

**SCOPING MEETING FOR SPECIAL REPORT ON OCEANS AND CRYOSPHERE
OPENING SESSION, MONACO, TUESDAY 6 DECEMBER 2016
STATEMENT BY IPCC CHAIR HOESUNG LEE**

His Serene Highness, Prince Albert II of Monaco

His Excellency, Mr Serge Telle, Minister of State of Monaco

His Excellency Mr Bernard Fautrier, Vice-President and CEO of the Prince Albert II Foundation

Her Excellency Madam Marie-Pierre Gramaglia, Minister of Public Works, the Environment and Urban Development

His Excellency Mr Gilles Tonelli, Minister of Foreign Affairs and Cooperation

Ms Ko Barrett, IPCC Vice-Chair and Chair of the Scientific Steering Committee

Ms Valérie Masson-Delmotte and Mr Panmao Zhai, Co-Chairs of IPCC Working Group I

Ms Debra Roberts and Mr Hans-Otto Pörtner, Co-Chairs of IPCC Working Group II

Mr Abdalah Mokssit, Secretary of the IPCC

IPCC Bureau Members, distinguished delegates and friends

Welcome to this scoping meeting for the IPCC Special Report on Climate Change and Oceans and the Cryosphere. With this meeting we are starting the substantive work on the second of our three special reports in this packed and ambitious assessment cycle.

I would like to thank His Serene Highness Prince Albert II of Monaco for the support of the Government of Monaco and the Prince Albert II Foundation in hosting this meeting and providing us with such excellent facilities and organization. And of course the Government of Monaco was a driving force in persuading the Panel to include this special report in our work programme.

Like our other special reports, this is a highly policy-relevant subject. Oceans make up more than 70% of the planet's surface. Since 1971 they have absorbed 90% of the energy increase in the climate system and 30% of anthropogenic CO₂ emissions, leading to acidification. Thus oceans are a key component of the climate system, and understanding oceans is essential to understand climate change. Furthermore, hundreds of millions of people depend on fisheries for food, often one of their major sources of protein.

Similarly millions inland depend on glaciers for water with implications for food security and energy.

Changes in sea-level are affected by changes in the ocean and the cryosphere, through the combined effects of ocean thermal expansion and changes in inland water storage in glaciers and ice sheets. Hundreds of millions of people living in coastal areas are vulnerable to this sea-level rise and related impacts.

Last week several of us here took part in an IPCC outreach event in Jamaica for the small island states in the Caribbean. The intensive and stimulating discussions there reinforced to us just how vulnerable people in these small island developing countries are to the impacts of climate change on oceans.

Global interest in this topic is reflected by the fact that we had almost 500 nominations of experts to participate in this meeting. The invited participants to this meeting reflect areas of expertise, geographical balance and gender balance.

The Steering Committee has produced a detailed background document, including an analysis of the responses to the pre-scoping questionnaire, and I don't want to pick out any one theme here at the expense of the others. Suffice it to say that we have a wide range of topics to consider for inclusion in the report.

But let us look at some of the things science is already telling us about oceans and the cryosphere, as reflected in the Fifth Assessment Report as a point of departure.

- The oceans are warming, acidifying and losing oxygen.
- World-wide marine species are suffering displacement.
- Warm-water coral reefs are already under pressure from warming.
- Fish and invertebrates will be displaced and diversity reduced in low latitudes at temperatures of 2°C above pre-industrial levels.
- Acidification will affect molluscs and crustacean fisheries at temperature increases of 2°C.
- It is very likely that Arctic sea ice cover will continue to shrink and thin and that Northern Hemisphere spring snow cover will decrease during the 21st century as global mean surface temperature rises. Global glacier volume will further decrease.

We know this much, but we also have gaps in the previous assessment, while emerging literature since the Fifth Assessment Report has added to our knowledge.

We have a lot to get through in the coming days in order to draft the outline of this special report. I very much hope that the cooperative spirit that has been manifested in recent IPCC meetings will

continue to facilitate this work. Thank you for your attention and I wish you a fruitful and productive meeting.

I would now invite His Serene Highness Prince Albert II to address this meeting. Your Serene Highness, you have the floor.

-Ends-

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