

**CHECK AGAINST DELIVERY**

Opening Statement at the 45<sup>th</sup> Session of the IPCC

Hoesung Lee, Chair of the IPCC

Guadalajara, Mexico, 28 March 2017

Welcome to this Session of the IPCC. I'd like to thank the Government of Mexico for their generous hospitality. Indeed, we are becoming familiar with Mexican generosity.

Many Mexican scientists give us their time and expertise to serve as authors.

Two years ago the National University of Mexico hosted a regional outreach event for us.

And now our Session is hosted in Guadalajara, in this region so rich in culture and history. Juan Rulfo, one of the fathers of modern Mexican literature, was born here in Jalisco.

In his novel *Pedro Páramo*, one of the greatest works of Latin American literature, I found these lines, which in their description of nature and their optimism, have a message for those of us working with climate change:

*“There is air and sun, there are clouds. Above there is a blue sky and behind it there may be songs; maybe better voices ... There is hope, in short.”*

We may draw inspiration from nature and the arts, but the IPCC's work is firmly rooted in science.

We are gearing up now for the Sixth Assessment Report, and scientific research and scientific observation are giving us plenty of material to assess.

Last week, the World Meteorological Organization released its annual *Statement on the State of the Global Climate*.

That report confirms that the year 2016 was the warmest on record, a remarkable 1.1°C above the pre-industrial period, and beating the record set the previous year.

Global sea ice extent dropped more than 4 million square kilometres below average, an unprecedented anomaly, in November.

In the High Arctic, Svalbard Airport's 2016 mean annual temperature of -0.1°C was 6.5°C – I repeat 6.5°C – above the 1961-1990 average.

Also earlier this month, the United States National Oceanic and Atmospheric Administration, NOAA, reported that carbon dioxide levels rose in 2016 at a record pace for the second straight year.

CO2 levels measured at NOAA's Mauna Loa observatory rose by 3 parts per million in 2016 to 405.1 parts per million, an increase that matched the record jump observed in 2015.

The 6 ppm surge over two years in greenhouse gas concentrations between 2015 and 2017 is unprecedented in the observatory's 59-year record.

These data are not yet part of an IPCC assessment, but they underline the urgency and gravity of our work.

Science tells us the climate is changing, and science indicates the human activities causing this change.

But in a rapidly changing climate, we need science more than ever to help us understand the impacts of climate change, its risks, and options for addressing it.

Climate researchers are developing new methods to better observe the climate system and understand the processes at play.

They are developing new models to explain how the Earth's climate will react to different scenarios, at the global and regional scale, in the near and long term.

This research is crucial for monitoring and understanding today's changes, so that we can predict the weather and near-term climate better, and build projections we can trust.

These new knowledge resources are essential for sustainable development planning and strengthening resilience in our communities; and they underpin IPCC assessments.

I call on all our member governments to continue to invest in scientific research that targets the knowledge gaps highlighted in the Fifth Assessment Report, and is oriented to the needs of society.

Supporting science also means ensuring the IPCC is in a position to carry out its activities.

This week we will again be reviewing our resource mobilization strategy.

Please consider this carefully and think what you can do to support the work of the IPCC.

Our work is rooted in science; its hallmark is policy-relevance.

A reminder of that is the Special Report on *Global Warming of 1.5°C*, whose authors held their first Lead Author Meeting in Brazil earlier this month.

As you know, that report was requested by the 21<sup>st</sup> Conference of the Parties to the United Nations Framework on Climate Change, when they reached the Paris Agreement.

In accepting that request from COP 21, the Panel added the context of sustainable development and poverty eradication.

At this Session of the Panel we will consider the outlines of two special reports whose themes are also highly policy-relevant: the Special Report on climate change and oceans and the cryosphere, and the Special Report on climate change, desertification, land degradation, sustainable land management, food security, and greenhouse gas fluxes in terrestrial ecosystems.

Experts at the scoping meetings in Monaco and Dublin respectively have come up with carefully considered draft outlines that I commend to your attention.

I would also like to take this opportunity to welcome our new Deputy Secretary, Kerstin Stendahl, who is attending her first Session of the IPCC.

Those of you who participated in the last Session in Bangkok will recall the atmosphere of collegiality, cooperation and compromise that allowed us to reach agreement on the outline of *Global Warming of 1.5°C*.

I very much hope that the same spirit will inform our deliberations on the two special reports before us today.

I wish you fruitful and productive discussions and declare the 45<sup>th</sup> Session of the IPCC open.