





High Level Ocean and Climate Conference Bulletin

A publication of the International Institute for Sustainable Development

Wednesday, 12 September 2018 Vol. 186 No. 14

Summary of the High Level Ocean and Climate Conference: 10-11 September 2018

The High Level Scientific Conference "From COP21 towards the United Nations Decade of Ocean Science for Sustainable Development (2021-2030)" took place from 10-11 September in Paris, France, at the UN Educational, Scientific and Cultural Organization (UNESCO). The two-day conference:

- synthesized recent scientific progress on ocean and climate interplays;
- evaluated the latest ocean-climate trends within the context of increased ocean action; and
- reflected on ways to move "from science to action" during the Decade of Ocean Science for Sustainable Development (2021-2030).

The High Level Conference was attended by approximately 500 participants, including government delegates, scientists, and civil society. The Conference gathered inputs from multiple stakeholders and invited the global ocean community to deliver "the ocean we need for the future we want."

A Brief History of the Climate and Ocean Conference

Ocean-related legal and policy instruments have been developed within the UN system since the 1970s with the aim of protecting marine ecosystems. The 1982 United Nations Convention on the Law of the Sea (UNCLOS), which entered into force on 16 November 1994, sets forth the rights and obligations of states regarding the use of the ocean, their resources, and the protection of the marine and coastal environment. UNCLOS established that "the Area"—"the seabed and ocean floor and the subsoil thereof, beyond the limits of national jurisdiction"—and its resources are the common heritage of humankind. Ocean protection, however, has been challenging given governance difficulties in areas beyond national jurisdictions.

Annually, the ocean absorbs more than 25% of anthropogenic CO2 emissions and is the largest net supplier of oxygen in the world, just as important as forests. However, it is degrading at a dangerous pace, putting at risk its role as climate regulator. To bridge the gap between ocean and climate

discussions, the Ocean and Climate Platform was established as a coalition of non-governmental organizations and research institutes, with support from the UNESCO Intergovernmental Oceanographic Commission (IOC-UNESCO) on 10 June 2014 during the World Ocean Day.

At the UN Framework Convention on Climate Change (UNFCCC) 21st Conference of the Parties (COP 21), for the first time, the ocean was officially integrated into the outcome document, the Paris Agreement on Climate Change. In the run up to COP 21, the Ocean and Climate Platform mobilized civil society around the importance of "a healthy ocean, a protected climate." After the agreement was signed, the Ocean and Climate Platform evolved and focused on enhancing scientific knowledge, ocean-based solutions to climate mitigation and adaptation, mobilizing based on scientific evidence, and advocating for the integration of ocean issues into the climate regime.

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The High Level Ocean and Climate Conference Bulletin is a publication of the International Institute for Sustainable Development (IISD) <info@iisd.ca>, publishers of the Earth Negotiations Bulletin © <enb@iisd.org>. This issue was written and edited by Nicole de Paula, Ph.D, and James Van Alstine, Ph.D. The Editor is Brett Wertz
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In 2018, the UN has scheduled a Decade of Ocean Science for Sustainable Development for 2021-2030 ("the Decade") to spur action to reverse the cycle of decline in ocean health and gather ocean stakeholders worldwide to develop ocean science and countries' policies to make the ocean more sustainable and tasked the IOC to coordinate its preparatory phase. Currently, the Platform includes scientific organizations, universities, research institutions, non-profit associations, foundations, science centers, public institutions, and business organizations which work to bring the ocean to the forefront in climate discussions.

High Level Ocean and Climate Conference Report

Opening Ceremony

On Monday, 10 September, George Papagiannis, Chief Media Services, UNESCO, introduced and moderated the session. On behalf of Audrey Azoulay, Director-General, UNESCO, Vladimir Ryabinin, Executive Secretary, IOC-UNESCO, welcomed all participants and highlighted successes in raising the the ocean's profile within the global climate agenda through Sustainable Development Goal (SDG) 14 and the Paris Agreement on Climate Change. He stressed the role of ocean science to galvanize action during the Decade, called for more public funding for ocean-related issues, and underscored the need to develop synergies and partnerships to achieve the Decade's activities.

Byong Hyun Lee, Chair of the Executive Board, UNESCO, highlighted that the Decade will provide a common framework of action to implement the Paris Agreement and the 2030 Agenda for Sustainable Development. He hoped this period would increase public awareness of the importance of the ocean and its interplay with the climate. He discussed the impact of the international partnerships, networks, and alliances that UNESCO fosters and encourages on ocean and climate change, such as the Global Ocean Science Report, led by IOC-UNESCO.

Romain Troublé, President, Ocean and Climate Platform, noted the launch of the Platform in 2015 and the initiative "Let's give ocean a voice," which collected 30,000 signatures



Romain Troublé, President, Ocean and Climate Platform



Byong Hyun Lee, Chair of the Executive Board, UNESCO, and **Frédérique Vidal**, Minister of Higher Education, Research and Innovation, France

during COP 21. He noted the establishment of the SDGs and the opportunity for growing the ocean community and concluded calling for further work on ocean scientific gaps.

Frédérique Vidal, French Minister of Higher Education Research and Innovation, highlighted the need to move from promises to action to reach the goals of COP 21. She stressed the commitment of France to support the synergies between ocean and climate, declaring "we need facts to design solutions." Declaring "the ocean is the lungs of the world," she said that the International Legally Binding Instrument (ILBI) under the UNCLOS on the Conservation and Sustainable Use of Marine Biological Diversity of Areas Beyond National Jurisdiction (BBNJ) is important, given that the ocean is a common good. She concluded stating that ocean knowledge must go beyond academia and benefit all economic actors.

Ana Paula Vitorino, Minister of the Sea, Portugal, highlighted growing ocean risks, including global warming, ocean acidification and overfishing. She noted that population growth and density in coastal areas requires tough compromises to avoid ocean degradation. She highlighted the importance of equitable benefit sharing from ocean resources and described priorities for ocean science, including: sea floor science; ocean atmosphere studies; and basic research to improve knowledge of ecosystem functions and the links of marine ecosystem services, including marine research in the deep sea.

Session 1 – What does the Science Tell us Today about the Ocean?

Anny Cazenave, member of the French Academy of Sciences, and Françoise Gaill, Emeritus Research Director, the French National Center for Scientific Research (CNRS), moderated this session, which focused on research priorities, knowledge gaps, and proposed actions in the context of the Decade.

Martin Visbeck, Head of the Research Unit Physical Oceanography, GEOMAR, said what science tells us about the ocean largely relies on observation, such as through the Argo profiling float network, which measures temperature, salinity, and oxygen. He illustrated how ocean heat is rising constantly and how the ocean is losing its oxygen, stressing the need for scientists to observe, predict, assess, and act.

Patricia Miloslavich, Project Officer, GOOS Biology and Ecosystem Panel, discussed how climate change has impacted the diversity, distribution, and abundance of marine life. She highlighted how these changes will affect the livelihoods of people that rely on these resources and described the challenges of making biological observations in the ocean. She stressed the role of the public, not just the scientists, to make the Decade successful.

Sheila Heymans, Executive Director, European Marine Board, explained that Europe needs a multi-purpose integrated biological ocean observing system, which is underpinned by sustainable management of human activity, citizen science and the automation of these processes. She noted challenges for marine ecosystem modeling include linking models to observations and data, increasing the predictive ability of models, and developing practices to share knowledge.

Lauren Mullineaux, Senior Scientist and Biology Department Chair, Woods Hole Oceanographic Institution, underscored the value of deep-sea ecosystems for carbon sequestration, maintenance of biodiversity, and future food provision in case of fisheries depletion. The next biggest scientific challenge, she affirmed, is to promote an interdisciplinary approach to get a true understanding of how these ecosystems function.

William Cheung, Associate Professor, University of British Columbia, explained that one of the key goals for scientists should be to identify key communities that can help with assessing risks for the most vulnerable people, who are, for example, very dependent on micronutrients from fishing. He said poverty, food security, and sustainable cities are areas that could co-benefit from a healthier ocean.

In the ensuing discussion, the panel focused on significant technological advances assisting with ocean research, negative impacts on aquaculture due to climate change, and the effects of land-use change in ocean health. Cazenave noted the need to better understand coastal sea level rise and suggested that a systematic monitoring system from space be implemented for coastal changes.

Session 2 – An Intergovernmental Organization Perspective on Ocean, Climate and Biodiversity Knowledge

Joachim Claudet, Researcher, CNRS-CRIOBE, and Laura Hampton, journalist, moderated the session, which focused on how the ocean is being integrated into the reports of the Intergovernmental Panel on Climate Change (IPCC) and the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES), and how ocean science is being integrated into UN frameworks, notably with regards to marine ecosystems and biodiversity.

Hans-Otto Pörtner, Co-chair, IPCC, highlighted reports that will cover the ocean in the Sixth Assessment cycle of the IPCC, such as the Special Report on the Ocean and Cryosphere in a Changing Climate scheduled for approval in 2019. He recalled that the two most vulnerable marine ecosystems found in the IPCC Fifth Assessment Report are warm water coral reef systems and arctic sea ice systems, outlining how disturbance of ecosystem functions can lead to loss of biodiversity and food chain disruption. He also stressed that too little is happening to bring the world in line with the Paris Agreement.

Highlighting how IPBES is similar to the IPCC, Robert Watson, President, IPBES, stressed that climate change and biodiversity isolated issues and noted the need to understand the interplay between land, ocean, and atmosphere. He said that IPBES is a demand-driven process, which seeks to understand how science can best address policy issues. He described how IPBES incorporates different disciplines, manages the gender and geographical balance of authors, and, more recently, how it can bring indigenous and local knowledge into the assessment process. Watson underscored the need for multi-stakeholder governance and multi-sectoral policies.

Elva Escobar-Briones, Institute of Marine Sciences and Limnology, Universidad Nacional Autónoma de Mexico, highlighted that human dimensions are well accounted for in the reports from IPCC and IPBES, including gender balance. She noted that the human dimensions of the sea, such as the social impacts of marine protected areas (MPAs), could be better represented in reports. She stressed the need for scientific research into the deep sea, such as the different economic values of losing deep ocean biodiversity, and called for the compatibility of different ocean databases.

Nathalie Hilmi, Environmental Economist, Scientific Center of Monaco, noted challenges to communicate the urgency of ocean conservation to decision makers in the context of multilateral negotiations, especially related to the deep sea. She highlighted a healthy ocean as essential for coastal communities, tourism, energy and food security, adding that environmental issues remain ignored in detriment of economic growth, probably because the effect of climate change remains perceived as a long-term issue. She concluded stating that 55 million jobs could be created by environment-related activities before 2030.

Valérie Masson-Delmotte, Co-chair, IPCC, recalled advancements in ocean science allowing more concrete information about the relationship between ocean and climate. She stated that, currently, the ocean absorbs 30% of CO2 and 90% of the heat created by global warming. She also said that upcoming IPCC reports try to share information holistically and outlined key ingredients for successful reports and science, which included: new knowledge; investment in training of new scientists; timely publications; coordination during peer-review processes; investment in gender equality; and production of knowledge that is policy-relevant.

During discussions, panelists recommended further coordination between the IPCC and IPBES, with Watson declaring that all countries are "far away from implementing the Paris Agreement" and that science must be taken more seriously to produce real change. He added that governments alone could not produce real change, calling for outreach enhancement in order to transfer the knowledge from "ivory towers" to young scientists and citizens. Escobar proposed increasing dialogue among multiple stakeholders. Panelists agreed on the need for: investments in gender equality in the research community; innovative ways to interpret gross domestic product (GDP); further inclusion of the humanities; and capacity building in developing countries.

Session 3 – From Science to Action: How can the UN Decade of Ocean Science for Sustainable Development Make a Difference?

Julian Barbière, Head of the IOC Marine Policy and Regional Coordination Section, IOC-UNESCO, and Patricia Ricard, President, Paul Ricard Oceanography Institute, moderated the session, which focused on the opportunities for the Decade to scale up science-based solutions to address the impact of climate-related changes on ocean, ecosystems and society.

Peter Haugan, Chair, IOC-UNESCO, highlighted how the IOC Ocean Global Science Report will provide a benchmark for SDG14 with regards to science capacity and that the Decade has been launched at the right time. Suggesting that the ocean science community needs to better communicate with the public and policy makers, he stressed the need to look beyond the UN system, to include NGOs, civil society, and industry in activities related to the Decade, and noted that ocean literacy is part of roadmap for the Decade.

Torsten Thiele, Economist, Global Ocean Trust, discussed the importance of new sources of finance for the ocean and explained how ocean finance can create linkages with climate and conservation finance. He stressed the need to deliver results-based solutions, linking finance and economics to the concept of blue natural capital. He suggested that to develop an ocean finance pathway there needs to be a shift from grants to delivery. Thiele discussed the rise of ocean risk within the investment world and noted that the Norwegian Sovereign Wealth Fund has recently required all investors in the ocean to take ocean-related risks into account.

Jacqueline Uku, President, Western Indian Ocean Marine Science Association (WIOMSA), discussed how the linkages between science and policy evolved within WIOMSA. She noted how at the beginning scientists set the research agenda, but over time started working on multi-disciplinary projects and began asking policy makers and government what questions they would like to see answered. She discussed how the Nairobi Convention for the development, protection, and management of the coastal and marine environment of the Western Indian Ocean provides common dialogue on a science-to-policy platform.

Anna Zivian, Co-chair, Future Earth's Ocean Knowledge-Action Network Development Team and Senior Research Fellow, Ocean Conservancy, discussed the importance of a network approach to ocean governance and management. She stressed that boundary organizations are needed to solve ocean issues, noting how the Ocean Knowledge-Action Network seeks to bridge disciplines to provide timely and useful ocean knowledge.

In the ensuing discussion, panelists called for ocean literacy investments and further engagement with the BBNJ process, agreeing that the Decade can help with the implementation of Nationally Determined Contributions under the UNFCCC. Thiele added that the deep sea is part of the common heritage of humankind and more discussions about this concept are needed to include society's perspective.. Thiele reinforced the need for an economic case for ocean finance, using the example of the Sustainable Blue Economic Finance Principles, a partnership between the European Commission, WWF, the Prince of Wales's International Sustainability Unit and the European Investment Bank. Zivian noted places, such as the Artic, where traditional communities hold much of the knowledge and no decisions can be made without their inputs. Uku said that policy decisions deserve inputs from beyond the "board roams" and Haugan highlighted that "practical" knowledge—not only academic—is relevant to make the Decade a real success.

The panel concluded that ocean science affects many other areas in the economy and that advocacy for integrative action is key.

Session 4 – From Science to Action: Which Policies?

Rémi Parmentier, Director, The Varda Group, and Salvatore Aricò, Head of the Ocean Science Section, IOC-UNESCO, moderated the session, which discussed: methods and tools for international frameworks, such as UNFCCC's Action Agenda, the SDGs, and the Ocean Pathway Partnership, to shape national, regional, and international policies on ocean, climate, and biodiversity; and the actions initiated by States and international alliances, such as Because the Ocean, to implement their commitments and elaborate ocean-related NDCs.

Cameron Diver, Deputy Director-General of the Pacific Community, highlighted how the ocean is at the center of the identities of Pacific island peoples. He said that if "we just use ocean science to produce policy we will fail" and stressed the need to use ocean science to inform policy that drives ocean action. He suggested that the Pacific could have "huge added value" for the Decade by harnessing the ocean identity of Oceania to genuinely own the message "we are the sea and we are the ocean."

On the Decade's value, Serge Ségura, French Ambassador for Ocean Affairs, said the Decade tries to concentrate ocean knowledge, enhance coordination and favor scientific international cooperation. Noting that the UNFCCC, SDG14 and the BBNJ are 80% about of ocean, he underscored the Decade as essential to promote synergies, illustrating how the ocean is at the core of so many policy processes. He added that BBNJ is

the only international treaty dealing with biodiversity and areas beyond national jurisdiction. The implementation of this accord is where the Decade will have greater impact, as science will be the basis for decisions around, for example MPAs, marine genetic resources, capacity building, and technology transfer, themes that deserve more technical knowledge, he said.

Calling for consistency, Ricardo Serrão Santos, Member of the European Parliament, expressed satisfaction with the growing ocean agenda since COP 21. He stressed the role of the ocean for civilization's stability, comparing it to forests. Despite current success in raising awareness about ocean degradation, he mentioned political setbacks, lamenting the rise in nationalism and science denial, which contributes to misinformation and weak political implementation. He recommended reinforcing governance frameworks at the global level, which requires solid scientific knowledge.

Special Sessions

Sciences Cooperation, Policies Interfaces and SDGs in South Atlantic Ocean: Organized by the French National Research Institute for Sustainable Development (IRD) and the University of Western Brittany, this session launched a program on the need of sciences and adapted policies for coastal and marine waters in the South Atlantic Ocean for the creation of a UNU institute dedicated to the ocean, led by the Ocean University Initiative. The session also fed regional consultations of the IOC in the framework of the Decade and the implementation of the Belém Agreement. Which aims to boost research and innovation cooperation on marine ecosystems and climate with Brazil and South Africa.

In a keynote speech, Amadou Thierno Gaye, Director General of research, Senegal, explained how Africa is a "hot spot" for the interaction between climate systems and socio-economic issues. He noted the interaction between climate change, marine resources, and food security, stressing the need to develop partnerships for the integration of science and development.

On "data production, observatories and models," panelists discussed the importance of: a strategic approach for scientific impact at the national level in Africa with international cooperation; continuous and long term observations, such as through Senegal's environment observatory network, the Prediction and Research Moored Array in the Tropical Atlantic (PIRATA), and the South Atlantic Mooring Buoy Array (SAMBA) across the South Atlantic; opportunities for marine research students in Africa, such as through South Africa's floating university; and engagement between scientists and decision-makers to encourage regional sovereignty, through for example South-South cooperation and capacity-building.

On "sustainable management of marine and coastal socioecosystems," panelists highlighted the challenges of science communication, the need to promote science and innovation throughout the entire society and prospects for science.

Panelists recommended: increasing ocean observation capabilities; strengthening the monitoring of exclusive economic zones; making sure climate change is integrated into

development policies; emphasizing integrated management of coastal areas in national strategies; training regional researchers; supporting climate adaptation initiatives; considering regulations on fisheries; designing sub-regional training programs on aquaculture; evaluating and modeling the impacts of climate change on fishing; and developing joint-management of policies to properly address spatial use and the effects of climate on local populations. All panelists highlighted the importance of including social scientists in ocean research and encouraging participatory tools.

Making Waves: Women in Ocean Science: Organized by Fisheries and Oceans Canada (DFO) and the Permanent Delegation of Canada to UNESCO, this session discussed gender equality in ocean-related sciences. Discussions highlighted concrete opportunities to advance women's issues and priorities in the context of the Decade.

Debates highlighted member States' commitments within the IOC, including: providing strong role models for women in science; building capacities of women in natural sciences and engineering; and supporting the unique contributions of women and men to advance sustainable development. Canada announced financial support for the secondment of a Canadian female ocean scientist at the IOC Secretariat. Panelists discussed: the benefits of gender equality; tools to empower women in science through ocean-focused community-based science and local knowledge initiatives; building role models and the importance of mentoring; as well as methods to improve ocean literacy. Key recommendations to enhance women in ocean science included, *inter alia*: investing in accessible childcare and mentoring programs; setting targets for grant allocation related to gender equity; and promoting resilience and confidence-building.

Academic Research: Which Contributions to the UN Decade of Ocean Science? This session was organized by the French National Center for Scientific Research (CNRS) and the French National Research Alliance for the Environment (AllEnvi). Marie-Alexandrine Sicre, Research Director, CNRS-SCOR, and Agathe Euzen, Scientific Deputy Director, Institute of Ecology and Environment (INEE-CNRS), moderated the discussion, which, *inter alia*, focused on how ocean science can foster socio-ecological synergies to avoid trade-offs between biodiversity conservation and resource use, and how to best operationalize science-policy interfaces to improve evidence-based decision-making.

On how to model the complex interactions between climate and earth systems, Laurent Bopp, research director, CNRS, highlighted the lessons learned from working across many disciplines, which included: the need to simplify the way results are communicated to colleagues; transparent research methods; and to be honest on how uncertainty and limitations are communicated. He stressed the need to attract scientists from outside the ocean and science community to bring "new eyes" to ocean socio-ecosystems, and said that moving from the global to local scale in ocean science is one of the big challenges for the Decade.

William Cheung, Director of Science, Nippon Foundation-UBC Nereus Program, discussed the challenges facing fisheries in the context of climate change, which included: a changing ocean due to climate change and the interaction with other destructive activities such as pollution; governing global fish stocks given their shifting distribution; and ensuring equity of access to fishing, including balancing between indigenous, small, and industrial-scale fisheries. He recommended using participatory scenarios to engage scientists, policy makers, and other stakeholders to co-develop sustainable solutions for global and local fisheries, but stressed there is "no silver bullet solution" that can be applied globally.

Rodolphe Devillers, Professor, Department of Geography, Memorial University of Newfoundland, underscored that scientists need convincing facts to justify MPAs, noting a vast literature showing both their positive outcomes and efficacy limits. He added that MPAs cannot be a one-size-fits-all solution for ocean conservation and called for more diverse conservation tools, as well as narratives that go beyond "human-centric" perspectives. On challenges, he highlighted the integration of social-environmental values to go beyond the narrow economic narratives and noted the importance of ocean health to human health. To improve evidence-based research, he underscored that transparency is vital. He noted that academic journals remain closed for interdisciplinary content and recommended creating interdisciplinary programs.

Speaking from the perspective of international law, Nele Matz-Lück, Professor of Law, University of Kiel, Germany highlighted several challenges of ocean regulation, such as thinking about the ocean from a land perspective despite the borderless character of pollutants and fisheries. On exclusive economic zones, she underscored that the tragedy of the commons is not their only problem and that giving more jurisdiction to coastal states did not avoid unsustainable management as short term economic benefits still prevail. She recommended "not waiting for the best top-down regulations" and promoted bottom up changes. On BBNJ, she stressed the need for inputs from science and not only from the diplomatic perspective. Using the example of UNCLOS, she noted it makes more diplomatic than scientific sense and suggested more flexibility in international agreements to allow for revisions.

In the ensuing discussion, panelists discussed, *inter alia*: bottom-up approaches to ocean governance through case studies; mechanisms to make law less static and able to better respond to changes in the environment; opportunities to embrace the digital revolution during the Decade; giving "things" some legal authority to allow ecosystems, fish stocks, and biodiversity hotspots, among others, to be represented during MPA negotiations; opportunities for young marine scientists to find jobs; and the challenges of funding for transdisciplinary research.

Closing Ceremony

In a wrap-up session, rapporteurs thanked all participants for the quality of their contributions, inquiring: "Do we have enough science or should we start acting on the science that we already have?" Lisa Svensson, Director of the Ocean and Marine Programme, UN Environment, highlighted several key points from the Conference sessions, including the Decade's need to:

- be an inclusive process, reaching out to a public beyond the UN agencies;
- establish new networks to promote knowledge-sharing, while engaging with existing ones;
- enhance multidisciplinarity;
- improve science-policy interfaces and outreach methods;
- significantly increase funding for ocean-related activities;
- encourage new tools for funding beyond governments;
- emphasize the role of the private sector in ocean conservation;
- enhance science communication to decision makers and citizens;
- promote leadership training, notably among female scientists;
- promote "engaged" scientific cooperation that can support decision makers, as opposed to "passive" production of knowledge;
- encourage economic and social consideration of biodiversity, notably in marine areas;
- increase ambition in the protection of the ocean for climate change;
- improve the narrative on "why ocean matters"; and
- further include small island developing states and indigenous peoples to co-construct knowledge.

Haugan complemented this summary, highlighting: the importance of adopting transdisciplinarity as a research method; the need to include social sciences in ocean research projects; and the importance of promoting mentorship projects, especially for women. On the intergovernmental perspective, he highlighted the multiple values of biodiversity, noting that 2020 is an important year for the Convention on Biodiversity (CBD) and marine biodiversity, recalling that multisectoral action is required. On the UNFCCC, he underscored the need for more attention to vulnerable populations calling for improved adaption policies and better mitigation policies within the maritime transport sector.



A view of the room during the Conference

Ségura congratulated the IOC and the Ocean and Climate Platform for gathering a broad and significant number of participants from multiple backgrounds to discuss ocean matters, saying 2021 is "around the corner" to suggest a sense of urgency in planning the Decade. For him, he said, the Decade should: stimulate ocean research; apply this knowledge to conserve and explore marine resources sustainably; promote the notion of "blue economy"; and improve benefit-sharing regulations. He highlighted the importance of scientific cooperation for international relations, reminding the importance of oceans for marine biodiversity in areas beyond national jurisdiction. He concluded calling for a "decisive" change deriving from the Decade and its inclusive process.

In closing, Ryabinin stressed that the Decade is a "once in a professional lifetime opportunity." He highlighted, it is not just about ocean science and technology, but also about the economy, society, politics, and ethics, and that ocean science needs to be viewed as part of earth science. He encouraged all participants to imagine the ocean of the future still healthy under climate change, and closed noting "the Decade is yours, it is all of you."

Upcoming Meetings

First Session of the Intergovernmental Conference on BBNJ: The first session of the Intergovernmental Conference on an international legally binding instrument (ILBI) under the UN Convention on the Law of the Sea (UNCLOS) on the conservation and sustainable use of marine biological diversity of areas beyond national jurisdiction (BBNJ) follows an organizational session (held in April 2018) and the conclusion of the fourth and concluding session of the Preparatory Committee (PrepCom) on the elements of a draft text of an ILBI on the conservation and sustainable use of marine BBNJ under UNCLOS, which was held in July 2017. dates: 4-17 September 2018 venue: UN Headquarters location: New York City, US www: http://www.un.org/depts/los/reference_files/calendar_of_meetings.htm

49th Pacific Islands Forum: The Government of Nauru will host the 49th Pacific Islands Forum, which will focus on the theme "Building a Strong Pacific: Our Islands, Our People, Our Will." During the Forum, a side event will be held by Nauru Ocean Resources Inc. and the International Seabed Authority on regulations for deep-seabed mining. **dates:** 3-6 September 2018 **location:** Yaren, Nauru **contact:** Pacific Islands Forum Secretariat **phone:** +679-331-2600 **email:** info@forumsec.org **www:** https://www.forumsec.org/

Global Climate Action Summit: Convened by Governor Jerry Brown and the State of California, US, the Global Climate Action Summit will bring leaders from government, business, and the global community to inspire greater global ambition to act on climate change. Executive Secretary of the UN Framework Convention on Climate Change (UNFCCC), Patricia Espinosa, the UN Secretary-General's Special Envoy for Cities and Climate Change, Michael Bloomberg, and Mahindra Group Chairman, Anand Mahindra, will co-chair the Global Climate

Action Summit. **dates:** 12-14 September 2018 **location:** San Francisco, CA, US **www:** https://globalclimateactionsummit. org/

Our Ocean Conference 2018: The fifth Our Ocean Conference will focus on the theme, "Our Ocean, Our Legacy," with participants reflecting on choices and actions to maintain the sustainability of ocean resources and to preserve ocean health, as a heritage presented for our children and grandchildren. Our Ocean Conference is focused on generating commitments and taking actions to maintain the sustainability of our ocean. Since 2014, Our Ocean Conference has generated commitments totaling around US\$18 billion and 12.4 million square kilometers of marine protected areas. Our Ocean Conference 2018 will introduce the Our Ocean Commitment Registry, to facilitate tracking and review of past and new commitments. In addition, the fifth Conference is the first conference to be held in Asia, and will feature a focus on the importance of action in the region. dates: 29-30 October 2018 location: Bali, Jakarta Raya, Indonesia www: http:// ourocean2018.org/

2018 UN Biodiversity Conference: The 14th meeting of the Conference of the Parties to the Convention on Biological Diversity (CBD), the 9th Meeting of the Parties to the Cartagena Protocol on Biosafety and the 3rd Meeting of the Parties to the Nagoya Protocol on Access and Benefit-sharing (CBD COP 14, Cartagena Protocol COP/MOP 9, and Nagoya Protocol COP/MOP 3) are expected to address a series of issues related to implementation of the Convention and its Protocols. A High-level Segment will be held from 14-15 November. dates: 17-29 November 2018 location: Sharm el-Sheikh, Egypt contact: CBD Secretariat phone: +1-514-288-2220 fax: +1-514-288-6588 email: secretariat@cbd.int www: https://www.cbd.int/conferences/2018

Asia-Pacific Day for the Ocean: The UN Economic and Social Commission for Asia and the Pacific (ESCAP), in cooperation with the custodian agencies of the Communities of Ocean Action and the UN Secretary-General's Special Envoy for the Ocean (tbc), will host an Asia-Pacific Day for the Ocean. The event will bring together member States, UN agencies, civil society, businesses, and other ocean stakeholders to follow up on voluntary commitments for implementation of SDG 14 (life below water), build partnerships and engage in concerted regional action for a healthy ocean. date: 20 November 2018 location: Bangkok (Krung Thep), Thailand www: https://www.unescap.org/events/asia-pacific-day-ocean

Sustainable Blue Economy Conference: The first global conference on the blue economy will be hosted by Kenya. Participants from around the world will share ideas on how to transition to a blue economy that: harnesses the potential of the ocean, seas, lakes and rivers to improve the lives of all, particularly developing states and women and girls; and leverages the latest innovations, scientific advances and best

practices to build prosperity, while conserving waters for future generations. **dates:** 26-28 November 2018 **location:** Nairobi, Kenya **contact:** Kenya Ministry of Foreign Affairs **phone:** +254-20-3318888 **email:** blueeconomykenya@mfa.go.ke **www:** http://www.blueeconomyconference.go.ke/

Katowice Climate Change Conference (UNFCCC COP 24): The Katowice Climate Change Conference will include the 24th session of the Conference of the Parties (COP 24) to the UNFCCC, along with meetings of the Conference of the Parties serving as the Meeting of the Parties to the Kyoto Protocol (CMP), the Subsidiary Body for Scientific and Technological Advice (SBSTA), the Subsidiary Body for Implementation (SBI), and the Conference of the Parties serving as the meeting of the Parties to the Paris Agreement (CMA). COP 24 is expected to finalize the rules for implementation of the Paris Agreement on climate change under the Paris Agreement work programme (PAWP). A High-Level Ministerial Dialogue (HLMD) on Climate Finance is expected to be held in conjunction with COP 24. dates: 2-14 December 2018 location: Katowice, Slaskie, Poland contact: UNFCCC Secretariat phone: (49-228) 815-1000 fax: (49-228) 815-1999 e-mail: secretariat@unfccc. int www: https://unfccc.int/process-and-meetings/partiesnon-party-stakeholders/non-party-stakeholders/participationand-engagement-in-the-katowice-climate-change-conferencedecember-2018-cop-24

Glossary		
BBNJ	the conservation and sustainable use of marine biological diversity of areas beyond national jurisdiction	
CBD	Convention on Biological Diversity	
CNRS	French National Center for Scientific Research	
COP	Conference of the Parties	
IPBES	Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services	
IPCC	Intergovernmental Panel on Climate Change	
IOC-UNESCO	UNESCO Intergovernmental Oceanographic Commission	
MPAs	Marine Protected Areas	
SDGs	Sustainable Development Goals	
UNCLOS	UN Convention on the Law of the Sea	
UNESCO	UN Educational, Scientific and Cultural Organization	
UNFCCC	UN Framework Convention on Climate Change	



L-R: Vladimir Ryabinin, Executive Secretary, IOC-UNESCO; Anna Paula Vitorino, Minister of the Sea, Portugal; Frédérique Vidal, Minister of Higher Education, Research and Innovation, France; Byong Hyun Lee, Chair of the Executive Board, UNESCO; and Romain Troublé, President, Ocean and Climate Platform