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Pivoting through change for 46 years

On August 22nd 2021, NGC celebrated 46 years in the business of natural gas and associated industrial development. We have had a longer life than most companies can lay claim to, and we are only growing stronger with age.

When we began operations back in 1975, our incorporation ushered in a new era for Trinidad and Tobago energy. The decades that followed were years of unprecedented development and change. Important to note, however, was that change was not always linear and incremental - it was sometimes explosive and disruptive. To build a successful business over our 46 years, we therefore had to learn how to navigate change with dexterity, whatever the magnitude. We had to learn to pivot.

The theme of this issue of *GASCO News*, 'Pivot', pays homage to the resilience of our company - our ability to move with change, while remaining anchored in our vision and core business. The theme also references the role that NGC continues to play in the domestic context - we are still a pivot around which our economy turns.

In this issue

In this publication, we profile some of the mechanisms by which NGC and its subsidiaries are using core strengths – flexibility, strategic vision and partnerships - to pivot around various disruptive developments in the business.



In response to the changing energy landscape, NGC and the wider NGC Group continue to expand green agenda investments. The Group has been working closely with academia to conceptualise new projects to clean up energy and pivot around industry challenges. Among our partners are The University of Trinidad and Tobago and The University of the West Indies. Together, through multiple projects in development, we are doing some critical research and breaking new ground for Trinidad and Tobago.

To shore up revenues from our gas business, we are exploring new opportunities to diversify our portfolio and strengthen existing income streams. Micro-LNG is receiving attention as a potential new area of business, while work continues toward growing our Energy Marketing and Trading portfolio.

The COVID-19 pandemic remains a serious threat and we have had to adjust operating procedures to maintain business continuity. Subsidiary PPGPL was one company undertaking a plant turnaround during the pandemic and has lessons to share around executing such an exercise safely and successfully within pandemic restrictions.

Alongside our business undertakings, we did not lose sight of our CSR and sustainability obligations. We appreciate that due to the fallout from the pandemic, we are not the only ones who now need to pivot. Our young people have seen their futures disrupted by a number of challenges. They must now manoeuvre through a complex landscape of changes and will need support to emerge successfully on the other side. In that regard, we are proud to introduce a new programme called 'Inspire to Achieve', aimed at equipping young people for the road ahead.

We at NGC fully subscribe to the idea that change and progress go hand in hand. We, therefore, see every pivot — whether reactive or anticipatory as a step forward, moving us closer to our vision of growing into a leading global energy brand.

Mark Loquan President, NGC



RESEARCH AND DEVELOPMENT DRIVING INNOVATION

The NGC Group collaborates with The University of Trinidad and Tobago (UTT) and The University of the West Indies (The UWI) -

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NGC and its subsidiaries have acknowledged the significant value that research and development (R&D) can add to climate change mitigation strategies across The Group, as well as broader national plans. Innovation drives economic development, and a strong relationship between academia and industry remains the cornerstone for future development. The latter is at the core of The NGC Group's green agenda endeavours. NGC and its subsidiaries have acknowledged the significant value that research and development (R&D) can add to climate change mitigation strategies across The Group, as well as broader national plans.

The March 2021 issue of *GASCO News* profiled The NGC Group's partnership with The University of Trinidad and Tobago (UTT) on a three-year Climate Change Mitigation Project. The predominantly research-based project establishes a strong scientific basis to aid Trinidad and Tobago in achieving its emissions reduction commitments.

NGC subsidiaries National Energy and NGC CNG Company Limited are now looking to undertake other collaborative research and development projects with both UTT and The UWI between 2021 and 2023. This article gives an overview of the scope and potential impact of those projects.

RESEARCH AND DEVELOPMENT PROJECTS: UTT, NATIONAL ENERGY AND NGC CNG

Project 1 – To assess port and maritime emissions from marine assets owned by The NGC Group.

The general objective of the study is to develop a Greenhouse Gas (GHG) inventory model for shipping activity, energy use and GHG emissions from The NGC Group's marine assets. Quantifying emissions is key to developing targeted strategies for addressing port operations. This ensures compliance with Trinidad and Tobago's Nationally Determined Contributions (NDCs), which seek to achieve a reduction in overall emissions across the power generation, transportation and industrial sectors by 15% by 2030 from a Business-as-Usual (BAU) scenario. In absolute terms, this is equivalent to 103 million tonnes of CO2e. Emission sources at ports include ocean-going vessels, harbour Research and Development Driving Innovation CONTINUED



THE GROUP IS LOOKING AT REDUCING EMISSIONS FROM OCEAN-GOING VESSELS. PICTURED IS ONE OF NATIONAL ENERGY'S TUGS.

vessels, cargo handling equipment and vehicles. The potential impact from this work can support datadriven decision-making regarding energy use by marine assets and increased energy efficiency of The Group's maritime operations.

Project 2 - To investigate the feasibility of solar-powered irrigation systems

The NGC Group is always searching for opportunities to leverage the energy industry to develop other



sectors of the local economy. In that vein, a key project is exploring the feasibility of using solar technology to power pumps to support irrigation in the agricultural sector. Development of an application to size the solar power requirements for specific irrigation systems together with the design, development, and testing of a prototype for a smart, solarpowered irrigation system are also included as part of the project. The potential impact for this project is the introduction of new technologies into the local farming industry.

Project 3 – Design, Simulation and Optimisation of a Solar Photovoltaic (PV) System

The NGC Group, through National Energy, continues to implement solar PV technologies, with the latest project being the design, procurement, supply, delivery, installation, and commissioning of a 100-kilowatt solar photovoltaic (PV) rooftop mounted system at the Preysal Service Station. The aim of this study is to examine the optimisation of an installed solar





PV system by comparing actual performance results with existing design parameters.

Project 4 – The integration of PV-Wind Renewable Energy Sources into Electric Vehicle (EV) Charging Stations for Trinidad and Tobago

The Government of Trinidad and Tobago signalled that it is preparing for an increase in the penetration of EVs in keeping with the country's NDCs. An Electric Mobility (e-mobility) Policy for Trinidad and Tobago is already at an advanced stage of development. This policy is being prepared with support from the Danish Technical University (DTU)/United Nations Environment Programme (UNEP).

In anticipation of that policy, a proposed project with UTT seeks to catalyse adoption of electric mobility through the utilisation of a 100% renewable energy system for EV charging. The major activity in this project will be an electric vehicle charging station which integrates solar photovoltaic power generation and/or wind energy utilisation together with battery energy storage technology to support the implementation of highly efficient, green and energy-saving charging stations.

This project will also examine the impact of electrification in the transport sector on the power curve and the integration of renewable energy into the power systems of Trinidad and Tobago. It will include analysis of different charging regulation models for the electric vehicles which will be derived using a computer model for energy systems analysis.

Project 5 - Assessment of Vehicular Mass Emission Rates Applicable to Trinidad and Tobago

Over the years, developed countries have placed emphasis on various vehicle emission reduction strategies primarily because of associated health risks. In Trinidad and Tobago, there is no database of emission levels and testing procedures for vehicular emissions are limited to visible vapours only. There are no policies or incentives available for the removal of older or less efficient vehicles from the nation's roadways. The fuel intake systems for existing models are either carburettor or fuel injection types with the combustion systems being either naturally aspirated or force-induction with an assortment of available fuel types that include Super and Premium unleaded gasoline, CNG and diesel.

The NGC Group is therefore undertaking a research project to assess the actual level of vehicular emissions and develop a low-cost method for the determination of "real world" vehicle mass emission rates, using an on-board gas analyser and data extracted from the vehicle's electronic control unit (ECU). The study will involve the gathering of sample data on vehicles, with the intention of assessing the current state of on-road emissions from vehicles and an evaluation against various international standards. Vehicles will be sampled and classified according to make, model year of manufacture, application, fuel type, type of intake system, and overall mileage.

Research and Development Driving Innovation CONTINUED



THE GROUP IS UNDERTAKING RESEARCH TO HELP REDUCE EMISSIONS FROM THE TRANSPORTATION SECTOR.

The pollutant species of interest will be carbon monoxide (CO), carbon dioxide (CO₂), nitrogen oxide (NOx), total hydrocarbons and particulate matter. The built database will be reflective of the current vehicle sector and results will be evaluated with comparison to international standards for vehicle emissions. This inventory has the potential to assist Government agencies in the development of standards appropriate to Trinidad and Tobago.

Project 6 – A Well-to-Wheel Analysis of Compressed Natural Gas (CNG) for Trinidad and Tobago

This project seeks to quantify the overall emissions and energy usage associated with the use of CNG as a transportation fuel. The study will include a direct comparison with established Well-to-Wheel results for diesel and gasoline. The results of the study will serve as a direct guide for national stakeholders in determining the emissions and energy associated with each liquid transportation fuel pathway and inform policy decisions that would be efficacious towards meeting the country's international climate change commitments of 30% reduction in public transportation emissions by 2030.

Project 7 - Automated and real time vehicle emissions data collection and analysis

To meet climate change commitments, understanding, monitoring and assessing emissions associated with fleet vehicles is critical. This project seeks to determine emissions associated with fleet vehicles that use diesel, gasoline and CNG. It will help in the estimation of overall national vehicle emissions, and can inform policy changes to reduce emissions in the transportation sector.

RESEARCH AND DEVELOPMENT PROJECTS: THE UWI, NATIONAL ENERGY AND NGC CNG

National Energy and The UWI's Department of Chemical Engineering explored two research projects at the undergraduate level which examined:

- The comparison of blue hydrogen and green hydrogen to determine which offered the best fit for Trinidad and Tobago's transition toward a sustainable petrochemical sector.
- 2. Opportunities for the repurposing of natural gas infrastructure to support a hydrogen economy in Trinidad and Tobago.

The results of these undergraduate studies will be considered as part of The Group's strategy and approach towards development of the hydrogen economy.

Additionally, there are discussions to form a joint NGC CNG and Regional Transport Authority comprising Barbados, Grenada, Antigua, St. Vincent, St. Lucia, and Trinidad and Tobago, with the headquarters for the Secretariat to be located in Trinidad and Tobago. A Memorandum of Understanding (MOU) is also currently being explored for the creation of a regional Energy Centre of Excellence for Sustainable and Future Energy Technologies.

CONCLUSION

The NGC Group recognises that innovation through research drives development. Partnerships between industry and academia will therefore be integral to the transition to a more sustainable future, and The Group will continue to pursue that outcome.

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IN PURSUIT OF GREENER LNG Atlantic's Carbon Abatement Strategy

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Cleaner energy is still the priority, so fossil fuel markets are moving away from more pollutant coal and oil towards cleaner-burning natural gas.

According to most experts, humanity's best chance at avoiding irreparable and catastrophic climate change in the next three decades hinges on us building a carbon neutral world. An attainable goal in principle, its actualisation is nevertheless some way off. Some of the technologies on which we are placing reliance are still in their infancy; for others, deployment on any significant scale remains commercially or logistically infeasible. Barring new design breakthroughs or rapid advancements in battery technology, we will continue to rely heavily on our staple hydrocarbons to meet our energy needs over the medium term.

That said, cleaner energy is still the priority, so fossil fuel markets are moving away from more pollutant coal and oil towards cleaner-burning natural gas.

A role for LNG

With natural gas serving as a bridge fuel in the energy transition, LNG trade is likely to remain strong for some time, and Trinidad and Tobago, as an exporter of LNG, would be well-placed to leverage into new markets. However, while natural gas is relatively clean-burning, its value chain — particularly downstream LNG production — has a considerable carbon footprint. Given increasing pressures to neutralise the carbon impact of energy production and consumption, some believe that 'green LNG' could soon become the new accepted norm for the industry. On the supply side, certain producers have started selling carbon neutral cargoes; on the demand side, some companies have signed contracts requiring producers to disclose the carbon footprint of their LNG production process.¹ It is therefore not unreasonable to presume that carbon-conscious production could become a baseline criterion for entry into certain LNG markets in the near future.

So, what does this mean for Trinidad and Tobago and its LNG business, led by the Atlantic LNG Company of Trinidad and Tobago (Atlantic)? Through Atlantic's operations, Trinidad and Tobago has earned a spot among the top 10 exporters of LNG in the world, despite being a relatively small gas province by reserve volume. The country has built a global network of trading partners and is well-positioned and resourced to capitalise on emerging demand. However, the LNG business is currently a major local contributor to CO₂ emissions, with Atlantic's operations releasing over 4.5 million tonnes of carbon dioxide equivalent (tCO₂e) in 2020 alone.² If markets start demanding cleaner LNG, our competitiveness as an LNG exporting nation will hinge on a cleaner production process and LNG supply chain.

Atlantic has taken heed and since 2017, has been on a mission to reduce its GHG intensity levels at its facilities, through a series of technology upgrades, process improvements and collaborative work with shareholders NGC, bpTT and Shell.



THE COMPANY HAS FOUR MAIN EMISSIONS SOURCES

Atlantic targets cleaner operations

Whereas in the past, greenhouse gas (GHG) monitoring was conducted to ensure compliance with industry regulations, Atlantic has implemented a more proactive emissions management plan that goes beyond bare minimum requirements. The intent is not only to preserve the commercial viability of its product in a more demanding market, but to support Trinidad and Tobago's commitments under the Paris Agreement.

Emissions management strategies The company has four main emissions sources: Combustion (93.5%) Flaring (6%) Fugitive (0.5%) Venting (~0%)

Emissions comprise carbon dioxide, methane, nitrogen and sulphur oxides, as well as volatile organic compounds. However, CO_2 from combustion is the dominant GHG in the emissions profile. FIRST STREAM OF INITIATIVES IS ADDRESSING POTENTIALLY **20%** OF EMISSIONS

Having mapped its emissions sources, Atlantic has been seeking to curb its GHG output via two work streams. The first stream of initiatives is addressing potentially 20% of emissions. Since 2017, Atlantic has been screening and implementing carbon abatement projects aimed at:

- increasing thermal efficiency,
- reducing fuel consumption,
- optimising processes to convert every molecule of natural gas into LNG, and
- energy efficiency improvements in building facilities.

¹ https://www.naturalgasintel.com/green-Ing-rapidly-becoming-new-normalacross-the-world/

² https://atlanticlng.com/wp-content/ uploads/2021/07/Atlantic-Sustainability-Report-2020.pdf



STRATEGIC ORGANISATIONAL CHANGES HAVE ALSO BEEN IMPLEMENTED ALONGSIDE THESE PROJECTS:

GHG EMISSIONS ARE MONITORED AND REPORTED ON THE CORPORATE SCORECARD AS A METRIC IN THE **'ENVIRONMENT'** CATEGORY GHG REDUCTION IS EMBEDDED AS A **KEY PERFORMANCE INDICATOR** FOR THE PRODUCTION OPERATIONS DEPARTMENT

SPECIFIC ACCOUNTABILITIES

HAVE BEEN ASSIGNED TO THE VICE PRESIDENT HEALTH, SAFETY, SECURITY AND ENVIRONMENT, AND A RECENTLY APPOINTED CARBON ABATEMENT MANAGER.

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Atlantic's Low Carbon Project gives industry veterans the opportunity to aggregate their experience and apply their learnings to support decarbonisation efforts in one of our country's most important industrial sectors.

Ramesh Harrylal
Vice President of Operations, NGC

Several have been conceptualised in this work stream and are being rolled out systematically, with hundreds of thousands of tCO₂e already avoided thanks to these initiatives.

Asset integrity management is one of the major focus areas — the company has an active Leak Detection and Repair (LDAR) programme and is working to build a digital twin of its facilities to monitor infrastructure for vulnerabilities and leaks.

Strategic organisational changes have also been implemented alongside these projects:

 GHG emissions are monitored and reported on the corporate scorecard as a metric in the 'Environment' category

- GHG reduction is embedded as a Key Performance Indicator for the Production Operations department
- Specific accountabilities have been assigned to the Vice President Health, Safety, Security and Environment, and a recently appointed Carbon Abatement Manager.

The second work stream concerns the larger portion of emissions. These emissions are harder to abate, and require more extensive and technical upgrades. In 2021, Atlantic launched its Low Carbon Project to tackle these emissions in collaboration with its major shareholders NGC, Shell and bpTT. **//**

Our commitment to considerably reduce the carbon intensity of our LNG not only upholds our responsibility to environmental, social, and corporate governance, but it is also a major step along our journey to becoming a world-class LNG producer. — Shawn Garcia Carbon Abatement Manager, Atlantic

Through various mechanisms of exchange and consultation, Atlantic is benefitting from the expertise of these shareholders, who collectively bring decades of global experience in managing natural gas infrastructure to the table.

All three companies are also members of the Oil and Gas Methane Partnership (OGMP) and are working closely with Atlantic to align with OGMP methane emissions and abatement reporting. A proposed approach was to break down goals and supporting activities into shortterm (2021), medium-term (2022-2023) and longer-term ambitions (2024+).

One of the short-term activities identified for Atlantic's involvement was the ongoing Work Stream 1 of the OGMP Flare Working Group, which looks at improving flare measurement. Atlantic began actively participating in this group in May 2021 through a representative from its Engineering and Projects team, and takeaways are expected to inform more robust management of emissions from flares. According to NGC's Vice President of Operations, Ramesh Harrylal who was appointed to Atlantic's Low Carbon Project as NGC's representative — the dialogue and knowledge transfer facilitated by this collaborative approach among shareholder members, in combination with Atlantic's expertise, will greatly support Atlantic's efforts towards achieving its GHG intensity targets.

"Atlantic's Low Carbon Project gives industry veterans the opportunity to aggregate their experience and apply their learnings to support decarbonisation efforts in one of our country's most important industrial sectors.

"LNG is a business interest held in common across our companies, and we are committed to ensuring that Atlantic — and by extension Trinidad and Tobago — remains a formidable LNG player in the changing energy landscape. NGC will keep working alongside all stakeholders to make cleaner energy a reality across all spheres of activity in Trinidad and Tobago, the LNG industry prime among them."

Atlantic's commitment

As Atlantic moves forward with its carbon abatement initiatives, the country stands to benefit tremendously from the targeted outcome of a cleaner LNG business, against a backdrop of LNG playing a central role during a time of global energy transition.

Atlantic's recently appointed Carbon Abatement Manager, Shawn Garcia, summarised the potential takeaways for company and country:

"Our commitment to considerably reduce the carbon intensity of our LNG not only upholds our responsibility to environmental, social, and corporate governance, but it is also a major step in our journey to becoming a world-class LNG producer.

"Atlantic continues to collaborate with our shareholders to identify future-proofed solutions to build a sustainable company with a step change in GHG intensity, to meet expectations of stakeholders, competitive global markets, and society."



Expanding Natural Gas Service with Micro-LNG

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NGC is on a mission to develop the non-energy and transportation industries even further through the provision of innovative energy solutions that empower these nationally critical sectors. It is a well-known fact that NGC has fuelled the development of the natural gas-based sector for over 46 years. Lesser known, however, is NGC's role in growing and developing the non-energy sector through its support of Light Industrial Commercial (LIC) businesses and the provision of Compressed Natural Gas (CNG) for transportation. Starting in 1994, NGC embarked on a strategy to link the energy sector directly to the local commercial, manufacturing, food and transportation industries.

Over the years, the company's LIC customer base has more than doubled, standing at 96 at the end of 2020. NGC is on a mission to develop the non-energy and transportation industries even further through the provision of innovative energy solutions that empower these nationally critical sectors. One such solution currently under active consideration is a micro-Liquefied Natural Gas (micro-LNG) plant.

A team comprising representatives from NGC's Commercial Group as well as NGC CNG has been established to explore the potential for implementing a micro-LNG project. If implemented, the project will result in the delivery of a reliable natural gas supply to traditionally underserved locations in the country.

What is micro-LNG and how does it work?

Where natural gas fields are located far away from gas markets and pipeline distribution is not feasible, the gas can be shipped in the form of Liquefied Natural Gas (LNG). Traditional LNG plants can be massive in size. For example, Trinidad and Tobago's Atlantic Trains 1 - 4 have a combined full capacity of 15 million tonnes/year of LNG. Micro-LNG plants are significantly smaller, typically having production capacities of less than 50,000 tonnes/year.

In the last two decades, micro-LNG has emerged as a viable option for niche industries that require small amounts of natural gas for their operations. Throughout the world, micro-LNG is finding increasing application in heavy land-based and marine transportation, off-grid power generation and light industrial facilities.

The micro-LNG process generally involves four main elements: liquefaction, storage, transportation and regasification, as shown in Figure 1 on the following page.

Expanding Natural Gas Service with Micro-LNG | CONTINUED



Liquefaction – This involves cooling the natural gas until it is liquefied, reducing its volume by a factor of about 600. During the liquefaction process, heavy hydrocarbon elements and impurities are removed. There are many technologies available for liquefying natural gas, with the most used being:

- Nitrogen and gas expansion
- Mixed refrigerant
- Single mixed refrigerant.

Energy requirements and costs are usually the main decision criteria for

selecting the appropriate solution. For example, cascade refrigeration, which involves use of single refrigerants in sequence, has fallen out of favour due to its exorbitant cost.

Storage - Of the two main methods for storing LNG, vacuum insulated pressurised (bullet) tanks are generally preferred for storage of small volumes (Tractebel Engineering, S.A., 2015). These tanks are simple and less expensive to install as opposed to vertical cylindrical self-supporting tanks. **Transportation** – Micro-LNG is transported on land via trucks or trailers, specially designed for cryogenic temperatures (-162°C/-259°F). The vehicles are equipped with safety equipment to prevent over-pressurising. In some countries, LNG tanks are transported via railway.

Regasification - At the

regasification facility, LNG trucks dock into unloading bays. Pumps are then used, along with unloading arms or flexible hoses, to transfer the LNG into storage tanks where it is depressurised. The LNG is then vapourised and transmitted to the customer.





FIGURE 3: REGASIFICATION PROCESS SOURCE: WORLD BANK GROUP - ENERGY & EXTRACTIVES, 2015

Various vapourisation methods can be employed, including open rack; submerged combustion; shell and tube; and ambient air. Ambient air vapourisation, which utilises natural atmospheric air for heating, is the most common type for micro-LNG volumes.

Potential benefits of micro-LNG

The target market for gas from NGC's micro-LNG project includes LICs located more than 5km away from existing gas pipelines and service to prospective Compressed Natural Gas (CNG) customers. LNG would be supplied to these customers via a virtual pipeline, in which Road Tanker Wagons (RTWs) would transport LNG to endusers. As such, the economic and environmental costs of constructing pipeline infrastructure would be eliminated.

The potential for reduction of greenhouse gas (GHG) emissions is another driving factor behind the project. Stranded gas would be the gas sourced for micro-LNG liquefaction. Stranded gas in our case includes associated gas that is considered uneconomic to produce, as well as gas that is currently vented in the production of crude oil. If implemented, the micro-LNG project could significantly reduce GHG emissions from onshore oil and gas production, while optimising usage of gas molecules.

Technology is reducing the cost of micro-LNG solutions. The manpower requirements for micro-LNG plants are relatively low, as the facilities are highly automated. Also, modularisation has been introduced, resulting in relatively straightforward design and construction of micro-LNG plants and regasification terminals.

The Ten Man LNG facility in Pennsylvania, USA is an example of an effective modular micro-LNG plant where stranded gas from Tenaska Resources' Mainseburg field was successfully monetised in 2016. The entire portable liquefaction system was transported on eight trucks. The relationship between capital expenditure and capacity size of LNG plants is non-linear. However, scalable micro-LNG systems have allowed producers to minimise capital expenditure by altering production capacity to match demand. An example of this type of technology is the high-pressure micro-LNG liquefaction system built by Dresser-Rand (now Siemens Energy) for Altgas in British Columbia, Canada (Offshore Energy, 2018).

What are the main challenges?

Developing a micro-LNG project is not without its challenges. The commercial viability of the project is of utmost importance. The economics must be favourable on both the supply and demand sides of the equation. Factors such as the cost of liquefaction, storage and transportation to remote locations must be considered when determining the commercial feasibility of the project. The returns to be derived from micro-LNG must be at least comparable to that of traditional pipeline delivery, to warrant further exploration.

Based on the growth of the LIC sector over the past three decades, there may be a potential market for micro-LNG in Trinidad and Tobago. However, stakeholder engagement with prospective new clients will be required to ensure that sufficient demand is generated to sustain profitable operations.

While micro-LNG does not require pipeline infrastructure, RTWs require appropriate road infrastructure to ensure access to remote sites. Other potential challenges include distance from the liquefaction facility; traffic intensity on the roadways; road conditions and clearance height from utility lines. A safety assessment would be conducted to ascertain and mitigate risks related to the roadways so that RTWs can operate safely and with minimum disruption.

Next Steps

The micro-LNG project is being managed in accordance with The NGC Group's Project Management Methodology.

The project is currently in Stage 1 - Initiation - and the business opportunity has been identified. A preliminary schedule has been developed to guide the team and assist with managing deliverables in preparation for the first stage-gate review later this year.

Detailed evaluation of technology options is ongoing, and discussions are in progress with producers regarding supply. Project assumptions are being refined while the preliminary economics are analysed. A commercial operating framework is also under development.



Based on the growth of the LIC sector over the past three decades, there may be a potential market for micro-LNG in Trinidad and Tobago. However, stakeholder engagement with prospective new clients will be required to ensure that sufficient demand is generated to sustain profitable operations.

Should the project satisfy the economic requirements of the first stage gate, it would be advanced to Stage 2 - Feasibility Analysis, **Concept Optimisation and Final** Selection. During this period, pre-FEED (Front End Engineering Design) would be conducted, and a contractor selected. As the project concept is refined, a budget would be developed. The commercial structure for the project, for example, the type and source of financing to be utilised, would be determined in this stage. Further, preliminary terms and conditions for both purchase and sale agreements would be articulated in the second stage.

Conclusion

In 2018, The NGC Group made a commitment to LIC customers that the Group would do its part to strengthen the LIC sector. The exploration of the micro-LNG concept brings us a step closer to delivering on that promise. While the project is still in its germination phase, we are excited by the potential it holds. Should micro-LNG be deemed feasible, it would increase economic activity and boost employment in rural communities.

In addition to creating economic value, micro-LNG could further The Group's green agenda by directly reducing GHG emissions, while simultaneously optimising the use of natural gas molecules. NGC is pleased to be at the forefront of yet another transformative initiative that has the potential to develop the local economy while advancing our global imperative of GHG emission reduction.

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PIVOTING THE BUSINESS

PPGPL'S PANDEMIC STRATEGY FOR TURNAROUNDS





PPGPL FACILITY

PPGPL has been strategic in changing the way we operate by embracing risk management and preserving asset integrity without compromising the safety of our workforce.

The COVID-19 pandemic has significantly impacted the way we work and has had a considerable effect on project readiness, planning, and execution in Trinidad and Tobago's energy sector. With the implementation of business and movement restrictions and physical distancing measures, there have been major disruptions to supply chain management, business operations and project management, all of which are essential to the successful execution of field work.

During this pandemic, PPGPL and other companies have been challenged to swiftly adapt to measures implemented by the World Health Organisation and the Ministry of Health, whilst maintaining facility safety and production targets. To accomplish this, PPGPL has been strategic in changing the way we operate by embracing risk management and preserving asset integrity without compromising the safety of our workforce.

The Onset of the Pandemic

PPGPL's Facility Turnaround (FTAR) was initially planned to be executed between April 20th and May 2nd, 2020. This outage catered for the execution of engineering, obsolescence projects, and maintenance jobs. Based on the initial impact of the COVID-19 pandemic, a decision was taken to defer this shutdown. The required risk assessment reviews were conducted, which supported outage postponement with many jobs being deemed low-to-medium risk, and which could therefore be deferred for 6 months or more with minimal impact. There were, however, several jobs that were deemed high risk with a requirement for execution within a three to six-month period.

PPGPL's Pandemic Strategy for Turnarounds | CONTINUED

Coincident with the pandemic, several plants on the Point Lisas Industrial Estate were taken offline resulting in a 25 - 35% reduction in gas for processing by PPGPL. With this development, PPGPL switched to a strategy of a twoplant operation which allowed critical maintenance jobs to be addressed by shutting down sections of the facility without impacting production targets. Five consecutive plant shutdowns were planned and executed from April to September 2020, targeting critical and opportunity jobs. The latter was done based on innovative approaches to make systems available with integrated teamwork across all disciplines.

Completion of residual maintenance and engineering jobs required a total facility shutdown and two separate FTAR windows were planned for September and November 2020. Due to a surge in COVID-19 cases and the start of community spread in August 2020, it became increasingly difficult to conceptualise how an increase in headcount at the Plant Facility could be managed while implementing social distancing practices and other regulatory requirements.

With stricter guidelines enforced by the Government of Trinidad and Tobago and escalation in cases, an assessment was conducted by the Operations Leadership Team to determine the feasibility of undertaking the intended FTARs. It was assessed that with a major increase of manpower projected, exposure could not be managed even with extensive mitigations. The planned FTARs were subsequently postponed and the strategy of conducting discrete outages with no impact on production was continued throughout 2020. Additional critical maintenance jobs were completed during this period with reduced manpower at the facility.



MEASURES WERE PUT IN PLACE TO ENSURE COMPLIANCE WITH COVID-19 REGULATIONS

An Adjusted 2021 Turnaround Premise

A turnaround under normal circumstances requires a significant increase in manpower to support iob completion in a compressed timeframe for resumption of production as planned. During the pandemic, however, this posed significant safety implications. Many companies, PPGPL included, were forced to manage risk with reinspections and delayed site works if deemed non-critical. Turnarounds are however fundamental events. and they cannot be put off indefinitely. PPGPL Operations, having gained the experience of smaller 'pandemic' outages in 2020, raised the bar in assessing residual critical jobs and restrategised planning and execution for 2021.

This task proved to be especially demanding, since deciding to proceed with turnaround execution in 2021 implied making frequent adjustments to job planning to manage changing situations arising from case management.

Furthermore, there were requirements to quickly implement government-imposed restrictions as well as astute management of the usual complexities of turnarounds.

In 2020 and early 2021, energy companies with multi-plant operations proceeded to perform single plant outages, having the flexibility of extending their shutdowns if impacted by COVID-19 challenges as work progressed.

PPGPL however, remained challenged in exercising this option due to storage limitations for the provision of LPG to the local market, dry gas requirements for downstream customers and other contractual obligations.

The revised 2021 plan was introduced in January with the intention to perform two shortduration FTARs during opportunity periods with the first projected for May 2021. The projected periods were proposed as six days, from production-to-production. Out of necessity, turnaround planning for these short outages was focused on adjustments to turnaround scope, revised execution strategy and continued timely improvements to site COVID-19 safety practices.



PIVOTING THE BUSINESS

Scope Adjustments

With continued focus on the most critical jobs in accordance with assessment reviews, the FTAR job list was centred on core maintenance activities.

The engineering jobs remained low-medium risk and could be deferred. As planning activities were completed, it was resolved that in many instances, scope reductions did not necessarily equate to significant changes to outage durations. Even with more robust planning, the inception of the pandemic and social distancing implementation measures led to lower labour densities and expectations of lower-than-normal labour productivity. Jobs were planned to fit into four maintenance days with considerations made for imposed restrictions and contingency planning.

Execution Strategy Adjustments

As cases surged in early May 2021, PPGPL adopted a modified approach to turnaround execution. PPGPL evaluated that there was an increased need for scenario planning and "What If" exercises to support situations that had a high probability of occurring during job execution. To support this strategy, plans had to be made to permit some variability in job execution. Furthermore, in addition to the usual turnaround contingencies, planning entailed:

- catering for stand-by crews for many of the contracting companies engaged at the facility
- keeping mirrored resources offsite for availability to replace on-site task leads if required
- mobilisation of additional welfare facilities with appropriate screening for separation of crews
- increased welfare facilities to limit utilisation by multiple crews
- continuous mass sanitisation of all areas.

This ultimately resulted in maximised utilisation of all available work areas. Implementation of these measures



WORK IN PROGRESS

became necessary as PPGPL gained insight into the case management process locally.

Site COVID-19 Safety Practices

By May 2020, PPGPL had implemented and rolled out 17 COVID-19 mitigation barriers which quickly became part of daily practice. By May 2021, these protocols would have been updated routinely as the company kept abreast of the latest COVID-19 recommendations as it pertained to the workplace.

For FTAR execution, four main philosophies were implemented. The first was mandatory use of N95 and KN95 or double medical masks by all personnel entering the Plant Facility, for which entry was limited to essential staff. The second was establishing zones for key jobs and for job permitting.

Physical distancing and creation of work bubbles were strictly practiced. Implementation of daily Antigen Testing with re-testing on a three-day interval was rolled out prior to the FTAR and maintained throughout the outage period. Additional stand-by crews were oriented and tested prior to outage start to ensure availability for quick deployment to site, if required. Lastly, a dedicated FTAR Case Management Support Team was assigned for oversight of positive cases arising from Antigen Testing. This effort was critical to effectively manage the follow-up PCR testing through approved private medical facilities; supporting timely receipt of the required medical advice; and helping to collect and clarify data to support case management by relevant authorities.

Outcome

While execution proved to be exceptionally challenging, the FTAR was successfully and safely completed, inclusive of several emergent jobs that arose during the four-day maintenance window. As the world evolves and continues to adapt to the new realities due to COVID-19, PPGPL continues to learn quickly and innovate to deal with and minimise the disruptions caused by the pandemic. As we seek to develop agile leadership and build a resilient workforce across the Group of Companies, we must all continue to work together, share learnings and leverage efficiencies to quickly change the way we operate.



PIVOTING THE BUSINESS

GOVERNANCE

GOVERNANCE: A SUSTAINABILITY IMPERATIVE



CORPORATE GOVERNANCE AND COMPLIANCE FRAMEWORK

Successful integration and effective management of sustainability at a company requires having committed leadership, clear direction, and strategic influence and none of this will happen without a robust governance structure. (Eapen, S., BSR™, 2017)

Sustainability starts with robust Governance

Sandy Eapen, Former Manager at BSR™, an organisation of sustainable business experts that works with a global network to build a just and sustainable world stated that: "Successful integration and effective management of sustainability at a company requires having committed leadership, clear direction, and strategic influence—and none of this will happen without a robust governance structure." (Eapen, S., BSR™, 2017)

The need for robust governance structures as a critical part of any organisation's sustainability strategy is well recognised. Sustainability, in this context, is about organisations, nations, and individuals positioning themselves to sustain their current activities into the future without compromising the well-being of future generations. This positioning process involves conducting an impartial, frank evaluation of the Company's vision, purpose, strategy, and the activities it has committed to undertake to deliver on its chosen strategy.

A necessary part of this exercise must also include a careful review and assessment of the governance structures and activities which exist, or should exist, within the organisation, to support the achievement of the organisation's strategic goals.

GENDER

EQUALITY

SUSTAINABLE CITIES

AND COMMUNITIES

Governance: A Sustainability Imperative CONTINUED

UNITED NATIONS' SUSTAINABLE DEVELOPMENT GOALS (SDGs)





OUALITY

EDUCATION

REDUCED

INEQUALITIES

PEACE, JUSTICE AND

STRONG INSTITUTIONS

PARTNERSHIPS FOR THE GOALS

Governance is core to ESG and the SDGs

AND PRODUCTION

This focus on governance is supported by rapidly growing stakeholder interest and pressure for businesses to become more transparent and accountable for the Environmental, Social and Governance (ESG) impacts of their products, services, and operations. The term ESG was first used by the United Nations in its 2006 Principles of Responsible Investment Report to introduce the criteria required to be incorporated in companies' financial evaluations (Atkins, 2020)¹ and companies across the globe have been increasingly adopting the principles underlying the ESG evaluation criteria.

In 2016, the United Nations' Sustainable Development Goals (SDGs) of the 2030 Agenda officially came into force. The SDGs outline 17 targets geared towards ensuring a sustainable future for all.

These targets cover several areas, including governance, environmental and social goals. The ESG elements and SDGs have been influential in shaping the sustainability landscape and the way that companies approach activities in the environmental, social and governance spheres.

The principles underlying the ESG evaluation criteria have become a part of the zeitgeist of the current business era. The elements of ESG are viewed as key drivers of sustainability, inextricably intertwined with a company's economic viability, social and societal impact, financial and reputational risk management.

Choosing to ignore ESG/SDG concerns is therefore risky business.

Integration of ESG and the SDGs

For many companies, a convenient place to start integrating environmental and social elements of ESG/SDGs into its business model, is through its Corporate Social Responsibility (CSR) and Health, Safety & Environment (HSE) programmes.

While it is a crucial part of this integration process that elements of the ESG and SDG criteria guide the focus and activities of these areas, to achieve true sustainability, they must also be ingrained in the strategic direction of the organisation.

The governance element of the SDGs/ESG, particularly where they are not also rule-based, are not always easily adopted into the organisation's structure, resulting in many cases in governance receiving less attention than it deserves. Having a focused unit, committed to providing governance related support and guidance to the organisation, to assist in the achievement of its governancebased ESG/SDG goals, is a key element for success in this area. In pursing integration, a second fundamental consideration is whether the existing systems and reporting structure of the organisation, will deliver the type of change required to set it on a trajectory to a desired future state in which stakeholder expectations, based on ESG/SDG considerations, are met.

¹ Atkins, B. (2020, June 8). Forbes. Retrieved from Forbes: https://www.forbes.com/sites/ betsyatkins/2020/06/08/ demystifying-esgits-history--currentstatus/?sh=3a53cb8b2cdd



PIVOTING THE BUSINESS

If not, it should be determined whether incremental or transformational changes are required.

Incremental changes may be required where the current business strategy, structure and operations, remain largely intact, requiring only slight adjustments in order to meet the organisation's sustainability goals. Transformational change requires a major or disruptive strategy, supported by "top-down" leadership and in is driven by issues that are most 'material' to the business and its key stakeholders, including the economic, environmental, and social risks that could affect reputation and ability to create value over the short, medium, and long term.

NGC and Governance

Governance occupies a prominent place in NGC's business strategy and operations, as one of its 'Big Five' critical focus areas. It forms an essential part of the foundation upon which to build a sustainable organisation. NGC believes that good governance is good business, and it is the starting point for the realisation of the dream of long-term sustainability.

Cognisant of this fact, NGC is nurturing a culture in which beliefs, values, attitudes, and behaviours demonstrate strong governance orientation. This is visibly displayed in The NGC Group's Core Values.

Governance is also integrated into all aspects of NGC's operations, as it is recognised that governance principles must underpin all our business transactions, operations, and stakeholder interactions. To this end, in 2018, NGC formed the Corporate Governance and Compliance (CGC) Division to complement the work of other critical risk-mitigating units.

A Governance and Compliance Framework, built on the pillars of accountability, fairness, transparency, and independence, has been developed to guide the organisation's internal and external operations. The

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Framework allows the required focus to be placed on the development of the key areas identified in the framework structure.

NGC's focus on governance enables it to identify and manage various types of risks. For example, compliance with applicable laws, regulations, and state guidelines aids in mitigating financial, reputational, and stakeholder/regulatory risks.

With the guidance provided by ESG, risks associated with executive compensation, bribery and corruption, political lobbying and donations are also identified and alleviated. Internal policies and procedures such as the Business Practices and Ethics Policy, Anti-Fraud Policy, and the Delegation of Authorities Manual guide the activities of stakeholders, while the Whistle-blowing Policy and Procedure inaugurates the "speak-up" culture in NGC.

NGC is committed to engaging with internal and external stakeholders in a consistent, transparent, legal, and equitable manner. This allows the company to maintain its social license to operate, while protecting its reputation and brand. The implementation of key policies and procedures (for example, addressing procurement, human resource and HSE practices) together with a robust compliance and audit programme, properly aligned with Governance best practice and NGC's sustainability strategy, also contributes to the company's effective risk management and its ability to achieve its SDGs.

Governance and Business

The heightened focus on governance and compliance is already bearing fruit across NGC and its subsidiary companies. Over the period 2020-2021 alone there has been:

- increased engagement of the CGC and Audit Divisions to provide assurance on key policies and procedures, allowing for greater consistency in the documentation of key policies and procedures, improved corporate record retention and retrievability and compliance monitoring.
- ii) the development of a clear graphic depiction of The NGC Group structure to clarify the relationships among companies within The NGC Group and the areas in which they operate. This has allowed for improved subsidiary governance. In keeping with our core value of Transparency, this information is published in the NGC's Annual Sustainability Report, which has been produced since 2017.



GOVERNANCE IS A FOUNDATIONAL ELEMENT IN NGC'S SUSTAINABILITY STRATEGY

- iii) The development of governance-aligned Board Protocols and Terms of Reference (TOR) for all NGC's Board sub-committees which are currently being disseminated throughout The NGC Group to ensure an aligned group approach to Board governance.
- iv) the undertaking of sensitisation initiatives to improve the understanding of NGC's Conflict of Interest (COI) Online System and reporting requirements. In 2021, Leadership will consider mitigating measures and controls related to risks identified during the 2020 COI Declaration Cycle.

Governance and Sustainability

The NGC Group has adopted the SDGs, and these are being continuously integrated into corporate activities and culture. The Group is building its sustainability house with governance at its foundation. As the organisation continues to pursue its internationalisation strategy, governance will boost growth potential in a tangible way by demonstrating commitment to the principles of sustainability set out in the SDGs.

NGC is known to be a reputable organisation that approaches its business operations in good faith, upkeeps its contractual obligations, maintains reporting in accordance with applicable laws, regulations, standards, and guidelines. NGC is also committed to creating a working environment that is safe and inclusive. NGC supports a compliance culture and operates transparently (without prejudice to contractual confidentiality requirements), for the benefit of its shareholders – the Government and people of Trinidad and Tobago.

NGC recognises that the concept of governance must be all encompassing and pervade the organisation top-down as well as bottom-up. All NGC's employees can, and do, play a part in building and sustaining a culture of governance. In this way, NGC will be able to create a business that can withstand scrutiny, is aligned to international standards and practices, and achieves sustainability in the long term.



PIVOTING CSR

A BETTER CHANCE AT A **BRIGHTER TOMORROW**

NGC introduces the 'Inspire to Achieve' Programme

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PIVOTING CSR



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. Nyan Gadsby-Dolly; Curtis Mohammed, President NGC CNG; Sheldon Sylvester, Vice President Commercial of National Energy; Wendy Seow, General Manager LABIDCO.

There is no doubt that young people today are facing extraordinary challenges. Already heirs to complex climate, geopolitical and societal problems, their future prospects have been hard hit by the COVID-19 pandemic.

There is no doubt that young people today are facing extraordinary challenges. Already heirs to complex climate, geopolitical and societal problems, their future prospects have been hard hit by the COVID-19 pandemic. In mere months, 20 years' worth of advances in global education were wiped out by pandemic restrictions.¹ Those setbacks in education are now projected to exacerbate challenges for young jobseekers, as labour markets are saturating and the Fourth Industrial Revolution is disrupting demand for traditional skillsets.

That said, while the outlook for youth may seem bleak, there are promising opportunities on the horizon, forged from present challenges. For example, by accelerating our transition into an age of digital learning, earning and communication, the pandemic has forced us to confront inequalities

¹ https://sdgs.un.org/goals/goal4

of access to technology and digital resources. In Trinidad and Tobago, we already see corrective action being taken in the form of the Ministry of Education's 'No Child Left Behind' initiative, which seeks to support students in need of digital devices.

On the job front, while opportunities in traditional sectors are contracting, entire industries are being incubated in response to climate change imperatives and digital transformation. The value chains of clean energy businesses and technology-based products are projected to create millions of new jobs in the near future. In Latin America and the Caribbean alone, some 15 million jobs could become available by 2030 with shifts towards greener patterns of production and consumption.²

² https://publications.iadb.org/publications/english/document/Jobs-in-a-Net-Zero-Emissions-Future-in-Latin-Americaand-the-Caribbean.pdf

A Better Chance at a Brighter Tomorrow - NGC Introduces the 'Inspire to Achieve' Programme | CONTINUED

This surge in new opportunities is, however, not a guarantee of success. If young people are not adequately equipped to seize those opportunities, to participate in and contribute to the future that is unfolding, they risk falling behind. There is considerable work that must be done to give all young people a fair shot at a bright future. NGC is one company willing to take on that challenge.

NGC's renewed focus on youth development

Well before the pandemic drew attention to the outlook for young people, NGC appreciated the link between youth development and a sustainable future for country and planet. The company has for many years invested in nurturing young potential and increasing youth participation in sport, arts and culture, community development, civic life and environmental preservation.



PIVOTING CSR

NGC has also sponsored tertiary level research and scholarships, partnered on energy education initiatives, supported schools with special projects, and provided vocational skills training to members of youth clubs in its fenceline communities. While the cumulative impact of these investments has been considerable, NGC wanted to do more to help young people secure sustainable livelihoods, particularly in underserved communities.

Cognisant of changing market demands and certain gaps in mainstream academic curricula, NGC began to conceptualise a programme that would support more rounded student development and open more diverse pathways for future employment and entrepreneurship. When the pandemic struck in 2020, this concept evolved to address emergent risks and new skill demands that could impact the future prospects of hundreds of vulnerable young people.

For instance, the digital transformation which was already underway across all sectors was accelerated due to the pandemic. More services were automated or moved online, reducing the need for personnel in some businesses and requiring staff to retool in others. Almost overnight, digital literacy became a baseline skill for many more careers. Young people entering the workforce without sufficient training in this area would be significantly less competitive.

Looking deeper, there are other skills that could prove equally vital to career success in the future. According to McKinsey and Company, 'softer' skills such as critical thinking, time management, communication, creativity, entrepreneurship, self-awareness and regulation, interpersonal skills



and adaptability are just some of over 50 foundational skills that will help people thrive in the future of work.³

Guided by such insights, NGC wanted to pre-empt some of the challenges that youth would face in the job market, by designing interventions to build their competitiveness, entrepreneurial spirit, technological savvy, emotional intelligence and resilience, among other marketable skills.

NGC also saw the need to prepare young people for a future built on clean energy and environmental stewardship. Young people will need to live and work within green agenda limits. They will be asked to adopt sustainable consumption practices, to adapt to disruptive green systems and technologies, and to lead innovation themselves.

With all this in mind, and after much research, iteration and consultation, NGC has finally turned its vision for a holistic, future-focused youth development programme into a signature project called 'Inspire to Achieve', or i2A.

Introducing i2A

Starting September 2021, preliminary work will begin on the rollout of NGC's i2A programme. As envisioned, this programme will seek to holistically develop youth in the company's fenceline communities through the delivery of after-school training in the areas of:

- Science, Technology, Research, Engineering, Arts and Math (STREAM)
- ii) Life skills and career coaching
- iii) Environmental citizenship
- iv) Entrepreneurship

Each of these areas, called programme tracks, is intended to build core skillsets that will strengthen students' ability to participate in future job markets. whether as employees or self-made entrepreneurs. The programme will be structured as a series of lessons spread across two years, delivered in different formats by professional educators and coaches. These formats may include virtual and live lectures, interactive games, videos, field trips, workshops, online and live demonstrations, inter alia. Assessments will also be included to track student progress and development.

At the time of writing, pandemic restrictions remain in place, and there is still uncertainty about the format of the upcoming academic year. Accordingly, NGC will begin i2A activities on virtual platforms.

The intent is to eventually transition into live settings when safe and feasible, to allow for practical, hands-on instruction where necessary.

The specific outcomes being targeted by i2A are summarised in Figure 1.

³ https://www.mckinsey.com/industries/ public-and-social-sector/our-insights/defining-the-skills-citizens-will-need-in-thefuture-world-of-work

A Better Chance at a Brighter Tomorrow - NGC Introduces the 'Inspire to Achieve' Programme | CONTINUED

Figure 1



Targeted Programme Outcomes



Improved attitudes toward STREAM fields and careers

Increased STREAM knowledge and skills

Increased likelihood of graduation and pursuing a STREAM career

Improved participation of girls in STREAM fields and careers

Increased likelihood of girls and young women pursuing STREAM careers

> STREAM Track



Helped identify personal, educational and career choices

Helped create action plans to accomplish personal, educational and career choices

Practised skills to monitor progress towards achieving goals

Helped identify and treat with any socio-psychological challenges to goal attainment

Improved ability to cope with adversity and to manage interpersonal conflict constructively

Life Skills and Career Coaching Track



Increased propensity for enjoyment of nature by displaying behaviours related to:

- Energy conservation
- Involvement in environmental preservation
- Recycling and upcycling
- Climate change mitigation and adaptation

Increased empathy and care for biodiversity and environmentally sensitive species

Increased sense of responsibility for the environment

Increased likelihood of graduation and pursuing a career in Sustainability

Environmental Track



Helped participants develop skills for creative and innovative thinking to identify novel business opportunities

Developed a spirit of perseverance in participants to enable them to persist in any business venture they embark on

Helped participants pursue selfemployment and to become self-reliant

Promoted small business creation in target communities

Entrepreneurship Track

GENERAL TARGET ACROSS ALL TRACKS:

Improved abilities in problem-solving, collaborating, critical and systems thinking.



LA BREA HAS BEEN IDENTIFIED FOR ROLLOUT OF THE PILOT PROJECT

The target population of this programme is youth between the ages of 7 and 25, enrolled in primary, secondary, tertiary or technical/ vocational schools. In the first instance, NGC will be looking to pilot the programme in the community of La Brea. La Brea was identified as a good fit for the deployment of the i2A programme based on needs assessments and NGC's long-standing relationship with the community. It is hoped that the introduction of i2A activities will go a long way to bolster schooling and equip young residents for gainful future employment.

Restoring lost gains

While the COVID-19 pandemic has set progress back on many of the UN's Sustainable Development Goals, prompt and targeted interventions can help restore lost gains. When it comes to education and youth development, the pandemic actually highlighted areas of weakness and inequalities that need to be addressed. It is now up to governments, corporate citizens and civil society to take note and respond accordingly. It is after all in everyone's best interest to ensure the next generation is not lost, and that young people are outfitted to fulfil their potential and contribute productively to society.

As a champion of youth development in Trinidad and Tobago, NGC will continue to do its part to ensure that young people are equipped to succeed and inspired to achieve.

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

Sand Land

Clear day at Columbus Bay. Photo by Shaun Rambaran











- THE NGC GROUP OF COMPANIES -