UN Decade of Ocean Science for Sustainable Development (2021-2030)

United Nations Educational, Scientific and Cultural Organization

Intergovernmental Oceanographic Commission

2021 2030 United Nations Decade of Ocean Science for Sustainable Development

Presentation Outline

- What is the UN Decade of Ocean Science for Sustainable Development?
- Why a Decade of Ocean Science?
- A Vision for the Decade
- Preparing the Decade: 2018-2020

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What is the UN Decade of Ocean Science for Sustainable Development?

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On 5 December 2017, the UN General Assembly proclaimed the Decade of Ocean Science for Sustainable Development (2021-2030).

Resolution A/72/L.18 calls upon the IOC to prepare an Implementation Plan for the Decade in consultation with:

- Member States;
- UN partners;
- Institutional partners;
- Other relevant stakeholders.

And to report to the UN Secretary-General about the implementation of the Decade.

Resolution A/72/L.18 also invites UN-Oceans to collaborate with IOC.

2030 AGENDA

UN PROCESSES for SUSTAINABLE DEVELOPMENT

Biological Diversity/Aîchi Biodiversity targets (CBD)

Law of the Sea (UNCLOS + BBNJ + UNFSA)

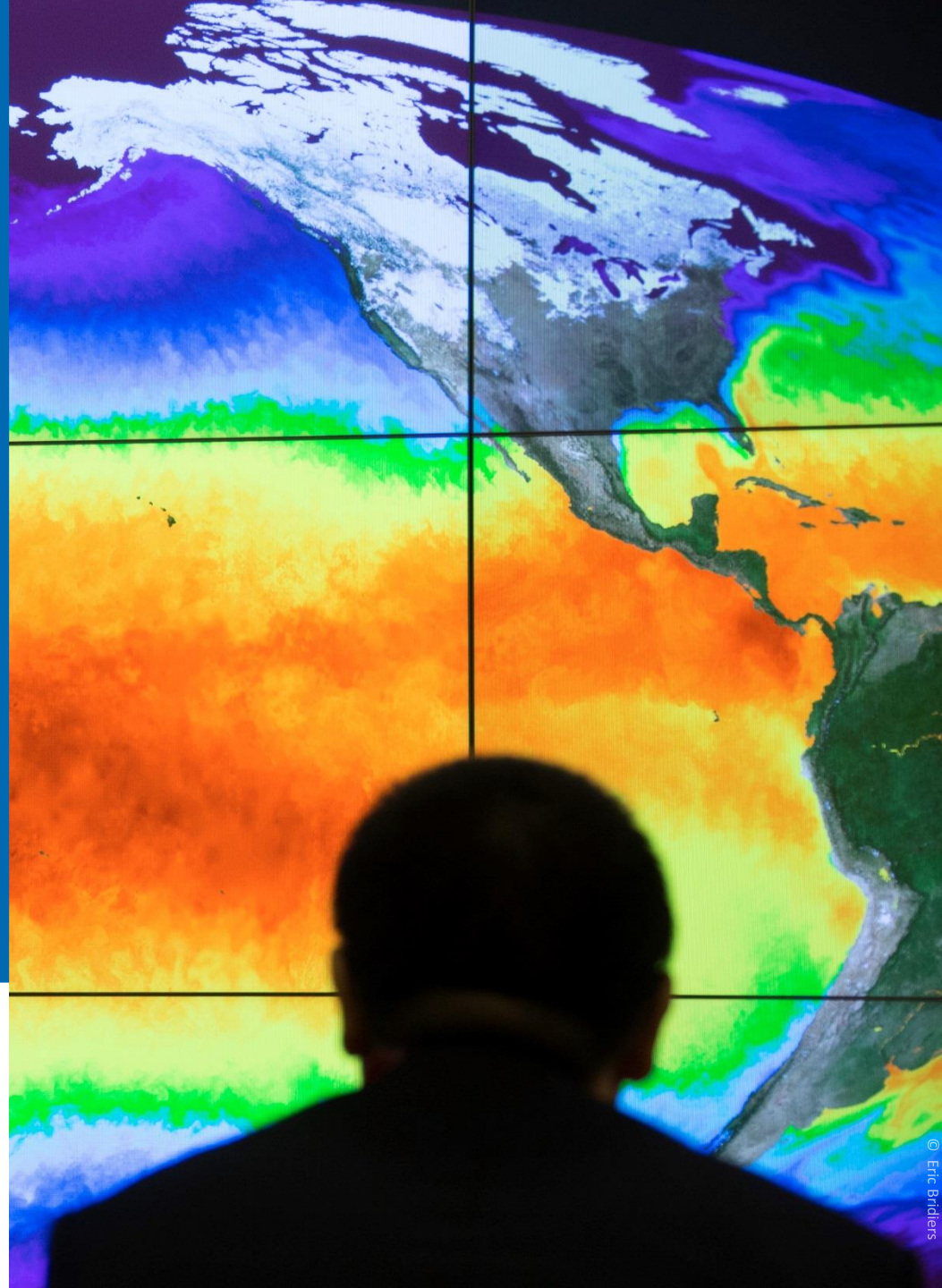
SIDS Action (SAMOA Pathway)

Disaster Risk Reduction SENDAI Framework

Climate Change/Paris Agreement (UNFCCC)

A global framework that will ensure Ocean Science can help governments and societies achieve the major goals of our generation

Why a Decade of Ocean Science for Sustainable Development?



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climate change
marine pollution
marine ecosystems services
nutrient cycling
degradation of habitats
ocean acidification
loss of species
climate regulation
growing population
primary productivity
seafood

A global framework to support efforts to reverse the cycle of decline in Ocean health & create improved conditions for sustainable development

Vavau © Stuart Chape

A global collective research and investment framework to close the knowledge gaps

GLOBAL KNOWLEDGE GAPS

99%
of habitable marine areas lack basic biodiversity knowledge for their management

3
Number of people who have explored the deepest known point of the ocean

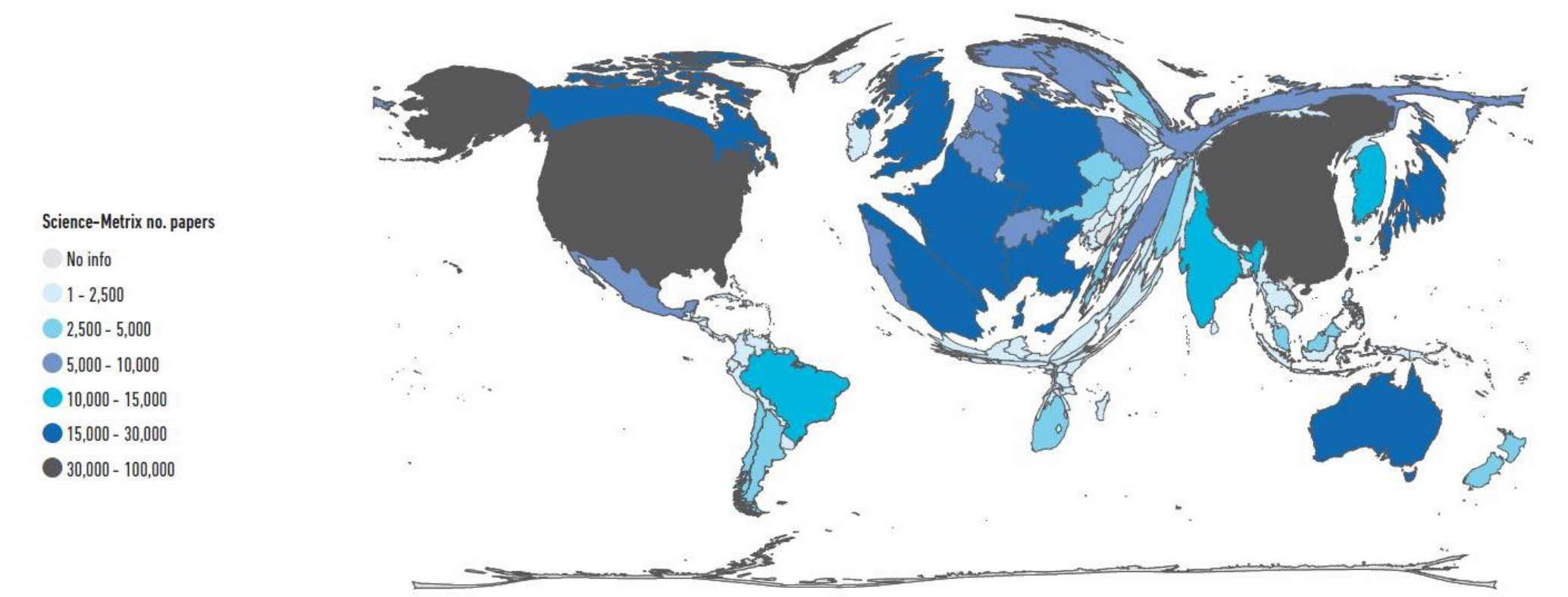
Only 5%
of the ocean floor has been mapped at high resolution

1 million
Approximate number of marine species that could still be unknown to science

103 million
square miles of deep sea are in perpetual darkness

Vavau © Stuart Chape

A global framework to structure and boost scientific efforts at national and international levels to address global and regional SD challenges



Societal outcomes

A Clean Ocean

Sources of pollution are identified, quantified and reduced, and pollutants removed from the Ocean.

A healthy and resilient Ocean

Marine ecosystems are mapped and protected, multiple impacts, including climate change, are measured and reduced, and the provision of Ocean ecosystem services is maintained.

A predicted Ocean

Society has the capacity to understand current and future Ocean conditions, forecast their change and impact on human wellbeing and livelihoods.

The Decade will be mission-oriented

A safe Ocean

Human communities are protected from ocean hazards and the safety of operations at sea and on the coast is guaranteed.

A Sustainable Productive Ocean

The provision of food supply and alternative livelihoods are secured.

A transparent and accessible Ocean

All nations, stakeholders and citizens have access to ocean data and information, technologies, and are capable of making informed decisions.

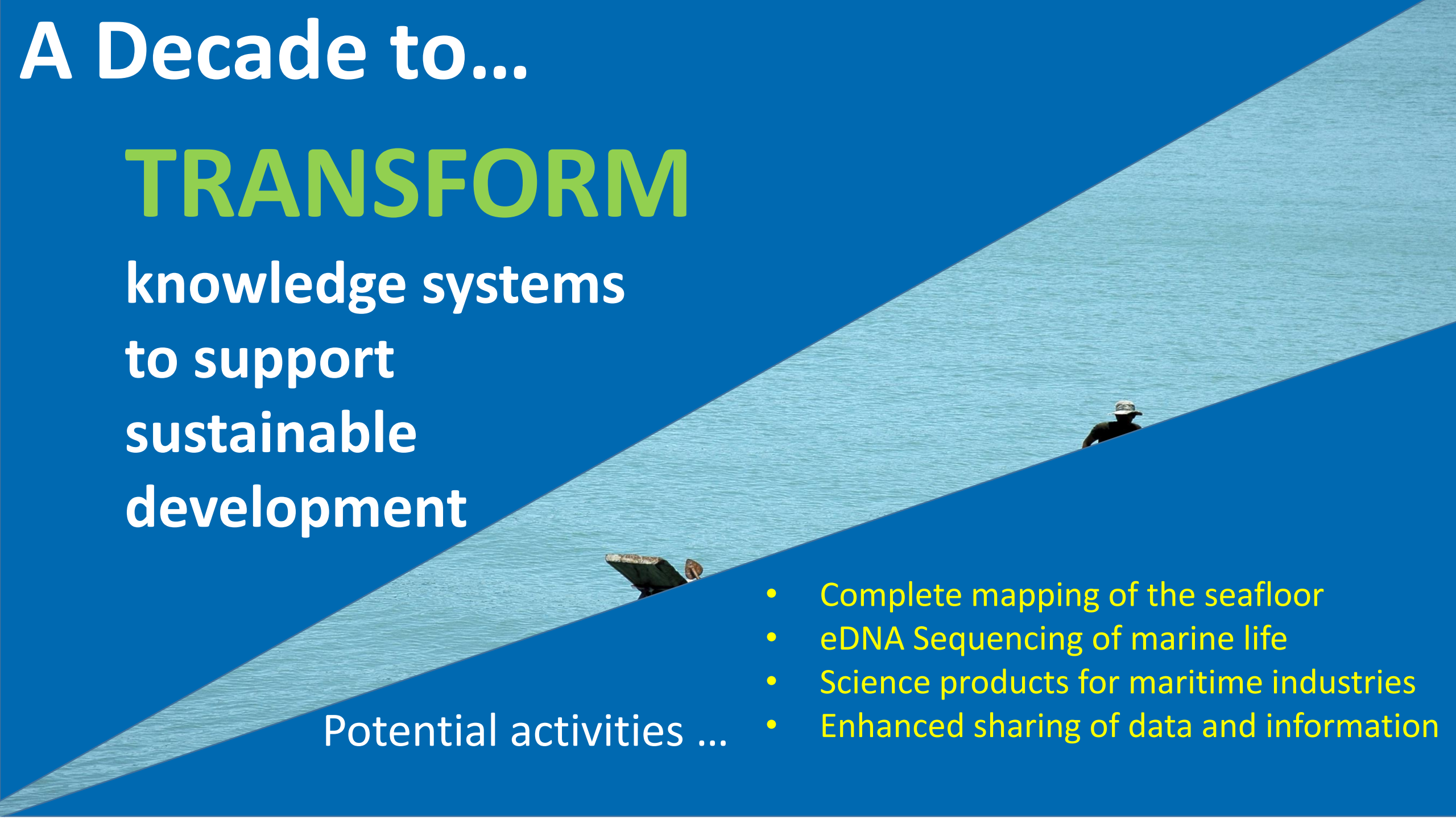
A Vision for the Decade

Develop scientific knowledge, build infrastructure, and foster partnerships for a sustainable and healthy ocean

A Decade to…

TRANSFORM

knowledge systems to support sustainable development



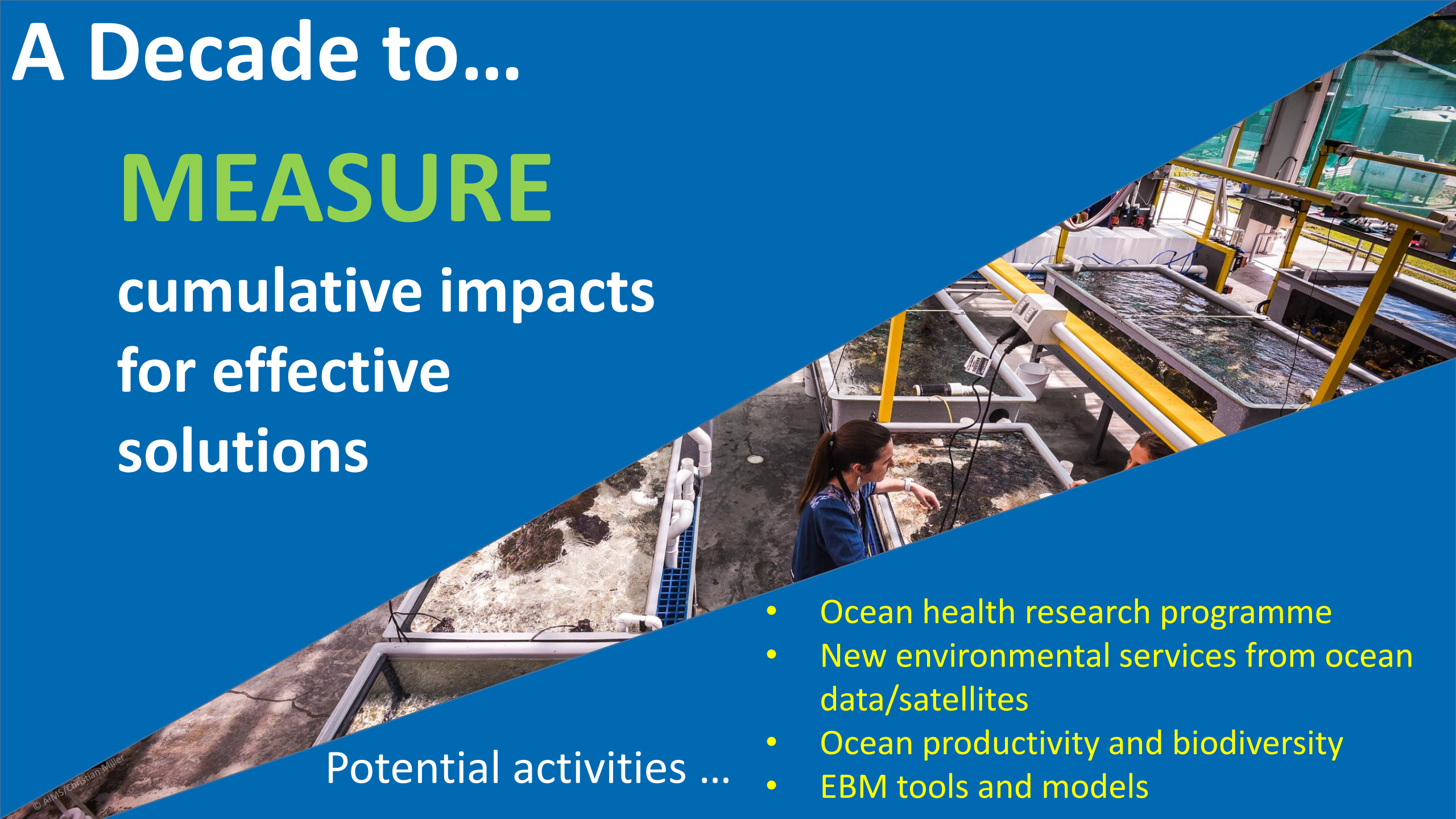
Potential activities …

- Complete mapping of the seafloor
- eDNA Sequencing of marine life
- Science products for maritime industries
- Enhanced sharing of data and information

A Decade to…

MEASURE

cumulative impacts for effective solutions



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Potential activities …

- Ocean health research programme
- New environmental services from ocean data/satellites
- Ocean productivity and biodiversity
- EBM tools and models

A Decade to…

REDUCE

vulnerability to ocean and coastal hazards

Potential activities …

- Improved coastal hazards warnings syst.
- Better mapping of vulnerable areas
- Coordinated programme of OA research, including forecasting
- Sea-level change and coastal impacts projections

A Decade to…

BOLSTER

ocean observing and data systems

Potential activities …

- An Ocean Observing System for All Major Ocean Basins
- Sustained Deep Ocean Observing System
- Open access, data portal for all
- Social science metrics

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A Decade to…

ACCELERATE

transfer of marine technology, training and education

Potential activities …

- Marine technology transfer/exchange hubs
- Self-driven regional capacity development programmes
- Ocean literacy initiatives
- Gender focused programmes

A Decade to…

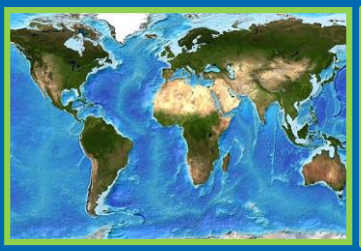
DELIVER

best available knowledge to decision-makers

Potential activities …

- Promotion of Science/policy mechanims
- Consolidated network of Decade partners
- Regional & global dialogue enhancement
- Peace through science initiatives

Research & Development Priority Areas



Map the entire ocean floor and processes

Bolster ocean observation systems in all basins

Conduct an inventory of ecosystems and their functioning

Develop a data and information portal

Establish an integrated multi-hazard warning system

Include ocean in earth-system observation

Strengthen capacities and accelerate technology transfer and ocean literacy

Vavau © Stuart Chape

Key Applications

Coastal zone management and adaptation

Marine Spatial Planning/ Blue economy

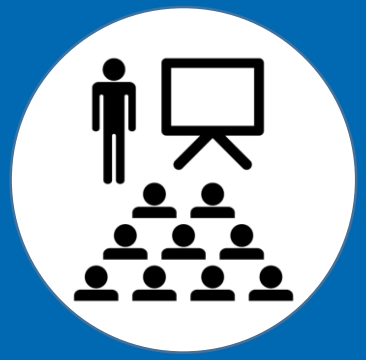
Establishment of Marine Protected Areas

Fishery management

Nationally Determined Contributions to UNFCCC

Development of national ocean policies

Development of national R&D strategies



Regional and national capacity development planning

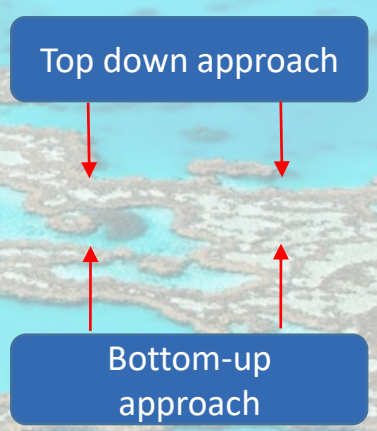
Early warning systems

Key principles of the Decade

Inclusive & transformative

- Science Community
- Businesses & Industries
- Policy-makers & practioners
- Civil Society
- Donors

A Two-way process, regionally driven



A cooperation framework for ocean science

Mobilizing scientists on critical ocean priorities relevant to Agenda 2030

Funding /partnerships

Stakeholders engagement

Bridging science, policy and society
Science-policy dialogues, dissemination, access to data, information, communication

Synthesise existing research
defining trends, knowledge gaps, priorities for future research

Synthesising, assessing results, development of user-driven solutions

New co-designed research strategies

Fostering new joint research and cooperation within & across ocean basins

Integration natural & social sciences

Capacity development

Preparatory Phase: 2018-2020

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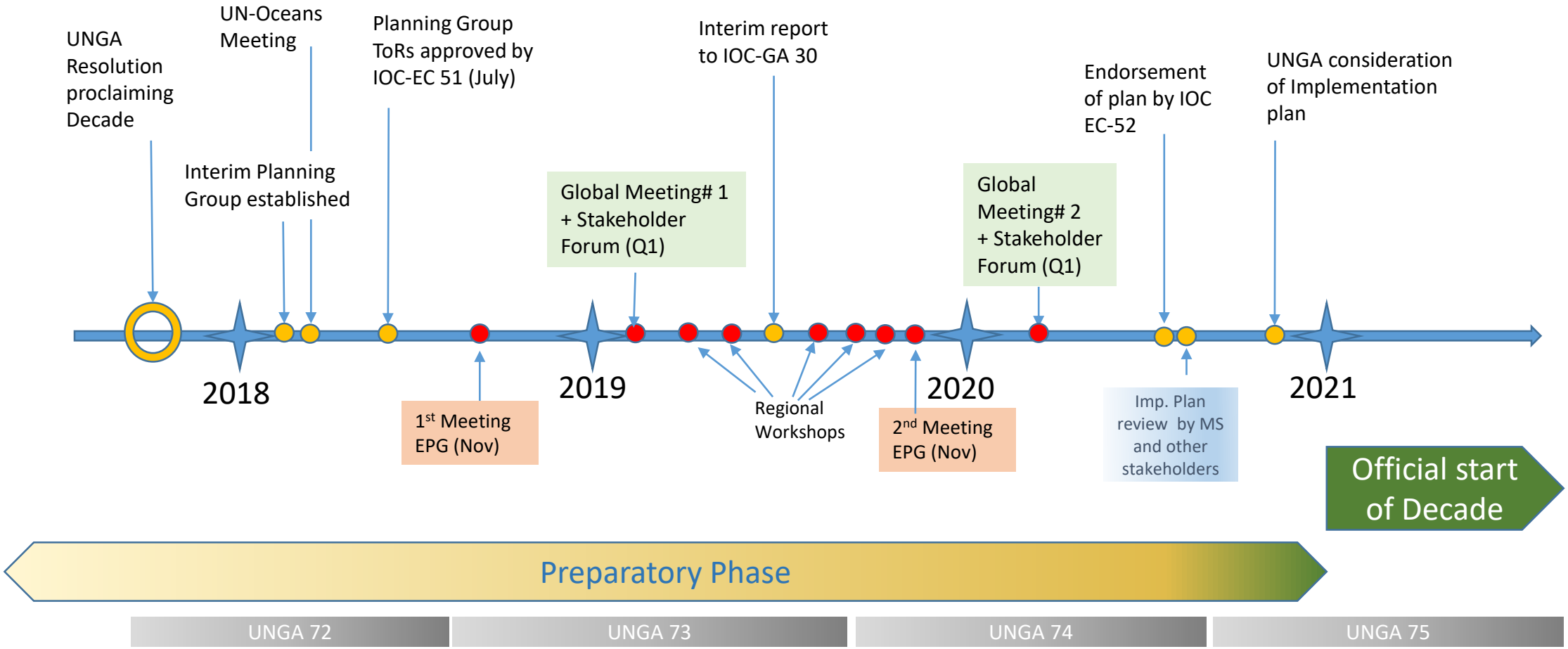
HOW TO PREPARE THE DECADE: PREPARATORY PHASE (2018-2020) GOVERNANCE

Implementation Plan

Between 2018 and 2020, the UNGA tasked IOC with preparing the Decade and coordinating the development of an Implementation Plan which will include:

- Science Plan
- Capacity Development Plan
- Resource Plan
- Communications & Engagement Plan
- Monitoring & Reporting



Preparing for the Decade: Next Steps

How can you help?

- Contribute to the Planning Process
- Host and organize events
- Provide staff and/or financial support
- Communicate about the Decade

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Get in touch

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