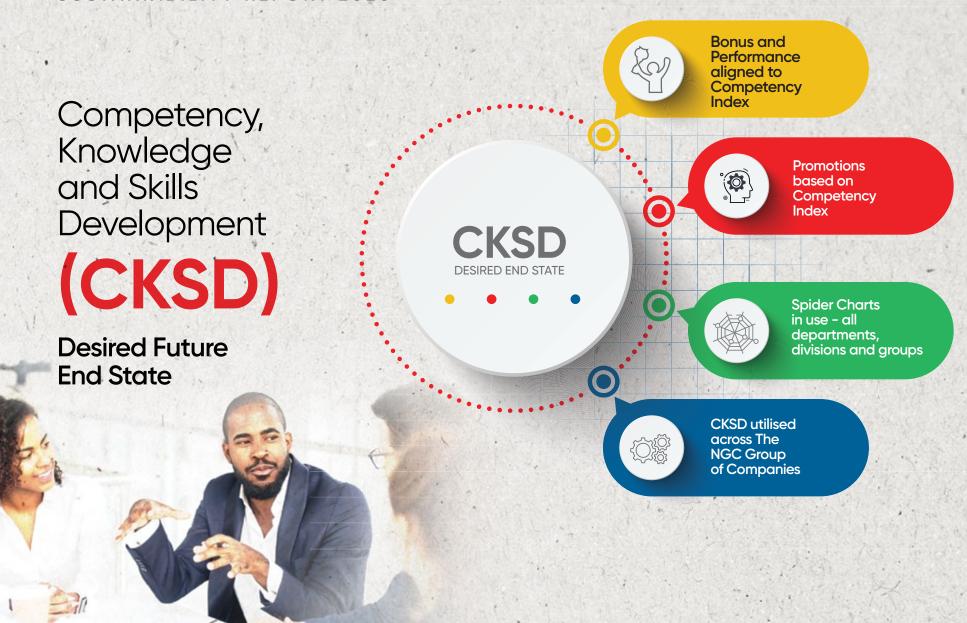


CKSD COMPLETION STAGES



PHASE

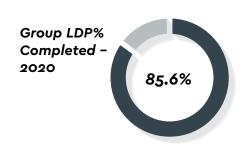
### SUSTAINABILITY REPORT 2020



### **Leadership Development Programme**

The NGC Group introduced the John Maxwell Leadership Development Programme (LDP) in 2019. The goals of the programme were to build The Group's bench strength in leadership and to encourage consistent demonstration of the organisation's core values and leadership behaviours across The Group. The programme experienced a setback during the first guarter of 2020 when in-person sessions were suspended. The programme was subsequently redesigned for online delivery and restarted in August, with virtual leadership training and Group coaching sessions.

### LDP Managers - 2020





### **Human Capital (continued)**

The impact of the LDP was clearly demonstrated in 2020, as the internal facilitators who had been trained in 2019, delivered five modules of the programme to 81 employees with the coaching and mentoring support of the external consultant. The LDP has also impacted the participants' ability to reflect on their leadership behaviours and adjust the ways in which they relate to their colleagues.

When surveyed at the end of the 2020 cycle, the new LDP facilitators indicated that employees were very receptive and look forward to the sessions. They expressed a general challenge of balancing their workload and other commitments with the requirements of the LDP. It was recommended that communication of the programme's progress to the employee body should be improved, and that demonstration of leadership behaviours should be recognised by the company.

THIS IS WHAT SOME OF THE 2020 LDP PARTICIPANTS HAD TO SAY ABOUT THE PROGRAMME.

"The programme was enlightening, especially leadership from a 360-degree standpoint. It was not just theoretical; all sessions were thought-provoking.

It was beneficial to me, equipping me on my leadership journey. I had some reservations as to how it would come out virtually, (but) a good job was done."

- NIKISHEA, NATIONAL ENERGY

"Leadership is a journey...it involves a continuous process. You cannot say you have reached the top, you have to work at it. It is about life-long learning."
- ANDRE, NGC

"The area that stood out for me and which was most impactful was leadina self. recoanisina the different traits of people, and discovering how we can have a better working relationship with them. ...It helps me to lead and develop the persons below me. The area of succession planning is important to me - to aet them to that level so that when the opportunities arise, they develop, incorporating all the learnings in a holistic WQU." - ARLETTE, NGC

"I have work to do.
I enjoyed reading
Maxwell from before;
I have a supportive
team, I have to engage
myself some more to get
results."
- GARTH, NGC CNG



### Knowledge Management, Training & Development

Training was conducted in a wide range of areas during the year, including oil and gas capacity building; accounting; finance; gas operations; cyber security; governance, ethics and compliance; and risk management. A Train-the-Trainer course was delivered to a group of employees from within the HSSE Department and the Operations Group in 2020. The objective of this programme is to enhance the knowledge and skills of participants so that they in turn, would become confident and effective facilitators, capable of transferring their knowledge through the internal training process.

NGC hosted six Knowledge Cafe sessions during the year. Topics ranged from COVID-19 awareness, conducted by the company's Occupational Health Doctor, to the newly introduced demerit system for traffic violations, global LNG, hazard communication and the hydrogen economy. Though the sessions were moved to the virtual space, employees remained engaged in learning not only about the pandemic and its potential effects, but also about trends in the energy business.

This initiative was a major step forward in establishing the NGC Academy, a concept built on the principles of knowledge transfer, value creation and sustainability. In 2021, the 2020 facilitators are expected to begin conducting sessions while additional groups of employees will be empowered through 2021 Train-the-Trainer courses.

### **Employee Wellness**

Feelings of anxiety, isolation, Zoom fatigue, difficulty with coping and managing a myriad of other issues, were experienced in 2020. And for the parents of small children and those attending online classes, 2020 brought additional layers of emotional strain, as some struggled to adapt to new ways of working and learning. Recognising that employees could easily lose focus on wellness and fitness within the maelstrom of change, the company provided some crucial support.

Prior to WFH, NGC's most consistently utilised Wellness offering was the corporate gym, including weekly spin classes. However, with the closure of these facilities and restrictions on social interaction, NGC implemented live virtual yoga and aerobics sessions during the initial lockdown period. Fitness was also encouraged through the six-

week Tone Up Thursday Fitness Challenge and in August 2020, the company hosted its inaugural 5K as a virtual event. In September 2020, the SelfHelpWorks series provided a suite of interactive online activities and tips designed to motivate staff to make healthy choices.

As part of the BCP, the company implemented a 14-day work schedule for Control Room employees to minimise physical interaction. A meeting was held with each crew of sequestered workers at Beachfield Installation, Union Industrial Estate, Phoenix Park Valve Station and Tobago Natural Gas Receiving Facility. A total of 81 workers were sequestered.

NGC's partnerships with EAP provider, Families in Action, and the company's Occupational Health Doctor took on deeper significance, as numerous sessions were held with employees. In addition to providing timely and accurate information on COVID-19, the meetings facilitated discussions on managing stress, promoting emotional stability, and maintaining social connection.

### **Discrimination Claims**

There were zero discrimination claims recorded and zero discrimination cases that went to the Industrial Court in 2020.

# **Human Capital (continued)**

### **Succession Management**

Succession Management has been identified as one of the major areas for improvement in the company's management of human capital. As succession management is crucial for sustainability, particularly in strategic and specialised roles, the company will be strengthening this area in 2021.

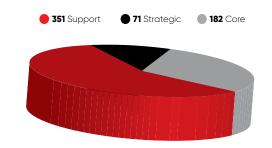
An assessment of the organisation's talent supply for core functions was commenced, with the aim of having real-time data available to assist in development of the company's talent management strategy. A role segmentation exercise was conducted to categorise job functions into three groups:

**Strategic** - These roles are vital to executing strategy. These roles are the drivers of longterm competitive advantage. The company's future success would be compromised if these roles are not filled by extremely competent people.

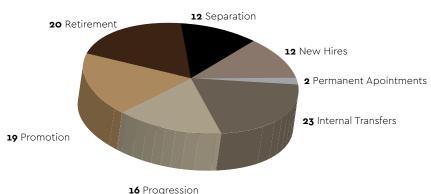
**Core** - These roles relate to operational excellence. They are critical for the delivery of products and services and the company's current success would be compromised if there are issues with these functions.

**Support** – The roles keep internal operations working smoothly. These functions are essential to the business, but can be delivered via alternative staffing strategies.

### Role Segmentation - Strategic, Core and Support

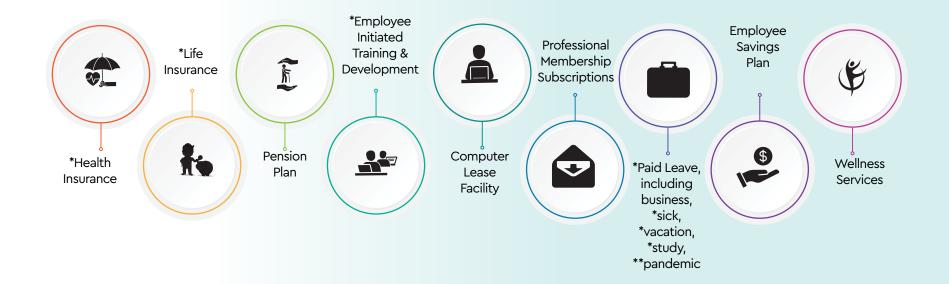


#### Employee Movements - 2020



# **Employee** Benefits

EMPLOYEES OF NGC ARE PROVIDED WITH THE FOLLOWING BENEFITS



#### NOTE

- None of NGC's employees are covered by Collective Bargaining Agreements

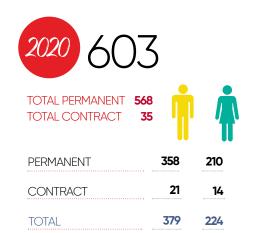
  Maternity leave (14 weeks maximum) is provided to female employees with a minimum of one-year continuous service.

  \*\* Pandemic leave was implemented in 2020, during the initial stages of the pandemic.

<sup>\*</sup> These benefits are offered to permanent and contract employees.

# **Human Capital Performance Indicators**











EMPLOYEE	LEVELS	o <sup>r</sup>	9	TOTAL
LO	PRESIDENT	1	0	1
L1	VICE PRESIDENTS	3	1	4
L2	MANAGERS	21	17	38
L3	ASSISTANT MANAGERS/HEADS	48	40	88
L4	SUPERVISORS	63	23	86
L5	INDIVIDUAL CONTRIBUTORS	243	143	386











	MALE	FEMALE	TOTAL
NON-TECHNICAL PROFESSIONS	80	147	227
TECHNICAL PROFESSIONS	288	26	314
ADMINISTRATIVE AND ANCILLARY STAFF	11	51	62

22 EMPLOYEES DUE TO RETIRE IN 2021







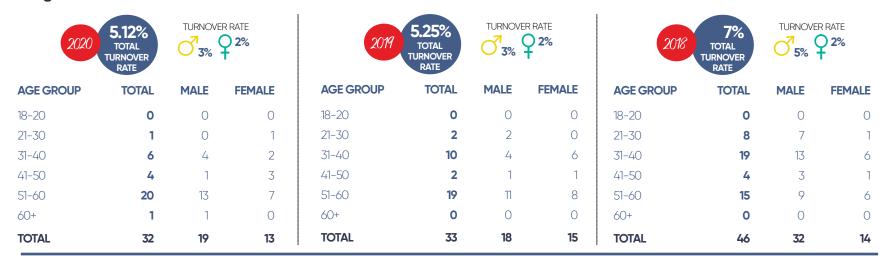


2018	1.30% HIRE
	RATE

AGE GROUP	TOTAL	MALE	FEMALE	AGE GROUP	TOTAL	MALE	FEMALE	AGE GROUP	TOTAL	MALE	FEMALE
18-20	0	0	0	18-20	0	0	0	18-20	0	0	0
21-30	1	1	0	21-30	1	1	0	21–30	2	1	1
31-40	4	1	3	31-40	5	2	3	31–40	2	0	1
41-50	5	3	2	41-50	6	6	0	41-50	3	1	2
51-60	2	1	1	51-60	0	0	0	51-60	2	2	0
60+	0	0	0	60+	2	2	0	60+	0	0	0
TOTAL	12	6	6	TOTAL	14	11	3	TOTAL	9	4	5
				8				1			

# **Human Capital Performance Indicators**





# HOURS OF EMPLOYEE TRAINING AND DEVELOPMENT RECEIVED

,00-		2020			
MPLOYEE	EE CATEGORY	Total No. of Employees	Total No. of Hours		
) PRES	RESIDENT	_	0		
VICE	CE PRESIDENTS	4	76		
MAN.	ANAGERS	26	700		
S ASSIS	SSISTANT MANGERS/HEADS	46	1,578		
+ SUPE	JPERVISORS	. 71	1,501		
5 INDIN	DIVIDUAL CONTRIBUTORS	246	4,219		
OTAL		393	8,074		
ALE O	3	279	5,732		
MALE P	9	114	2,342		
MALE P	9	114			

	2019				
of Empl	tal No. oyees	Total No. of Hours			
		0			
	4	104			
	32	864			
	37	1,222			
	57	1,916			
	347	9,400			
	477	13,506			
MALE O	316	9,284			
FEMALE (	) 161 F	4,225			

Total No. of Employees	2018 Total No. of Hours
	0
4	168
31	1,170
51	1,918
116	3,589
289	7,428
492	14,273
MALE 0	9,851
FEMALE P	4,422



# embracing the new **energy future**

SUSTAINABILITY REPORT



health safety security environment

HSSE

12
Responsible
Consumption
and Production



### WHAT WE ARE PROUD OF:

- Participating in national committees to promote standardisation of HSSE practices
- Adopting Life Saving Rules across The NGC Group
- Establishing Crisis Management and Emergency Response (CMER) Team



### WHERE WE COMMIT TO DOING BETTER:

- Monitoring of compliance for operating facilities in alignment with revised CEC requirements
- Improving BCP response in various scenarios

NGC and its subsidiaries continued the journey towards 'Destination: World Class Safety' which 'touched down' in 2020. Some turbulence was experienced along the way. However, NGC laid a firm foundation of occupational safety upon which we are building our Process Safety Management (PSM) system. We are embracing the principles for being systematic and incontrol of our operations. This requires nurturing of operational discipline to ensure that all stakeholders consistently uphold the established Health, Safety, Security and Environment (HSSE) standards.

Though some programmes were interrupted in 2020, the company's resilience was demonstrated through its ability to adapt, while maintaining its focus on strengthening sustainable processes and systems to achieve organisational goals. HSSE continued to be embedded in our operations and culture to empower our employees, contractors and stakeholders to function safely at work and at home.

### **Influencing Industry Best Practice**

NGC is represented on several national HSSErelated committees, as the company seeks to leverage its position as an industry leader to influence the adoption of international best practices. In 2020, NGC assisted the following committees:

- Energy Sector Security Initiative (ESSI)
   Task Force establishing standards for managing critical infrastructure during lock-down.
- Trinidad and Tobago Mutual Aid Scheme (TTEMAS) – NGC and its subsidiaries are playing an active role in the revitalisation of the south-east and south-west divisions.

NGC became one of the first companies to adopt the Point Lisas Energy Association's (PLEA) Life Saving Rules (LSR) and Process Safety Fundamentals (PSF). LSRs and PSFs formed part of the mandatory HSSE awareness training requirements for all staff of NGC and its subsidiaries. The training videos were developed internally. Other PLEA members have expressed interest in adopting NGC's model for rolling out LSR and PSF training.

NGC also joined the National Emergency Operations Centre which was established for coordination of critical services such as electricity, water, ports, roadways, and natural gas during a national emergency.

# Health, Safety, Security and Environment (continued)

NGC is the representative organisation for energy-related functions.

### **Barrier Controls for Risk Management**

NGC commenced implementation of a Bowtie Barrier Control Model in 2019 in which the company's top 5 risks were identified:

- Working at heights
- Lifting and rigging
- Isolation
- Excavation
- Critical transfers, including transportation

Based on the assessment, refined barriers were designed to mitigate against these risks. An upgraded barrier procedure was rolled out for Working at Heights in 2020, with the remaining procedures to be implemented in 2021.

A programme was introduced for barrier verification, which involves checking the health of established controls for managing the HSSE risks related to a particular activity. Corrective action can then be identified for observed deficiencies. The programme commenced in Quarter 1, with senior managers conducting barrier health verification. However, physical verification was put on hold to reduce contact

opportunities for the protection of employees. Plans are in place for transitioning to online real-time monitoring of barrier controls in the near future.

# Crisis Management and Emergency Response (CMER)

Emergency response preparedness has always been an important part of NGC's HSSE management approach. In the past, the focus was on managing training and response to major accident scenarios. In 2020, a CMER Team was established to implement a more comprehensive approach to crisis management planning and coordination. The CMER includes the management of safety critical equipment (SCE), emergency response and stakeholder management.

It also integrates all phases of emergency response – prevention, mitigation, response and recovery. Engagement of emergency response stakeholders, including localised police, hospitals, fire and ambulance services, was identified as an area for improvement. Roll out of a stakeholder engagement plan began in Quarter 1, but was suspended during lockdown.

A mass notification system was developed and launched in 2020, in which direct messages (SMS) can be sent to the phones of employees and stakeholders. This system will allow the company to disseminate critical information to multiple users, from a central location in the event of an emergency. This was one aspect of the Incident Command System (ICS), which is changing the way the company is organised to respond to crisis situations. In the future, virtual drills based on various scenarios will be enabled using simulator technology.

### **Learning from Incidents**

A new Learning from Incidents (LFI) system was brought onstream in 2020. Elements of the system included the formation of an LFI Committee, which meets weekly to review incident reports submitted by line managers. The LFI system features an online reporting tool where Managers and Assistant Managers can input reports on incidents, including accidents and near misses. Joint assessments are then conducted by the committee in conjunction with line managers, following which, 'lessons learned' summary reports will be produced and shared with employees and other stakeholders. The LFI procedure will be disseminated to all employees in the coming year.



# PROCESS SAFETY INDICATORS

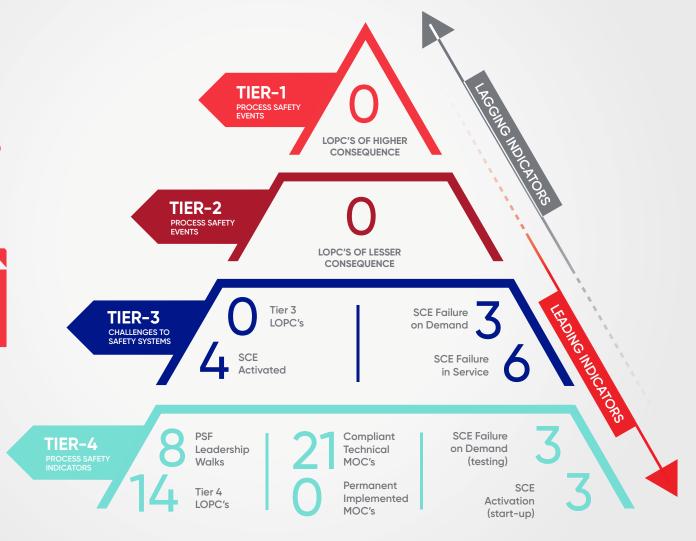
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### **TERMS OF REFERENCE:**

LOPC - LOSS OF PRIMARY CONTAINMENT SCE - SAFETY CRITICAL EQUIPMENT PSF - PROCESS SAFETY FUNDAMENTAL MOC - MANAGEMENT OF CHANGE

Year. Date of Incident

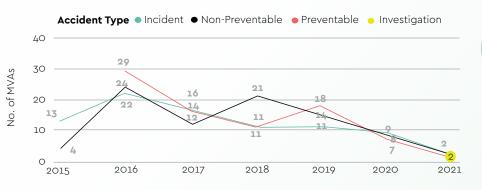
2020



# Health, Safety, Security and Environment (continued)

MVA's by Year and Driving Activity

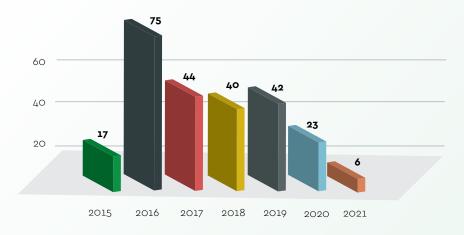
### **MVAs by Year**



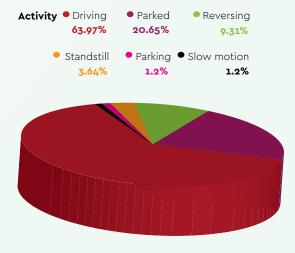
A vehicle incident is one involving a Company vehicle that is not a result of driving behaviours.

A non-preventable vehicle accident is one involving a Company vehicle in which the investigation found the employee could not have avoided the incident through reasonable precautions.

# **MVAs by Driving Activity**



# **MVAs by Driving Activity**



### **Industrial Hygiene Programme**

NGC enhanced its industrial hygiene activities in 2020 with the recruitment of the first Industrial Health Nurse for NGC and its subsidiaries

This was another well-timed action, as the nurse provided valuable support to the Group's management of COVID-19. A procedure was established for issues arising from employees' Health Declaration Forms to be referred to the nurse for a preliminary assessment. Matters requiring medical attention are forwarded to the company's doctor.

The occupational health nurse is responsible for handling both preventative and reactive aspects of occupational health. Management of cases, including injuries; administration of The Group's random drug testing process; and industrial medicals are also handled by the nurse.

Elements of occupational health prevention include hearing conservation through management of risk exposure to noise and hydrocarbons; and respiratory controls such as air quality monitoring. Biological health

risks, including working in proximity to snakes and harmful insects are included in the industrial hygiene and surveillance plans.

The first phase to be integrated in 2020 involved a review of the company's chemical management system. Procedures were developed for handling of arsenic and benzene, hazardous chemical components that can be found at NGC's field facilities. A Human Health Risk Assessment (HHRA) comprising an evaluation of qualitative and quantitative health risks, began in 2020. In the coming year, a health matrix will be developed to delineate the different levels of health hazards to which employees are exposed.

### Management of Change

As NGC continues to entrench its Risk-based Process Safety Management system into its organisational culture, the management of change (MOC) element has been introduced. MOC procedures and practices ensure that process changes do not inadvertently introduce new hazards or unknowingly increase risks associated with existing hazards.

The MOC process includes a review and authorisation process for evaluating proposed adjustments to facility designs, operations, organisation, or activities, prior to implementation. The consequences of existing hazards to employees, the public, or the environment, are evaluated to ensure that all stakeholders are notified of the change.

The outputs of the MOC process include updated documents, such as procedures, process safety knowledge, lessons learnt, designs and systems and procedures. If a proposed modification is made to a hazardous process without appropriate review, the risk of a process safety accident could increase significantly.

NGC and its subsidiaries have initiated the MOC process in alignment to Process Safety Management (PSM) best practice. Consolidation of a common workflow as well as consistent and comparable KPI reporting have also resulted from the MOC assimilation process.

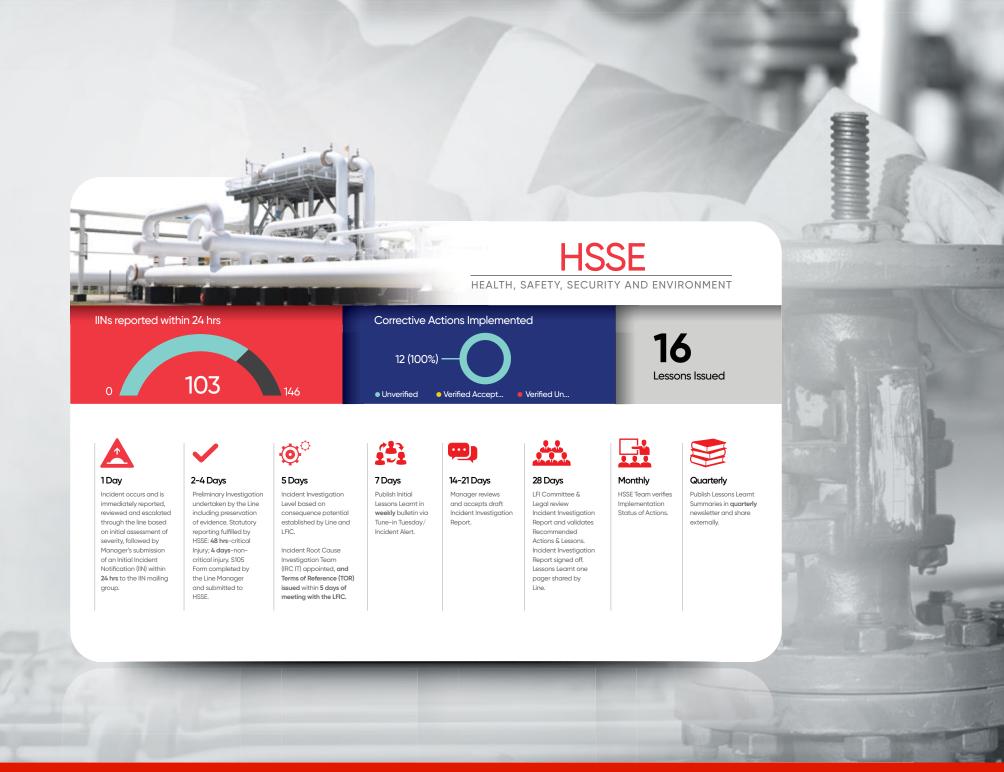
# Health, Safety, Security and Environment (continued)

### No. of Compliant/Non-Compliant Reports per Month



### Reporting Compliance (within 24 hrs of an Incident)





### HSSE PERFORMANCE

YTD December 2020

MAN-HOURS WORKED



1,632,216



YTD December 2019

MAN-HOURS WORKED



1,653,678



ACCIDENT FREQUENCY RATE YTD December 2018

MAN-HOURS WORKED



1,904,762



ACCIDENT FREQUENCY RATE

PERFORMANCE INDICATORS	YTD 2020	YTD 2019	YTD 2018
Preventable Vehicular Accidents (PVAs)	7	18	10
Recordable Injuries	1	7	2
Days Lost	8	90	179
Near Misses/IIN*	119	106	66
Let's Connect	5,112	11,348	16,293

<sup>\*</sup> INITIAL INCIDENT NOTIFICATION (IIN) SYSTEM IMPLEMENTED IN 2019

### TOTAL NON-HAZARDOUS WASTE AND TREATMENT

WASTE CATEGORY	2020 TOTAL (LBS)	2019 TOTAL (LBS)	2018 TOTAL (LBS)	TREATMENT TYPE
Plastic Packaging	1,411	5,117	4,056	Recycled
Paper and Cardboard	1,986	2,612	1,896	Recycled
Glass (domestic)	224	712	726	Recycled
Metallic Packaging	64	346	172	Recycled
Total Waste (lbs)	3,685	8,787	6,850	
Total Waste (tonnes)	1.84	4.39	3.42	
Diversion Rate*	100%	76.31%	40.79	

<sup>\*</sup>DIVERSION RATE REFERS TO THE AMOUNT OF WASTE THAT IS DIVERTED AWAY FROM THE FACILITY WITHOUT INCINERATION OR GOING TO LANDFILL.



### TOTAL HAZARDOUS WASTE AND TREATMENT

WASTE CATEGORY	2020 TOTAL (LBS)	2019 TOTAL (LBS)	2018 TOTAL (LBS)	TREATMENT TYPE
Other Engine/Gear and Lubricating Oils	0	82,760	2,048	Incineration
Paint, Ink, Adhesives and Resins	0	28,160	0	Incineration
Waste Printing Toner Containing Dangerous Substances	306	2,064	1,594	Recycling
Computer Equipment	12	1,830	5,363	Recycling
Plastics	0	1,702	0	Landfill
Fluorescent Tubes and Other Mercury-Containing Waste	247	1,699	1,079	Crushing/Recycling
Paper and Cardboard	0	750	0	Incineration
Steel Drums	0	560	0	Recycling
Oily Rags/Gloves/Contaminated Protective Clothing	0	175	0	Incineration
Incandescent Bulbs	13	57	0	Crushing/Recycling
Paper and Cardboard Packaging	Ο	34	0	Landfill
Ni-Cd Batteries	0	6	0	Recycling
Alkaline Batteries	16	3	74	Recycling
Lead Batteries	5,581	0	0	Recycling
Fuel Filters	Ο	0	374	Incineration
Spent/Used Chemicals	O	0	36	Incineration
Empty Aerosol Cans/Gas Cylinders	0	0	10	Crushing/Recycling
Total Waste (lbs)	6,175	119,800	10,578	
Total Waste (tonnes)	3.09	59.90	5.29	
Diversion Rate*	100%	99.18%	76.76%	

<sup>\*</sup>Diversion rate refers to the amount of waste that is diverted away from the facility without incineration or going to landfill.

embracing the new **energy future** 

SUSTAINABILITY REPORT



**'asset** integrity

12
Responsible
Consumption
and Production



### WHAT WE ARE PROUD OF:

- Maintaining pipeline network 100% available and operational during the year
- Less than 0.5% gas shortfall in 2020
- Delivering on 2020 drive to increase use of technology for risk management and value
- Coordinating critical services for Point Lisas Industrial Estate during the early stages of the pandemic



#### WHERE WE COMMIT TO DOING BETTER:

- Continuously improving the Inspection
- Completing Process Hazard Analysis (PHA) for all
- Embedding and building Process Safety culture

Resources (Human and Capital)

AIM

People Culture Technology

Technical AI

Programmes

(RBI, PM, PdM)

Process

Operations (ASM, SOL,

IOW)

Capital

Project

Management &

Design (RAM

Analysis)

Functional Execution

and KPIs

Technical Standards and Procedures

> Information Management & CMMS

Supply Chain (Procurement & Spares)

Leadership & Governance

PSM & Risk Management

IN 2020, NGC **CONTINUED TO** BE GUIDED BY THE ROBUST **ASSET INTEGRITY** MANAGEMENT (AIM) FRAMEWORK THAT WAS IMPLEMENTED IN 2018 TO CLOSE AIM GAPS IDENTIFIED IN THE 2017 AUDIT CONDUCTED BY DET **NORSKE VERITAS** (DNV) T&T LTD. WE RECOGNISE AIM, ALONG WITH PROCESS SAFETY MANAGEMENT, AS KEY PRINCIPLES TO ENSURE THE LONGEVITY OF OUR BUSINESS.





Programme for consumers and facilities

# **Asset Integrity (continued)**

The events of 2020 tested the resilience of our AIM and Process Safety systems, and further emphasised the importance of technology and innovation for business continuity. NGC is proud of its swift response to the changing environment and heartened to know that based on our disruption preparedness, we were able to assist the wider industry. Leveraging our internal strengths during the early weeks of the pandemic, NGC took on a coordinating role, ensuring that gas supply to essential services, such as hospitals and downstream plants, was prioritised.

### **Getting Organised for Change**

The process of realigning the operations function which started in 2019, continued in 2020. The key principles employed were:

- Alignment with corporate strategy
- Alignment with requisite skills
- Control of work
- Business process optimisation
- Independent assurance and compliance

The Operations Group was reorganised to include divisions/departments focused on asset maintenance, pipeline operations, maintenance engineering and projects, and

KEY PRINCIPLES FOR CHANGE Alianment with Control of Work Skills Alignment with Strategy Employees with Alignment with specific skills. Safe Work Operational strength and Excellence Practices and career Control of Work Asset Integrity aspirations best practices. Process Safety aligned with the (Process Safety) Efficiency business needs **Business Process** Independent Optimisation Assurance & Leveraging Compliance Technology Technical Resource Authority Planning Asset Integrity Removing Measurement duplication Assurance Clear Roles and Centralised Responsibilities Planning

integrity management and value assurance. This new structure optimises the productivity of the operations team in delivering NGC's strategic objectives.

### Operational Excellence 4.0

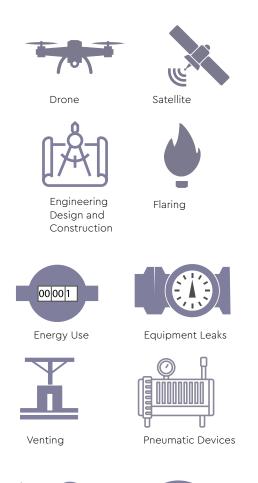
Last year was certainly a catalyst for change, ushering in a new dispensation in the world of business. At NGC, we introduced the concept of Operational Excellence 4.0, a new way of doing business driven by technology and innovation. Through the implementation of various technological solutions, NGC was able to reduce risks, improve monitoring efficiency, and create value (over TT\$50M was generated through cost-saving and strategic initiatives). The 2020 technology drive included:

### • Digital Worker Initiatives

Overall operational efficiency and reliability were improved as field technicians were equipped with tablets connected to NGC's Geographic Information System (GIS). This enabled real-time access to GIS data for field verification and reporting. Route and inspection forms were also digitised and linked to GIS and the mobile devices were used with drones for mapping of the Right of Way (ROW) surveys.

### • Obsolescence Management

Monitoring and management of ageing assets form an integral part of NGC's AIM. The 2020 Obsolescence Management Programme saw the upgrade of Remote Terminal Units (RTUs) and telecommunications systems at 70



Operational Repairs

sites. Human-Machine Interfaces (HMIs) and control systems were also upgraded at our facilities at Beachfield, Union Industrial Estate and Cove Industrial Estate in Tobago.

### • Satellite monitoring of ROWs

NGC partnered with Orbital Eye B.V., a Netherlands-based company, to use satellite technology for reliable and efficient monitoring of NGC's pipeline ROWs. The PIMSyS Software-based application with integrated geoviewer for notification, provides a high probability of change detection along the ROW. Efficiency is improved, as the system is not subject to weather conditions; and health, safety and security risks to personnel are mitigated through the unmanned system.

### Leak Detection and Repair (LDAR) Programme

Design and implementation of an LDAR Programme commenced in 2020. Utilising an advanced camera system linked to the GIS, leaks, flares and venting throughout NGC's pipeline network can be remotely monitored. Plans are in progress to link the LDAR to the Orbital Eye satellite system to further improve efficiency and effectiveness as we work towards the objective of zero leakage.

# **Asset Integrity (continued)**

### **Process Safety Management**

Integration of Process Safety Management (PSM) continued at NGC and its subsidiaries in alignment with the Centre for Chemical Process Safety (CCPS) Risk-based – Inspection model. The PSM system is built on four pillars:

- Commit to process safety
- Understand hazards and risks
- Manage risks
- Learn from experience

PSM and occupational safety are continuously reinforced through communication, training, and system improvements, to strengthen the safety culture across The NGC Group.

### **Closing Asset Integrity Gaps**

NGC continues its programme to close the AIM gaps identified in the 2017 DNV audit of systems and equipment. As at the end of 2020, the system asset integrity score was 2.83, while equipment obtained a score of 2.6. By end of 2021, we aim to achieve system and equipment scores of 3.5 and 3.18 respectively. We continue to take deliberate steps towards improving AIM, implementing action items and building a culture of asset integrity awareness throughout the organisation. Despite the challenges encountered in 2020, a 97% gap closure was achieved.

#### AIM AUDIT SCORES



TABLE 1: AUDIT SCORING SYSTEM WITH COLOURS USED IN HEAT PLOTS

4 = OPTIMISING: THE ACTIVITY OR PRACTICE IS
EFFECTIVE AND EFFICIENT. VISIBLE CONTINUOUS
IMPROVEMENT CULTURE/EFFORTS ARE IN PLACE.

3 = MANAGING: THE ACTIVITY OR PRACTICE IS
DOCUMENTED AND EFFICIENTLY IMPLEMENTED.

2 = IMPLEMENTING: THE ACTIVITY OR PRACTICE IS
DOCUMENTED WITH IMPLEMENTATION ONGOING,
BUT NOT FULLY MATURE.

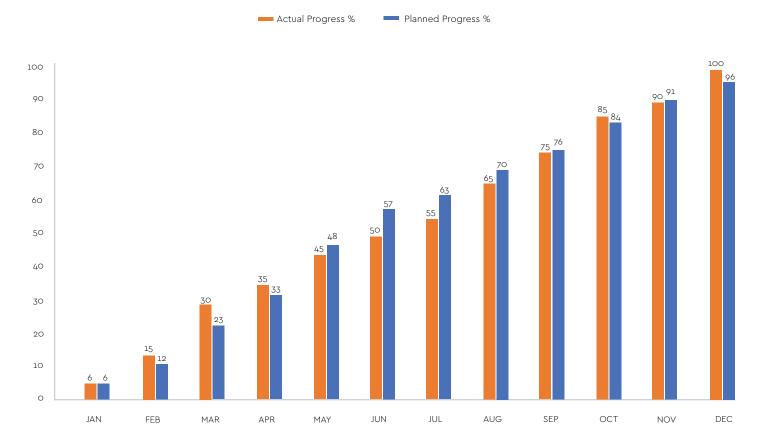
1 = DEVELOPING: THE ACTIVITY OR PRACTICE
EXISTS, ALTHOUGH IT MAY BE INCOMPLETE AND
UNDOCUMENTED.

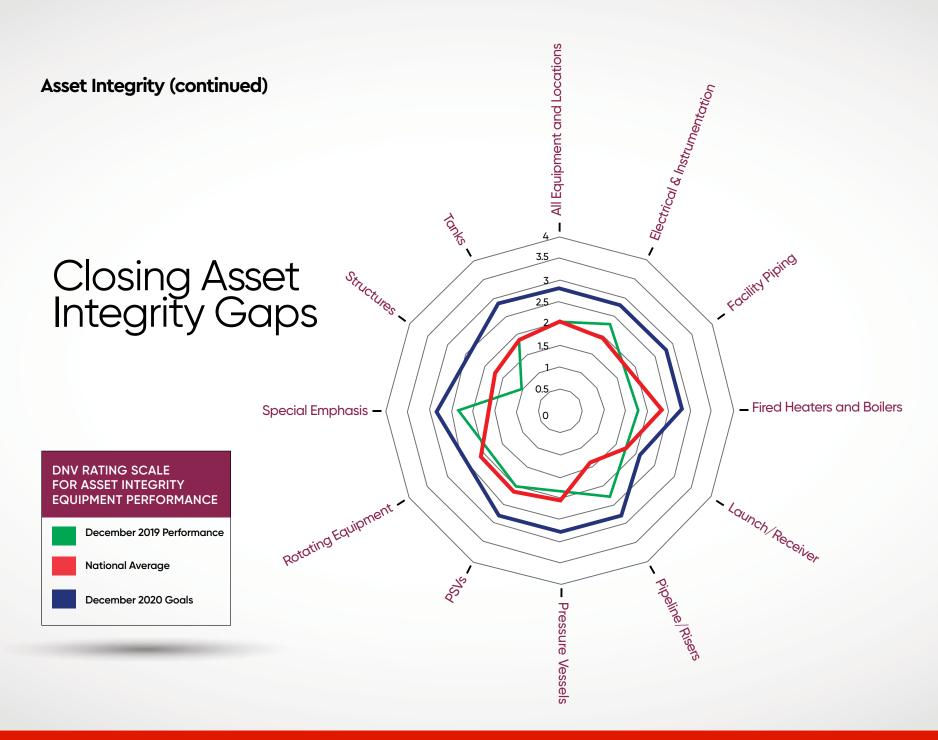
0 = LEARNING: THE ACTIVITY OR PRACTICE IS ABSENT
OR AD HOC AND LITTLE AWARENESS OF THE

EXPECTATION IS IN PLACE.

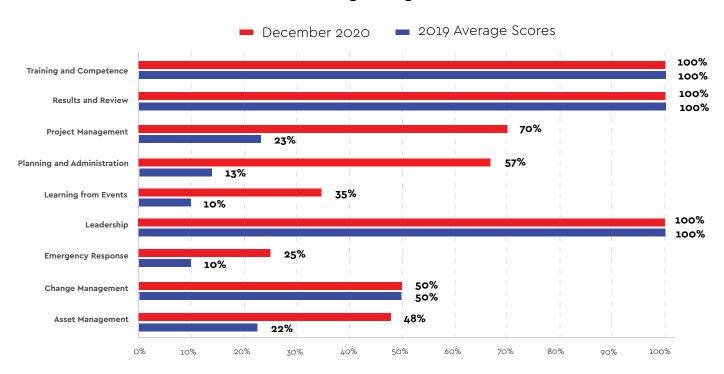
### 2020 OVERALL AIM PROGRESS

### 2020 OVERALL AIM PROGRESS



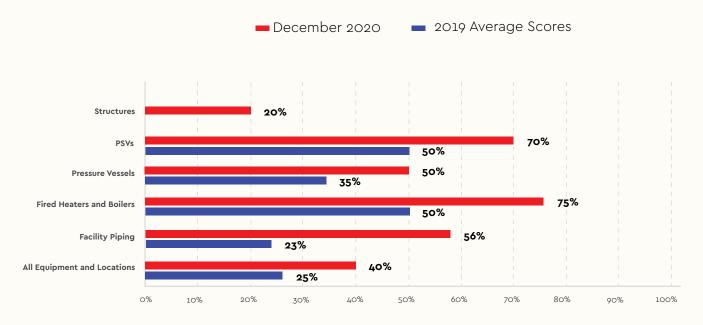


AIM
Overall GAP Analysis: System Elements



#### **Asset Integrity (continued)**

AIM
Overall GAP Analysis: Equipment Elements



#### Vision of the Future

A collaborative approach is being taken towards the execution of a Process Safety Knowledge Management (PSKM) Programme, which was launched in 2020. A cross-functional team was established towards the development of a 'single

source of truth' where information would be digitised and easily accessible. The PSKM forms an appropriate starting point towards the transition to a 'Digital Twin' system in the future. The 'Digital Twin' will combine operational performance modelling and the Industrial Internet of Things (IIOT). Through

the creation of virtual replicas of our facilities, monitoring and management from a desktop will be enabled. The system will improve design quality and processes, enhance cross-discipline collaboration, and mitigate overall project and operational risks.

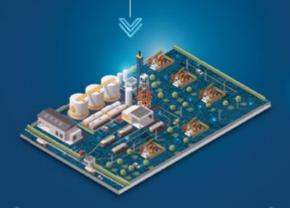
# A Digital Roadmap

The data architecture for the whole asset is a critical driving factor to achieve a truly dynamic and resilient Digital Enterprise and EcoSystem



**BUILD THE DIGITAL ASSET** 

Once an accurate digital asset is acheived, advanced and predictive analytics, simulation, mobile and virtual collaboration technology can be applied to drive tangible improvements in productivity, operational efficiencies and compliance



MATURE THE **DIGITAL ENTERPRISE** 

#### **Artificial Intelligence**

predictive analytics improvement insights



#### **Data Sharing**

operations dashboard georeferenced data data silo integration



#### **Sensor Integration**

autonomous plants sensor integration cybersecurity



IMPROVE PRODUCTIVITY WITH ADVANCED TECHNOLOGY

## embracing the new **energy future**

SUSTAINABILITY REPORT



local growth and internationalisation





#### WHAT WE ARE PROUD OF:

- Signing of new gas contracts with BHP and Touchstone Exploration Inc.
- 20 Gas Sales Agreements (downstream) and 18 Gas Supply Agreements (upstream) signed
- Entering into Technical Services Agreement with Integrated Logistics Bureau Limited of Ghana
- Executing of agreement with e TecK for provision of natural gas infrastructure for Phoenix Park Industrial Estate



#### WHERE WE COMMIT TO DOING BETTER:

 Presenting at more international forums to position NGC as a recognised global leader in sustainable energy-related businesses The company continues to pursue new avenues for growth locally, regionally, and internationally. NGC is maintaining its existing business by securing gas supply to meet its downstream commitments, which in turn earns revenue for the country. Concurrently, The NGC Group is expanding its product and service offerings, leveraging The Group's extensive and specialised skill sets.

#### **Securing Current Business**

NGC and BHP successfully completed negotiation of a Gas Sales Agreement for the Ruby Field, located in Block 3 (a) in the East Coast Marine Area (ECMA). The agreement, announced in July 2020, underscores NGC's commitment to investing in upstream projects that will provide crucial gas molecules for the downstream sector. The Ruby Field is expected to be commissioned in 2021.

In December 2020, NGC registered another accomplishment with the signing of a long-term natural gas supply agreement with Primera Oil and Gas Limited, a subsidiary of Touchstone Exploration Inc. Primera, acting on behalf of its Joint Venture partner, Heritage

Petroleum Company Limited, will supply gas from the Ortoire Block, initially from the Coho-1 Field. This agreement follows the announcement by Touchstone in July 2020. of the discovery of an estimated 381 billion cubic feet (bcf) of natural gas reserves in its onshore Cascadura Assessment Area in the Ortoire exploration block. More positive news was received in December when Touchstone revealed that the completion of flowback testing of the Cascadura Deep-1 well, confirmed a liquids-rich natural gas discovery. This augurs well for NGC's current business, while the company intensifies its move towards a lower carbon business model.

#### **Exporting Technical Services**

Over the past 45 years, NGC has acquired a vast amount of technical and commercial experience in successfully managing highrisk operations. This expertise is now being recognised as a source of value creation and a potential game changer, as the company is marketing its services on the local and international markets.

On the local front, NGC held negotiations with Evolving Technologies and Enterprise

### Local Growth and Internationalisation (continued)

Development Company Limited (e TecK) for provision of gas infrastructure for the Phoenix Park Industrial Estate. An Engineering, Procurement and Commissioning (EPC) contract is expected to be signed for the works in January 2021. Negotiations were also advanced for the establishment of a four-inch diameter natural gas pipeline and associated metering and regulator stations from an existing 16-inch line to A. S. Bryden at the e Teck Factory Road Industrial Estate, Chaguanas. Installation of the 2.3km carbon steel pipeline is expected to commence in the first half of 2021.

NGC provided technical services to the Integrated Logistics Bureau Limited (ILBL) for design, building and commissioning of the Takoradi Distribution Station (TDS) Pressure Regulator Skid in Takoradi, Western Ghana. The ILBL project represents the first major energy project to be undertaken by Trinidad and Tobago in Ghana. Over the past decade, Trinidad and Tobago and Ghana have steadily developed relationships that could

see cooperation between our countries, as Trinidad and Tobago's knowledge of the natural gas business can benefit Ghana's emerging energy industry.

#### **Building a Global Presence**

Due to travel restrictions and cancellation of international conferences due to COVID-19, there was a reduction in the number of international presentations made by the company in 2020. However, opportunities for participation in online conferences were seized where possible.

Vice President Commercial presented at the Mozambique Strategic African Content and Suppliers Summit webinar in September 2020. She spoke on the development of Trinidad and Tobago's energy sector and gave an overview of NGC's business growth strategy. The Vice President also outlined NGC's value proposition to emerging gas markets such as Mozambique, where recent natural gas discoveries present an opportunity for the country's economic transformation.

November 2020 saw Senior Manager Treasury, Risk and Finance, participate in a panel discussion at the Caribbean Risk Management Academy (CRMA) virtual conference. Under the theme, Risk Management 4.0, Constructively Disrupting Caribbean Economies, the following topics were discussed:

- New opportunities to create value
- Entry into niche markets
- Leveraging creativity
- Impact of energy on economies: fossil fuel vs renewable energy and innovation
- Re-igniting the economy of entertainment, tourism, entrepreneurship post-COVID
- Climate change risk
- Cybersecurity risk
- Realistic diversification: tools and methods needed to effect a diversified Caribbean economy



#### embracing the new energy future

SUSTAINABILITY REPORT







corporate social responsibility









#### WHAT WE ARE PROUD OF:

- Our CSR partners demonstrating resilience and commitment to operate successfully in the 'new normal'
- One of our sponsored steel bands, winning the major national steelpan competition
- Employing technology to enhance monitoring and reporting on impacts of CSR initiatives



#### WHERE WE COMMIT TO DOING BETTER:

- Integrating the UN Sustainable Development Goals deeper in our business operations
- Monitoring and measurement of the impacts of our operations

Corporate Social Responsibility (CSR) is one of NGC's Core Values and one of the foundation blocks on which the company's 'Sustainability House' is being built. To us, CSR is much more than satisfying the minimum requirements to gain a licence to operate within our fenceline communities. It is about partnering with our stakeholders for the sustainable enhancement of our communities and the nation. Not only is this approach ethically sound; it is simply good business. Our CSR programmes are guided by our CSR Principles (adopted from the ISO 26000 International Standard), and applied in five focus areas:

- Arts and Culture
- Sport
- Education
- Empowerment and Youth Development
- Environmental Preservation

In 2020, we were obliged to develop creative solutions for delivering our signature NGC CSR programmes. We recognise the commitment and resourcefulness displayed by our CSR partners, who worked with us to ensure that we continued to assist the persons who depend on our support for their community-based and nation-building pursuits.

#### **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

## Arts and Culture

#### **NGC Bocas Lit Fest**

The creativity behind NGC Bocas Lit Fest, one of the nation's premier creative festivals, was on full display in 2020 - literally. Following the national lockdown in March 2020, the festival organisers moved expeditiously to reimagine and reinvent the festival for online delivery. By April 2020, the first monthly online Survival Kit, Bios and Bookmarks, was launched, providing viewers with a package of film, literary, musical and photographic content to enjoy. Bocas Lit Fest (BLF) then hosted a festival in May, with the marquee event streaming live on all the major social media platforms in September.

In keeping with our drive to develop sustainable organisations, a plan is being developed for monetisation of digital content produced by the NGC Bocas Lit Fest

NGC has been the proud sponsor of the BLF since 2011, as we understand the significant role of cultural expression and the arts to the development of caring, productive, and sustainable communities. As we transition to the new energy future, the energy of our people will be transported in the imagination.

Through the arts and culture, we are preserving our history while innovating our path forward.

#### 2020 **PRIZES WRITERS' PRIZES**

- 10<sup>TH</sup> OCM Bocas Prize
- 8<sup>TH</sup> Bocas Henry Swanzy Award
- Johnson and Amoy Achong Caribbean Writers Prize



#### 10 WORKSHOPS & SEMINARS

(supported by the Ministru of Tourism. Arts and Culture)

#### **WORKSHOPS**

#### 4 EPISODES OF LIT'S BE

**REAL** - a talk show series on





**BOCAS LIT FEST** COMMEMORATED 10-YEAR **ANNIVERSARY IN 2020** 

fores.



**55,265** 

**f** 19,256

**@ 12,495** 



CHILDREN'S **FESTIVAL HOSTED** ONLINE

TOTAL REACH

#### **CHILDREN'S FESTIVAL CONTENT**

- World Read Aloud
- Dragonzilla Storytime
- Dragonzilla Short Story Writing
- Dragonzilla Animated Story
- Children's Storytelling Caravan

#### **Support for Steelpan**

NGC has been supporting the development of the national instrument for decades, providing financial assistance to steel bands in all categories. In the past few years, we have taken a more structured approach, working with our sponsored bands to help them develop into profitable and sustainable organisations. This approach comprises an investment in music literacy, talent development, capacity building and pan manufacturing and tuning skills training.

Additionally, NGC worked with The University of The West Indies (The UWI) to score the arrangements performed by our sponsored bands over a two-year period. This exercise preserved the music for posterity and was also a developmental experience for The UWI graduate students who recorded and transcribed the music.

In 2020, the holistic strategy bore fruit. The NGC Couva Joylanders achieved a historic feat, winning the National Panorama Competition in the Medium Band Category.



## SPONSORED STEELBANDS

- NGC COUVA
- NGC LA BREA NIGHTINGALES
- NGC STEEL

## DEVELOPMENT PROGRAMMES

- MUSIC LITERACY
- BUSINESS CAPACITY BUILDING
- PAN MANUFACTURING AND TUNING



MUSIC SCORES
4 STEELBANDS

**2 YEARS** OF PANORAMA PIECES

**3 LEVELS**PRIMARY
SECONDARY
MASTERS

# Sport

#### Track & Field Development

NGC's Youth Elite Programme (YEP) was developed in collaboration with the National Association of Athletics Administrations of Trinidad and Tobago (NAAATT). The programme is designed to promote the holistic development of track and field athletes aged 14 - 20, who have been identified as having the potential to compete at the highest levels. As with most sporting programmes in 2020, YEP was forced to innovate to deliver meaningful developmental elements to the participants without breaching physical distancing protocols.

Since physical activity was limited in 2020, YEP got creative, devising ways for our athletes to train at home. We also used the opportunity to engage virtually with the hosting of an online symposium in August. During the year, YEP athletes also had access to the Bridge Athletics Learning Platform, developed by the Michael Johnson Performance team. This online platform provided a plethora of learning resources for both athletes and coaches.

Though the hosting of school sporting events was not possible in 2020, NGC continued discussions with the Ministry of Education for the development of a proposal to enhance the preparation and performance of athletes who take part in the company's Kids Athletic Programme (KAP) and Right on Track (ROT). The proposal was accepted by the Ministry and plans are being made for integration into the schools' curriculum. This augurs well for improved junior track and field events when physical games resume.



## Education

#### NGC Above and Beyond -Adult Literacy Tutors Association (ALTA)

Launched in 2017, the NGC Above and Beyond Programme seeks to recognise the contribution of citizens and/or organisations in Trinidad and Tobago, that have registered outstanding national or international achievement in the fields of arts and culture; sport; business; agriculture; community and social work; education; environment and energy. The 2020 honoree was the Adult Literacy Tutors Association (ALTA), an organisation that has dedicated itself to the cause of promoting adult

literacy and ending low-literacy stigma in Trinidad and Tobago for over 28 years.

NGC supported ALTA in the development and execution of three projects in 2020 under the 'Stand Tall' banner:

I Am ALTA marketing campaign in which ALTA students shared their literacy journeys in their own words. This series of ads helped combat stigmatisation against persons with low literacy. The I Am ALTA campaign successfully attracted 595 students to the ALTA-V virtual classes

- ALTA Online Pilot Project Software and digital content developed to enable student self-learning, with occasional guidance from ALTA-trained mentors
- ALTA Spelling Dictionaries and Phonics Charts — NGC assisting with distribution to low performing primary and secondary schools



# MILESTONE ACHIEVEMENT – ALTA ONLINE ALTA ONLINE PILOT 1 AND PILOT 2 EXECUTED

#### NO. OF STUDENTS

PILOT 1 - 70 STUDENTS PILOT 2 - 72 STUDENTS



#### NO. OF MENTORS TRAINED PILOT 1 - 30 MENTORS

#### STUDENTS' FEEDBACK

100% FELT THEY IMPROVED THEIR READING AND SPELLING SKILLS

100% FELT A SENSE OF ACCOMPLISHMENT WITH EACH READING ACTIVITY

100% INTERESTED IN CONTINUING PROGRAMME

90% WOULD RECOMMEND ALTA ONLINE

#### **ALTA ONLINE CONTENT**

- HOW TO USE ALTA ONLINE VIDEO DESIGNED AND **PRODUCED**
- ALTA ONLINE USER MANUAL - STUDENT AND MENTOR **VERSIONS**
- ALTA ONLINE BOOK 1 AND BOOK 2 SOFTWARE **DEVELOPED**

#### MILESTONE ACHIEVEMENT -I AM ALTA

**595** STUDENTS RECRUITED FOR ALTA-V THROUGH I AM ALTA CAMPAIGN

**65** CLASSES ESTABLISHED: LEVEL 1 CLASSES - 16 LEVEL 2 CLASSES - 36 LEVEL 3 CLASSES - 6 SPELLING CLASSES - 7

#### STUDENT DEMOGRAPHICS

STUDENT AGE GROUPS: **CHILDREN**: 9 - 17 ADULT: 16+

#### MILESTONE **ACHIEVEMENT - ALTA SPELLING & PHONICS**

4,000 PHONICS CHARTS PRODUCED

200 SPELLING DICTIONARIES PRODUCED

#### STUDENTS CAME FROM:

- ALTA
- CHILDREN'S HOMES
- SCHOOLS
- REFERRALS FROM STUDENT SUPPORT SERVICES
- REFERRALS FROM THE CHILDREN'S AUTHORITY

#### **CAMPAIGN CONTENT**



**TELEVISION ADS** FEATURING ALTA STUDENTS



**RADIO ADS** FEATURING ALTA

# Empowerment and Youth Development

#### NGC/YTEPP **Vocational Training Programme**

to COVID-19 Due restrictions, NGC partnered with the Youth Training and Employment Partnership Programme (YTEPP, to deliver an online Digital Literacy and Life Skills Training series for members of NGC's five supported Police Youth Clubs (PYCs)).

The sessions were conducted on Saturdays from September to October 2020. In collaboration with YTEPP, the courses were designed to empower young people, to navigate effectively in the digital space, and to handle general life challenges. The impact of initiatives such as this can be expected to reverberate well into the future, as the youth are empowered to contribute to their communities and society.

# MILESTONE ACHIEVEMEN

DIGITAL LITERACY AND LIFE SKILLS TRAINING SERIES HOSTED FOR 5 PYCs

#### **LOCATION OF PYCs**

COUVA, LA BREA, LAVENTILLE ROAD. MAYARO AND PENAL



NO. OF PARTICIPANTS COMPLETING TRAINING

#### PROGRAMME CONTENT

- Computer Fundamentals
- Windows 10 Microsoft Office Suite
- Life Skills and Financial Planning
- Communication
- Leadership
- Financial Planning



#### Pan Manufacturing and Tuning

NGC engaged the MIC Institute of Technology in 2018 to conduct a 3-year training programme for members of the company's sponsored steelbands. The training sessions are designed to equip the band members with skills necessary for pan manufacturing. This is part of an integrated strategy to empower the steelbands to become self-sufficient, sustainable and profitable in the long-term. There were some difficulties in 2020 due to the pandemic and the programme was suspended.

It is anticipated that in 2021, classes would be accelerated to achieve the required contact hours.





80% ENROLLMENT MAINTAINED



TRAINING HOURS COMPLETED **36 HOURS** 3 DAYS PER WEEK

**PROGRAMME PROGRESS SECOND CYCLE OF 3-CYCLE** PROGRAMME COMPLETED



#### 'No Child Left Behind' Initiative

The Government of Trinidad and Tobago closed schools in March 2020 to help slow the spread of COVID-19. By April 2020, the Ministry of Education announced that students would not return to schools in the short term. Classes would be conducted online as far as possible. The arrangement posed serious challenges to students who did not have connectivity and/or devices to access online learning.

To facilitate the continuity of education for all through learning, remote Ministry of Education in August 2020, reached out to corporate entities to support the Ministry of Education's 'No Child Left Behind' initiative

This initiative was designed to provide laptops and

tablets to students across the country through Public-Private Partnerships. The NGC Group of Companies was among the organisations to respond.

LABIDCO assisted primary schools in the communities of La Brea and environs, by establishing a printing and copying centre at Brighton Anglican School. Curriculum materials were printed, copied and packaged weekly for distribution to over 500 students during the first term of the 2020/2021 school year. This initiative was appreciated by the primary schools, as many students did not have facilities for online learning. PPGPL also contributed towards 'No Child Left Behind' by donating desktop computers that were changed-out and repaired by the company, to schools in its fenceline communities



#### NGC GROUP COMMITS SUPPORT TO 'NO CHILD LEFT BEHIND' INITIATIVE

(L-R) Dominic Rampersad, President PPGPL; Mark Loquan, President NGC; The Hon. Minister of Education, Dr. Nvan Gadsby-Dolly: Curtis Mohammed, President NGC CNG: Sheldon Sylvester, Vice President Commercial of National Energy; Wendy Seow, General Manager LABIDCO.

#### MII FSTONE **ACHIFVEMENT**

THE NGC GROUP SUPPORTED MOE'S 'NO CHILD LEFT

BEHIND' INITIATIVE



NO. OF DEVICES DELIVERED LAPTOPS - 280

TABLETS - 440



#### **BENEFICIARIES**

61 SCHOOLS (IN ALL EDUCATIONAL DISTRICTS)



5 POLICE YOUTH CLUBS



8 EDUCATIONAL DISTRICTS



# **Environmental Preservation**

#### NGC's Reforestation Programme Goes Beyond 315

Commencing in 2005, NGC undertook a programme to replant and maintain approximately 315 hectares of forest, in compliance with the requirements of its Certificate of Environmental Clearance (CEC), for the Cross Island Pipeline (CIP) Beachfield Upstream Development (BUD) and Union Industrial Estate construction. During the 15 years of the project, in keeping with the 'No Net Loss Principle', NGC has replanted over 100,000 seedlings of over 17 indigenous plant species in the south-west and south-east forest conservancies in Guapo-Parrylands, Moruga, Mayaro and Rio Claro, Trinidad.

In 2018, NGC went beyond the original scope of the Reforestation Programme, partnering with The University of the West Indies (The UWI) to conduct a study to ascertain the amount of carbon and CO<sub>2</sub> sequestered above ground by the replanting exercise from its inception and projected till 2030. This was the commencement of an advanced initiative – Beyond 315 – which is embracing all-round sustainability principles, further than the requirements for CEC compliance. A new phase of the Beyond 315 Project was launched in 2020. This involved commissioning of a study by The UWI to determine the carbon sequestered below ground. It is expected that in the coming years, Beyond 315 will expand

to include empowerment of members of the community to develop entrepreneurial ventures to complement the reforestation activities. As at the end of 2020, the  $\mathrm{CO}_2$  and carbon sequestered by the replanted forest was estimated as follows:

	Carbon Sequestered	CO <sub>2</sub> Sequestered
Above Ground (tons)	2,290	8,404
Below Ground (tons)	595	2,185

The programme has also positively affected the surrounding communities, as persons have been trained and employed in the planting and maintenance of the trees.

MILESTONE ACHIEVEMENT



ESTIMATED CO<sub>2</sub>
SEQUESTERED
ABOVE GROUND
IN 2020

**2,290** TONS

ESTIMATED TOTAL
CARBON SEQUESTERED
ABOVE GROUND
IN 2020

**8,404** TONS

ESTIMATED TOTAL CARBON SEQUESTERED BELOW GROUND IN **2020** 

**2,185** TONS

**BELOW GROUND** 

IN 2020



79.25 HECTARES

NO. OF PLANTS RESUPPLIED FROM COMMUNITY NURSERIES

4,000

NO. OF PLANTS FROM NATURAL REGENERATION

3,086

FIRE TRACE CLEARED

4,633M

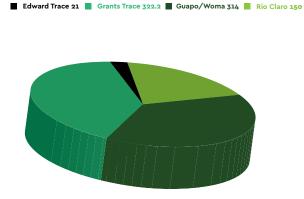


NO. OF PERSONS EMPLOYED FROM COMMUNITY

38

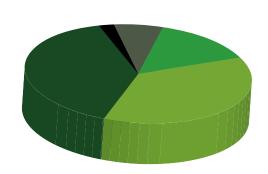
TOTAL ESTIMATED MAN-HOURS 7.508

#### No. of hectares maintained by site

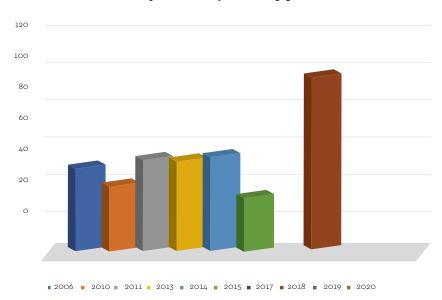


#### No. of hectares planted by site

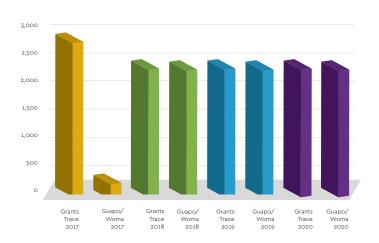
■ Guapo/Woma 123.5 ■ Mayaro 7.8 ■ Grants Trace 116.9 ■ Rio Claro 21.25 ■ Edward Trace 44.9



#### No. of hectacres planted by year



#### No. of metres fire-traced by site and year



# Environment

#### Green Screen Environmental Film Festival

NGC partnered with SustainTT to host the 10th edition of the Green Screen Environmental Film Festival. The entire event was delivered virtually and featured the popular Very Short Shorts Mobile Film Competition. The festival included live panel discussions and films were available on-demand. The event promotes education, knowledge exchange, and discussion on pertinent environmental issues.

VERY SHORT
SHORTS MOBILE FILM
COMPETITION

**61**Submissions

OVERALL ATTENDANCE (LIVE EVENTS)

5,756

FESTIVAL LAUNCH



MAIN FESTIVAL SUBMISSIONS

340





embracing the new **energy future** 

SUSTAINABILITY REPORT







**green** agenda



#### WHAT WE ARE PROUD OF:

- Partnering with key stakeholders for collaboration on research and development of energy efficiency, renewables and alternative energy projects
- Educating employees and the public about energy efficiency



#### WHERE WE COMMITTO DOING BETTER:

 Collating data on The NGC Group's GHG footprint in a more timely manner The NGC Group has been progressively demonstrating its commitment to leading the energy sector of Trinidad and Tobago into the new energy future. Through its Green Agenda, the company is applying a multi-faceted approach which includes:

- Energy efficiency awareness and education
- Research and development of renewable and emerging energy solutions and associated projects
- GHG and methane monitoring and reduction

Energy efficiency, a natural starting point in the transition, has been a focus area for NGC over the past few years. Against the backdrop of falling natural gas production and gas curtailment, energy efficiency can help reduce gas consumption for low-cost power generation, making more gas available for higher value downstream industries. While the company continues to execute initiatives geared towards public education on energy efficiency, renewables and emerging energy solutions have come into focus. The NGC Group is working with key stakeholders to pilot new energy technologies in Trinidad and Tobago.

# Partnerships for New Energy Research and Development

NGC and subsidiaries, National Energy and NGC CNG, signed an MOU with Trinity Exploration and Production (Trinidad and Tobago) Ltd. in October 2020, for cooperation on a range of projects including renewable energy opportunities.

In December 2020, The NGC Group took its Green Agenda a step further with the signing of an MOU between member companies and the University of Trinidad and Tobago (UTT) for the commencement of a Climate Change Mitigation Project at NGC and its subsidiaries. Information generated from the project will ascertain The Group's baseline GHG footprint and aid in development of reduction strategies.

Under the MOU, the organisations will share information in four main areas: Renewable Energy; Energy Efficiency; Greenhouse Gas (GHG) Emissions and Climate Change Research, with emphasis on GHG reduction strategies, specifically for the industrial, power generation and transportation sectors.

#### **Green Agenda (continued)**

The parties have committed to collaborate on the development of commercially viable carbon reduction initiatives, as well as the sharing of information generated from the research, for public awareness and education.

#### From Energy Efficiency to Energy Transition

Launched in 2019, NGC's Energy Efficiency Week has already made the transition. The 2020 installment of the 'green-centred' forum was rebranded as Energy Transition Week, to reflect its broadened scope. Themed Be the Transition: See the Change, the virtual conference hosted on 22 - 23 October 2020, featured speakers from Group member companies.

The event content was expanded to include educational sessions on a range of relevant topics, including:

- The value of renewable energy and energy efficiency to T&T
- Energy Efficiency and Indoor Environmental Quality Readiness for a COVID-19 world
- Methane Emissions Trends and latest updates

- Renewable Energy & Climate Transition: Meeting 1.5 to Stay Alive
- Fundamentals of Wind and Solar
- Evolving Fuel Technology Pros and Cons of Different Fuel Options

It was noted that attendance in 2020 was lower than in the previous year. The Energy Transition Week become an increasingly important forum for promoting green conversations, as The NGC Group continues to advance the Green Agenda.

# NGC Energy Efficiency Innovation Recognised

There is a saying that, 'Charity begins at home.' At NGC, we believe that 'Energy Efficiency begins at home'. Therefore, in 2020, we developed the NGC EnergySmarTT app, to empower the citizens of Trinidad and Tobago to make better choices and reduce energy consumption in their daily lives. And of course, reducing energy consumption will save money.

The app was officially launched in June 2020. EnergySmarTT, Trinidad and Tobago's first energy efficiency app, was created by an in-house cross-functional team, that worked diligently on the project for a year. The app is available for free download on Google Play and the Apple App Store.

Additional features will be developed in 2021 to increase functionality and make the app more attractive to young people through the inclusion of games and educational features.

The NGC EnergySmarTT app was selected as a finalist in the 2020 IDB President's Awards for Innovation in the Public Service. This recognition serves as further proof that NGC is moving in the right direction and leading the way into the new energy future.

#### THESE ARE THE **FIVE** FUNCTIONS CURRENTLY AVAILABLE ON THE APP:





# **KEY ELEMENTS** (2020-2022)

#### GHG CSRU

(Carbon Storage, Reduction and Usage)



- Group GHG Audit
- Carbon Sequestration
- Water Conservation Project
- Waste Management Project
- NGC and NGC Group Sustainability Report
- Green Energy Information Hub
- Carbon Sequestration in Concrete

# Renewable Energy



- BP/Shell/BP Lightsource Solar Opportunity
- Solar Park Project
- Educational Programme on Solar Energy
- Clean Energy Strategic Partnerships
- Climate Finance Research
- Offshore Wind Resource Assessment
- Support RE integration into LIC sector

# **Energy Efficiency**



- Promotion and Enhancement of Energy SmarTT App
- National Energy Efficiency Action Plan for T&T
- Energy Audit Pilot Study/Lights Off
- SuperESCO Programme
- Reduce 2019 Energy Consumption by 10% by 2022

#### Methane Focus



- Leak Detection and Repair Programme
- Methane Satellite Monitoring
- Membership with GHG/Methane Bodies

#### Fuel Switching



- CNG
- Hydrogen Economy
- Micro LNG for the Caribbean
- Fuel Bunkering
- Bio-Methane
- Renewables Gas lintegration into NGC System
- Natural Gas for Cooking

# Green Energy Information Hub for the Caribbean

The establishment of a Green Energy Information Hub for the Caribbean was conceptualised and approved in 2020. The project is intended to develop a centralised repository of 'green' energy information for the Caribbean.

The objectives of the initiative include:

- To create a portal that will bring together datasets, information products, economic data and climate change strategies from different sources into one central location to ensure complete, timely and trusted information
- To build the necessary relationships within the Caribbean and international energy information organisations to sensitise and inform citizens on matters related to green energy
- To develop in-house competency and institutional knowledge within The NGC Group that goes beyond energy efficiency/ renewable energy

The hub will combine data from reputable sources in a one-stop-shop for 'green' information to be used by investors, academia and the public. Information will include projects under development, available financing, market opportunities, energy statistics, policies, green energy developments, and more.

A cross-functional team comprising members of The NGC Group has been established to advance the Green Energy Information Hub Project, expected to be completed in 2021.

#### **Sustainable Energy Development Projects**

NGC's subsidiary, National Energy, is responsible for conceptualising and developing new energy projects in Trinidad and Tobago. Some of the green energy projects that were progressed in 2020 include:

# First Utility Scale Solar PV Projects for Trinidad and Tobago

 In February 2020, Cabinet approved two utility-scale solar PV projects for Trinidad and Tobago with a total capacity of 112.2MW. National Energy is earmarked to be the landlord for the 92.2MW project, which will be located at Brechin Castle, Point Lisas. These projects are being implemented by a consortium comprising Lightsource bp, BPTT and Shell Trinidad & Tobago, with National Energy expected to take an equity position, subject to completion of due diligence and requisite state approvals.

- During 2020, negotiations continued with the relevant state authorities, on major agreements, including the Power Purchase Agreement (PPA); Implementation Agreement and Generation Licence. Discussions were also held with National Energy regarding the securing of land rights for the development.
- The Consortium engaged consultants for planning its first public consultation in December 2020 as part of the CEC process. A social survey is planned for early 2021 and as the prospective landlord, National Energy will support the survey process.

#### Green Agenda (continued)

#### Solar Power at NGC CNG Flagship Station

NGC CNG partnered with the National Petroleum Marketing Company (NP) to construct its most technologically advanced station to date. National Energy was engaged to provide project management for the installation of a 100kW solar PV system that will power one rapid direct current (DC) charging port for electric vehicles (EVs) in the first instance. Solar power will also be used for the station's canopy and peripheral lighting, convenience store and liquid fuel dispensers. The flagship station is located at Preysal, in NGC's fenceline community. Work on the facility was advanced in 2020 and commissioning of the solar system installed by National Energy is expected in the second quarter of 2021, subject to regulatory approvals.

#### Green Hydrogen Pilot Study

Hydrogen is one of the emerging energy solutions being utilised in various parts of the world. In 2020, National Energy secured funding of US\$363,817 from the IDB under

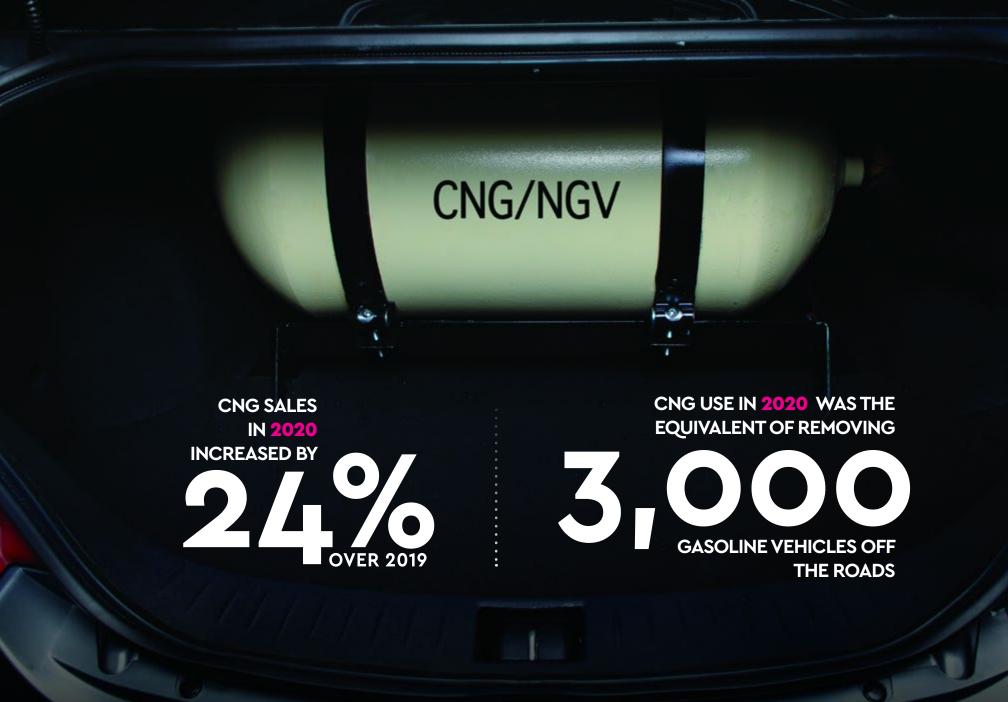
a Technical Co-operation Agreement, with Trinidad and Tobago and Uruguay, to support feasibility work and contribute to understanding the economic parameters of producing green hydrogen locally. Under the agreement, National Energy would be the focus agency. The IDB will commence the process to procure an international consultant to conduct the study in the first quarter of 2021.

# Solar PV Demonstration Project at National Energy's Head Office

National Energy commissioned the installation of a 4kW solar PV system at its Head Office. The project included the installation of eight ground-mounted panels that will provide electricity to the security booth located on the eastern side of the administration compound. Another eight panels were mounted on the rooftop of the administration extension building to provide power for two conference rooms. All installation works were completed and will be electrified upon approval by T&TEC.

#### **CNG Sales Increase**

The switch to CNG is continuing. Since the incorporation of NGC CNG in 2013. the number of vehicles using CNG as their fuel has increased by 600% in Trinidad and Tobago. In 2020, new and converted CNG vehicles amounted to 2,540. NGC CNG also opened one new supply point at NPO'Meara, bringing to nine, the number of public supply points with new state-of-the-art CNG equipment. CNG sales in 2020 increased by 24% over 2019 to 13.5 million Iges. Using that amount of CNG, meant approximately 10,041 metric tonnes of CO, was not emitted, since CNG is 30% cleaner than gasoline or diesel. From an emissions perspective. CNG use in 2020 was the equivalent of removing 3,000 gasoline vehicles off the roads.



# Energy Usage at NGC

#### ORINOCO HOUSE



ANNUAL CONSUMPTION
OF ELECTRICITY (KWH)

1,908,200.00

AVERAGE KWH
CONSUMPTION OF
ELECTRICAL ENERGY
PER MONTH (KWH)

159,016.67



AVERAGE MONTHLY CONSUMPTION (MMBTU TO KWH)

195,427.78

TOTAL MONTHLY
CONSUMPTION
(NATURAL GAS +

ELECTRICITY)

354,444.45



**ENERGY USE INTENSITY** KWH/M²YR

776.30

ESTIMATED TONNES CO<sub>2</sub>/YR

2,356.13

YEAR-ON-YEAR ENERGY SAVINGS ENERGY CONSUMER DESCRIPTION

AIR CONDITIONING
LIGHTING
GENERAL EQUIPMENT
REFRIGERATION
PUMPS
WATER HEATERS
GRAND TOTAL

AVERAGE MONTHLY
ENERGY KWH
(NATURAL GAS
AND ELECTRICITY)

275,757.78 77.8% 37,925.56 10.70% 32,608.89 9.2% 1,772.22 0.5% 1,063.33 0.3% 5,316.67 1.5% 354,444.45 100%

% TOTAL



## PACIFIC PLACE



ANNUAL CONSUMPTION OF ELECTRICITY (KWH)

136,533.33

**AVERAGE KWH CONSUMPTION OF ELECTRICAL ENERGY** PER MONTH (KWH)



**AVERAGE MONTHLY** CONSUMPTION (MMBTU TO KWH)

293.02

TOTAL MONTHLY CONSUMPTION (NATURAL GAS + ELECTRICITY)



**ENERGY USE INTENSITY** (KWH/M<sup>2</sup>/YR)

119.66

54,287.83

ESTIMATED TONNES CO<sub>2</sub>/YR 360.87

ENERGY KWH (ELECTRICAL AND NG)	% TOTAL
42,235.93	77.8%
5,808.80	10.70%
4,994.48	9.2%
271.44	0.5%
162.86	0.3%
814.32	1.5%
54,287.83	100%
	(ELECTRICAL AND NG)  42,235.93 5,808.80 4,994.48 271.44 162.86 814.32

#### **CNG FUEL STATION**

AVERAGE MONTHLY CONSUMPTION (MCF)	184.98
TOTAL ANNUAL VOLUME CONSUMPTION (MCF)	2,219.77
TOTALANNUALENERGY CONSUMPTION (MMBTU)	2,267.97
AVERAGE MONTHLY ENERGY (MMBTU)	189.00
MONTHLY CONSUMPTION (MMBTU TO KWH)	55,380.07





# Conclusion

In this our fourth annual Sustainability Report, *Embacing the New Energy Future*, we have advanced our reporting on our stewardship of the country's natural gas resource. We continue the process of aligning our management approach and business strategies with sustainability principles.

This is an ongoing journey that will require the changing of paradigms and the adjustment of priorities. However, we are committed to doing what is necessary to ensure that NGC establishes its place in the new energy future and continues to contribute towards the nation's wellbeing.

We are pleased to present the 2020 Sustainability Report and urge all our valued stakeholders to read it and send us your comments. We welcome your feedback on the sustainability issues that matter to you, and how we can improve the report.



Please send us your feedback

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