

MONDAY 12 JUNE
11.45 AM-1:00 PM (CEST)

THE GLOBAL STOCKTAKE AND OCEAN-BASED CARBON DIOXIDE REMOVAL:

Opportunities, uncertainties, risks and
future needs

BERLIN ROOM, WORLD
CONFERENCE CENTER, BONN



OCEAN & CLIMATE
PLATFORM



Plymouth Marine
Laboratory

UC San Diego



SCRIPPS INSTITUTION OF
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DESCRIPTION

The first Global Stocktake (GST) provides the opportunity to include the world's ocean as a key element for nations, and the global community, in delivering the Paris Agreement and addressing the Glasgow Pact of better inclusion of the ocean in all relevant UNFCCC processes. Achieving warming close to 1.5°C by 2050 will not just require massive cuts in CO₂ emissions but also removal of CO₂ from the atmosphere.

Not surprisingly, there is a growing interest in increasing ocean uptake and storage of carbon through intentionally enhancing natural biological and geochemical processes – processes collectively called Ocean Carbon Dioxide Removal (CDR). The ocean currently takes up about 30% of our CO₂ emissions but this ability is slowing down. The ocean is the biggest store of carbon on Earth and the stability of this store under climate change is of great concern. Therefore, understanding the ocean carbon cycle and how it might change under a changing climate as well as understanding the feasibility, uncertainty, risks and verification of different Ocean CDR approaches is essential to avoid unintended consequences.

Collaborative, transdisciplinary research is needed to fully assess Ocean CDR uncertainty, feasibility, the risks associated and to properly define robust methods of verification. For this reason, an internationally agreed code of conduct for scientific research and appropriate governance applications are required. This side event will showcase the uncertainties and potential of Ocean CDR and share recommendations for the future way forward for assessing Ocean CDR methods and their potential for limiting warming to 1.5 °C, enhancing National Determined Contributions and therefore contributing to the GST.

PROGRAMME

HIGH-LEVEL OPENING:

H.E. Peter Thomson, UN Special Envoy for the Ocean

UNCERTAINTIES:

IMPLEMENTING APPROPRIATE SAFEGUARDS

Dr. Sarah Cooley, Ocean Conservancy (virtual)

Understanding the Ocean Carbon Cycle and why there is an urgent need for a code of conduct for Ocean CDR scientific research

Prof. Tom Bell, Plymouth Marine Laboratory

The need for a Monitoring, Reporting and Verification (MRV) framework to assess the efficacy of different Ocean CDR techniques

Dr. Kilaparti Ramakrishna, Woods Hole Oceanographic Institution

Policy and governance requirements for Ocean CDR

Prof. Lisa Graumlich, American Geophysical Union

A perspective on CDR ethics, including environmental justice

POTENTIAL:

CONTRIBUTING TO THE PARIS GOALS

Dr. Joanna Post, UNFCCC Secretariat

The ocean's potential contribution to the GST

Prof. Lisa Levin, Scripps Institution of Oceanography

A summary of potential Ocean CDR approaches, their current uncertainties and relevance to the GST

HIGH-LEVEL CLOSING REMARKS

Dr. Vladimir Ryabinin, Executive Secretary of IOC - UNESCO, and Assistant

Director General of UNESCO

MODERATED BY

Loreley Picourt, Executive Director, Ocean & Climate Platform