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Two Ocean Decade Programmes working towards reducing ocean stress

Kirsten Isensee IOC-UNESCO,

GO2NE & GOOD

GOA-ON, & OARS

GO₂NE

Global Ocean Oxygen Network

The Ocean is losing its breath Declining oxygen in the world's ocean and coastal waters



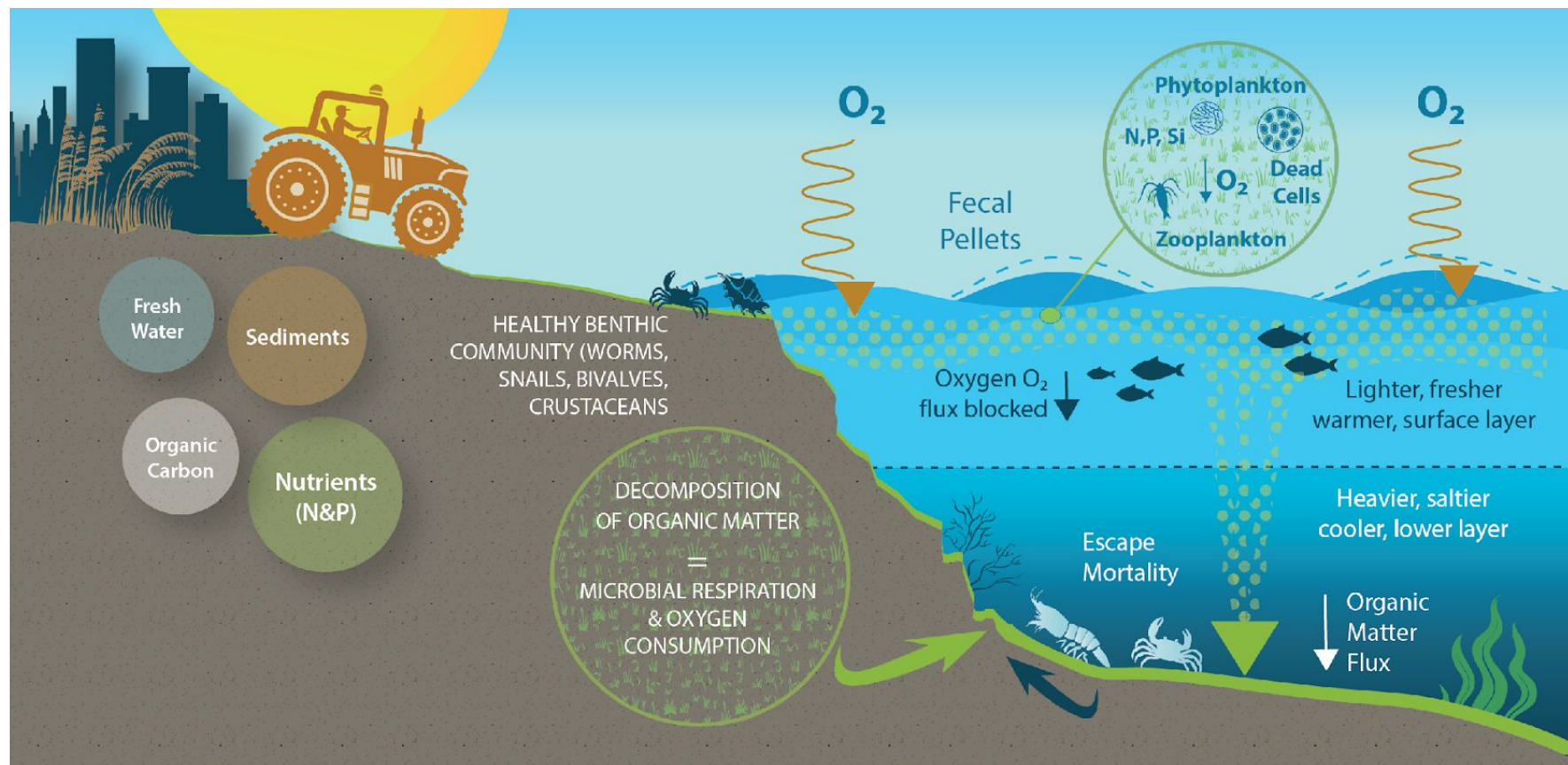
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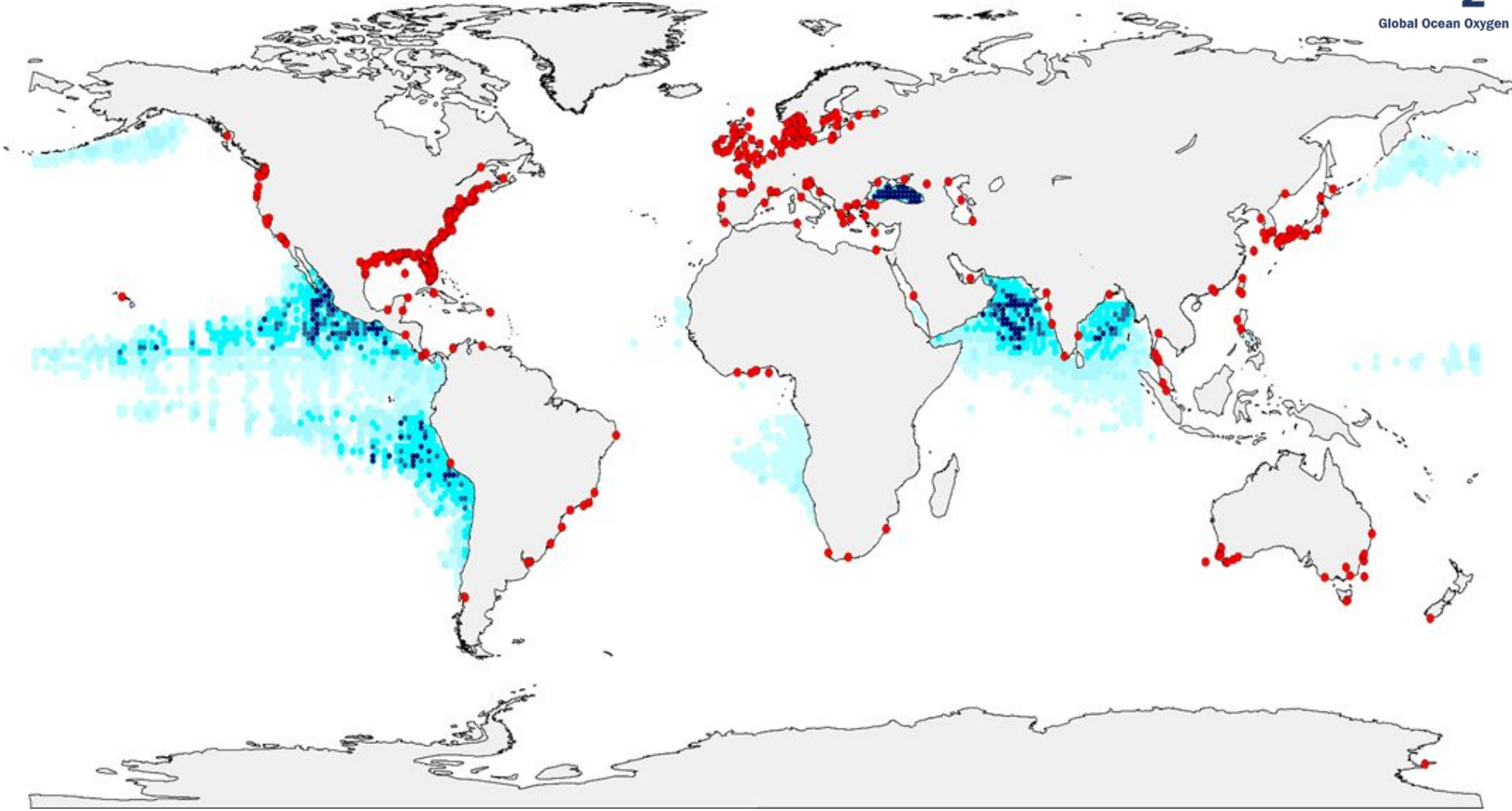
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Andrew Alteri, Denise Breitburg, Francisco Chavez, Sean Crowe, Minhan Dai, Marilaure Grégoire, Véronique Garçon, Dimitri Gutierrez, Shin-ichi Ito, Karin Limburg, Ivonne Montes, **Andreas Oschlies**, Kenny Rose, Jodie Rummer Damodar Shenoy, **Caroline Slomp**, Aileen Tan Shau Hwaim Moriaki Yasuhara

Secretarial support:
Kirsten Isensee, Jeremy Sterling

Previous but still active members:
Gil Jacinto, Lisa Levin, Grant Pitcher, Nancy Rabalais, Mike Roman





GOOD

Global Ocean Oxygen Decade

Global Ocean Oxygen Decade (GOOD):

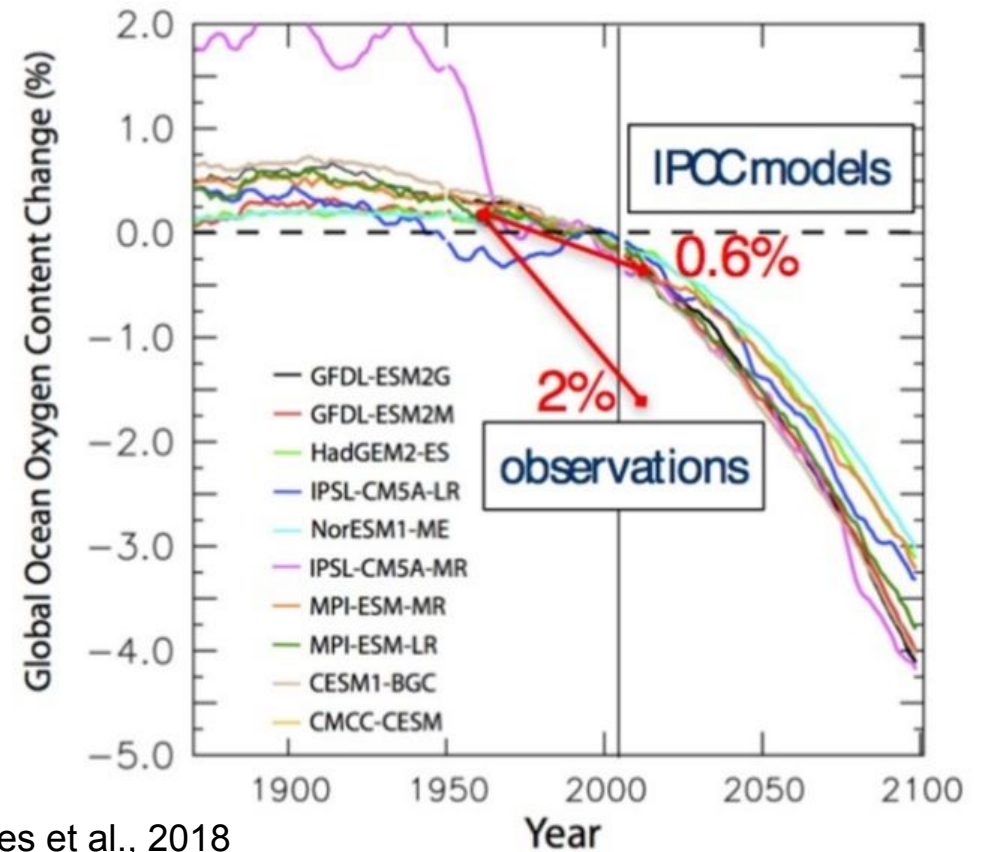
- will raise global awareness about ocean deoxygenation,
- **provide knowledge for action and develop mitigation and adaptation**
- **minimize impacts on the ocean economy** through local, regional, and global efforts, including transdisciplinary research, innovative outreach, and ocean education and literacy.



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Deoxygenation trend over 1960–2005 differs between 0.6% and 2 %



Oschlies et al., 2018

Activities

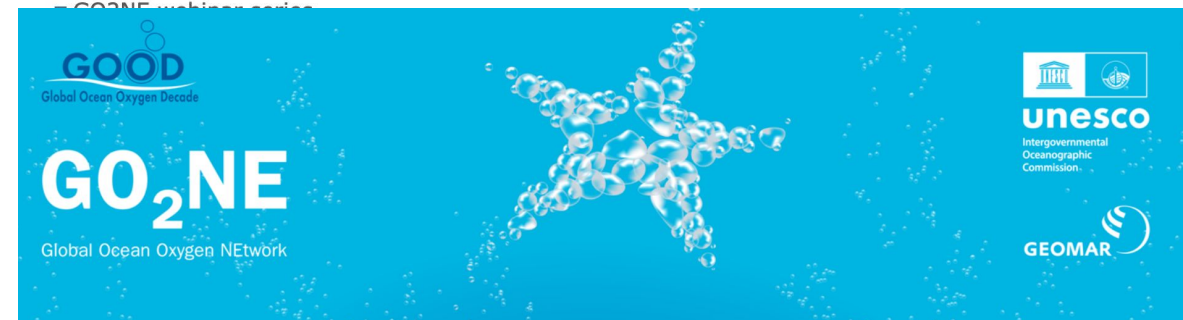
1. Increase knowledge about the causes, impacts and threats of deoxygenation
2. Increased capacity to measure, document, map, monitor and understand ocean deoxygenation,
3. Indicators and related methodologies will be provided to agencies and industries to ensure safe operating spaces,
4. Actionable strategies to mitigate and adapt to ocean deoxygenation on local to global scales.

<https://www.ocean-oxygen.org/>



In the third issue of GOOD News, you can read more about:

- GO2NE working group annual in-person meeting
- ECCWO-5: Ocean Deoxygenation: Physical, Biogeochemical and Ecological Research Advances and Future Needs
- Update of the Global Ocean Oxygen Database and Atlas (GO2DAT) project
- Spotighting Ocean Deoxygenation at World Oceans Day – June 2023
- GO2DAT at the International Ocean Data Conference-II 2023



GO₂NE Webinar Series No.24

20 November 2023 | 17:00-18:00 CET

**Do you want to know more about deoxygenation in the ocean?
Join us for the upcoming webinar!**

GO₂DAT

COASTAL & OPEN, FAIR, transparent QC & QF

DATASETS

Winkler



CTD



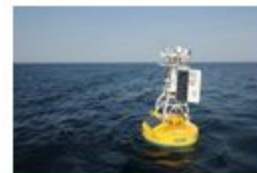
ARGO



Glider



Mooring, emergent, benthic



PRODUCTS: maps and indicators

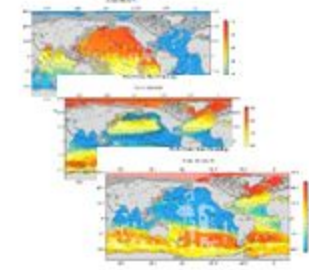
GO₂DAT1

GO₂DAT2

GO₂DAT3

GO₂DAT4

GO₂DAT5



WEB PORTAL



USERS

IOC, WMO, IUCN, FAO, EEA, Civil society, private sector.
IPCC, IPBES, UN-Decade, UNFCCC, SOLAS, GOOS, IMBER, EU Green Deal, ..



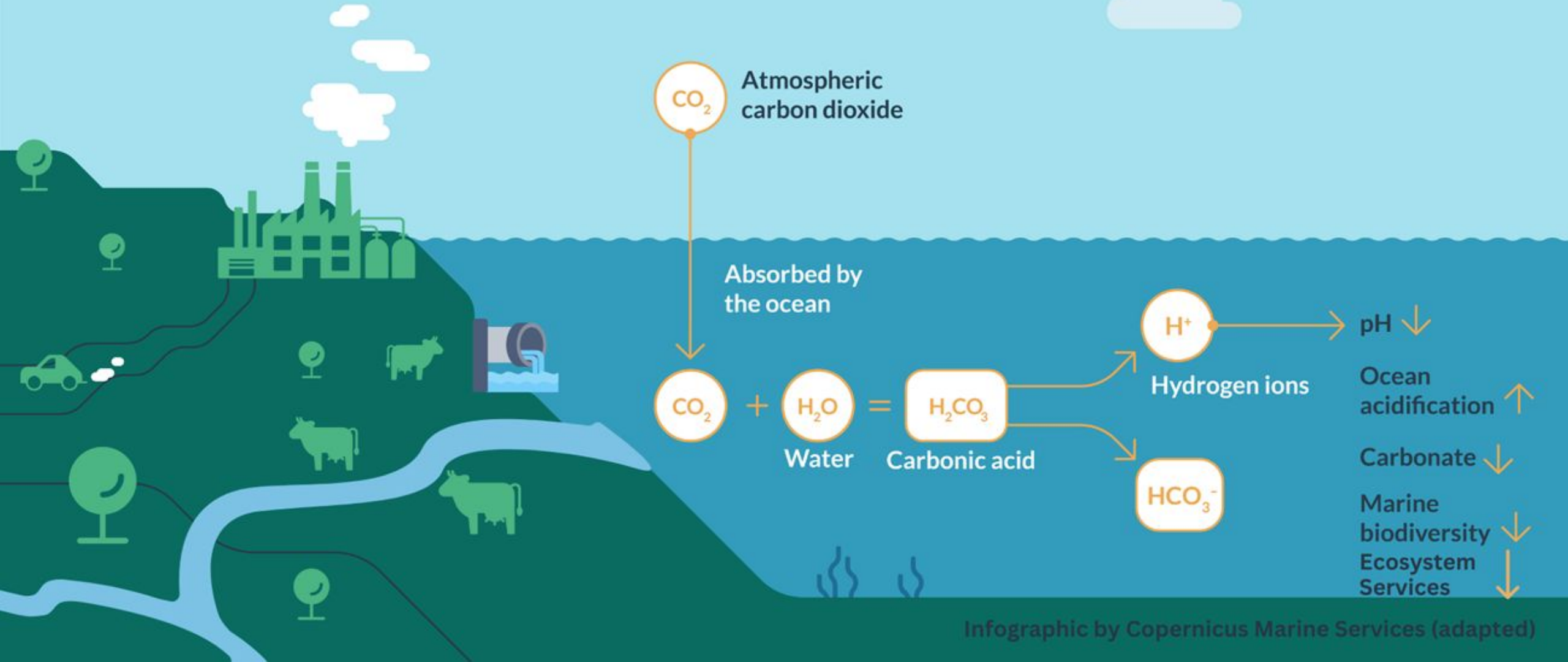
Ocean Acidification Research for Sustainability (OARS)

A Decadal Vision For Ocean Acidification Research To Sustainably Manage Our Oceans.

Jan Newton
(Univ. of Washington)
Kirsten Isensee
(IOC-UNESCO)
Steve Widdicombe
(Plymouth Marine Lab)

Amy Kenworthy
(OARS Project Officer)

Ocean Acidification

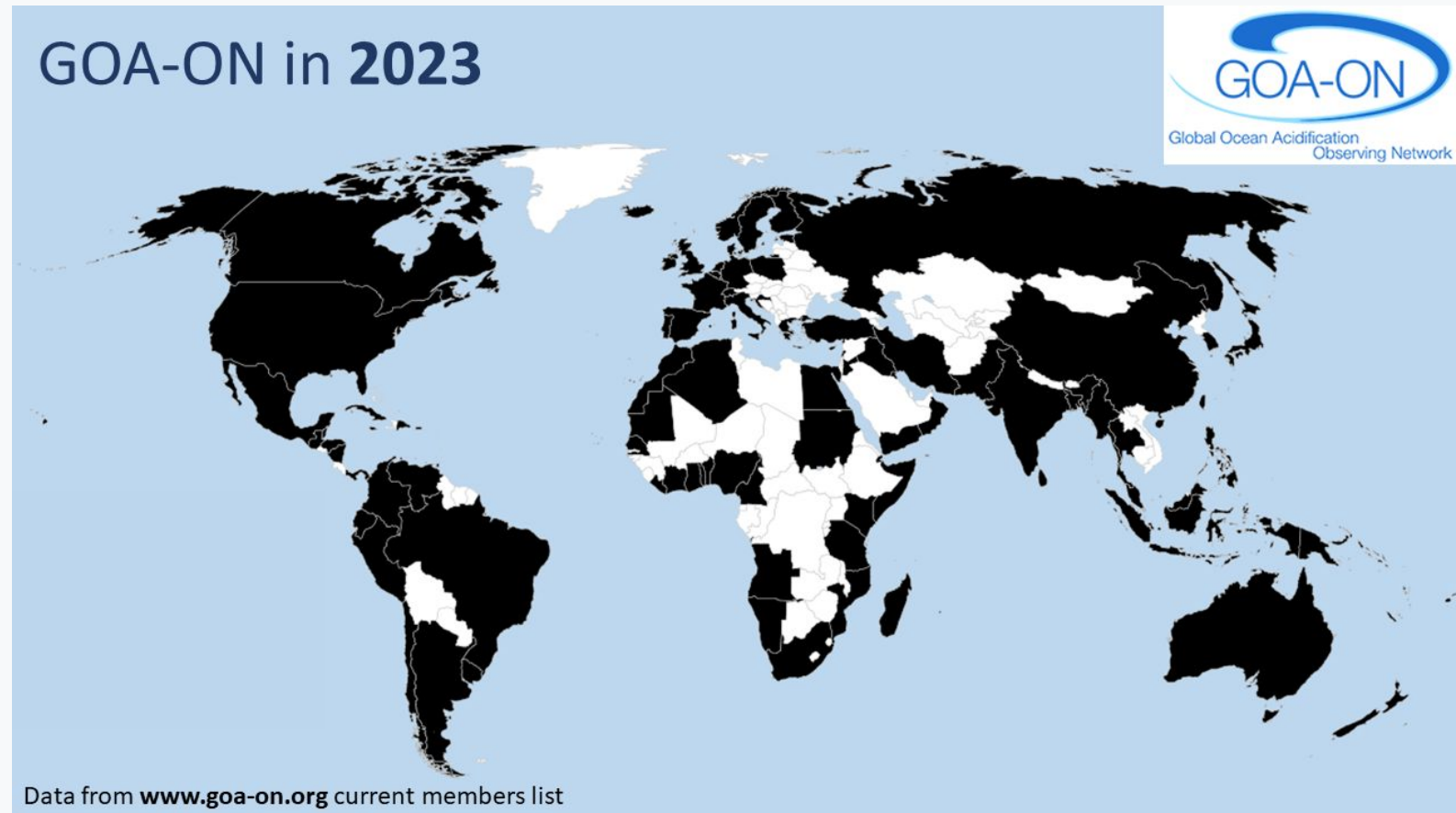


This Global Problem needs a Global Effort

Formed in 2012, the Global Ocean Acidification-Observing Network (GOA-ON) is an international community partnership.



- GOA-ON is a network of 900+ scientists from 114 countries and territories.
- GOA-ON has more than 140 members from 24 Small Island Developing States (SIDS), which translates to 12% of the membership



Regional Hubs

2023



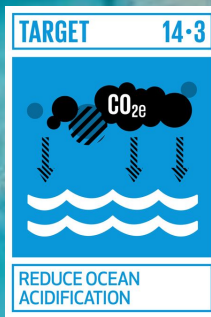
NEW!
Caribbean Hub



Southern Ocean Hub in
formation



The Science We Need for the Ocean We Want



www.oars-un.org

The United Nations
Decade of Ocean Science
for Sustainable Development
(2021-2030)



GOA-ON's response to the UN Ocean Decade



Fostering the co-development of ocean acidification science, including the impacts on marine life and sustainability of marine ecosystems in estuarine-coastal-open ocean environments.

In June 2021, the UN Ocean Decade endorsed the OARS programme.

Proposed by GOA-ON, on behalf of the ocean acidification community, OARS offers a 10-year road map to deliver the ocean acidification science we need.

Creating a Community of OA Action



Ocean Acidification Research for Sustainability
A Community Vision for the Ocean Decade

The OARS Outcome 'Onion'



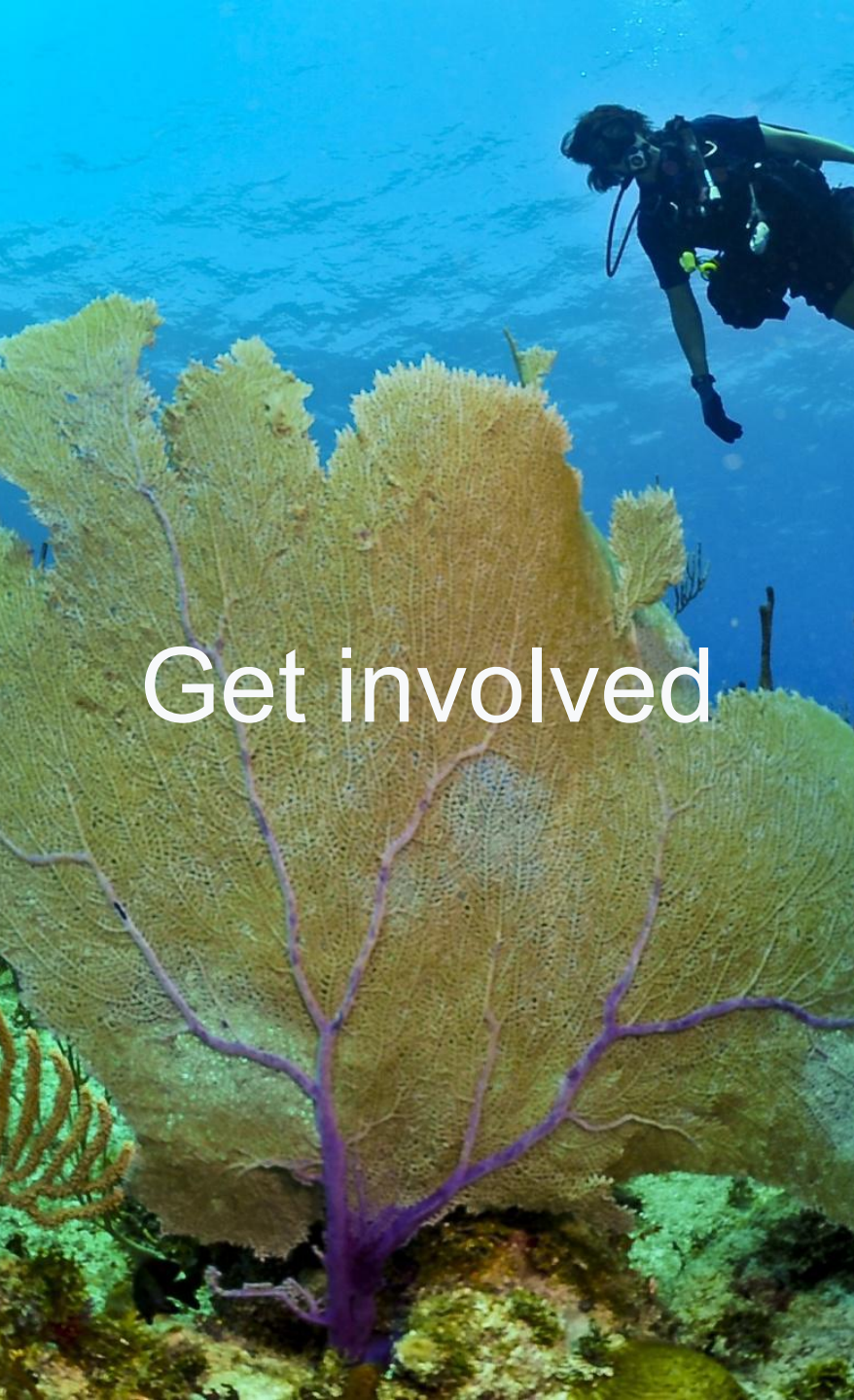
Co-Champions; will provide the leadership for each outcome.

Outcome Working Group; will support the co-champions in setting out the Theory of Change process that will deliver the implementation plan.

Experts and Specialists; will provide targeted knowledge and input for the development and delivery of the Outcome strategy.

Delivery Partners; will develop, lead and deliver specific activities, engagements and outputs that will contribute to the Outcome

Stakeholders and funders; will co-develop and contribute to key Outcome activities, engagements and outputs.



Get involved

Become a Working Group member

Create new projects and actions, as guided by the white papers, the co-champions and the working groups.

Register a Commitment to one or more of the OARS Outcomes.



Ocean Acidification
Research for Sustainability

Register Your Commitment

Join the OARS Ocean Decade
Programme in tackling ocean
acidification.

www.oars-commitments.org

