TODAY FOR TOMORROW – PREPARING FOR THE FUTURE OF ENERGY

ESTIMATED READ TIME: 6 MINUTES

ON THE GREEN AGENDA

> **"Even as we push to harness renewable sources of energy, we need to seize every low-hanging opportunity to lower our net carbon output in the interim."**

KEY TAKEAWAYS

Although climate action is urgently needed, making the necessary changes in our energy mix and consumption practices requires time, and alignment among stakeholders with often competing priorities.

For that reason, even as we push to harness renewable sources of energy, we need to seize every low-hanging opportunity to lower our net carbon output in the interim.

These include using natural gas as a transition fuel, addressing methane emissions, and using carbon offsets.

We also need to build a strong defence through climate change adaptation strategies.

Conversations about the future of energy invariably evolve into conversations about climate action and adaptation.

We have heard in many permutations of language, on many platforms, that our planet stands on the precipice of climate chaos. However, unlike in cinematic scenarios, we cannot expect some deus ex machina to pull us back from the edge at the last second. Instead, our hope for salvation lies in our own collective determination not to fall, by making the necessary adjustments to our energy diet (inter alia).

That said, though we know what is at stake and are already seeing the climate chaos unfurl, why has it been so difficult for us to galvanise forceful and meaningful action against climate change? Particularly within the energy space, why is it so difficult for the world to curb the runaway emissions problem? As climate lobbyists tell it, is the need for decarbonisation not sufficiently urgent to justify hard limits on further fossil fuel development?

Though it seems a simple enough choice – adjust or face perilous consequences – the truth is that making the changes we need to make in our energy mix and consumption practices requires time, and alignment among stakeholders with often competing priorities.

How do you convince billions of people around the world who depend on coal and oil for power generation and heat that they need to accelerate a shift to alternative energy sources that could be less reliable, more expensive, or logistically challenging to integrate in the short to medium term? The immediacy of hunger and poverty will always obscure the long view. For countries that have just begun to develop hydrocarbon reserves and generate wealth for their people, how do you say - your growth is inconvenient?

The reality is that we cannot dismantle fossil fuel-based energy systems overnight. Not only is it infrastructurally infeasible, but attempting to quit fossil fuels without proper planning will destabilise economies and societies.

This is not to say that pressure to transition quickly is not needed. Certainly, every day of inaction brings us closer to the edge.

However, even in countries where decarbonisation of energy is high priority, the systemic overhauls required to make the transition will take time to realise.

For that reason, even as we push to harness renewable sources of energy – which we are doing aggressively - we need to seize every low-hanging opportunity to **lower our net carbon output in the interim**. At its core, this is fundamentally a sustainability challenge – finding a way to meet our energy needs today in a way that does not make life more difficult for us tomorrow.

For one, this means capitalising on transition fuels such as natural gas, which has the lowest emissions profile of the fossil fuels and a healthy market supply. This is one reason why The NGC Group has been assessing options to support micro-LNG projects across the Caribbean, that can potentially displace some of the crude oil from the regional energy mix. It is also a reason to welcome the progress that has been made on restructuring Trinidad and Tobago's LNG production business. A more streamlined Atlantic will strengthen the country's LNG export capacity, and by extension, our ability to help fuel the global energy transition.

Of course, we harbour no delusions that natural gas is 100 percent clean. It is equally important to find solutions that can reduce the carbon output from the gas value chain today.

"For those emissions we cannot avoid, we need to compensate with offsets so that net emissions can remain low. One mechanism is to invest in carbon sequestration projects, whether by creating artificial sinks (eg. injection wells) or natural carbon vaults, as NGC did with our large-scale reforestation programme."

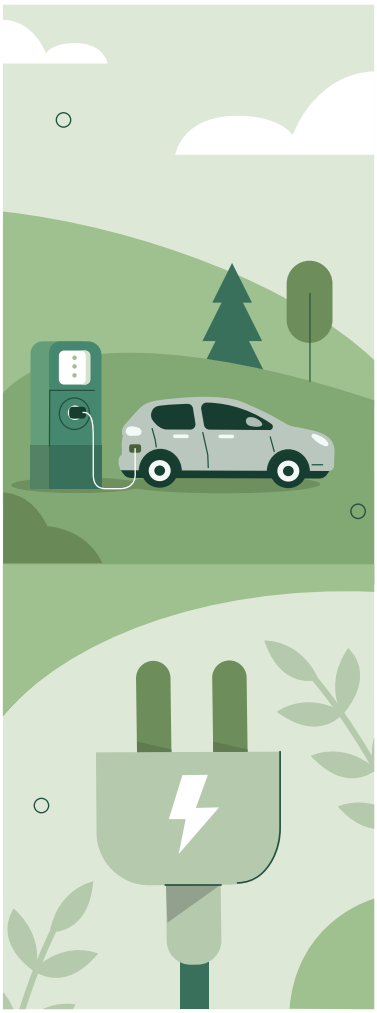
One approach is to ensure as much of it stays in the pipeline as possible, by focusing on asset integrity and leak detection and repair. For us at NGC, methane mitigation is a priority focus of our business, because we understand its climate impact. For those emissions we cannot avoid, we need to compensate with offsets so that net emissions can remain low. One mechanism is to invest in carbon sequestration projects, whether by creating artificial sinks (eg. injection wells) or natural carbon vaults, as NGC did with our large-scale reforestation programme.

Even as we take action today to change the current and future global emissions profile, we must confront our ghosts of emissions past. We cannot soon escape the cumulative impact of carbon emitted since the age of industrialisation, so we need to build a strong defence through climate change adaptation strategies.

The meteorology of our planet is changing rapidly, with concerning implications for agricultural cycles and soils, the biosphere, human settlement patterns and the integrity of our built environment. While we work in earnest to prevent further deterioration of climate stability, we need to start adapting our habits and habitats, so we can build more resilient societies and continue to meet our basic human needs for food and shelter in a warmer, wetter world.

This is one reason behind NGC's recent investments and partnerships around food and nutrition security, green infrastructure and sustainability education. Over the coming months, we will intensify our focus on these and other adaptation strategies.

Given energy's many intersections with other development and sustainability challenges, forecasting



the future of energy is a complex exercise. One need only look at the impact of the war between Russia and Ukraine to appreciate that future energy markets can be influenced by factors beyond our control:

- How will political and cultural priorities shift in the coming years?
- Will technology deliver the anticipated acceleration in the transition to renewables?
- Will promised financing for green projects be readily available?
- Will countries be willing to forego immediate development aspirations and value clean over cheap and fast?
- How will climate change shape our energy needs and markets?

Navigating those uncertainties will be challenging, no doubt, but hearteningly, our domestic energy sector has demonstrated malleability in the past few years. We have advanced solar, wind, green hydrogen, and biofuels projects, even as we work to strengthen our natural gas sector. Come what may, our people are resourced and driven enough to guide us through change. Importantly, The NGC Group and other leading energy companies have had the climate-awareness and foresight to begin diversifying, to ensure Trinidad and Tobago has a long and *sustainable* future in energy.

We are determined not to give up. ■