

Integrated Ocean Carbon Research (IOC-R)

A formal IOC working group sponsored by:



Global Research Programs where ocean carbon is only one aspect of their mission



GCP is focused on carbon, but not just ocean



IOCCP coordinates ocean carbon observations, but is not a research program





GENERAL ASSEMBLY OF THE UNITED NATIONS

Omnibus Resolution for Oceans and the law of the sea (A/RES/72/73) of 6 December 2017

- Proclaimed the UN Decade of Ocean Science for Sustainable Development 2021-2030 and called upon the IOC to prepare an implementation plan for the Decade in consultation with [multiple stakeholders]
- Invited the UN SG to inform the UNGA about the implementation of the Decade through his report on oceans and the law of the sea based on information provided by IOC





Science Action Plan for the Decade

Decade Societal Outcomes

Science action outcomes

Science action priorities

New/unresolved ocean science
action projects

Focus on young scientists[/early career
professionals/gender]

Inputs from
other relevant
processes
(e.g. IPCC,
WOA-II, ...)
Workshops

Inputs from
global and
regional
consultative
workshops

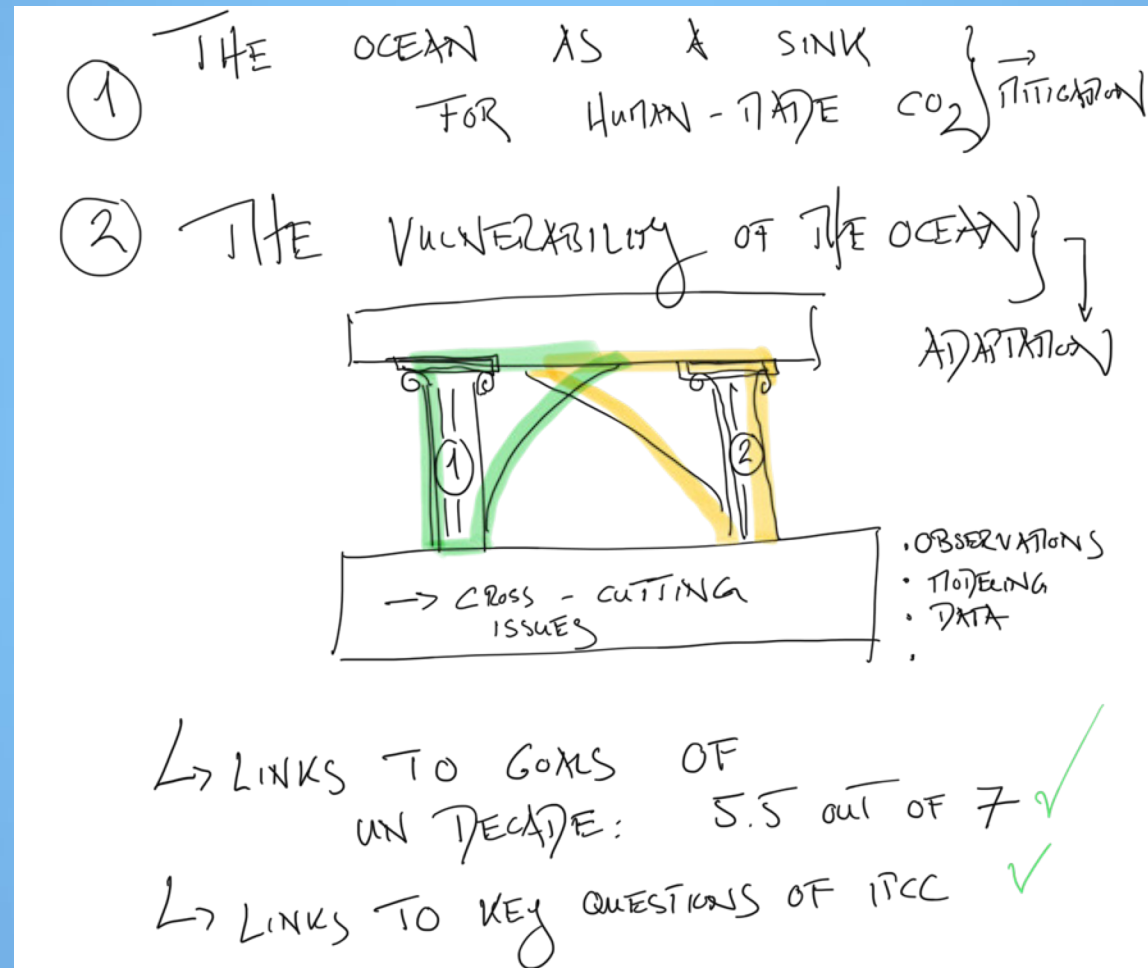
The SAP will be high-level, providing a framework to guide actions by which ocean science can more effectively deliver its contribution to achieving the societal outcomes of the Decade.

Expert Workshop on Integrated Ocean Carbon Research (IOCR)

IOC-UNESCO Headquarters, Paris, France

Oct. 28-30, 2019

Participants: 34
Countries: 16



Mission: The Integrated Ocean Carbon Research (IOC-R) effort aims to address key issues in ocean carbon research through a strategy of research and observational goals.

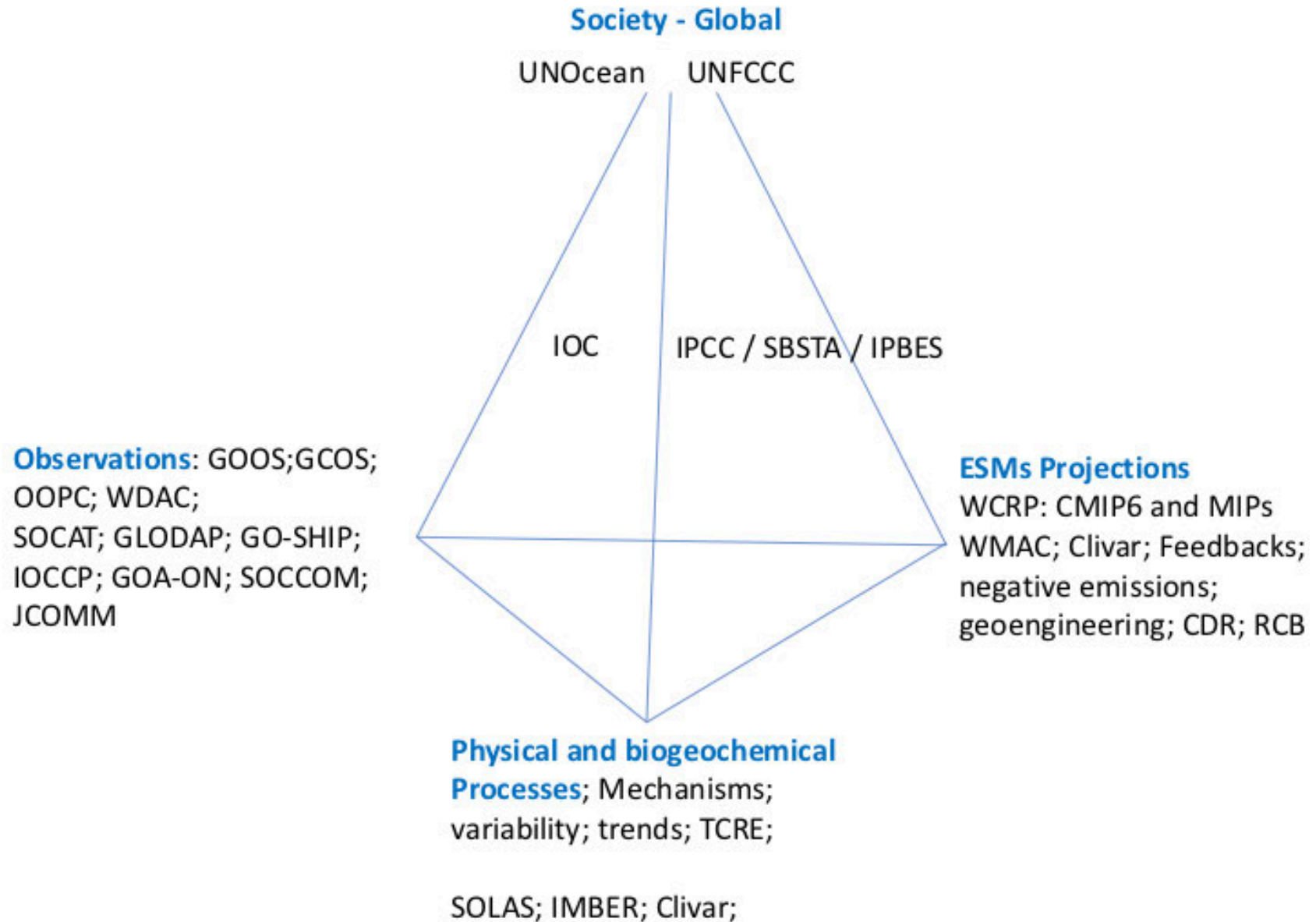
Four Key Questions

1. Will the ocean uptake of anthropogenic CO₂ continue as primarily an abiotic process?
2. What is the role of biology in the ocean carbon cycle?
3. What are the exchanges of carbon between the land-ocean continuum and how are they evolving over time?
4. How are humans altering the ocean carbon cycle?

Approaches

- Evaluate the opportunities and challenges
- Solidify and expand the network of core ocean carbon observations
- Develop regional priorities
- Consider what new process studies and experiments are needed
- Identify new tools and approaches that can be applied to these questions
- Emphasize the integration of models and observations
- Consider the ocean's role in climate solutions- mitigation approaches
- Propose oversight and management mechanisms for an integrated carbon program

Many Different Parts



Thank You
For
Your Time



United Nations
Educational, Scientific and
Cultural Organization



Intergovernmental
Oceanographic
Commission



2021
2030 United Nations Decade
of Ocean Science
for Sustainable Development

One Planet, One Ocean