IS THE CLIMATE OF THE WHOLE EARTH REALLY CHANGING?

Yes! Earth has been getting warmer... fast! Global climate is the average climate over the entire planet. And the reason scientists and kids like you are concerned is that Earth's global climate is changing. The planet is warming up faster than previously observed.

THE GREENHOUSE EFFECT

The greenhouse effect is natural for the Earth. Greenhouse gases are like a blanket that keeps the planet warm. Without the greenhouse effect, the Earth would be much colder than it is now—so cold that we couldn’t live here. But here’s the thing. Greenhouse gases - especially carbon dioxide - are increasingly in the atmosphere because of the burning of fossil fuels such as coal and petrol. Our “blanket” is getting thicker. The planet is heating up, just like you would if you pile a thick layer of blankets on your bed. You can kick the blankets off if you get too hot. The Earth can’t - and that’s the problem.
HOW ARE YOU AND THE CARIBBEAN AFFECTED?

**Global Warming** is the recent increase in the world’s temperature that is believed to be caused by the increase of certain gases (such as carbon dioxide) in the atmosphere.

**Ocean Acidification** happens when excess carbon dioxide from the atmosphere ends up in the ocean. The chemical make-up and temperature of the Caribbean seas, as well as pH, are changed, which slows new coral growth and decreases shellfish fisheries.

**Risk to water quality** during both droughts and flooding because water resources are diminished or sewer systems and water treatment plants become overwhelmed.

**Increasing risk of some airborne allergens** which can contain potentially infectious organisms that can worsen asthma and allergies.
Changing and erratic rainfall which impacts farmer’s ability to plan their growing seasons.

Rising sea levels in some areas could result in coastal erosion, increase salinity of water resources, and increase risk of storm surges.

**ACTIONS YOU CAN TAKE**

You can help by planting a tree. Your new plants and trees will help to remove the greenhouse gas Carbon Dioxide (CO₂) from the air.

Recycle everything you can… aluminum cans, cardboard, food cans, plastic, glass, newspapers, magazines, junk mail, phone books, and anything made of paper.

Be aware of how much water you use. Turn water off when you are not using it, for example, when you brush your teeth.
Turn off lights, TVs, fans, and computers, when you do not need them.

Ask your parents to buy reusable grocery bags. Help them to remember to bring them into the store. Drink tap water - filtered, if you like – instead of bottled water. Use a reusable bottle. Plastic water bottles are an environmental disaster!

Climate Change impacts are evident across the Caribbean. What are some of the changes you observe and what actions do you think are most important? Tell us in a blog post of up to 400 words, vlog or tweet using the hashtag #CaribbeanClimate. Your responses will be featured at www.caribbeanclimateblog.com

The Caribbean Community Climate Change Centre (CCCCC) coordinates the region’s response to climate change. Officially opened in August 2005, the Centre leads regional efforts to educate the people of the Caribbean, advises governments and communities on adaptation and mitigation measures and encourages the development of sectors that are climate resilient for the security of CARICOM nations. The Centre's Clearinghouse is a repository of Caribbean specific information and data on climate change.