Opportunities for carbon emission reduction in Trinidad and Tobago

Trinidad and Tobago’s (T&T) oil and gas sector generates approximately two thirds of the country’s revenue. The country is the largest exporter of ammonia and methanol in the world. Described by the United Nations Environment Programme’s (UNEP) Emission Country Profile Report for 2013 as a “carbon intensive economy”, T&T’s carbon dioxide per capita emissions are among the highest in the world, ranking 2\textsuperscript{nd} in 2010 behind Qatar (worldbank.org). In terms of absolute emissions, Trinidad and Tobago produces the most emissions per year among all small island developing states (SIDS). Yet, T&T’s emissions combined with those of all SIDS only contribute to less than one percent of total global emissions.

This is compounded by the estimated 630,000 vehicles on our nation’s roads; a number which is increasing by 30,000 annually. According to the Report, “the emissions from consumption of liquid fuels in T&T, in 2008, were 3.7 million tons, nearly all of which stem from transportation (all power production is based on gas)”. The report further states that “greenhouse gas emissions (GHGs) from the transportation sector have increased by 278 percent over the period 1990 to 2006.” All together, this paints a gloomy picture of air quality in T&T that is ripe with opportunity.

Among the effort to curtail carbon emissions, the Government is exploring the feasibility of Compressed Natural Gas (CNG) as an alternative fuel. CNG can reduce GHGs by as much as 15-20 percent when compared to diesel or gasoline, and this environmentally friendly approach can also reduce the country’s fuel subsidy. To promote the use of this fuel by both corporate and private citizens, financial incentives were recommended including the removal of duty on components for the retrofit of vehicles with CNG kits, a 25 percent tax credit for conversion cost up to a limit of $2,500 per vehicle (non-business), and the removal of Value Added Tax (VAT) on imported new and used natural gas vehicles (energy.gov.tt).

The Government has also proposed the increased availability of CNG refuelling stations and CNG conversion centres, with a master plan of converting the Priority Bus Route, a major...
transportation artery for public buses and maxi taxis, as a “green route”, accommodating vehicles using CNG, electric power, or a combination of electric power and fossil fuel (hybrid power). The Public Transport and Service Commission (PTSC) has already started dispatching CNG buses to the public to initiate this overhaul.

It should be noted that policy changes for carbon emission reduction should be accompanied by a concerted effort from citizens to achieve the same objective. If we divide the population by the number of cars on the road, then we have on average one vehicle for every two persons! Using the good old-fashioned habits such as carpooling and walking where possible can contribute to an overall decrease in emissions by reducing fuel consumption. Besides, walking is not only beneficial to the environment; it is great for one’s health as well! Additionally ensuring your vehicles and in good working condition thus limiting your vehicle emissions is also another step towards responsibly taking charge of the CO2 reduction efforts.

These lifestyle changes are a start towards reducing the levels of harmful emissions in our atmosphere, but there are still other factors impacting on our carbon footprint. Deforestation is occurring at an uncontrolled rate in our pristine forests, and trees are valuable vessels for carbon absorption. The Food and Agriculture Organisation (FAO) estimates that T&T has 226 000 ha of forest cover, accounting for 44 percent of the total surface land area. Between the period 1990-2010 it is estimated that forest cover was lost at a rate of 0.31 percent or 750 ha per year. This amounts to 6.2 percent or 15,000 ha, which is a significant amount for a nation as small as ours. The Country Profile Report states that if T&T avoids deforestation alone, approximately 290 thousand tons in CO2 emissions can be reduced each year. The Report further states that “afforestation/reforestation initiatives aiming to replant 50 percent of the loss in forest cover during 1990-2005 (-9,000 ha), would require the regeneration of 4,500 ha of forest land, which could generate more than 1.7 million tons CO2 emission reductions every year.”

This potential to reduce emissions is one of the driving factors behind the EMA’s National Restoration, Carbon Sequestration, Wildlife and Livelihoods Project. This project funded by the Green Fund, involves collaboration between the EMA, UWI and Community Based Organisations (CBOs) to achieve the reforestation of 500 hectares of the Nariva Swamp by March 2017. This programme includes training for members on Fire Prevention and management of replanting projects; thus ensuring the sustainability of this project.

Ultimately, it is the responsibility of each citizen- whether corporate, private, or policymaker, to ensure that our environment does not suffer from our indiscriminate actions. While our country is richly blessed with oil and gas reserves, we must condition our habits to ensure the availability of current resources for future generations. We must continue to explore and implement opportunities for cleaner energy sources.

So remember to turn off those unused lights, consider carpooling, and try replanting trees in your own space to help our reduce our carbon emissions.
If you have any comments or would like to contribute to this column please send us an email at emacorner@ema.co.tt.