

BEYOND THE PIPELINE

building a
new
tomorrow



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Beyond the Pipeline is NGC's Community Newsletter, produced by the Corporate Communications Division of The National Gas Company of Trinidad and Tobago Limited (NGC)

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Managing Editor: Nicola J. Ghouralal
Head Communications and Brand

Sub-editor: Natasha Harrichand-Kooarsingh
Public Relations Assistant

Design and Layout: Lonsdale Saatchi and Saatchi
Advertising Limited

For feedback and comments, please contact
natasha.harrichand-kooarsingh@ngc.co.tt or
call us at 636-4662/4680



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Message from the Senior Manager, Corporate Sustainability

Forging Ahead

Another year has passed, and the Covid-19 pandemic and its variants remain a threat. Amidst the economic and social disruption, NGC has been navigating through the pandemic using a structured approach, with uninterrupted service delivery and employee safety being our top priorities.

Despite the challenges, we have maintained 100% reliability in supply and distribution to our customers. We accelerated our Technology Strategy to enable a seamless transition to the new normal, and most of our employees are still working from home. Frontline workers on roster are protected by strict safety protocols at our facilities. We also offered vaccines to employees, as well as programmes to support their health and mental wellness.

Business challenges aside, NGC has not relinquished its Corporate Social Responsibility (CSR) portfolio, and in fact, sought ways to help our partners and communities pivot with us. In this issue of *Beyond the Pipeline*, we look at how NGC's partnerships are changing their programmes to adapt to the current environment. In the area of arts and culture, the trinidad+tobago film festival has been hosting virtual competitions while the NGC Bocas Lit Fest launched a new programme. As part of our community outreach, we have been providing food assistance to families in need and supported a vaccination drive in Tobago. We are also looking at empowering youth through a new signature programme, Inspire to Achieve (i2A).

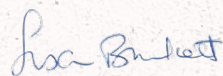
A major focus for us has been supporting Trinidad and Tobago's climate action efforts and emissions reduction targets through our NGC Group Green Agenda. Some of our initiatives for 2021 included offering training to our fenceline communities in installing renewable energy hardware, such as solar panels; promoting CNG and alternative fuels; signing a Memorandum of Understanding with SWMCOL to explore using



LISA MARIA BURKETT
SENIOR MANAGER, CORPORATE SUSTAINABILITY, NGC

landfill gas; supporting construction of the new Preysal fuel station; sponsoring regional media training for journalists; and participation in the GECF Annual Workshop on natural gas.

We share this newsletter in hopes that you will have a better understanding of the work we have been doing to support our national community while growing our business. We offer our best wishes and happiness to you and your families as we all look forward to a successful year ahead.



Lisa Maria Burkett
Senior Manager, Corporate Sustainability, NGC

Movies and Masterclasses

"If we are to preserve culture, we must continue to create it"—Johan Huizinga

NGC has always recognised the immense value of preserving our Caribbean culture, contributing both financially and non-financially to Trinidad and Tobago's various artforms throughout the years. This acknowledgement of the need to support our local arts and culture is reflected in our continued sponsorship of the trinidad+tobago film festival (ttff).

The trinidad+tobago film festival 2021 (ttff/21) marked the 13th year of the NGC's partnership with the popular festival. As many have been required to do, the organisers of ttff/21 have had to adapt and transition rapidly to remain relevant in our new normal.

The festival was held from September 21–28, and apart from the customary array of films from which to choose and view (**#WatchAMovieOnUs**), the festival featured film maker panels and masterclasses. Also, awards were given in eight film categories:

- The 'Best T&T Film' was awarded to the director Nicola Cross, for her short doc, *Becky*.
- Trinidad-based director, Andreas Antonopoulos won 'Best New Media Film' – for his work, *Rhythms of Trinidad*.



- Out of 13 student films screened at ttff/21, *Juana*, by Dominican director José Antonio Martínez, emerged as the winner of 'Best Student Film'.
- The award for 'Best Film as selected by the Youth Jury' was juried by young film jurors under the mentorship of seasoned film critic BC Pires, and was presented to Olivier Sagne for his film *Lovena*.
- 'Best Narrative Film Short' went to Brazilian directors Mariah Teixeira and Nanda Félix, for their film *Rafameia (Riff-Raff)*.
- *Perfume de Gardenias*, by Puerto Rican director Macha Colón, won 'Best Narrative Feature'.
- The award for 'Best Documentary Short' went to Audrey Jean-Baptiste and Maxime Jean-Baptiste from French Guiana, for *Écoutez le battement de nos images (Listen to the Beat of Our Images)*.
- Cuban filmmaker, Marcel Beltran, won 'Best Documentary Feature' with his film, *Option Zero*.

Look out for NGC and ttff in 2022!

A Virtual Bocas Lit

On August 19th 2021, the NGC Bocas Youth Festival was held, for the first time, virtually. Having a festival geared at fostering literary education among the youth of Trinidad and Tobago was an obvious move for the organisers of the NGC Bocas Lit Fest. The festival, which was streamed live on Facebook and Youtube, targetted people aged 13 to 30, and comprised a variety of events, including:

- Port of Spain, 'A Writer's Heaven': A special screening of a pioneering film exploring the richness of Port of Spain as a backdrop to some of the Caribbean's best literary creations with

host Wendell Manwarren.

- **10 Questions with Young Adult Author Sarah Dass:** A chat with Tobagonian author Sarah Dass who discussed her debut novel *'Where the Rhythm Takes You'* (Balzer & Bray), and her insights on writing Young Adult romance and getting published.

The Youth Fest helps NGC Bocas Lit Fest achieve one of its overarching goals: 'to be recognised as a leader in the youth literary education market and support the promotion of education products and services'.

We hope that 2022 brings more innovation and signature events to NGC Bocas Lit Fest.



Providing Food for Families in Need

As a result of the Covid-19 outbreak and several months of lockdown in Trinidad and Tobago, some members of our community have faced food insecurity. Companies throughout Trinidad and Tobago were inundated with pleas for food aid. NGC and its subsidiaries were no exception.

In July 2021, NGC donated food baskets to 100 households in its fence line communities. The Couva/Tabaquite/Talparo Regional Corporation helped distribute the food baskets to families in Couva and the surrounding areas. Families in Guayaguayare, Mayaro, and Moruga also received assistance from non-profit organisations in their areas.

Ms. Satragie Maharaj, Chief Executive Officer at the Couva/Tabaquite/Talparo Regional Corporation (CTTRC), expressed gratitude for NGC's support. "Your unwavering support and contribution have gone a long way in assisting the corporation in bringing much-needed relief to families during this trying time. NGC has been and continues to truly be an exemplar within corporate T&T. Your dedication and keen attitude toward your corporate social responsibility are praiseworthy."

La Brea Industrial Development Company Limited (LABIDCO), a subsidiary of NGC, also contributed to mitigating the pandemic's consequences by sponsoring projects targeted at



Community Shelf located at Aaron's Grocery & Variety Store.

reducing the economic sufferings of disadvantaged people in communities. The Guapo Police Community Council's Food Hamper Drive and Aaron's Grocery and Variety Store's Community Shelf have both received sponsorship from the company.

LABIDCO responded to a request from the Guapo Police Community Council



Hampers donated by LABIDCO for the food hamper drive

to donate basic food items to its hamper drive. Food items were packaged and distributed by the Guapo Police Community Council between July 2nd and 5th. Families from Guapo, Vance River, Parry Lands and New Village benefitted from this initiative.

The proprietor of Aaron's Grocery and Variety Store established a community shelf within the store to make food items available to persons in need, free of charge, while asking others to replenish the shelf. LABIDCO responded by purchasing food items for the shelf and in so doing, also supported a local business. Several families will benefit from this.

NGC Supports Vaccination Drive in Tobago

To counter the spread of Covid-19, the vaccination drive in Tobago was the result of collaboration between the private and public sector, with NGC as one of the contributors. The aim was to promote vaccine literacy and encourage COVID-19 vaccination among the sister isle's population.

The drive was launched at Shaw Park on July 31st, and moved steadily throughout various locations across Tobago, allowing citizens to easily access the vaccine. In Roxborough, over 280 vaccines were administered over a three-day period.

Let's all do our part to manage the spread of the disease by following the 3Ws: Wear a Mask, Watch your Distance, Wash your Hands and of course get vaccinated.

Check out the link below for more information about the WHO-approved COVID-19 vaccinations:

<https://health.gov.tt/covid-19/covid-19-vaccine>





The NGC i2A Programme

NGC 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.

Young people today have numerous hurdles in terms of education, skill acquisition, and employment. NGC has supported tertiary research and scholarships, partnered on energy education efforts, aided schools with special projects, and provided practical skills training to members of youth groups in its fenceline towns over the years. While these efforts have had a significant impact, NGC wanted to do more to assist young people in securing sustainable livelihoods, particularly in underserved communities.

NGC's i2A (Inspire to Achieve) programme, seeks to holistically develop youth in the Company's fenceline communities through the delivery of after-school training in the areas of:

1. **Science, Technology, Research, Engineering, Arts and Math (STREAM)**
2. **Life skills and career coaching**
3. **Environmental citizenship**
4. **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 overall goals of the curriculum are to increase problem-solving, collaboration, critical, and system thinking skills. Each track focuses on developing essential abilities.

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.

Assessments will also be included to track student progress and development. 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.

NGC's i2A programme is carded to be launched in 2022.



The NGC Group Green Agenda Initiatives

Under a Green Agenda portfolio, NGC and its subsidiaries have invested in and developed programmes and initiatives to support the nation's commitments to fight climate change. The Green Agenda initiatives include work in energy efficiency, renewable energy, reducing methane and greenhouse gas emissions, and educating the nation about alternative fuels and energy.

Leading Our Communities into the Low-Carbon Future

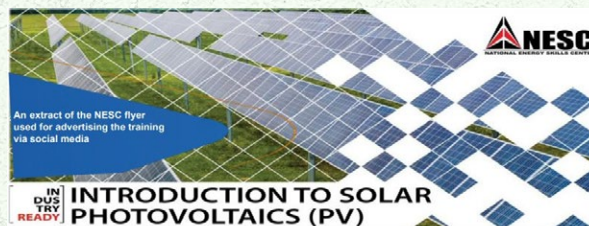
In support of The NGC Group Green Agenda initiatives, National Energy has partnered with the National Energy Skills Centre (NESC) to provide 12 residents of our fenceline community of La Brea with training around Solar Photovoltaic Systems (PVs).

The training, which began in June, aimed to provide residents with a fundamental understanding of the technology that converts solar energy into electricity, with an emphasis on electricity generation.

Dr. Indra Haraksingh of The University of the West Indies, who has developed programmes dedicated to renewable energy technologies, facilitated this certificate course.

To be eligible for the training, applicants had to meet NESC's academic requirements as well as have at least one year of experience in the electrical industry. Twenty-nine applications were received from La Brea residents, and National Energy chose 12 based on criteria that ensured fair participation across the five communities of La Brea, Vance River Village, Union Village, Sobo Village and Vessigny Village.

As Trinidad and Tobago invests in renewable energy technologies, one of which is solar, there is more demand and opportunity for people to enter the solar industry, as well as for those already in the industry to expand their knowledge.



The Future of AFVS in T&T

Will your next vehicle be powered by natural gas, electricity, hydrogen, or gasoline? NGC CNG has started looking at the future of Alternative Fuel Vehicles (AFV) in Trinidad and Tobago, and what needs to happen to achieve significant market penetration.

The consultation process started with a two-day workshop and consultation, facilitated by Dr Graham King, a Professor in the Department of Mechanical and Manufacturing Engineering at The University of the West Indies.

The workshop focussed on four main areas:

1. **Defining Sustainable Transport**
2. **Problems with the Movement of People and Goods in Trinidad and Tobago**
3. **World Trends in Transport**
4. **Trinidad and Tobago's Options**

The seminar and subsequent study determined that a rapid adoption of battery electric vehicles, in addition to CNG conversions, are required to achieve a large transition impact by 2030, both in terms of vehicle numbers and harmful emissions reductions. Several areas were identified for NGC CNG to focus on as an evolving company interested in sustainable transportation in Trinidad and Tobago and the region.

Exploring Alternative Marine Fuels

National Energy Corporation of Trinidad and Tobago Limited (National Energy) owns and operates a fleet of 10 marine vessels, manages the Savonetta Piers at Point Lisas and the Port of Galeota. National Energy also owns assets at the Port of Brighton which is managed by its sister company LABIDCO.

With the International Maritime Organisation's (IMO's) decision to limit the sulphur content for ship fuel from January 2020, and the recently adopted resolution to reduce greenhouse gas (GHG) emissions by 50% by 2050, National Energy recognised the impact that such regulations would have on the operations of its ports and vessels transiting through Trinidad and Tobago's major port facilities.

Leading providers of risk management and quality assurance services to the maritime, oil and gas, power and renewables industries have stated that these IMO regulations will dramatically change the future fuel mix for ships.

The new regulations have brought alternative fuels to the forefront as a means of achieving compliance. This is especially true given that the current and potential proliferation of Emission Control Areas (ECAs) is creating strong incentive for ship owners and operators to explore the use of alternative fuels to satisfy sulphur oxide (SOx) and nitrogen oxide (NOx) limits.



The proposed alternative fuels for shipping include LNG, LPG, methanol, biofuel, and hydrogen as the most promising solutions. Among these, LNG has already overcome the hurdles of international legislation and is the most prolific alternative with around 500 ships in operation or on order, and applications around the globe and in most ship segments. In addition to LNG, methanol is viewed as a safe, clean-burning, and cost-effective globally available marine fuel. In November 2020, the IMO approved interim guidelines for the use of methanol in ships.

National Energy as a member of The NGC Group is already exploring the development of alternative fuel bunkering facilities at Trinidad and Tobago's ports. Given its access to both LNG and methanol volumes (through The Group's shareholdings), the development of such facilities will ensure the country's compliance with IMO MARPOL Annex VI legislation.

PLEA Subcommittee Goes Green

NGC's latest initiative to influence the local Green Agenda landscape has been to steer the formation of the Point Lisas Energy Association's (PLEA) Sustainability Pathway and Green Agenda Sub-committee.

Through the sub-committee, PLEA members have committed to align with the National Environmental Policy (NEP) and collaborate towards achieving the GoRTT's Nationally Determined Contribution (NDC), which outlines the country's commitment to low-carbon targets under the Paris Agreement. This includes the 15% consolidated reduction in emissions by 2030. This is in line with Trinidad and Tobago's national mandate to reduce greenhouse gas (GHG) emissions among the three major carbon-emitting sectors: power generation, transportation, and industry.



Members of PLEA fall under the industry category.

Recognising the need for structured collaboration and capitalising on synergies among PLEA members in reducing emissions, NGC's Vice President Operations, Mr. Ramesh Harrylal, with direction from NGC's President, Mr. Mark Loquan spearheaded the formation of the sub-committee with the commitment and support of all PLEA members.

This coordinated approach in reducing emissions will involve partnership among member companies of PLEA in:

1. **Communication**
2. **Sustainability tracking**
3. **Monitoring and reporting of emissions**
4. **Contribution towards regulatory requirements**
5. **Building capacity**
6. **Stakeholder engagement**
7. **Sustainability projects**

The formation of the sub-committee comes at an opportune time as NGC seeks to occupy a larger space in the 'green' sphere, with the Company having already taken several crucial steps to reduce operational emissions:

MOU for Landfill Gas Use

The NGC Group of Companies has marked yet another significant milestone in its Green Agenda. NGC, NGC CNG and National Energy signed a Memorandum of Understanding (MOU) with The Trinidad and Tobago Solid Waste Management Company Limited (SWMCOL) in September 2021.

The MOU will explore opportunities to capture and commercialise landfill gas for use such as the provision of carbon-negative, renewable compressed natural gas. The agreement signals the Group's commitment to driving sustainability through strategic partnerships that will leverage opportunities of innovation in carbon capture.

NGC has long recognised the need for transformative-thinking and looking beyond its traditional business model and current energy mix to create real impact within the clean energy space. It is well positioned to take leading role as the energy landscape transitions to a low-carbon energy future, locally and internationally. Through this newly



formed partnership with SWMCOL, The NGC Group will seek to identify and quantify methane emissions from existing landfills and determine ways to monetise this undervalued source of biofuel and green energy.

Representatives from The NGC Group of Companies and The Trinidad and Tobago Solid Waste Management Company Limited signed a Memorandum of Understanding (MOU) in September 2021.



A 'Green' Media

NGC collaborated with The Energy Chamber of Trinidad and Tobago (Energy Chamber) to deliver Regional Media Training for media personnel on The Green Agenda. This was considered an important avenue to help raise public awareness around clean energy issues, since the media is a conduit for public information.

The training started September 2021 and ran for six weeks. Topics presented over the six weeks were:

- Effects of global climate change
- Impact on SIDS and Caribbean Nationally Determined Contributions (NDCs)
- T&T Reduction Strategy
- Greenhouse Gases (GHGs)
- GHG inventory
- Methane emissions
- Climate Financing
- Renewable Energy
- Energy Efficiency
- Hydrogen
- Future Fuels for Transport

Solar Panels for Preysal Station

The Preysal multi-fuel service station, is a nod to the NGC Group's Green Agenda in more ways than one. The NP-branded station has 14 liquid and 10 CNG filling spots in addition to an Electric Vehicle (EV) charger.

In keeping with this country's renewable energy mandate, solar technology is powering the operation of the new station. The NGC Group was issued the first renewable energy, non-utility scale license by the Ministry of Public Utilities.

The license was granted for the use of the expansive solar photovoltaic (PV) system at the new Preysal Service Station. National Energy's Sustainable Energy Division managed the installation of the solar panels and tie-in to the power requirements of the facility. The 320 panels will generate 100 kw of power, which will be used for:

- A rapid or Level 3 direct current (DC) charging station for EVs with three modes of charging and capable of charging two vehicles simultaneously. This is the first high speed EV charger in Trinidad and Tobago
- Canopy lighting
- Convenience store in-store and peripheral lighting
- Liquid fuel dispensers



The new station will also cater to the thousands of residents of the area and provide convenience to commuters who travel along the Sir Solomon Hochoy Highway. This is welcome news to CNG users, as this station is strategically positioned to service North-South CNG customers.





Photo of the Month

Columbus Bay
Photo by Shaun Rambaran



Energy
Brain

Buster

QUIZ: Answer either True or False

1. The trinidad+tobago film festival 2021 featured film maker panels and masterclasses.
2. The first NGC Bocas Youth Festival was held on August 19th, 2021.
3. The only company in The NGC Group to provide food assistance to members of the community was LABIDCO.
4. NGC supported vaccination drives in Tobago.
5. There will not be an Above and Beyond honoree for 2021.
6. NGC's i2A programme seeks to holistically develop youth in the company's fenceline communities through the delivery of after-school training.
7. Adult Literacy Tutors Association (ALTA) was honored in the 2019 Above and Beyond programme.
8. National Energy has partnered with the National Energy Skills Centre to provide residents of its fenceline community with training around Solar Photovoltaic Systems.
9. The Regional Media Training facilitated by the Energy Chamber was held for NGC employees.
10. The Point Lisas Energy Association's (PLEA) Sustainability Pathway and Green Agenda Sub-committee was formed in 2021.

ANSWERS:

1) TRUE 2) TRUE 3) FALSE 4) TRUE 5) FALSE 6) TRUE 7) FALSE 8) TRUE 9) FALSE 10) TRUE