

**Mario Molina – Opening Statement**  
**COP-16/CMP-6, Cancun, Mexico, November 29, 2010**

I would like to welcome all of you to Mexico and to Cancun, and to the United Nations Climate Change Conference, the COP-16 and the CMP-6. I am truly honored to have the opportunity to participate in the inauguration of this event. As a scientist this gives me the opportunity to emphasize the crucial role that the scientific method has played in elucidating the nature of the climate change problem.

This Conference of the Parties is a truly historic event: climate change is the most serious environmental challenge our society has ever confronted, and we have the opportunity at this event to successfully address this problem and to engage in a process that will ultimately reduce the risk of severe damage to our environment with possibly catastrophic consequences.

The problem is indeed very challenging, but we do have the means to address it effectively. Last year, at the COP-15 in Copenhagen, more than a 100 heads of state supported the goal of limiting the average temperature increase of the Earth's surface below two degrees Celsius in order to prevent dangerous interference with the climate system. It is often stated that this is what science tells us; let me explain, though, that science does not tell us what to do; it only advises us what might happen as a result of different courses of action. The two degrees figure comes about by considering that there are technological solutions to the problem at hand; and by considering as well that the cost of taking the necessary measures to achieve the two degrees goal is relatively small, possibly only one or perhaps two or three percent of global GDP. But, most importantly, the consensus among economic analysts is that the cost of not implementing such measures is very likely significantly higher. In fact, postponing action and thus risking a temperature increase of four or more degrees could imply astronomical costs for future generations, threatening both our economic systems and our governance systems.

Recent scientific findings tell us that if we continue with unabated emissions of greenhouse gases there is a significant risk of reaching certain tipping points in coming decades as the surface temperature increases, leading to changes in the Earth's climate system that for all practical purposes will be irreversible, such as melting of the poles, drying of the Amazon forest, or a disappearing Indian monsoon. Such catastrophes could have devastating consequences for literally hundreds or even thousands of millions of the Earth's inhabitants. And, even if the risk of such events occurring is a mere ten or twenty percent, experts agree that this risk should actually dominate economic considerations.

So, the science is clear; the solution is at hand, and the cost of inaction is no doubt larger than the cost of taking the necessary measures. Why, then, has the problem not been solved? You are surely well aware of the difficulties, and I will not list them all here. Let me just stress that all the countries of the planet win if you come up with the right solutions; they all lose if you don't. Now, I do not underestimate the magnitude of the challenge: developed nations do not want to lose competitiveness; and developing nations and emerging economies want to make sure that their economic development is not threatened. If, however, we all work together, with creativity we can actually improve the chances of achieving the desired economic growth by means of well-planned low-emissions development plans. Otherwise the impacts of climate change might well prevent the eradication of poverty in many developing countries.

I urge you to reach agreement on concrete steps to move us closer to an international regime that formalizes the commitments that many nations have already made, and that incorporates as well strong support for adaptation to climate change impacts. I also urge you to outline in some detail the steps that are required to reach a definitive agreement within the next few years. I urge you furthermore to agree to

take whatever fast-action mitigation measures are feasible, consistent with the Bali Action Plan that calls for all parties to deliver an effective post 2012 regime. We cannot afford to wait yet another decade.

I just mentioned that there are political difficulties. The basic conclusion of the scientific community is that the climate is changing as a consequence of human activities with potentially very serious consequences for society. And yet in all sorts of media reports it has been stated in this past year that this basic scientific conclusion is questionable.

Why is this so? There are powerful interest groups that have mounted a very successful public relations campaign to discredit climate change science. The scientific community is of course aware that the current understanding of the science of climate change is far from perfect, and that much remains to be learned, but enough is known to estimate the probabilities that certain events will take place if society continues with “business as usual” emissions of greenhouse gases. As expressed in the IPCC report, the consensus among the vast majority of climate scientists is that there is a 9 out of 10 chance that the observed increase in global average temperature since the industrial revolution is indeed a consequence of the increase in atmospheric concentrations of greenhouse gases caused by human activities. The existing body of climate science, while not comprehensive and with still many questions to be answered, is robust and extensive, and is based on many hundreds of studies conducted by thousands of highly trained scientists, with transparent methodologies, publication in public journals with rigorous peer review, etc. And this is precisely the information that society and decision makers in government need in order to assess the risk associated with the continued emissions of greenhouse gases. I challenge those that question the validity of the science to a rational and civilized discussion of these matters.

I would like to emphasize that policy decisions about climate change have to be made by society at large, and more specifically by policymakers in coordination with delegates, such as yourselves; scientists, engineers, economists and other experts should merely provide the necessary information. In my opinion, even if there is a mere 50% probability that the changes in climate that have taken place in recent decades are caused by human activities, society should certainly adopt the necessary measures to reduce greenhouse emissions; but here I am not speaking as a scientist, but rather as an individual who strongly supports universal ethical values, and who values the well-being of future generations.

In closing, let me emphasize again that the climate change challenge is urgent and that fast-action mitigation must begin as soon as possible. Our generation has the responsibility to address effectively the climate challenge; there is still time to act, although the window of opportunity is rapidly closing. But I remain an optimist; I trust that science, common sense and our universal ethical values will ultimately prevail.

I wish you the best of luck in your deliberations.

Thank you.

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*Mario Molina received the Nobel Prize in Chemistry in 1995*