

# UN Ocean Decade Vision 2030 Process 1st Public Webinar

02 November 2023



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

***Please note that the webinar is being recorded***

# 1. Agenda



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Agenda	Speakers
<p><b><u>Welcome and Overview (10 mins)</u></b></p> <ul style="list-style-type: none"><li>- Overview of the webinar’s objectives and agenda</li><li>- Rapid presentation of the Ocean Decade Objectives, Challenges, Outcomes and ‘Ecosystem’</li><li>- Overview of the 2024 Ocean Decade Conference in Barcelona and its programme</li></ul>	DCU
<p><b><u>The Vision 2030 process (45 mins)</u></b></p> <ul style="list-style-type: none"><li>- Introduction to the roadmap and framework of the Vision 2030 process</li><li>- Overview of the White Papers, Consultation, and Review process</li><li>- Opportunities to participate and engage in the process</li><li>- Update from each WG on progress and upcoming milestones</li></ul>	DCU & Co-Chairs
<p><b><u>Q&amp;A Session (30 mins)</u></b></p> <ul style="list-style-type: none"><li>- Occasion for attendees to ask questions, engage and share insights</li></ul>	All
<p><b><u>Closing Remarks (5 mins)</u></b></p> <ul style="list-style-type: none"><li>- Summarize the key takeaways</li><li>- Guidance on accessing additional resources</li><li>- Call to action for active participation in the Vision 2030 process</li></ul>	DCU

## 2. Main objectives



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**Facilitate broad Decade stakeholder engagement in the Vision 2030 process**

**Collect initial inputs and feedback on the Vision 2030 and the work of the Working Groups**

**Showcase initial outputs of the White Papers**

**Set out the process for further detailed engagement in the process moving forward**

# THE OCEAN DECADE ACTION FRAMEWORK

## 'THE SCIENCE WE NEED'

UN Decade of Ocean Science for Sustainable Development



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



2030 United Nations Decade of Ocean Science for Sustainable Development



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## 'THE OCEAN WE HAVE'



- ### DECADE CHALLENGES
- 1 Understand and beat marine pollution
  - 2 Protect and restore ecosystems and biodiversity
  - 3 Sustainably feed the global population
  - 4 Develop a sustainable and equitable ocean economy
  - 5 Unlock ocean-based solutions to climate change
  - 6 Increase community resilience to ocean hazards
  - 7 Expand the global ocean observing system
  - 8 Create a digital representation of the ocean
  - 9 Skills, knowledge and technology for all
  - 10 Change humanity's relationship with the ocean

- ### DECADE OUTCOMES
- #### 'THE OCEAN WE WANT'
- A clean ocean
  - A healthy and resilient ocean
  - A productive ocean
  - A predicted ocean
  - A safe ocean
  - An accessible ocean
  - An inspiring and engaging ocean

## 4. Overview of the 2024 UN Ocean Decade Conference



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**Purpose:** Assess the progress and achievements made during the first three years of the Ocean Decade and define a collective vision for the upcoming years.

**Date:** 10<sup>th</sup> - 12<sup>th</sup> April 2024 & full week of events

**Location:** Barcelona, Spain

### **Key Points:**

- Publication of the set of White Papers addressing the 10 Decade Challenges
- Identifying future priorities for science-based solutions to global challenges
- Bringing together governments, leaders, maritime sectors, philanthropy, universities, private sector, NGOs, and more
- Platform for sharing knowledge, best practices, and innovative solutions
- Addressing pressing ocean challenges and advancing the Decade's goals





## 10 April

10.00 - 13.00

Plenary: High Level Opening Segment

Plenary: Principles of Success for the Ocean Decade

- ✓ *Engagement of Small Island Developing States / Least Developed Countries*
- ✓ *Gender & Early Career Ocean Professionals*
- ✓ *Technology & Innovation*
- ✓ *Investment in ocean science*

15.00 - 18.00

**Session 1: Science and Solutions for a Clean, Healthy and Resilient Ocean**  
*(Challenges 1, 2 and 5 – Pollution, Ecosystems and Climate)*

Plenary and Parallel Sessions

## 11 April

10.00 - 13.00

**Session 2: Science and Solutions for a Sustainable and Resilient Ocean Economy**  
*(Challenges 3, 4 and 6 – Sustainable Ocean Economy, Sustainable Blue Food and Resilient Communities)*

Plenary and Parallel Sessions

15.00 - 18.00

**Session 3: Science and Solutions for a Safe and Predicted Ocean**  
*(Challenges 6, 7 and 8 – Observations, Data, and Forecasting / Early Warning Systems)*

Plenary and Parallel Sessions

## 12 April

10.00 - 13.00

**Session 4: An Inspiring and Engaging Ocean for All**  
*(Challenges 9 and 10 – Capacity Development, Ocean Literacy, and Indigenous and Local Knowledge and Cultural Heritage)*

Plenary and Parallel Sessions

15.00 - 18.00

Plenary: Resources and Partnerships for the Ocean Decade

Plenary: Announcements & Commitments for the Ocean Decade

Plenary: Closing Segment - Charting a Vision to 2030

## 6. Strategic Ambition Setting



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- Strong demand from Decade community to **shape a common vision** for the next 8 years & enhance collective impact
- Unique window of opportunity to **deliberately design the 'science we need'** and avoid dispersion of Decade Actions
- Growing need to **measure & document impact** of the Ocean Decade
- ❖ What does success look like for this Ocean Decade Challenge at the end of the Decade?
- ❖ What milestones / targets do we need to achieve throughout the Decade to be on the path for success for this Challenge?





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**10**  
Working  
Groups  
for  
**10 Challenges**

**~50**  
Countries

**21**  
ECOPs

**~150**  
Experts

**26**  
Supporting  
Staff

**58%**  
of women

**20**  
Co-Chairs

**~40**  
Actions

Visit the page:



**Vision 2030**



## 8. White Papers & Milestones



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### White Paper Layout



Finalization

Public review  
process  
(Jan-Feb 2024)

**White Papers and Synthesis  
Report** to be presented and  
discussed at the 2<sup>nd</sup> International  
Ocean Decade Conference in  
April 2024

Consolidation of White Papers  
and development of the  
Operational Plan to implement  
and operationalize the Strategic  
Ambitions for each Challenge

## 9. How to engage



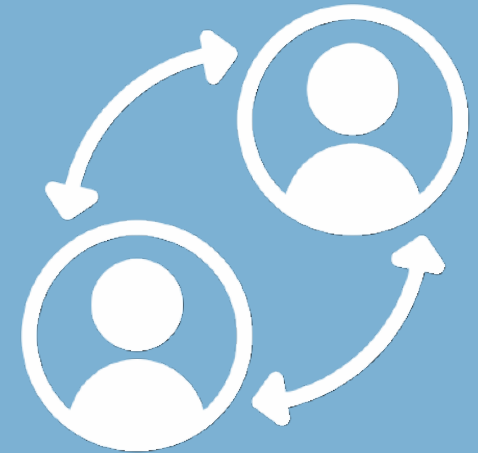
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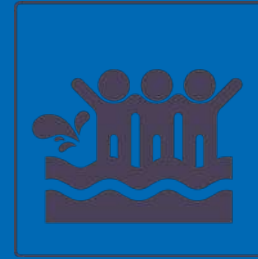
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- Get involved through targeted consultations with specific WGs
- Participate in the open review process of the White Papers
- Join the 2024 Ocean Decade Conference
- Share the Vision 2030 process during events & collect feedback
- Contact the coordination team



# Working Group 10



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## Challenge 10: Change humanity's relationship with the ocean

Ensure that the multiple values and services of the ocean for human wellbeing, culture, and sustainable development are widely understood, and identify and overcome barriers to behaviour change required for a step change in humanity's relationship with the ocean.



**Diz Glithero**  
National Lead  
Canadian Ocean  
Literacy Coalition



**Nicola Bridge**  
Head  
Ocean Advocacy and  
Engagement, Ocean  
Conservation Trust



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## Challenge 10:

### Change humanity's relationship with the ocean

Ensure that the multiple values and services of the ocean for human wellbeing, culture, and sustainable development are widely understood, and identify and overcome barriers to behaviour change required for a step change in humanity's relationship with the ocean.



Restoring humanity's  
relationship with  
the Ocean

### Strategic Ambition

To create enabling conditions and environments to support humanity to have the motivation, capability, and opportunity to behave in ways that ensure a healthy ocean



Does this high level  
ambition for 2030  
resonate with you?





## Priority Drivers of Pro-Ocean Behaviour

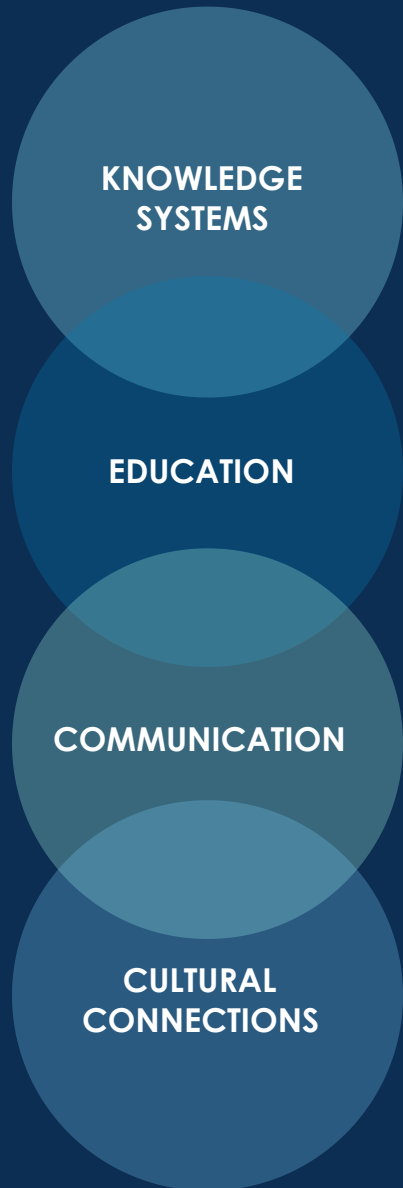
*\*Driver: a key factor that has a large influence on an outcome of interest*



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Leveraging different ways of knowing about human-ocean connections and actioning this knowledge across all sectors of society



Using formal education in schools, as well as informal experiential learning (e.g., citizen science, museums, aquariums, and multimedia) to build connection



Equipping people (from different user groups) with the tools, skills, and knowledge to communicate clearly about the values/services of the ocean to human well-being



Recognizing how intergenerational interactions with the ocean (and local waterways, coastal areas, and sea ice) inform cultural identity, social values, and practices, and how these cultural relationships change and evolve over time



What drivers do you feel are essential to ensuring societal behaviour and action that supports a healthy ocean?

# Working Group 9



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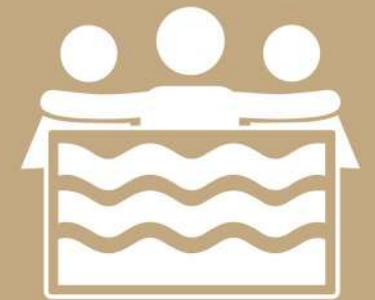


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## Challenge 9: Skills, knowledge and technology for all

Ensure comprehensive capacity development and equitable access to data, information, knowledge and technology across all aspects of ocean science and for all stakeholders.



**Brian Arbic**  
Professor of  
Oceanography  
University of Michigan



**Edem Mahu**  
Senior Lecturer of  
Marine Biogeochemistry  
University of Ghana

# Working Group 9



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## PROGRESS

- Formed working group of about 20 members (> diversity in gender, geography, and career stage)
- Several online meetings with WG9 members
- Several online meetings with co-chairs only
- Generated long-list of key inequities, users, and user needs
- Created general outline of white paper
- Started to write white paper; will show the white paper now...

The Current Status: Unequal recognition, representation, and distribution of resources related to ocean science globally

## KEY INEQUITIES

- Technological and Digital Divide
- Infrastructure and Monitoring Disparities
- Data Access and Ownership
- Data Quality and Standardization
- Knowledge generation and use
- Gender and Diversity Representation
- Educational Disparities
- Language and Communication Barriers
- Funding and Resource Allocation
- Political and Policy Barriers
- Resource Exploitation

# Working Group 9



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## Addressing Key inequities

- Equitable Knowledge and Data Sharing
- Thoughtful Policy Development
- Co-design Projects through Interdisciplinary Teams
- Integrate Public and Private Sector Resources
- Assist Early Career Ocean Professionals
- Enhance Local Capacity
- Focus on Communities in Need
- International Collaboration

## User Needs

- Funding
- Sustainable employment
- Sense of community
- Fit-for-purpose equipment
- Representation: Place in decision-making bodies
- Access to data, journal articles, and international meetings
- Training and Education
- Inclusive collaboration
- Access to technology, research vessels, and key infrastructure
- Local knowledge integration
- Acknowledgement and respect
- Policy and governance support
- Continuous monitoring and evaluation and feedback loops
- Elimination of inherent bias and stereotyping
- Private/ public partnerships to support sustainable employment



# Working Group 8



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## Challenge 8: Create a digital representation of the ocean

Through multi-stakeholder collaboration, develop a comprehensive digital representation of the ocean, including a dynamic ocean map, which provides free and open access for exploring, discovering, and visualizing past, current, and future ocean conditions.



**Jan-Bart Calewaert**  
Lead Manager  
Decade Coordination  
Office for Ocean Data  
Sharing, IOC-UNESCO



**Paula Cristina Sierra-Correa**  
Coordinator  
Marine and Coastal  
Research Institute  
'Jose Benito Vives de  
Andreis'

# Working Group 8



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## WHO WE ARE

A diverse, regionally representative group of individual experts as well as institutional members and representatives of relevant Decade Programmes, Actions and partners.  
+Observers from IOC&IODE

## WG8 IN NUMBERS

- 2 co-chairs
- 16 Working Group members
- 4 observers
- 4 brainstorming meetings (entire group)
- 2 drafting group sessions (sub-group)
- 1 briefing document
- 1 brainstorming document
- 1 White Paper Narrative
- 1 Supporting DCO (Ocean Data Sharing)

## OUR WORK SO FAR

Developed a White Paper Narrative addressing:

- What do we mean by Digital Representation of the Ocean?
- What is the time frame for the strategic ambition setting: from now to 2030? And beyond?
- Who are our users and what do they need?
- What content do we need to provide and by when?
- What tools & services should be in place by 2030? And beyond?
- Identifying needs from other Challenge WG's and Actions
- Plan for elaboration and drafting white paper

## HOW CAN YOU PARTICIPATE/CONTRIBUTE ?

- Ocean Decade webinars
- Ditto Digital Twins of the Ocean Conference: November 9-12 2023, Xiamen China and online
- Ocean Decade Conference in Barcelona in April 2024 - Participate in Ocean Decade Conference (Ch8: Session 3; 11/04/2024)
- Propose / implement / Contribute to Ocean Decade actions dealing with data/information sharing with a broader impact
- Promote, practice key messages of WG8
- Contact us:
  - Jan-Bart Calewaert ([jb.calewaert@unesco.org](mailto:jb.calewaert@unesco.org))
  - Paula Sierra ([paula.sierra@invemar.org.co](mailto:paula.sierra@invemar.org.co))
  - Decade Coordination Office for Ocean Data Sharing: [oceandatasharing@unesco.org](mailto:oceandatasharing@unesco.org)

# Working Group 8



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## Process towards a Strategic Ambition Setting for Challenge 8 White Paper

### WHO ARE OUR USERS

Everyone - diverse in expertise & area, leave no one behind

- professional (hands on)
- professional (not hands on)
- non-professional/public
- **other 9 challenges are proxy users** defining data & info needs (both content & services)

### WHAT DO THEY NEED?

- easy access to ocean data & information (multidisciplinary)
- tools/services for accessing and sharing data, information and knowledge

### DIGITAL CONTENT NEEDS

All data types relevant  
Focus on **priority data products & underpinning data**

**Global data-layers** as drivers to pull in data

- Address data-gaps, agree on standards & improve interoperability
- Leverage existing communities
- Must be societally relevant (other challenges)
- Must be co-developed in a transparent process

Global layers must be **complemented with local case studies** (global south)

### DIGITAL SERVICES NEEDS

1. Global Ocean **Data Discovery and Access Service**
2. Online user-friendly **Digital Atlas of the Ocean**
3. **Marine Knowledge exchange** mechanisms
4. **Help Desk** Service
5. **Capacity Development** / Sharing and **Training** facility

### NEXT STEPS

- Agree on globally relevant data products: e.g., marine litter/pollution, MPAs, blue carbon,
- Elaborate service ideas, build on what exists / identify existing best practices
- Synergies with other WGs
- Incorporate feedback on strategic ambition
- Involve relevant Actions
- Draft White Paper

# Working Group 7



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## Challenge 7: Expand the Global Ocean Observing System

Ensure a sustainable ocean observing system across all ocean basins that delivers accessible, timely, and actionable data and information to all users.



**Patricia Miloslavich**  
Program Lead  
East Antarctic  
Monitoring Program,  
Australia Antarctic  
Division



**Joe O'Callaghan**  
Director  
Oceanly Science



# Working Group 7



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Name	Affiliation	Expertise	Country
Aridane Gonzalez	Universidad de Las Palmas	Marine Chemistry	Spain
Erin Satterthwaite	Scripps Institution of Oceanography	Marine ecology, ocean sustainability	USA
Irene Schloss	CADIC/SOOS	Zooplankton, Southern Ocean	Argentina
Isa Olalekan Elegbede	Brandenburg University of Technology / Brand Lagos State University	Sustainability of marine and coastal resources	Germany / Nigeria
Jerome Aucun	SPC	Physical oceanography	France
Laura Lorenzoni	NASA	Biogeochemistry, remote sensing	USA
Marcos Fontela	University of Vigo	Oceanography	Spain
Mathieu Belbeoch	GOOS, Ocean Ops	Data management	France
Michelle Heupel	Integrated Marine Observing System (IMOS)	Ocean observing coordination, conservation and management of marine predators	Australia
Nick Rome	UCAR	Environmental policy	USA
Pierre Testor	CNRS	Physical oceanography	France
Stephen Widdicombe	Plymouth Marine Laboratory	Marine ecology	UK
Emma Heslop *	IOC/UNESCO	Ocean observing coordination, physical oceanography	France
Terry McConnell *	IOC/UNESCO	Ocean observing coordination	Canada

(\*) IOC/UNESCO coordination support

# Working Group 7



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## ACTIVITIES

- Established WG members – balancing expertise, geographic areas
- First meeting: 17 October 2023
- **Topics discussed:** background of the UN challenges and WG process, cross-pollination with other WGs, priorities for expansion of ocean observations, use of automated and low cost options, integrative approach, co-designing, resourcing, foundation of OceanObs19 papers, GOOS strategy, and planning of the Decade Collaborative Center for ocean observing.

## SOME RECCOMENDATIONS

- High-level drafting (to fit in the established format/space)
- Reflect on priorities (societal part at the top) - use the GOOS delivery areas as the foundation for high level priorities
- Focus not only on “expanding” the observing system but on securing/strengthening the current system
- Articulating the importance of having best practices/standard operating procedures (SOPs) for all EOVs that are fit for purpose, as well as low-cost options associated to these SOPs
- Take the approach that a new funding model will be required - expanding from the traditional funding sources (involve a representative of one of these financial sectors in the WG)
- To reach out to other WGs to learn their specific needs for observational data

**Next call: 2-3 November – assign writing teams**

# Working Group 6



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## Challenge 6: Increase community resilience to ocean hazards

Enhance multi-hazard early warning services for all geophysical, ecological, biological, weather, climate and anthropogenic related ocean and coastal hazards, and mainstream community preparedness and resilience.



**Nadia Pinardi**  
Professor of  
Oceanography  
University of Bologna



**Srinivasa Kumar**  
Director  
Indian National Centre  
for Ocean Information  
Services

# Working Group 6



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## Design 'people-centred' multi-hazard early warning systems

### Characteristics:

- Stakeholder engagement
- Responsibility sharing
- Accessible communication
- Institutional capacity building

**OUTCOME:**  
A safe ocean where life and livelihoods are protected from ocean-related hazards

## Design adaptation planning strategies to increase coastal resilience

Use the new data from the Ocean Decade to prepare updated plans and solutions, also in view of the Marine Spatial Planning processes



# Working Group 6



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## Preliminary User Needs for Coastal Resilience Components

### Risk Assessment

- 1) Observational evidence of both hazards and impacts, merged topo/bathy
- 2) Numerical models of, and AI applied to, the hazards and impacts
- 3) Human activities data, economic indicators across sectors

### Risk Reduction

- 1) Early warning systems for preparedness & response
- 2) Emergency response capacity
- 3) Advanced data management capacity
- 4) Staff and media training

### Governance / Institutional / Social

- 1) Marine/Maritime Spatial Planning
- 2) Contingency planning and community partnerships
- 3) Track equity across time and space
- 4) Enhance Corporate social responsibility

# Working Group 5



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## Challenge 5: Unlock ocean-based solutions to climate change

Enhance understanding of the ocean-climate nexus and generate knowledge and solutions to mitigate, adapt and build resilience to the effects of climate change across all geographies and at all scales, and to improve services including predictions for the ocean, climate and weather.



**Carol Robinson**  
Professor of Marine  
Sciences  
University of East Anglia



**Christopher Sabine**  
Professor of  
Oceanography  
University of Hawai'i at  
Mānoa

# Working Group 5



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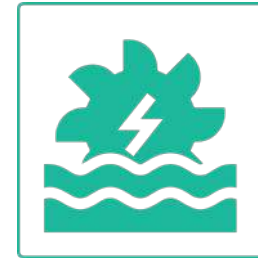
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15 members writing team from 13 countries, 9 female/6 male, all career stages, range of affiliations and expertise

Name	Affiliation	Expertise	Country	Group
Courtney McGeachy/ Liliana Bastian	Ocean Visions	Decade Collaborative Center for Ocean Climate Solutions	USA	Decade Actions etc
Fangli Qiao	First Institute of Oceanography (FIO), Ministry of Natural Resources (MNR), P. R. China	Decade Collaborative Centre for Ocean-Climate Nexus and Coordination amongst Decade Implementing Partners in P.R. China	China	Decade Actions etc
Dhrubajyoti Samanta	Nanyang Technological University	Ocean and climate modelling, climate dynamics	Singapore	Decade Actions etc
Richard Bellerby	Norwegian Inst. for Water Research/East China Normal Univ.	Stakeholder engagement	Norway/ China	Decade Actions etc
Sonia Batten	PICES	North Pacific Marine Science studies	Canada	Decade Actions etc
Jean Pierre Gattuso	Sorbonne University	Multiple stressors/Carbon Dioxide Removal	France	Subject experts
Richard Sanders	NORCE	Integrated Carbon Observing System	Norway	Subject experts
Galen McKinley	Lamont-Doherty Earth Observatory	Ocean and climate models	USA	Subject experts
VVSS Sarma	CSIR-National Institute of Oceanography	Biogeochemical cycles	India	Subject experts
Kelly Ortega Cisneros	University Cape Town	Fisheries, climate change, multiple stressors	South Africa	Subject experts
Robert Blasiak	Stockholm Resilience	Risk and resilience	Sweden	User
Andrea Lira Loarca	University of Genoa	Civil engineer, ports	Italy	User
Suchana Chavanich	Chulalongkor University	Ecologist, conservation, restoration	Thailand	User
Sophia Laarissa	Cadi Ayyad University and ECOP Africa	Lawyer	Morocco	User
Jess Melbourne-Thomas	Commonwealth Scientific and Industrial Research Organization	Research into decision making / policy	Australia	User

# Working Group 5



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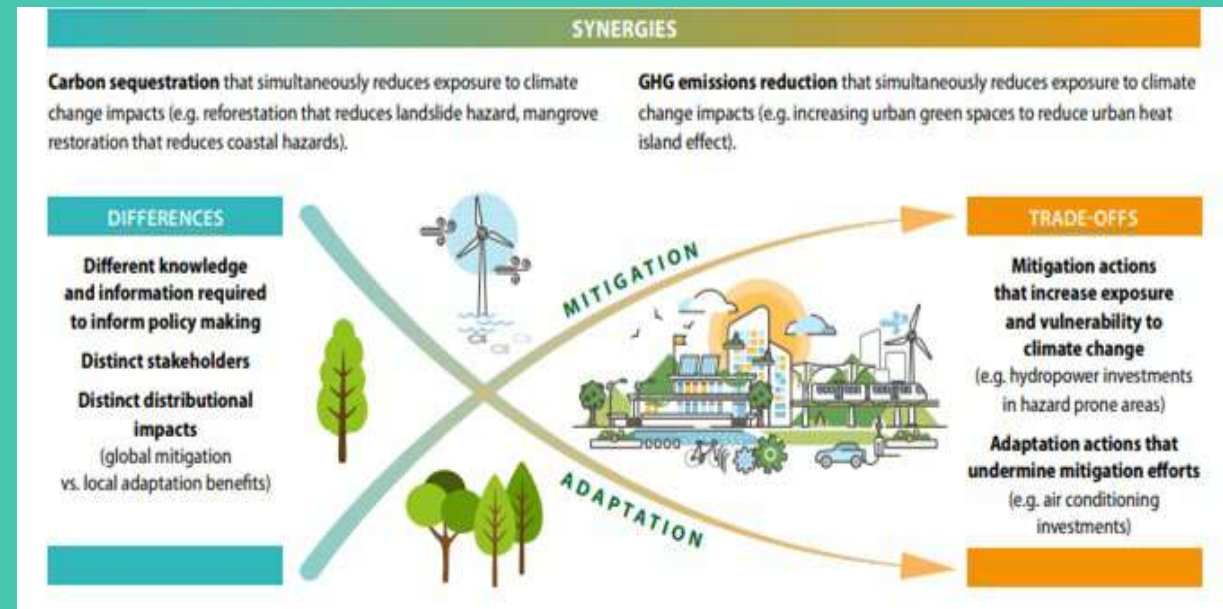
## KEY ISSUES

### Mitigation approaches

- Develop marine renewable energy (windfarms, wave energy etc) as an alternative to fossil fuel derived energy
- Reduce marine pollution (nutrients, plastics etc)
- Restore and increase vegetation (seagrass, mangroves, saltmarshes, macroalgae)
- Marine Carbon Dioxide Removal
  - Nutrient fertilization to enhance plant productivity including enhanced upwelling and seaweed farming
  - Ocean Alkalinity Enhancement
  - Carbon capture and storage

### Adaptation approaches

- Increased ocean literacy / awareness
- Co-designed governance and co-operation between users including local and indigenous communities
- Improved risk reduction policies
- Improved predictive capability of ocean, climate and weather forecasts



## PROGRESS & NEXT STEPS

- Met twice and drafted a long list of 'user needs'
- Focusing on the text for the common structure of the white paper
- Draft ready for public review in January



# Working Group 4



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## Challenge 4: Develop a sustainable and equitable ocean economy

Generate knowledge, support innovation, and develop solutions for equitable and sustainable development of the ocean economy under changing environmental, social and climate conditions.

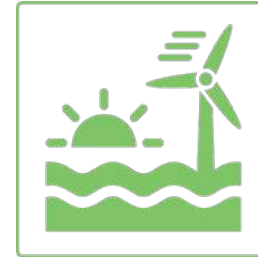


**Peter M. Haugan**  
Policy Director  
Institute of Marine  
Research



**Andrew Rhodes**  
Coordinator  
High-Level Panel for  
Sustainable Ocean  
Economy

# Working Group 4



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## 1. Executive summary (1 page)

- 1.1 Overview of the Ocean Decade Challenge
- 1.2 Key findings and recommendations

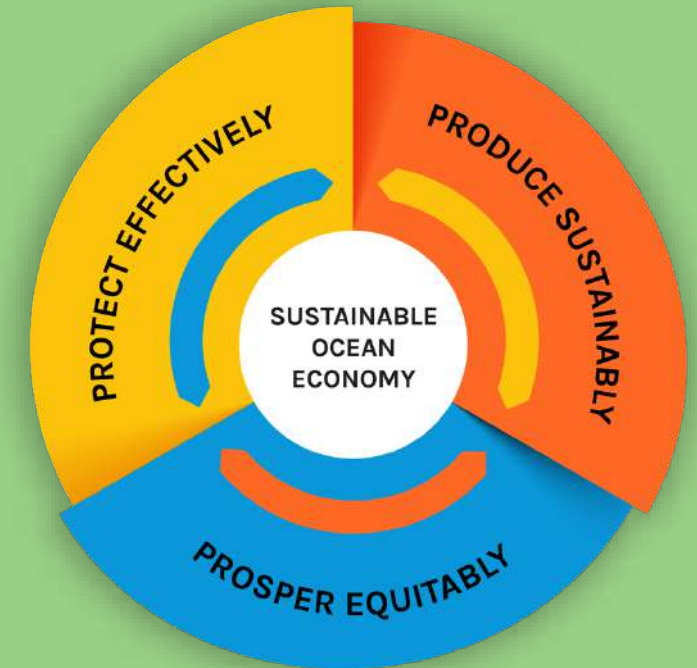
## 2. Introduction (1 page)

## 3. Context (2-3 pages)

- 3.1 Overview of current work in the Ocean Decade
- 3.2 Importance and relevance of the Challenge for sustainable development
- 3.3 Gaps and Barriers
  - 3.3.1 Climate change
  - 3.3.2 Institutional Inefficiencies
  - 3.3.3 Knowledge
  - 3.3.4 Finance
- 3.4 Analysis of user needs and priorities

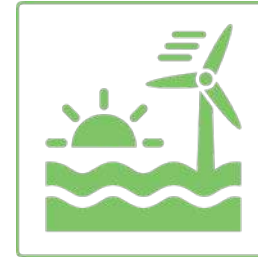
Guiding the Development of  
an Equitable and Sustainable  
Ocean Economy

- Active and diverse author group
- Agreed structure
- Written 50%
- Discussing key messages



An integral and holistic view of the sustainable use of ocean resources, not only emphasizing the economic value or ocean resources

# Working Group 4



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## 4. Strategic ambition setting (4 pages)

4.1 Methodology for strategic ambition setting

4.2 Definition of the strategic ambition for the Challenge

4.2.1 Vision for 2030

4.2.2 Knowledge generation and sharing

4.2.3 Partnerships and resources

4.2.4 Capacity development and exchange needs

4.2.5 Technology and innovation solutions

4.2.6 Integration, synergies and interdependencies with other Challenges

## 5. Milestones and indicators (1 page)

5.1 Key milestones to measure progress and success

5.2 Indicators to track the achievement of the strategic ambition

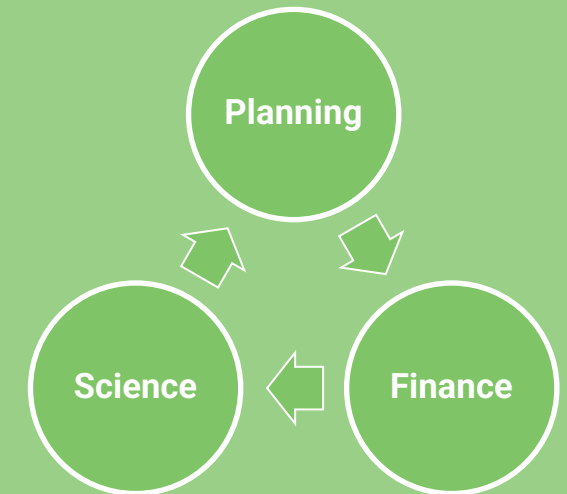
«Ecosystem» interactions between government (planning / regulation), action (finance, private sector, society), and science (including practical and Indigenous knowledge)

### Science → planning → finance

- Seek knowledge to explore opportunities, then plan sustainable ocean activities, then finance them

### Planning → finance → science

- Set societal goals, then enable finance, then create demand for knowledge to sustainably implement



Ideas or input? Contact  
[peter.haugan@hi.no](mailto:peter.haugan@hi.no)

# Working Group 3



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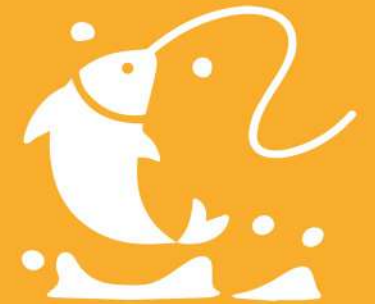


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## Challenge 3: Sustainably feed the global population

Generate knowledge, support innovation, and develop solutions to optimize the role of the ocean in sustainably feeding the world's population under changing environmental, social and climate conditions.



**Vera Agostini**  
Deputy Director  
FAO Fisheries and  
Aquaculture Policy and  
Resources Division



**Erik Olsen**  
Head of Research  
Research Group for  
Sustainable  
Development, Institute  
of Marine Research



# Working Group 3



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## Challenges?

Aquatic food  
systems

Nutrition  
Livelihood  
Environment  
Culture  
&...

## Sustainably feed the global population

Until now...

- Interdisciplinary Working Group
- Defined the scope, status and obstacles of Challenge 3
- Defined key users and their needs
- Identified key gaps:
  - *Limited uptake of science in policy*
  - *Remaining science/knowledge gaps*



Tigchelaar et al., 2022



# Working Group 3



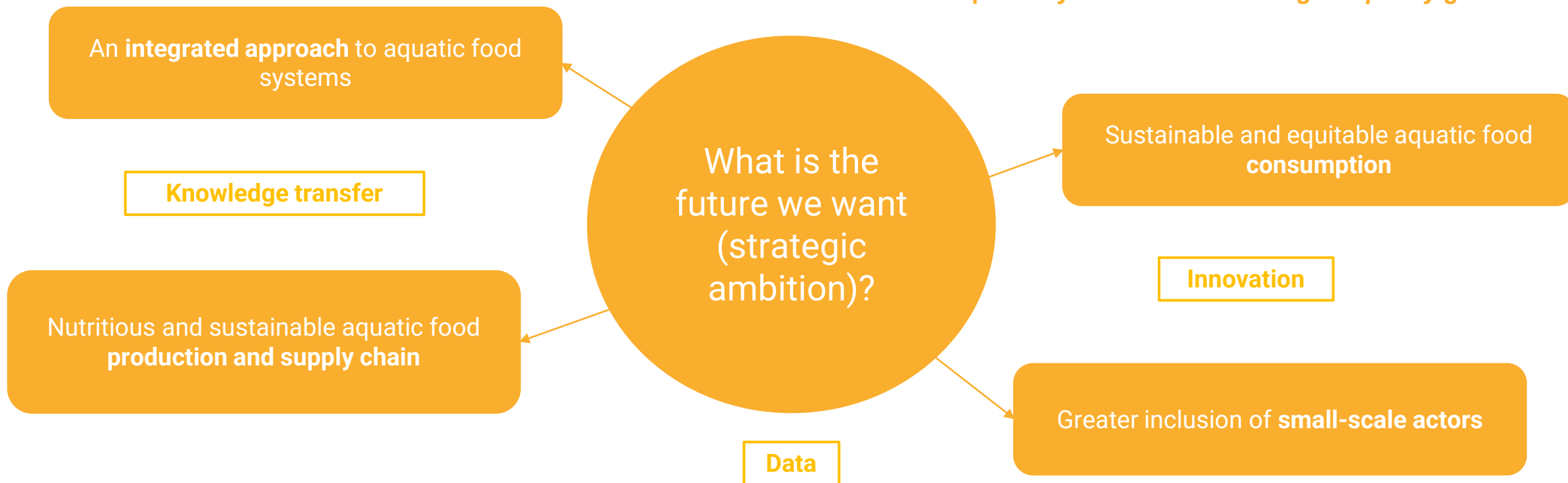
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Solutions and pathways: *Science/knowledge vs policy/governance*



## Next steps

- Draft White Paper!
- Incorporate feedback on strategic ambition
- Develop synergies with other WGs
- Involve relevant Ocean Decade actions

# Working Group 2



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## Challenge 2: Protect and restore ecosystems and biodiversity

Understand the effects of multiple stressors on ocean ecosystems, and develop solutions to monitor, protect, manage and restore ecosystems and their biodiversity under changing environmental, social and climate conditions.



**Frank E. Muller-Karger**  
Professor of  
Oceanography  
University of South  
Florida



**Aileen TAN Shau Hwai**  
Professor of  
Oceanography  
Universiti Sains  
Malaysia

# Working Group 2



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## KEY MESSAGES / GOALS

- **Strategic Ambition: enable wise management using timely, accurate information**
- **View and scope: “beyond 2030”**
- **Build on what exists and use existing global frameworks**
  - Integrate research, policy, management in an operational framework
  - Focus on biodiversity indicators and best practices
    - SDG 14 Targets, Global Biodiversity Framework, national requirements
  - Co-design approach for restoration, conservation, and development efforts
  - Research to Operations: aim to forecast biodiversity and ecosystem services
  - Better link GOOS, CBD, GEO, national, private, monitoring and research
  - Best Practices:
    - Respectful, fair, ethical interactions
    - Coordinated, international capacity development **focus: operations & jobs**
    - Common language (linked Essential Variables: EO, ECV, EBV)
    - Mobilize biology and ecosystems data, following FAIR/CARE principles
      - Use standard data formats (e.g., Darwin Core, etc.), link databases

# Working Group 2



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## MILESTONES

- Engage UN Global Compact:
  - Ocean Stewardship Coalition
- Commitment to a minimum set of common monitoring guidelines, Essential Ocean Variables and indicators (SDG, GBF, national)
- Commitment to best practices:
  - standard data formats (e.g., DarwinCore, etc.)
  - FAIR/CARE bio/eco data
- (Others)

## TIMELINE



## OPPORTUNITIES FOR PARTICIPATION

- Propose / implement proactive Ocean Decade actions that have broader impact
- Participate in Ocean Decade Conference (Ch2: Session 1 - April 10: 15.00 – 18.00)
- Promote, practice key messages of WG2
- Link Vision 2030 working groups
- Contact co-chairs
  - Frank Muller-Karger ([carib@usf.edu](mailto:carib@usf.edu))
  - Aileen Tan Shau Hwai ([aileen@usm.my](mailto:aileen@usm.my))



# Working Group 1



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## Challenge 1: Understand and beat marine pollution

Understand and map land and sea-based sources of pollutants and contaminants and their potential impacts on human health and ocean ecosystems and develop solutions to remove or mitigate them.



**Rosemary Rayfuse**  
Emerita Scientia  
Professor of  
International Law  
University of New South  
Wales



**Vanessa Hatje**  
Professor in Chemical  
Oceanography  
Federal University of  
Bahia

# Working Group 1



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## OUR CHALLENGE

*Understand and map land and sea-based sources of pollutants and contaminants and their potential impacts on human health and ocean ecosystems and develop solutions to remove or mitigate them*

### DEFINITION OF MARINE POLLUTION:

- Any substance or energy introduced by humans either directly or indirectly into the marine and estuarine environment from any source, which results or is likely to result in harm to marine life, hazards to human health, impairment of water quality or interference with marine activities (UNCLOS, 1982).
- Neither the intrinsic quality of the substance nor its source (i.e., terrestrial, marine or atmospheric) is of primary concern.
- Rather, it is the actual or potential impact that the introduction of a substance has on marine ecosystem services and functions that holds significance.

### DEFINITION POLLUTANT:

- Pollutants (actual and potential) include: chemicals, biologically active substances, wastes, products like oil and gas and plastics – as well as light and noise.
- While our understanding of the ocean continues to improve, our scientific knowledge of the sources and impacts of marine pollution on the marine environment remains limited.
- Addressing these knowledge gaps is crucial for our understanding of marine pollution and its cumulative, long-lasting effects on human health and ecosystem functioning and lies at the core of WG 1's work.

# Working Group 1



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## WHAT HAVE WE DONE

### WHO WE ARE

A diverse and globally geographically representative group of individual experts as well as institutional members and representatives of Decade Programmes, Actions and Partners.

### HOW YOU CAN PARTICIPATE

Ocean Decade webinars  
Ocean Decade Conference in Barcelona in April 2024  
Back to Blue Hackathon: November – December 2023

### Our 'short list of priorities':

- **Datasets** – what is missing/what can we add?
  - **Establishing baselines** and criteria for what/how constitutes a 'risk'
  - Establishing regional networks for **monitoring** and observation
  - Developing **predictive models** to enable risk assessment of current, new and emerging pollutants (screening systems)
- **Identifying relevant elements** of these priorities for more detailed analysis and consultation
- **Establish milestones and indicators** by which success in meeting these priorities can be assessed



# Q&A Session





## 10. Wrap-up & next steps



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- Key takeaways
- Additional resources: Vision 2030 Webpage, UN Ocean Decade Conference Website, ...
- Call to action for active participation in the Vision 2030 process

### Next Steps

- Consultation and review process
- Second Webinar (TBD)





# VISION 2030

The Ocean Decade's strategic ambition setting process on the road to 2030

**Thank you! Merci! Grazie! ¡Gracias! Obrigado!**

**Takk! Terima kasih! धन्यवाद! Bedankt!**

**Medaase! 谢谢! Asante! Vinaka! Fa'afetai!**

**Nouari! नमस्कार! АААА! ধন্যবাদ! Дякую!**

**Спасибо! Danke! Salammat! ありがとう!**

**Hvala! 감사합니다! Whakawhetai koe!**