



## Statement of IOC/UNESCO at the opening of SBSTA-51

Ariel Troisi, IOC/UNESCO Chairperson, 2 December 2019

I'm pleased to greet you on behalf of the Intergovernmental Oceanographic Commission of UNESCO, the IOC, of which I am the chairperson.

The just-released IPCC Special Report on the Ocean and Cryosphere in a Changing Climate highlights the crucial changes happening in the ocean as consequence of the greenhouse gas emissions. The global ocean has taken up more than 90% of the excess heat in the climate system, with observed marine heatwaves, acidification and a loss of oxygen. It has absorbed more than 25% of human-induced emissions, and according to recent scientific findings, this storage capacity of the world ocean seems to be reducing. Marine species are on the move, and the coverage of blue carbon ecosystems is being further reduced. Future shifts in fisheries and degradation of marine ecosystems will affect human well-being and even identity. Rising mean and extreme sea level will increase risks for coastal communities.

But at this Blue COP, rather than dwelling on these risks, we should be searching for solutions.

Systematic observations of the ocean have provided the evidence I am citing, and research has enabled both the projections of what will come, but also that search for ocean-based solutions and positive action.

The IOC is the lead agency for the Global Ocean Observing System, GOOS, and you will have a chance to hear from its chair tomorrow at the Earth Information Day. The GOOS focus on delivery for climate is the ocean component of the Global Climate Observing System GCOS. As we heard in the statement by GCOS, the ocean observing system for climate is in large part supported by limited-lifetime project funds – its sustainability is in question every year. The IOC has responded to questions on ocean and climate by the SBSTA and its research Dialogue.

The IPCC report also helps us identify gaps in systematic ocean observations to support the Parties of the UNFCCC. These gaps include the deep ocean, polar regions, measurements to track carbon in the ocean, particularly in the coast, and observations and data to support local adaptation in many countries.

The IOC is leading the preparations of the UN Decade of Ocean Science for Sustainable Development 2021-2030. We anticipate this decade of the *science we need for the ocean we want* will catalyze transformative and innovative science-based solutions.

We look forward to working closely with the parties of the Convention in systematic ocean observations and research to help you and all of us address the challenges before us.

Thank you.