

## **Adaptation and mitigation strategies in changing oceans** GCCA+ Session at COP25

**Venue:** EU Pavilion ; EU Oceans Day

**Date:** 15:00 –16:30 on 7 December

### **Background**

“Oceans and climate are inextricably linked, and oceans play a fundamental role in mitigating climate change by serving as a major heat and carbon sink. As concerns about climate change increase, the interrelationship between oceans and climate change must be recognized, understood, and incorporated into climate change policies.” IPCC 2015.

The ocean plays a central role in regulating the Earth’s climate. The Fifth Assessment Report published by the Intergovernmental Panel on Climate Change in 2013 (IPCC, 2013) revealed that it has thus far absorbed 93% of the extra energy from the enhanced greenhouse effect, with warming now being observed at depths of 1,000 m.

Carbon dioxide and other greenhouse gas emissions are giving rise to changes in the ocean including:

- Temperature rise – effects include polar ice melting, coral bleaching and fish migration;
- Ocean acidification – Ocean acidification reduces the ability of marine organisms, such as corals, plankton and shellfish, to build their shells and skeletal structures. It also exacerbates existing physiological stresses and reduces growth and survival rates during the early life stages of some species;
- Sea level rise – effects include drowning wetlands and increased coastal erosion/flooding; and
- Expanding of oxygen minimum zones as an indirect effect of increased stratification;
- Increasing in marine heat waves.

### **The Blue COP**

The Santiago Climate Change Conference, which will feature the 25th session of the Conference of the Parties (COP 25) to the UNFCCC and meetings of the UNFCCC subsidiary bodies, is expected to take place from 2-13 December 2019. The pre-session period will be from 26 November-1 December 2019.

Host nation Chile, which has control over almost 18 million square km of the world’s oceans, is calling this year’s COP 25 UN climate conference in Santiago a “Blue COP”. At a special preparatory meeting in Madrid in 2018 politicians, scientists, and NGOs discussed ways to use the meeting to gain political traction. Some governments at the meeting requested that ocean health be placed on the formal agenda for the COP 25. This would hoist marine issues at the top of the list of climate priorities.

Implementing marine protected areas, sustainable fisheries, enhancing adaptation and mitigation strategies in the oceans will be some of the scope areas for this Blue COP. The IPCC Special Report on the Ocean and the Cryosphere in a Changing Climate (SCROCCC) will be released in September 2019, and it is expected to further raise attention on the ocean -climate link.

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## Session Objectives

This session will explore current challenges and opportunities to address the climate and ocean link, and associated adaptation and mitigation strategies over a range of socio-economic context. In addition, this session will discuss the local and regional approach to solve emerging and challenging ocean adaptation issues and analyse how various countries, organizations and institutions could integrate their experience in the 2020 NDC review for ocean-climate indicators.

During this session we hope to expand on understandings of the ways in which climate change interacts with oceans by examining themes that can include, but are not limited to, the following:

- What is the latest best-practices and applications for adaptation in ocean due to extreme climate events such as marine heat waves, hurricanes and rapid hypoxia events?
- What is the latest best-practices and applications for adaptation in ocean due slow on-setting climate driven events such as ocean acidification, sea level rise, deep sea environments loss of productivity and coastal decrease productivity?
- What ocean-related issues are being considered in current NDC review, e.g. ocean-based renewables, low carbon shipping, sea level rise, MPAs, mangroves, blue carbon sinks conservation consistent with the Paris Agreement environmental integrity, coral reefs, sea level rises? How are these issues being assessed and integrated in quantitative indicators and strategies?

## Speakers

1. **Mr. Stefano Signore**, Head of Unit Sustainable Energy and Climate Change, DEVCO
2. **Dr. Manuel Barange**, Director of the Fisheries and Aquaculture Policy and Resources Division at the Food and Agriculture Organization of the United Nations
3. **Dr. David J Wrathall**, Professor and Intergovernmental Panel on Climate Change, Sixth Assessment, Working Group II, Chapter 8: Poverty, Livelihoods and Sustainable Development.
4. **Dr. Sylvie Goyet** - Director of Climate Change and Environmental Sustainability (Noumea), Pacific Community
5. **Dr. Robert Duncan McIntosh**, Oceanography Advisor, SPREP
6. **Dr. Dorothee Herr**, IUCN Global Marine and Polar Program

## Resource Material

1. [GCCA+ Factsheet](#)
2. [Blueprint for International Ocean-Climate Action- Goals and Steps for Governments and Stakeholders](#) drafted by a range of think-tanks;
3. EU Maritime Affairs and Fisheries (MARE)- This Commission department is responsible for EU policy on maritime affairs and fisheries - [https://ec.europa.eu/info/departments/maritime-affairs-and-fisheries\\_en](https://ec.europa.eu/info/departments/maritime-affairs-and-fisheries_en)

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