

## CLIMATE MORATORIUM: IS THERE TIME?

Climate change advances inexorably. Extreme conditions are currently the new 'normality': torrential rains and flooding, heat waves, pronounced draught and vegetation fires, more intense hurricanes and typhoons. October 2012 was the 333<sup>rd</sup> consecutive month with global temperatures above the average for the 20<sup>th</sup> century. Unfortunately, the achievements of the United Nations Framework Convention on Climate Change (UNFCCC) are not in line with the climatic reality. The latest Conferences of the Parties (COPs): Copenhagen 2009, Cancun 2010, Durban 2011 and Doha 2012, have failed to establish a new agreement to replace the controversial Kyoto Protocol (KP), which expired last December 31<sup>st</sup>. An amendment was agreed in Doha, extending the KP until 2020. However, Russia, Japan, Canada and New Zealand did not sign the agreement, and the USA never ratified the protocol. In this way, the industrialized countries with binding commitments only represent ~15% of the global emissions of greenhouse gases (GG). These countries must report during 2014 the fulfillment of their reduction commitments. Very likely the reductions will be similar to those promised in the Copenhagen Agreement, which are insufficient to reduce global warming (*Interciencia* 35: 624-631; 2010).

Together, the industrialized countries committed to the KP, reduced their emissions with respect to 1990 in ~16%, overcoming the established goal, but many did not fulfill their individual goals and some increased their emissions. The reduction was achieved through a combination of factors: weakness of the economies, transfer of manufacturing processes to developing countries (the KP is based on the production of GG and not in their consumption), purchase of carbon credits through the Clean Development Mechanism (*Interciencia* 35: 798; 2010) and conscientious/genuine

efforts to limit emissions. However, the global GG emission increased 50% between 1990 and 2011, due to the growth of the developing countries, especially China and India, whose economies are based on the burning of carbon, the fuel with the largest GG emission. The use of carbon will continue to increase on a global scale and it is predicted that in 2017 it will become the main source of energy. Since developing countries are not committed to the KP, this situation cannot be legally objected.

At Doha it was also agreed to establish a new Agreement in 2015 that would enter in force in 2020 and in which all countries would commit themselves, in a binding manner, to control GG emissions. The new Agreement that would replace the KP should have been agreed upon before the beginning of 2013, but the lack of political willingness in the part of those integrating the UNFCCC led to this dangerous moratorium. The problem consists in the uncertainty about the achievement of the needed accords. Time is running short and the delay in taking decisions will result in more expensive solutions that will eventually become unfeasible (*Nature* 493: 35-36, 2013). The objective of UNFCCC is to maintain the temperature rise below 2°C with respect to the temperature of the pre-industrial era, but the models predict an increase of at least 3°C for 2050. It is notorious that the increase produced, of less than 1°C, is already significantly affecting the planet. Now, if the goal is to avoid a climatic catastrophe the slow diplomacy of the UN ought to be reinforced with other more expeditious instances. The probabilities of achieving the goal of 2°C are larger if actions of mitigation are furthered in 2015, instead of doing so after 2020. The participation of all countries, industrialized as well as developing, is crucial. Policy makers should imitate the climate and change immediately. There is no time.

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