

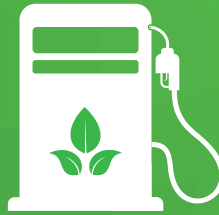
The Road to Sustainability



Education & Advocacy



CNG



Energy Efficiency



LNG



Reduction of Methane Emissions



Carbon Sequestration



Renewables



Hydrogen



The Road to Sustainability **(continued)**



NGC's **Green Agenda** is driven by international and local imperatives. Under the Paris Agreement on Climate Change, Trinidad and Tobago has set an objective to achieve a reduction in overall emissions from three target sectors - power generation, transportation and industry - **by 15%** by 2030 from a business-as-usual baseline.

NGC's 'Green Agenda' is aimed at both reducing our corporate carbon footprint while simultaneously supporting Trinidad and Tobago in meeting its Nationally Determined Contribution (NDC) emissions reduction target. Current and planned projects feature promoting energy efficiency and renewables, assessing our carbon impact through a carbon

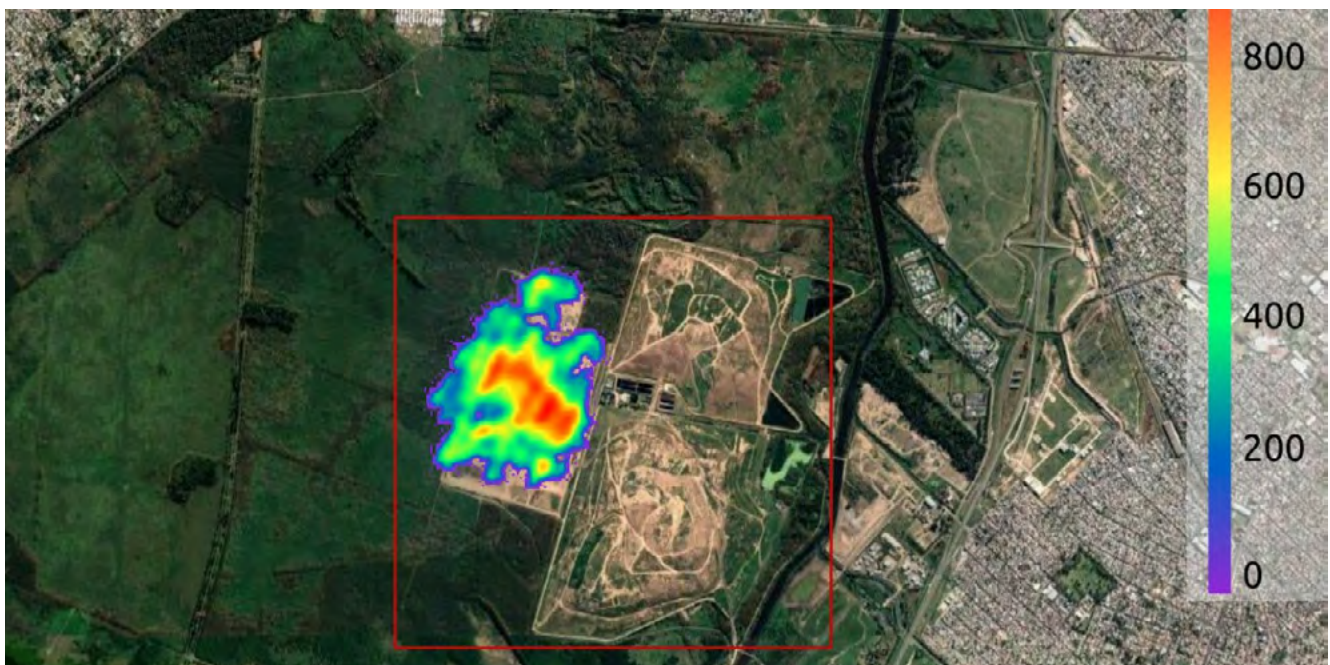
sequestration study associated with NGC's 15-year reforestation programme; energy audits and the introduction of green technology supported by local, regional and international partnerships.

Methane Emissions

Methane, a more potent greenhouse gas (GHG) than carbon dioxide, is the primary component of natural gas. Addressing gas leaks and methane emissions has therefore become a priority.

In 2020, the Company invested in an optical and infrared camera capable of detecting and visualising fugitive hydrocarbon emissions at its facilities. Starting in 2021, this equipment will allow NGC to identify and repair vulnerabilities in its infrastructure and close in on its operational target of near-zero methane emissions.

As stated previously, NGC has entered an exciting new partnership with a Netherlands-based technology solutions provider, Orbital Eye. Through satellite data and algorithms, this company can monitor infrastructure such as transmission pipelines, roads, railways, and power lines, and measure the GHG output associated with these assets. NGC's partnership with Orbital Eye will allow it to access critical research and emissions information about Trinidad and Tobago's industrial on-shore and off-shore assets over the next three years. This data can then be used to develop mitigation and asset integrity management plans. Moreover, there is scope for growth as the intention is to extend this exercise across the Caribbean where feasible.



Carbon Sequestration

NGC's Reforestation Programme, implemented in 2005, aimed to replant the equivalent hectares of trees cleared during pipeline and estate construction activities. A 2018 study commissioned by NGC and conducted by The University of the West Indies (The UWI), St. Augustine Campus, estimated that 2,243 tons of carbon were sequestered by the above-ground biomass of the trees planted under this initiative.

In 2020, NGC decided to take its carbon sequestration study further by looking at below-ground sequestration. The study, being undertaken by The UWI, will provide valuable insights into the mechanism of natural carbon capture and storage and help generate a more accurate picture of the country's net carbon footprint.

MILESTONE ACHIEVEMENT



Estimated CO₂ sequestered above ground in 2020

2,290 TONS

Estimated CO₂ sequestered below ground in 2020

595 TONS

Estimated total carbon sequestered above ground in 2020

8,404 TONS

Estimated total carbon sequestered below ground in 2020

2,185 TONS



Area maintained 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 manhours

7,508

Energy Efficiency

Energy efficiency has been proven to dramatically reduce energy waste and significantly slash carbon emissions.

With this knowledge in mind, NGC launched the country's first mobile app around energy efficiency and conservation – Energy SmarTT – in June 2020. This app, available for free download by the public, targets changing behaviours and attitudes toward energy consumption, particularly at the domestic level, and aims to increase awareness about the big picture environmental impact of personal choices. Through the app interface, users can determine how much energy their current appliances consume, and how much they can save on their energy bills by switching to more efficient models. A map directs users to retailers that sell energy-efficient products and the functionality exists for business owners to flag their shops.



The Road to Sustainability (continued)



Compressed Natural Gas

Under the Paris Agreement, T&T’s NDC sets an unconditional target of 30% reduction in emissions from the transportation sector by 2030.

NGC supports the attainment of this target by providing and promoting CNG as an alternative vehicle fuel.

In 2020, there were 10 operational CNG stations for use by the public and three for fleet use. It is now estimated that there are 14,290 CNG vehicles on the roads of T&T. CNG volumes sold in 2020 was 13.5 million litres of gasoline equivalent (lges).

In development is a multi-fuel station that will house the largest

assembly of CNG pumps, locally, at the entrance to the Point Lisas Industrial Estate. This station will feature solar-powered lighting and offer motorists a choice of fuels – conventional gasoline, CNG or electricity.



UTT MOU SIGNING: L to R: Mr. Dominic Rampersad, President PPGPL; Mr. Curtis Mohammed, President NGC CNG; Prof. Prakash Persad, President (Ag.) UTT; Mr. Mark Loquan, President NGC; Dr. Vernon Paltoo, President National Energy; Ms. Wendy Seow, General Manager LABIDCO

UTT Climate Change Mitigation Project

Recognising the importance of collaboration between industry and academia to progress climate action goals, NGC signed an MOU with the University of Trinidad and Tobago (UTT) in December 2020, to commence work on a Climate Change Mitigation Project.

The objectives of this agreement are:

- The joint identification and development of commercially viable climate change initiatives

- Production of data and reports for public awareness and education campaigns on climate change
- Renewable energy
- Energy efficiency
- GHG emissions
- Flood mapping
- Sustainable land use
- Development and exchange of information on GHG reduction technologies and strategies
- The transfer of experience and industry learnings

Green Hydrogen

National Energy has also initiated work to identify opportunities for applying renewables-based hydrogen locally.

These efforts will be the basis for the decarbonisation of the existing petrochemical industry and hard-to-decarbonise sectors, such as the cement and metals industries.

Solar PV Project

The NGC Group is getting involved in the solar energy space through subsidiary National Energy.

The Company is part of a joint venture project to build the first utility-scale solar PV for Trinidad and Tobago. The project is being undertaken by a consortium of major companies: Lightsource BP, bpTT and Shell Trinidad and Tobago. The project is expected to produce 112 MW of power and will be located at the Point Lisas South Industrial Estate.

The overall benefits to the economy would include:

- An improved reserve-to-production ratio
- Storage of excess renewables such as hydrogen for use as a secondary fuel
- Improved resilience
- Job creation/ skills transfer
- Reduced CO₂ emissions
- Increased foreign exchange levels
- Energy diversification in T&T

National Energy secured funding from the Inter-American Development Bank (IDB) under an IDB-executed, non-reimbursable grant under the Technical for Promotion of the Green Hydrogen Market in Latin America and Caribbean (LAC) Countries. This cooperation will facilitate feasibility studies in 2021 that contribute to understanding the economic parameters of producing green hydrogen locally.

The results will add to the work of National Energy and the Ministry of Energy and Energy Industries (MEEI) to provide insight into green hydrogen possibilities for the country.

