

Using tech to drive efficiency

NGC introduces 'EnergySmarTT' mobile app





In 2020, The National Gas Company of Trinidad and Tobago Limited (NGC) celebrates 45 years of distinguished service to country at the forefront of the energy sector. Over that lifespan, the Company's innovative and forward-thinking business strategies have enabled it to build a world-class model for gas-based development.

As NGC now looks to its next 45, innovation and future-minded investments continue to drive its growth strategy. Since the next few decades are projected to see increased deployment of renewable and energy efficient technologies, it is imperative that NGC enter the clean energy space to remain relevant, and indeed to become a best-in-class energy player. To that end, the Company has built several initiatives into a new sustainability strategy, which collectively aim to reduce its environmental footprint and increase internal accountability for its carbon impact. External to the organisation, NGC has also sought to build national capacity and consciousness with regard to energy efficiency and renewable energy (EE/RE).

It is within that context that NGC recently developed and launched the country's first mobile app around energy efficiency and conservation - 'EnergySmarTT'. 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.

Context – the new energy future

The Trinidad and Tobago energy landscape is being steered into a strategic reconfiguration with greater emphasis being placed on:

- Reducing greenhouse gas emissions (GHGs),
- Energy diversification utilising clean energy technologies (Wind, Solar, Hydrogen) and
- Energy efficiency and conservation (EE&C).

Within the last three years, EE&C has been placed within the spotlight, as the message for the way we should consume energy has changed. As a country, we are known for our wasteful energy culture and any pathway transitioning to renewable energy technologies and GHG emissions reductions must encourage EE&C as the foundation. It directly deals with addressing user behaviours and choices which impact overall energy consumption and demand.

The role EE&C will play in reshaping our energy future on a national level has been continuously highlighted between 2019 and 2020, through government initiatives such as:

1. Development of a National Energy Efficiency and Conservation Plan for Trinidad and Tobago;
2. The nationwide LED bulb exchange programme;
3. Pilot study audits of government buildings; and
4. Final First Report of the Post-COVID-19 Road to Recovery, which includes stimulating activity in EE

Developing an EE&C society will require addressing our energy intensive behaviours encouraged by access to cheap and abundant energy. Energy education for citizens to make smarter energy choices has always been around, but messages have been fragmented across many media and platforms. Indeed, there are no **local** resources which constitute a 'one-stop shop' for answers to:

1. why we should invest in EE and the impact of using an energy-efficient appliance;
2. where products can be acquired;
3. tips for improving behaviours; and
4. assessing the return on investment for spending extra on EE products.

In recognition of this need, NGC decided to undertake a project that would centralise EE&C education resources, make them specific to our local context, and bring them within reach of the general population.

Introducing 'EnergySmarTT'

The concept of utilising a mobile application for reshaping the message on EE&C seems fitting given the recent focus on using technology in Trinidad and Tobago to improve the way we do business. The COVID-19 pandemic and social distancing measures accelerated the transition to more online services. Mobile applications that are now changing how we purchase and consume include ride-sharing applications, accommodation booking applications, delivery applications for food and utility apps for paying and viewing bills.

NGC's 'EnergySmarTT' app fits within that trend. It is the first local energy education mobile application in Trinidad and Tobago and through its platform, anyone with an Android or Apple device (phone or tablet) can access it. The app was built by an in-house team.

The first iteration of the mobile application offers five main functions:

1. The 'My Consumption' feature allows users to calculate their estimated electricity cost and carbon footprint for using a specific household appliance on a daily, monthly or yearly basis. Rates and wattages used



for this function referenced the Trinidad and Tobago Electricity Commission (T&TEC) Appliance Usage Brochure with calculations based on the 2009/2010 price at the lowest tier of 26 cents per kWh.

2. The 'Switch and Save' feature helps users understand the true cost of purchasing an EE product. The app calculates the estimated payback period, over which the purchase cost of an EE product would be amortised - i.e. how long consumers would have to wait before realising savings on their energy bills because of that purchase. Calculations illustrate the simple payback, monthly savings, and an estimated carbon savings breakdown per day/month/year.
3. Energy Saving Tips are included to highlight the simple measures users can implement to reduce their consumption habits for 12 common household appliances/products. Tips provided are illustrated as infographics and follow similar guidelines as those provided by T&TEC and the Regulated Industries Commission (RIC).
4. 'Locate Energy Saving Products' is a unique feature that is not commonly found within energy saving mobile applications. It uses location-based services linked to mobile devices to highlight for app users where EE products can be purchased within Trinidad and Tobago.

Types of products available on the feature listing are:

- Air Conditioners
- Lighting
- Refrigerators
- Washing Machines

Over time, this list will be extended.

5. The 'Useful Resources' feature provides links for local, regional and global entities promoting and providing the latest news/learnings on energy efficiency.

Looking Ahead

With the first iteration of EnergySmarTT app launched in June, users can expect app updates to occur in the fourth quarter of 2020. New features to anticipate include:

1. Push Notifications for promoting daily energy saving tips and articles, and
2. A feature promoting 'Green Networking' - a designated hub that will focus on connecting schools, community groups and NGOs with experienced practitioners of energy efficiency and renewable energy projects. ■

