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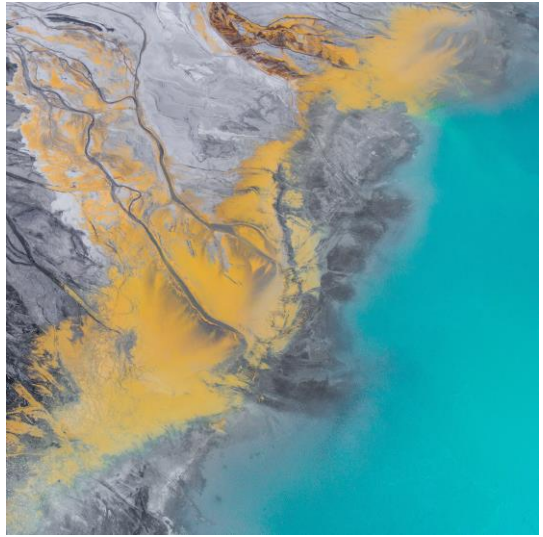
5th Symposium | Accra, Ghana | 24 – 28 October 2022



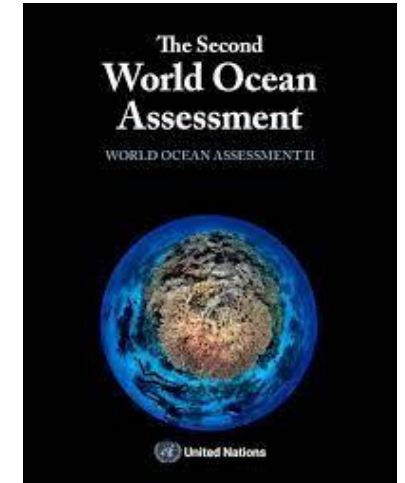
The Global Environment Monitoring System for the Ocean and Coasts (GEMS Ocean) Programme

Harnessing multi-stakeholder partnerships to transform data into action





Framing of GEMS Ocean



UNITED NATIONS DECADE ON
**ECOSYSTEM
RESTORATION**
2021-2030



**2021
2030** United Nations Decade
of Ocean Science
for Sustainable Development



**Convention on
Biological Diversity**

GEMS Ocean Vision and Mission



Vision

A global environment monitoring system that provides **relevant open and easily accessible ocean and coastal data, analysis, and information**, guiding actions to protect and sustainably use marine and coastal resources.

Mission

Co-design and convene a global Community of Practice across experts and society at large to provide **capacity, analysis, innovation** and synthesized information to decision and policy makers, civil society, international organizations as well as **coastal communities** worldwide in a holistic approach to keep the global ocean and coasts healthy and productive.



Strategic Goals

Problem 1: There are many observation and monitoring systems, but they are rather fragmented.

Problem 2: Many Small Island Developing States (SIDS) and Developing Countries don't have the capacity and resources to undertake effective monitoring.

Problem 3: There is much information and data already but is not easily accessible and interpretable by non-experts.

GOAL 1: Promote and convene a **transdisciplinary partnership** approach focusing on sustainable coastal and ocean use and ecosystem health.

GOAL 2: Strengthen **capacity development** on key aspects of ocean monitoring especially in **SIDS and Developing Countries**

GOAL 3: Provide **access to the use of quality assured, interoperable, open environmental data**, analysis and **sets of indicators to governments and stakeholders.**

Core-partnership (to date)



United Nations
Educational, Scientific and
Cultural Organization



Intergovernmental
Oceanographic
Commission



FUTURE OF THE SEAS
& OCEANS INITIATIVE



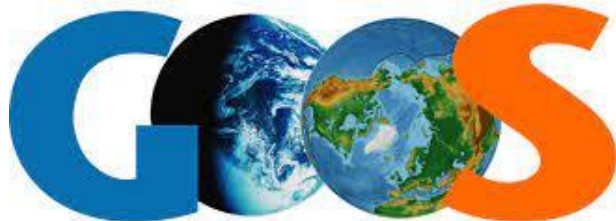
MERCATOR
OCEAN
INTERNATIONAL



WCMC



A Centre collaborating with UNEP



The Global Ocean Observing System



research for global sustainability



WORLD
RESOURCES
INSTITUTE

The Science We Need for the Ocean We Want



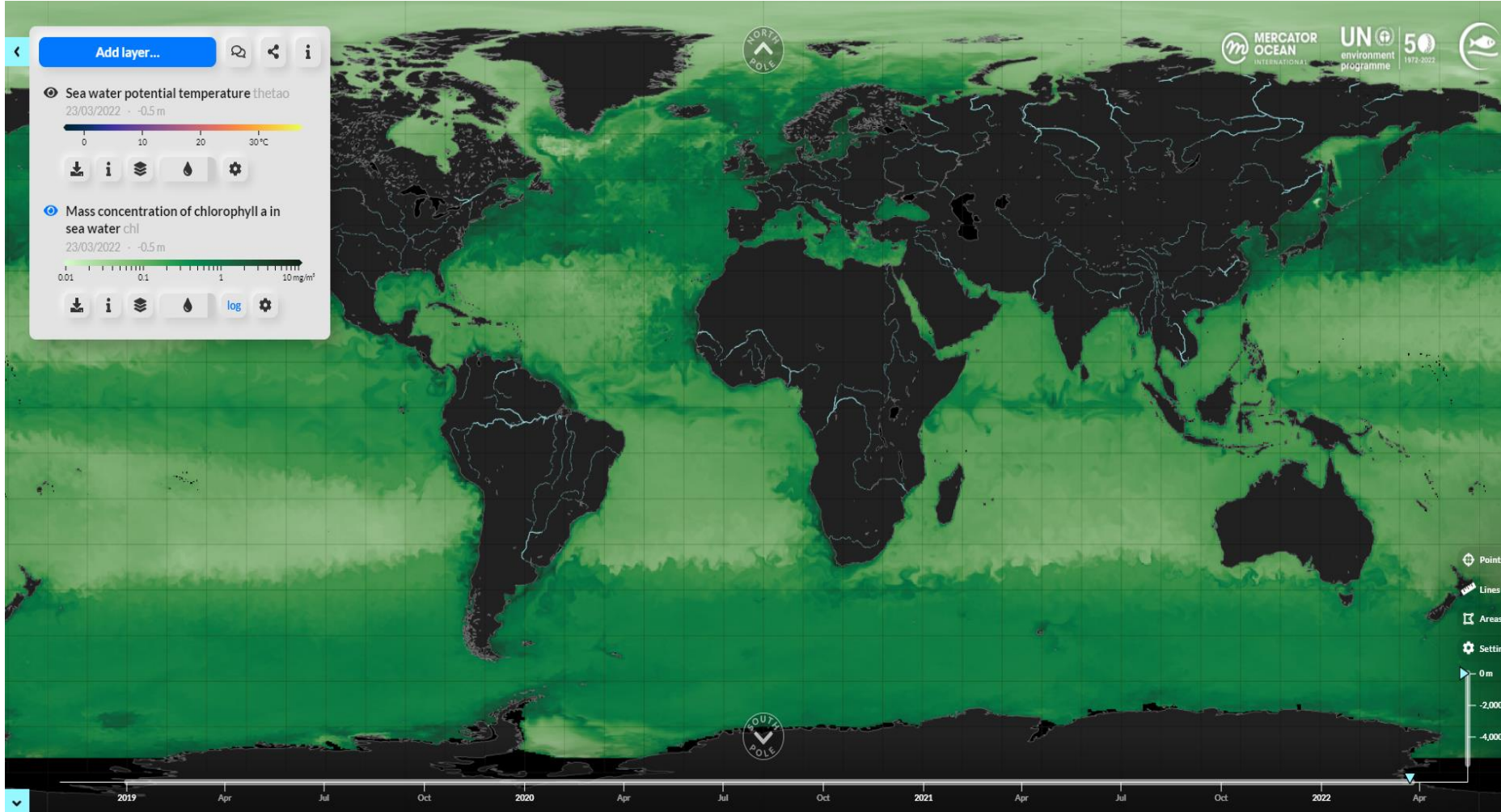
**2021
2030** United Nations Decade
of Ocean Science
for Sustainable Development



- A predicted ocean based on a shared and coordinated global effort in the framework of the UN Ocean Decade
- To galvanize and coordinate efforts towards the co-development and integration of worldwide ocean prediction activities, serving Decade objectives and in close collaboration with the Decade endorsed actions and other stakeholders



Data system and supporting services



**MERCATOR
OCEAN**
INTERNATIONAL

My Ocean Tool to combine and display global 4 dimensional break down of EOVS

MyOcean Tool

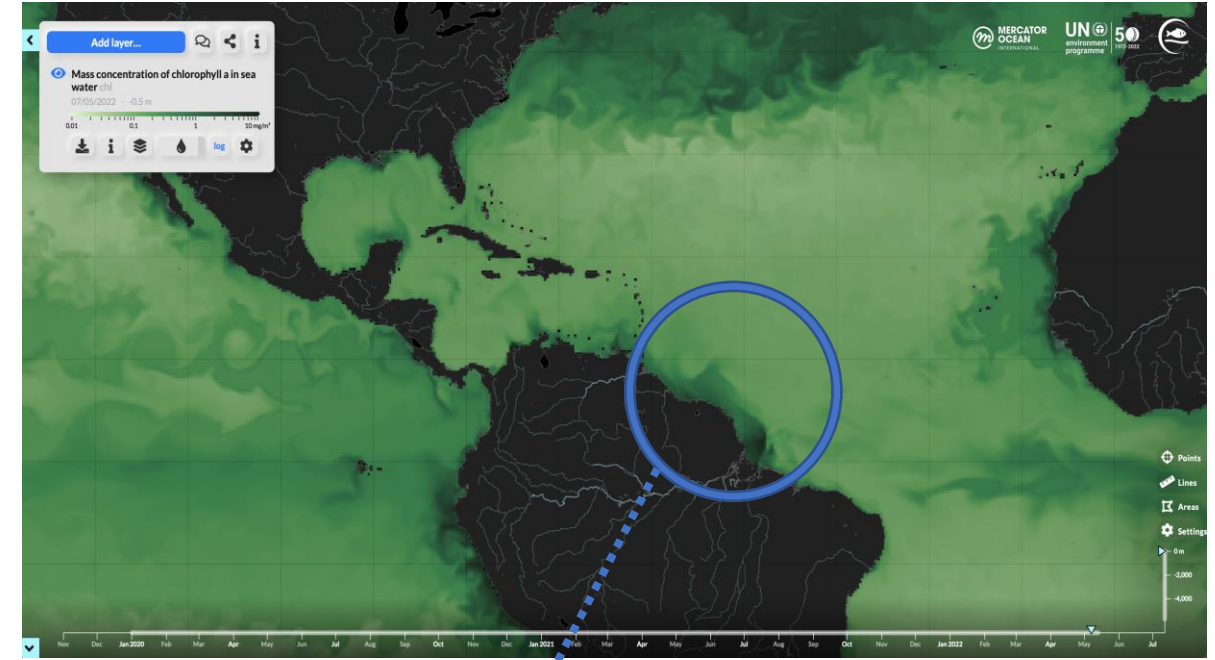


Sea water potential temperature

Temperatures above 30 °C

Possible ocean heat waves

Possible coral bleaching episodes



Chlorophyll a concentration

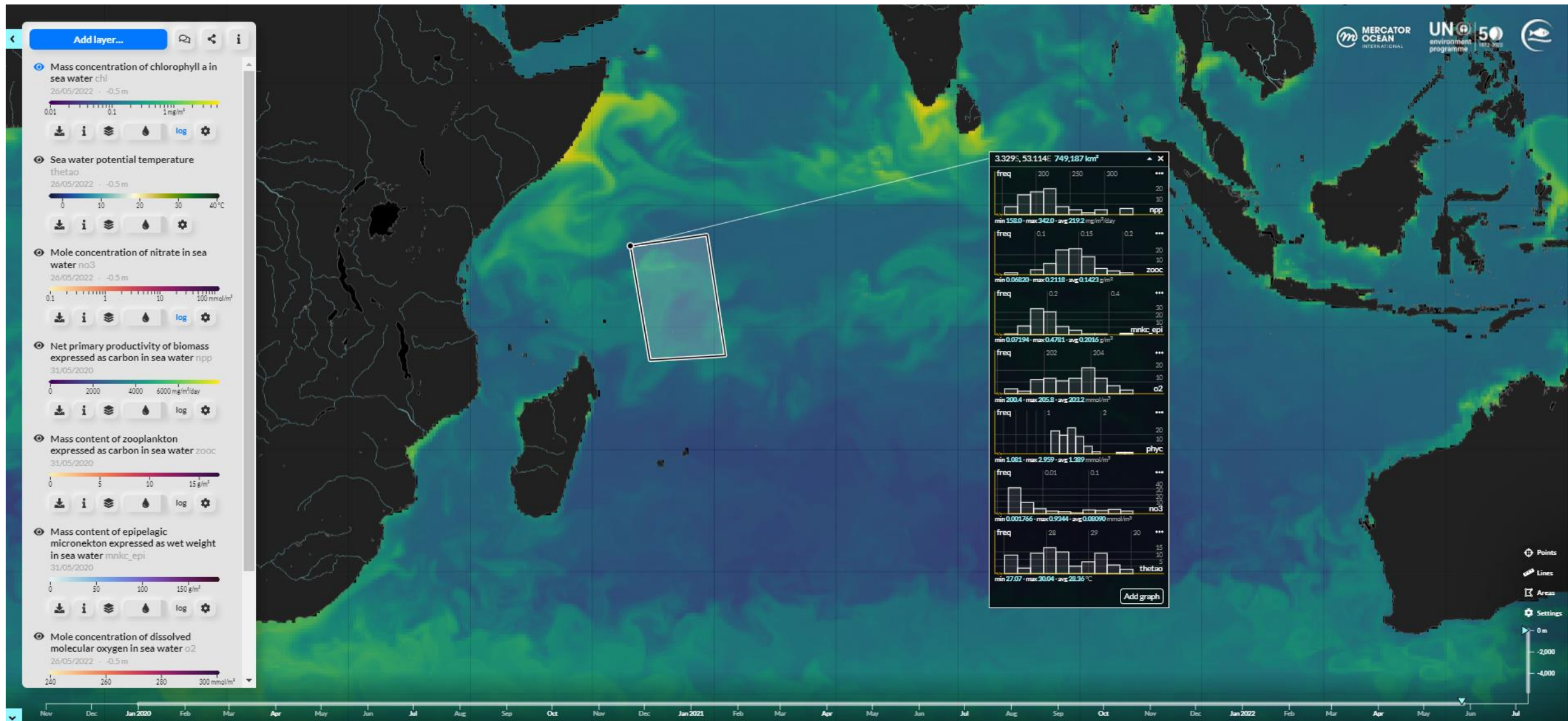
High concentration of Chlorophyll

Possible riverine nutrient inputs

Possible eutrophication episodes

Possible hypoxia episodes

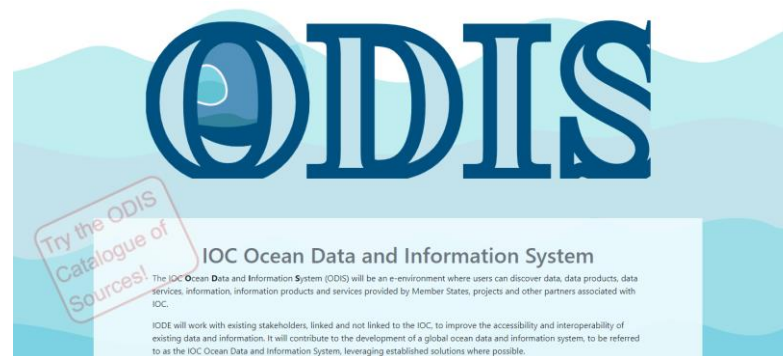
Specific layers & values



Data working flow

Thematic Working Group on Data and Services

- EVs or SDG related: ensure data sources are endorsed by the respective panels and organizations (upstream)
- Define a set of endorsed/quality-controlled data sources, make sure they are registered in IODE's ODISCat (Catalogue of Sources) so that they can be identified explicitly and trusted
- Test harvest from these data sources, refine where needed and establish agreements (e.g. MoU) to ensure data sustainability and stable flows
- Feed visualisation tools and analytics which are re-circulated to data providers as a value-added component



Defining GEMS Ocean focus

- Work with **communities** and capacity building activities
- Connection with **Regional Seas**, LMEs and Member States (priority setting, co-design, feedback, reporting support)
- Matchmaking mechanism and user centric approach (i.e., engagement process down to community level to connect demand and supply)
- Demand driven approach
- Dynamic partnership model
- Ground truthing of data



Governance Mechanism

- **Community of Practice (CoP)**

All the actors that responded on a voluntary in-kind/basis.

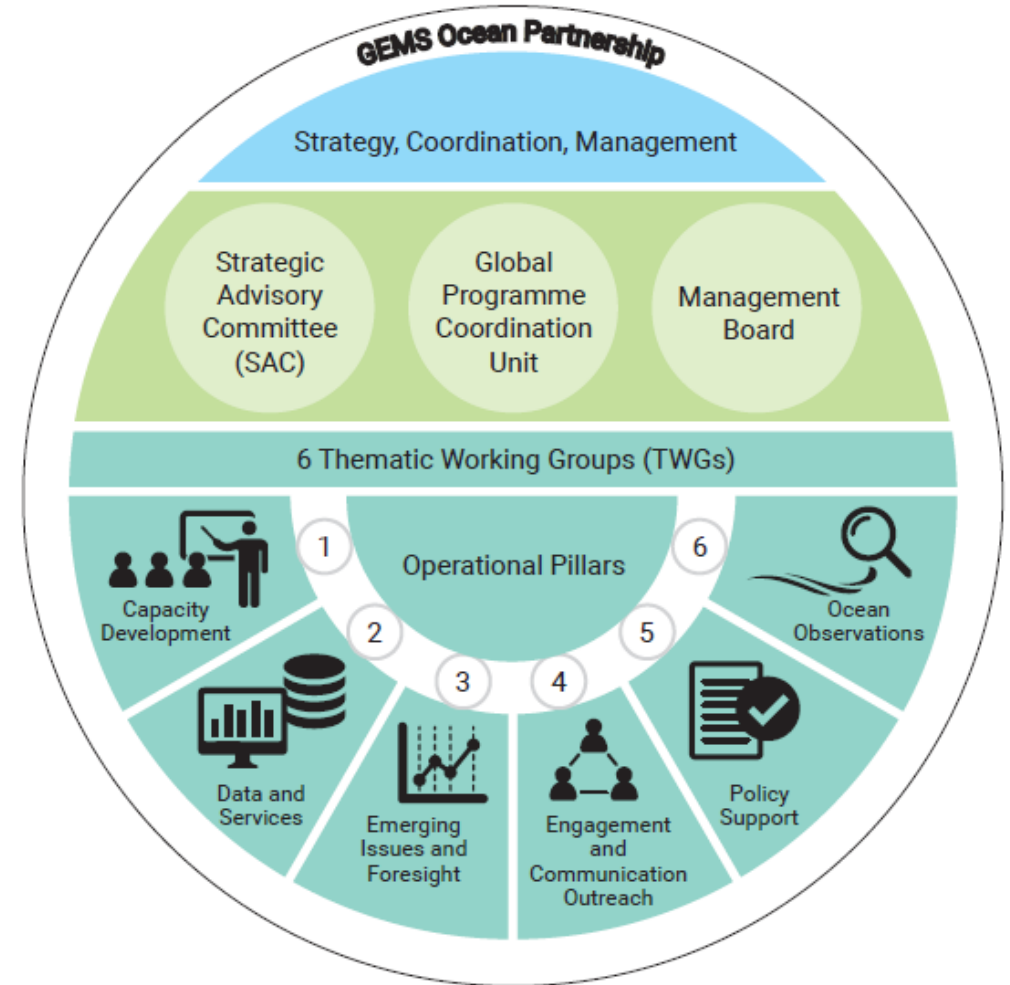
- **Steering Committee (SC)**

Provide strategic guidance including review and approval of work plans, advice resource mobilisation, agreement on data standards.

Membership by transparent selection process, from representatives of observing, monitoring, modelling, political, **MEAs** and private sector communities.

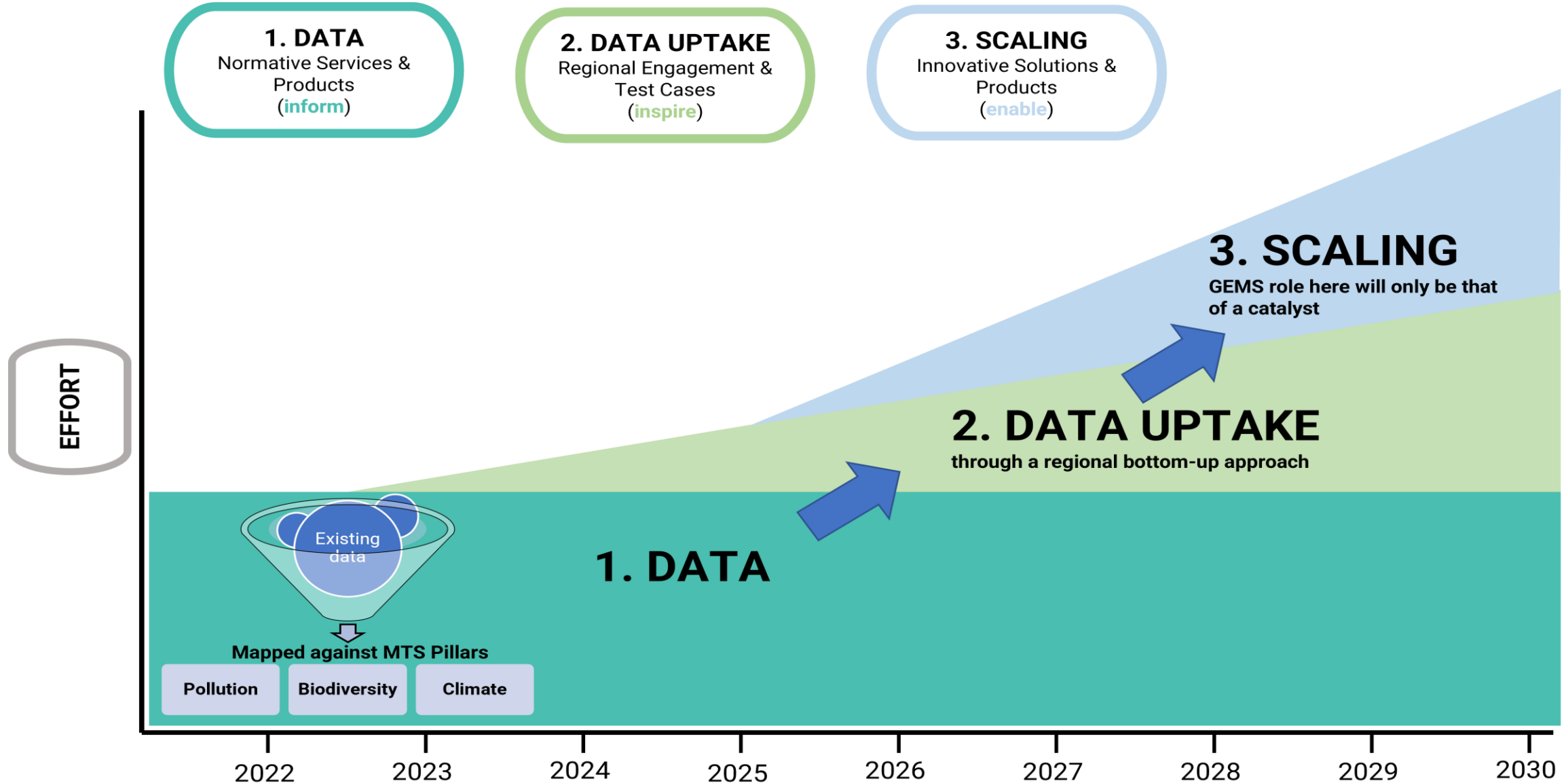
- **Thematic Working Groups (TWG)**

Will act as the operational mechanism of the GEMS Ocean Programme and its CoP and develop deliverables to be reflected in work-packages. Possible TWG: Capacity Development, Data and Services, Engagement and Community outreach, Policy Support, Emerging issues and foresights.

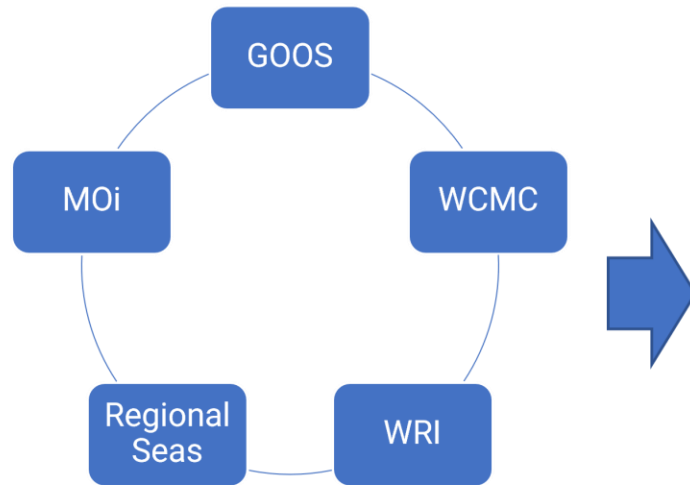


Potential structure of the GEMS Ocean Programme, including a proposed governance mechanism

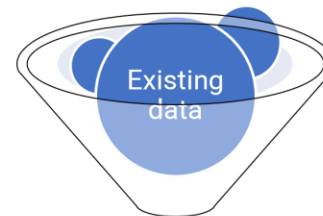
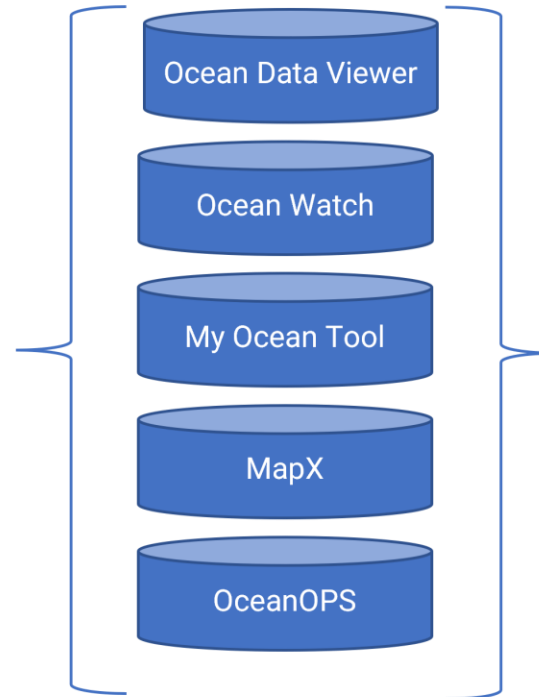
Delivery system



Data & Knowledge Asset Holders



Databases

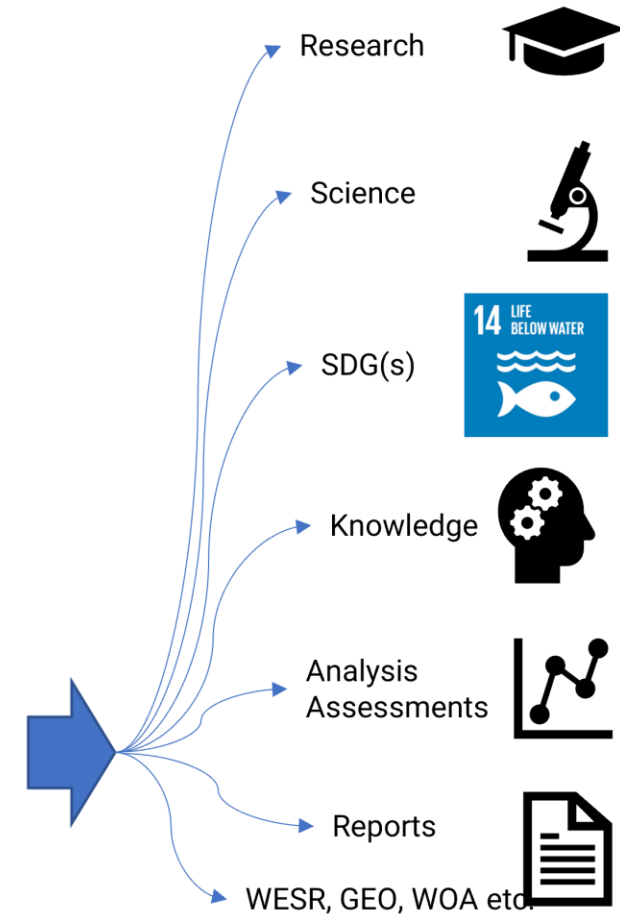


Mapped against MTS Pillars



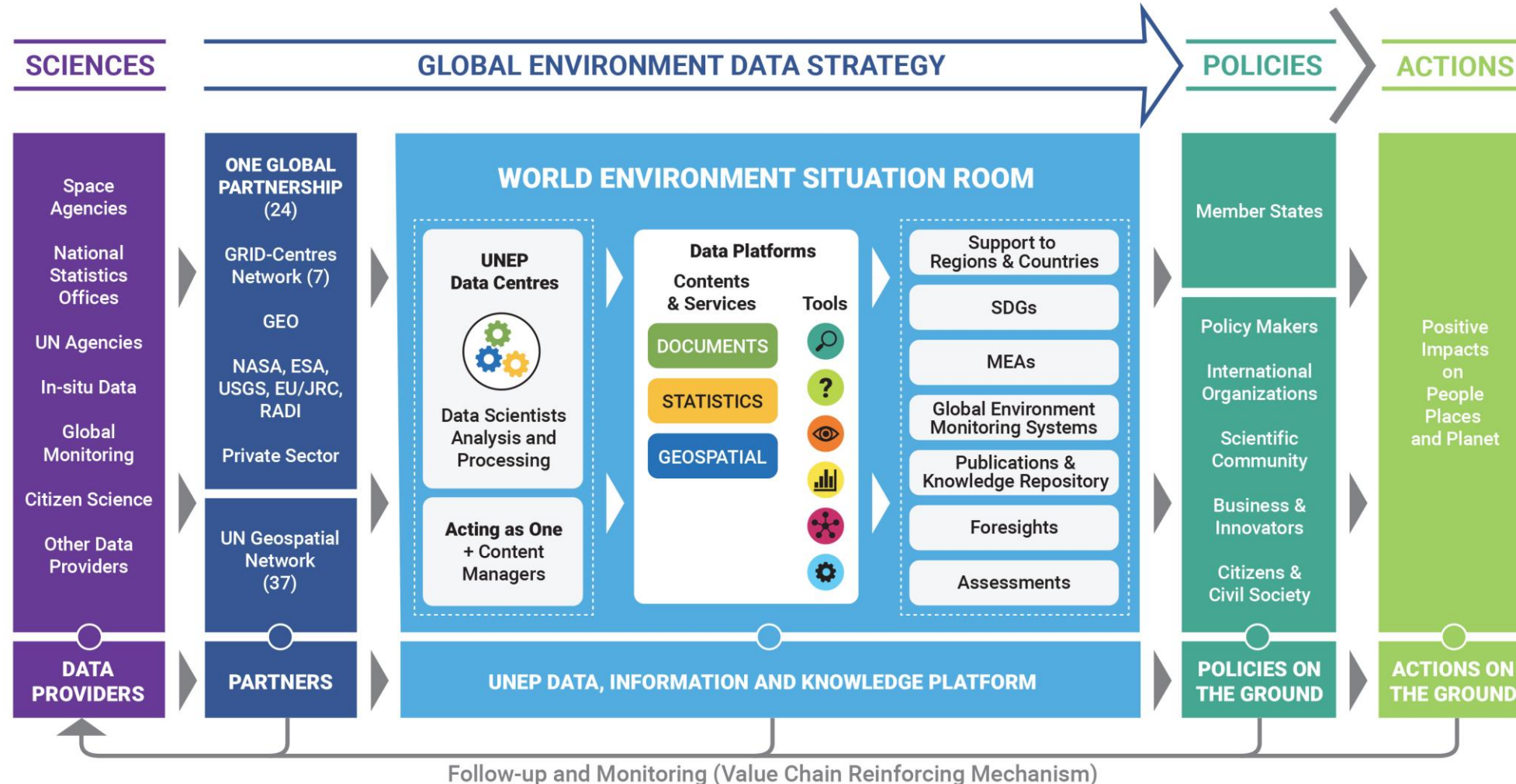
Feedback Loop
(convened by GEMS)

Utility of data For Member States and Civil Society

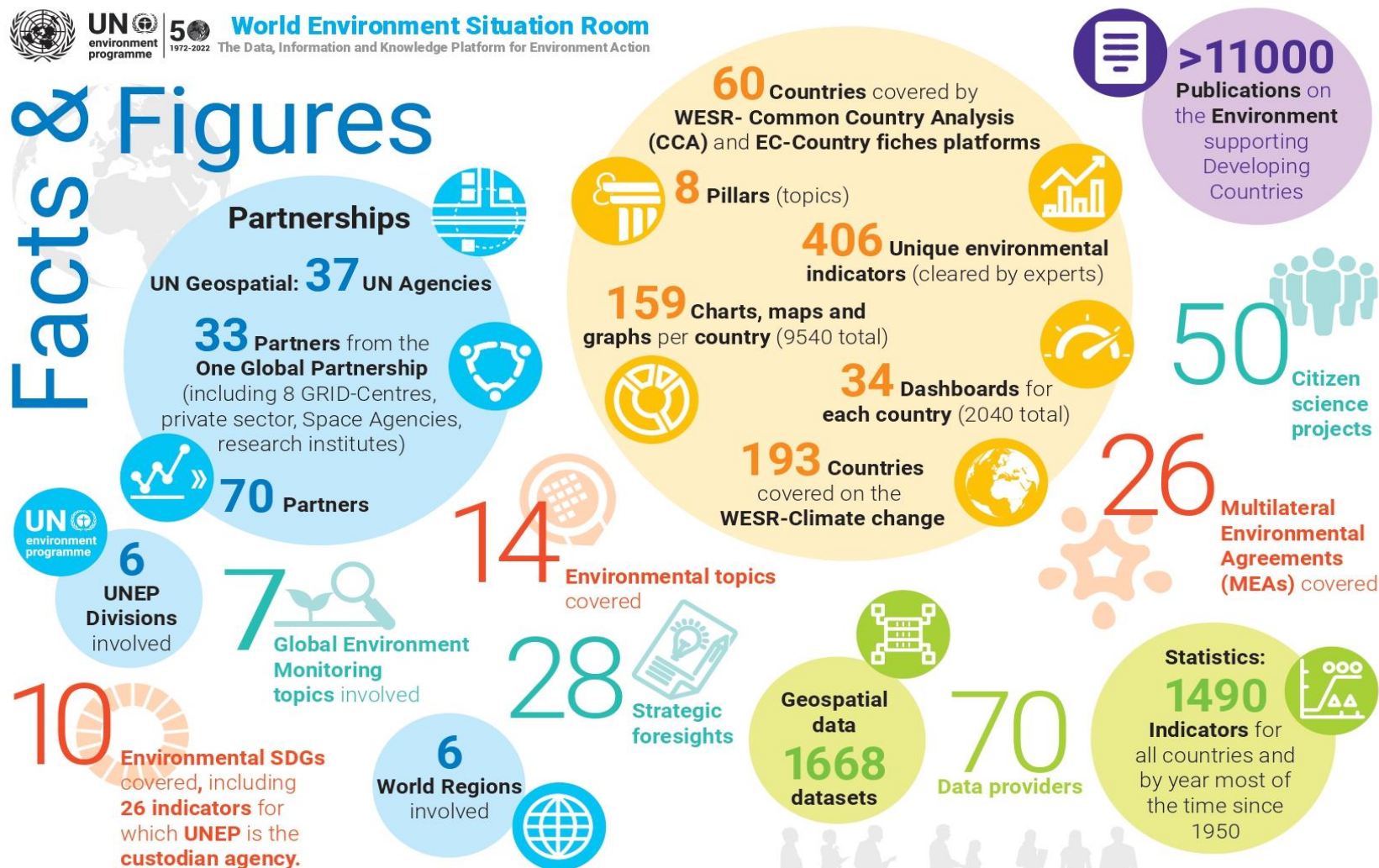


World Environment Situation Room (WESR)

A World Environment Situation Room (WESR) implementing GEDS



World Environment Situation Room (WESR)



<https://data.unep.org/>

GEF proposal

Source to Sea (S2S) in practice - Enabling Action to protect and restore freshwater and marine ecosystems in the Wider Caribbean Region (WCR) with a focus on Small Island Developing States (SIDS) and Developing Countries

Objectives:

- Identify, assess, and analyse interlinkages among actions taken at national/regional level for achieving SDGs 6 and 14.
- Support national/regional reporting and monitoring on the achievement of these SDGs.
- Support capacity development and local solutions to regional and global pressures.
- Community and social engagement to explore data utility and development of key actions.



GLOBAL ENVIRONMENT FACILITY
INVESTING IN OUR PLANET

Recent events



- **Digital Ocean Forum (20-22 April) Paris, France**
- **22nd Global meeting of the Regional Seas Programme (25-28 May) Mahe, Seychelles**
- **Twenty-second meeting of the United Nations open ended informal consultative process on the oceans and law of the sea (6-10 June) New York, USA**
- **UN Ocean Conference (26 June - 1 July) Lisbon, Portugal**
- **Final Conference MSP-MED project (12-14 October) Rome, Italy**

Thank you for your attention!

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Aspiring to Achieve the Sustainable Development Goal 14:
to "Conserve and sustainably use the oceans, seas and marine resources for sustainable development"

