

## 21 Facts about Climate Change

1. Now, there is NO disagreement whether: (a) the world has become quantifiably warmer; and (b) the global climate system is changing.
2. Scientists have generally agreed Global Warming is “human-induced”
3. Global surface temperature increased  $0.74 \pm 0.18$  °C during the last century. In Wider Caribbean Region, this associated sea temperature increase has triggered over 500 significant coral bleaching incidents since 1980. A further 1.1-6.4 °C rise is estimated during the 21st century.<sup>ii</sup>
4. New research indicates that the ocean could rise in the next 100 years to a meter higher than the current sea level – which is three times higher than predictions from the UN's Intergovernmental Panel on Climate Change. In the Bahamas, 80% of the landmass is within 1.5 m of mean sea level.<sup>iii</sup>
5. Global warming will likely to cause dramatic expansion of Dead Zones in oceans.<sup>iv</sup>
6. Taken collectively, all the Small Island States of the Caribbean Sea, the Atlantic, Pacific and Indian Oceans contribute less than 1 % to global emissions.<sup>v</sup>
7. Global warming equals stronger hurricanes. An increase in hurricane maximum wind intensities of at least 5-10 % by the 2050s is projected. Four major hurricanes impacted the Caribbean basin in 2004, causing more than US\$ 5.0 billion. There were 27 named storms in 2005, 15 of which became hurricanes. An unprecedented 4 hurricanes reached category 5 status. The current decade (2000 – present) has already experienced more category 5 systems than any other decade<sup>viii</sup>
8. Top 13 warmest years on record have all been in last 19 years, with scientists stating it's not “a statistical accident”. The year 2008 tied with 2001 as the eighth warmest year on record.<sup>viii</sup>
9. Latest energy calculation suggests trapping CO<sub>2</sub> or switching to nuclear power will not solve global warming problem.<sup>ix</sup>
10. Since 2000, Greenland's glacier has lost 920.5 square kilometers of ice, more than 10 times the size of Manhattan. Switzerland's glaciers have lost 12% of their ice volume since 1999. Researchers have told that earth climate has reached the point where it doesn't have to warm any more to continue losing ice on earth.<sup>x</sup>
11. According to the latest World Bank analysis, Caribbean Coral Reefs could disappear by 2060.<sup>xi</sup>
12. In June 2008, NOAA made official statement that the Caribbean Monk Seal has gone extinct, determining them as the first type of seal to go extinct from human pressure.<sup>xii</sup>
13. A recent study suggests global warming already adds more than 150,000 deaths and 5 million illnesses every year. The numbers are predicted to double by 2030. The Wider Caribbean Region is considered to be one of the most vulnerable places against the impact.<sup>xiii</sup>
14. Climate change will pose serious threats against food and water security. In Wider Caribbean Region, higher temperature, reduced rainfall, more frequent droughts will cause more heat stress on crops/animals, and reduces growth rates and thus leads to lower yields.<sup>xiv</sup>
15. Sea-level rise and associated saline intrusion into ground water will cause decline in potable

water - both supply and quality. In Jamaica, up to 80% of the island freshwater is supplied by ground water.<sup>xv</sup>

16. Coral reefs throughout the Caribbean have been comprehensively 'flattened' over the last 40 years. One fifth of the Earth's coral reefs have disappeared since 1950.<sup>xvi</sup>
17. Wider Caribbean Region has experienced major losses of Reef fish in last 15 years.<sup>xvii</sup>
18. As global warming whips up more powerful and frequent hurricanes and storms, the world's coral reefs face increased disruption to their ability to breed and recover from damage.<sup>xviii</sup>
19. Recent study found plankton stores much less CO<sub>2</sub> than expected, shattering the possibility of Iron Fertilization.<sup>xix</sup>
20. Coral reefs in the Caribbean have suffered significant changes due to the proximal effects of a growing human population, jeopardizing over 4 billion dollars in services worth from fisheries, tourism and coastal protection.<sup>xx</sup>
21. Study suggests part of the Caribbean and Central American will have less summer rain with rising temperature in near future.<sup>xxi</sup>

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