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for Corporate Ocean Responsibility

The Sustainable Ocean Summit 2020 convened for the first time its history as a virtual summit on December 8-11.

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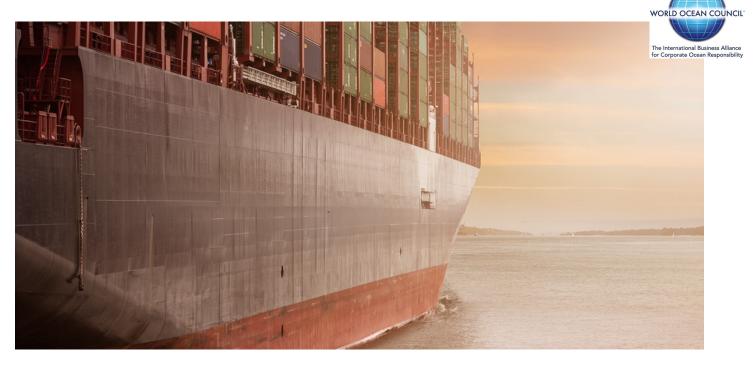
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#### **FORWARD**

Since 2010 the World Ocean Council (WOC) has been bringing the diverse international Blue Economy industry and investment world together at the Sustainable Ocean Summit (SOS). In 2020, this unique event focused the global ocean business community on the theme of "Ocean Vision 2030: The Decade for Ocean Action" for sustainable development, in the WOC's first virtual SOS.

With "Ocean Action" as the focus of the SOS 2020, each session explored a key topic and identified priorities for advancing progress in delivering the Sustainable Development Goals (SDGs) for the ocean. The sessions were working meetings for developing outputs to drive industry and investment action on the session's issue for the year to come.

The SOS 2020 was designed for each session to address:

- The status of the issue and developments during the past year.
- The priority needs and opportunities for ocean business and investment community collaboration and action on the issue.
- What could and should be undertaken on the issue in the coming year (and the role of WOC in advancing that progress).



# Key SOS 2020 Outputs/Recommendations

# SESSION 1 - IMPLEMENTING THE VISION OF OCEAN AND CLIMATE DATA COLLECTION BY INDUSTRY: SMART OCEAN-SMART INDUSTRIES IN SUPPORT OF SDG 14 AND THE U.N. DECADE OF OCEAN SCIENCE

- WOC recommits to advancing the SMART Ocean-SMART Industries program development.
- WOC will develop a hub or "clearinghouse" for industry as part of expanding its efforts to broker interaction with the science and technology community in order to engage the help that industry needs to participate in data collection and sharing.
- WOC encourages, challenges and will assist ocean companies to at least evaluate their potential for engaging in (or expanding efforts in) data collection and sharing.
- WOC will develop a submission for the 1st "Call for Action" for the UN Decade of Ocean Science.

# SESSION 2 - ARCTIC SUSTAINABLE DEVELOPMENT: IMPACTS OF CHANGING ENVIRONMENTAL CONDITIONS ON SHIPPING OPERATIONAL RISK

- WOC will continue its efforts to develop and expand the coordination and exchange of information between ocean industries operating in the Arctic and the Arctic science community.
- WOC will particularly focus on increasing the involvement of ocean industries in data collection and sharing, in the context of the WOC SMART Ocean-SMART Industries program and in support of the U.N. Decade of Ocean Science.
- WOC will continue to develop the structure and process for ocean industries to inform the Arctic science community of priorities for research and observations that will support safe, sustainable and environmentally sound economic activity.



## **Key SOS 2020 Outputs/Recommendations**

# SESSION 3 - UN LAW OF THE SEA: OCEAN INDUSTRY INPUT TO THE NEW LEGALLY BINDING INSTRUMENT ON BIODIVERSITY IN AREAS BEYOND NATIONAL JURISDICTION (BBNJ)

- WOC will continue to monitor the BBNJ process and provide updates to the global ocean business community.
- WOC will plan to again participate as an official observer in the remaining formal negotiation sessions, develop formal 'side events' and develop opportunities for industry to participate.
- WOC will continue to review and provide analysis of the evolving draft BBNJ treaty text, especially regarding area based-management tools (ABMT) and Environmental impact assessment (EIA).
- WOC will explore the development of a series of webinars to brief ocean industries on the BBNJ treaty process, implications and opportunities to engage and provide input.

# SESSION 4 - PORT AND COASTAL INFRASTRUCTURE ADAPTATION: PRIVATE SECTOR COLLABORATION TO ADVANCE ACTION, INVESTMENT AND NATURE-BASED SOLUTIONS

- WOC roundtables and working groups provide examples on how to move forward with developing business and investment leadership and collaboration on Port and Coastal Infrastructure Adaptation efforts.
- WOC will launch a business and investment working group on Port and Coastal Infrastructure Adaptation.
- WOC will work to include a range of appropriate stakeholders in the working group.
- WOC will aim to regularly convene this working group and develop a project timeline and schedule.



### **Key SOS 2020 Outputs/Recommendations**

#### SESSION 5 - OCEAN ESG: RESPONSIBLE INVESTING IN THE OCEAN

- WOC will continue and expand its efforts to develop the Ocean Investor Roundtable
  as the gathering place for the investment community interested in ocean sustainable
  development.
- WOC will work to raise awareness among investors about the ocean economy and sustainable development, especially with institutional investors.
- WOC will follow through with the priority developed by the Roundtable for the develop a Framework for Ocean Economy Investing that covers ocean investment sectors, issues, metrics, indicators, monitoring and reporting for sustainable development.
- WOC will continue engaging with incubators, accelerator, start-up hubs and challenge competitions in order to coordinate and connect the innovation community to the investment community.

# SESSION 6 - BIOFOULING AND INVASIVE SPECIES: ENGAGING INDUSTRY OVER THE LONG TERM

- WOC will develop and deliver reports, under GloFouling Project, on Best Practices for Biofouling Management, with active industry involvement.
- WOC will continue its effort on engaging industry for antifouling measure via the GloFouling Project's Global Industry Alliance (GIA) and beyond.
- WOC will develop innovation and investment events to help drive development of innovative solutions to biofouling and draw the attention of the investment community to these opportunities.



#### SESSION 1

Implementing the Vision of Ocean and Climate Data Collection by Industry: SMART Ocean-SMART Industries in Support of SDG 14 and the U.N. Decade of Ocean Science

- What is the most effectively way to coordinate between ocean scientists and ocean industry operators in order to engage industry in data collection and sharing in support of the U.N. Decade of Ocean Science for Sustainable Development?
- What are the investment opportunities linked to greater industry involvement in data collection and sharing and how can these be developed?
- What are the priority locations, topics and technology to engage more ships and platforms of opportunity in collecting and sharing data?

Paul Holthus, WOC, introduced the WOC SMART Ocean-SMART Industries (SO-SI) program and outlined the ways in which the WOC has been working to engage industry to collect and share data by: 1) hosting sensors on vessels and platforms, 2) deploying instruments from vessels or platforms, and/or 3) making previously collected data available. He described the role of WOC in acting as a broker to develop the interaction between ocean industry operators and the ocean science/technology communities in order to engage industry to participate in data collection and sharing. The WOC has been undertaking these efforts since 2011, will continue and align them with the U.N. Ocean Decade during the next 10 years and will be continuing to work to engage industry in data collection well beyond 2030.

Vladimir Rabinin, UNESCO IOC, presented the U.N. Decade of Ocean Science noting that the 2016 World Ocean Assessment concluded time is running out to save the ocean and urgent action is required to develop a sustainable ocean future. He added that when the U.N. Decade of Ocean Science was declared, 195 countries supported the importance of ocean science for life on the planet as an indication of the strong political behind the "Decade". The next steps are to begin designing what needs to be done during the Decade, which will require a lot of discussion by science and industry. The U.N. will launch a series of "Decade Forums' to address this, and he highly encouraged that discussions like this WOC forum also continue.



David Millar, Fugro (a WOC Member), presented on the role of industry in ocean data collection and sharing initiatives. He stated that there is a serious deficiency in ocean science data, e.g.: 1) 80% of the ocean seabed is unmapped and 2) only 4% of the deep ocean has been observed. Fugro is actively participating in key ocean data efforts, specifically Seabed 2030 and the U.N. Decade. The company's motivations for participating include business opportunities, access to increased data, the sustainability agenda, tax and reputation benefits, and improved engagement with their stakeholders. He concluded by stating that sustainable companies such as Fugro must balance people, planet, and profit.





# Commentators The International Business Allian for Comparte Opean Responsibility

Elaine Heldewier, Carnival Corporation outlined that the company is supportive of efforts to ensure a sustainable ocean, including through their efforts to gather data. Their challenge is that many entities seeking ocean data want to partner with the cruise industry. The company needs help in determining who they should partner with and which equipment they should be utilizing, a role that WOC can play.

Kevin Banister, Simply Blue Energy (a WOC Member) highlighted the importance of ocean data, noting that there will be about 150,000 MW new floating offshore wind turbine installations in the next decade. Major challenges include ensuring a collaborative coexistence with other users in affected ocean spaces and making all needed data available to development teams in a timely manner. An additional challenge will be adaptive ocean management when the projects are up and running.

Cooper Van Vranken, Berring Data Collective, pointed that they have already been collaborating with the WOC SMART Ocean-SMART Industries program and will support SO-SI and the "Decade" by helping the fishing industry to gather data from ocean fishing vessels by engaging them to outfit boats with the sensors. Fishing vessels present a unique opportunity because their fishing gear constantly goes down and up through the water column so sensors in the gear can measure water column properties.

Øistein Jensen, Odfjell, noted that the company has one of the world's largest tanker fleet and that they are supportive of ocean sustainability efforts. Odfjell has set challenging internal targets for reducing ship carbon emissions and their motivation is long-term viability. A major challenge they have is that their vessels are minimally manned so data collection must be automated or remotely operated.

#### Discussion

Ray Marine and Pick A Pier noted that there are 28 million pleasure boats around the globe, creating an opportunity to gather a significant amount of additional data, especially in shallower waters where data is most needed. Navigation companies have been collecting terabytes of data for many years already but have found it very challenging to actually share it and are struggling with quantifying benefits versus the cost to share. A major challenge is that the recreational boating sector is very fragmented.

Other participants highlighted that small and medium enterprises (SMEs), and microbusinesses are collecting data but struggle to get it into the system and need help. These data contributions are needed but the key challenge is the degree to which the data gets vetted so users have confidence it can be used reliably for key scientific findings or safety related decisions.

A number of participants stated that for moving forward, it is critical that all companies begin to more explicitly share their benefits and motivations for collecting and disseminating data from specific ocean areas as an aid to help each other justify increased participation.



In response to interest by industry to collect and share data, Paul Holthus, WOC stressed the need to move forward with the SMART Ocean-SMART Industries program, including developing its role as a hub or "clearinghouse" for industry and as a broker to foster, facilitate and coordinate industry interaction with the science and technology community in data collection and sharing. WOC is working to help industry understand who else is operating there, who might they partner with, what kind of data should be collected, how best to collect it and what is the best equipment to use, and how to operationalize and fund the collection.

WOC is working to assist companies to: 1) define ways to measure success, 2) develop data collection standardization, 3) clear barriers to sharing, find more creative and non-traditional ways to fund activities, and 4) investigate ways to compensate suppliers for sharing data to cover their costs.

It was requested that WOC make it easy to participate, both in collecting data and in using data and making the "clearinghouse" process simple, clear and as specific as practical for each industry (offshore wind farms, cruise lines, fishing boats, etc.). The WOC "clearinghouse" should work closer with those governments that are trying to collect more data to help their ocean industries and help them connect with the right ocean operators. Governments can also help the WOC in setting data gathering priorities.

WOC encourages, challenges and is ready to work with any and all ocean companies to at least evaluate their potential for engaging in (or expanding efforts in) data collection and sharing. The overarching goal moving forward for the WOC SO-SI program is to more systematically and comprehensively work with industry to increasing the collection and sharing of ocean, weather and climate data.

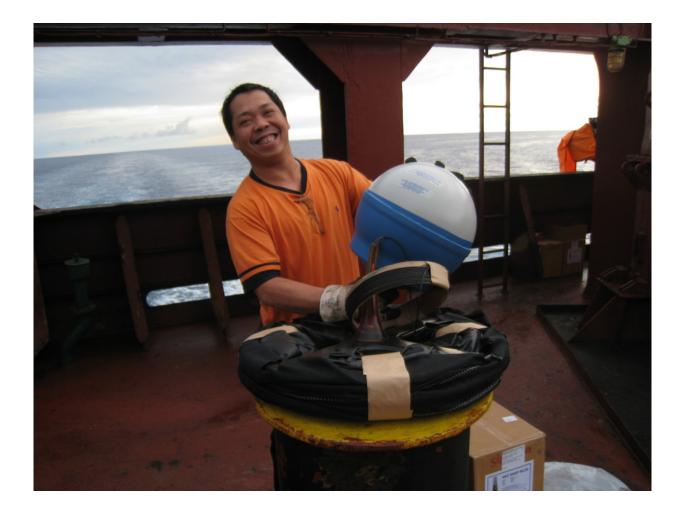
WOC and partners will be submitting a proposal to the U.N. Decade of Ocean Science initial Call to Action in January 2021 on advancing the WOC SO-SI program and developing a global Community of Practice to make it easier and more efficient for industry to gather and share more ocean data over the next decade.

WOC will reach out to companies to get involved in this effort and will build on the previous SO-SI efforts and expand this into a global industry "Community of Practice" to expand this effort and support the U.N. Decade, as well continue the efforts well beyond 2030.



#### Recommendations/Way Forward

- WOC recommits to advancing the SMART Ocean-SMART Industries program development.
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#### SESSION 2

# Arctic Sustainable Development: Impacts of Changing Environmental Conditions on Shipping Operational Risk

- What will be the impacts of changing environmental conditions in the Arctic on shipping operational risk?
- Can these changes and the associated risk be predicted in order to foresee and adapt to these them and ensure safe and sustainable marine activities?
- Is it possible to provide a tailored climate services to deliver consistent and accurate risk-informed decision support to maritime and offshore operations, e.g., regarding extreme weather conditions, sea-ice, water temperature, precipitation, wind?

Colin Stedmon, DCMR, introduced the U.N. Ocean Decade Arctic Action Plan. He described the Ocean Decade mission to develop transformative ocean science solutions for sustainable development, connecting people and our ocean through three objectives: (1) Identify required knowledge for sustainable development, (2) generate comprehensive knowledge and understanding of the ocean, and (3) Increase the use of ocean knowledge.

The Arctic region has specific challenges due to rapid and impactful change and the Arctic Action Plan aims at developing the Ocean Decade's Arctic context; identifying the challenges for achieving societal outcomes in the Arctic (e.g. safe, clean, productive oceans etc.); determining high priority action priorities to address those challenges; describing what priority

actions could include, who should contribute, how, when etc.

The U.N. Ocean Decade working group on "Safe Ocean" identified specific Arctic challenges with the following potential solutions relevant to the SOS 2020 session:

- Issues: Insufficient information for planning safe nautical journeys.
- Solutions: Improved tools developed and shared via coordinating or facilitating organization
- Issues: Improve search and rescue and oil spill response.
- Solutions: Integration across professional, commercial and private or local capacities.
- Issues: Lack of local community and indigenous people's involvement.
- Solutions: Co-design and ownership of measures on how to deal with marine hazards.
- Issues: Understanding disaster risk (surface and subsurface) for Arctic coastal communities.
- Solutions: Mapping/understanding/predicting Arctic hazards and supporting outreach, awareness, and response.



Mark Payne, DTU Aqua, discussed applications and opportunities arising from a "Predicted Ocean", explaining that science has become good at answering questions on the decade/century time scale and on the days/week time scale. There is a gap in the ability of the scientific community to provide data on the mid-term (month/season scale), but this improving. The challenge now is to make ocean forecasts relevant to society and striking a balance between what is feasible and what is useful. Data users are the judge of whether a forecast has value and make decisions based on the information provided. Working in co-production and co-development mode from start can ensure that forecasts are relevant to society. While scientists work to predict ocean conditions and biological responses, it is the user that determines whether a forecast is useful, thus the scientific community's work needs to be guided by society.

Aarnes Oivin, DNV GL, outlined the sustainable ocean practices and actions promoting ocean stewardship and explained that predictions are useful to gauge impact with regards to societal needs. He highlighted that scientific data should be used in adaptation and mitigation strategies for coastal communities, Pacific Islands, small island developing states (SIDS) and least developed countries (LDCs); in marine spatial planning and to inform the ocean regulatory landscape (U.N. Law of the Sea, etc.), and ocean sustainable development policies. He highlighted that scientific data and predictability can help promote transparency, accountability and trust in the Blue Economy and mentioned that the EU Blue Action project is developing a tailored climate service for risk-informed decision support and insights to address shipping operational risk.

Jacques Besse, TOTAL, described the company's operational experience with LNG Shipping in Arctic. He explained how the changing environmental conditions in the Arctic are impacting TOTAL's marine logistics and shipping operations. Predictions are an especially important parameter because they require estimates of changes in metocean and ice conditions in order to assess future strategies. Changing ice and weather conditions and associated predictions will influence decisions regarding ship routes in ice during route planning, which has significant impact on safety, efficiency, and economics. He mentioned that sailing at 8 knots instead of 6 allows to reduce the number of ships by 25% which represent USD 2.5 billion dollars saved.



#### Commentators

Yakov Antonov, NSC, stressed that, as a shipping company operating in the Arctic, they always make use of all information available for voyage planning, i.e., Weather chats, ice charts, or satellite imagery.

Peter Hinchliffe, ARICE Advisory Board, noted the critical relationship between applied science and commercial operations and reiterated the importance of differentiating between what is feasible and what is useful.

Mark van der Hulst, Oceanwide Expeditions, highlighted that the scientific community has become good at predicting ocean conditions and that now effort is needed in predicting the ice conditions and combining both types of information. He explained that it is sometimes challenging for end users to obtain and make use of the correct and relevant information because so much information is available, but the information is not accessible from one single platform. He pointed out the need for more coordination between search and rescue on the one hand and oil spill response teams on the other hand.





#### Discussion

The session participants noted that changing environmental conditions in the Arctic have clear impacts on marine logistic, operation and assessment of future strategies. Given this, a better predicted ocean in the Arctic can address challenges arising from changing conditions. Working Group 5 for a "Safe Ocean' of the UN Ocean Decade Arctic Action Plan has identified the challenge of insufficient information for planning safe nautical journeys and is exploring solutions.

Enhancing coordination between different stakeholders involved in prediction services is key to developing the information that can reduce risks to shipping in the Arctic. However, it is necessary to strike a balance between what is feasible and what is useful in terms of predictions and climate services.

Scientific data is very much used by end users in the industry so as to address shipping operational risk. Nevertheless, finding information is not always an easy task. Dialogue between the scientific community and the industry needs to keep going so that both worlds can better understand their mutual needs and challenges.

#### Recommendations/Way Forward

- WOC will continue its efforts to develop and expand the coordination and exchange of information between ocean industries operating in the Arctic and the Arctic science community.
- WOC will particularly focus on increasing the involvement of ocean industries in data collection and sharing, in the context of the WOC SMART Ocean-SMART Industries program and in support of the U.N. Decade of Ocean Science.
- WOC will continue to develop the structure and process for ocean industries to inform the Arctic science community of priorities for research and observations that will support safe, sustainable and environmentally sound economic activity.



#### SESSION 3

UN Law of the Sea: Ocean Industry Input to the New Legally Binding Instrument on Biodiversity in Areas Beyond National Jurisdiction (BBNJ)

- How will the legally binding BBNJ agreement affect ocean industries when it is adopted?
- What are the comments and concerns from responsible industry about the draft treaty text concerning: a) Environmental Impact Assessment (EIA), and b) Area Based Management Tools (ABMT)?
- How can and should ocean industries engage with each other and with other ocean stakeholders, including governments, as the BBNJ agreement moves to its final negotiations?

WOC has been engaged in discussions on the new implementation agreement for Biodiversity Beyond National Jurisdiction under the UN Convention on the Law of the Sea (1982) since it was initiated in 2017. Commonly referred to as 'BBNJ' the draft treaty is intended to provide a legal framework for the protection of biodiversity in the high seas – areas beyond national jurisdiction.

There have been three negotiating sessions so far and a fourth in March this year was postponed due to the health crisis.

However there has been intersessional work undertaken on-line this year to move the text forward. The text of the treaty may be concluded in the fourth or perhaps the fifth negotiating sessions. There are four elements to the future treaty:

- Marine genetic resources,
- Area based-management tools,
- Environmental impact assessments,
- Capacity building and the transfer of marine technology.

Greg Fisk, BMT (a WOC Member), outlined the key issues regarding the draft ABMT text. He highlighted that it is generally desirable to try to use existing tools and mechanisms for ABMT as far as practicable. Overall, a 'multiple use' approach is needed for ABMTs, particularly if they are to cover large areas of the high seas water column and seabed. He noted that in developing the BBNJ there is a need to avoid undue regulatory impacts on industry where the activities undertaken present low or negligible risks to biodiversity. The current BBNJ text includes that proposals for ABMTs must include a description of 'specific human activities' in the proposed management area, but do not currently provide for consideration of future uses as part of the declaration of the management area. It will be important that there is a balanced range of expertise on the BBNJ Science and Technical Body and for membership in that body to be refreshed, perhaps every five years.



Peter Glazebrook, a WOC Associate, presented a review of the key issues regarding the draft EIA text, as developed by Renee Grogan, Gro Sustainably (a WOC Member). The presentation highlighted the need for clarity on activities that require an EIA. To date, there is not a list of activities requiring an EIA under the BBNJ. It is not yet clear whether a State Party will be obliged to conduct EIA on the sum activities it permits (e.g., total fishing licenses), or whether individual companies (e.g., fishing companies) will be required to complete individual EIAs. It is important for the BBNJ to address the achievability of EIAs, as it may be impossible for an individual company to deliver meaningful data or commitments on issues like cumulative impacts. A level playing field is critical, as there is the potential for a non-standardized process to occur if different States are assessing EIAs according to their own criteria. A standard and transparent EIA process based on best available science would reduce uncertainty and the BBNJ Science and Technical Body must play a key role in this.

At this stage, it is not clear if States may impose an expert for conducting EIAs, and if the project proponent must bear that cost. The absence of a definition for "serious adverse impact" creates uncertainty for industry about which activities or impacts may or may not be allowed under the BBNJ treaty. States have the ability to halt activities which are causing impacts that were not foreseen in the EIA, so a clear mechanism for dispute resolution will be needed to ensure that delays caused by process uncertainties do not impact approved activities.





#### Commentators

Didier Dillard, Orange Marine Cable Ships (a WOC Member), highlighted the need for careful implementation of the BBNJ treaty through clear and transparent rules with global consistency. Such rules should be proportionate to the expected benefit. The undersea cable industry would present only minimal impact to the ocean but would need to seek clarity through the BBNJ Science and Technical Body.

Bud Darr, MSC Group, a shipping company, concurred with the need for uniform consistency and clarity of purpose, adding that a balance must be struck between sustainable use and conservation. There is need to respect the rights of navigation and to observe the balance of jurisdiction between port, coastal and flag States. He noted that IMO already had provisions for both ABMT and EIA and was important to keep these aligned with the provisions of the BBNJ treaty.

Darian McBain, Thai Union Group, a seafood processor, noted that the fishing industry was disaggregated in terms of vessel ownership and fishing operations. A science-based approach was crucial as was the need to collaborate with other ocean industry sectors. Like other industries, the fishing industry needed consistency in relation to regulations and enforcement, noting that food security for fish protein was an important part of global sustainability. There was a need to engage across social, economic and conservation sectors in the development of the BBNJ treaty.

Eric Kingma, Hawaii Longline Association, reflected on the dependence of their members for fishing on the high seas and said that these operators were acutely aware of access issues and were concerned about the potential of high seas closure areas. The association was wary of objectives that were too broad, of controls on highly migratory fish species, and the prospect of EIAs applied on a wide scale in an already highly regulated fishery.





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#### Discussion

Session participants raised concerns about the application of BBNJ to drifting technologies and in the monitoring and enforcement of the BBNJ treaty. The need for economic as well as science representation on the BBNJ Science and Technical Body was highlighted in order to ensure a balance between science, political, practical and economic aspects. Successful EIAs require that social and economic dimensions and trade-offs are addressed. If the BBNJ treaty is to include lists of activities for potential restriction, there is a need to supplement with data on the resources that will be affected.

Some government representatives commented on the BBNJ process from their perspective. For example, urging non-duplication of effort and the consideration and understanding for small nations seeking to evaluate the draft text and its implications. Other government representatives noted that IMO was already involved in potentially overlapping work, such as its consideration of underwater noise impacts.

Paul Holthus, WOC, updated the session on the engagement of States in BBNJ and reported that the main drivers for BBNJ had been EU, Australia and other countries with large Exclusive Economic Zones (EEZs). He also anticipated that the BBNJ instrument should be expected to be concluded at the next formal session, although a5th session may be added to the process. The interaction between BBNJ proposals and existing EEZ provisions was a concern and there is an opportunity for industry to engage in the BBNJ process through WOC whilst there was still time to do so.

#### Recommendations/Way Forward

- WOC will continue to monitor the BBNJ process and provide updates to the global ocean business community.
- WOC will plan to again participate as an official observer in the remaining formal negotiating sessions, develop formal 'side events' and develop opportunities for industry to participate.
- WOC will continue to review and provide analysis of the evolving draft BBNJ treaty text, especially regarding Area based-management tools (ABMT) and Environmental impact assessment (EIA).
- WOC will explore the development of a series of webinars to brief ocean industries on the BBNJ treaty process, implications and opportunities to engage and provide input.



#### **SESSION 4**

### Port and Coastal Infrastructure Adaptation: Business and investment action

- How can the ocean business and investment community best collaborate to ensure that ports and coastal infrastructure are adapted to ensure resiliency to extreme events and sea level rise, especially in small islands and developing countries?
- How can the ocean business and investment community best engage with the public finance community to advance coastal infrastructure adaptation, e.g., Green Climate Fund, multilateral/bilateral development assistance, national governments, etc.?
- What is the best way to develop and implement a "Grey/Green/Blue" approach to coastal infrastructure adaptation, i.e., including "Green Infrastructure" (Nature-Based Solutions) and optimizing Blue Carbon benefits?

Nicholas Swetchine, LaFargeHolcim, introduced the company and the concept of Basalt based Quatroblocks as more stable ecological engineering solutions, cost-effective, simply transportable, resulting in fewer lifecycle emissions. He also emphasized the need for both a grey, green and blue combined infrastructure approach that incorporates climate resilience, technical and environmental performance and coastal and biodiversity protection. This creates the need for sustainable materials and ensuring the artificial creation of habitats for marine species, to enhance aquatic biodiversity.

Patrick King, Jacobs, introduced the company and the need for port engineering companies and others to adopt project specific and general related emission zero reducing targets to become more sustainable. This includes pressing for greater sustainability and awareness of climate resilient networks throughout companies, port authorities and dependent supply chains. Specific commitments include being powered by renewable energy and striving for carbon neutral then negative efforts. He and Luce Bassetti emphasized the need to prioritize climate change in all types of adaptation solutions and scenarios; augmenting resilience and ensuring it is adequately mainstreamed into finance and delivery. Therefore, it is essential to consider natural engineering to protect coastal ecosystems and resilience, along with grey infrastructure, structural and non-structural issues. They provided examples from San Francisco and New York where multi-hazard risk analysis and systematic resilience programs can ascertain vulnerability to flooding, sea evel rise, increased temperatures and other climate related natural events.



#### Commentators

Shimrit Perkol-Finkel, Econcete (a WOCMember), highlighted the need to mainstream nature-based solutions and to collaborate with other players. Legislation does not specify climate resilience standards and provides no linkage between the need to mitigate and re-compensate and to redesign port/supply chain infrastructure with ecosystem-based features in response. There is a need to save future coastlines and assess regional problems both environment and infrastructure. To effectively futureproof against these risks, the problems have to be conceptualized and integrated into all port/supply chain related projects. She highlighted the example of ecological engineered artificial reefs or breakwaters, which can integrate marine species as habitat and biodiversity as essential for marine resilience and as a way to integrate ecology and technical solutions in overcoming barriers to ecological solutions.

Joshua Berger, Washington Maritime Blue, identified the role of policymakers, accelerators and governments in facilitating the infrastructure adaptation process. He highlighted that cluster organizations can aid in facilitating this as a coalition builder, to facilitate collaboration and mobilizing stakeholders and policymakers. Cluster can forge relationships for trust, catalyze innovative finance and mobilize mechanisms for financing and technology development. It was noted that blue solutions and others may exist to make ports more climate resilient and sustainable, but a core challenge and question remains in relation to getting capital and other support deployed during the COVID19 economic recovery. There is a need for public and private capital projects to include considering climate change related factors, deploy and support climate resilient infrastructure and nature-based solutions.

Cynthia Jaggi, Climate Adaptive Infrastructure, emphasized the need for diverse stakeholders to understand what we have learned, and share examples of success and failure. Investors are looking at what they need to articulate what they see in an investment. They may also seek to co-create finance and an integral part of the system as areas are being developed and be involved earlier from an investor perspective.





Discussion
The International Business Alliance for Corporate Ocean Responsibility

Participants agreed on the need for a project-based approach and the value of a working group or a pledge for a coalition driven moving forward, implemented at a global level. Such a group would seek to consider knowledge exchange of best practices, collaboration as data and investigate possible specific issues such as climate change and integrate it as high priority items and the rules or agendas or recommended best practices for companies, port authorities and others to emulate.

As brought up in the discussion, a global business and investment working group could evaluate suitable responses to port adaptation barriers to climate change. These barriers include environmental impacts, workforce development, aging infrastructure, operational requirements, congestion and site constraints, economic viability and alignment with stakeholder requirements and priorities to motivate change. There is a need to move beyond silos towards better solutions for mutual benefit, to improve existing designs and getting involved.

Such a working group should define resilience, vulnerability and sustainability and agree on a common definition of core terms to ensure a collective understanding for all stakeholders. Consideration of sub-groups and regional approaches and solutions for ports, related infrastructure is important. For example, projects in Africa and other developing nations may experience different constraints and perhaps a different scale for data, aligning stakeholders and financing. Knowledge exchange, including at the policy level, is a critical issue to be resolved as ports may lack the finance and ability for solutions, even when the shipyards and others develop the technology. Ports will need to collaborate with companies to ensure appropriate solutions for innovations.

#### Recommendations/Way Forward

- WOC roundtables and working groups provide examples on how to move forward with developing business and investment leadership and collaboration on Port and Coastal Infrastructure Adaptation efforts.
- WOC will launch a business and investment working group on Port and Coastal Infrastructure Adaptation.
- WOC will work to include a range of appropriate stakeholders in the working group.
- WOC will aim to regularly convene this working group and develop a project timeline and schedule.



#### SESSION 5

### Ocean ESG: Responsible Investing in the Ocean

- What are the material Environment, Social and Governance (ESG) issues for investors relevant to the diverse ocean economy and the complex global ocean ecosystem?
- What does impact mean for ocean investors and how do we measure it?
- How can the investment community best work together to develop a common framework for understanding, monitoring and reporting the impact and success of Blue Economy investment?

Paul Holthus, WOC, outlined activities and development around Ocean ESG since the SOS 2019 in Paris, including the WOC Ocean Investor Roundtable, a collective of investors and funds/community of practice with the common ambition to invest for positive ocean impact. The main objectives of the Roundtable include creating greater awareness amongst investors of the issues and investment potential in the blue economy and facilitating investor understanding and awareness of ocean investment opportunities. Priority areas identified involve the development of a Framework for Ocean Economy Investing covering a range of topics – sectors, issues, metrics, indicators and reporting. Roundtable participants are from across the globe and include ocean impact fund managers, ocean impact fund advisors and ocean sectoral specialists. As the Roundtable activities continue, the community will be engaged through monthly gathering of the Ocean Fund Roundtable where a few options will be explored, including a White Paper.

Hugo Le Breton, Ocean 14 Capital, shared their approach to investing, the areas of tension that impact on their decision matrix and the challenges that should be resolved. He highlighted some of the key principles for investing, with impact being the most important, including a scientific and holistic approach. A key driver is the development of investment opportunities where sustainability and commercial drivers converge and are enabled by technology and innovation. He highlighted areas of tension around impact and internal rate of return (IRR) that, while not mutually exclusive, there are still businesses where there is no trade off- they are simply not big enough, not sufficiently impactful and do not bring about the desired IRR. Investing in Environment, Social, Governance (ESG) needs to address operational management of the business whereas their impact may not acceptable. In closing, he addressed the need for a reasonable benchmark across the industry that is transparent, and which has industry-wide buy-in.



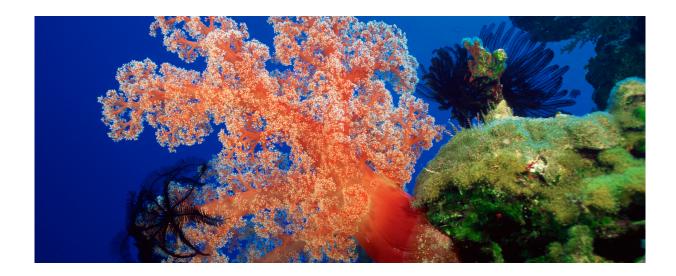
The International Business Alliance for Corporate Ocean Responsibility

Jacques Demers, York University Pension Fund, shared experience on helping the ocean investor community communicate effectively with the institutional investors. He highlighted that those tasked with overseeing capital on behalf of pension plans, sovereign wealth funds and similar capital pools are fiduciaries acting in a trust capacity. ESG considerations have become important to fiduciaries, but this will not be at the expense of foregoing 'risk-adjusted returns' on their investments, which are focused on long-term investments. ESG related disclosures will be required but there is a lack of uniformity. When referring to new technology, he noted that investors should always look at supply and demand, rule of law, revenue sources, historical performance, management, proven technology, diversification and liquidity. He highlighted that diversification is a proven to be critical in institutional investment principles, so it is key for the WOC Roundtable to package some messaging and increasing awareness for institutional investors when it comes to ocean investment.

#### Commentators

Gihan Ismail of Marine Capital highlighted that the Shipping Industry is grappling with decarbonization as it would like to attract institutional investors to fund the decarbonization process to help reach the end goal of zero emission ships on the water. She also stated that there is an issue with this transition. There are many technologies that could help to reduce greenhouse emissions. The issue still remains for investors as they run the risk of investing in technologies that could become obsolete in a few years time, when it gets taken over. Models in the industry don't allow for a sharing of the risk. Gihan raised the point that ESG is easy from an operational perspective, but for investors it is still an issue and the community could do a lot more to assist investors to understand what matters in each industry when it comes to the E, the S and the G.

Michael van Niekerk, Inspire Impact, opened his intervention outlining the work that Inspire has been doing to assess how they find opportunities and how they think about impact and ESG reinforcing some of the ideas around Marine Pollution and decarbonization. He further gave thoughts around how the group thinks through the links with investors through the education process as well as highlighting the critical need to link up with the EU Taxonomy and the work done around that space.





Pierre Rousseau, BNP Paribus highlighted that the gap that we have to fill when it comes to the Ocean is big as there is little knowledge that the operators have about how they depend on the ocean. He agreed that the investors have to follow strict matrix but cannot fit in some of the Ocean elements. He also added that financing world is not equipped to finance the ocean transition. Some of the key issues addressed by Pierre included fragmentation in the world financing community makes it difficult. How do we connect Private Equity (PE) to the Institutional investors. BNP has done a great deal of work to connect the players starting with the connection of incubators to the Private Equity Funds, then connect those Funds to corporates. The next step would involve creating a Funds of Funds and creating a de-risking mechanism, ultimately accelerating a process for the Private Equity Funds to invest more. Firstly, by de-risking (through some philanthropic money) the projects, one can then bring products to the industry that they can invest in, secondly, by protecting and creating safety (insurance) around the ocean product. In closing, he urged the finance world to stop working in silos.

#### Discussion

Participants brought further emphasis to the need for data to drive the education process for the investor community. Isabelle Duveux shared interest from the European Space Agency to partner with the WOC, and the development of investment opportunities in the use of space technology in support of ocean sustainable development.

A key challenge highlighted by the audience remained the ease of operationalizing ESG for the ocean industries as an issue for the finance community. The group highlighted further the need to standardize an agreed upon matrix for Ocean ESG. There was also consensus that the ocean transition is currently difficult to fund. Speakers and commentators agreed that the community needs to continue to expand the participants interested in being part of the Ocean ESG Framework. The right experts and strategic partnerships are critical, especially for the data which must be central to the process of Ocean ESG.



#### Recommendations/Way Forward

- WOC will continue and expand its efforts to develop the Ocean Investor Roundtable as the gathering place for the investment community interested in ocean sustainable development.
- WOC will work to raise awareness among investors about the ocean economy and sustainable development, especially with institutional investors.
- WOC will follow through with the priority developed by the Roundtable for the develop a Framework for Ocean Economy Investing that covers ocean investment sectors, issues, metrics, indicators, monitoring and reporting for sustainable development.
- WOC will continue engaging with incubators, accelerator, start-up hubs and challenge competitions in order to coordinate and connect the innovation community to the investment community.



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#### **SESSION 6**

### Biofouling and Invasive Species - Engaging Industry over the Long Term

- What is the Global Industry Alliance (GIA) of the GloFouling Partnerships Project and how can companies work with and though the GIA to address biofouling and invasive species?
- What are the innovation needs and investment opportunities in relation to addressing the global, multi-industry challenge of biofouling and the introduction of invasive species?
- How can the WOC and GIA Members work to ensure the continuity and action beyond the life of the GloFouling Project?

Darren Jones, Sonihull, outlined how industry and private sector can get involved in solving the complex issue of biofouling and highlighted the role the GloFouling Project Global Industry Alliance (GIA) is playing in bringing the key players together. He emphasized the need for technology developers, regulators and operators to work in unison to tackle issues existing at various levels and the importance of cross sectoral synergies. While the technology is available to address the issue, the most important thing that is required is leadership in people to bring about change.

David Johnston, Clean Sub Sea (a WOC Member), spoke about how important the issue of biofouling is to Australia, and how the country is deeply dependent on industries such as shipping, fishing and tourism. He suggested that WOC should set out a road map on the issue of biofouling in order to address matters such as commercial demands, regulatory requirements, risk management demands and create a framework that is internationally accepted. To provide that framework, a benchmark is needed which takes into consideration the acceptable and unacceptable risk involved and how to mitigate the risk. He said that putting this information on the table would help agencies like IMO to understand and Implement what is required in the most practical and manageable way.



#### Commentators

Ashok Srinivasan, BIMCO, provided the shipping industry perspective and proposed that ship owners, ports, paint companies and cleaning companies must work together to come up with solutions and to check if IMO's existing guidelines fit the purpose. Going forward these guidelines will be more robust and the two important points that shipping industry must take care of are applying a good antifouling paint and cleaning the hull and niche areas regularly.

John Lewis, IMarEST, addressed biofouling from the oil and gas industry perspective, as well as biofouling due to other offshore industries such as wind energy. He explained that oil rigs operate at different phases, such as an exploration, a mobile phase with the involvement of construction vessels, support vessels, anchor handling tugs, storage facilities etc. all operating from design to delivery stage and all these components cause and add to biofouling from different pathways.

Farshad Shishehchian, Blue Aqua International, addressed biofouling in the aquaculture industry, emphasizing how food security and food safety are the priorities. He described how the ocean is a source of a nutrition and one has to be practical rather than emotional in addressing issues relating to ocean sustainability and biofouling. He outlined how copper cages are very expensive and alternative to that like nylon meshes coated with copper solution would be an economical and viable option for the aquaculture industry.





Discussion

The International Business Alliance for Corporate Ocean Responsibility

There was considerable discussion among participants about the role of copper, which is by far the most common biocide in the antifouling paints, which is going to be phased out as an antifouling compound, the ecotoxicology of copper is well established and that copper leaching into sediment and water is a big concern. Copper was banned in places like California and Canada and copper alternatives are available and perform equally well.

Some participants highlighted that it is not a straight-forward and easy for other alternatives to work as effectively as they are not toxic enough and do not perform to the same standards, posing their own challenges.

The speakers and commentators all agreed to the fact that biofouling is a complex environmental issue and to solve it different stakeholders have to come together as there is technology available to tackle the issue and the problem can be solved.

#### Recommendations/Way Forward

- WOC will develop and deliver reports, under GloFouling Project, on Best Practices for Biofouling Management, with active industry involvement.
- WOC will continue its effort on engaging industry for antifouling measure via the GloFouling Project's Global Industry Alliance (GIA) and beyond.
- WOC will develop innovation and investment events to help drive development of innovative solutions to biofouling and draw the attention of the investment community to these opportunities.



### Special SOS 2020 Side Event Webinar

# "Partnerships For Sustainable Blue Economy Transition And Pandemic Recovery In SIDS"

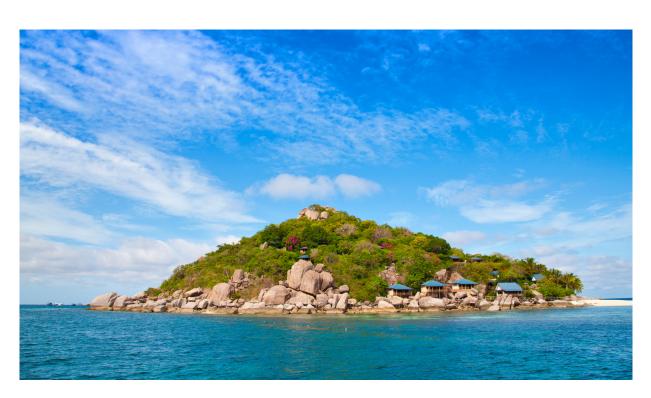
The WOC and the U.N. Office of the High Representative for the Least Developed Countries, Landlocked Developing Countries and the Small Island Developing States (OHRLLS) are working together to develop the SIDS Global Business Network (GBN) Forum as a key platform to attract interest and investments into SIDS by the private sector, to increase the engagement and the role of the private sector in promoting sustainable development through durable partnerships.

This U.N. OHRLLS and WOC collaborated to organize this webinar as part of the WOC 2020 Sustainable Ocean Summit (SOS), to address:

- Interlinkages between SIDS and ocean economy
- Impact of COVID on ocean industries such as fishing, shipping and tourism
- Underscore SIDS are hardest hit as a result of these disruptions.
- Emphasize the potential benefits from investment in sustainable ocean solutions

The webinar was opened by U.N. Under Secretary General, Fekitamoeloa Katoa 'Utoikamanu and with a keynote presentation by World Ocean Council CEO, Paul Holthus.

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The webinar roundtable included representatives of SIDS Member States and international organizations, and a diverse range of ocean industry leaders with experience and operations on the SIDS regions:

- Ocean Energy/Cabo Verde: Bill Staby, CEO, Resolute Marine Energy
- Shipping/Caribbean: Milaika Capella Ras, Deputy Director, Caribbean Shipping Association
- Aquaculture/Pacific: Neil Sims, Founder/CEO, Ocean Era
- Tourism/Caribbean: Heidi Clarke, Executive Director, Sandals Foundation
- Fishing: Casey Marion, Director, Sustainability Initiatives and Quality Management Systems, Beaver Street Fisheries.

The webinar roundtable discussion focused on partnership opportunities with the business community to accelerate the blue economy transition and support post-pandemic economic recovery, including:

- Challenges posed by the pandemic towards a sustainable blue economy in SIDS
- Best practices in ocean-based solutions to catalyze economic recovery
- New opportunities for SIDS to open up the blue economy with innovative investment
- The strategic partnerships and actions needed for long-term sustainable blue economy growth in SIDS.



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### Appendix: SOS 2020 Program

#### Session 1

Implementing the Vision of Ocean and Climate Data Collection by Industry: SMART Ocean-SMART Industries in Support of SDG 14 and the U.N. Decade of Ocean Science

OCEAN KNOWLEDGE, RESEARCH AND TECHNOLOGY

"SDG 14.a Increase scientific knowledge, develop research capacities and transfer marine technology"

#### Framing Questions

- What is the most effectively way to coordinate between ocean scientists and ocean industry operators in order to engage industry in data collection and sharing in support of the U.N. Decade of Ocean Science for Sustainable Development
- What are the investment opportunities linked to greater industry involvement in data collection and sharing and how can these be developed?
- What are the priority locations, topics and technology to engage more ships and platforms of opportunity in collecting and sharing data?

#### Chair/Moderator

Paul Holthus, Founding President and CEO, World Ocean Council

#### **Speakers**

- David Millar, Government Accounts Director, Americas, Fugro
- Vladimir Ryabinin, Executive Secretary, UNESCO Intergovernmental Oceanographic Commission (IOC)

#### Commentators

- Sam Walker, Group Marine Science Expert, BP
- Kevin Banister, Chief Development Officer, International, Simply Blue
- Elaine Heldewier, Sustainability Director, Carnival Corporation
- Cooper Van Vranken, Founder and CEO, Berring Data Collective
- Øistein Jensen, Chief Sustainability Officer, Odfjell



Arctic Sustainable Development: Impacts of Changing Environmental Conditions on Shipping Operational Risk

"SDG 14. Conserve and sustainably use the oceans, seas and marine resources for sustainable development"

#### Framing Questions

- What will be the impacts of changing environmental conditions in the Arctic on shipping operational risk?
- Can these changes and the associated risk be predicted in order to foresee and adapt to these them and ensure safe and sustainable marine activities?
- Is it possible to provide a tailored climate services to deliver consistent and accurate riskinformed decision support to maritime and offshore operations, e.g., regarding extreme weather conditions, sea-ice, water temperature, precipitation, wind?

#### Chair/Moderator

• Christine Valentin, WOC Europe Executive Director

#### **Speakers**

- · Colin Stedmon, Centre Leader, DCMR,
- Mark Payne, Senior Researcher, DTU Aqua
- Øivin Aarnes, Principal Specialist, DNV GL
- Jacques Besse, Head of LNG Technical Shipping, TOTAL

#### Commentators

Members of the ARICE Industry Liaison Panel and of the ARICE Advisory Board including:

- Yakov Antonov, General Director, NSC
- Peter Hinchliffe, Former Secretary General, International Chamber of Shipping; Member, ARICE Advisory Board
- Nicolas Dubreuil, Expedition Expert, Ponant
- Mark van der Hulst, COO, Oceanwide Expeditions



UN Law of the Sea: Ocean Industry Input to the New Legally Binding Instrument on Biodiversity in Areas Beyond National Jurisdiction (BBNJ)

# OCEAN GOVERNANCE INCLUDING UNCLOS

14.c Ensure the full implementation of international law, as reflected in UNCLOS for states parties to it, including, where applicable, existing regional and international regimes for the conservation and sustainable use of oceans and their resources by their parties"

#### Framing Questions

- How will the legally binding BBNJ agreement affect ocean industries when it is adopted?
- What are the comments and concerns from responsible industry about the draft treaty text concerning: a) Environmental Impact Assessment (EIA), and b) Area Based Management Tools (ABMT)?
- How can and should ocean industries engage with each other and with other ocean stakeholders, including governments, as the BBNJ agreement moves to its final negotiations?

#### Chair/Moderator

• Peter Hinchliffe, Former Secretary General, International Chamber of Shipping

#### Speakers

- Renee Grogan, Director, Gro Sustainability Presented by Peter Glazebrook, WOC Associate, World Ocean Council
- Greg Fisk, Business Development Director, BMT

#### Commentators

- Bud Darr, Executive Vice President, Maritime Policy and Government Affairs, MSC Group
- Didier Dillard, CEO, Orange Marine
- Eric Kingma, Executive Director, Hawaii Longline Association
- Darian McBain, Executive Advisor, Corporate Affairs and Sustainability, Thai Union

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Port and Coastal Infrastructure Adaptation: Private Sector Collaboration to Advance Action, Investment and Nature-Based Solutions CLIMATE CHANGE AND OCEAN ACIDIFICATION "SDG 14.3 Minimize and address the impacts of ocean acidification, including through enhanced scientific cooperation at all levels"

#### Framing Questions

- How can the ocean business and investment community best collaborate to ensure that ports and coastal infrastructure are adapted to ensure resiliency to extreme events and sea level rise, especially in small islands and developing countries?
- How can the ocean business and investment community best engage with the public finance community to advance coastal infrastructure adaptation, e.g., Green Climate Fund, multilateral/bilateral development assistance, national governments, etc.?
- What is the best way to develop and implement a "Grey/Green/Blue" approach to coastal infrastructure adaptation, i.e., including "Green Infrastructure" (Nature-Based Solutions) and optimizing Blue Carbon benefits?

#### Chair/Moderator

• Chris Allen, Senior Consultant, Buildings, Infrastructure + Advanced Facilities - Advance Planning Group, Jacobs

#### Speakers

- Nicolas Swetchine, Group Head, International Key Accounts and Infrastructure Markets, LaFargeHolcim
- Patrick King, Vice President, Global Director for Ports & Maritime, Jacobs / Luce Bassetti, Community of Practice Lead, Coastal Planning and Engineering, Jacobs)

#### Commentators

- Cynthia Jaggi, Director and Founding Partner, Climate Adaptive Infrastructure
- Joshua Berger, Founder and Board Chair, Washington Maritime Blue
- Shimrit Perkol-Finkel, Co-Founder and CEO, Econcrete



#### Ocean ESG: Responsible Investing in the Ocean

OCEAN SUSTAINABLE DEVELOPMENT "SDG 14. Conserve and sustainably use the oceans, seas and marine resources for sustainable development"

#### Framing Questions

- What are the material Environment, Social and Governance (ESG) issues for investors relevant to the diverse ocean economy and the complex global ocean ecosystem?
- What does impact mean for ocean investors and how do we measure it?
- How can the investment community best work together to develop a common framework for understanding, monitoring and reporting the impact and success of Blue Economy investment?

#### Chair/Moderator

• Paul Holthus, Founding President and CEO, World Ocean Council

#### **Speakers**

- Jacques Demers, Chair, York University Pension Fund
- Hugo le Breton, Head of Impact, Ocean 14 Capital

#### Commentators

- Pierre Rousseau, Strategic Advisor, Sustainable Business, BNP Paribas
- Gihan Ismail, Director, Marine Capital
- Michael van Niekerk, Managing Director, Inspire Impact

Web: www.oceanscouncil.org



Biofouling and Invasive Species: Engaging Industry Over the Long Term

MARINE POLLUTION "SDG 14.1 By 2025, prevent and significantly reduce marine pollution"

#### Framing Questions

- What is the Global Industry Alliance (GIA) of the GloFouling Partnerships Project and how can companies work with and though the GIA to address biofouling and invasive species?
- What are the innovation needs and investment opportunities in relation to addressing the global, multi-industry challenge of biofouling and the introduction of invasive species?
- How can the WOC and GIA Members work to ensure the continuity and action beyond the life of the GloFouling Project?

#### Chair/Moderator

• Tina Liu, COO, World Ocean Council

#### Speakers

- Darren Jones, Non-Executive Director, Sonihull NRG Marine Ltd; Chair, GloFouling Global Industry Alliance (GIA)
- David Johnston, Chairman, CleanSubSea

#### Commentators

- Ashok Srinivasan, Manager, Maritime Technology and Regulation, BIMCO
- John Lewis, Co-Chair, Biofouling Management Special Interest Group, IMarEST
- Farshad Shishehchian, CEO/Founder, Blue Aqua International

Web: www.oceanscouncil.org



#### THE CHALLENGE

The ocean is an inter-connected global ecosystem supporting a wide range of uses. Maintaining a healthy ocean requires responsible stewardship by all users. Concerns about the impacts of economic activity on ocean health from a growing range and level of commercial uses are on the rise. These concerns may limit industry access to marine areas and resources. Ocean users are increasingly being held accountable by governments and NGOs for the state of the ocean. Continued ocean access and use will increasingly require the social licence to operate – above and beyond simple regulatory compliance – and participation in the Sustainable Development Goals.

The best efforts by a single company or an entire sector will not be enough to address the cumulative impacts on the inter-connected marine ecosystem from growing use across the sectors. Companies dependent on the ocean can achieve business value from working with others to address shared challenges regarding sustainable development, science and stewardship.

#### **WOC - OCEAN BUSINESS ALLIANCE FOR SUSTAINABILITY**

The World Ocean Council is the international, cross-sectoral industry leadership alliance on "Corporate Ocean Responsibility". The WOC brings together leadership companies from the diverse Ocean Business Community to achieve the business benefits of cross-sectoral leadership and collaboration on sustainability.

The WOC develops global "platforms" to address cross-cutting ocean business and sustainability challenges, e.g. ocean policy and governance, marine planning, marine debris, marine sound, marine mammal impacts, water pollution, data collection by industry vessels and platforms, sea level rise and extreme event impacts, priority regions (e.g. Arctic, Indian Ocean), and investment for ocean sustainable development.

#### THE INVITATION TO RESPONSIBLE OCEAN COMPANIES

Responsible ocean companies are invited to join the growing number of organizations distinguishing themselves as leaders in "Corporate Ocean Responsibility" through the WOC.

In addition to the 75+ WOC Members from the diverse Ocean Business Community, the WOC Network includes 35,000+ ocean industry stakeholders around the world. The WOC is recognized or accredited by numerous U.N. agencies and other international organizations as the credible, global leadership body on ocean business and sustainability.

The WOC Sustainable Ocean Summit (SOS) – 2010 Belfast; 2013 Washington DC; 2015 Singapore; 2016 Rotterdam; 2017 Halifax; 2018 Hong Kong; 2019 Paris; 2020 - Virtual Summit – is acknowledged as the international business conference on ocean sustainable development, science and stewardship.

