



In 2017, the CARICOM Secretariat organised a **Youth Essay Competition** as part of its activities marking the CARICOM Energy Month. Wishing to involve the younger generation in energy-related issues and their fallout and thereby transform it into a channel for promoting awareness of clean energy solutions, and with a view to giving a voice to Caribbean youth regarding their dreams of their future in a changing world, the Secretariat's



Energy Unit invited participants to submit an essay about the need to advance the region's sustainable energy transition and their vision of how their country could support this move.

In this feature we present the Secondary Education laureate of the senior section (corresponding to Forms 4-6 / Grade 10-13): **Kiziah Soverall, of Bishop's High School in Tobago**. Like the other secondary education competitors, Ms Soverall had to make her case while respecting a 700-word limit, a feat she accomplished worthily, despite only learning of the competition on the eve of its closing date!



As she acknowledges, both candidly and disarmingly, she almost ignored her inner voice telling her that she had nothing to lose and that she ought to at least try and even so *"It took me most of that night and part of the morning to organize the documents necessary [for it] and write the essay. There were a few times when I thought, "Why are you bothering to do this so late anyway?" but something told me not to give up,"* she explains. Nevertheless, it came as a total shock when, through the family grapevine, she learnt that her name had been announced on the radio as the Essay Competition winner for the senior section of the Secondary Education category. *"And then, it was all over social media, which was slightly overwhelming because I'm not really one for the spotlight. It was just, quite honestly, a surprise, but I'm happy that I won,"* Ms Soverall says.

Proof for the need to spread the message of renewable energy throughout the Caribbean is offered by the laureate herself who says: *"I actually knew very little about sustainable energy prior to writing the essay. However, in Communication Studies, which we do in sixth form, we're taught to do proper research before we engage in a topic. So I did my research, and it became more evident to me as I went along that sustainable energy is something that should be implemented in not just Trinidad and Tobago, but in other Caribbean countries. As I am a business student, I wouldn't say that I see myself working in the energy sector per se, but I quite definitely see myself implementing it in whatever I pursue."*

As for possible obstacles Ms Soverall perceives regarding the adoption and use of sustainable energy sources, these are of different natures, one financial and the other a case of mentality. In her own words *"the initial cost of implementing renewable energy may dissuade people from making the switch from non-renewable energy. Another barrier I think may prevent or barricade*

*Caribbean countries from adopting sustainable energy practices is that Caribbean people are resistant to change. We are used to what we've grown up with and what has been in place for years and we don't want to make a change, even if that change might benefit us, our descendants and our environment."*

Despite being unaware of any projects or initiatives relating to renewable energy in her native Trinidad and Tobago, she is optimistic that *"there are many opportunities for us to utilize our natural resources in the Caribbean as an energy source"* and she recommends that governments should *"definitely target entrepreneurs, as they may be more willing to try something new. Also, administer more initiatives encouraging sustainable energy that youths and other members of the community can be a part of, so that they can understand why sustainable energy is necessary for a better future."*

We congratulate Ms Soverall for her award-winning essay, which we reproduce below in its entirety. As Albert Einstein (1879-1955) said, "the world as we have created it is a process of our thinking. It cannot be changed without changing our thinking," a fact confirmed by the laureate's stance after researching her subject and discovering a world she previously ignored, but which she now embraces and promotes.



### **Sustainable Energy: The Way to a Better Future**

Sustainable energy refers to energy that comes from natural, renewable sources. These sources of energy form faster than we can use them and take the form of solar, wind, geothermal or hydropower energy, to name a few. Although sustainable energy seems to be the most logical way to retrieve energy needed, the most used source of energy is non-renewable energy or fossil fuel (coal, oil, natural gas). Fossil fuels became popular in the Industrial Revolution, mid-1700s, when it was discovered that coal burned longer than wood (biomass), which was used prior to coal's discovery. Since then, fossil fuel has been the main source of energy used. However, this has been proved to have adverse effects on the environment. These range from pollution to health problems and emphasize the need to transition from non-renewable energy to renewable energy. The list stating reasons why non-renewable energy should be replaced by sustainable energy is nearly inexhaustible.

For one, fossil fuels undergo a chemical reaction when they are burnt, releasing harmful emissions, carbon dioxide for example, into the air. These emissions are harmful to the environment as they result in air pollution. It is estimated that Trinidad and Tobago produces up to 53 million tonnes of CO<sub>2</sub> per year.<sup>1</sup> While natural gas produces between 0.6 and 2 pounds of carbon dioxide equivalent per kilowatt hour and coal produces between 1.4 and 3.6 pounds of carbon dioxide per kilowatt hour, sustainable energy produces as low as 0.02 and 0.04 pounds of carbon dioxide per kilowatt hour.<sup>2</sup> Emissions like sulfur dioxide and nitrogen oxides contribute to acid rain, which damages ecosystems, and smog, which can cause asthma.<sup>3</sup>

Furthermore, a transition from non-renewable to sustainable energy would result in an improvement of public health. An MIT study shows that air pollution gained from generating power is the cause of 52,000 deaths per annum and a NYU study disclosed that nearly \$5 billion US in health costs are related to fossil fuel emissions' cause of premature births.<sup>4</sup> Coal dust is also a major cause for respiratory illnesses, heart diseases and cancer. In addition to this, an increase in temperature due to climate change in the Americas presented diseases that

previously, had only been found in Africa, Malaysia and other warmer climates. Diseases like Chikungunya and Zika affect citizens economically and financially as they are unable to work.<sup>5</sup>

Another reason to implement sustainable energy is that it can produce more opportunities for employment as it is more labour intensive whereas non-renewable energy is capital intensive. The need for jobs is great in Trinidad and Tobago as the last recorded unemployment rate was 4.5%.<sup>6</sup> Wind energy requires labour to assist in manufacturing, development, construction, installation, operating and maintenance. This employed up to 75,000 full-time workers in the US in 2011. Other renewable sources of energy require even more labour, the highest being hydroelectric, which provided jobs for approximately 250,000 people in the US in 2009.<sup>7</sup>

Trinidad and Tobago focus mainly on fossil fuel for a source of revenue. However, as a flourishing Caribbean country, we can enable alternative means of revenue, one of these being tourism. Since Trinidad and Tobago is one of the main producers of fossil fuels, one way we can support the region's transition from non-renewable to renewable energy is by reducing fossil fuel production. If Trinidad and Tobago were to reduce the amount of fossil fuels produced, there would be great benefit to our environment and citizens. A reduction in fossil fuel production would mean less air pollution from harmful emissions released from drilling. This would also mean that there would be a decrease in health problems for the citizens of Trinidad and Tobago, which can lead to longer life expectancy, thus improving our quality of life. Trinidad and Tobago can implement systems that utilize renewable energy, which betters the environment and helps lower the country's unemployment rate.

To conclude, air pollution reduction, public health improvement and job provision are just a few ways that prove that transitioning to sustainable energy is the best decision to make and Trinidad and Tobago can assist in this transition by reducing fossil fuel production and implementing renewable energy.

## References

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