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# Balancing Blue Growth and Sustainability

# Global Priority at the Highest Level



2015-2030  
2021 YILININ VE DEĞERLENERKEN ÇEVRE 14  
10 YILLIK ÇEVRE KAYNAKLARININ SÜRDÜRÜLEBİLİR KULLANIMINI SAĞLAMAK



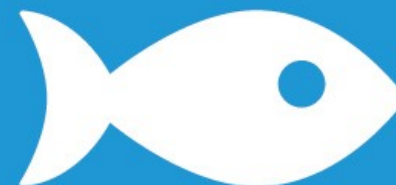
## GOAL 14

CONSERVE AND SUSTAINABLY USE THE OCEANS, SEAS AND MARINE RESOURCES FOR SUSTAINABLE DEVELOPMENT

**SUSTAINABLE DEVELOPMENT GOALS**

More at [sustainabledevelopment.un.org/sdgsproposal](https://sustainabledevelopment.un.org/sdgsproposal)

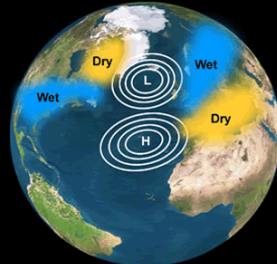
## 14 LIFE BELOW WATER



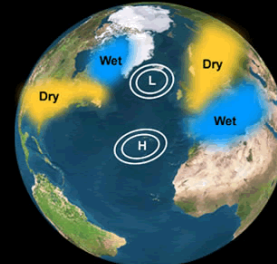
# Global Priority at the Highest Level

## The North Atlantic Oscillation

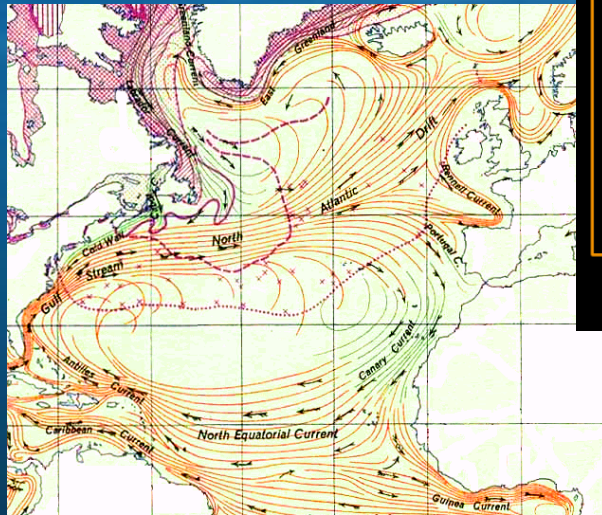
### Positive Phase



### Negative Phase



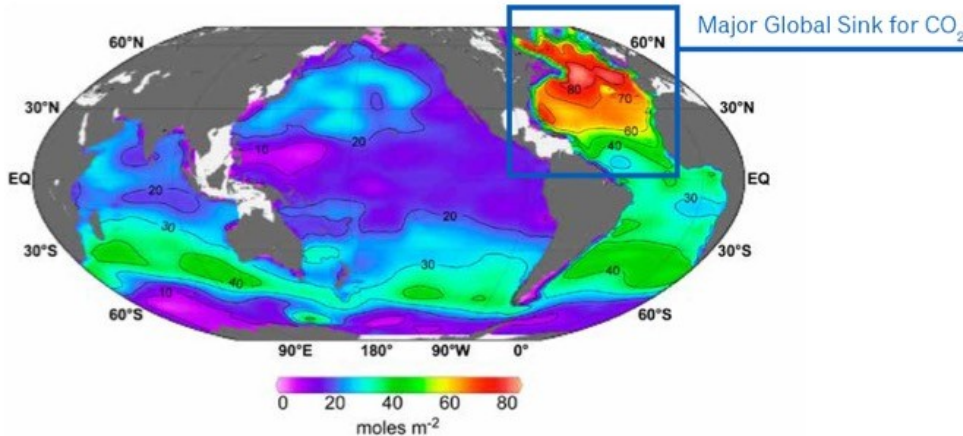
- Climate
- Fisheries
- Ecosystem change
- Pollutants



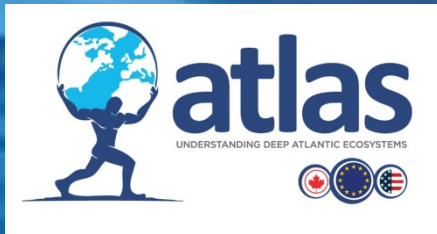
## 2013 Galway Statement

“cooperation is intended to increase our knowledge of the Atlantic Ocean and its dynamic systems. . . By aligning our ocean observation efforts to improve ocean health and stewardship and promote sustainable management of its resources.”

Signatories include Canada, the European Union, and the United States



# Major Programs and Opportunities



A trans-Atlantic assessment and **deep-water ecosystem-based spatial management** plan for Europe (ATLAS)



**Deep-sea Sponge Grounds** Ecosystems of the North Atlantic: an integrated approach towards their **preservation and sustainable exploitation**



Protecting the ocean: Supporting the development of **cost-effective ocean literacy** in Europe



To establish a **fundamental "Sea Change"** in how European citizens view their relationship with the sea, by empowering them, as **Ocean Literate citizens**



Focuses on **restoration of degraded marine habitats** using different technologies, quantifying socio-economic impacts & defining legal policy frameworks.



To **improve and innovate Atlantic observing** by obtaining an international, more sustainable, more efficient, more integrated, and fit-for-purpose system

# Major Programs and Opportunities



## Themes/ Work Packages

- Ocean Literacy
- Seabed and Habitat Mapping
- Shared Access to Research Marine Infrastructures
- Knowledge Sharing Platform
- **Ecosystem Approach to Ocean Health and Stressors**
- Ocean Observation
- Marine Biotechnology
- Aquaculture

# Major Programs and Opportunities



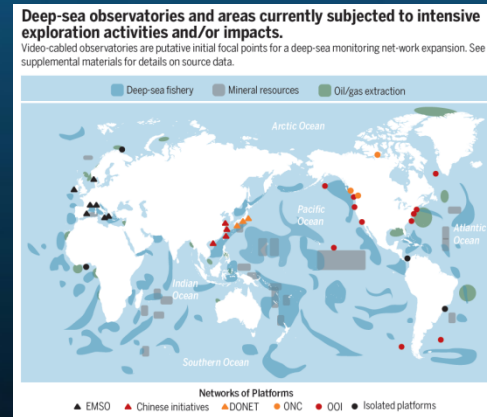
Biodiversity science for sustainability of Canada's three oceans...conservation strategies and cumulative impacts



Predict the export and fate of ocean Net Primary Production (NPP) from satellite and other observations



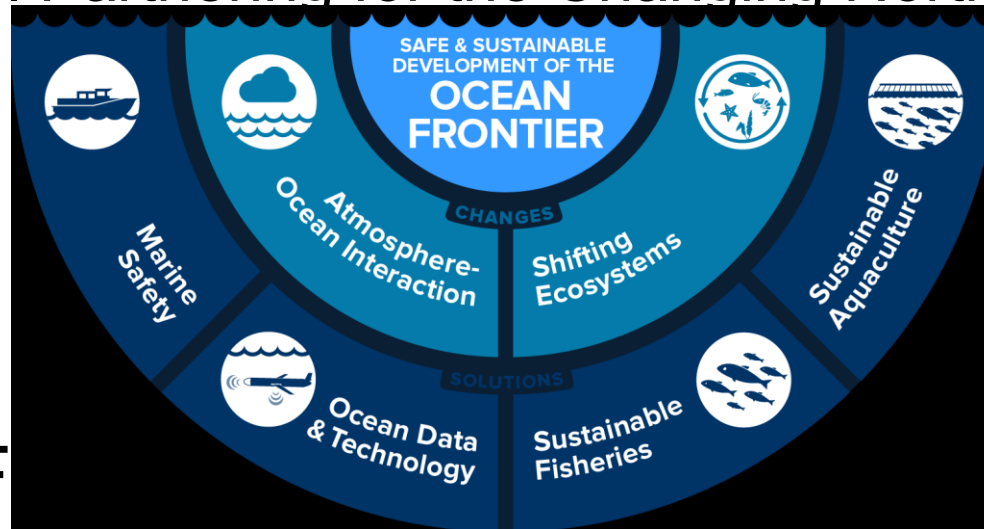
Coordinating observations in the deep ocean to address grand societal issues of climate change prediction & adaptation, ecosystem conservation & sustainable management in the deep ocean



Danovaro et al. 2017  
*Science*

ASPIRE: Atlantic Seafloor Partnership for Integrated Research & Exploration

# The Ocean Frontier Institute: Novel Partnering for the Changing North Atlantic



Initial F

- Changes in Atmosphere Ocean Interactions
- Sustainable Aquaculture
- Marine Safety
- Ocean Data Analytics
- Shifting Ecosystems
- Sustainable Fisheries



# Across the pond....

## In summary...

- One ocean, many shared challenges
- Numerous good reasons to work together
  - nature ignores borders
  - scales of problems large
  - shared infrastructure maximizes efficiency
  - Areas Beyond National Jurisdiction often ignored
- Multiple efforts underway
- Typically funds do not cross borders
- People are the most efficient currency