The UN Ocean Decade: International Partnerships and Opportunities

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AAAS Science & Technology Policy Fellow
US Office of Naval Research
What is the Ocean Decade?

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

Intergovernmental Oceanographic Commission, UNESCO

Proclaimed in 2017 by the United Nations General Assembly

Ocean Decade Vision: ‘The science we need for the ocean we want.’

Ocean Decade Mission: ‘Transformative ocean science solutions for sustainable development, connecting people and our ocean.’
What is the Ocean Decade?

The Ocean Decade is:

10 Challenges to deliver the science we need for the ocean we want

The Ocean Decade is:

over 1,200 endorsed actions and activities led by partners from 63 countries to deliver the science we need for the ocean we want

The Ocean Decade is:

77,000 people, including 4,500 early-career professionals, to deliver the science we need for the ocean we want
THE OCEAN DECADE

**Thematic**
- DCC- Coastal resilience
- DCO- Data Sharing
- DCC- Ocean-Climate Solutions (Ocean Visions)
- DCC- Ocean Prediction
- DCO- Ocean Observing

**Regional**
- DCC- Northeast Pacific
- DCC- Western Pacific
- DCC - Southern Ocean
- DCC- Pacific Islands Region of the Pacific Ocean
- DCC- Indian Ocean

**Regional and National Coordination**
- 12 Decade Collaborative Centres/Coordination Offices
- 16 Decade Implementing Partners
- 6 Regional Taskforces and Programmes
- 38 National Decade Committees

**OceanDecade.Org**
- @UNOceandecade
- @un-ocean-decade
THE OCEAN DECADE

in a snapshot

Programmes
Projects
Activities
Contributions

To address 10 challenges needed to meet Ocean Decade Objectives and Outcomes

ENDORSED OCEAN DECADE ACTIONS

52 PROGRAMMES
363 PROJECTS
99 CONTRIBUTIONS
718 ACTIVITIES

DECADE ACTIONS LED BY PARTNERS FROM 62 COUNTRIES

REGIONAL AND NATIONAL COORDINATION

12 DECADE COLLABORATIVE CENTRES/COORDINATION OFFICES
16 DECADE IMPLEMENTING PARTNERS
38 NATIONAL DECADE COMMITTEES
6 REGIONAL TASKFORCES AND PROGRAMMES

ENDORSED ACTIONS PER CHALLENGE

CHALLENGE 1: 7.2%
CHALLENGE 2: 11%
CHALLENGE 3: 11.6%
CHALLENGE 4: 9.5%
CHALLENGE 5: 6.1%
CHALLENGE 6: 6.3%
CHALLENGE 7: 15.9%
CHALLENGE 8: 15.2%
CHALLENGE 9: 11.6%
CHALLENGE 10: 9.4%
THE OCEAN DECADE

in a snapshot

ENDORSED OCEAN DECADE ACTIONS

- 52 Programmes
- 363 Projects
- 99 Contributions
- 718 Activities
- Decade actions led by partners from 62 countries

ENDORSED ACTIONS PER CHALLENGE

<table>
<thead>
<tr>
<th>Challenge</th>
<th>Endorsed Actions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Challenge 1</td>
<td>7.2%</td>
</tr>
<tr>
<td>Challenge 2</td>
<td>7.8%</td>
</tr>
<tr>
<td>Challenge 3</td>
<td>11%</td>
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<tr>
<td>Challenge 4</td>
<td>11.6%</td>
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<tr>
<td>Challenge 5</td>
<td>6.1%</td>
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<tr>
<td>Challenge 6</td>
<td>6.3%</td>
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<tr>
<td>Challenge 7</td>
<td>9.5%</td>
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<tr>
<td>Challenge 8</td>
<td>9.4%</td>
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<tr>
<td>Challenge 9</td>
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<tr>
<td>Challenge 10</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>15.9%</td>
</tr>
</tbody>
</table>

REGIONAL AND NATIONAL COORDINATION

- 12 Decade Collaborative Centres/Coordination Offices
- 16 Decade implementing partners
- 38 National Decade Committees
- 6 Regional Taskforces and Programmes

ENGAGEMENT AND OUTREACH

- 7 Informal working groups
- 11 Patrons and institutional members of the Ocean Decade Alliance
- Over 20 members of the foundations dialogue
- 8300 members from 173 countries on the Ocean Decade Network
- OCEANDECADE.ORG
- @UNOceandecade
- @un-ocean-decade
- 1.5+ million reach

As of April 2024
The 10 challenges to meet the Ocean Decade Outcomes

**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.

**Challenge 2: Protect and restore ecosystem 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.

**Challenge 3: Sustainably feed the global population**
Generate knowledge, support innovation, and develop solutions to optimise the role of the ocean in sustainably feeding the world's population under changing environmental, social, and climate conditions.

**Challenge 4: Develop a sustainable and equitable ocean economy**
Generate knowledge, support innovation, and develop solutions for the equitable and sustainable development of the ocean economy under changing environmental, social, and climate conditions.

**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.

**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 and weather.
The 10 challenges to meet the Ocean Decade Outcomes

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.

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 in a manner relevant to diverse stakeholders.

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.

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.
Over 1500 participants from 124 countries
over 3,000 online viewers
120 satellite events

4 Themes: Science and Solutions for a Clean, Healthy, and Resilient Ocean
Science and Solutions for a Sustainable and Resilient Ocean Economy
Science and Solutions for a Safe and Predicted Ocean
An Inspiring and Engaging Ocean for All

Main outcome: Barcelona Statement, which identifies priorities and areas for action for the Ocean Decade in the coming years
“...solutions that lead to positive impact at large scales have not been implemented. Just as relevant, the international community is not yet well organized to provide the information on ecosystem and biodiversity change required to design and to implement solutions. The UN Ocean Decade and the UN Decade for Ecosystem Restoration are intended to change this situation by expanding the geographic scales and ecosystem-level questions across which people can carry out critical collaborative science to inform governance.“- Vision 2030 Challenge 2 White paper
The Ocean Decade and the new Agreement for the Conservation and Sustainable Use of Biodiversity beyond National Jurisdiction (BBNJ): Opportunities to support ratification and implementation

Pacific Ocean Room [Area 8B], Barcelona International Convention Centre (CCIB)

Science requirements to meet the Global Biodiversity Framework for coral reefs

Indian Ocean Room [127+128], Barcelona International Convention Centre (CCIB)

Building a strong scientific community in support of a sustainable Atlantic Ocean

Atlantic Ocean Room [Area 06], Barcelona International Convention Centre (CCIB)

Welcome to NGOs!

Mediterranean Sea Room [129+130], Barcelona International Convention Centre (CCIB)

Join us:

Manuela Organelli, Coordinator, Matchment: NGOs-Li

The contribution of the International Seabed Authority to the scientific objectives of the UN Decade of Ocean Science for Sustainable Development

Southern Ocean Room [133+134], Barcelona International Convention Centre (CCIB)

At the current event, the International Seabed Authority (ISA) shall launch a report that will demonstrate the breadth and depth of the ISA mandate in relation to marine science.

Olivier Schneider, Coordinator, Matchment: NGOs-Li

Advancing the United Nations World Ocean Assessment: Supporting future ocean sustainability and informing decision making and ocean policy

Arctic Ocean Room [120+121], Barcelona International Convention Centre (CCIB)

This event is expected to: [1] increase awareness of the World Ocean Assessment (WOA) in bridging the science-policy interface; [2] highlight the new components of the third WOA, specifically the integration and consideration of socio-ecological systems and development of sustainability pathways for ocean sectors; [3] identify synergies and opportunities for collaboration with relevant UN bodies, other intergovernmental processes and the Ocean Decade community on these topics; and [4] gather input and feedback from the Ocean Decade community on development of the digital platform for delivery of the third WOA to ensure it is fit for purpose.

Learn more about the programme

Marco Boccia: marco.boccia@un.org

Carol Adly: DFO.EOS2024AtlanticForum-2024ForumAtlantiqueSEO.MPO@dfompo.gc.ca
Barcelona Statement:
“To achieve this and fulfill the identified priorities, the Conference issued the following Call to Action to all societal actors, including government, philanthropy, UN entities, industry, and the scientific community to:

Engage strongly in the Ocean Decade including through the proactive development of partnerships and collaboration for the co-design and co-delivery of transformative Decade Actions that translate the priorities identified during the Conference to tangible action.

To significantly increase investment of in-kind and financial resources in ocean science, including the development of policies and innovative financial instruments, thus ensuring the sustainability of existing and future Decade Actions, structures, and processes that are collectively working to fill the priorities identified during the Conference.

Seize all opportunities to raise awareness and visibility of the Conference outcomes and The Barcelona Statement as an essential guiding framework for global ocean science and knowledge priorities in the lead-up to the 2025 United Nations Ocean Conference”
The Ocean Decade Research Programme on the Maritime Acoustic Environment

A Programme of the UN Decade of Ocean Science for Sustainable Development

An Action of the SOST Interagency Working Group Ocean Sound and Marine Life
“Our engagement in international efforts, such as the United Nations Decade of Ocean Science for Sustainable Development, reflects the priorities and values of my Administration to ensure that ocean science delivers greater benefits for the American people, the people of the world, and international ocean ecosystems.”
President Joseph R. Biden, Proclamation on National Ocean Month, 2021
Why Sound?

Ubiquitous. A feature of every environment
Is highly intertwined with the physical, biological, and chemical aspects of the ocean that define the field of Oceanography
Ocean Acoustics is an interdisciplinary science with economic, environmental, and national security application
The **Acoustic Environment**: collectively, the combination of all sounds within a given area modified by interactions with the environment (National Park Service)
MAE Research Program

Overall Program envisions discrete Projects and Collaborative Partnerships across academia, industry, and government both domestically and internationally.
Current Endorsed Actions hosted by OD MAE

- **Quantifying Gases in the Ocean using Acoustics**
  - Sally Watson (New Zealand)
  - CH 1, 4, 6, 7

- **Numerical Seabed using Hydroacoustic Digital Twins**
  - Andres Prieto Anerios (Spain)
  - CH 4, 8, 9

- **Unraveling the Dynamics of Ocean Soundscapes**
  - Carrie Wall (USA)
  - CH 2, 8, 9

- **Ocean World of Sound: MesoAmerican Reef**
  - Ray Santisteban (Mexico)
  - CH 4, 7, 9

- **Acoustics to Assess the Health Status of Reefs**
  - Xavier Raick (Belgium)
  - CH 2, 5

- **Acoustic Detection and Protection Tech. for End. Right Whales**
  - Adele Labbe, Olivia Pisano (Canada)
  - CH 2, 7, 8

- **Global Library of Underwater Biological Sounds**
  - Miles Parsons (Australia)
  - CH 2, 3, 7

- **Quantitative Tools for Responsible Marine Energy**
  - Jesse Roberts (USA)
  - CH 3, 4, 7

[https://mae.dosits.org/](https://mae.dosits.org/)
Ocean Decade Research Programme on the Maritime Acoustic Environment

WG Challenge 7

Decade Coordinating Office – Ocean Observing

US National Committee

Ocean Acoustics
Education & Expertise

Hosted Projects

Quantifying Gases in the Ocean using Acoustics
Sally Watson (New Zealand)
CH 1, 4, 6, 7

Acoustics to Assess the Health Status of Reefs
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2024 OCEAN DECADE CONFERENCE

DELIVERING THE SCIENCE WE NEED FOR THE OCEAN WE WANT
10-12 APRIL 2024
BARCELONA, SPAIN

As part of the Ocean Decade Week (8-12 April 2024)

LISTEN TO THE OCEAN

9 - 12 April, 10:00 – 19:00, Lobby of the Museum of Natural Sciences Barcelona (Museu Blau)
"Listen to the Ocean- An Exhibit of Ocean Decade Week

“This exhibit explores the role of soundscapes in the study of the ocean. Participants will be immersed in a sensory experience of naturally-recorded ocean acoustic environments using audio and visual media. By blending science and art together we will demonstrate and communicate how we all have a role in the ocean’s soundscape. Through the interactive nature of the event, participants will be prompted to think of innovative ways to integrate sounds into their everyday life, work, and efforts. Participants will be invited to a follow-up virtual event that will explore further current scientific knowledge, gaps, and policy surrounding underwater acoustics.”
Partnering for external engagement at Ocean Decade Week

LISTEN TO THE OCEAN

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

JPI OCEANS

UNIVERSIDADE DA CORUÑA

GLUBS

OCEAN WORLD OF SOUND

LAB
Success in partnering for external engagement at Ocean Decade Week

“I was impressed by the diversity of sounds in the ocean”
- visitor to Listen to the Ocean

Visitor Composition - Listen to the Ocean

<table>
<thead>
<tr>
<th>Visitor Category</th>
<th>Num Visitors (%)</th>
</tr>
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<tbody>
<tr>
<td>Student</td>
<td>5</td>
</tr>
<tr>
<td>Expert</td>
<td>40</td>
</tr>
<tr>
<td>NGO</td>
<td>15</td>
</tr>
<tr>
<td>Artist</td>
<td>5</td>
</tr>
<tr>
<td>Gov/Integov</td>
<td>5</td>
</tr>
<tr>
<td>Policy expert</td>
<td>5</td>
</tr>
<tr>
<td>Tourist</td>
<td>5</td>
</tr>
<tr>
<td>Educator/researcher</td>
<td>5</td>
</tr>
<tr>
<td>Professional</td>
<td>5</td>
</tr>
<tr>
<td>Other</td>
<td>1</td>
</tr>
</tbody>
</table>
The OD-MAE program supports collecting information from the ocean to further analyze, interpret, assess, predict, and share to meet OD Challenges, Outcomes, and Goals

OD MAE is:
- A platform for ocean acoustics in the Ocean Decade
- A growing, global network that builds and expands ocean acoustic science, with efforts spanning governments, institutions, academia, NGOs, and more.

Opportunities:
- Partners: Underwater acoustics is interdisciplinary, and can provide complementary/additional information.
- Capacity building: can new technology incorporate acoustic monitoring components in observation systems? How can new acoustic efforts/networks be supported?
- Support: Tends to be an underrepresented field in ocean science.
- Framework: To connect and elevate interests and needs in ocean acoustics
Opportunities in the Decade

“What does this mean for me? “

- It’s not a funding call (but there is an effort to try to connect to funders – Ocean Matching Tool)
- Groups to join and get involved
- Submission of efforts- projects or activities
- Open events for the public- webinars, workshops, and more

Submit Decade Activities
Submit your idea for a Decade Activity anytime: events, publications, exhibitions, workshops, conferences or training opportunities.

Take part in Calls for Decade Actions
Participate in the Call for Decade Actions No. 05/2023 and submit your idea for a Decade programme, project or contribution.

Join a Community of Practice
Engage with partners and work together on similar topics to co-design solutions and share best practices.

Informal Working Groups
Dive into the Ocean Decade Informal Working Groups! (coming soon)

Register as an Ocean Decade Expert
Register as an expert to help shape the Ocean Decade!

Unlock Opportunities
How to engage with the Ocean Decade.

www.oceandecade.org/sign-up/
Submitting an Action for endorsement

Call for Actions No. 07/2024

Submit application in a call (2 rounds per year) at oceandecade.org

For Programmes:
Early deadline, expression of interest reviewed by Decade Advisory Board, related to certain themes every call

For Projects:
Recommendation: contact programs that you are interested in being hosted by
- Check the GUIDANCE document online to see what Programmes are accepting new projects and under what scope (26 out of 52 in the 7th call)

Application:
- Short, clear language
- Must fill out what Objectives, Outcomes, and Challenges are relevant to your Project
- Link why your Project fits with the suggested Programme
- Endorsement Criteria

www.oceandecade.org/sign-up/
Opportunities in the Decade

Submitting an Action for endorsement

Call for Actions No. 07/2024

Endorsement Criteria- not all criteria must be met

i. Contribute to fulfilling the Ocean Decade Challenges and to achieving the Decade objectives and the associated sub-objectives

ii. Accelerate the generation or use of knowledge and understanding of the ocean, with a specific focus on knowledge that will contribute to the achievement of the SDGs and complementary policy frameworks and initiatives.

iii. Are co-designed or co-delivered by knowledge generators and users, and thus facilitate the uptake of science and ocean knowledge for policy, decision making, management and/or innovation.

iv. Ensure that all data and resulting knowledge are provided in an open access, shared, discoverable manner in accordance with the relevant provisions of UNCLOS, and are appropriately deposited in recognized data repositories consistent with the IOC Oceanographic Data Exchange Policy 1 or the relevant UN subordinate body data policy. (N.B. Annex II provides additional guidance on alignment with this criterion)

v. Strengthen existing or create new partnerships across nations and/or between diverse ocean actors, including users of ocean science.

vi. Contribute toward capacity development, including, but not limited to, beneficiaries in Small Island Developing States, Least Developed Countries, and Land-locked Developing Countries.

vii. Overcome barriers to diversity and equity, including gender, generational, and geographic diversity.

viii. Collaborate with and engage local and indigenous knowledge holders.
Submitting a Project for endorsement

Call for Actions No. 07/2024
Opportunities in the Decade

Activities - Events, exhibitions, conferences, training opportunities, publications, or products “specifically developed for the Ocean Decade”

Contributions - Financial/in kind support
Opportunities in the Decade

- National Committees
- Early Career Ocean Professionals
- Youth Advisory Council

**United States ECOP Node**

**About Us**
We are an affiliate of the Global ECOP program. The U.S. node addresses key priorities to advance ocean science for sustainable development in the United States.

**Our Mission**
Leveraging the expertise of diverse ECOP members to drive solutions and outcomes.

**Get Involved**
- Join our Slack channel to connect with other ECOP nodes around the country.
- Take part in social events, workshops, conferences, events, and job opportunities.

**CONTACT US AND JOIN**
www.ecopdecade.org/us

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**OCEAN DECADE U.S.**
U.S. National Committee for the Decade of Ocean Science for Sustainable Development

**The ECOP Programme network**

Figure from https://www.ecopdecade.org/nodes/
“Science does indeed provide data, evidence and knowledge to sort out fact from fiction. It helps us understand how the world works, how it’s changing, and why. But it does even more – it helps us understand the likely consequences of the choices in front of us, and it provides solutions and hope – but only if we listen to and use that science.”

Dr. Jane Lubchenco, UN Ocean Conference 2022
Background: Ocean Decade Structure

Figure 6. Governance and coordination framework for the Decade.

UNESCO Ocean Decade Implementation Plan

DCU

DCO- Ocean Observing

UNESCO Ocean Decade Implementation Plan
Background: Ocean Decade Framework

Figure 2. Ocean Decade Action Framework.

Programmes
Projects
Contributions
Activities

Ocean Decade Implementation Plan