

Ocean science and the ocean action framework

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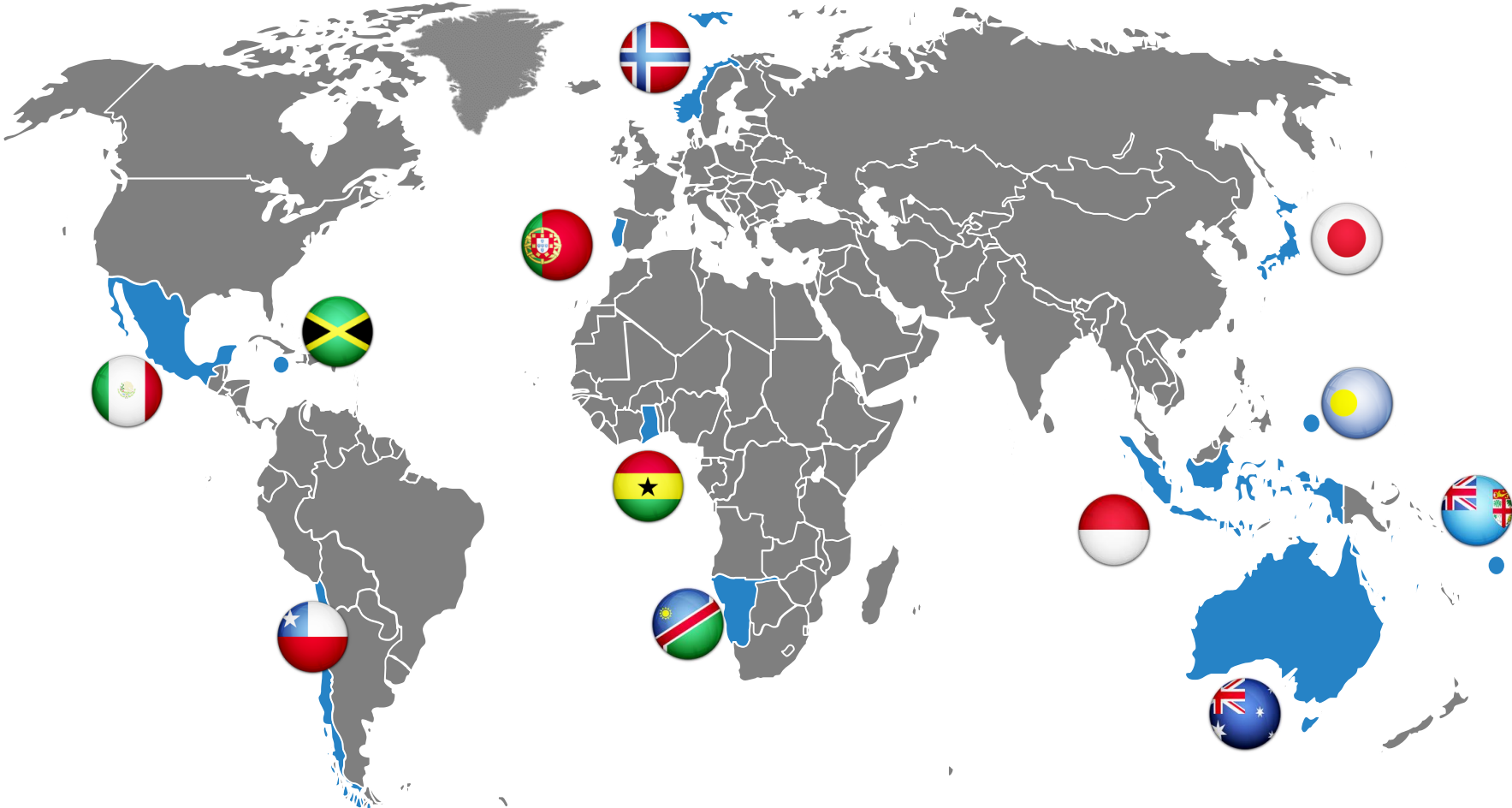
Outcomes of the UN Ocean Conference June 2017



- A call for Action
- Voluntary Commitments grouped into nine Communities of Ocean Action:
 1. Coral reefs
 2. Implementation of international law as reflected in United Nations Convention on the Law of the Sea
 3. Mangroves
 4. Marine and coastal ecosystems management
 5. Marine pollution
 6. Ocean acidification
 7. Scientific knowledge, research capacity development and transfer of marine technology
 8. Sustainable blue economy
 9. Sustainable fisheries

To report in Lisbon in June 2020

High Level Panel for a sustainable ocean economy = 12 Heads of State supported by an Expert Group and an Advisory Network



January 25th: HLP launched

September 24th: 1st meeting of the HLP

October 31st: Sherpa meeting alongside the Our Ocean Conference

19 November: 1st meeting of the Expert Group

The High Level Panel timeline

Next 18 months

- **Build bold, pragmatic solutions** for Ocean health
- **Take action within HLP country** spheres of influence
- **Start conversations** with other countries, organisations and businesses

2020 onwards

- **Catalyse international action** on the ocean agenda with report release
- **Influence post 2020 SDG targets**
- **Have recommendations endorsed and implemented** by other countries, organisations and businesses

Longer term

- **Achieve SDG 2030 targets** and support **UN Decade of Ocean Science for Sustainable Development**





On 5 December 2017, the **UN General Assembly proclaimed the Decade (2021-2030) of Ocean Science for Sustainable Development (Resolution A/72/L.18)**

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

UN PROCESSES for SUSTAINABLE DEVELOPMENT

Biological Diversity/Aichi Biological targets (CBD)

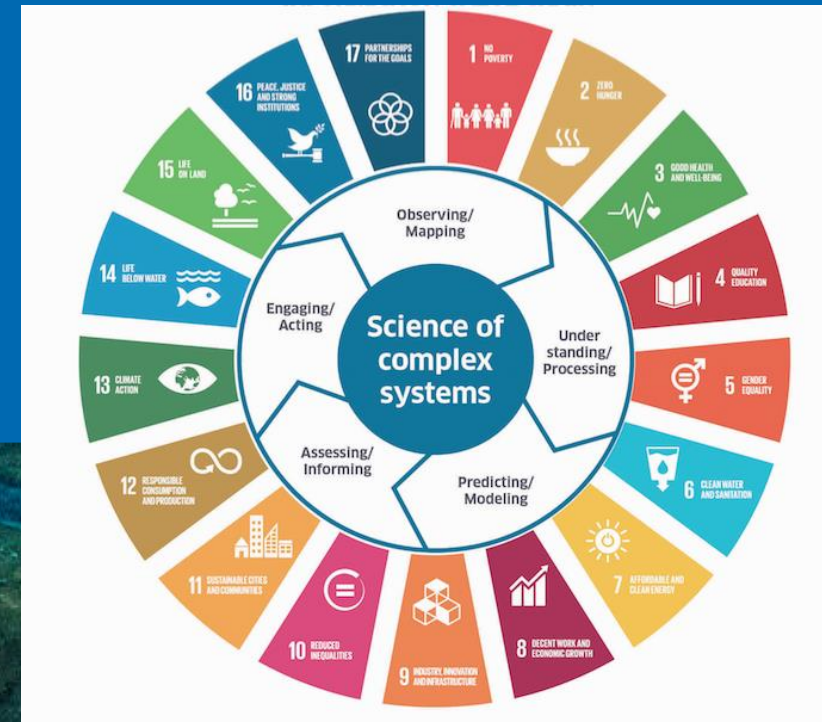
Law of the Sea (UNCLOS + UNFSA + BBNJ)

SIDS Action (SAMOA Pathway)

Disaster Risk Reduction SENDAI Framework

Climate Change/Paris Agreement (UNFCCC)

AGENDA 2030





The Ocean We Need for the Future We Want

Proposal for an International Decade of Ocean Science for Sustainable Development (2021-2030)



Science to help the ocean support the 2030 agenda



A Vision for the Decade

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



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.





Societal Outcomes



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.

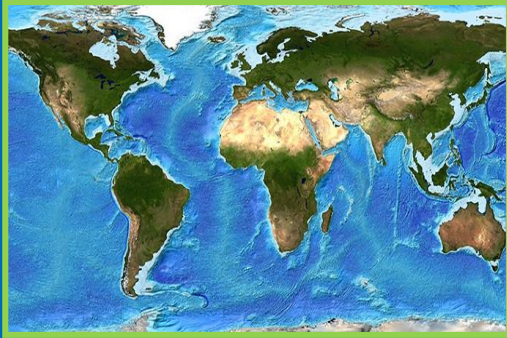


A transparent and accessible Ocean

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



Some Potential Major Breakthroughs



**Map the entire
ocean floor and
processes**



**Inventory of
ecosystems and
their functioning**



**Mainstream ocean
literacy worldwide**



**Bolster ocean
observations
systems in all
basins**



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

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

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

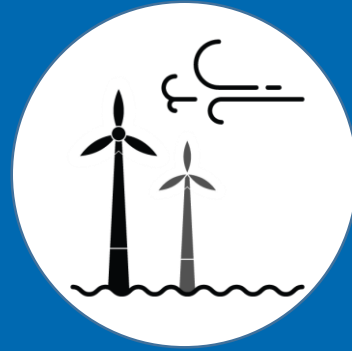
Potential activities ...

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

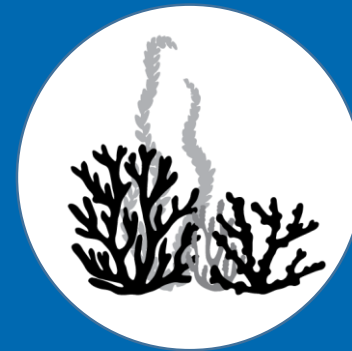
Key Applications



Coastal zone management and adaptation



Marine Spatial Planning/ Blue economy



Establishment of Marine Protected Areas



Fishery management



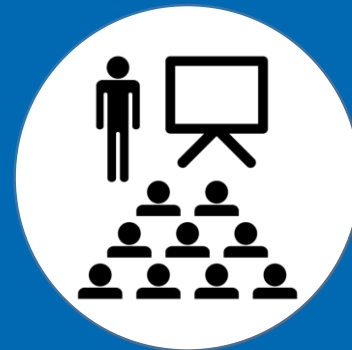
Nationally Determined Contributions to UNFCCC



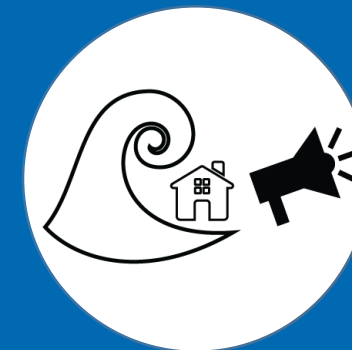
Development of national ocean policies



Development of national R&D strategies



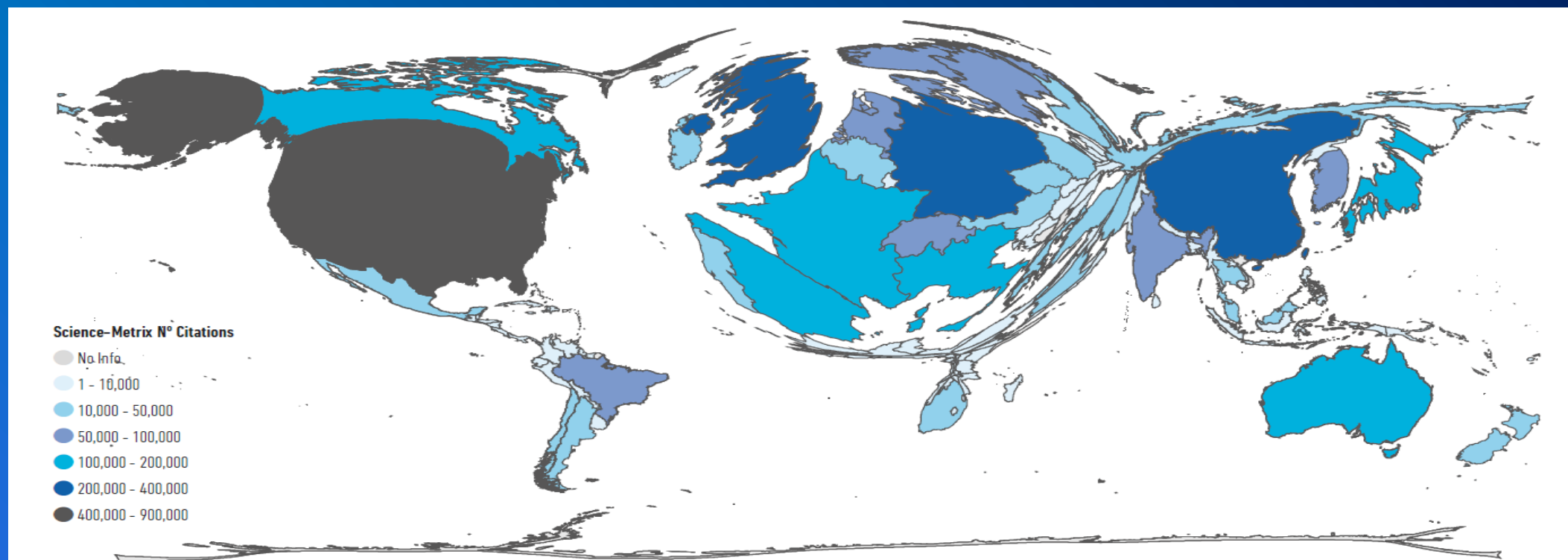
Regional and national capacity development planning



Early warning systems



We need to address gaps in science capacity



Source: Global Ocean Science Report, IOC/UNESCO, 2017



This conference – Science for ocean actions:

- 1. Impacts of climate change on marine ecosystems**
- 2. Ocean health**
- 3. The state of fisheries resources**
- 4. Sustainable aquaculture**
- 5. The importance of seafood for human nutrition**
- 6. Future sustainable use of ocean biological resources**