

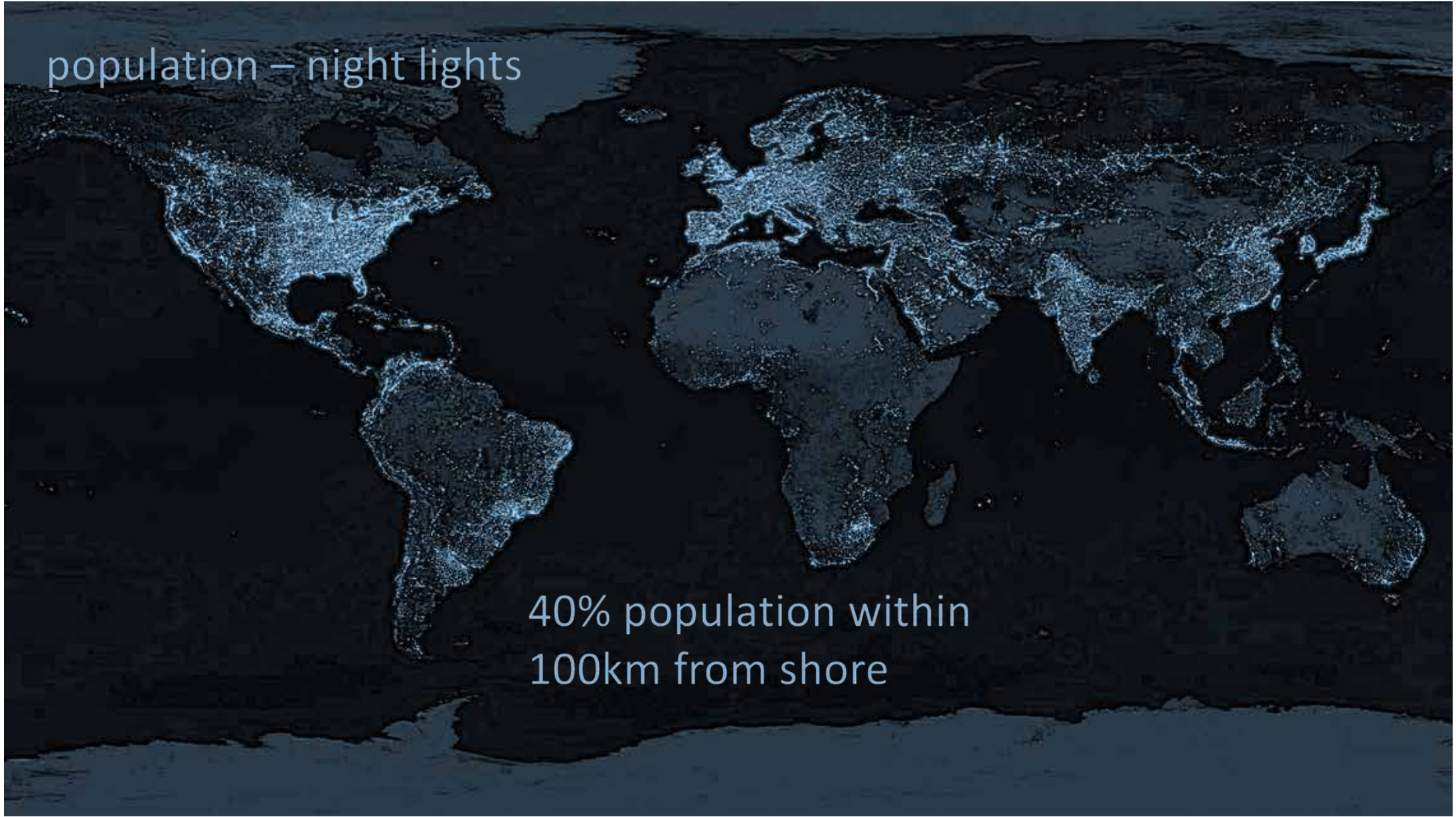


Challenges and Opportunities for International Ocean Science Organisations

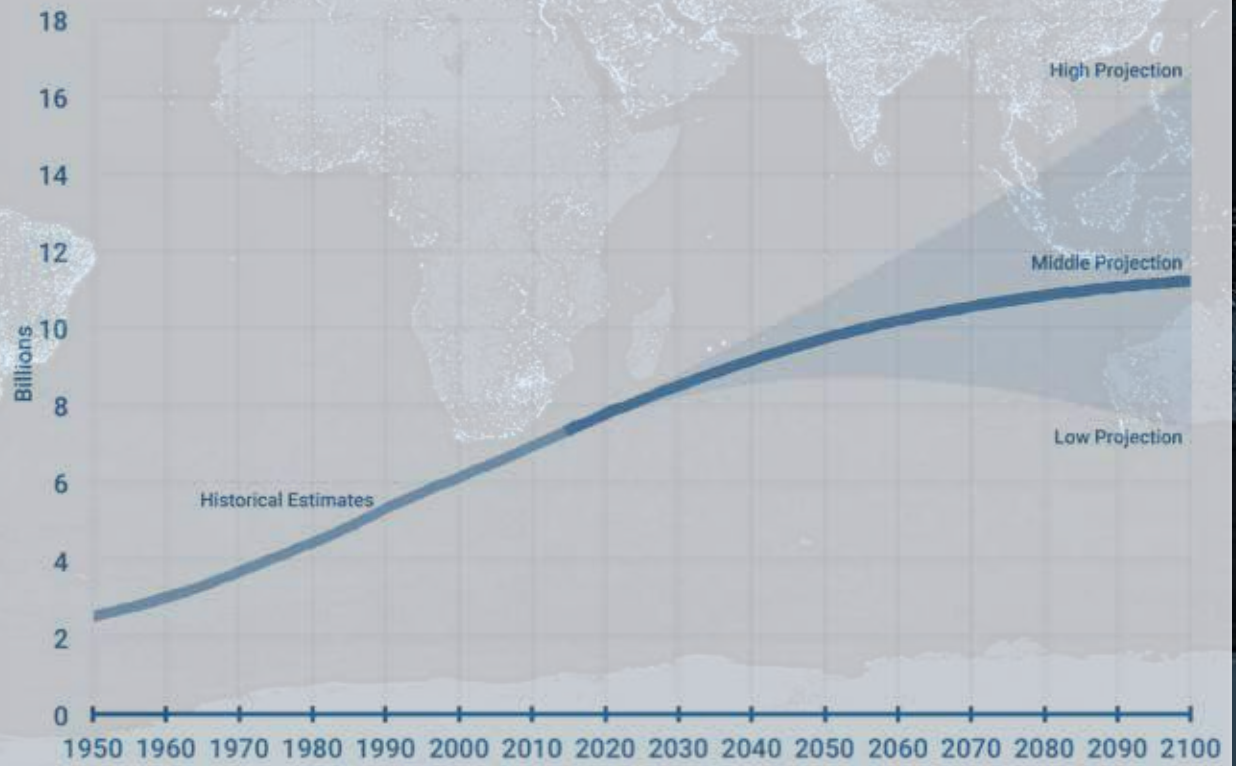
Martin Visbeck, GEOMAR Helmholtz Centre for Ocean Research Kiel
and Kiel University, Germany

population – night lights

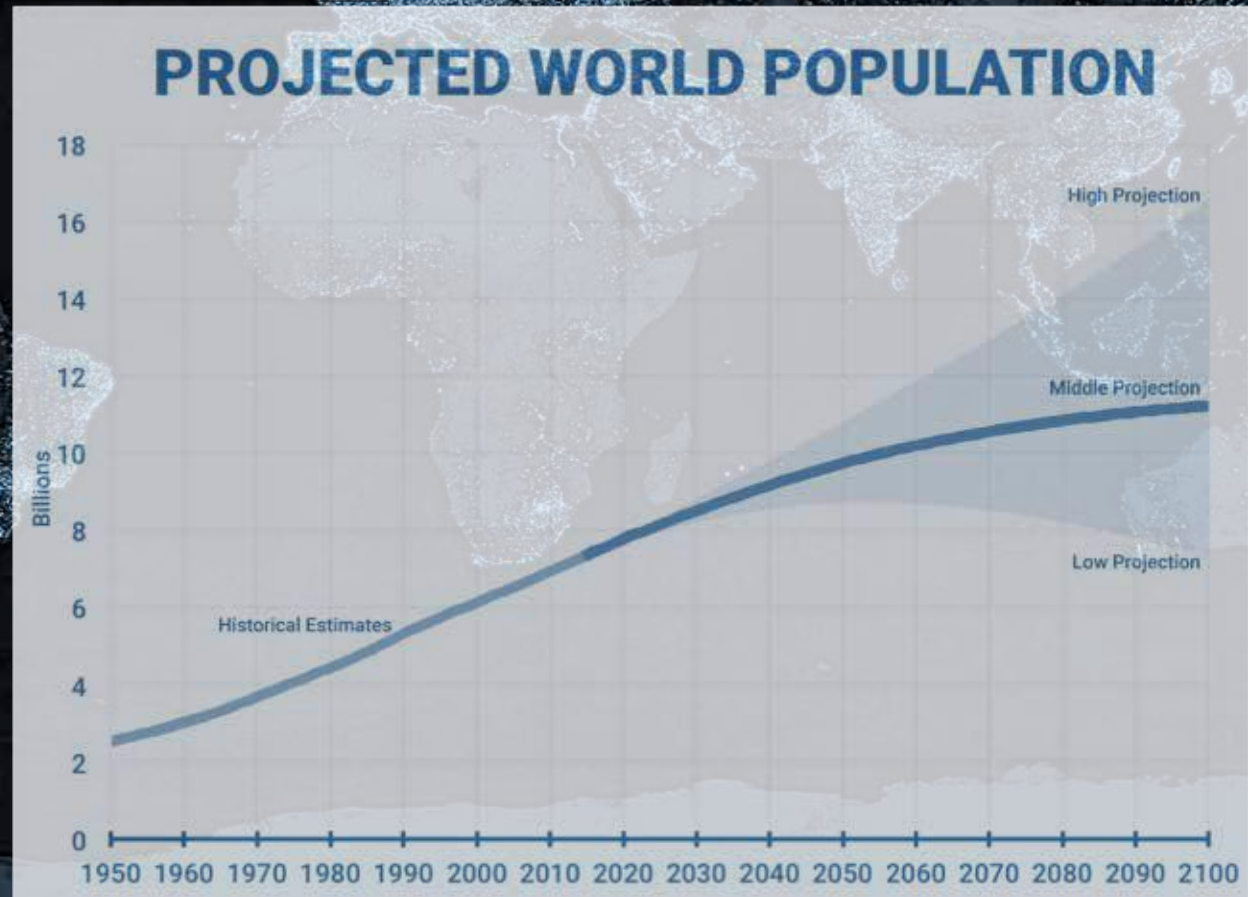
40% population within
100km from shore



PROJECTED WORLD POPULATION



A growing population...
increased demands on the ocean space:
food, transport, materials, energy, tourism



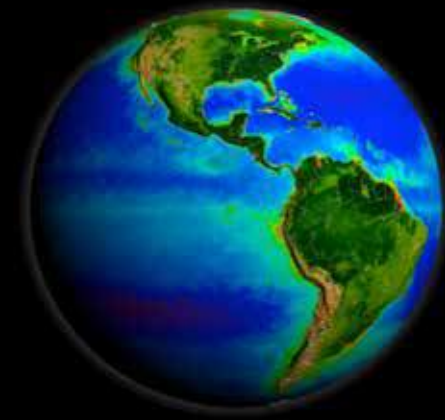
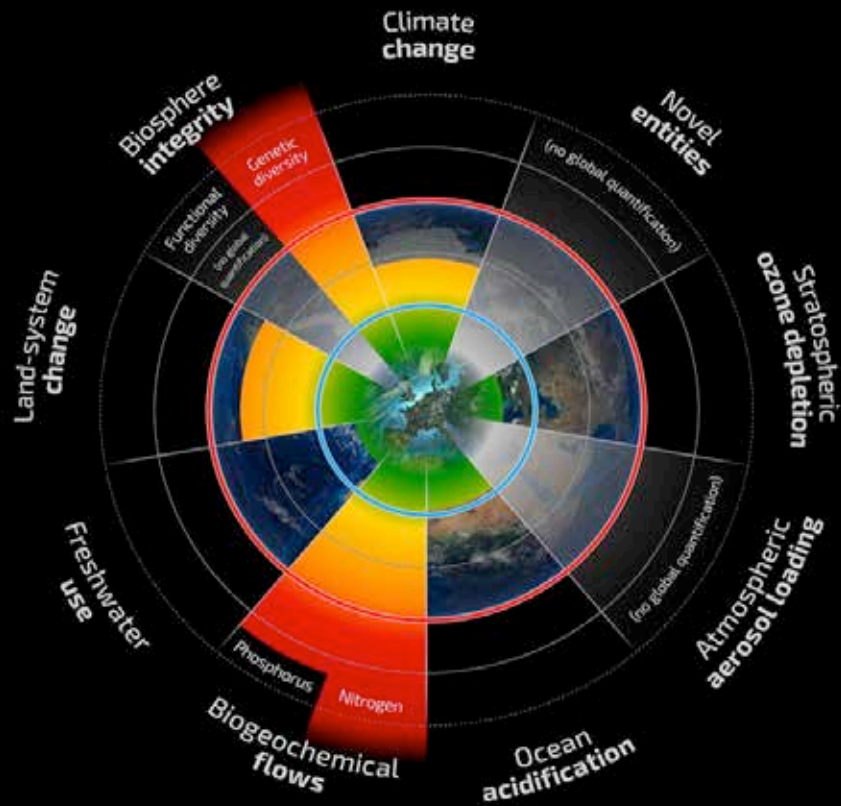
A world map with a dark, textured appearance, overlaid with text. The map is rendered in shades of dark blue and black, with a grainy, almost satellite-like texture. The continents are visible as lighter, more detailed areas against the dark background. The text is overlaid on the map, with a semi-transparent dark rectangular background behind it.

A growing population...

increased demands on the ocean space:
food, transport, materials, energy, tourism

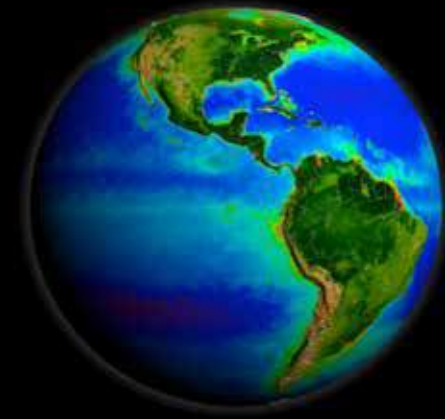
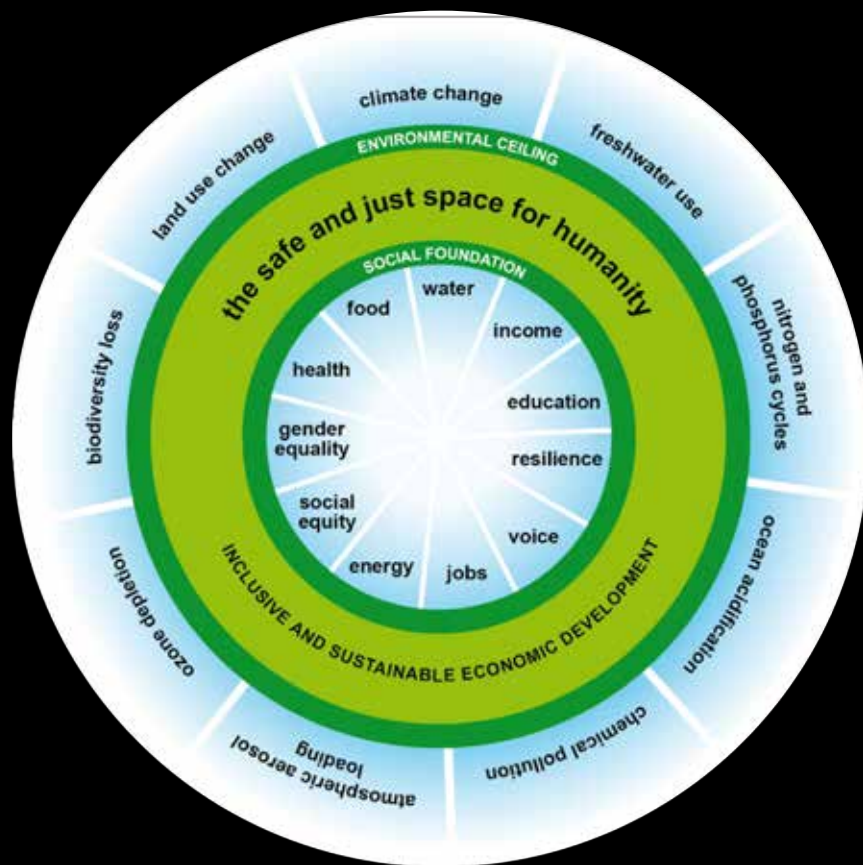
And yet we only have

Development needs to respect planetary boundaries



One Planet
One Ocean

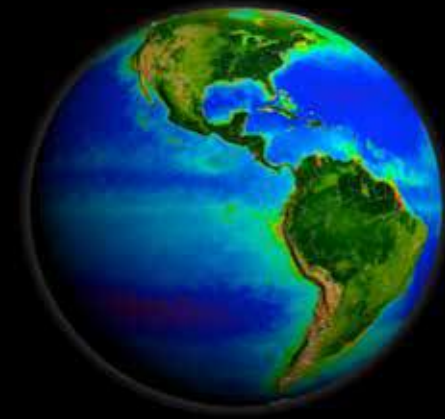
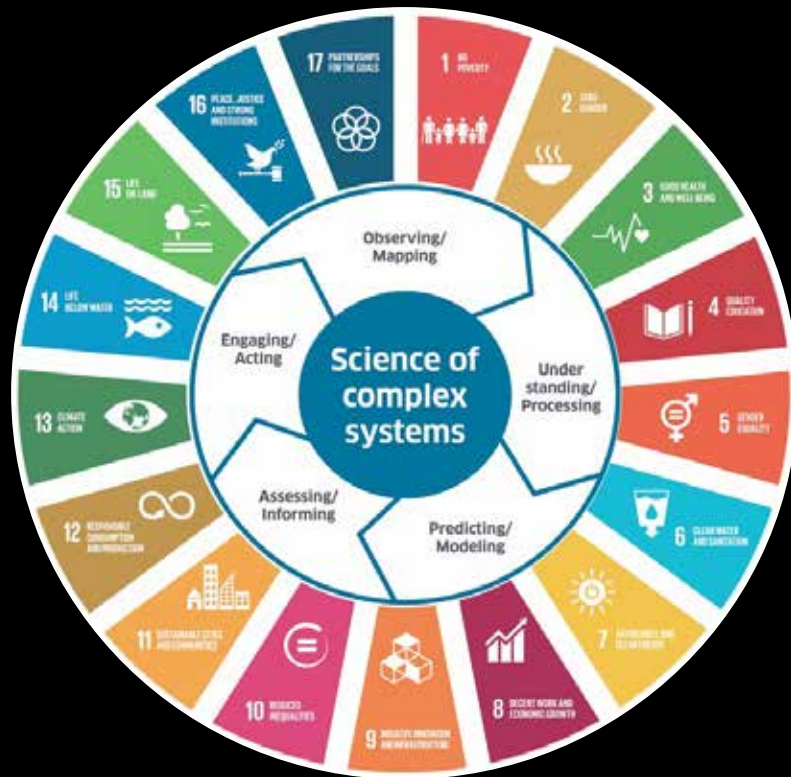
Development needs to respect planetary boundaries



One Planet
One Ocean

What is the safe and just operating space for humanity?

Development needs to respect planetary boundaries



One Planet
One Ocean

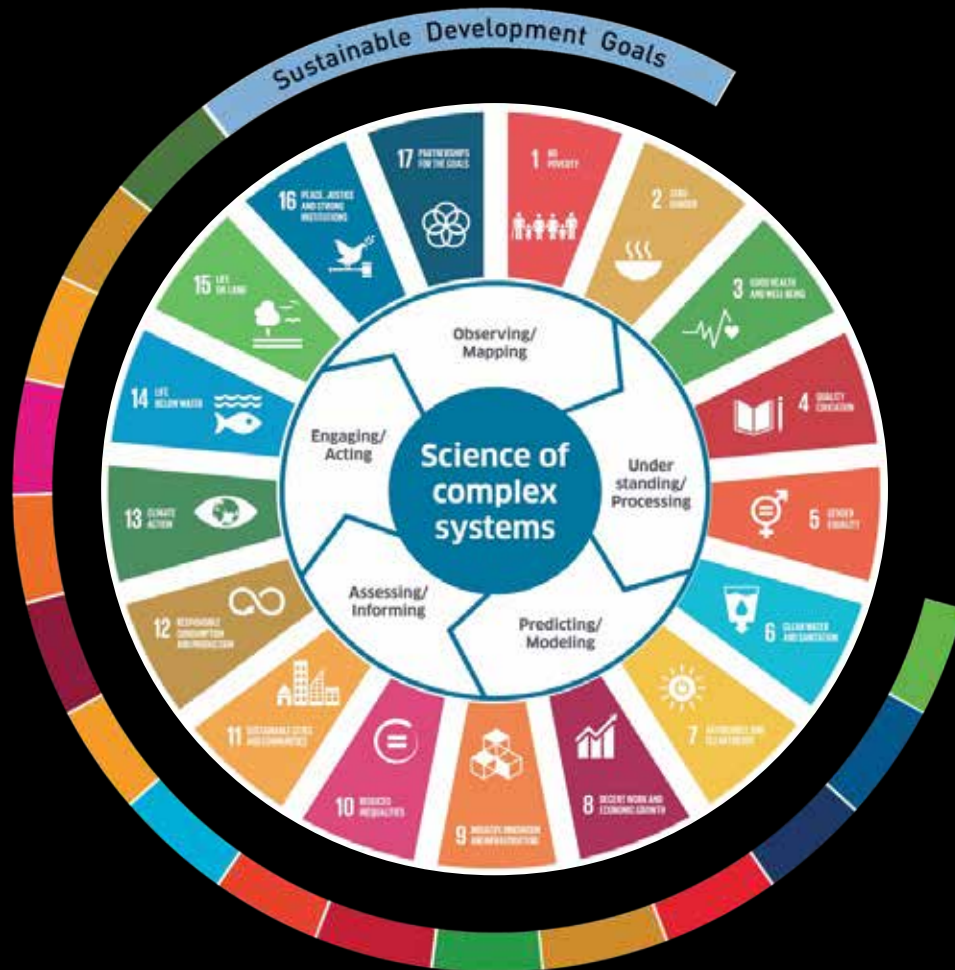
What is the safe and just
operating space for humanity?

2030 Agenda



SUSTAINABLE DEVELOPMENT GOALS

17 GOALS TO TRANSFORM OUR WORLD

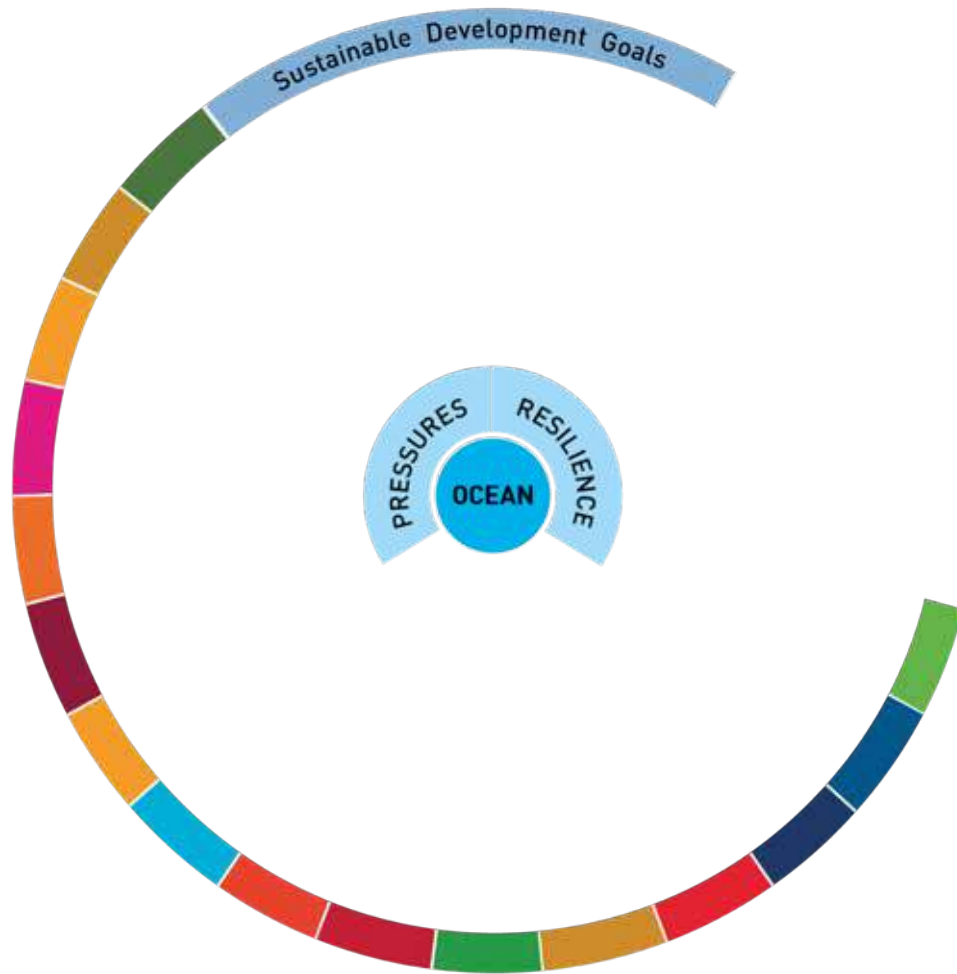


What is the safe and just operating space for humanity?

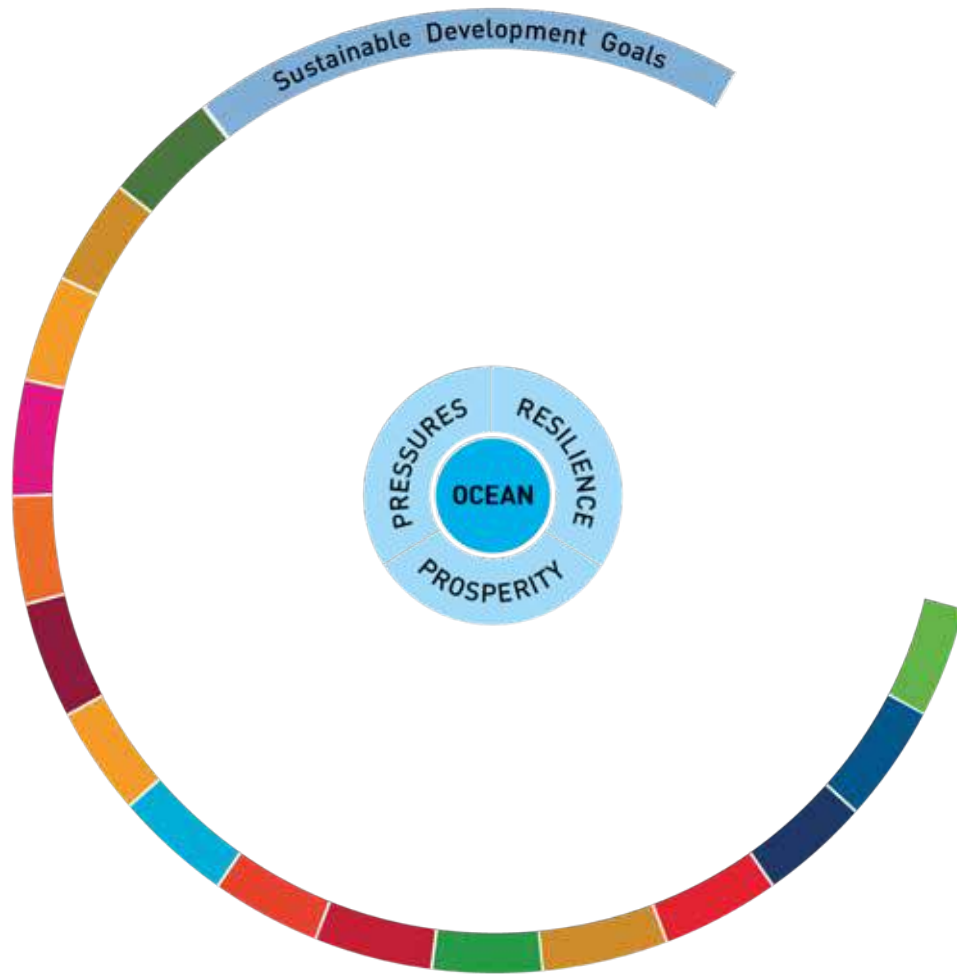
Understanding Human Pressures on the Ocean System



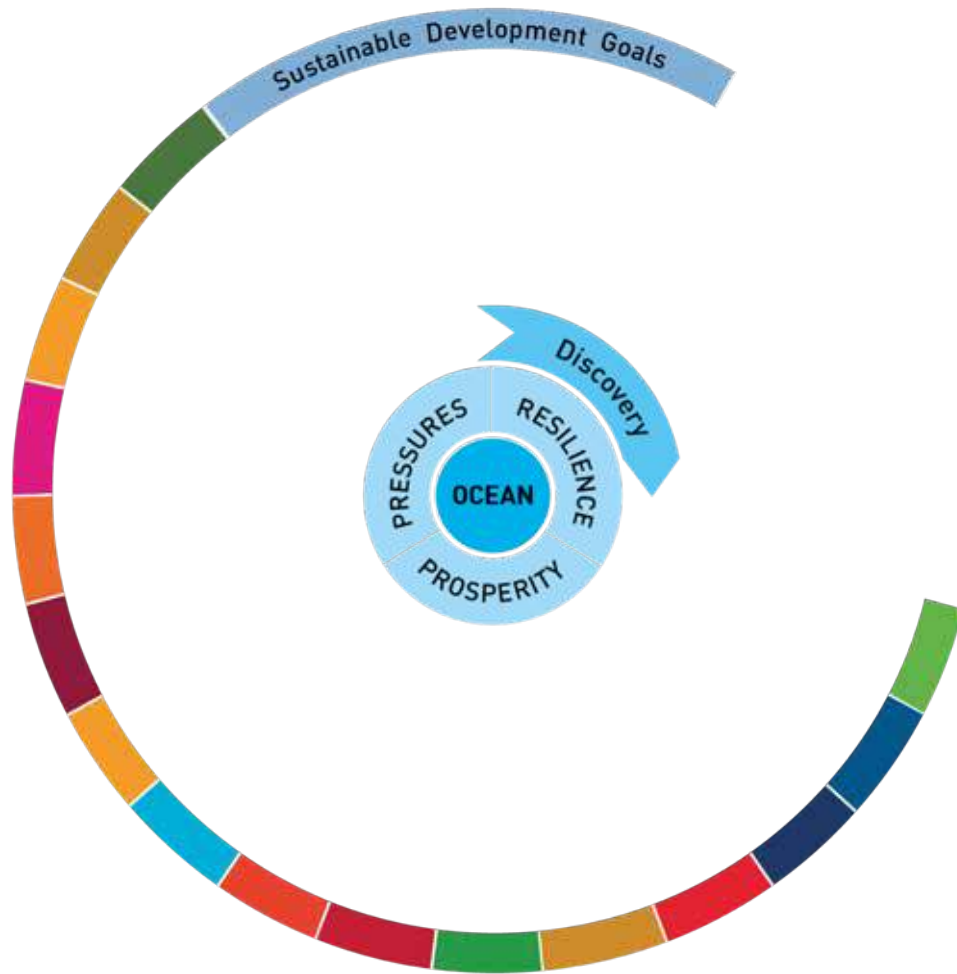
Science Supporting a **Resilient** Ocean and Coastal Communities



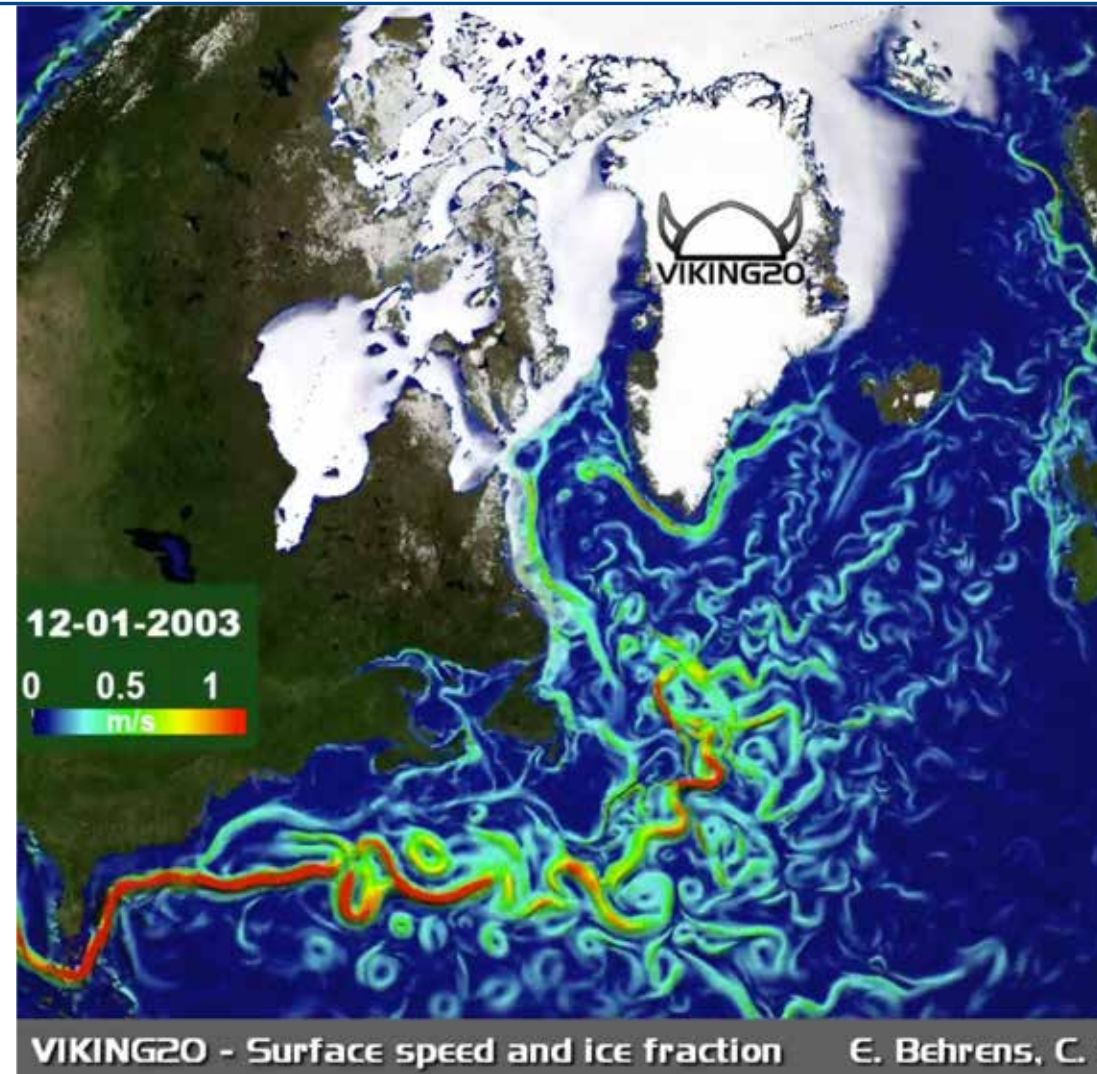
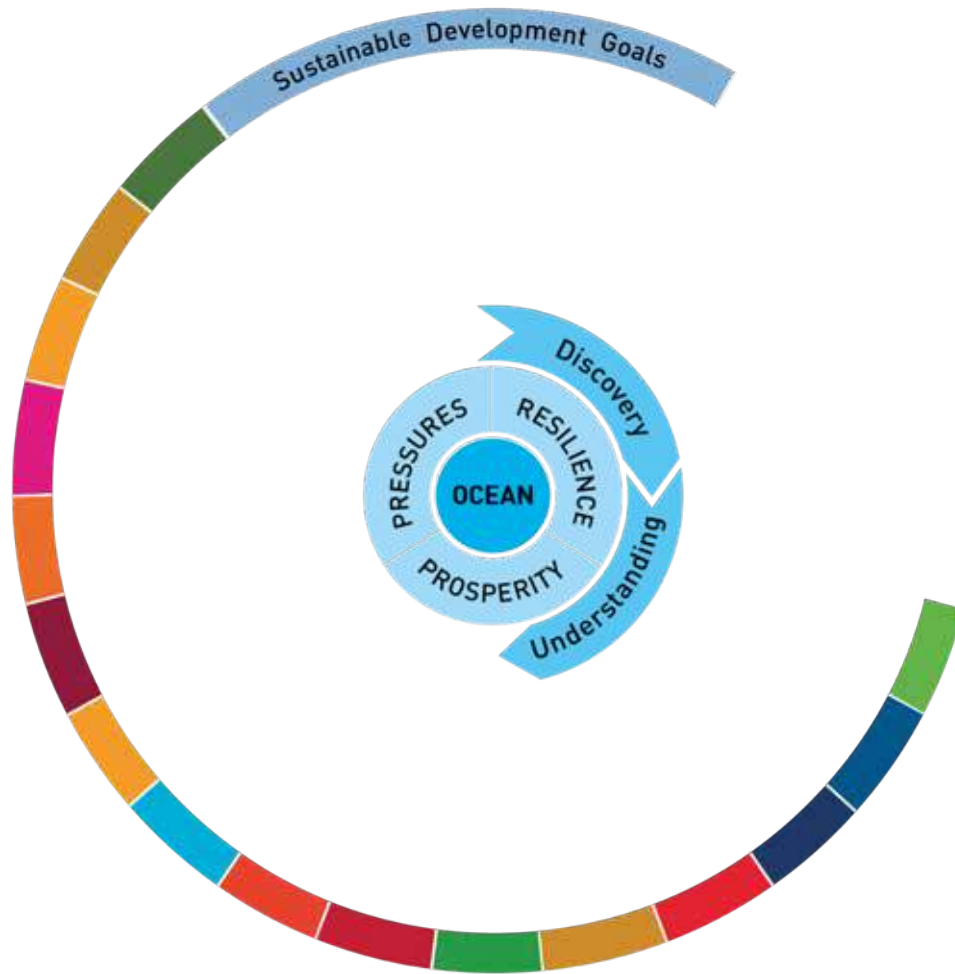
Advancing Pathways to Sustainable Ocean Prosperity



Future Ocean supports – OCEAN DISCOVERY



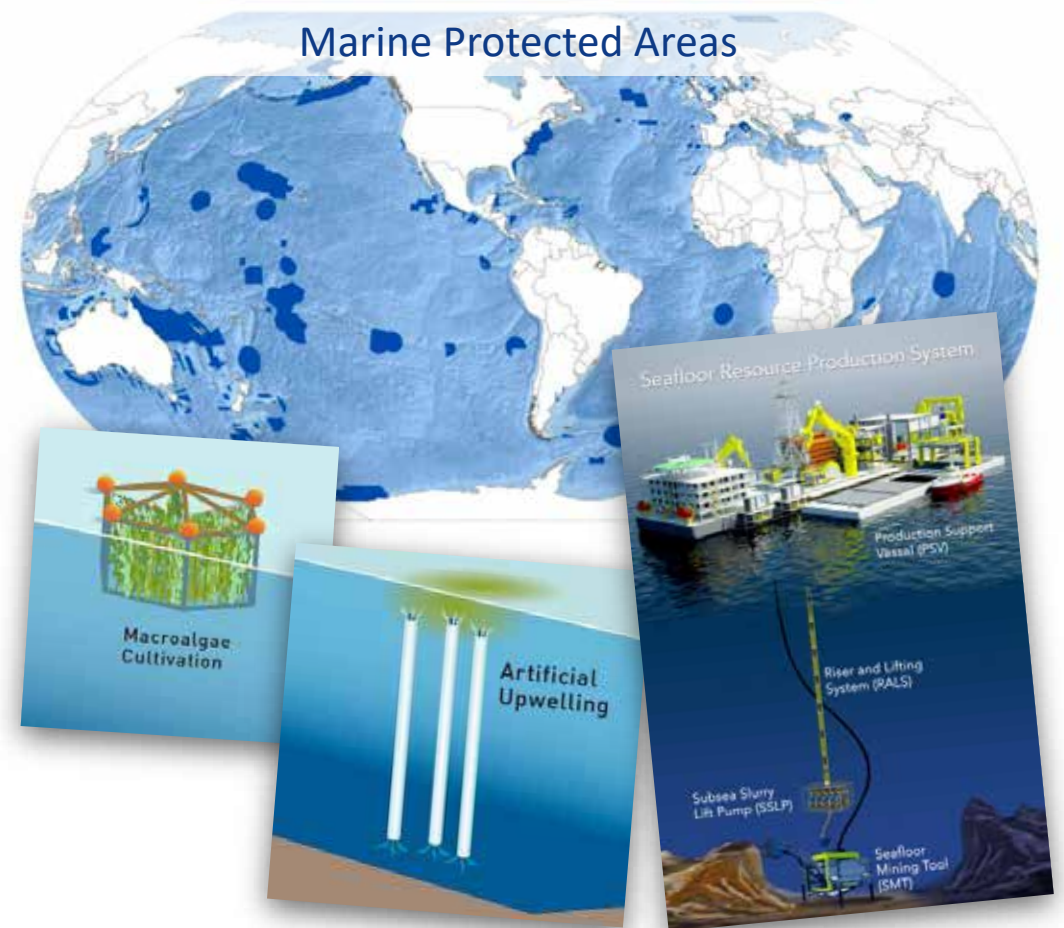
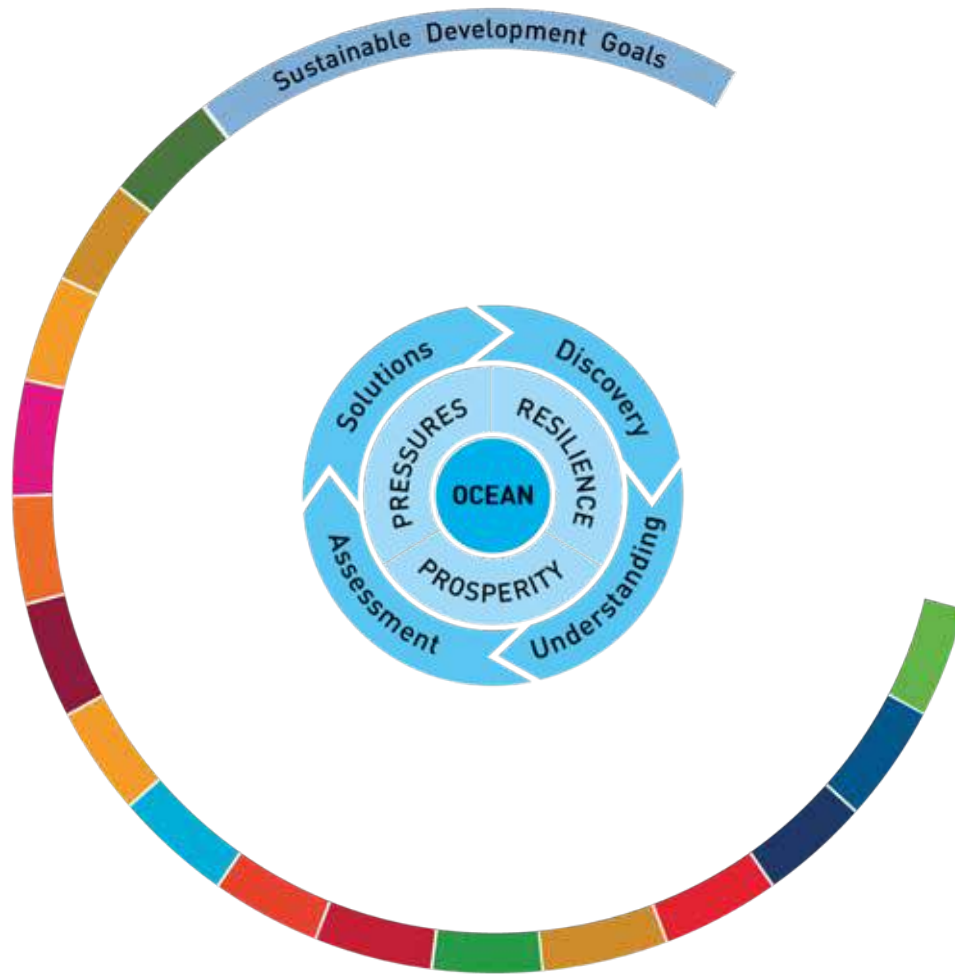
Future Ocean supports – OCEAN UNDERSTANDING



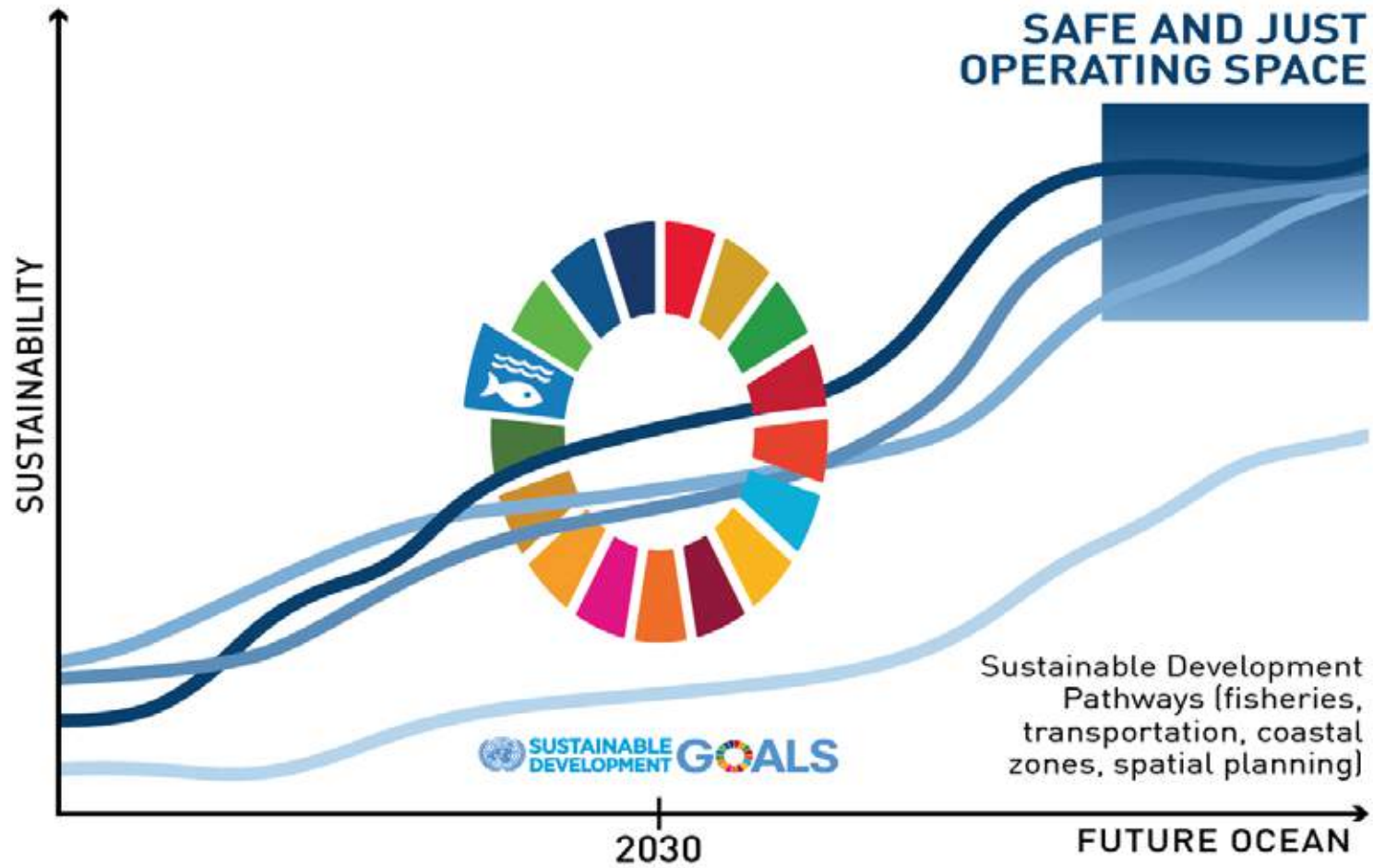
Future Ocean supports – OCEAN ASSESSMENT



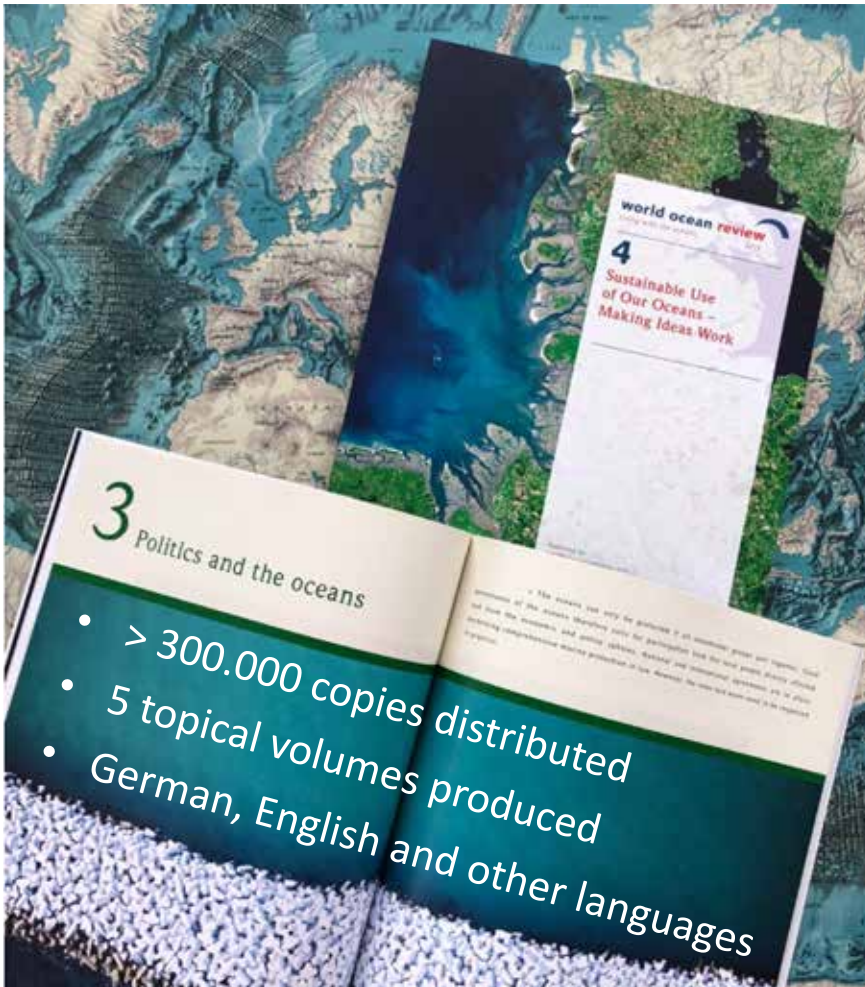
Future Ocean supports – OCEAN SOLUTIONS



Future Ocean supports – OCEAN PATHWAYS



Ocean Literacy – Ocean Atlas and World Ocean Review



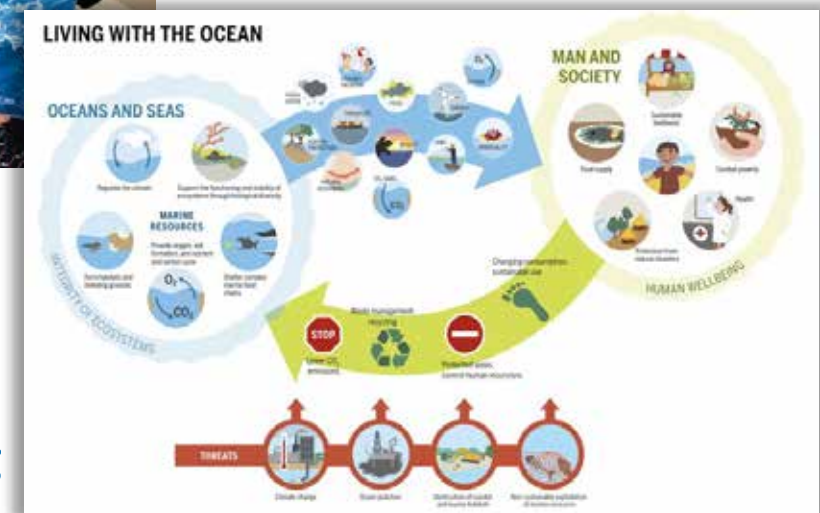
> 150.000
copies
distributed

Ocean-Atlas.org

HEINRICH
BÖLL
STIFTUNG



LE MONDE
diplomatique



International Ocean Science Organizations



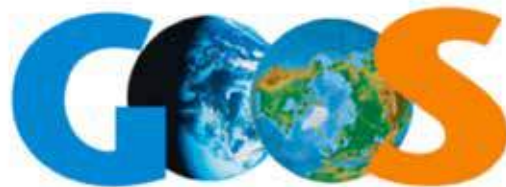
**International
Science Council**



futureearth
research for global sustainability



**futureearth
coasts**
land-ocean interactions in the coastal zone



ipcc
INTERGOVERNMENTAL PANEL ON
climate change



UN Ocean Science Organizations

UN-OCEANS

An interagency collaboration mechanism on ocean and coastal issues within the UN system



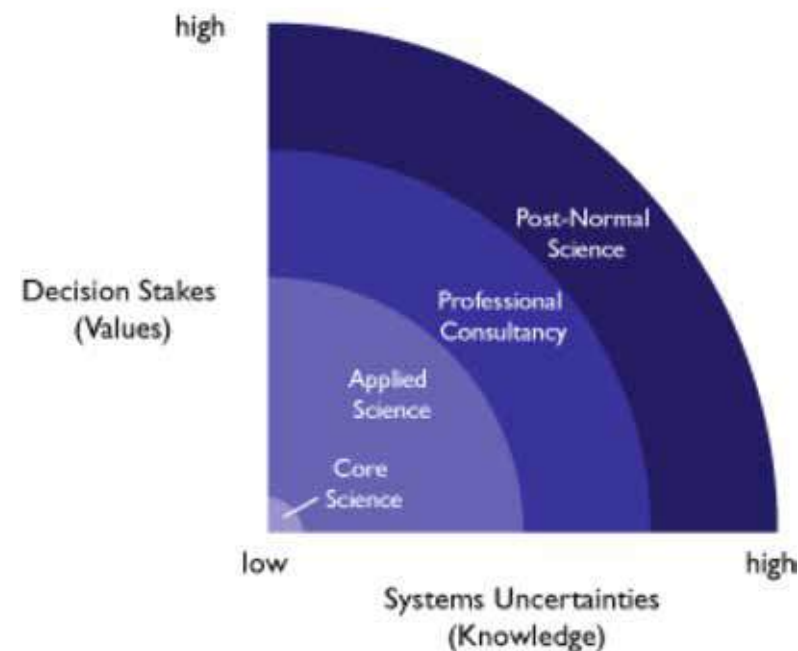
Challenges for International Ocean Science Organizations

- Science Organizations serve the science community – thus they have a self referenced frame.
- They articulate global scientific agendas and they define success and rewards.
- Scientific excellence is increasingly measured by impact on the science, which translates often to # of expert publications and their citation rates (H-Index).
- **Scientific advice to society is ‘nice’, part of ‘good citizenship’, but something you do in your spare time ...**



Opportunities for International Ocean Science Organizations

- Critically reflect our contract with society
- Provide alternative ways to measure success. Impact metrics or reward systems
- Science advice to society needs to become an integral part of the science we promote
- Balance the ‘freedom’ of science with ‘responsible science’
- Promote System-Science in addition to deep expertise in a particular field.



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

Martin Visbeck
GEOMAR and Kiel University





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



United Nations
Educational, Scientific and
Cultural Organization



Intergovernmental
Oceanographic
Commission



2021
2030 United Nations Decade
of Ocean Science
for Sustainable Development



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.





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.





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 cooperation framework for ocean science

Synthesise existing research

defining trends, knowledge gaps, priorities for future research

Mobilizing scientists on critical ocean priorities relevant to Agenda 2030

New co-designed research strategies

Funding /partnerships
Stakeholders engagement

Bridging science, policy and society

Science-policy dialogues, dissemination, access to data, information, communication

Synthesising, assessing results, development of user-driven solutions

Fostering new joint research and cooperation within & across ocean basins

Integration natural & social sciences
Capacity development





Preparatory Phase: 2018-2020



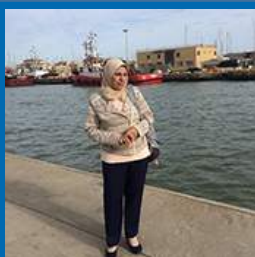
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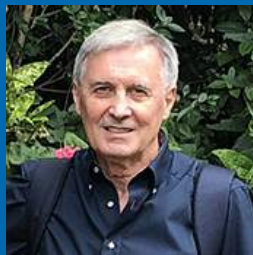


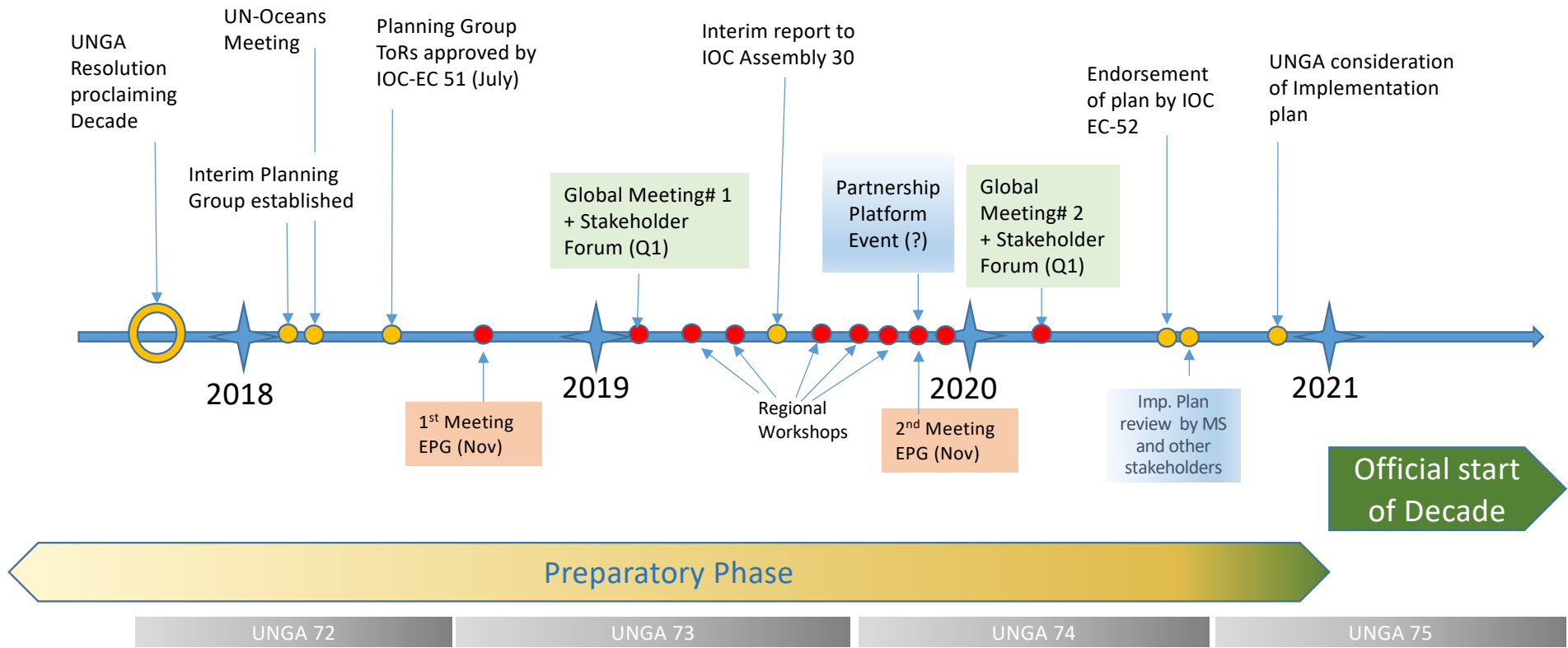
2021
2030 United Nations Decade
of Ocean Science
for Sustainable Development



Executive Planning Group

The Executive Planning Group (EPG) is an expert group composed of 16 to 20 members who will serve as an advisory body to the IOC governing bodies to support the development of the Implementation Plan as well as the preparatory activities of the Decade.





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



United Nations
Educational, Scientific and
Cultural Organization



Intergovernmental
Oceanographic
Commission



2021
2030 United Nations Decade
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