

The Ocean-Climate Nexus: Key messages from European Marine Board Forum

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Science Officer
European Marine Board Secretariat

A pan-European marine science partnership

A unique European partnership of major marine and oceanographic institutes, research funding agencies and national networks of universities.



Research Performing
Institutes



Research Funding
Organizations



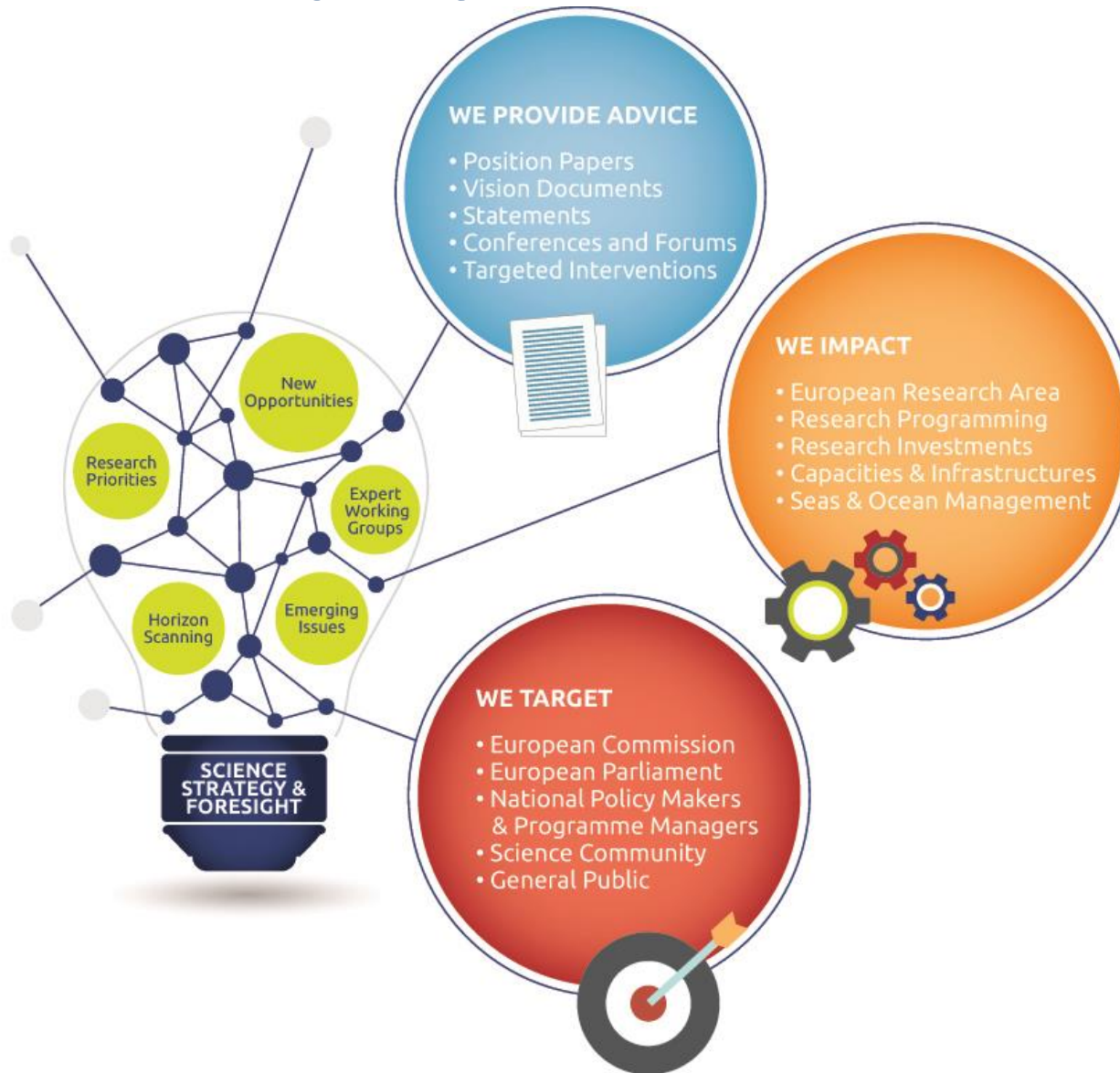
National University
Networks

36 members from
19 countries

Our mission

“The European Marine Board provides a pan-European platform for its member organizations **to develop common priorities, advance marine research, and bridge the gap between science and policy** in order to meet future marine science challenges and opportunities.”

Transferring knowledge to the core of marine research policy



16 years of achievement and counting...



16 YEARS
OF HISTORY



>500 CONTRIBUTING
EXPERTS

2323 PAGES
OF SCIENCE
POLICY ADVICE



11
EU PROJECTS

1014 PAGES
OF WORKSHOP
REPORTS



26
CONFERENCES
ORGANIZED

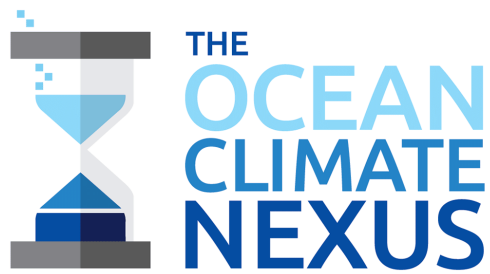
Modelling Continental Shelf Ecosystem
Resources Marine Protected Area
Polar Coastal Marine Spatial Planning Energy
Biotechnology Science Policy Interface
MSFD Environment Sea Level Blue Growth
Ocean Acidification Marine Mammals Food Renewable
Research Infrastructure Research Fleets
Underwater Heritage Policy Data Technology
Pollution Fisheries GES Ocean Human Health
Capacity Building Training Ocean Literacy
Climate Change Biodiversity
Ocean Observation Microbial Deepsea



THE OCEAN CLIMATE NEXUS

THE CRITICAL ROLE OF OCEAN SCIENCE
IN RESPONDING TO CLIMATE CHANGE
21 OCTOBER 2015, BRUSSELS





HOSTED BY
RICARDO SERRÃO SANTOS, MEP

Vice Chair of the Intergroup “Seas, Rivers, Islands and Coastal Areas”

OPENING ADDRESSES

Ricardo Serrão Santos, MEP

Jan Mees, Chair, European Marine Board

Sherri Goodman, President, Consortium for Ocean Leadership (video message)

SPECIAL MESSAGE

HSH Prince Albert II of Monaco (video message)

SCIENTIFIC PRESENTATIONS

Mojib Latif, Helmholtz Centre for Ocean Research Kiel (GEOMAR), Germany

Ceri Lewis, University of Exeter, UK

PRESENTATION OF THE CONSENSUS STATEMENT

Michael Schulz, Centre for Marine Environment Sciences (MARUM), Germany

PANEL DISCUSSION

Speakers &

Vladimir Ryabinin, Executive Secretary, Intergovernmental Oceanographic Commission (IOC), UNESCO

Andrea Tilche, Head of the Climate Action and Earth Observation Unit, European Commission



Joint drafting expert nomination



3 teleconferences

Expert reviews (16) & approved by members of EMB and Ocean Leadership



Consensus Statement: A call from the ocean research community

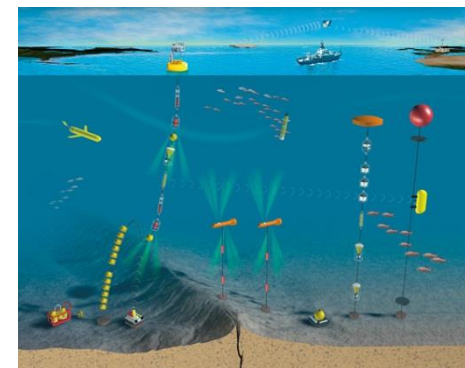
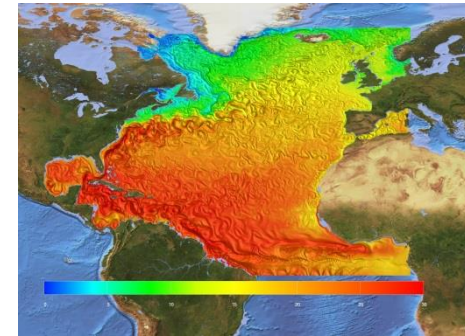


- **To the COP21:**
 - *Recognize* fundamental role of the ocean in the climate system
 - *Deliver* an agreement to reduce greenhouse gas emission and curb damage to the ocean & its ecosystem
 - *Understand & promote* the role of ocean and climate research
- **To research funders:**
 - *Support* ocean-climate research & observation programmes

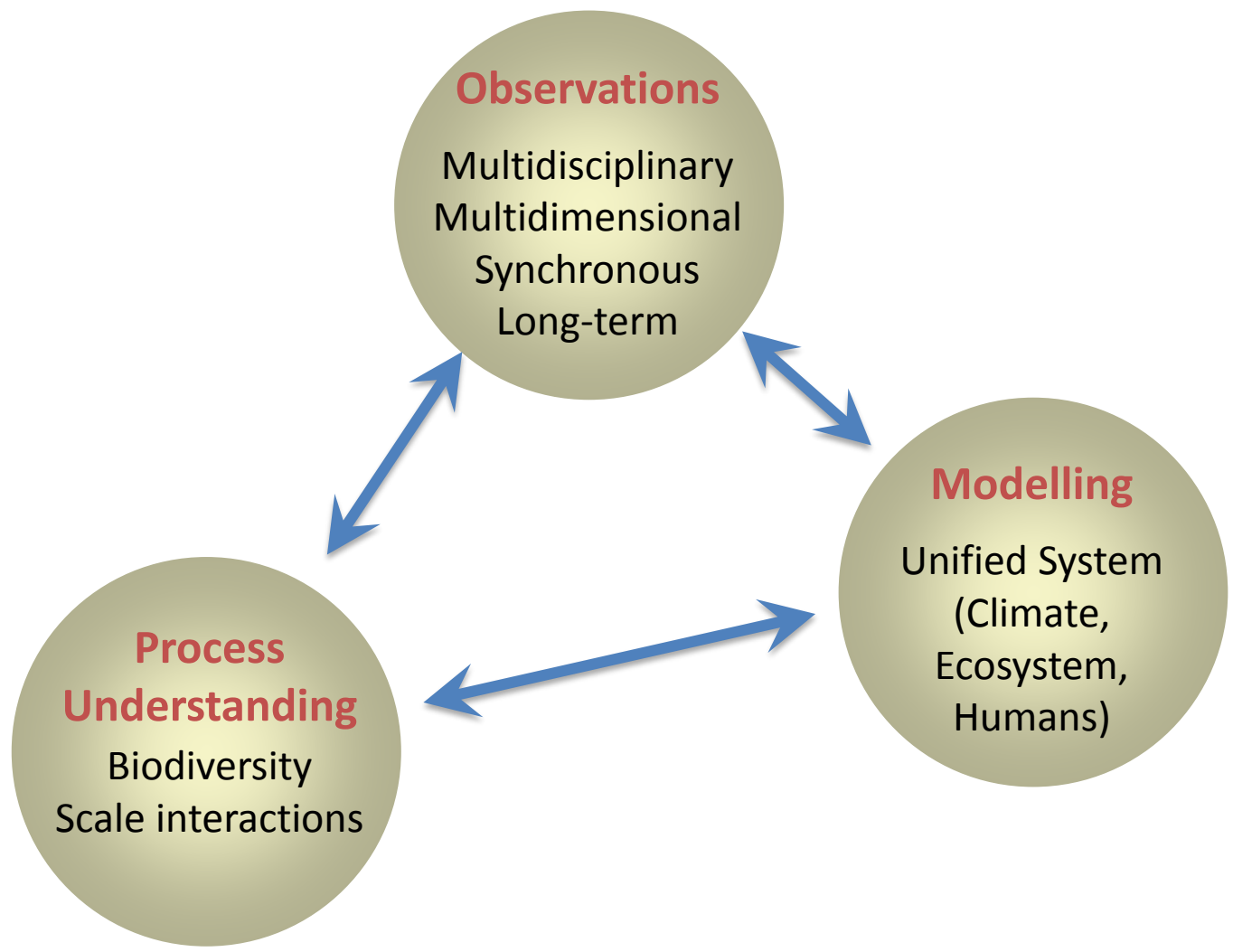


- **Key role of the ocean**
 - Ocean is a key component of the global climate system.
 - Climate change alters physical, chemical and biological properties of the ocean. Marine ecosystems have responded and will continue to respond to these changes.
 - Human societies depend on ocean services, which are sensitive to climate change.
 - Successful adaptation and mitigation strategies must consider the ocean.
- **But, key uncertainties remain...**

- **Insufficient understanding of some key processes, e.g.,**
 - mixing in the ocean interior
 - interactions between ecosystem functioning and biodiversity
- **Sustaining and enhancing the ocean observing system**
 - integrating biogeochemical and biological observations
 - improving coverage (space and time)
 - filling gaps in the deep ocean
- **Combining advanced models with observations**
- **International cooperation**



Towards more reliable projections



Thank you

www.marineboard.eu
www.marineboard.eu/ocean-climate-nexus/