



Christiana Figueres
Credit: Twitter



Mario Molina
Credit: Centro Mario Molina



Joseph Alcamo
Credit: UNEP

In the lead up to Ban Ki-moon's Climate Summit last year, Christiana Figueres, Mario Molina, and Joseph Alcamo wrote the following Editorial which appeared in newspapers and news websites worldwide on September 23rd 2014.

Based on the Synthesis Report of the Fifth Assessment Report of the Intergovernmental Panel on Climate Change which came out on 27th of October 2014, Figueres, Molina and Alcamo conclude that

- We have to attain climate neutrality as soon as possible in the second half of the century, i.e. a balance between those emissions entering the atmosphere and the capacity of the Earth to absorb them, if we want to achieve the goal of holding a global temperature rise below 2 degrees C
- This will require significant investments in cleaner, greener energy and energy efficiency in transport and buildings alongside smarter management to sustain, expand, and restore degraded coastal zones to forests and soils. However, this will be a much less costly economic development path for the entire planet, preventing potentially enormous costs connected with climate change impacts.

In the meantime, the Lima Summit took place and in spite of some set-backs, goals for reaching climate neutrality have become part of the negotiating text for a Paris Climate Treaty.

By Christiana Figueres, Mario Molina and Joseph Alcamo

Climate Neutrality—A Much Needed Long Term Vision

In a few short days the UN Secretary General will host a major climate summit: it is a moment in time for heads of state, cities, organizations, and companies to announce bold new initiatives to address climate change in the short to medium term.

It is also a moment for an ambitious, scientifically credible and clear vision on where the world needs to aim over the long haul.

Bold initiatives are certainly needed now to slow the growth in emissions before 2020, peak global emissions shortly thereafter and rapidly put in place policies capable of delivering clean and resilient development.

Yet, like a young person planning her career, a mayor looking at future demographics or a corporation evolving a business strategy there also needs to be a long term view of where we want to be fifty years or so down the road.

That long term vision is climate neutrality as soon as possible in the second half of the century.

There is ample evidence from the Fifth Assessment Report of the Intergovernmental Panel on Climate Change that global

greenhouse gas emissions have to be zero or near zero by the end of the 21st century if we want to achieve the goal of holding a global temperature rise below 2 degrees C.

And it is the best guarantee of ensuring that the poor and vulnerable are spared from ever more threatening impacts such as heat waves, crop failures, floods and water shortages that will increasingly threaten their lives and livelihoods; continued, unabated emissions pose an unacceptable risk of pushing our climate system toward potentially irreversible changes with highly damaging impacts to all sectors of society.

Let us be clear. Climate neutrality is not nirvana or an alternative universe---it is about dramatically reducing current greenhouse gas emissions to the point where we reach a balance between those emissions entering the atmosphere and the capacity of the Earth to absorb them.

This will require charting the path from the high emission society we have today—including initially through some level of certified carbon offsets-- to a deep, decarbonization of the global economy before arriving finally at a climate neutral family of nations.

It also demands a rapid transformation in the way we value healthy ecosystems to ensure that Nature will continue to play an ever more central role in removing carbon from the atmosphere.

This will require significant investments in cleaner, greener energy and energy efficiency in transport and buildings alongside smarter management to sustain, expand and restore degraded coastal zones to forests and soils.

Overall this will be a much less costly economic development path for the entire planet, preventing potentially enormous costs connected with climate change impacts; it will also be good for jobs with many emerging in constructing green buildings, low energy transportation systems and other climate-friendly infrastructure and natural resource management.

The effort is undoubtedly long term and ambitious but must be seen as the eventual target so that decisions taken now are taken with the long game in mind.

Climate neutrality may seem like a tall order in 2014 with global emissions still climbing

despite the growing penetration of renewable energy, improved energy efficiency in many countries and actions to sustainably manage natural assets like forests.

But some countries have already glimpsed the long term and are pointing their economies in that direction: from Bhutan and Costa Rica to Papua New Guinea, Sweden and Switzerland.

Many cities affiliated with associations like ICLEI and C40 are pledging ambitious long term targets some of which call for 80, 90 and even 100 per cent emission reductions. These pioneering urban centres range from Copenhagen and Stockholm to Oslo and Seattle.

Visionary companies, many of them household names in the Internet, high tech and banking sectors, are following suit.

The UN Secretary General's Summit in late September is about raising ambition *en route* to the Lima, Peru UN Climate Convention meeting later in the year and in advance of the UN Climate Convention meeting in Paris, France in late 2015.

In Paris, nations have agreed to ink a new agreement that can mark a turning point towards bending down the current greenhouse emissions curve and assisting the poor and vulnerable to better adapt to the climate change already underway.

But as the science spells out, this is not the end game, if poverty is to be truly eradicated and our collective goal of a safe and secure world is to be realized.

Only a long term vision of climate neutrality in the second half of the century can do that and in doing so provide a real and exciting prospect for over nine billion people of a functioning, fit and healthy world for generations to come.

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