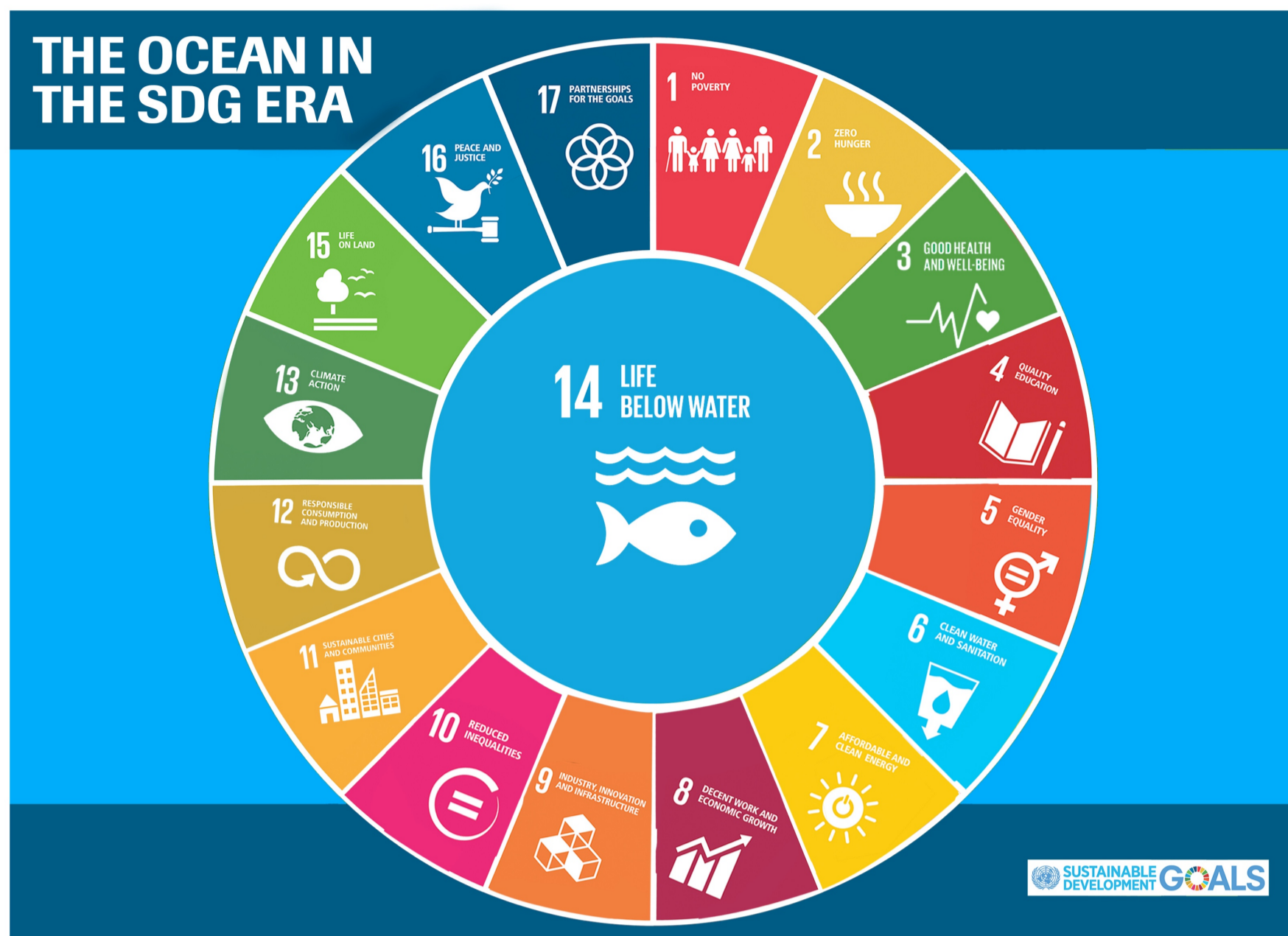


Karina von Schuckmann<sup>(1)</sup>, Elisabeth Holland<sup>(2)</sup>, Peter Haugan<sup>(3)</sup>, Peter Thomson<sup>(4)</sup>

Journal of Marine Policy, DOI: 10.1016/j.marpol.2020.104154

(1) Mercator Ocean International, France; (2) Norway Pacific Chair in Oceans and Climate Change, University of South Pacific, Fiji  
 (3) Institute of Marine Research, Bergen & Geophysical Institute, University of Bergen, Norway; (4) United Nations Secretary General's Special Envoy for the Ocean



## THE CRITICAL ROLE OF THE OCEAN

All SDGs are interconnected, and SDG14 supports the UN 2030 Agenda and the SDGs as a whole.

The Ocean plays a critical role across all three pillars of sustainable development, environment, environment, society and economy.



The Ocean offers opportunities to face causes and consequences of climate change, globally and locally, calling for a dramatic scaling up of efforts towards ambitious mitigation and adaptation

A holistic approach that embraces sustainable Ocean stewardship informed by science, data and services to support society and the economy is required to create the 'Future We Want'.

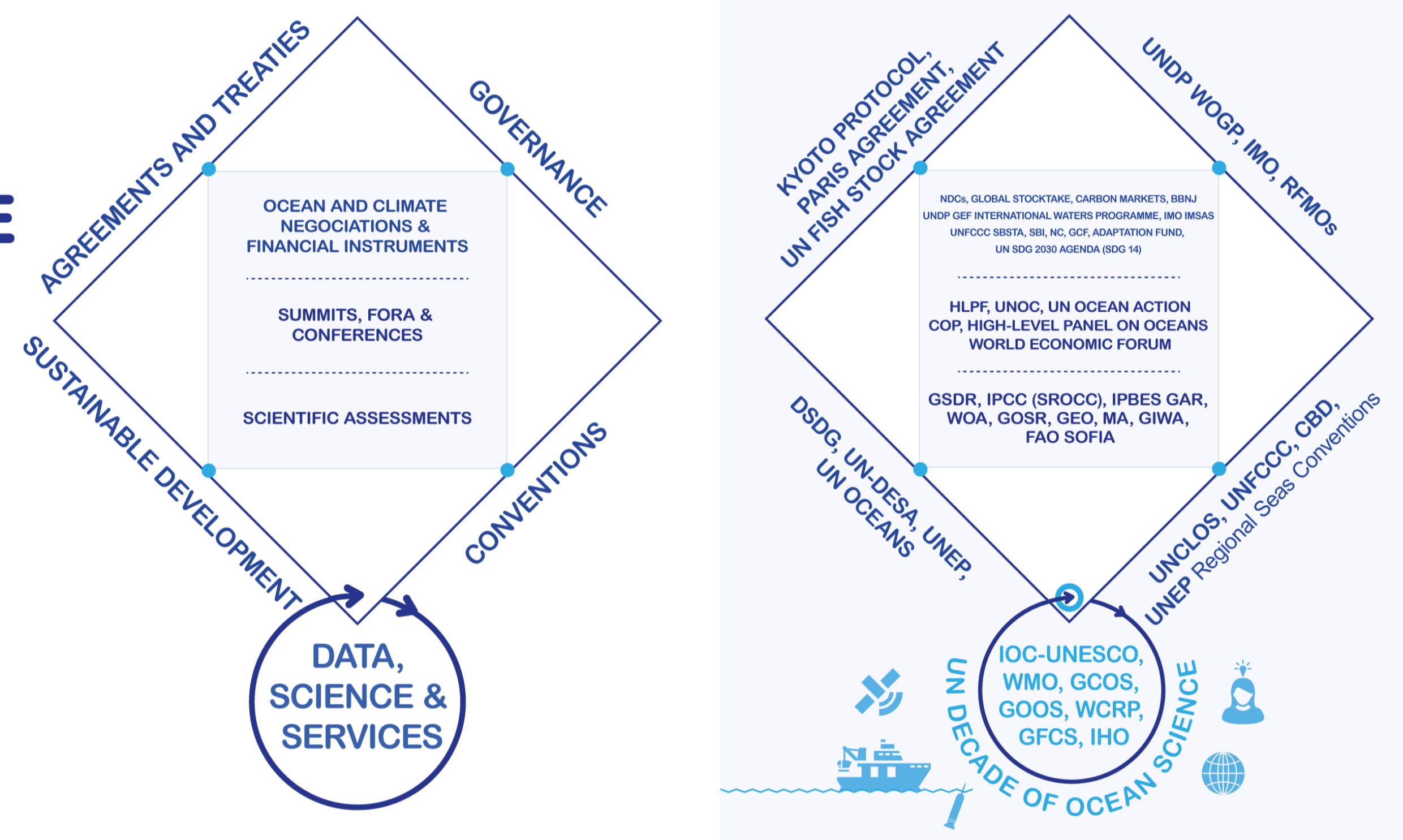
The UN Decade of Ocean Science for Sustainable Development is an essential foundation to achieve this objective.

## THE OCEAN CLIMATE NEXUS

The Ocean-climate nexus and our call for integrated management of the Ocean is a complex web with diverse opportunities, contradictions, mandates and goals in the science-policy 'oceanscape'.

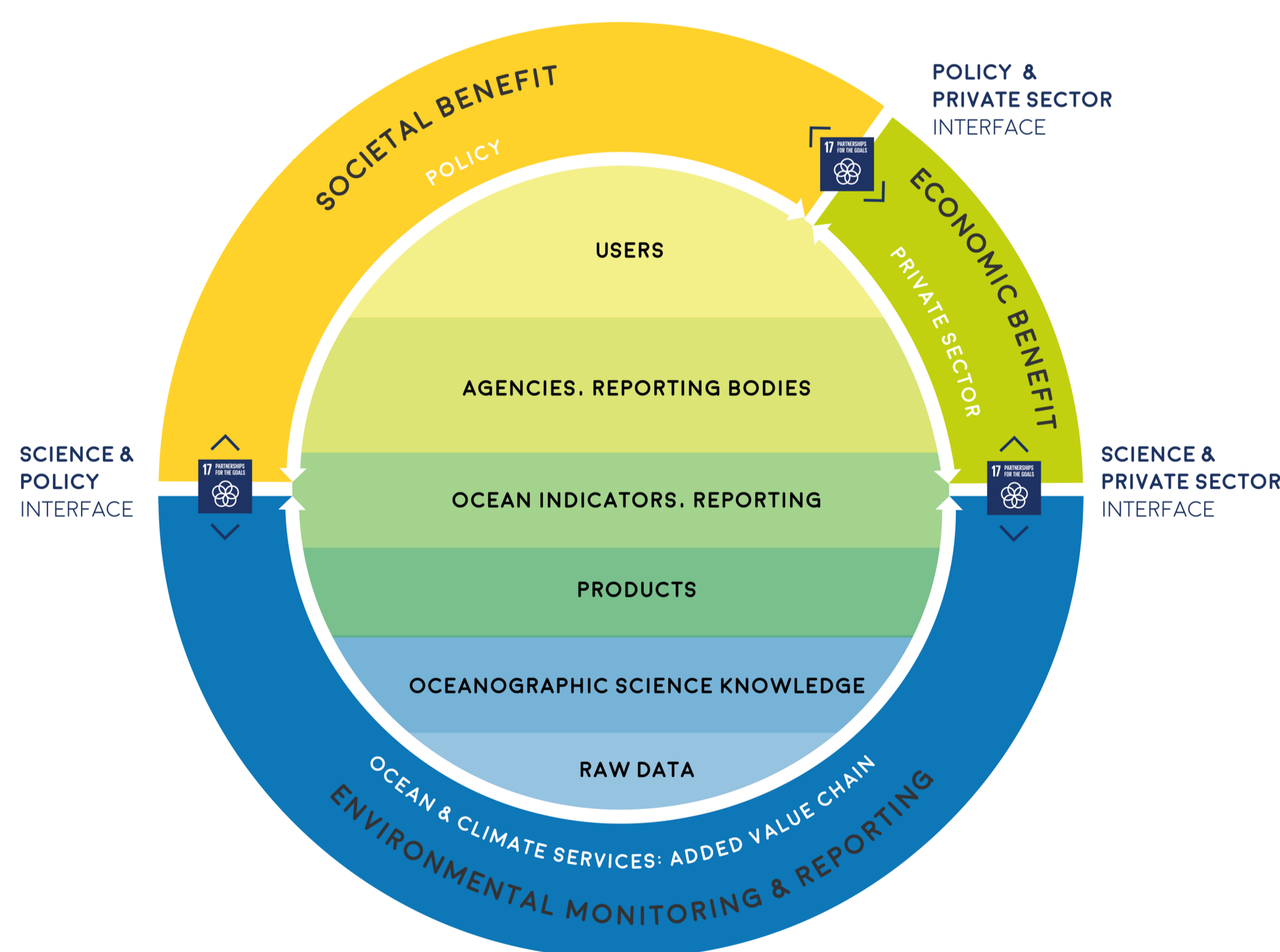
The 2021-2030 UN Decade of Ocean Science for Sustainable Development aspires to overcome the challenges to create a more holistic and integrated approach to managing the shared Ocean resources of the blue planet anchored by decades-long efforts

## THE OCEAN CLIMATE NEXUS



Linking science and governance at the Ocean-climate nexus (left panel) illustrated with concrete examples for the international diplomacy oceanscape (right panel). Abbreviations are defined in the acronym table of the paper.

## THE CRITICAL ROLE OF OCEAN SCIENCE, DATA AND SERVICES TO SUPPORT SUSTAINABLE DEVELOPMENT



The added-value chain is the core of Ocean and climate services connects raw products and oceanographic science knowledge to high-quality data products, and indicators.

These added-value products can provide the evidence basis for agencies and reporting bodies, decision makers, other stakeholders and the public, yielding societal and economic benefit.

Global partnerships under SDG 17 at the science policy and science/private interface support the optimized use of information in the marine environment through the added-value chain.

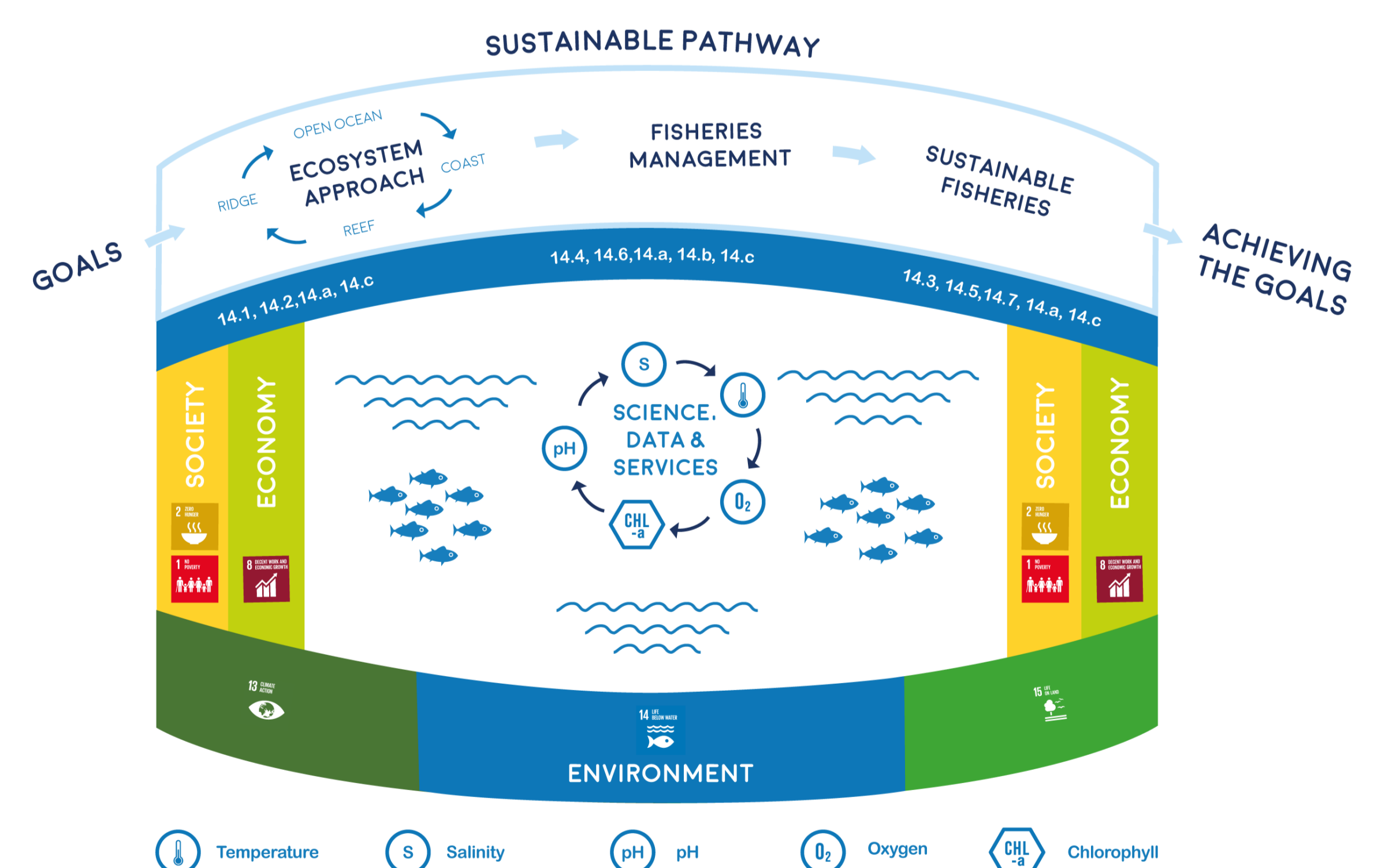


Illustration of a science, data and services informed pathway towards sustainable fisheries to achieve SDGs 1, 2, & 8.

The combined use of environmental Essential Variables can support a holistic ecosystem approach to substantially improve fisheries management and support the development of sustainable fisheries.

In this example, the environmental variables are key to inform the sustainable stewardship required to meet the SDG targets.

Sustainable fisheries will support a sustainable blue economy that simultaneously embraces environmental stewardship to support society and sustainable economy.